



WINDOW TECHNOLOGY
DOOR TECHNOLOGY
AUTOMATIC ENTRANCE SYSTEMS
BUILDING MANAGEMENT SYSTEMS



WINDOW TECHNOLOGY – ORDER CATALOGUE



Lift&Slide hardware for aluminium elements

Edition 08/2021

Securing technology for you



The Gretsch-Unitas group

Opening, moving, closing, securing – true to its motto "Securing technology for you", Gretsch-Unitas group provides groundbreaking solutions for window and door technology, automatic entrance systems and building management systems. With its system brands, the group delivers solutions for burglar inhibition on doors and windows, for barrier-free building, for doors in escape and rescue routes, extending to individual facade solutions for projects.



Gretsch-Unitas GmbH Baubeschläge



GU in Ditzingen is the headquarters of the group, development, administration and the production of modern architectural hardware for window and door technology. Apart from different flexible assembly departments, the production site comprises a high-tech punching, galvanising and anodising facility.

BKS GmbH



BKS manufactures mechanical and electronic locking cylinders, locks, locking systems and panic locks for escape and rescue routes. Harmonised mechanical and electronic system solutions are available for access control.

FERCO International S.A.S.



Ferco is the largest production site for window hardware in France. As a subsidiary of the Gretsch-Unitas group, Ferco also offers customer support and distribution in France for all products of the group.



GU Automatic



GU Automatic offers innovative, secure and reliable solutions for automatic entrance systems and automatic door systems, revolving doors, all-glass sliding walls, security curved sliding doors and controlled physical access.

ela-soft



The successful GEMOS facility management and organisation system was designed by ela-soft, one of the market and technology leaders in the building technology branch.

Securing technology for you



FASCINATION & SLIDE

LIFT

REINVENTED BY THE INVENTOR

Gretsch-Unitas has more than 60 years of Lift&Slide expertise: by inventing the Lift&Slide system, Gretsch-Unitas set standards for outstanding functionality, comfort, security and design. Thanks to many enhancements and additional packages, individual Lift&Slide solutions perfectly tailored to customer requirements can be designed and retrofitted. GU hardware has a fabricator-friendly design, and a wide range of fixing accessories, and one-to-one support with planning and construction is available.

FIND OUT MORE IN FASCINATION
LIFT&SLIDE





Securing technology for you





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Akotherm AT 750 HS / L&S bogie GU-934

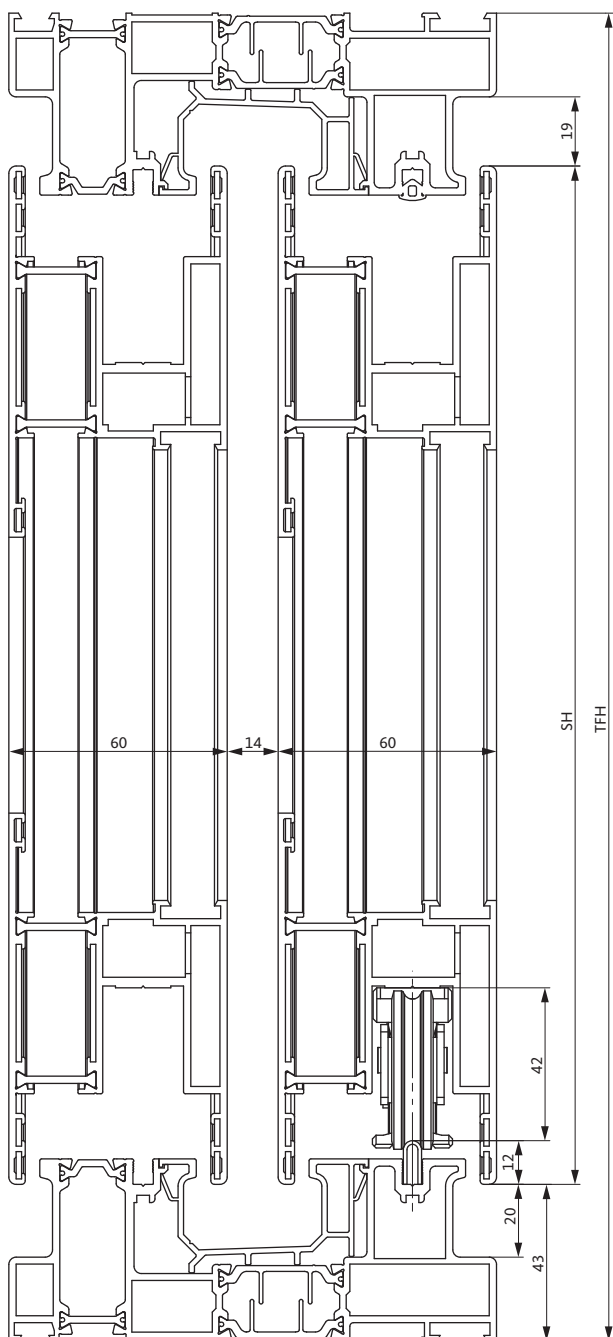
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 822–2722 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

Installation drawings

| Application | Drawing | Order information |
|------------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45754 | from page 11 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS StopUnit / HS SilentClose | 0-45754 | from page 268 |
| HS SpeedLimiter | 0-44550 | from page 270 |

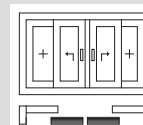
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



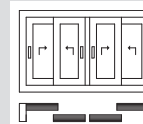
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



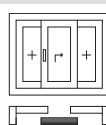
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



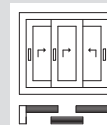
Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right



Pattern H
3 Lift&Slide doors
(like pattern G1 symmetrical)
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|---|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|---|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|---|-------------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 | |
| | | | | | | | | faceGUard | 1 | K-17804-01-0-18 | |

| Rod Ø 8 mm | | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|---|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Rod Ø 8 mm | 1270 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

Akotherm AT 750 HS / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|--|---|---|---|----|---|---|----------------|--------------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | F | G1 | H | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 3 | 822 – 1242 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | | | 1192 – 1822 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | | | 1822 – 2322 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-18 |
| | | | | | | 2072 – 2722 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 |
| | | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 |
| | | | | | | Optional: Gear and cover-rail extension set 500 mm | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | max. 3222 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | max. 3222 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Akotherm AT 750 HS

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|---|--------|----|----------------|
| A | C | D | F | G1 | H | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Basic hardware set for Akotherm AT 750 HS | - | 1 | K-16934-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, 1 x buffer, 2 x rubber buffer, fixing screws, cover caps

Optional: packers for frame cams

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|---------------|-----------------|----|----------------|
| A | C | D | F | G1 | H | | | | |
| 2 | 4 | 4 | 6 | - | 4 | Packer 0.5 mm | stainless steel | 10 | K-18309-01-0-8 |
| 2 | 4 | 4 | 6 | - | 4 | Packer 1.0 mm | stainless steel | 10 | K-18309-02-0-8 |

Accessories

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|-----------------|--------|----|----------------|
| A | C | D | F | G1 | H | | | | |
| - | 1 | - | 1 | - | - | Accessories set | - | 1 | K-13392-00-0-5 |

Contains: 8 x pin, 4 x bushing, fixing screws

L&S bottom keeper [1]

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|-------------------|----------|----|----------------|
| A | C | D | F | G1 | H | | | | |
| - | - | - | - | 1 | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws
[1] Optionally with patterns A, C, D and F

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | | | Designation | Finish | PU | Order no. |
|--------------------|---|---|---|----|---|----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|----|---|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | | Designation | Finish | PU | Order no. |
|---|---|---|---|----|---|---|--------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | - | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|----|---|-----------------------|-------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | - | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | | Designation | Finish | PU | Order no. |
|-----------------|---|---|---|----|---|-----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | - | 2 | Vertical packer | - | 1 | 9-47295-08-0-1 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|--|---|---|---|----|---|--|--------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | | |
| 1 | 2 | 2 | 4 | - | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 | |
| | | | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 | |
| | | | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 | |
| | | | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 | |
| | | | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 | |

Akotherm AT 750 HS / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1][2] | | | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|----|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | | dark brown [3] | 1 | 6-24608-00-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | | dark brown [3] | 1 | 6-24609-00-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] The fixing screws are contained in the basic hardware set for Akotherm AT 750 HS / order number K-16934-00-0-0.
 [3] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

L&S flush pull

| L&S flush pull | | | | | | | Designation | Finish | PU | Order no. |
|----------------|---|---|---|----|---|---------------------------|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 2 and 3

| Fixing screws | | | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|----|---|------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | |
| 2 | 4 | 4 | 8 | 2 | 6 | Countersunk screw M6 x 65 mm | 2 + 3 | - | 1 | 9-13274-65-0-1 | |

| Optional: gasket plates | | | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|----|---|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | H | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | 1 | 3 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Alcoa Europe / L&S bogie GU-934

Application ranges

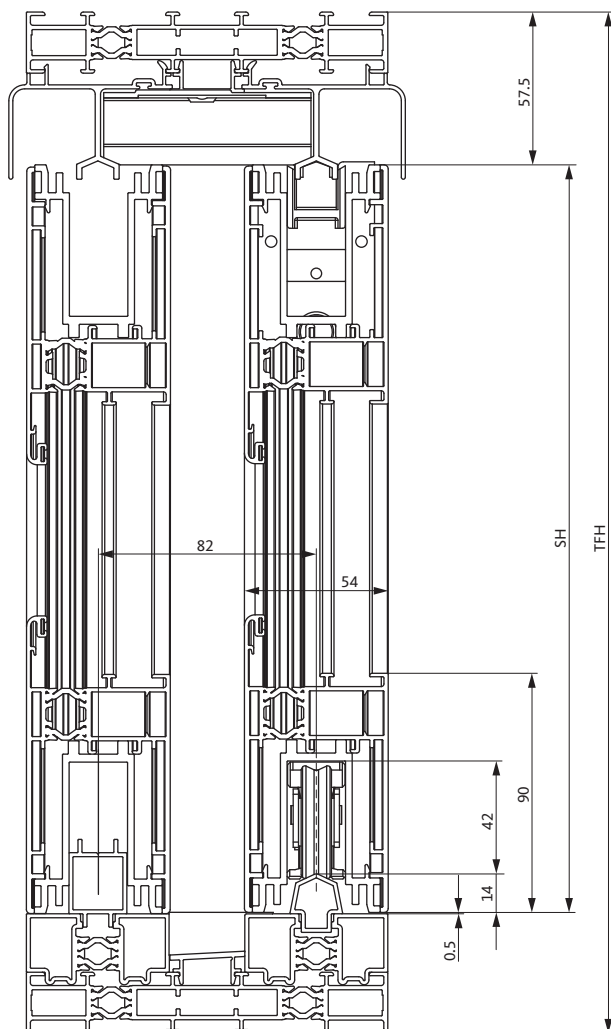


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 845–2745 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

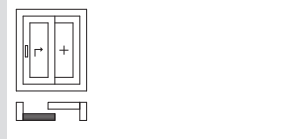
| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-934 | 0-44730 | from page 17 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |



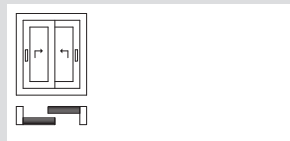
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | |
|-----------|---|-------------------------|----------|----|-----------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S bogie GU-934, front | ferGUard | 1 | [1] |
| 1 | 2 | L&S bogie GU-934, rear | ferGUard | 1 | [1] |

[1] The L&S bogies are included in the basic hardware set for Alcoa Europe / order number K-16971-00-0-0.

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

Alcoa Europe / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| A | D | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 845 – 1265 | 1190 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | 1215 – 1845 | 1770 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | 1845 – 2345 | 2270 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | 2095 – 2745 | 2670 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3245 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3245 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Alcoa Europe

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------------------------|--------|----|----------------|
| A | D | | | | |
| 1 | 2 | Basic hardware set for Alcoa Europe | - | 1 | K-16971-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 1 x packer, 6 x spacer, 3 x frame cam, 3 x packer, 3 x rubber buffer, 3 x guide, 1 x cover cap, 1 x PC screw-hole cover cap, gaskets, fixing screws

Optional: L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-------------|----|-----------------|
| A | D | | | | |
| 2 | 2 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | white | 1 | K-12024-00-0-7 |
| | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit L&S night vent module

| Frame cam | | | | | |
|--|---|-------------------|-----------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 2 | 4 | Frame cam | stainless steel | 1 | 9-43830-04-0-8 |
| L&S bottom keeper | | | | | |
| 1 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |
| Contains: 1 x bottom keeper, fixing screws | | | | | |

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | |
|---|---|----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |
| [1] Recommended from a sash weight of 200 kg for reduction of the operating forces. | | | | | |

| L&S handle damper [1] | | | | | |
|---|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |
| Contains: 1 x handle damper, accessory | | | | | |
| [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash. | | | | | |



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Alcoa Europe / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | |
|---------------|---|------------------------------|------------------------|--------|----|----------------|
| Pattern | | Designation | Example of application | Finish | PU | Order no. |
| A | D | | | | | |
| 2 | 4 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 |
| 2 | 4 | Countersunk screw M6 x 65 mm | 2 | - | 1 | 9-13274-65-0-1 |
| 2 | 4 | Countersunk screw M6 x 70 mm | 3 | - | 1 | 9-13274-70-0-1 |

| Optional: gasket plates | | | | | | |
|-------------------------|---|--|------------------------|--------|----|----------------|
| Pattern | | Designation | Example of application | Finish | PU | Order no. |
| A | D | | | | | |
| 1 | 2 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 |
| 1 | 2 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 |

Aliplast Ultraglidle / L&S bogie GU-934

Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 857–2727 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

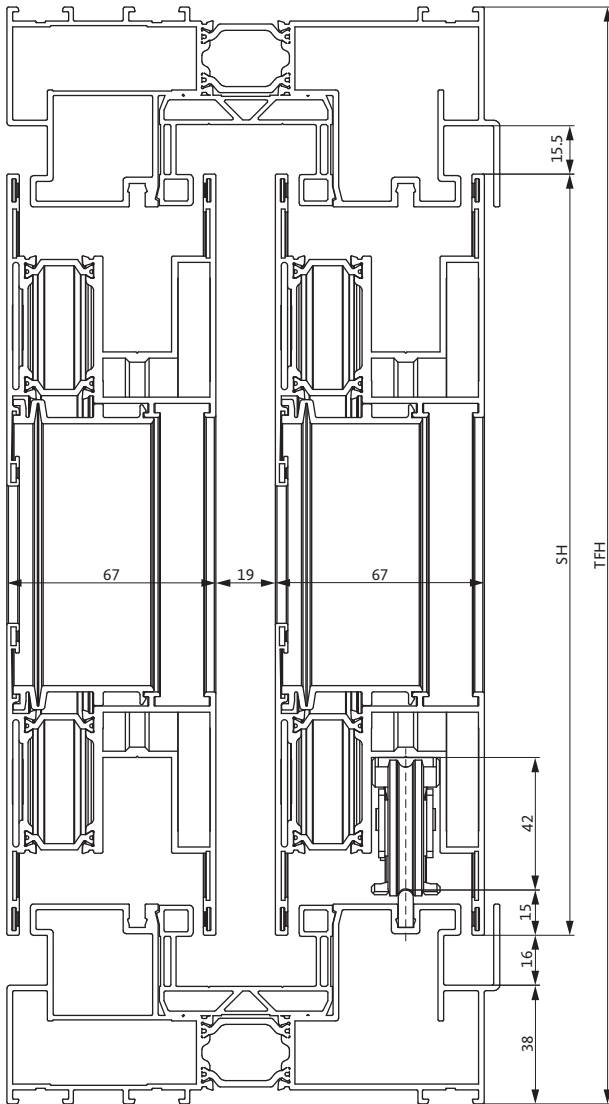
SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45871 | from page 23 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

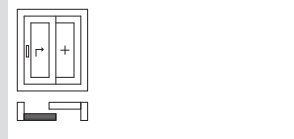
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

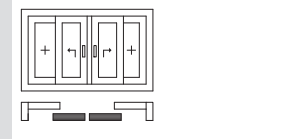


SH = sash height / TFH = total frame width

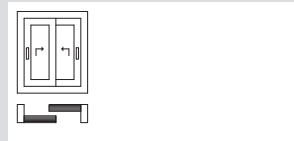
Possible patterns



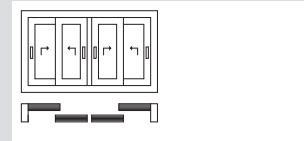
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



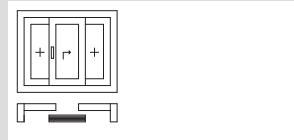
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|-------------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |
| 1 | 2 | 2 | 4 | 1 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 | |
| | | | | | | | faceGUard | 1 | K-17804-01-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

Aliplast Ultraglide / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|----|-------------|-------------|--------------------|--------------------|---------------------------|----|-----------------|
| A | C | D | F | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 857 – 1247 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | | 1197 – 1827 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | | 1828 – 2327 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | | 2077 – 2727 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3227 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3227 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Aliplast Ultraglide

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|--|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Basic hardware set for Aliplast Ultraglide | - | 1 | K-18082-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, 2 x rubber buffer, 1 x PC screw-hole cover cap, fixing screws

Frame cam

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | 2 | - | 2 | - | Frame cam | stainless steel | 1 | 6-22623-03-0-8 |

L&S buffer 90 [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | 2 | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with patterns A and C

Fixing screws

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Bag of screws | - | 1 | K-12256-00-0-0 |

Contains: 1 x PC screw-hole cover cap, fixing screws

| Accessories | | | | | | | | | |
|--|---|---|---|----|-------------------|----------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| - | 1 | - | 1 | - | Accessories set | - | 1 | K-13392-00-0-5 | |
| Contains: 8 x pin, 4 x bushing, fixing screws | | | | | | | | | |
| L&S bottom keeper [1] | | | | | | | | | |
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| - | - | - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |
| Contains: 1 x bottom keeper, fixing screws [1] Optionally with patterns A, C, D and F | | | | | | | | | |

Aliplast Ultraglidle / L&S bogie GU-934

Optional additional components



Additional kit L&S night vent module

| Pattern | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|-------------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | - | 4 | 4 | - | Frame cam | stainless steel | 1 | 9-43830-03-0-8 |
| L&S bottom keeper | | | | | | | | |
| 1 | - | 2 | 2 | - | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|----------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | | | | |
|---|---|---|---|----|---|--------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | | | |
|-----------------------|---|---|---|----|-----------------------|-------------------|----|----------------|
| Pattern | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | | | |
|-----------------|---|---|---|----|-----------------|--------|----|----------------|
| Pattern | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | - | Vertical packer | - | 1 | 9-47295-06-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | | | |
|--|---|---|---|----|--|--------------|-------------|----------|----|----------------|
| Pattern | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Aliplast Ultraglide / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|----|--|------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | | | | |
|---------------|---|---|---|----|-------------------------------|--------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw 5.5 x 32 mm | – | 1 | 9-13253-32-0-0 | |

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1][2] | | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | dark brown [3] | 1 | 6-24608-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | dark brown [3] | 1 | 6-24609-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] The fixing screws are contained in the basic hardware set for Aliplast Ultraglide / order number K-18082-00-0-0.
 [3] Similar to RAL 8022

| L&S flush pull | | | | | | Designation | Finish | PU | Order no. |
|----------------|---|---|---|----|---------------------------|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

| Optionally: gasket plate | | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|----|-----------------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 | |

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | dark brown [3] | 1 | 6-24615-96-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] The fixing screws are contained in the basic hardware set for Aliplast Ultraglide / order number K-18082-00-0-0.
 [3] Similar to RAL 8022

| Optionally: gasket plate | | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|----|--|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 | |

Alsistem / L&S bogie GU-934

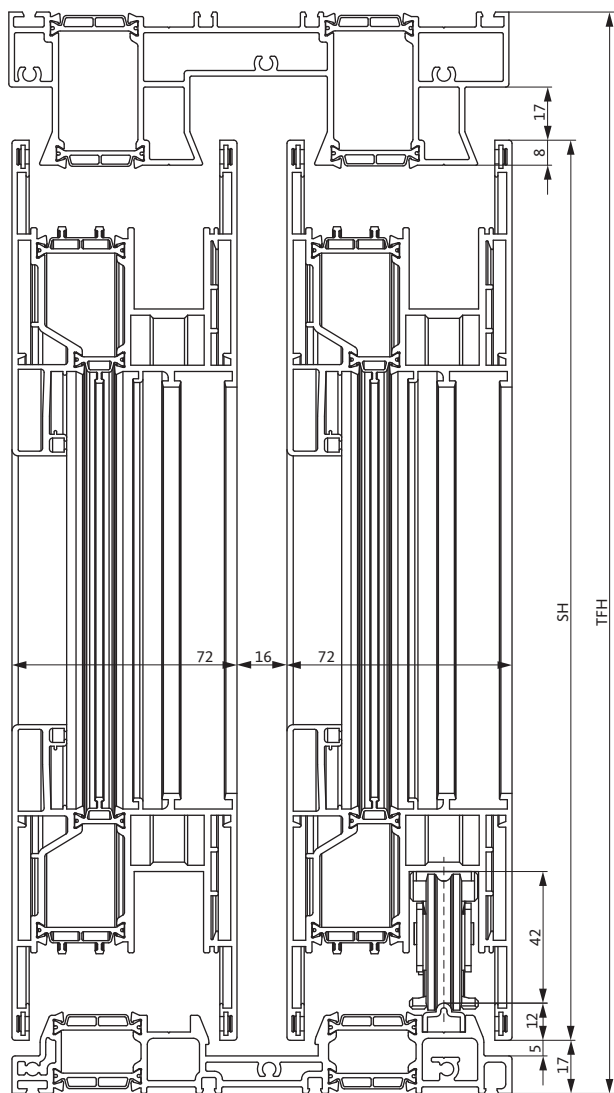
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 830–2730 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45782 | from page 31 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

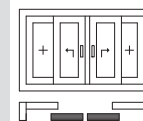
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



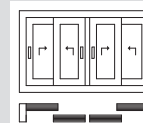
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



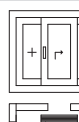
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|-------------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |
| 1 | 2 | 2 | 4 | 1 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 | |
| | | | | | | | faceGUard | 1 | K-17804-01-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

Alsistem / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|----|-------------|-------------|--------------------|--------------------|---------------------------|----|-----------------|
| A | C | D | F | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 830 – 1250 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | | 1200 – 1830 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | | 1831 – 2330 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | | 2080 – 2730 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3230 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3230 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Alsistem

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------------------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Basic hardware set for Alsistem | - | 1 | K-18082-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, 2 x rubber buffer, 1 x PC screw-hole cover cap, fixing screws

L&S buffer 90 [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | 2 | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with patterns A and C

| Fixing screws | | | | | | Designation | Finish | PU | Order no. |
|--|---|---|---|----|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | Bag of screws | - | 1 | K-12256-00-0-0 | |
| Contains: 1 x PC screw-hole cover cap, fixing screws | | | | | | | | | |
| Accessories | | | | | | Designation | Finish | PU | Order no. |
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| - | 1 | - | 1 | - | Accessories set | - | 1 | K-13392-00-0-5 | |
| Contains: 8 x pin, 4 x bushing, fixing screws | | | | | | | | | |
| L&S bottom keeper [1] | | | | | | Designation | Finish | PU | Order no. |
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| - | - | - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |
| Contains: 1 x bottom keeper, fixing screws [1] Optionally with patterns A, C, D and F | | | | | | | | | |

Alsistem / L&S bogie GU-934

Optional additional components



Additional kit L&S night vent module

| Pattern | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|-------------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 4 | 4 | 4 | – | Frame cam | stainless steel | 1 | 9-43830-03-0-8 |
| L&S bottom keeper | | | | | | | | |
| 1 | 2 | 2 | 2 | – | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|----------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Tension spring | – | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S handle damper | – | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50%.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | Designation | Finish | PU | Order no. |
|--|---|---|---|----|---|--------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |
| Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws | | | | | | | | | |

| L&S anti-jemmy device | | | | | | Designation | Finish | PU | Order no. |
|---|---|---|---|----|-----------------------|-------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |
| | | | | | | | | | |
| Contains: 2 x lever, 2 x wedge, 2 x pivot bracket | | | | | | | | | |

| Vertical packer | | | | | | Designation | Finish | PU | Order no. |
|-----------------|---|---|---|----|-----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | Vertical packer | - | 1 | 9-47295-06-0-1 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | | | |
|--|---|---|---|----|--|--------------|-------------|----------|----|----------------|
| Pattern | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Alsistem / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|----|--|------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | | | | |
|---------------|---|---|---|----|-------------------------------|--------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw 5.5 x 32 mm | - | 1 | 9-13253-32-0-0 | |

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1][2] | | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole [2] | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | dark brown [3] | 1 | 6-24608-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole [2] | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | dark brown [3] | 1 | 6-24609-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] The fixing screws are contained in the basic hardware set for Alsistem / order number K-18082-00-0-0.
 [3] Similar to RAL 8022

| L&S flush pull | | | | | | Designation | Finish | PU | Order no. |
|----------------|---|---|---|----|---------------------------|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

| Optionally: gasket plate | | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|----|-----------------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 | |

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | dark brown [3] | 1 | 6-24615-96-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] The fixing screws are contained in the basic hardware set for Alsistem / order number K-18082-00-0-0.
 [3] Similar to RAL 8022

| Optionally: gasket plate | | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|----|--|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 | |

AluK SC140 / L&S bogie GU-934

Application ranges

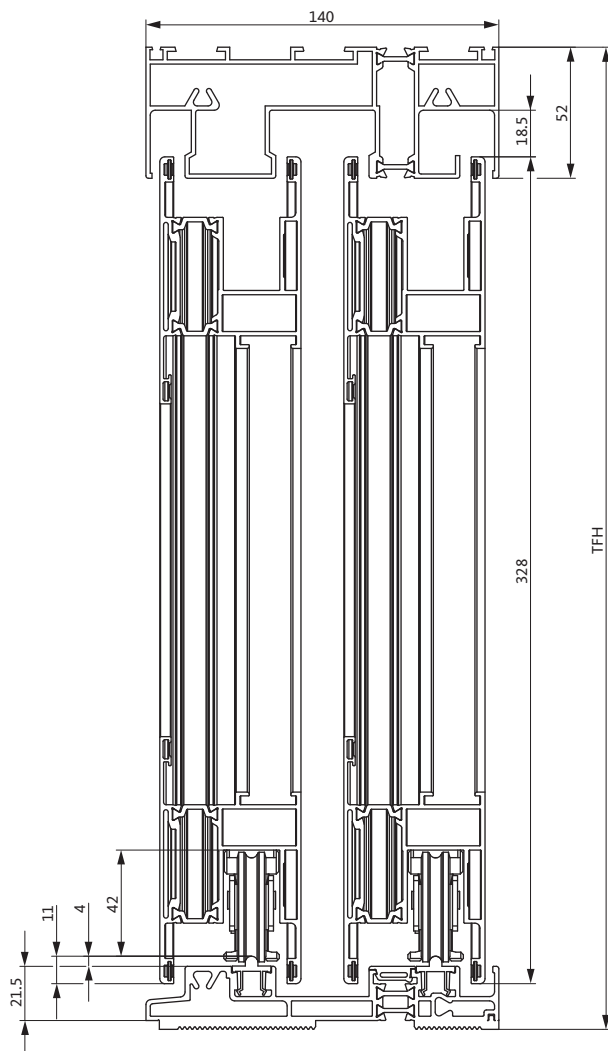


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 850–2749 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1

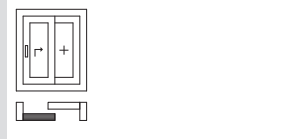
| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-934 | 0-45641 | from page 39 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



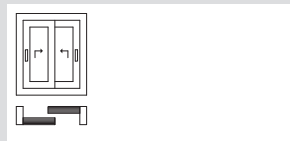
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern D
2 Lift&Slide doors
Fig: sliding direction to the right and left

TFW = total frame width

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | |
|-----------|---|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | D | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | |
|-----------|---|-------------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | D | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |
| 1 | 2 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 |
| | | | | faceGUard | 1 | K-17804-01-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 1210 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

AluK SC140 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 27.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|--|---|---|-------------|--------------------|--------------------|---------------------------|----|-----------------|
| A | D | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 850 – 1269 | 1190 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | 1220 – 1849 | 1770 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-19-0-18 |
| | | 1850 – 2349 | 2270 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-24-0-18 |
| | | 2100 – 2749 | 2670 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-28-0-18 |
| | | Optional: Gear and cover-rail extension set 500 mm | | | | | | |
| 1 | 2 | max. 3249 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3249 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for AluK SC 140

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------------------------|--------|----|----------------|
| A | D | | | | |
| 1 | 2 | Basic hardware set for AluK SC 140 | - | 1 | K-17981-00-0-0 |

Contains: 1 x packer, 5 x spacer, 1 x frame cam, 1 x PC screw-hole cover cap, fixing screws

L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|--------|----|----------------|
| A | D | | | | |
| 2 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Optional: L&S bottom keeper

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------|----------|----|----------------|
| A | D | | | | |
| 1 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | |
|--------------------|---|----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | |
|-----------------------|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | |
|---|---|---|--------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | |
|-----------------------|---|-----------------------|-------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | |
|--|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

AluK SC140 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1][2] | | | | | |
|---------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [3] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [3] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] The fixing screws are contained in the basic hardware set for AluK SC 140 / order number K-17981-00-0-0.
 [3] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 2 | 4 | Countersunk screw M6 x 75 mm | – | 1 | 9-13274-75-0-1 |

| Optionally: gasket plate | | | | | |
|--------------------------|---|-----------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | |
|---------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | K-13267-00-0-1 |
| | | | dark brown [3] | 1 | K-13267-00-0-5 |
| | | | white, RAL 9016 | 1 | K-13267-00-0-7 |

[1] Contents: 1 DIRIGENT interior/exterior turn handle set with PC hole, fixing screws, square spindle
 [2] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [3] Similar to RAL 8022

| Optionally: gasket plate | | | | | |
|--------------------------|---|--|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Application example 4: Interior turn handle – with extended exterior flush pull

| DIRIGENT L&S turn handle | | | | | |
|--------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole [1] | silver/EV 1 look | 1 | K-13265-00-0-1 |
| | | | dark brown [3] | 1 | K-13265-00-0-5 |
| | | | white, RAL 9016 | 1 | K-13265-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole [2] | silver/EV 1 look | 1 | K-13266-00-0-1 |
| | | | dark brown [3] | 1 | K-13266-00-0-5 |
| | | | white, RAL 9016 | 1 | K-13266-00-0-7 |

[1] Contents: DIRIGENT interior turn handle without PC hole, extended flush pull, square spindle
 [2] Contents: DIRIGENT interior turn handle with PC hole, extended flush pull, square spindle
 [3] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 2 | 4 | Countersunk screw M6 x 60 mm | - | 1 | 9-13274-60-0-1 |

Alumil M300 / L&S bogie GU-934

Application ranges



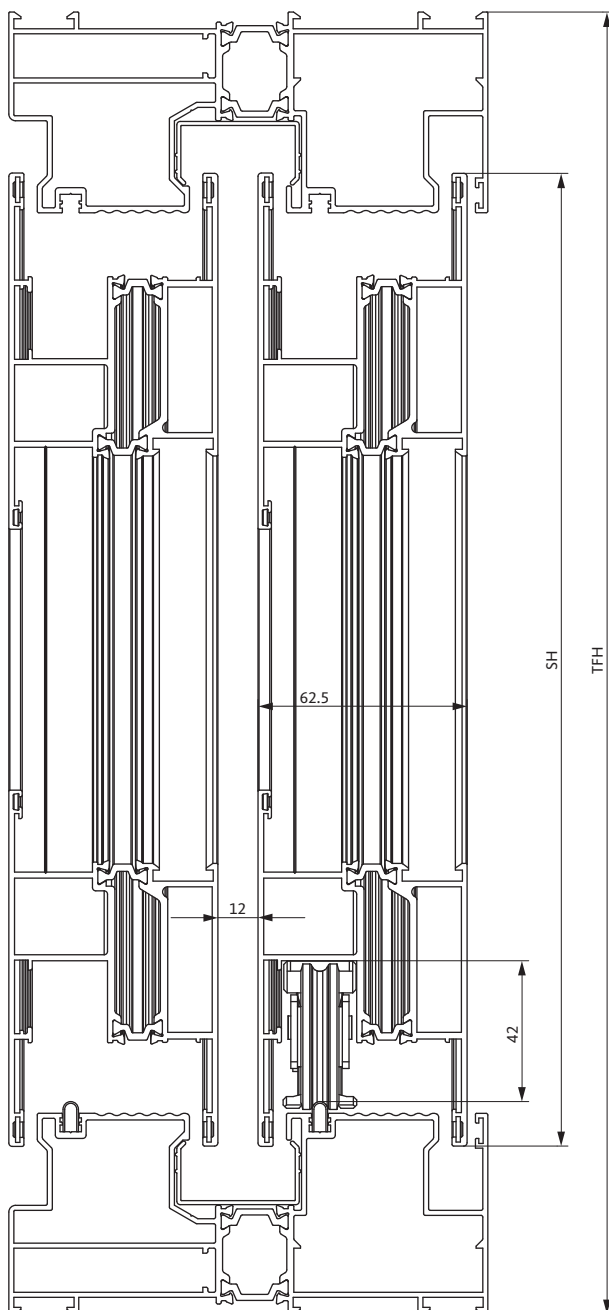
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 830–2730 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-44685 | from page 45 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |

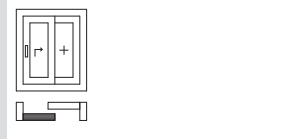


SH = sash height / TFH = total frame width

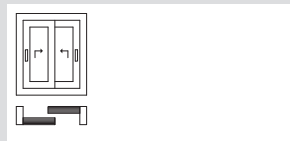
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

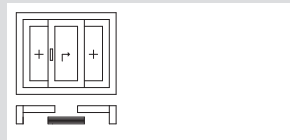
Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|----|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | | | | | | |
| A | D | G1 | | | | | |
| 1 | 2 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|----|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | | | | | | | |
| A | D | G1 | | | | | | |
| 1 | 2 | 1 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Alumil M300 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-------------|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | D | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 1 | 830 – 1250 | 1190 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | 1200 – 1830 | 1770 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | 1831 – 2330 | 2270 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | 2080 – 2730 | 2670 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | | | | 6-30021-28-0-5 | | | |
| EV 1 / light grey | faceGUard | 10 | | | | 6-30021-28-0-18 | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 1 | max. 3230 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 1 | max. 3230 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

PC cover cap

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|-------------------------|--------|----|----------------|
| A | D | G1 | | | | |
| 1 | 2 | 1 | PC screw-hole cover cap | grey | 1 | 9-26687-00-0-1 |

Basic hardware set for Alumil M300

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|------------------------------------|--------|----|----------------|
| A | D | G1 | | | | |
| 1 | 2 | 1 | Basic hardware set for Alumil M300 | - | 1 | K-17464-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, fixing screws

Bottom keeper

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|-------------------|----------|----|----------------|
| A | D | G1 | | | | |
| - | - | 1 | Bottom keeper set | ferGUard | 1 | K-17864-00-0-1 |

Contains: 1 x bottom keeper, fixing screws
[1] Optionally with patterns A and D

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | | | |
|--------------------|---|----|----------------|--------|----|----------------|--|
| Pattern | | | Designation | Finish | PU | Order no. | |
| A | D | G1 | | | | | |
| 1 | 2 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | | | |
|-----------------------|---|----|-------------------|--------|----|----------------|--|
| Pattern | | | Designation | Finish | PU | Order no. | |
| A | D | G1 | | | | | |
| 1 | 2 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Alumil M300 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

DIRIGENT L&S turn handle [1][2]

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|--|------------------|----|----------------|
| A | D | G1 | | | | |
| 1 | 2 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | dark brown [3] | 1 | 6-24608-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | dark brown [3] | 1 | 6-24609-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.

[2] The fixing screws are contained in the basic hardware set for Alumil M300 / order number K-17464-00-0-0.

[3] Similar to RAL 8022

L&S flush pull

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|---------------------------|------------------|----|----------------|
| A | D | G1 | | | | |
| 1 | 2 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-02-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-02-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-02-0-7 |

[1] Similar to RAL 8022

Optionally: gasket plate

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|-----------------------------|--------|----|----------------|
| A | D | G1 | | | | |
| 1 | 2 | 1 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | | |
|---------------------------------|---|----|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | dark brown [3] | 1 | 6-24615-96-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] The fixing screws are contained in the basic hardware set for Alumil M300 / order number K-17464-00-0-0.
 [3] Similar to RAL 8022

| Optionally: gasket plate | | | | | | |
|--------------------------|---|----|--|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Aluprof MB-77HS / L&S bogie GU-934

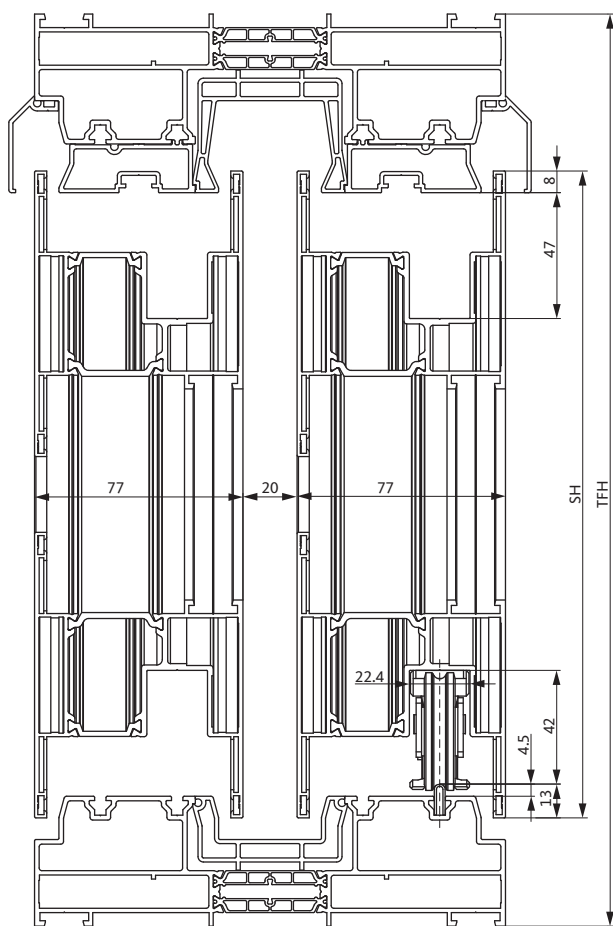
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 843–2743 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFW = total frame width

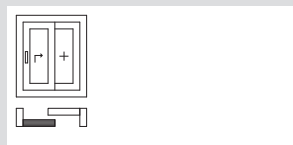
Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45957 | from page 51 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

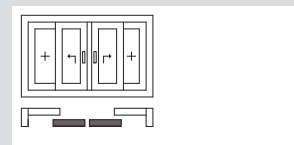
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

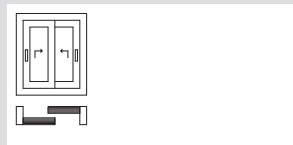
Possible patterns



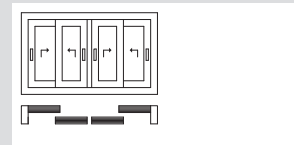
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



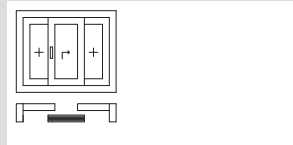
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|-------------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | | faceGUard | 1 | K-16488-00-0-18 | |
| 1 | 2 | 2 | 4 | 1 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 | |
| | | | | | | | faceGUard | 1 | K-17804-01-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

Aluprof MB-77HS / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|----|-------------|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | F | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 843 – 1263 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | | 1213 – 1843 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | | 1843 – 2343 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | | 2093 – 2743 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3243 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3243 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Packer, spacer, frame cam, PC screw-hole cover cap, rubber buffer

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|----|----|----|----|---|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Vertical packer for L&S bogie GU-934, front | - | 1 | 9-47295-04-0-1 |
| 5 | 10 | 10 | 20 | 7 | Spacer for Lift&Slide gear | - | 1 | 9-47296-06-0-1 |
| 2 | 2 | 4 | 6 | - | Frame cam | stainless steel | 1 | 6-22648-03-0-8 |
| 1 | 2 | 2 | 4 | 1 | PC cover cap | grey | 1 | 9-26687-00-0-1 |
| 2 | 4 | - | - | 2 | Rubber buffer 62 | black | 1 | 9-24292-00-0-0 |

L&S buffer 90 [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | 2 | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
 [1] Optionally with patterns A and C

L&S bottom keeper [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|----------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws
 [1] Optionally with patterns A, C, D and F

Aluprof MB-77HS / L&S bogie GU-934

Optional additional components



Additional kit L&S night vent module

| Pattern | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|-------------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 4 | 4 | 4 | - | Frame cam | stainless steel | 1 | 9-43830-03-0-8 |
| L&S bottom keeper | | | | | | | | |
| 1 | 2 | 2 | 2 | - | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|----------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | | | | |
|---|---|---|---|----|---|--------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | | | |
|-----------------------|---|---|---|----|-----------------------|-------------------|----|----------------|
| Pattern | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | | | |
|-----------------|---|---|---|----|-----------------|--------|----|----------------|
| Pattern | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | - | Vertical packer | - | 1 | 9-47295-04-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | | | |
|--|---|---|---|----|--|--------------|-------------|----------|----|----------------|
| Pattern | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Aluprof MB-77HS / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|----|----------------|
| Pattern | | | | | | | | |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|----|----------------|
| Pattern | | | | | | | | |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

L&S flush pull

| L&S flush pull | | | | | Designation | Finish | PU | Order no. |
|----------------|---|---|---|----|---------------------------|------------------|----|----------------|
| Pattern | | | | | | | | |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|----|-------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw 5.5 x 32 mm | 1 | - | 1 | 9-13253-32-0-0 | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw M6 x 85 mm | 2 + 3 | - | 1 | 9-13274-85-0-3 | |

| Optional: gasket plates | | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|----|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Aluprof MB-77HS / L&S bogie GU-937

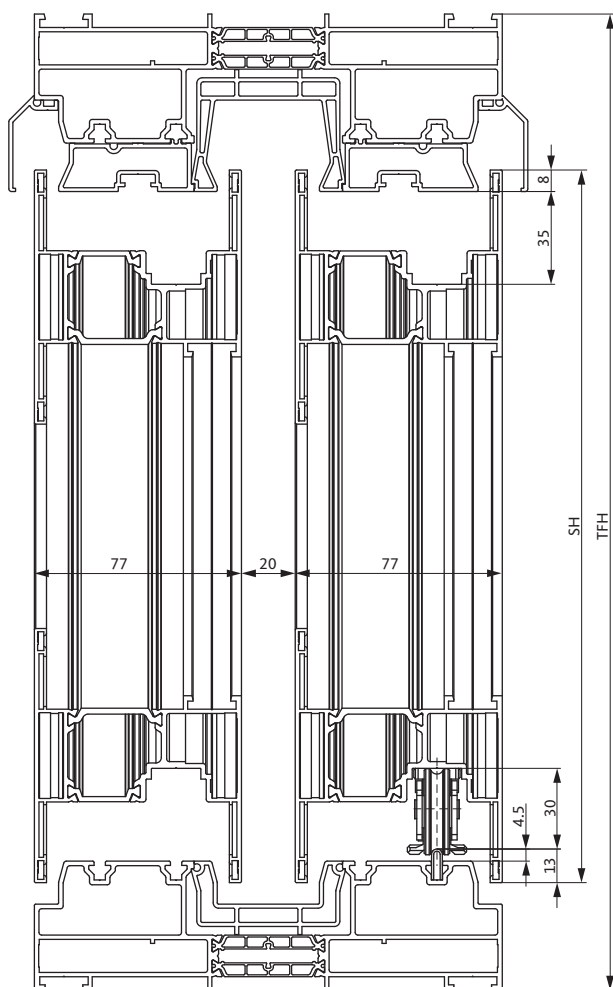
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 841–2741 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

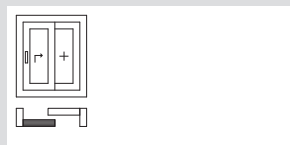
Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-937 | 0-45958 | from page 59 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

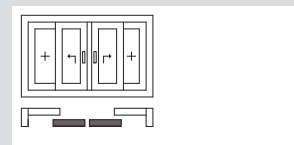
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

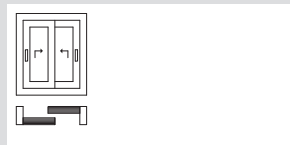
Possible patterns



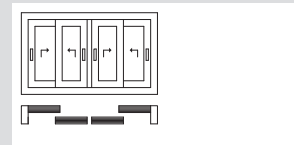
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



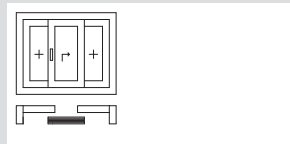
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 200 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|------------------|-----------------------------------|----------|-----------|----------------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-937 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16493-00-0-1 |
| | | | | | | | | faceGUard | 1 |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Aluprof MB-77HS / L&S bogie GU-937

Hardware requirements



Lift&Slide gear, 27.5 mm backset

| Pattern | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|--|---|---|---|----|---|-------------|--------------------|--------------------|---------------------------|----|-----------------|
| A | C | D | F | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 841 – 1261 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | | | | 1211 – 1841 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-19-0-18 |
| | | | | | 1841 – 2341 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-24-0-18 |
| | | | | | 2091 – 2741 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-28-0-18 |
| | | | | | Optional: Gear and cover-rail extension set 500 mm | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3241 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3241 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Frame cam, PC screw-hole cover cap, rubber buffer

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|------------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 2 | 4 | 6 | - | Frame cam | stainless steel | 1 | 6-22648-03-0-8 |
| 1 | 2 | 2 | 4 | 1 | PC cover cap | grey | 1 | 9-26687-00-0-1 |
| 2 | 4 | - | - | 2 | Rubber buffer 62 | black | 1 | 9-24292-00-0-0 |

L&S buffer 90 [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | 2 | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with patterns A and C

L&S locking set for pattern G1

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | - | - | 1 | Bottom keeper set | - | 1 | K-17864-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Optional: frame cam

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 4 | 4 | 4 | - | Frame cam | stainless steel | 1 | 9-43830-03-0-8 |

Optional: bottom keeper

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|----------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 2 | - | Bottom keeper set | ferGUard | 1 | K-17864-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| L&S handle damper [1] | | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|----|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | Designation | Finish | PU | Order no. |
|---|---|---|---|----|---|--------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|----|-----------------------|-------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | Designation | Finish | PU | Order no. |
|-----------------|---|---|---|----|-----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | Vertical packer | - | 1 | 9-47295-06-0-1 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|--|---|---|---|----|--|--------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 | |
| | | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 | |
| | | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 | |
| | | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 | |
| | | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 | |

Aluprof MB-77HS / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24608-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24609-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

L&S flush pull

| L&S flush pull | | | | | | Designation | Finish | PU | Order no. |
|----------------|---|---|---|----|---------------------------|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|----|-------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw 5.5 x 32 mm | 1 | - | 1 | 9-13253-32-0-0 | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw M6 x 85 mm | 2 + 3 | - | 1 | 9-13274-85-0-3 | |

| Optional: gasket plates | | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|----|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Etem E3000 / L&S bogie GU-934

Application ranges



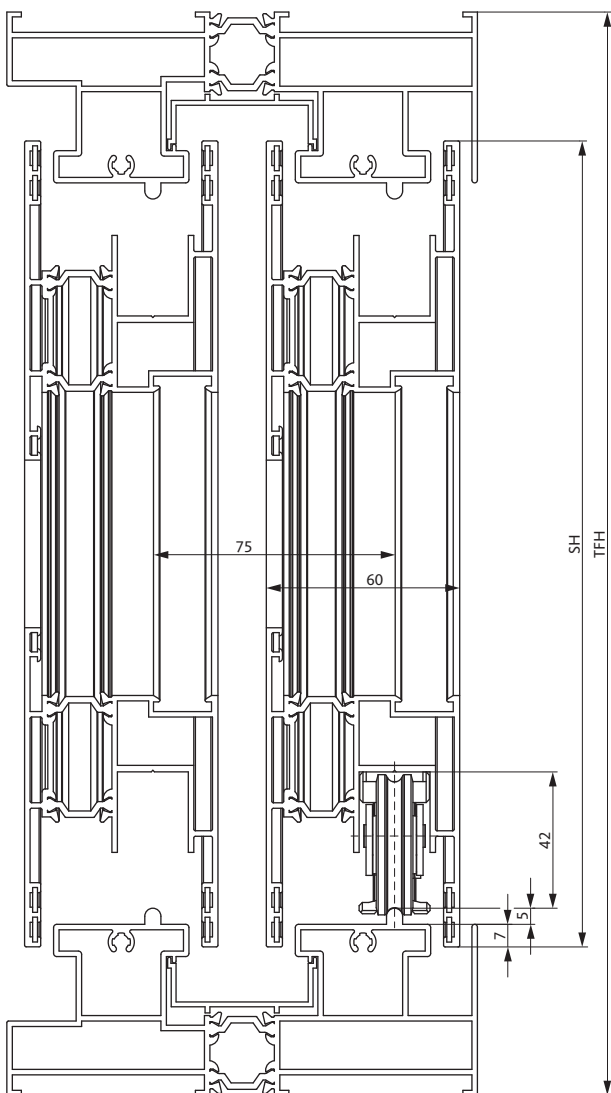
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 825–2725 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-44306 | from page 65 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |



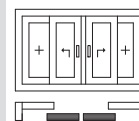
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



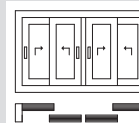
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | faceGUard | 1 | K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Etem E3000 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|-------------|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 825 - 1245 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | 1195 - 1825 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | 1825 - 2325 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | 2075 - 2725 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3225 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3225 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Packer, spacer, frame cam, PC screw-hole cover cap, rubber buffer

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|----|----|----|---|-----------------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Vertical packer for L&S bogie GU-934, front | - | 1 | 9-47295-08-0-1 |
| 5 | 10 | 10 | 20 | Spacer for Lift&Slide gear | - | 1 | 9-47296-09-0-1 |
| 2 | 2 | 4 | 4 | Frame cam | stainless steel | 1 | 6-22623-03-0-8 |
| 1 | 2 | 2 | 4 | PC cover cap | grey | 1 | 9-26687-00-0-1 |
| 2 | 4 | - | - | Rubber buffer 60 | black | 1 | 9-23793-00-0-0 |

Counterplate

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|------------------|--------|----|----------------|
| A | C | D | F | | | | |
| - | 1 | - | 1 | Counterplate set | - | 1 | K-17605-00-0-0 |

Contains: 2 x counter plate, fixing screws

Additional kit L&S night vent module

| Frame cam | | | | | Designation | Finish | PU | Order no. |
|-------------------|---|---|---|-------------------|-----------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 2 | 4 | 4 | 4 | Frame cam | stainless steel | 1 | 9-43830-03-0-8 | |
| L&S bottom keeper | | | | | Designation | Finish | PU | Order no. |
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | Designation | Finish | PU | Order no. |
|--------------------|---|---|---|----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50%.
 Order information from page 236.

Etem E3000 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | | | |
|----------------|---|---|---|---------------------------|------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

| Fixing screws | | | | | | | | |
|---------------|---|---|---|------------------------------|--------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 70 mm | – | 1 | 9-13274-70-0-1 | |

| Optionally: gasket plate | | | | | | | | |
|--------------------------|---|---|---|-----------------------------|--------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 | |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | | | | |
|---------------|---|---|---|------------------------------|--------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 70 mm | - | 1 | 9-13274-70-0-1 | | |

| Optionally: gasket plate | | | | | | | | | |
|--------------------------|---|---|---|--|--------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 | | |

Etem E50 / L&S bogie GU-937

Application ranges



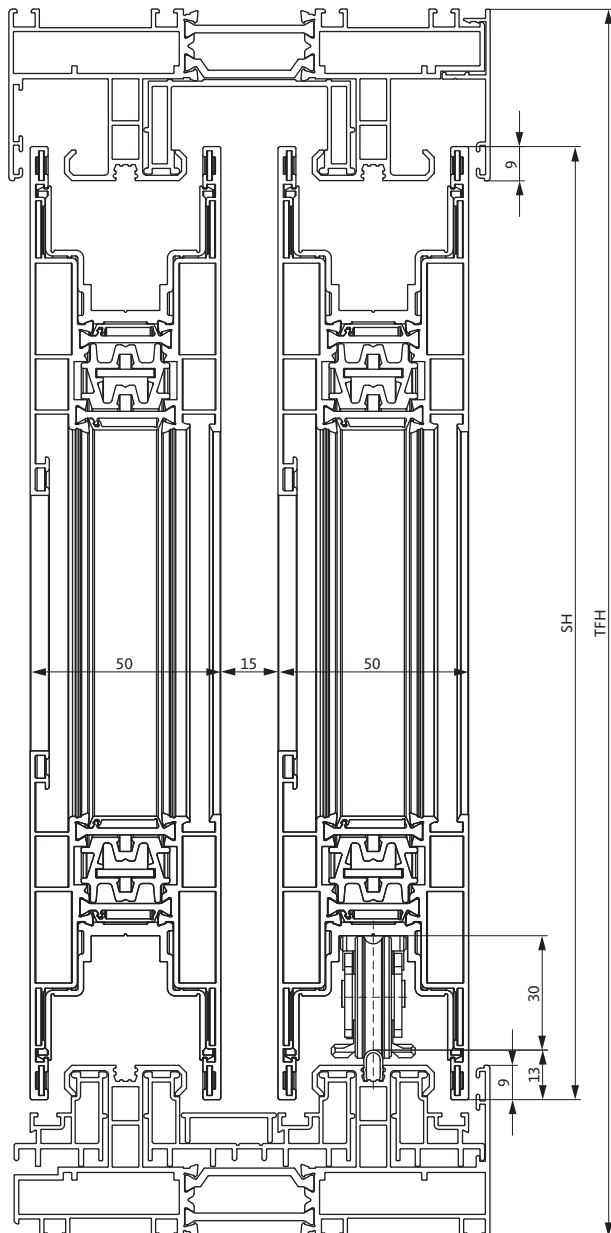
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 849–2749 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-937 | 0-46563 | from page 71 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |



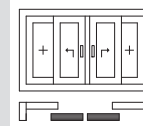
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



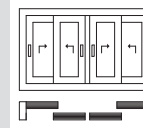
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 200 kg

| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-937 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16493-00-0-1 | |
| | | | | | | faceGUard | 1 | K-16493-00-0-18 | |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Etem E50 / L&S bogie GU-937

Hardware requirements



Lift&Slide gear, 27.5 mm backset

| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|--|---|---|---|---|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 849 – 1269 | 1190 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | | | 1239 – 1849 | 1770 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-19-0-18 |
| | | | | 1849 – 2349 | 2270 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-24-0-18 |
| | | | | 2099 – 2749 | 2670 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-28-0-18 |
| | | | | Optional: Gear and cover-rail extension set 500 mm | | | | | | |
| 1 | 2 | 2 | 4 | max. 3249 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3249 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Frame cam

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------------------|-----------------|----|----------------|
| A | C | D | F | | | | |
| 2 | - | 4 | 4 | Frame cam | stainless steel | 1 | 9-38825-00-0-8 |
| - | 2 | - | 2 | Frame cam pattern C | stainless steel | 1 | 6-22648-01-0-8 |
| - | 4 | - | 4 | Countersunk screw 4.8 x 38 mm | stainless steel | 1 | 9-13089-38-R-8 |

PC cover cap

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

L&S buffer 90

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|--------|----|----------------|
| A | C | D | F | | | | |
| 2 | 4 | 2 | 4 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Optional: L&S bottom keeper

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------|----------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| L&S handle damper [1] | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Etem E50 / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | | | | |
|----------------|---|---|---|---------------------------|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | | |
| | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 80 mm | 2 + 3 | - | 1 | 9-13274-80-0-1 | |

| Optional: gasket plates | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Etem E52 / L&S bogie GU-937

Application ranges



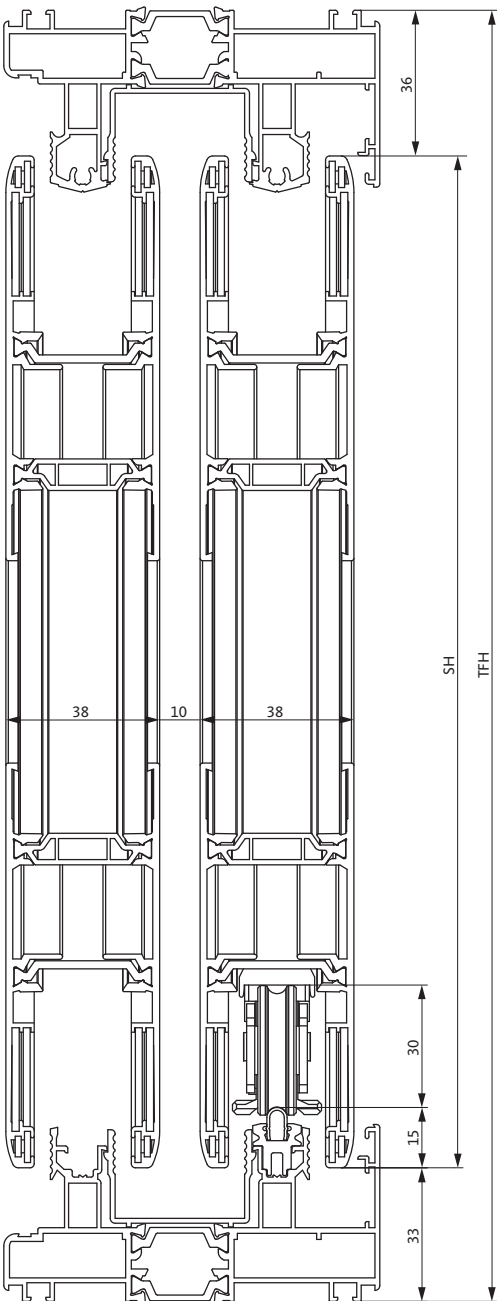
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 849–2749 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-937 | 0-46585 | from page 77 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |



SH = sash height / TFH = total frame width

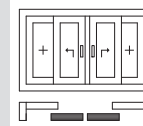
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



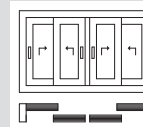
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 200 kg

| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|----------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-937 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16721-00-0-1 | |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |

Etem E52 / L&S bogie GU-937

Hardware requirements



Lift&Slide gear, 27.5 mm backset

| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|---|---|-------------|----------------|-----------------------|--------------------|------------------------------|----|----------------|
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 849 - 1269 | 1190 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | | | 1239 - 1849 | 1770 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | | 1849 - 2349 | 2270 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | | 2099 - 2749 | 2670 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3249 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3249 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Frame cam

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------------------|-----------------|----|----------------|
| A | C | D | F | | | | |
| 2 | - | 4 | 4 | Frame cam | stainless steel | 1 | 9-47530-02-0-8 |
| - | 2 | - | 2 | Frame cam pattern C | stainless steel | 1 | 6-22648-03-0-8 |
| - | 4 | - | 4 | Countersunk screw 4.8 x 38 mm | stainless steel | 1 | 9-13089-38-R-8 |

PC cover cap

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

L&S buffer 90

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|--------|----|----------------|
| A | C | D | F | | | | |
| 2 | 4 | 2 | 4 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit L&S night vent module

| Frame cam | | | | | Designation | Finish | PU | Order no. |
|-------------------|---|---|---|-------------------|-----------------|--------|----------------|-----------|
| A | C | D | F | | | | | |
| - | 4 | - | 4 | Frame cam | stainless steel | 1 | 9-43830-03-0-8 | |
| L&S bottom keeper | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| L&S handle damper [1] | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-------------------|-------------|--------|----------------|-----------|
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Etem E52 / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | | | | |
|----------------|---|---|---|-----------------------|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull, round | silver/EV 1 look | 1 | 9-46686-00-0-1 | | |
| | | | | | dark brown [1] | 1 | 9-46686-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 9-46686-00-0-7 | | |
| | | | | | stainless steel | 1 | 9-46686-00-0-8 | | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 45 mm | 2 + 3 | - | 1 | 9-13601-45-R-8 | |

| Optional: gasket plates | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Etem E70 / L&S bogie GU-934

Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 849–2749 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

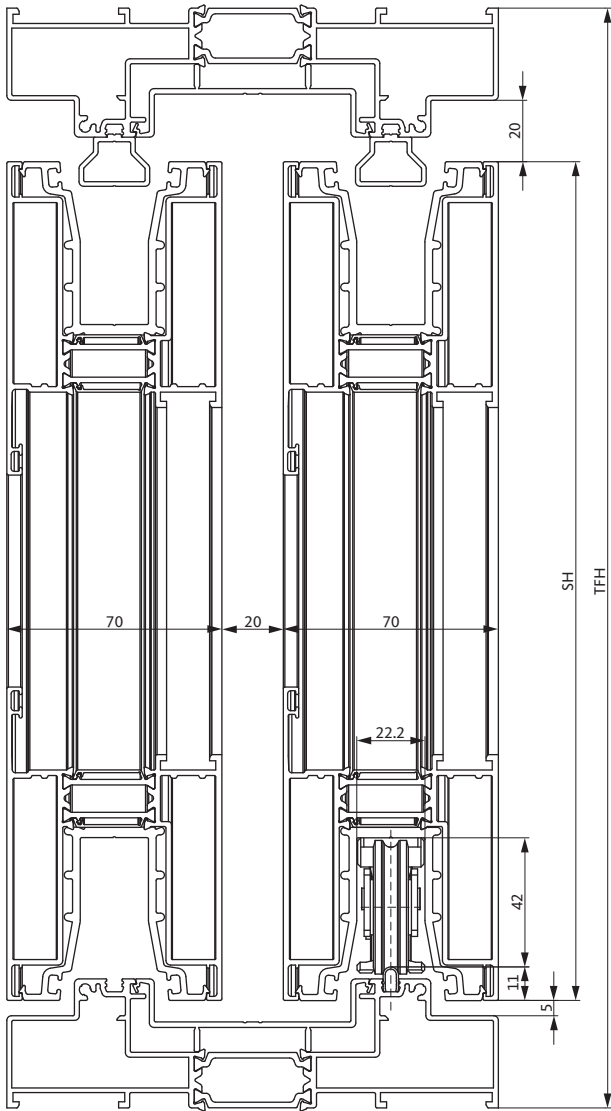
SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45904 | from page 83 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

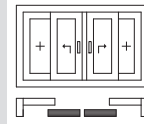


SH = sash height / TFH = total frame width

Possible patterns



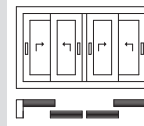
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



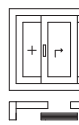
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|------------------|-----------------------------------|-----------------------|--------|-----------------------------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard faceGUard | 1 1 | K-16488-00-0-1 K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|-------------------------|-----------------------------------|-----------------------|--------|-----------------------------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard faceGUard | 1 1 | K-16488-00-0-1 K-16488-00-0-18 | |
| 1 | 2 | 2 | 4 | 1 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard faceGUard | 1 1 | K-17804-01-0-1 K-17804-01-0-18 | |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Rod Ø 8 mm | 1210 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

Etem E70 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|----|-------------|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | F | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 849 – 1269 | 1190 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | | 1239 – 1849 | 1770 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | | 1849 – 2349 | 2270 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | 2099 – 2749 | 2670 | 1006 | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | | | | | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3249 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | max. 3249 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Frame cam

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 2 | 4 | 6 | - | Frame cam | stainless steel | 1 | 6-22648-02-0-8 |
| - | 4 | - | 4 | - | Countersunk screw 4.8 x 38 mm | stainless steel | 1 | 9-13089-38-R-8 |

Packer, spacer, PC screw-hole cover cap

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|----|----|----|----|---|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Vertical packer for L&S bogie GU-934, front | - | 1 | 9-47295-06-0-1 |
| 5 | 10 | 10 | 20 | 6 | Spacer for Lift&Slide gear | - | 1 | 9-47296-07-0-1 |
| 1 | 2 | 2 | 4 | 1 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

L&S buffer 90

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 4 | 2 | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

L&S bottom keeper

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|----------|----|----------------|
| A | C | D | F | G1 | | | | |
| - | - | - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit L&S night vent module

| Pattern | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|-------------------|-----------------|----|----------------|
| A | C | D | F | G1 | | | | |
| 2 | 4 | 4 | 4 | - | Frame cam | stainless steel | 1 | 9-43830-04-0-8 |
| L&S bottom keeper | | | | | | | | |
| 1 | 2 | 2 | 2 | - | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Etem E70 / L&S bogie GU-934

Optional additional components



Additional kit 'comfort' (see Chapter 4.1)

Tension spring [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|----------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

L&S handle damper [1]

| Pattern | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|-------------------|--------|----|----------------|
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | | | | |
|---|---|---|---|----|---|--------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | | | |
|-----------------------|---|---|---|----|-----------------------|-------------------|----|----------------|
| Pattern | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | | | |
|-----------------|---|---|---|----|-----------------|--------|----|----------------|
| Pattern | | | | | Designation | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | |
| 1 | 2 | 2 | 4 | - | Vertical packer | - | 1 | 9-47295-06-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | | | |
|--|---|---|---|----|--|--------------|-------------|----------|----|----------------|
| Pattern | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Etem E70 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|----|--|------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|----|--|------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | | | | |
|----------------|---|---|---|----|---------------------------|------------------|----|----------------|--|
| Pattern | | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | G1 | | | | | |
| 1 | 2 | 2 | 4 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|----|------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 | |
| 2 | 4 | 4 | 8 | 2 | Countersunk screw M6 x 80 mm | 2 + 3 | - | 1 | 9-13274-80-0-1 | |

| Optional: gasket plates | | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|----|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G1 | | | | | | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | 1 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Etem E70 / L&S bogie GU-937

Application ranges



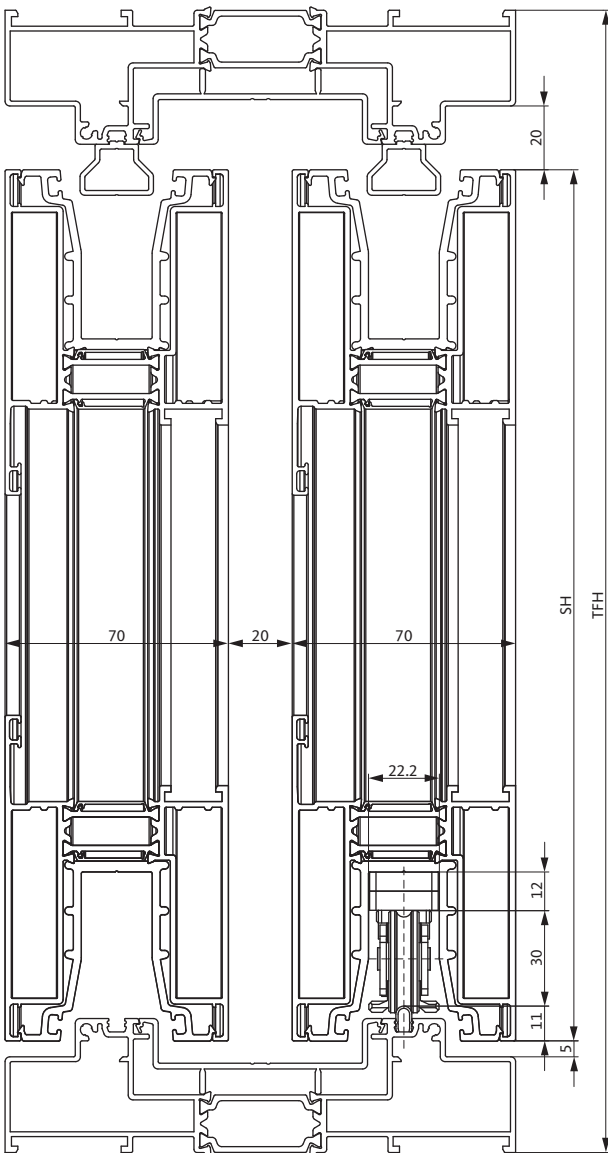
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 849–2749 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

Installation drawings

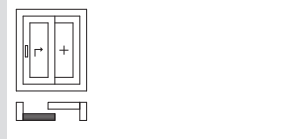
| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-937 | 0-46564 | from page 91 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |



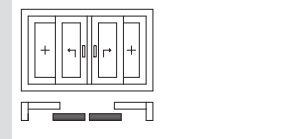
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

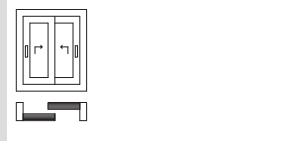
Possible patterns



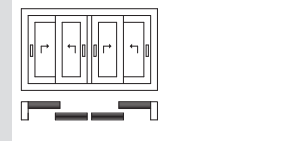
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 200 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-937 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16493-00-0-1 | |
| | | | | | | faceGUard | 1 | K-16493-00-0-18 | |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

| Lift&Slide gear, 27.5 mm backset | | | | | | | | | | | |
|--|---|---|---|-------------|-------------|--------------------|--------------------|---------------------------|-----------|-----------------|-----------------|
| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. | |
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | | |
| 1 | 2 | 2 | 4 | 849 – 1269 | 1190 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 | |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 | |
| | | | | 1239 – 1849 | 1770 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 | |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 | |
| | | | | 1849 – 2349 | 2270 | 1006 | EV 1 / light grey | faceGUard | 10 | 6-30019-19-0-18 | |
| | | | | | | | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 | |
| | | | | 2099 – 2749 | 2670 | 1006 | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 | |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-24-0-18 | |
| Optional: Gear and cover-rail extension set 500 mm | 1 | 2 | 2 | 4 | max. 3249 | 500 | – | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3249 | 500 | – | EV 1 / light grey | – | 10 | 9-28483-05-0-1 | |
| | | | | | | | UC 5 / dark bronze | – | 10 | 9-28483-05-0-5 | |

Etem E70 / L&S bogie GU-937

Hardware requirements



Frame cam

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------------------|-----------------|----|----------------|
| A | C | D | F | | | | |
| 2 | 2 | 4 | 6 | Frame cam | stainless steel | 1 | 6-22648-02-0-8 |
| - | 4 | - | 4 | Countersunk screw 4.8 x 38 mm | stainless steel | 1 | 9-13089-38-R-8 |

Horizontal packers

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--|--------|----|----------------|
| A | C | D | F | | | | |
| 2 | 4 | 4 | 8 | Horizontal packer for GU-937 L&S front bogie | - | 1 | 9-41680-16-0-1 |
| 2 | 4 | 4 | 8 | Horizontal packer for L&S bogie GU-937, rear | - | 1 | 9-41681-16-0-1 |

Packer, spacer, PC screw-hole cover cap

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|----|----|----|---|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Vertical packer for L&S bogie GU-937, front | - | 1 | 9-47295-06-0-1 |
| 5 | 10 | 10 | 20 | Spacer for Lift&Slide gear | - | 1 | 9-47296-07-0-1 |
| 1 | 2 | 2 | 4 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

L&S buffer 90

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|--------|----|----------------|
| A | C | D | F | | | | |
| 2 | 4 | 2 | 4 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit L&S night vent module

Frame cam

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------|-----------------|----|----------------|
| A | C | D | F | | | | |
| 2 | 4 | 4 | 4 | Frame cam | stainless steel | 1 | 9-43830-04-0-8 |

L&S bottom keeper

| | | | | | | | |
|---|---|---|---|-------------------|----------|---|----------------|
| 1 | 2 | 2 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |
|---|---|---|---|-------------------|----------|---|----------------|

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.2)

| L&S handle damper [1] | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.4)

| L&S corner-drive with anti-jemmy device | | | | | Designation | Finish | PU | Order no. |
|---|---|---|---|---|--------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-----------------------|-------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | Designation | Finish | PU | Order no. |
|-----------------|---|---|---|-----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Vertical packer | - | 1 | 9-47295-06-0-1 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|--|---|---|---|--|--------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 | |
| | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 | |
| | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 | |
| | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 | |
| | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 | |

Etem E70 / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

L&S flush pull

| L&S flush pull | | | | | Designation | Finish | PU | Order no. |
|----------------|---|---|---|---------------------------|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|---|------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 | |
| 2 | 4 | 4 | 8 | Countersunk screw M6 x 80 mm | 2 + 3 | - | 1 | 9-13274-80-0-1 | |

| Optional: gasket plates | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|---|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 4 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Exalco Albio 230 / L&S bogie GU-934

Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 825–2725 mm | 350 kg | GU-934 |

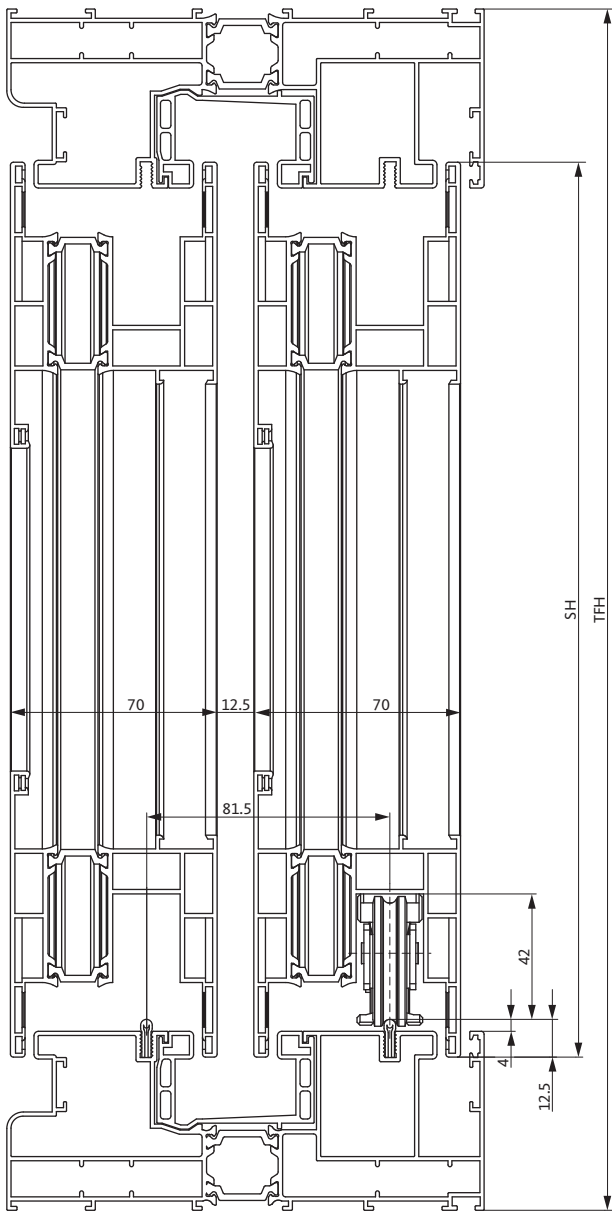
SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-44822 | from page 97 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

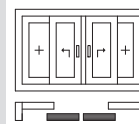


SH = sash height / TFH = total frame width

Possible patterns



Pattern A
 1 Lift&Slide door
 1 Fixed-glazed sash
 Fig.: sliding direction to the right



Pattern C
 2 Lift&Slide doors
 2 Fixed-glazed sashes
 Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 350 kg

| L&S bogie | | | | | | |
|-----------|---|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | C | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Exalco Albio 230 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| A | C | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 825 – 1245 | 1190 | 407.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | 1195 – 1825 | 1770 | 407.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | 1825 – 2325 | 2270 | 1007.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | 2075 – 2725 | 2670 | 1007.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3225 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3225 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Exalco Albio 230

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Basic hardware set for Exalco Albio 230 | - | 1 | K-17482-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, 2 x rubber buffer, 1 x PC screw-hole cover cap, fixing screws

Counterplate

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|--------------|--------|----|----------------|
| A | C | | | | |
| - | 2 | Counterplate | - | 1 | 9-24414-00-0-0 |

Fixing screws

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------------------|-----------------|----|----------------|
| A | C | | | | |
| - | 4 | Countersunk screw M5 x 55 mm | stainless steel | 1 | 9-13133-55-0-8 |

Optional: L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|--------|----|----------------|
| A | C | | | | |
| 2 | 4 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | |
|--------------------|---|----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | |
|-----------------------|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Exalco Albio 230 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1][2] | | | | | |
|---------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [3] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [3] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] The fixing screws are contained in the basic hardware set for Exalco Albio 230 / order number K-17482-00-0-0.
 [3] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

| Optionally: gasket plate | | | | | |
|--------------------------|---|-----------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | |
|---|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [3] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |
| <p>[1] The use of buffers is recommended. For order information, refer to page 220 + 221. [2] The fixing screws are contained in the basic hardware set for Exalco Albio 230 / order number K-17482-00-0-0. [3] Similar to RAL 8022</p> | | | | | |

| Optionally: gasket plate | | | | | |
|--------------------------|---|--|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Feal T 120 / L&S bogie GU-934

Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 847–2747 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

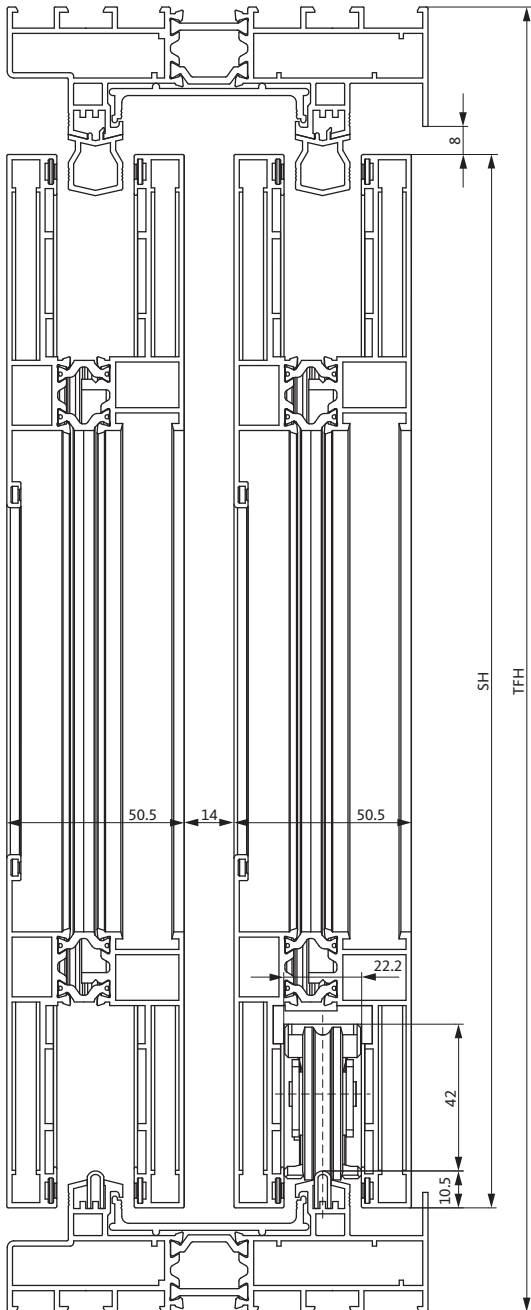
SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45732 | from page 103 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

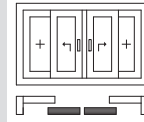


SH = sash height / TFH = total frame width

Possible patterns



Pattern A
 1 Lift&Slide door
 1 Fixed-glazed sash
 Fig.: sliding direction to the right



Pattern C
 2 Lift&Slide doors
 2 Fixed-glazed sashes
 Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | |
|-----------|---|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | C | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | |
|-----------|---|-------------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | C | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |
| 1 | 2 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 |
| | | | | faceGUard | 1 | K-17804-01-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Feal T 120 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. | | |
|---|----------|--|-------------|--------------------|--------------------|---------------------------|-------------------|-----------------|----|----------------|
| A | C | | | | Cover rail | Lock case, connecting rod | | | | |
| 1 | 2 | 847 – 1267 | 1190 | 405.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 | | |
| | | 1217 – 1874 | 1770 | 405.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 | | |
| | | 1874 – 2347 | 2270 | 1005.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 | | |
| | | 2097 – 2747 | 2670 | 1005.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | |
| | | Alternative: Lift&Slide gear, 27.5 mm backset | | | | | | | | |
| | | 1 | 2 | 847 – 1267 | 1190 | 405.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| UC 5 / dark bronze | ferGUard | | | | | | 10 | 6-30019-11-0-5 | | |
| 1217 – 1874 | 1770 | | | 405.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-19-0-18 | | |
| 1874 – 2347 | 2270 | | | 1005.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-24-0-18 | | |
| 2097 – 2747 | 2670 | | | 1005.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30019-28-0-18 | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | max. 3247 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 | | |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | max. 3247 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 | | |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 | | |

Horizontal/vertical packers

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Horizontal packer for L&S bogie GU-934, front | - | 1 | 9-41680-05-0-1 |
| 1 | 2 | Horizontal packer for L&S bogie GU-934, rear | - | 1 | 9-41681-05-0-1 |
| 2 | 4 | Horizontal packer for L&S tandem bogie GU-934, centre | - | 1 | 9-41681-05-0-1 |
| 1 | 2 | Vertical packer for L&S bogie GU-934, front | - | 1 | 9-47295-05-0-1 |

Frame cam, spacers, PC screw-hole cover cap

| Pattern | | Designation | Finish | PU | Order no. |
|---------|----|----------------------------|-----------------|----|----------------|
| A | C | | | | |
| 2 | - | Frame cam | stainless steel | 1 | 9-47530-01-0-8 |
| - | 2 | Frame cam | stainless steel | 1 | 6-22648-02-0-8 |
| 5 | 10 | Spacer for Lift&Slide gear | - | 1 | 9-47296-07-0-1 |
| 1 | 2 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

Optional: L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|--------|----|----------------|
| A | C | | | | |
| 2 | 4 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit L&S night vent module

Frame cam

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------|-----------------|----|----------------|
| A | C | | | | |
| - | 4 | Frame cam | stainless steel | 1 | 9-43830-04-0-8 |

L&S bottom keeper

| | | | | | |
|---|---|-------------------|----------|---|----------------|
| 1 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |
|---|---|-------------------|----------|---|----------------|

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

Tension spring [1]

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|----------------|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

L&S handle damper [1]

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Feal T 120 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | |
|---------------|---|------------------------------|------------------------|--------|----|----------------|
| Pattern | | Designation | Example of application | Finish | PU | Order no. |
| A | C | | | | | |
| 2 | 4 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 |
| 2 | 4 | Countersunk screw M6 x 60 mm | 2 + 3 | - | 1 | 9-13274-60-0-1 |

| Optional: gasket plates | | | | | | |
|-------------------------|---|--|------------------------|--------|----|----------------|
| Pattern | | Designation | Example of application | Finish | PU | Order no. |
| A | C | | | | | |
| 1 | 2 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 |
| 1 | 2 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 |

Gastaldello Sistemi / L&S bogie GU-934

Application ranges



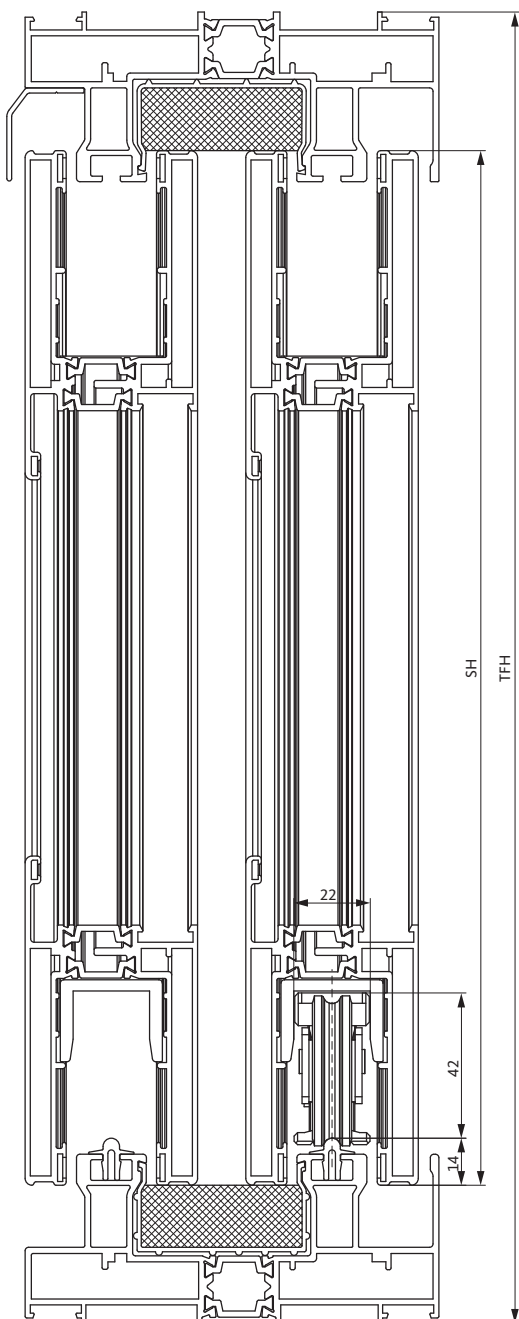
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 852–2752 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-44395 | from page 109 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



SH = sash height / TFH = total frame width

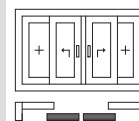
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



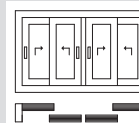
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|----------|--------|-----|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | [1] | |

[1] The L&S bogies are included in the basic hardware set for Gastaldello Sistemi / order number K-16967-00-0-0.

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |

| Lift&Slide gear, 27.5 mm backset | | | | | | | | | | |
|---|---|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 852 – 1272 | 1190 | 409.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | | | 1222 – 1852 | 1770 | 409.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | | 1852 – 2352 | 2270 | 1009.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | | 2102 – 2752 | 2670 | 1009.5 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3252 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3252 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

| Basic hardware set for Gastaldello Sistemi | | | | | | | | | | |
|--|---|---|---|--|--------|----|----------------|--|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Basic hardware set for Gastaldello Sistemi | - | 1 | K-16967-00-0-0 | | | |

Contains: 1 x front bogie, 1 x rear bogie, 2 x rubber buffer, 2 x frame cam, 1 x PC screw-hole cover cap, fixing screws

Gastaldello Sistemi / L&S bogie GU-934

Hardware requirements / Optional additional components



Cover plate

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Cover plate, bottom | black | 1 | 9-45585-00-0-6 |

Spacer, guides

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------|--------|----|-----------|
| A | C | D | F | | | | |
| 1 | 1 | 2 | 3 | Spacer | - | 1 | [1] |
| 1 | 1 | 2 | 3 | Guide 1 | - | 1 | [1] |
| 1 | 2 | 2 | 4 | Guide 2 | - | 1 | [1] |

[1] Delivered by Gretsch-Unitas Italia S.r.l.

Optional: L&S buffer 90

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|-------------|----|-----------------|
| A | C | D | F | | | | |
| 2 | 4 | 2 | 4 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | | | white | 1 | K-12024-00-0-7 |
| | | | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Optional: packer for L&S buffer 90

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---|-------------|----|-----------------|
| A | C | D | F | | | | |
| - | - | 4 | 8 | Packer for L&S buffer 90 Height 8.0 mm | black | 1 | 9-30294-01-0-6 |
| | | | | | white | 1 | 9-30294-01-0-7 |
| | | | | | cream white | 1 | 9-30294-01-0-7Z |

Additional kit 'comfort' (see Chapter 4.1)

Tension spring [1]

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

L&S handle damper [1]

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | | |
|------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24608-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 | | |
| | | | | | dark brown [2] | 1 | 6-24609-00-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 | | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | | | | |
|---------------|---|---|---|-------------------------------|--------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 2 | 4 | 4 | 8 | Countersunk screw 5.5 x 32 mm | - | 1 | 9-13253-32-0-0 | | |

Gutmann SC 180 / L&S bogie GU-934

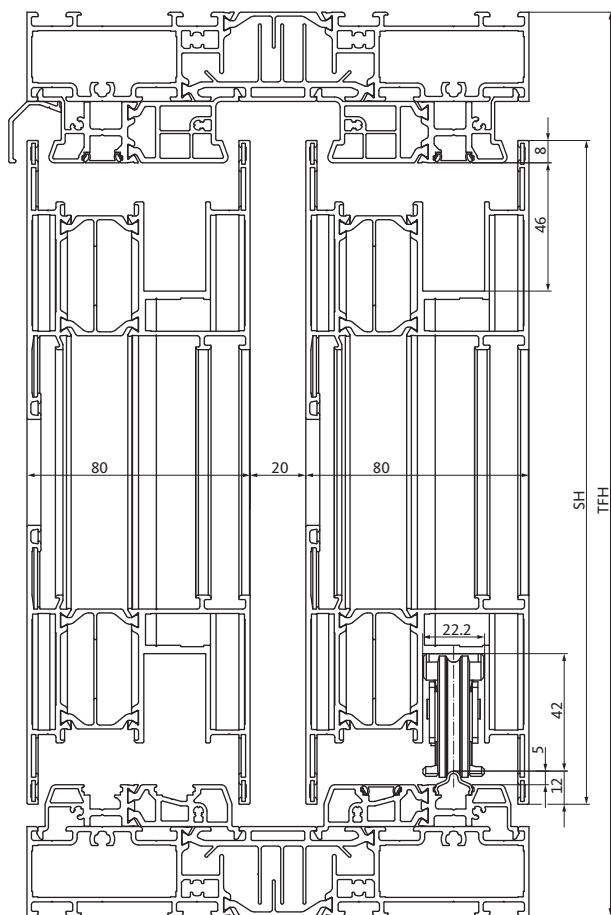
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–2220 mm | 851–2751 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

Installation drawings

| Application | Drawing | Order information |
|------------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-46014 | from page 113 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS StopUnit / HS SilentClose | 0-46014 | from page 268 |

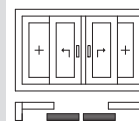
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|---|------------------|-----------------------------------|-----------|----|-----------------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | | faceGUard | 1 | K-16488-00-0-18 |

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|-------------|-------------|-------------|-----------|----|-----------------|
| A | C | D | | | | | | |
| 1 | 2 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

L&S bogie and rod – for sash weights up to 400 kg



| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|---|-------------------------|-----------------------------------|-----------|----|-----------------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | | faceGUard | 1 | K-16488-00-0-18 |
| 1 | 2 | 2 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 |
| | | | | | faceGUard | 1 | K-17804-01-0-18 |

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|-------------|-------------|-------------|-----------|----|-----------------|
| A | C | D | | | | | | |
| 1 | 2 | 2 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Gutmann SC 180 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-------------|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 1 | 851 – 1271 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | 1221 – 1851 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | 1852 – 2351 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | 2101 – 2751 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | | | | 6-30021-28-0-5 | | | |
| EV 1 / light grey | faceGUard | 10 | | | | 6-30021-28-0-18 | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 1 | max. 3251 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 1 | max. 3251 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

PC cover cap

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-------------------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | PC screw-hole cover cap | grey | 1 | 9-26687-00-0-1 |

Basic hardware set for Gutmann SC 180

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------------------------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Basic hardware set for Gutmann SC 180 | - | 1 | K-18330-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, fixing screws

Packers for frame cams

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|-----------------|----|----------------|
| A | C | D | | | | |
| 2 | 4 | 4 | Packer 0.5 mm | stainless steel | 1 | K-18309-01-0-8 |
| 2 | 4 | 4 | Packer 1.0 mm | stainless steel | 1 | K-18309-02-0-8 |

L&S buffer 90

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|--------|----|----------------|
| A | C | D | | | | |
| - | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Rubber buffer 80

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|------------------|------------|----|----------------|
| A | C | D | | | | |
| 2 | - | - | Rubber buffer 80 | light grey | 1 | 9-08488-00-0-1 |
| | | | | black | 1 | 9-08488-00-0-6 |

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | Designation | Finish | PU | Order no. |
|--------------------|---|---|----------------|-------------|--------|----------------|-----------|
| A | C | D | | | | | |
| 1 | 2 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|-------------------|-------------|--------|----------------|-----------|
| A | C | D | | | | | |
| 1 | 2 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | Designation | Finish | PU | Order no. |
|---|---|---|---|--------------------|--------|----------------|-----------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|-----------------------|-------------------|--------|----------------|-----------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | Designation | Finish | PU | Order no. |
|-----------------|---|---|-----------------|-------------|--------|----------------|-----------|
| A | C | D | | | | | |
| 1 | 2 | 2 | Vertical packer | - | 1 | 9-25740-07-0-0 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|--|---|---|--|--------------|---------|-------------|--------|----------------|-----------|
| A | C | D | | | | | | | |
| 1 | 2 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 | |
| | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 | |
| | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 | |
| | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 | |
| | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 | |

Gutmann SC 180 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | |
|----------------|---|---|---------------------------|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 and 2

| Fixing screws | | | | | | | |
|---------------|---|---|------------------------------|------------------------|--------|----|----------------|
| Pattern | | | Designation | Example of application | Finish | PU | Order no. |
| A | C | D | | | | | |
| 2 | 4 | 4 | Countersunk screw M6 x 90 mm | 1 + 2 | - | 1 | 9-13274-90-0-1 |

| Optional: gasket plates | | | | | | | |
|-------------------------|---|---|--|------------------------|--------|----|----------------|
| Pattern | | | Designation | Example of application | Finish | PU | Order no. |
| A | C | D | | | | | |
| 1 | 2 | 2 | Gasket plate for flush pull | 1 | black | 1 | 9-47211-01-0-6 |
| 1 | 2 | 2 | Gasket plate for exterior and interior turn handle | 2 | black | 1 | 9-47210-01-0-6 |

Gutmann SC 180 / L&S bogie GU-937

Application ranges



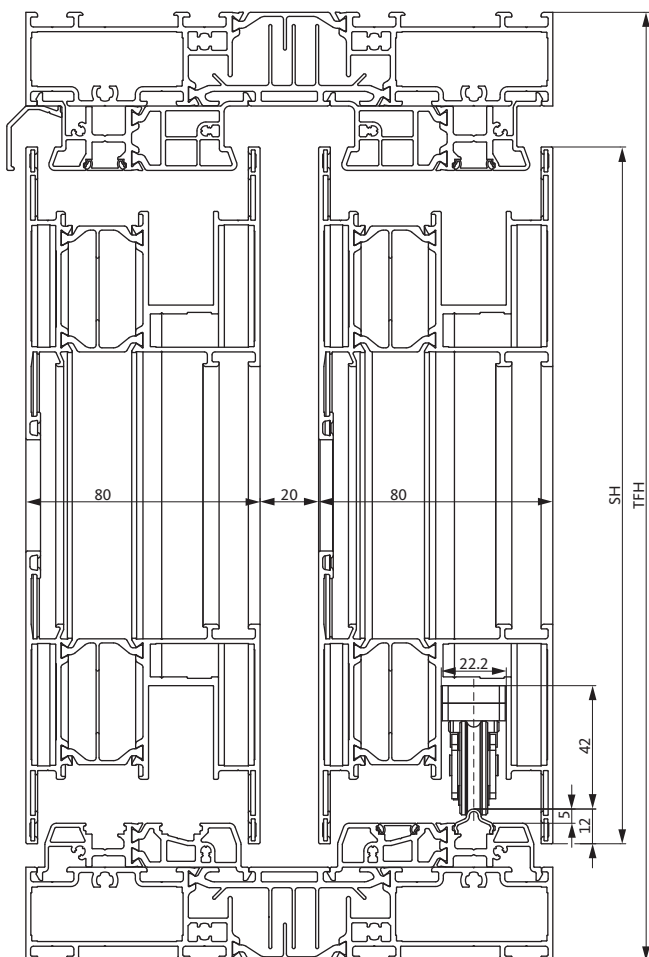
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–2220 mm | 851–2751 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|------------------------------|---------|-------------------|
| Lift&Slide hardware GU-937 | 0-46014 | from page 119 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS StopUnit / HS SilentClose | 0-46014 | from page 268 |



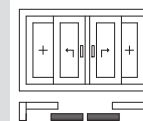
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 200 kg

| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|---|------------------|-----------------------------------|----------|----|----------------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S bogie GU-937 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16721-00-0-1 |

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|-------------|-------------|-------------|-----------|----|-----------------|
| A | C | D | | | | | | |
| 1 | 2 | 2 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | 1851 – 2220 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-18-0-18 |

| Pattern | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. | | | |
|--|-----------|----|---|-------------|--------------------|--------------------|---------------------------|----|-------------------|----------|----|----------------|
| A | C | D | | | | Cover rail | Lock case, connecting rod | | | | | |
| 1 | 2 | 1 | 851 – 1271 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 | | | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 | | | |
| | | | 1221 – 1851 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 | | | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 | | | |
| | | | 1852 – 2351 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 | | | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 | | | |
| | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 | | | |
| | | | 2101 – 2751 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 | | | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | |
| | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | |
| | | | Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | |
| | | | 1 | 2 | 1 | max. 3251 | 500 | – | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | | | | | | | 6-32030-00-0-5 | | | |
| EV 1 / light grey | faceGUard | 10 | | | | | | | 6-32030-00-0-18 | | | |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | | |
| 1 | 2 | 1 | max. 3251 | 500 | – | EV 1 / light grey | – | 10 | 9-28483-05-0-1 | | | |
| | | | | | | UC 5 / dark bronze | – | 10 | 9-28483-05-0-5 | | | |

Gutmann SC 180 / L&S bogie GU-937

Hardware requirements



PC cover cap

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-------------------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | PC screw-hole cover cap | grey | 1 | 9-26687-00-0-1 |

Basic hardware set for Gutmann SC 180

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------------------------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Basic hardware set for Gutmann SC 180 | - | 1 | K-18330-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, fixing screws

Packers for frame cams

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|-----------------|----|----------------|
| A | C | D | | | | |
| 2 | 4 | 4 | Packer 0.5 mm | stainless steel | 1 | K-18309-01-0-8 |
| 2 | 4 | 4 | Packer 1.0 mm | stainless steel | 1 | K-18309-02-0-8 |

Horizontal packers for L&S bogies GU-937

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|------------------------------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Packer for L&S bogie GU-937, front | - | 1 | 9-41680-16-0-1 |
| 2 | 4 | 4 | Packer for L&S bogie GU-937, rear | - | 1 | 9-41681-06-0-1 |

L&S buffer 90

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|--------|----|----------------|
| A | C | D | | | | |
| - | 4 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Rubber buffer 80

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|------------------|------------|----|----------------|
| A | C | D | | | | |
| 2 | - | - | Rubber buffer 80 | light grey | 1 | 9-08488-00-0-1 |
| | | | | black | 1 | 9-08488-00-0-6 |

Additional kit 'comfort' (see Chapter 4.1)

| L&S handle damper [1] | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-------------------|--------|----|----------------|
| Pattern | A | C | D | | | | |
| 1 | 2 | 1 | | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | Designation | Finish | PU | Order no. |
|---|---|---|---|---|--------------------|----|----------------|
| Pattern | A | C | D | | | | |
| 1 | 2 | 2 | | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-----------------------|-------------------|----|----------------|
| Pattern | A | C | D | | | | |
| 1 | 2 | 2 | | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | Designation | Finish | PU | Order no. |
|-----------------|---|---|---|-----------------|--------|----|----------------|
| Pattern | A | C | D | | | | |
| 1 | 2 | 2 | | Vertical packer | - | 1 | 9-25740-07-0-0 |

| P 959 connecting rod for L&S anti-jemmy device | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|--|---|---|---|--|--------------|-------------|----------|----|----------------|
| Pattern | A | C | D | | | | | | |
| 1 | 2 | 2 | | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Gutmann SC 180 / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | |
|----------------|---|---|---------------------------|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 and 2

| Fixing screws | | | | | | | |
|---------------|---|---|------------------------------|------------------------|--------|----|----------------|
| Pattern | | | Designation | Example of application | Finish | PU | Order no. |
| A | C | D | | | | | |
| 2 | 4 | 4 | Countersunk screw M6 x 90 mm | 1 + 2 | - | 1 | 9-13274-90-0-1 |

| Optional: gasket plates | | | | | | | |
|-------------------------|---|---|--|------------------------|--------|----|----------------|
| Pattern | | | Designation | Example of application | Finish | PU | Order no. |
| A | C | D | | | | | |
| 1 | 2 | 2 | Gasket plate for flush pull | 1 | black | 1 | 9-47211-01-0-6 |
| 1 | 2 | 2 | Gasket plate for exterior and interior turn handle | 2 | black | 1 | 9-47210-01-0-6 |

Metra NC 150 STH Rodos (45°) / L&S bogie GU-934

Application ranges

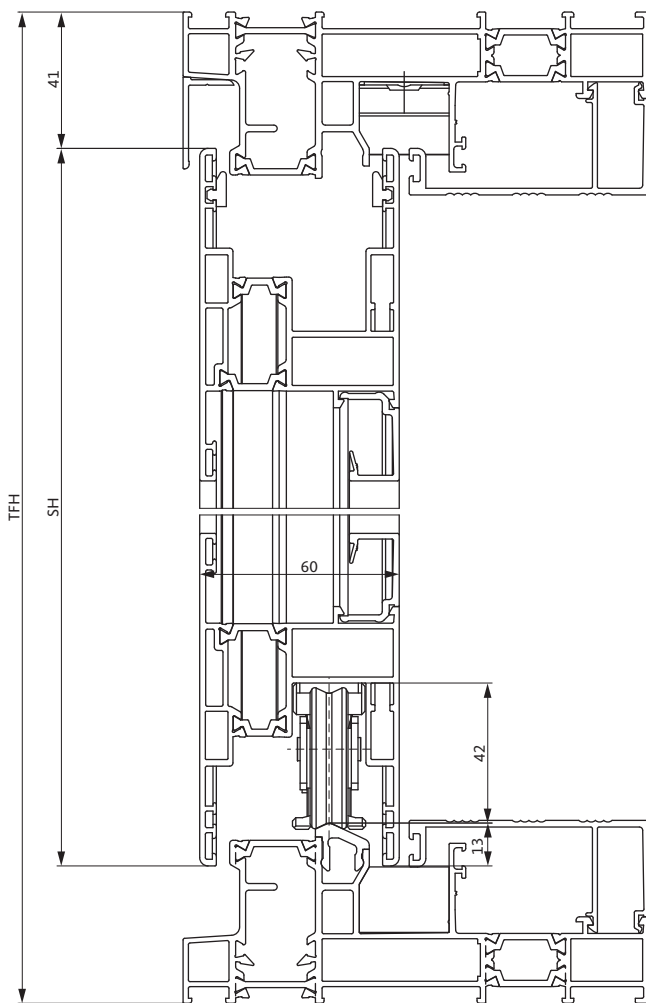


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 855–2755 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-934 | 0-45571 | from page 125 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



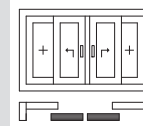
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
 1 Lift&Slide door
 1 Fixed-glazed sash
 Fig.: sliding direction to the right



Pattern C
 2 Lift&Slide doors
 2 Fixed-glazed sashes
 Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 350 kg

| L&S bogie | | | | | |
|-----------|---|-------------------------|----------|----|-----------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S bogie GU-934, front | ferGUard | 1 | [1] |
| 1 | 2 | L&S bogie GU-934, rear | ferGUard | 1 | [1] |

[1] The L&S bogies are included in the basic hardware set for Metra NC 150 STH Rodos / order number K-17414-00-0-0.

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

| Lift&Slide gear, 27.5 mm backset | | | | | | | | |
|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
| A | C | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 855 – 1275 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | 1225 – 1855 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | 1855 – 2355 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | 2105 – 2755 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3255 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3255 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

| Basic hardware set for Metra NC 150 STH Rodos | | | | | |
|---|---|---|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Basic hardware set for Metra NC 150 STH Rodos | - | 1 | K-17414-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 1 x packer, 5 x spacer, 4 x rubber buffer, 2 x PC screw-hole cover cap, fixing screws

Metra NC 150 STH Rodos (45°) / L&S bogie GU-934

Hardware requirements



Gasket plate, bridging gasket, top guide track

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-----------------|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Gasket plate | black | 1 | 9-44106-00-0-6 |
| 1 | 2 | Bridging gasket | - | 1 | 6-22154-13-0-0 |
| 1 | 2 | Top guide track | black | 1 | K-14281-00-0-6 |

Frame cam

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-----------------|----|----------------|
| A | C | | | | |
| 2 | - | Frame cam set | stainless steel | 1 | K-17415-00-0-8 |

Contains: 1 x frame cam, fixing screws

Frame cam, counterplate, fixing screws

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------------------|-----------------|----|----------------|
| A | C | | | | |
| - | 2 | Frame cam | stainless steel | 1 | 6-22623-05-0-8 |
| - | 2 | Counterplate | - | 1 | 9-24414-00-0-0 |
| - | 4 | Countersunk screw M5 x 35 mm | - | 1 | 9-13133-35-0-0 |

Optional: L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-------------|----|-----------------|
| A | C | | | | |
| 2 | 4 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | white | 1 | K-12024-00-0-7 |
| | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Optional: bottom keeper

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------|----------|----|----------------|
| A | C | | | | |
| 1 | 2 | Bottom keeper set | ferGUard | 1 | K-14568-00-0-1 |

Contains: 1 x bottom keeper, 1 x anti-jemmy device

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | |
|--------------------|---|----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | |
|-----------------------|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | |
|---|---|---|--------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | |
|-----------------------|---|-----------------------|-------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | |
|-----------------|---|-----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Vertical packer | - | 1 | 9-47295-11-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | |
|--|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Metra NC 150 STH Rodos (45°) / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 2 | 4 | Countersunk screw M6 x 70 mm | - | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | |
|--------------------------|---|-----------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 2 | 4 | Countersunk screw M6 x 70 mm | - | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | |
|--------------------------|---|--|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Metra NC 150 STH Rodos (45°) / L&S bogie GU-937

Application ranges

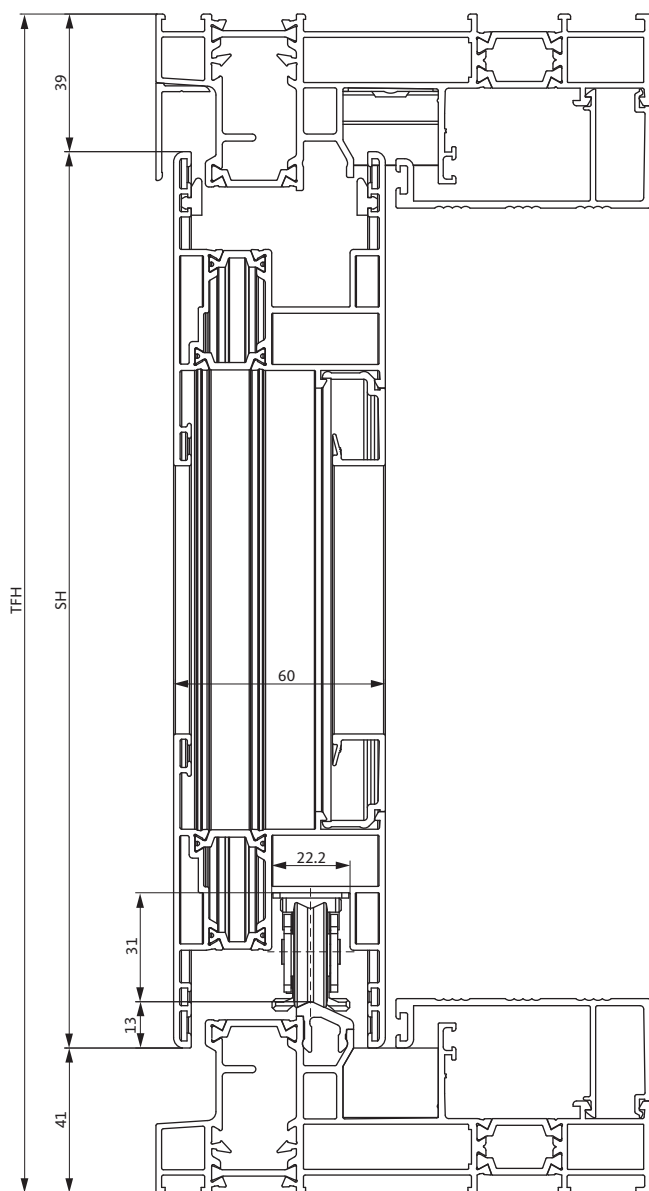


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 830–2730 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-937 | 0-45079 | from page 131 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



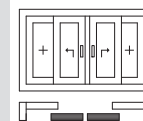
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
 1 Lift&Slide door
 1 Fixed-glazed sash
 Fig.: sliding direction to the right



Pattern C
 2 Lift&Slide doors
 2 Fixed-glazed sashes
 Fig.: sliding direction to the right and left

SH = sash height / TFH = total frame width



L&S bogie and rod – for sash weights up to 200 kg

| L&S bogie | | | | | |
|-----------|---|-------------------------|----------|----|-----------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S bogie GU-937, front | ferGUard | 1 | [1] |
| 1 | 2 | L&S bogie GU-937, rear | ferGUard | 1 | [1] |

[1] The L&S bogies are included in the basic hardware set for Metra NC 150 STH Rodos / order number K-17687-00-0-0.

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

| Lift&Slide gear, 27.5 mm backset | | | | | | | | |
|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
| A | C | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 830 – 1250 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | 1250 – 1830 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | 1830 – 2330 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | 2080 – 2730 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3230 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3230 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

| Basic hardware set for Metra NC 150 STH Rodos | | | | | |
|---|---|---|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Basic hardware set for Metra NC 150 STH Rodos | - | 1 | K-17687-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 3 x packer, 5 x spacer, 2 x rubber buffer, 1 x gasket plate, 2 x PC screw-hole cover cap, fixing screws

Metra NC 150 STH Rodos (45°) / L&S bogie GU-937

Hardware requirements



Gasket plate, top guide track

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-----------------|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Bridging gasket | - | 1 | 6-22154-13-0-0 |
| 1 | 2 | Top guide track | black | 1 | K-14281-00-0-6 |

Frame cam

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-----------------|----|----------------|
| A | C | | | | |
| 2 | - | Frame cam set | stainless steel | 1 | K-17415-00-0-8 |

Contains: 1 x frame cam, fixing screws

Frame cam, counterplate, fixing screws

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------------------|-----------------|----|----------------|
| A | C | | | | |
| - | 2 | Frame cam | stainless steel | 1 | 6-22623-05-0-8 |
| - | 2 | Counterplate | - | 1 | 9-24414-00-0-0 |
| - | 4 | Countersunk screw M5 x 35 mm | - | 1 | 9-13133-35-0-0 |

Optional: L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-------------|----|-----------------|
| A | C | | | | |
| 2 | 4 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | white | 1 | K-12024-00-0-7 |
| | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Optional: bottom keeper

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------|----------|----|----------------|
| A | C | | | | |
| 1 | 2 | Bottom keeper set | ferGUard | 1 | K-14568-00-0-1 |

Contains: 1 x bottom keeper, 1 x anti-jemmy device

Additional kit 'comfort' (see Chapter 4.1)

| L&S handle damper [1] | | | | | |
|-----------------------|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | |
|---|---|---|--------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | |
|-----------------------|---|-----------------------|-------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | |
|-----------------|---|-----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Vertical packer | - | 1 | 9-25740-08-0-0 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | |
|--|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Metra NC 150 STH Rodos (45°) / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 2 | 4 | Countersunk screw M6 x 70 mm | – | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | |
|--------------------------|---|-----------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 2 | 4 | Countersunk screw M6 x 70 mm | - | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | |
|--------------------------|---|--|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Metra NC 150 STH Rodos (90°) / L&S bogie GU-934

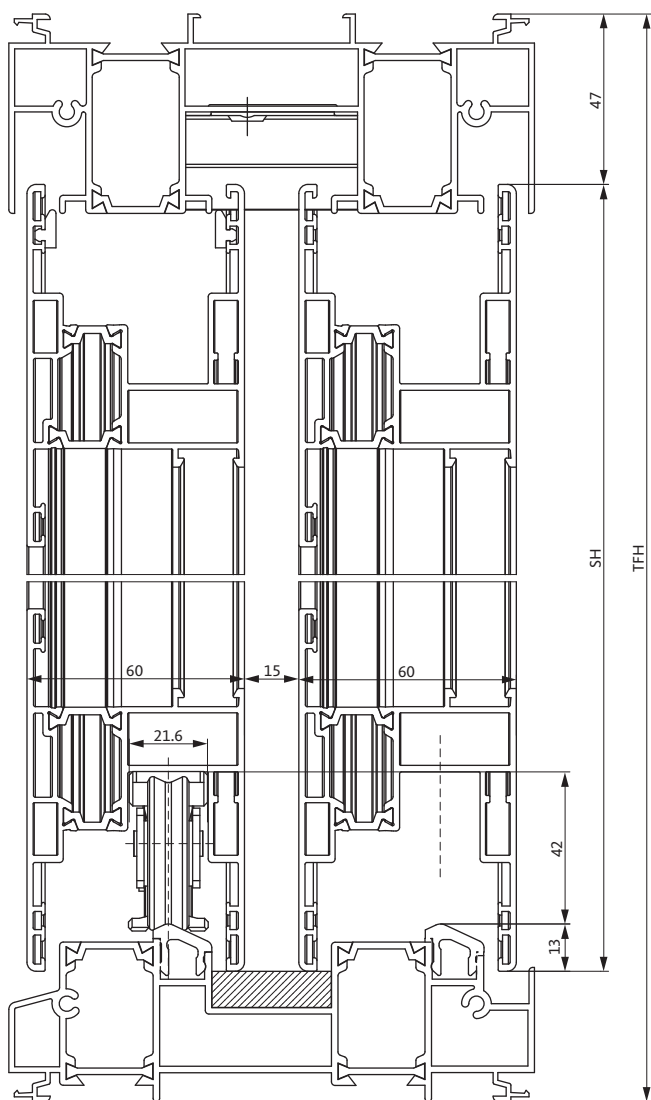
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 855–2755 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-44415 | from page 137 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS SpeedLimiter | 0-44550 | from page 270 |

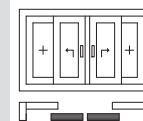
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|---|------------------|-----------------------------------|----------|----|-----------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | [1] |

[1] The L&S bogies are included in the basic hardware set for Metra NC 150 STH Rodos / order number K-17414-00-0-0.

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|-------------|-------------|-------------|----------|----|----------------|
| A | C | D | | | | | | |
| 1 | 2 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

L&S bogie and rod – for sash weights up to 400 kg



| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|---|-------------------------|-----------------------------------|----------|----|----------------|
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | [1] |
| 1 | 2 | 2 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-02-0-1 |

[1] The L&S bogies are included in the basic hardware set for Metra NC 150 STH Rodos / order number K-17414-00-0-0.

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|-------------|-------------|-------------|----------|----|----------------|
| A | C | D | | | | | | |
| 1 | 2 | 2 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

Metra NC 150 STH Rodos (90°) / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| A | C | D | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 855 – 1275 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | 1225 – 1855 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | 1855 – 2355 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | 2105 – 2755 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 2 | max. 3255 | 500 | – | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 2 | max. 3255 | 500 | – | EV 1 / light grey | – | 10 | 9-28483-05-0-1 |
| | | | | | | UC 5 / dark bronze | – | 10 | 9-28483-05-0-5 |

Basic hardware set for Metra NC 150 STH Rodos

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Basic hardware set for Metra NC 150 STH Rodos | – | 1 | K-17414-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 1 x packer, 5 x spacer, 4 x rubber buffer, 2 x PC screw-hole cover cap, fixing screws

Gasket plate, top guide track

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-----------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Bridging gasket | – | 1 | 6-22154-05-0-0 |
| 1 | 2 | 4 | Top guide track | black | 1 | K-14281-00-0-6 |

L&S buffer 90 [1]

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|-------------|----|-----------------|
| A | C | D | | | | |
| – | – | 2 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | | white | 1 | K-12024-00-0-7 |
| | | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with patterns A and C

| Frame cam | | | | | | |
|-----------|---|---|---------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 2 | - | 4 | Frame cam set | - | 1 | K-14388-00-0-1 |

Contains: 1 x frame cam, fixing screws

| Frame cam, counterplate, fixing screws | | | | | | |
|--|---|---|------------------------------|-----------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| - | 2 | - | Frame cam | stainless steel | 1 | 6-22623-05-0-8 |
| - | 2 | - | Counterplate | - | 1 | 9-24414-00-0-0 |
| - | 4 | - | Countersunk screw M5 x 35 mm | - | 1 | 9-13133-35-0-0 |

| Optional: bottom keeper | | | | | | |
|-------------------------|---|---|-------------------|----------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | Bottom keeper set | ferGuard | 1 | K-14568-00-0-1 |

Contains: 1 x bottom keeper, 1 x anti-jemmy device

Metra NC 150 STH Rodos (90°) / L&S bogie GU-934

Optional additional components



Additional kit 'comfort' (see Chapter 4.1)

Tension spring [1]

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|----------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

L&S handle damper [1]

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-------------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | |
|---|---|---|---|--------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | |
|-----------------------|---|---|-----------------------|-------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | |
|-----------------|---|---|-----------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | Vertical packer | - | 1 | 9-47295-11-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | |
|--|---|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | | | | | | |
| 1 | 2 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Metra NC 150 STH Rodos (90°) / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | |
|----------------|---|---|---------------------------|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

| Fixing screws | | | | | | |
|---------------|---|---|------------------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 2 | 4 | 4 | Countersunk screw M6 x 70 mm | – | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | | |
|--------------------------|---|---|-----------------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | |
|---------------|---|---|------------------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 2 | 4 | 4 | Countersunk screw M6 x 70 mm | - | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | | |
|--------------------------|---|---|--|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Metra NC 150 STH Rodos (90°) / L&S bogie GU-937

Application ranges



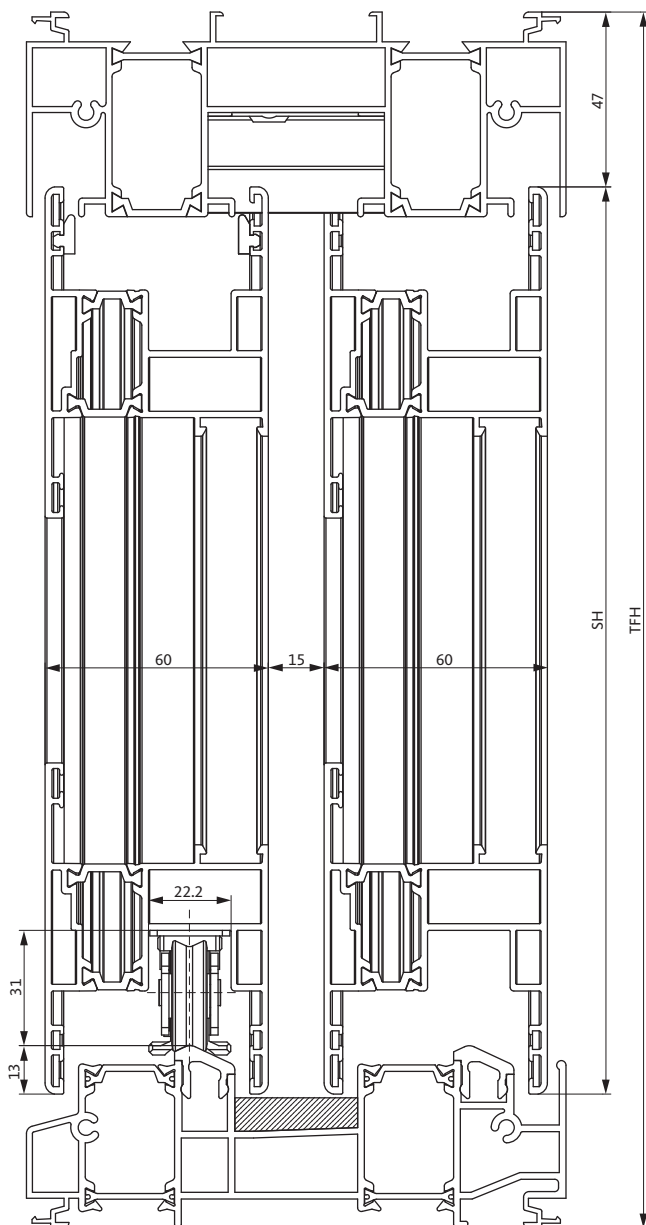
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 830–2730 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-937 | 0-45553 | from page 145 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



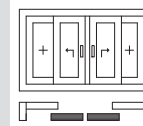
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
 1 Lift&Slide door
 1 Fixed-glazed sash
 Fig.: sliding direction to the right



Pattern C
 2 Lift&Slide doors
 2 Fixed-glazed sashes
 Fig.: sliding direction to the right and left



Pattern D
 2 Lift&Slide doors
 Fig.: sliding direction to the right and left

SH = sash height / TFH = total frame width



L&S bogie and rod – for sash weights up to 200 kg

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-------------------------|----------|----|-----------|
| A | C | D | | | | |
| 1 | 2 | 2 | L&S bogie GU-937, front | ferGUard | 1 | [1] |
| 1 | 2 | 2 | L&S bogie GU-937, rear | ferGUard | 1 | [1] |

[1] The L&S bogies are included in the basic hardware set for Metra NC 150 STH Rodos / order number K-17687-00-0-0.

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|-------------|-------------|-------------|----------|----|----------------|
| A | C | D | | | | | | |
| 1 | 2 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

| Pattern | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| A | C | D | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 830 – 1250 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | | 1250 – 1830 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | 1830 – 2330 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | 2080 – 2730 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 2 | max. 3230 | 500 | – | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | 2 | max. 3230 | 500 | – | EV 1 / light grey | – | 10 | 9-28483-05-0-1 |
| | | | | | | UC 5 / dark bronze | – | 10 | 9-28483-05-0-5 |

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Basic hardware set for Metra NC 150 STH Rodos | – | 1 | K-17687-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 3 x packer, 5 x spacer, 2 x rubber buffer, 1 x gasket plate, 2 x PC screw-hole cover cap, fixing screws

Metra NC 150 STH Rodos (90°) / L&S bogie GU-937

Hardware requirements



Gasket plate, top guide track

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-----------------|--------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Bridging gasket | - | 1 | 6-22154-05-0-0 |
| 1 | 2 | 4 | Top guide track | black | 1 | K-14281-00-0-6 |

L&S buffer 90 [1]

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|-------------|----|-----------------|
| A | C | D | | | | |
| - | - | 2 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | | white | 1 | K-12024-00-0-7 |
| | | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with patterns A and C

Frame cam

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|---------------|--------|----|----------------|
| A | C | D | | | | |
| 2 | - | 4 | Frame cam set | - | 1 | K-14388-00-0-1 |

Contains: 1 x frame cam, fixing screws

Frame cam, counterplate, fixing screws

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|------------------------------|-----------------|----|----------------|
| A | C | D | | | | |
| - | 2 | - | Frame cam | stainless steel | 1 | 6-22623-05-0-8 |
| - | 2 | - | Counterplate | - | 1 | 9-24414-00-0-0 |
| - | 4 | - | Countersunk screw M5 x 35 mm | - | 1 | 9-13133-35-0-0 |

Bottom keeper

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|---|-------------------|----------|----|----------------|
| A | C | D | | | | |
| 1 | 2 | 2 | Bottom keeper set | ferGUard | 1 | K-14568-00-0-1 |

Contains: 1 x bottom keeper, 1 x anti-jemmy device

Additional kit 'comfort' (see Chapter 4.1)

| L&S handle damper [1] | | | | | | | |
|-----------------------|---|---|-------------------|--------|----|----------------|--|
| Pattern | | | Designation | Finish | PU | Order no. | |
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50 %.
 Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | | |
|---|---|---|---|--------------------|----|----------------|--|
| Pattern | | | Designation | Finish | PU | Order no. | |
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | | |
|-----------------------|---|---|-----------------------|-------------------|----|----------------|--|
| Pattern | | | Designation | Finish | PU | Order no. | |
| A | C | D | | | | | |
| 1 | 2 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | | |
|-----------------|---|---|-----------------|--------|----|----------------|--|
| Pattern | | | Designation | Finish | PU | Order no. | |
| A | C | D | | | | | |
| 1 | 2 | 2 | Vertical packer | - | 1 | 9-25740-08-0-0 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | |
|--|---|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | | | | | | |
| 1 | 2 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Metra NC 150 STH Rodos (90°) / L&S bogie GU-937

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | |
|----------------|---|---|---------------------------|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

| Fixing screws | | | | | | |
|---------------|---|---|------------------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 2 | 4 | 4 | Countersunk screw M6 x 70 mm | – | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | | |
|--------------------------|---|---|-----------------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|---|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | |
|---------------|---|---|------------------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 2 | 4 | 4 | Countersunk screw M6 x 70 mm | - | 1 | 9-13274-70-0-1 |

| Optionally: gasket plate | | | | | | |
|--------------------------|---|---|--|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | C | D | | | | |
| 1 | 2 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Ponzo SL1600 / L&S bogie GU-934

Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 852–2752 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

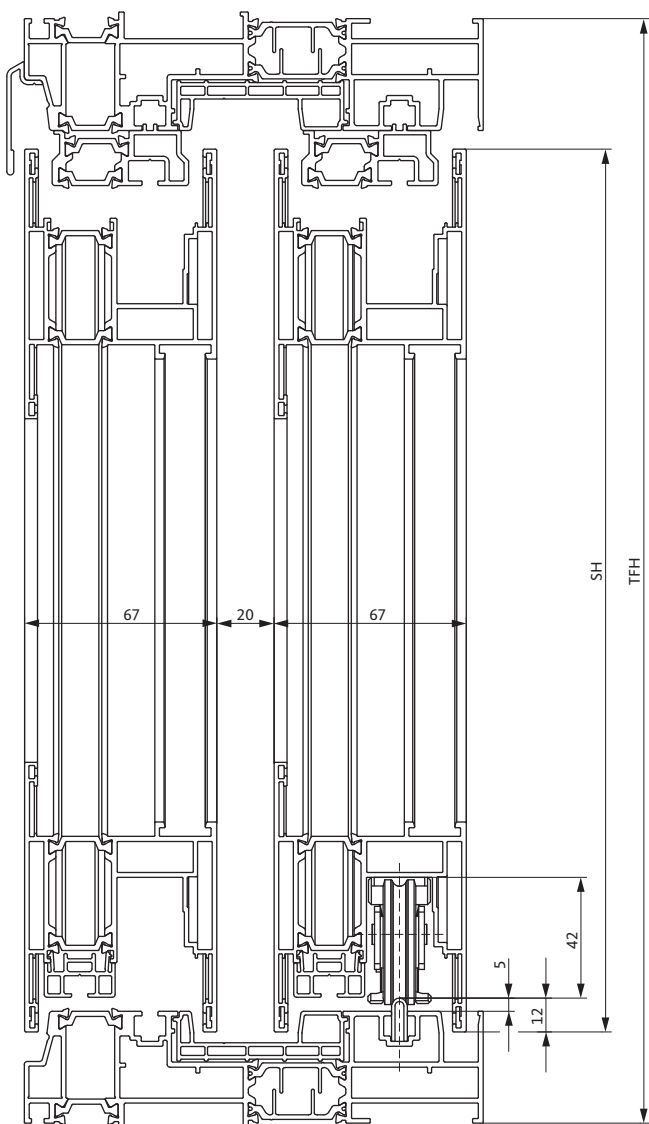
SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|------------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-46501 | from page 151 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS StopUnit / HS SilentClose | 0-46501 | from page 268 |
| HS SpeedLimiter | 0-44550 | from page 270 |

Note:

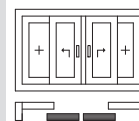
- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".



Possible patterns



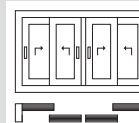
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|----------|--------|-----|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | [1] | |

[1] The L&S bogies are included in the basic hardware set for Ponzio SL1600 / order number K-18435-00-0-0.

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|-------------------------|-----------------------------------|----------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | [1] | |
| 1 | 2 | 2 | 4 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 | |

[1] The L&S bogies are included in the basic hardware set for Ponzio SL1600 / order number K-18435-00-0-0.

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |

Ponzio SL1600 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 27.5 mm backset

| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---------|---|---|---|-------------|----------------|-----------------------|--------------------|------------------------------|----|----------------|
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 852 - 1272 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | | | 1222 - 1852 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | | | 1852 - 2352 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | | | 2102 - 2752 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |

With HS Master, pattern A: Lift&Slide gear, 37.5 mm backset

| A | C | D | F | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|---|---|-------------|----------------|-----------------------|--------------------|------------------------------|----|----------------|
| | | | | | | | Cover rail | Lock case, connecting rod | | |
| 1 | - | - | - | 852 - 1272 | 1190 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | 1222 - 1852 | 1770 | 407 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | 1852 - 2352 | 2270 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | 2102 - 2752 | 2670 | 1007 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 |

Optional: Gear and cover-rail extension set 500 mm

| A | C | D | F | SH [mm] | Length [mm] | Handle height [mm] | Finish | Lock case, connecting rod | PU | Order no. |
|---|---|---|---|------------|----------------|-----------------------|--------------------|------------------------------|----|----------------|
| 1 | 2 | 2 | 4 | max. 3252 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |

Optional: Cover-rail extension set 500 mm

| A | C | D | F | SH [mm] | Length [mm] | Handle height [mm] | Finish | Lock case, connecting rod | PU | Order no. |
|---|---|---|---|------------|----------------|-----------------------|--------------------|------------------------------|----|----------------|
| 1 | 2 | 2 | 4 | max. 3252 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Ponzio SL1600

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--------------------------------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Basic hardware set for Ponzio SL1600 | - | 1 | K-18435-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 1 x packer, 5 x spacer, 2 x frame cam, 2 x rubber buffer, 2 x cover cap, fixing screws

Accessories

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-----------------|--------|----|----------------|
| A | C | D | F | | | | |
| - | 1 | - | 1 | Accessories set | - | 1 | K-13392-00-0-5 |

Contains: 8 x pin, 4 x bushing, fixing screws

L&S buffer 90 [1]

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|--------|----|----------------|
| A | C | D | F | | | | |
| - | - | 2 | 4 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with patterns A and C

Optional: packers for frame cams

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|-----------------|----|----------------|
| A | C | D | F | | | | |
| 2 | 4 | 4 | 6 | Packer 0.5 mm | stainless steel | 10 | K-18309-01-0-8 |
| 2 | 4 | 4 | 6 | Packer 1.0 mm | stainless steel | 10 | K-18309-02-0-8 |

Optional: L&S bottom keeper

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------|----------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Ponzo SL1600 / L&S bogie GU-934

Optional additional components



Additional kit 'comfort' (see Chapter 4.1)

Tension spring [1]

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

L&S handle damper [1]

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-------------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | | | |
|---|---|---|---|---|--------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 | |
| | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 | |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | | | |
|-----------------------|---|---|---|-----------------------|-------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 | |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | | | |
|-----------------|---|---|---|-----------------|--------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Vertical packer | - | 1 | 9-47295-06-0-1 | |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | | |
|--|---|---|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Ponzio SL1600 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1][2] | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | F | Designation | Finish | PU | Order no. |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | dark brown [3] | 1 | 6-24606-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | dark brown [3] | 1 | 6-24607-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] The fixing screws are contained in the basic hardware set for Ponzio SL1600 / order number K-18435-00-0-0.
 [3] Similar to RAL 8022

| L&S flush pull – version 1 | | | | | Designation | Finish | PU | Order no. |
|----------------------------|---|---|---|---------------------------|------------------|--------|----------------|-----------|
| Pattern | | | | F | Designation | Finish | PU | Order no. |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

| L&S flush pull – version 2 | | | | | Designation | Finish | PU | Order no. |
|----------------------------|---|---|---|-----------------------|------------------|--------|----------------|-----------|
| Pattern | | | | F | Designation | Finish | PU | Order no. |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull, round | silver/EV 1 look | 1 | 9-46686-00-0-1 | |
| | | | | | dark brown [1] | 1 | 9-46686-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 9-46686-00-0-7 | |
| | | | | | stainless steel | 1 | 9-46686-00-0-8 | |

[1] Similar to RAL 8022

| Optionally: gasket plate | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|-----------------------------|-------------|--------|----------------|-----------|
| Pattern | | | | F | Designation | Finish | PU | Order no. |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 | |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | Designation | Finish | PU | Order no. |
|---------------------------------|---|---|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | dark brown [3] | 1 | 6-24615-96-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] The fixing screws are contained in the basic hardware set for Ponzo SL1600 / order number K-18435-00-0-0.
 [3] Similar to RAL 8022

| Optionally: gasket plate | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|--|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 | |

Profilati / L&S bogie GU-934

Application ranges

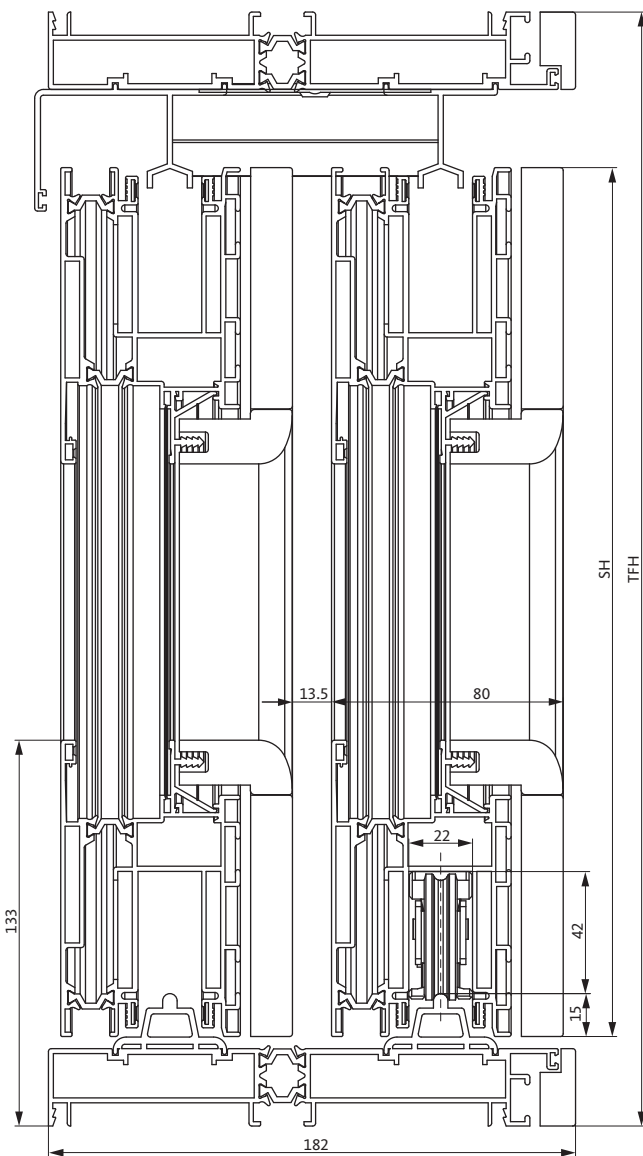


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 830–2730 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-934 | 0-44499 | from page 159 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



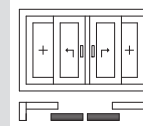
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



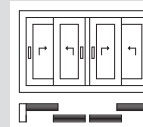
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 350 kg

| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|------------------|-----------------------------------|----------|--------|-----|-----------|
| Pattern | | | | | | | | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | [1] | |

[1] The L&S bogies are included in the basic hardware set for Profilati / order number K-16978-00-0-0.

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|------------|-------------|---------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | | | | | | | |
| 1 | 2 | 2 | 4 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 | |

Profilati / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|---|---|-------------|----------------|-----------------------|--------------------|------------------------------|----|----------------|
| A | C | D | F | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 830 – 1250 | 1190 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | 1200 – 1830 | 1770 | 410 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | 1830 – 2330 | 2270 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | 2080 – 2730 | 2670 | 1010 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3230 | 500 | – | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 4 | max. 3230 | 500 | – | EV 1 / light grey | – | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | – | 10 | 9-28483-05-0-5 |

Basic hardware set for Profilati

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----------------------------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Basic hardware set for Profilati | – | 1 | K-16978-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 1 x packer, 5 x spacer, 2 x frame cam, 4 x rubber buffer, 3 x guide, 2 x cover plate, 1 x bridging gasket, 1 x spacer profile, 1 x PC screw-hole cover cap, fixing screws

Frame cam, counterplate, fixing screws

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|------------------------------|-----------------|----|----------------|
| A | C | D | F | | | | |
| – | 2 | – | 2 | Frame cam | stainless steel | 1 | 6-22648-05-0-8 |
| – | 2 | – | 2 | Counterplate | – | 1 | 9-24414-00-0-0 |
| – | 4 | – | 4 | Countersunk screw M5 x 20 mm | – | 1 | 9-13133-20-0-0 |

Optional: L&S buffer 90

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------|-------------|----|-----------------|
| A | C | D | F | | | | |
| 2 | 4 | 2 | 4 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | | | white | 1 | K-12024-00-0-7 |
| | | | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | Designation | Finish | PU | Order no. |
|--------------------|---|---|---|----------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|---|-------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | F | | | | | |
| 1 | 2 | 2 | 4 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Profilati / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

DIRIGENT L&S turn handle [1][2]

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|--|------------------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | | dark brown [3] | 1 | 6-24608-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | 2 | 4 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | | dark brown [3] | 1 | 6-24609-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.

[2] The fixing screws are contained in the basic hardware set for Profilati / order number K-16978-00-0-0.

[3] Similar to RAL 8022

L&S flush pull

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|---------------------------|------------------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Optionally: gasket plate

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|-----------------------------|--------|----|----------------|
| A | C | D | F | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1][2] | | | | | | | | | |
|---------------------------------|---|---|---|--|------------------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | | |
| | | | | | dark brown [3] | 1 | 6-24615-96-0-5 | | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] The fixing screws are contained in the basic hardware set for Profilati / order number K-16978-00-0-0.
 [3] Similar to RAL 8022

| Optionally: gasket plate | | | | | | | | | |
|--------------------------|---|---|---|--|--------|----|----------------|--|--|
| Pattern | | | | Designation | Finish | PU | Order no. | | |
| A | C | D | F | | | | | | |
| 1 | 2 | 2 | 4 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 | | |

Reynaers CP 130-LS / L&S bogie GU-934

Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 853–2753 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

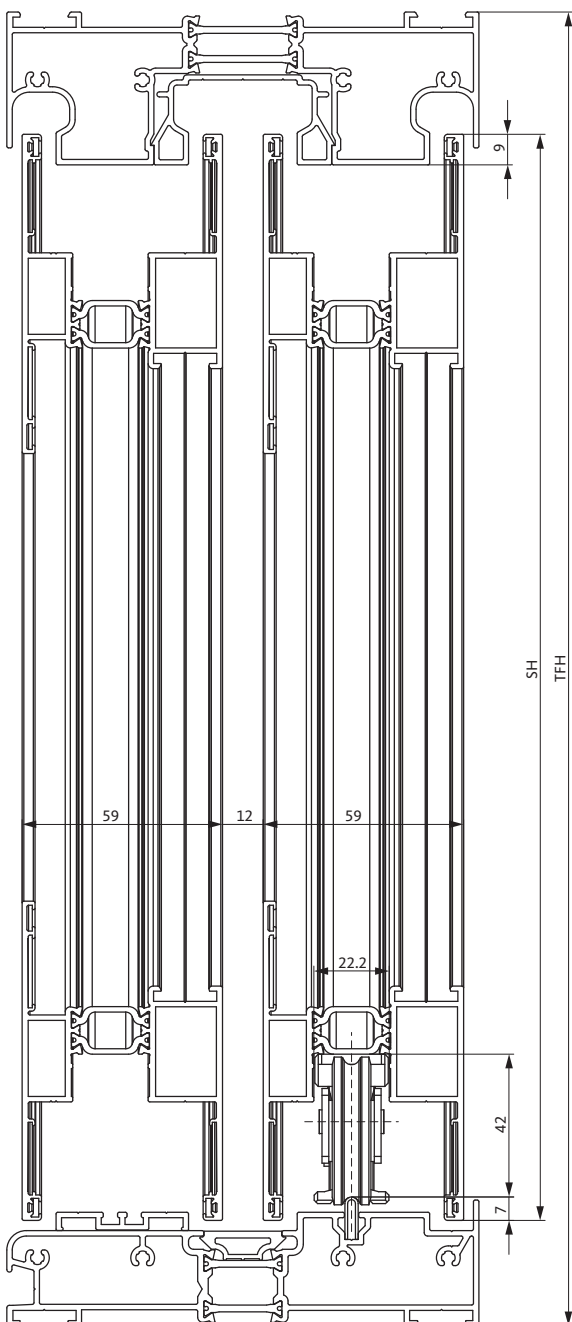
SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45873 | from page 165 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| HS SpeedLimiter | 0-44550 | from page 270 |
| L&S locking monitoring set | 0-44449 | from page 258 |

Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".



SH = sash height / TFH = total frame width

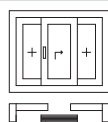
Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|----|------------------|-----------------------------------|-----------|----|-----------------|
| A | D | G1 | | | | | |
| 1 | 2 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | | faceGUard | 1 | K-16488-00-0-18 |

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|----|-------------|-------------|-------------|-----------|----|-----------------|
| A | D | G1 | | | | | | |
| 1 | 2 | 1 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

L&S bogie and rod – for sash weights up to 400 kg



| Pattern | | | Designation | Contents | Finish | PU | Order no. |
|---------|---|----|-------------------------|-----------------------------------|-----------|----|-----------------|
| A | D | G1 | | | | | |
| 1 | 2 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | | faceGUard | 1 | K-16488-00-0-18 |
| 1 | 2 | 1 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 |
| | | | | | faceGUard | 1 | K-17804-01-0-18 |

| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|----|-------------|-------------|-------------|-----------|----|-----------------|
| A | D | G1 | | | | | | |
| 1 | 2 | 1 | Rod Ø 8 mm | 1210 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Reynaers CP 130-LS / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. | |
|--|---|-----------|-------------|--------------------|-----------------------|--------------------|------------------------------|----------|-----------------|----------------|
| A | D | G1 | | | | Cover rail | Lock case, connecting rod | | | |
| 1 | 2 | 1 | 853 – 1273 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 | |
| | | | 1273 – 1853 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 | |
| | | | 1853 – 2353 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 | |
| | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 | |
| | EV 1 / light grey | faceGUard | | | | 10 | 6-30021-24-0-18 | | | |
| | 2103 – 2753 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 | | | |
| | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | |
| | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | |
| | Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | |
| | 1 | 2 | 1 | max. 3253 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| UC 5 / dark bronze | | | | | | | ferGUard | 10 | 6-32030-00-0-5 | |
| EV 1 / light grey | | | | | | | faceGUard | 10 | 6-32030-00-0-18 | |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 1 | max. 3253 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 | |
| | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 | |

Packer, spacer, frame cam, PC screw-hole cover cap, rubber buffer

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|----|----|---|-----------------|----|----------------|
| A | D | G1 | | | | |
| 1 | 2 | 1 | Vertical packer for L&S bogie GU-934, front | - | 1 | 9-47295-11-0-1 |
| 5 | 10 | 5 | Spacer for Lift&Slide gear | - | 1 | 9-47296-12-0-1 |
| 2 | 4 | - | Frame cam | stainless steel | 1 | 6-22648-02-0-8 |
| 1 | 2 | 1 | PC cover cap | grey | 1 | 9-26687-00-0-1 |
| 2 | - | - | Rubber buffer 60 | black | 1 | 9-23793-00-0-0 |

L&S buffer 90 [1]

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|---------------|--------|----|----------------|
| A | D | G1 | | | | |
| - | 2 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
 [1] Optionally with pattern A

L&S bottom keeper

| Pattern | | | Designation | Finish | PU | Order no. |
|---------|---|----|-------------------|----------|----|----------------|
| A | D | G1 | | | | |
| - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Reynaers CP 130-LS / L&S bogie GU-934

Optional additional components



Additional kit L&S night vent module

| Frame cam | | | | | | |
|-------------------|---|----|-------------------|-----------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 2 | 4 | - | Frame cam | stainless steel | 1 | 9-43830-04-0-8 |
| L&S bottom keeper | | | | | | |
| 1 | 2 | - | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | | |
|--------------------|---|----|----------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | | |
|-----------------------|---|----|-------------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | | |
|---|---|----|---|--------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | | |
|-----------------------|---|----|-----------------------|-------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | | |
|-----------------|---|----|-----------------|--------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | - | Vertical packer | - | 1 | 9-47295-11-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | | |
|--|---|----|--|--------------|-------------|----------|----|----------------|
| Pattern | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | G1 | | | | | | |
| 1 | 2 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Reynaers CP 130-LS / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|----|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|----|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

| L&S flush pull | | | | | | |
|----------------|---|----|---------------------------|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | |
|------------------------------|---|----|--|------------------|----|----------------|
| Pattern | | | Designation | Finish | PU | Order no. |
| A | D | G1 | | | | |
| 1 | 2 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | | |
|---------------|---|----|------------------------------|------------------------|--------|----|----------------|
| Pattern | | | Designation | Example of application | Finish | PU | Order no. |
| A | D | G1 | | | | | |
| 2 | 4 | 2 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 |
| 2 | 4 | 2 | Countersunk screw M6 x 70 mm | 2 + 3 | - | 1 | 9-13274-70-0-1 |

| Optional: gasket plates | | | | | | | |
|-------------------------|---|----|--|------------------------|--------|----|----------------|
| Pattern | | | Designation | Example of application | Finish | PU | Order no. |
| A | D | G1 | | | | | |
| 1 | 2 | 1 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 |
| 1 | 2 | 1 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 |

Reynaers CP 155 / L&S bogie GU-934

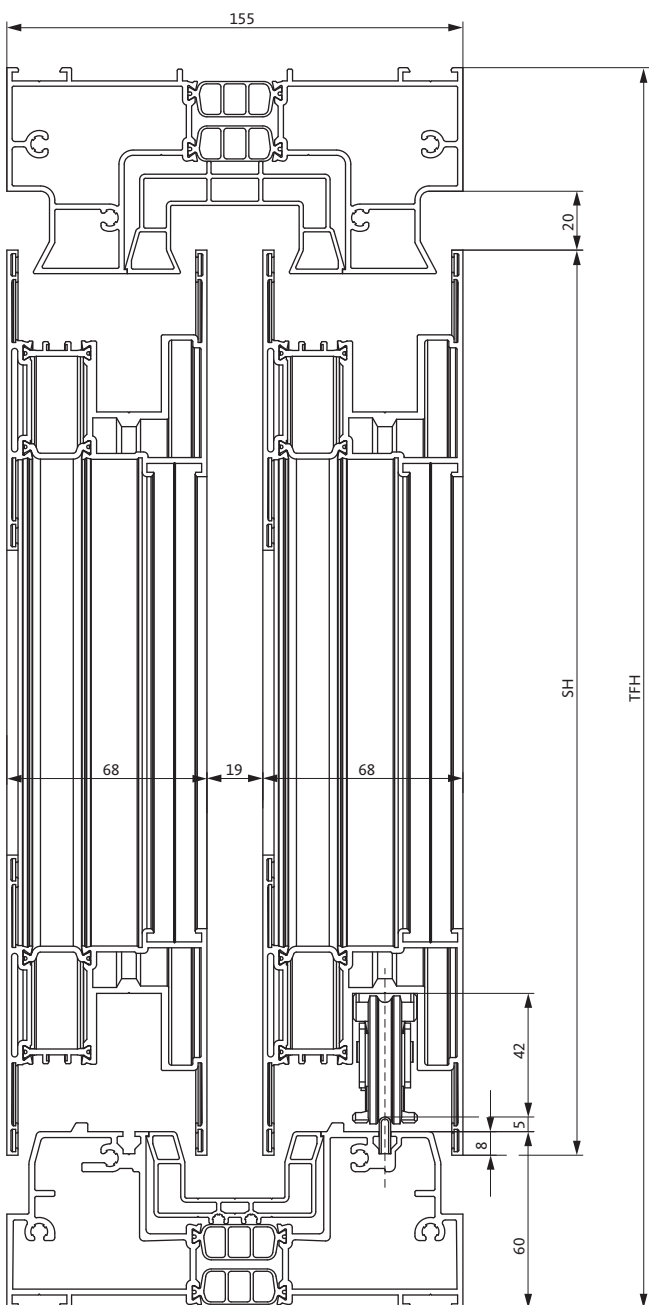
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 853–2753 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

Installation drawings

| Application | Drawing | Order information |
|------------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-45582 | from page 173 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| L&S locking monitoring set | 0-44449 | from page 258 |
| HS StopUnit / HS SilentClose | 0-45582 | from page 268 |
| HS SpeedLimiter | 0-44550 | from page 270 |

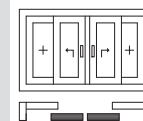
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



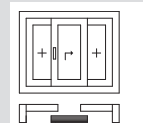
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G1 symmetrical
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|----|------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | G1 | | | | | | |
| 1 | 2 | 2 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | faceGUard | 1 | K-16488-00-0-18 | |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | G1 | | | | | | | |
| 1 | 2 | 2 | 1 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|----|-------------------------|-----------------------------------|-----------|--------|-----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | G1 | | | | | | |
| 1 | 2 | 2 | 1 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 | |
| | | | | | | faceGUard | 1 | K-16488-00-0-18 | |
| 1 | 2 | 2 | 1 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 | |
| | | | | | | faceGUard | 1 | K-17804-01-0-18 | |

| Rod Ø 8 mm | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|----|------------|-------------|---------|-------------|--------|-----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | G1 | | | | | | | |
| 1 | 2 | 2 | 1 | Rod Ø 8 mm | 1210 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-11-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-14-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-14-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-18-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-18-0-18 | |
| | | | | | | | ferGUard | 1 | 9-25476-33-0-1 | |
| | | | | | | | faceGUard | 1 | 9-25476-33-0-18 | |

Reynaers CP 155 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|-------------|----------------|-----------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | G1 | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 1 | 853 - 1273 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | 1273 - 1853 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | 1853 - 2353 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | 2103 - 2753 | 2670 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 1 | max. 3253 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | 2 | 1 | max. 3253 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Reynaers CP 155

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|----|--|--------|----|----------------|
| A | C | D | G1 | | | | |
| 1 | 2 | 2 | 1 | Basic hardware set for Reynaers CP 155 | - | 1 | K-17936-00-0-0 |

Contains: 1 x packer, 5 x spacer, 2 x frame cam, 2 x rubber buffer

PC cover cap

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|----|--------------|--------|----|----------------|
| A | C | D | G1 | | | | |
| 1 | 2 | 2 | 1 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

| L&S buffer 90 | | | | | | | | |
|---------------|---|---|----|---------------|--------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | G1 | | | | | |
| - | - | 2 | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 | |
| | | | | | white | 1 | K-17134-00-0-7 | |

Contains: 1 x buffer, 1 x cover cap, fixing screws

| Frame cam, fixing screws | | | | | | | | |
|--------------------------|---|---|----|--|-----------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | G1 | | | | | |
| - | 2 | - | - | Frame cam | stainless steel | 1 | 6-22648-03-0-8 | |
| - | 4 | - | - | Countersunk-head tapping screw 4.8 x 16 mm | - | 1 | 9-13089-16-R-1 | |

| L&S bottom keeper | | | | | | | | |
|-------------------|---|---|----|-------------------|----------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | G1 | | | | | |
| - | - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |

Contains: 1 x bottom keeper, fixing screws

Reynaers CP 155 / L&S bogie GU-934

Optional additional components



Additional kit L&S night vent module

| Frame cam | | | | | Designation | Finish | PU | Order no. |
|-------------------|---|---|----|-------------------|-----------------|--------|----------------|-----------|
| A | C | D | G1 | | | | | |
| - | 4 | - | - | Frame cam | stainless steel | 1 | 9-43830-03-0-8 | |
| L&S bottom keeper | | | | | Designation | Finish | PU | Order no. |
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | - | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | Designation | Finish | PU | Order no. |
|--------------------|---|---|----|----------------|-------------|--------|----------------|-----------|
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | 1 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | Designation | Finish | PU | Order no. |
|-----------------------|---|---|----|-------------------|-------------|--------|----------------|-----------|
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | 1 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

L&S corner-drive with anti-jemmy device

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|----|---|--------------------|----|----------------|
| A | C | D | G1 | | | | |
| 1 | 2 | 2 | - | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

L&S anti-jemmy device

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|----|-----------------------|-------------------|----|----------------|
| A | C | D | G1 | | | | |
| 1 | 2 | 2 | - | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

Vertical packer

| Pattern | | | | Designation | Finish | PU | Order no. |
|---------|---|---|----|-----------------|--------|----|----------------|
| A | C | D | G1 | | | | |
| 1 | 2 | 2 | - | Vertical packer | - | 1 | 9-47295-11-0-1 |

P 959 connecting rod for L&S anti-jemmy device

| Pattern | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|---------|---|---|----|--|--------------|-------------|----------|----|----------------|
| A | C | D | G1 | | | | | | |
| 1 | 2 | 2 | - | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Reynaers CP 155 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | |
|------------------------------|---|---|----|--|------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | | | | |
|------------------------------|---|---|----|--|------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | 1 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24606-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 | |
| 1 | 2 | 2 | 1 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24607-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 | |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
 [2] Similar to RAL 8022

| L&S flush pull | | | | | | | | |
|----------------|---|---|----|---------------------------|------------------|----|----------------|--|
| Pattern | | | | Designation | Finish | PU | Order no. | |
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | 1 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 | |
| | | | | | dark brown [1] | 1 | 9-29992-01-0-5 | |
| | | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 | |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|----|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | |
| A | C | D | G1 | | | | | |
| 1 | 2 | 2 | 1 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | Designation | Example of application | Finish | PU | Order no. |
|---------------|---|---|----|------------------------------|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | G1 | | | | | | |
| 2 | 4 | 4 | 2 | Countersunk screw M6 x 20 mm | 1 | - | 1 | 9-13274-20-0-1 | |
| 2 | 4 | 4 | 2 | Countersunk screw M6 x 80 mm | 2 + 3 | - | 1 | 9-13274-80-0-1 | |

| Optional: gasket plates | | | | | Designation | Example of application | Finish | PU | Order no. |
|-------------------------|---|---|----|--|-------------|------------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | |
| A | C | D | G1 | | | | | | |
| 1 | 2 | 2 | 1 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 | |
| 1 | 2 | 2 | 1 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 | |

Reynaers TSL 110 / L&S bogie GU-934

Application ranges

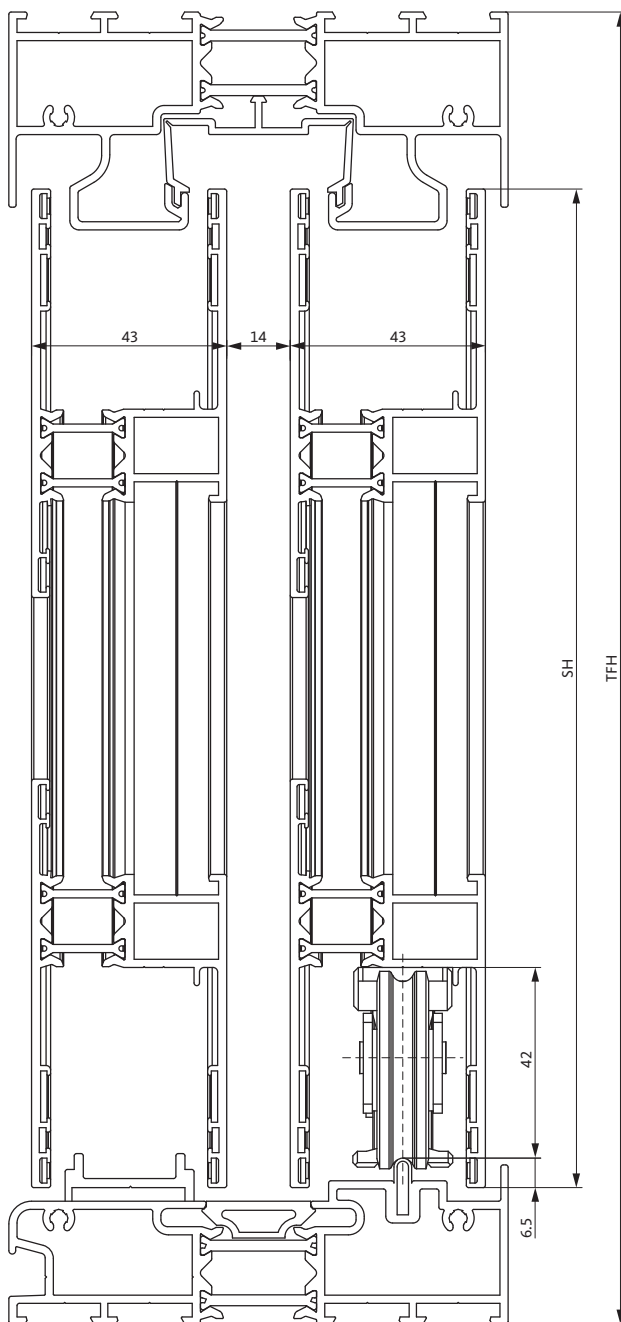


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 864–2764 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-934 | 0-45328 | from page 181 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



SH = sash height / TFH = total frame width

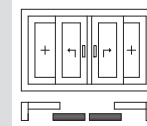
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
 1 Lift&Slide door
 1 Fixed-glazed sash
 Fig.: sliding direction to the right



Pattern C
 2 Lift&Slide doors
 2 Fixed-glazed sashes
 Fig.: sliding direction to the right and left



L&S bogie and rod – for sash weights up to 350 kg

| L&S bogie | | | | | | |
|-----------|---|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | C | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | C | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Reynaers TSL 110 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. | | |
|--|-----------|---|-------------|--------------------|--------------------|---------------------------|-------------------|-----------------|----|----------------|
| A | C | | | | Cover rail | Lock case, connecting rod | | | | |
| 1 | 2 | 864 – 1284 | 1190 | 406.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 | | |
| | | 1234 – 1864 | 1770 | 406.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 | | |
| | | 1864 – 2364 | 2270 | 1006.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 | | |
| | | 2114 – 2764 | 2670 | 1006.5 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 | | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | |
| | | Optional: Gear and cover-rail extension set 500 mm | | | | | | | | |
| | | 1 | 2 | max. 3264 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| UC 5 / dark bronze | ferGUard | | | | | | 10 | 6-32030-00-0-5 | | |
| EV 1 / light grey | faceGUard | | | | | | 10 | 6-32030-00-0-18 | | |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | |
| 1 | 2 | max. 3264 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 | | |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 | | |

Basic hardware set for Reynaers TSL 110

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Basic hardware set for Reynaers TSL 110 | - | 1 | K-17133-00-0-0 |

Contains: 2 x frame cam, 1 x packer, 5 x spacer

Frame cam, rubber buffer, cover cap

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------|-----------------|----|----------------|
| A | C | | | | |
| - | 2 | Frame cam | stainless steel | 1 | 6-23309-00-0-8 |
| 2 | 4 | Rubber buffer 60 | black | 1 | 9-23793-00-0-0 |
| 1 | 2 | PC cover cap | grey | 1 | 9-26687-00-0-1 |

L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-------------|----|-----------------|
| A | C | | | | |
| 2 | 4 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | white | 1 | K-12024-00-0-7 |
| | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit L&S night vent module

| Frame cam | | | | | |
|--|---|-------------------|-----------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 2 | - | Frame cam | stainless steel | 1 | 9-43830-04-0-8 |
| L&S bottom keeper | | | | | |
| 1 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |
| Contains: 1 x bottom keeper, fixing screws | | | | | |

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | |
|---|---|----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |
| [1] Recommended from a sash weight of 200 kg for reduction of the operating forces. | | | | | |

| L&S handle damper [1] | | | | | |
|---|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |
| Contains: 1 x handle damper, accessory | | | | | |
| [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash. | | | | | |



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50%.

Order information from page 236.

Reynaers TSL 110 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with exterior flush pull

DIRIGENT L&S turn handle [1]

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|--|------------------|----|----------------|
| A | C | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24606-00-0-1 |
| | | | dark brown [2] | 1 | 6-24606-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24606-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | dark brown [2] | 1 | 6-24607-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.

[2] Similar to RAL 8022

L&S flush pull

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------------------|------------------|----|----------------|
| A | C | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |

[1] Similar to RAL 8022

Fixing screws

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------------------|--------|----|----------------|
| A | C | | | | |
| 2 | 4 | Countersunk screw M6 x 20 mm | – | 1 | 9-13274-20-0-1 |

Optionally: gasket plate

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-----------------------------|--------|----|----------------|
| A | C | | | | |
| 1 | 2 | Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 2 | 4 | Countersunk screw M6 x 50 mm | - | 1 | 9-13274-50-0-1 |

| Optionally: gasket plate | | | | | |
|--------------------------|---|--|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | C | | | | |
| 1 | 2 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 |

Sapa Ekonal 125 / L&S bogie GU-934

Application ranges



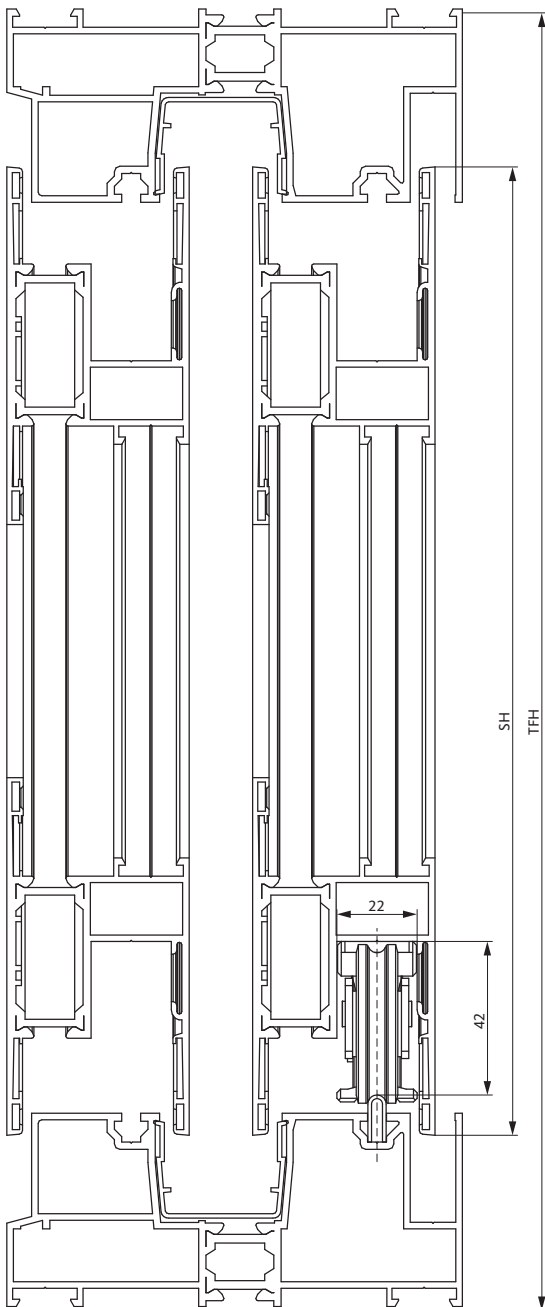
Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 774–2719 mm | 350 kg | GU-934 |

SH : SW = 2.5 : 1

Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-44718 | from page 187 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |



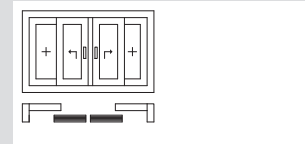
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

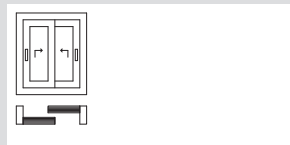
Possible patterns



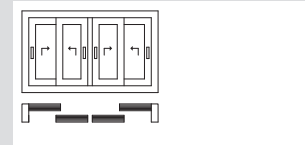
Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



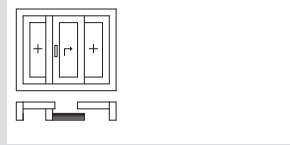
Pattern C
2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



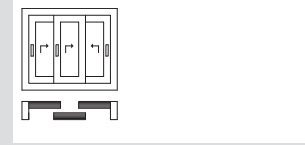
Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern F
4 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern G2 asymmetrical
with fixed mullion
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right



Pattern H
3 Lift&Slide doors
(like pattern G1 symmetrical)
Fig.: sliding direction to the right and left

SH = sash height / TFH = total frame width

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | Designation | Contents | Finish | PU | Order no. |
|-----------|---|---|---|----|---|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G2 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | | | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|------------|---|---|---|----|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | | | | | | | | | | |
| A | C | D | F | G2 | H | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | | | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | | | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | | | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Sapa Ekonal 125 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | | | | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|-----------|----|-----------------|----|---|-------------|----------------|--------------------------|--------------------|------------------------------|----|-----------------|
| A | C | D | F | G2 | H | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 2 | 4 | 1 | 3 | 774 – 1239 | 1190 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 |
| | | | | | | 1144 – 1819 | 1770 | 406 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 |
| | | | | | | 1774 – 2319 | 2270 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 |
| | | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 |
| | | | | | | 2024 – 2719 | 2670 | 1006 | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 |
| UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | | | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | | | | | | | | |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | max. 3219 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| | | | | | | | | | EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | max. 3219 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for Sapa Ekonal 125

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|--|--------|----|----------------|
| A | C | D | F | G2 | H | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Basic hardware set for Sapa Ekonal 125 | - | 1 | K-17266-00-0-0 |

Contains: 2 x frame cam, 1 x packer, 5 x spacer, 1 x PC screw-hole cover cap, fixing screws

Spacer

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|-------------|--------|----|----------------|
| A | C | D | F | G2 | H | | | | |
| - | - | - | - | - | 1 | Spacer | - | 1 | 9-47296-06-0-1 |

L&S bottom keeper

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|-------------------|----------|----|----------------|
| A | C | D | F | G2 | H | | | | |
| - | - | - | - | - | 1 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Optional: L&S buffer 90

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|---------------|-------------|----|-----------------|
| A | C | D | F | G2 | H | | | | |
| 2 | 4 | 2 | 4 | 2 | 4 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | | | | | white | 1 | K-12024-00-0-7 |
| | | | | | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Additional kit L&S night vent module

| Pattern | | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|---|-------------------|-----------------|--------|----------------|-----------|
| A | C | D | F | G2 | H | | | | | |
| 2 | 4 | 4 | 4 | - | - | Frame cam | stainless steel | 1 | 9-43830-03-0-8 | |
| L&S bottom keeper | | | | | | | | | | |
| 1 | 2 | 2 | 2 | - | - | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 | |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Pattern | | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|----------------|-------------|--------|----------------|-----------|
| A | C | D | F | G2 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Tension spring | - | 1 | 9-40235-05-0-0 | |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| Pattern | | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|-------------------|-------------|--------|----------------|-----------|
| A | C | D | F | G2 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | L&S handle damper | - | 1 | K-19053-00-0-6 | |

Contains: 1 x handle damper, accessory
 [1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.
 The operating forces can be reduced by up to 50%.
 Order information from page 236.

Sapa Ekonal 125 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

DIRIGENT L&S turn handle [1][2]

| Pattern | | | | | | Designation | Finish | PU | Order no. |
|---------|---|---|---|----|---|---|------------------|----|----------------|
| A | C | D | F | G2 | H | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | | | | | dark brown [3] | 1 | 6-24607-00-0-5 |
| | | | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.

[2] The fixing screws are contained in the basic hardware set for Sapa Ekonal 125 / order number K-17266-00-0-0.

[3] Similar to RAL 8022

Application example 2: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | | | Designation | Finish | PU | Order no. |
|------------------------------|---|---|---|----|---|--|------------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G2 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 | |
| | | | | | | | dark brown [2] | 1 | 6-24615-96-0-5 | |
| | | | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 | |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

| Fixing screws | | | | | | | Designation | Finish | PU | Order no. |
|---------------|---|---|---|----|---|------------------------------|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G2 | H | | | | | |
| 2 | 4 | 4 | 8 | 2 | 6 | Countersunk screw M6 x 65 mm | - | 1 | 9-13274-65-0-1 | |

| Optionally: gasket plate | | | | | | | Designation | Finish | PU | Order no. |
|--------------------------|---|---|---|----|---|--|-------------|--------|----------------|-----------|
| Pattern | | | | | | | | | | |
| A | C | D | F | G2 | H | | | | | |
| 1 | 2 | 2 | 4 | 1 | 3 | Gasket plate for exterior and interior turn handle | black | 1 | 9-47210-01-0-6 | |

TS-Aluminium / L&S bogie GU-937

Application ranges

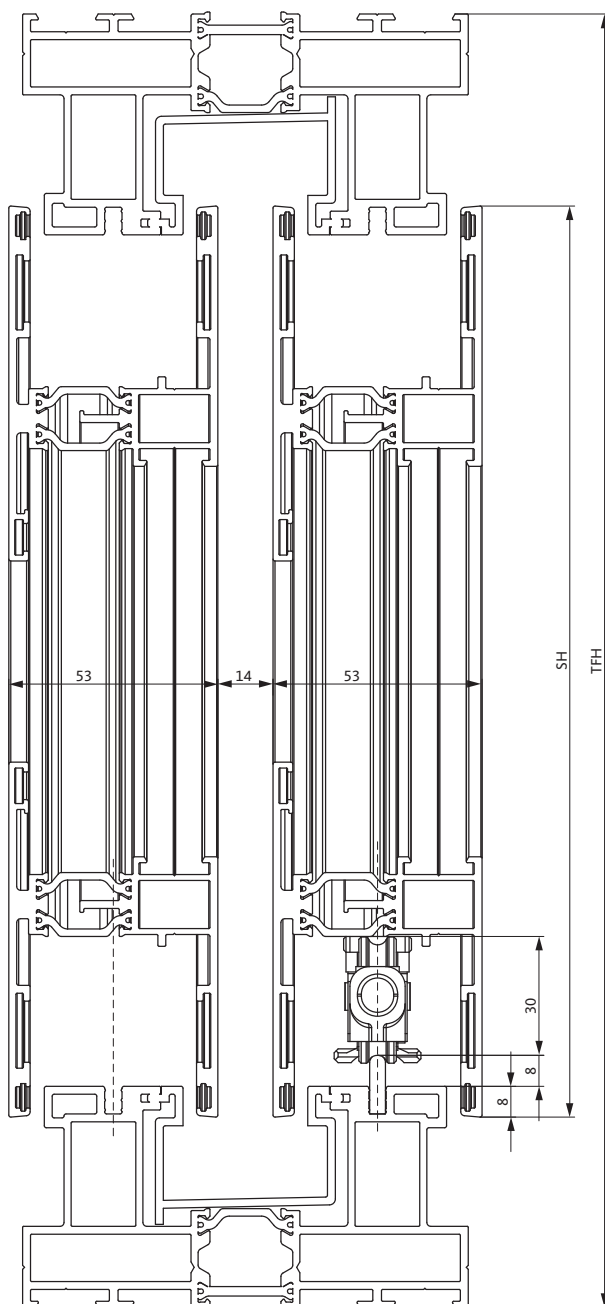


Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|-----------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 700–3300 mm | 830–2730 mm | 200 kg | GU-937 |

SH : SW = 2.5 : 1

| Installation drawings | | |
|----------------------------|---------|-------------------|
| Application | Drawing | Order information |
| Lift&Slide hardware GU-937 | 0-44919 | from page 193 |
| HS LiftUnit GU-937 | 0-48605 | from page 236 |
| L&S locking monitoring set | 0-44449 | from page 258 |

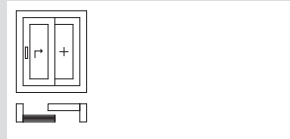


SH = sash height / TFH = total frame width

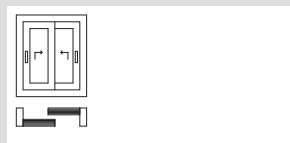
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern D
2 Lift&Slide doors
Fig: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 200 kg



| L&S bogie | | | | | |
|-----------|---|-------------------------|----------|----|-----------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S bogie GU-937, front | ferGUard | 1 | [1] |
| 1 | 2 | L&S bogie GU-937, rear | ferGUard | 1 | [1] |

[1] The L&S bogies are included in the basic hardware set for TS-Aluminium / order number K-17599-00-0-0.

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 700 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |

TS-Aluminium / L&S bogie GU-937

Hardware requirements



Lift&Slide gear, 27.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. |
|---|---|-------------|-------------|--------------------|--------------------|---------------------------|----|----------------|
| A | D | | | | Cover rail | Lock case, connecting rod | | |
| 1 | 2 | 830 – 1250 | 1190 | 411 | EV 1 / light grey | ferGUard | 10 | 6-30019-11-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-11-0-5 |
| | | 1200 – 1830 | 1770 | 411 | EV 1 / light grey | ferGUard | 10 | 6-30019-19-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-19-0-5 |
| | | 1830 – 2330 | 2270 | 1011 | EV 1 / light grey | ferGUard | 10 | 6-30019-24-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-24-0-5 |
| | | 2080 – 2730 | 2670 | 1011 | EV 1 / light grey | ferGUard | 10 | 6-30019-28-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30019-28-0-5 |
| Optional: Gear and cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3230 | 500 | - | EV 1 / light grey | ferGUard | 10 | 6-32030-00-0-1 |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 |
| Optional: Cover-rail extension set 500 mm | | | | | | | | |
| 1 | 2 | max. 3230 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 |

Basic hardware set for TS Aluminium

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------------------------|--------|----|----------------|
| A | D | | | | |
| 1 | 2 | Basic hardware set for TS Aluminium | - | 1 | K-17599-00-0-0 |

Contains: 1 x front bogie, 1 x rear bogie, 1 x packer, 2 x frame cam, 2 x rubber buffer, 2 x PC screw-hole cover cap, fixing screws

Optional: L&S buffer 90

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|-------------|----|-----------------|
| A | D | | | | |
| 2 | 2 | L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | | | white | 1 | K-12024-00-0-7 |
| | | | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Optional: L&S handle damper [1]

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------|--------|----|----------------|
| A | D | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory
[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-937

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – with extended exterior flush pull

| DIRIGENT L&S turn handle | | | | | |
|--------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole [1] | silver/EV 1 look | 1 | K-13265-00-0-1 |
| | | | dark brown [3] | 1 | K-13265-00-0-5 |
| | | | white, RAL 9016 | 1 | K-13265-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole [2] | silver/EV 1 look | 1 | K-13266-00-0-1 |
| | | | dark brown [3] | 1 | K-13266-00-0-5 |
| | | | white, RAL 9016 | 1 | K-13266-00-0-7 |

[1] Contents: DIRIGENT interior turn handle without PC hole, extended flush pull, square spindle
 [2] Contents: DIRIGENT interior turn handle with PC hole, extended flush pull, square spindle
 [3] Similar to RAL 8022

| Fixing screws | | | | | |
|---------------|---|------------------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 2 | 4 | Countersunk screw M6 x 50 mm | - | 1 | 9-13274-50-0-1 |

Wicona Wicslide 160 / L&S bogie GU-934

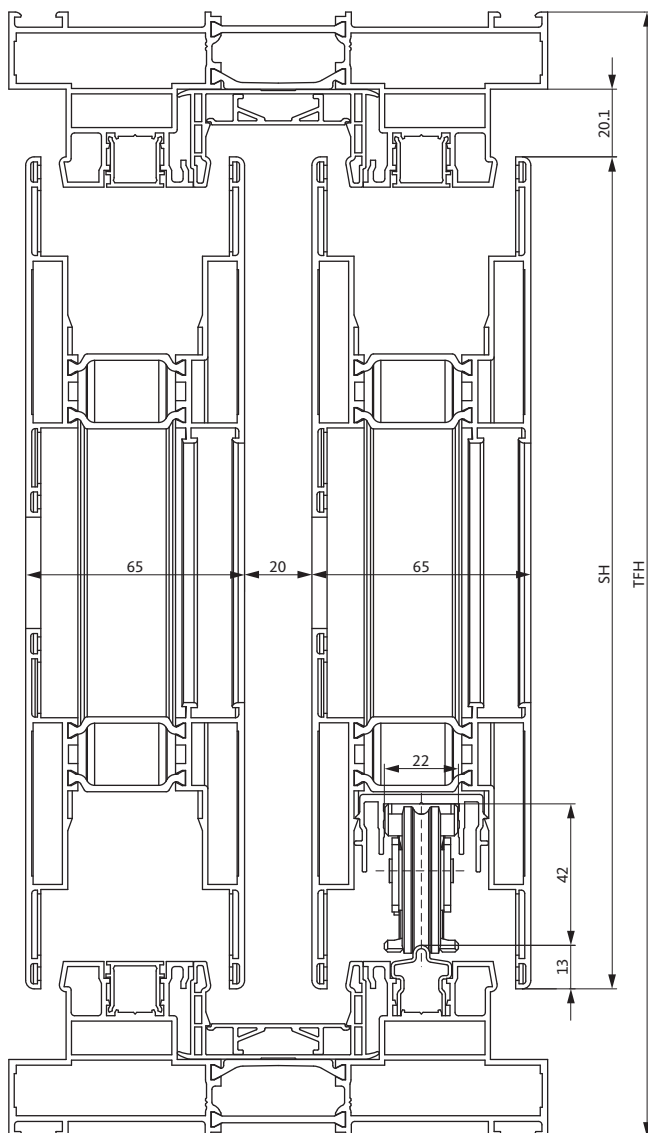
Application ranges



Application ranges

| Sash widths / sash heights / sash weights | | | |
|---|------------------|------------------|---------------|
| Sash width [SW] | Sash height [SH] | Sash weight [SW] | |
| | | maximum | L&S bogie |
| 720–3300 mm | 843–2743 mm | 350 kg | GU-934 |
| | | 400 kg | GU-934 Tandem |

SH : SW = 2.5 : 1



SH = sash height / TFH = total frame width

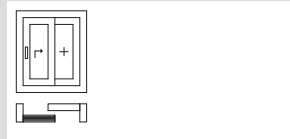
Installation drawings

| Application | Drawing | Order information |
|----------------------------|---------|-------------------|
| Lift&Slide hardware GU-934 | 0-46552 | from page 197 |
| HS LiftUnit GU-934 | 0-48605 | from page 236 |
| HS Master, pattern A | 0-44355 | from page 244 |
| HS SpeedLimiter | 0-44550 | from page 270 |
| L&S locking monitoring set | 0-44449 | from page 258 |

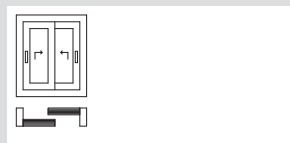
Note:

- The product guidelines of the system provider regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. linear profile expansion) are to be observed.
- RC2: for tested patterns please refer to our "System file RC2 Aluminium".

Possible patterns



Pattern A
1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



Pattern D
2 Lift&Slide doors
Fig.: sliding direction to the right and left

L&S bogie and rod – for sash weights up to 350 kg



| L&S bogie | | | | | | |
|-----------|---|------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | D | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 720 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

L&S bogie and rod – for sash weights up to 400 kg



| L&S bogie | | | | | | |
|-----------|---|-------------------------|-----------------------------------|-----------|----|-----------------|
| Pattern | | Designation | Contents | Finish | PU | Order no. |
| A | D | | | | | |
| 1 | 2 | L&S bogie GU-934 | 1 x front bogie 1 x rear bogie | ferGUard | 1 | K-16488-00-0-1 |
| | | | | faceGUard | 1 | K-16488-00-0-18 |
| 1 | 2 | L&S tandem bogie GU-934 | 2 x central bogies | ferGUard | 1 | K-17804-01-0-1 |
| | | | | faceGUard | 1 | K-17804-01-0-18 |

| Rod Ø 8 mm | | | | | | | |
|------------|---|-------------|-------------|-------------|-----------|----|-----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | Rod Ø 8 mm | 1230 – 1600 | 1100 | ferGUard | 1 | 9-25476-11-0-1 |
| | | | | | faceGUard | 1 | 9-25476-11-0-18 |
| | | | 1601 – 1850 | 1350 | ferGUard | 1 | 9-25476-14-0-1 |
| | | | | | faceGUard | 1 | 9-25476-14-0-18 |
| | | | 1851 – 2350 | 1850 | ferGUard | 1 | 9-25476-18-0-1 |
| | | | | | faceGUard | 1 | 9-25476-18-0-18 |
| | | | 2351 – 3300 | 3300 | ferGUard | 1 | 9-25476-33-0-1 |
| | | | | | faceGUard | 1 | 9-25476-33-0-18 |

Wicona Wicslide 160 / L&S bogie GU-934

Hardware requirements



Lift&Slide gear, 37.5 mm backset

| Pattern | | SH [mm] | Length [mm] | Handle height [mm] | Finish | | PU | Order no. | |
|---|-------------|-------------|-----------------|--|--------------------|---------------------------|-----------------|-----------------|-------------------|
| A | D | | | | Cover rail | Lock case, connecting rod | | | |
| 1 | 2 | 843 – 1263 | 1190 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-11-0-1 | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-11-0-5 | |
| | | 1213 – 1843 | 1770 | 408 | EV 1 / light grey | ferGUard | 10 | 6-30021-19-0-1 | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-19-0-5 | |
| | | 1843 – 2343 | 2270 | 1008 | EV 1 / light grey | ferGUard | 10 | 6-30021-24-0-1 | |
| | | | | | UC 5 / dark bronze | ferGUard | 10 | 6-30021-24-0-5 | |
| | | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-24-0-18 | |
| | | | | | EV 1 / light grey | ferGUard | 10 | 6-30021-28-0-1 | |
| | 2093 – 2743 | 2670 | 1008 | UC 5 / dark bronze | ferGUard | 10 | 6-30021-28-0-5 | | |
| | | | | EV 1 / light grey | faceGUard | 10 | 6-30021-28-0-18 | | |
| | | | | Optional: Gear and cover-rail extension set 500 mm | | | | | |
| | | | | 1 | 2 | max. 3243 | 500 | - | EV 1 / light grey |
| UC 5 / dark bronze | ferGUard | 10 | 6-32030-00-0-5 | | | | | | |
| EV 1 / light grey | faceGUard | 10 | 6-32030-00-0-18 | | | | | | |
| Optional: Cover-rail extension set 500 mm | | | | | | | | | |
| 1 | 2 | max. 3243 | 500 | - | EV 1 / light grey | - | 10 | 9-28483-05-0-1 | |
| | | | | | UC 5 / dark bronze | - | 10 | 9-28483-05-0-5 | |

Packer, spacer, frame cam, PC screw-hole cover cap, rubber buffer

| Pattern | | Designation | Finish | PU | Order no. |
|---------|----|---|-----------------|----|----------------|
| A | D | | | | |
| 1 | 2 | Vertical packer for L&S bogie GU-934, front | - | 1 | 9-47295-08-0-1 |
| 5 | 10 | Spacer for Lift&Slide gear | - | 1 | 9-47296-09-0-1 |
| 2 | 4 | Frame cam | stainless steel | 1 | 6-22648-01-0-8 |
| 1 | 2 | PC cover cap | grey | 1 | 9-26687-00-0-1 |
| 2 | - | Rubber buffer 62 | black | 1 | 9-24292-00-0-0 |

L&S buffer 90 [1]

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|---------------|--------|----|----------------|
| A | D | | | | |
| - | 2 | L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | | | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws
[1] Optionally with pattern A

Optional: L&S bottom keeper

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|-------------------|----------|----|----------------|
| A | D | | | | |
| 1 | 2 | L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |

Contains: 1 x bottom keeper, fixing screws

Additional kit 'comfort' (see Chapter 4.1)

| Tension spring [1] | | | | | |
|--------------------|---|----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | Tension spring | - | 1 | 9-40235-05-0-0 |

[1] Recommended from a sash weight of 200 kg for reduction of the operating forces.

| L&S handle damper [1] | | | | | |
|-----------------------|---|-------------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S handle damper | - | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

[1] Recommended from a sash weight of 100 kg for controlled lowering of the sliding sash.



HS LiftUnit GU-934

The use of HS LiftUnit is recommended.

The operating forces can be reduced by up to 50 %.

Order information from page 236.

Additional kit 'burglary' (see Chapter 4.2)

| L&S corner-drive with anti-jemmy device | | | | | |
|---|---|---|--------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | | | UC 5 / dark bronze | 1 | K-16570-00-0-5 |

Contains: 1 x stay-arm slide block, 1 x lever, 1 x corner-drive, 1 x cover cap, 1 x extension, 2 x guides, fixing screws

| L&S anti-jemmy device | | | | | |
|-----------------------|---|-----------------------|-------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |

Contains: 2 x lever, 2 x wedge, 2 x pivot bracket

| Vertical packer | | | | | |
|-----------------|---|-----------------|--------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | Vertical packer | - | 1 | 9-47295-08-0-1 |

| P 959 connecting rod for L&S anti-jemmy device | | | | | | | |
|--|---|--|--------------|-------------|----------|----|----------------|
| Pattern | | Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
| A | D | | | | | | |
| 1 | 2 | P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | | | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | | | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | | | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | | | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

Wicona Wicslide 160 / L&S bogie GU-934

L&S turn handles



L&S turn handles

The turn handle versions used in the following application examples are exemplary.

You can find other finishes and handle designs in Chapter 5.0 "Turn handles and accessories" from page 279.

Application example 1: Interior turn handle – without exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

Application example 2: Interior turn handle – with exterior flush pull

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior L&S turn handle, without PC hole | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | dark brown [2] | 1 | 6-24608-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| 1 | 2 | DIRIGENT interior L&S turn handle, with PC hole | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | dark brown [2] | 1 | 6-24609-00-0-5 |
| | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |

[1] A removable service handle may be used alternatively for a fixed handle. Order information refer to page 358.
[2] Similar to RAL 8022

| L&S flush pull | | | | | |
|----------------|---|---------------------------|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | L&S flush pull MS, square | silver/EV 1 look | 1 | 9-29992-02-0-1 |
| | | | dark brown [1] | 1 | 9-29992-02-0-5 |
| | | | white, RAL 9016 | 1 | 9-29992-02-0-7 |

[1] Similar to RAL 8022

Application example 3: Interior/exterior handle set

| DIRIGENT L&S turn handle [1] | | | | | |
|------------------------------|---|--|------------------|----|----------------|
| Pattern | | Designation | Finish | PU | Order no. |
| A | D | | | | |
| 1 | 2 | DIRIGENT interior/exterior L&S turn handle set, with PC hole | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | dark brown [2] | 1 | 6-24615-96-0-5 |
| | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |

[1] The use of buffers is recommended. For order information, refer to page 220 + 221.
 [2] Similar to RAL 8022

Accessories for application examples 1 to 3

| Fixing screws | | | | | | |
|---------------|---|-------------------------------|------------------------|--------|----|----------------|
| Pattern | | Designation | Example of application | Finish | PU | Order no. |
| A | D | | | | | |
| 2 | 4 | Countersunk screw 5.5 x 32 mm | 1 | - | 1 | 9-13253-32-0-0 |
| 2 | 4 | Countersunk screw M6 x 75 mm | 2 | - | 1 | 9-13274-75-0-1 |
| 2 | 4 | Countersunk screw M6 x 85 mm | 3 | - | 1 | 9-13274-85-0-3 |

| Optional: gasket plates | | | | | | |
|-------------------------|---|--|------------------------|--------|----|----------------|
| Pattern | | Designation | Example of application | Finish | PU | Order no. |
| A | D | | | | | |
| 1 | 2 | Gasket plate for flush pull | 2 | black | 1 | 9-47211-01-0-6 |
| 1 | 2 | Gasket plate for exterior and interior turn handle | 3 | black | 1 | 9-47210-01-0-6 |



2.0 Lift&Slide hardware

| | |
|---|-----|
| L&S bogie GU-934 / GU-937 | 204 |
| Rod | 204 |
| L&S bogie support, adapter VT | 206 |
| HS CleanUnit | 207 |
| Packers | 208 |
| Lift&Slide gears | 210 |
| Gear extensions and cover-rail extensions | 213 |
| Spacers | 214 |
| Tension spring, L&S handle damper | 215 |
| Frame cam | 216 |
| Bottom keepers | 218 |
| Buffers, rubber buffers | 220 |
| L&S lowering safeguard | 224 |

Lift&Slide bogie

GU-934, GU-934 Tandem / GU-937, GU-937 Tandem



L&S bogie with rod \varnothing 8 mm

Use with a minimum sash width of 720 mm, respectively 700 mm depending on the profile

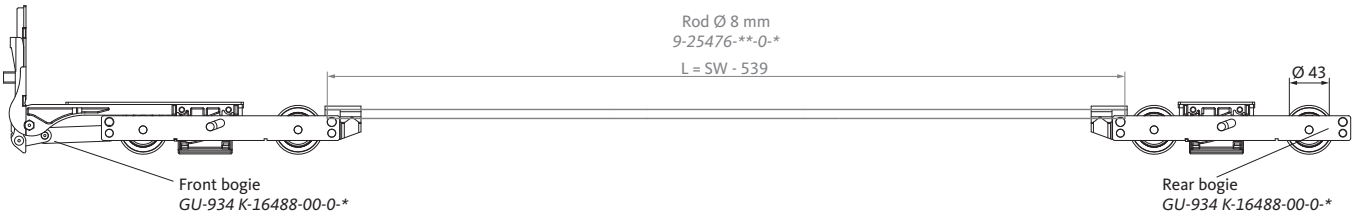


Fig.: L&S bogie GU-934

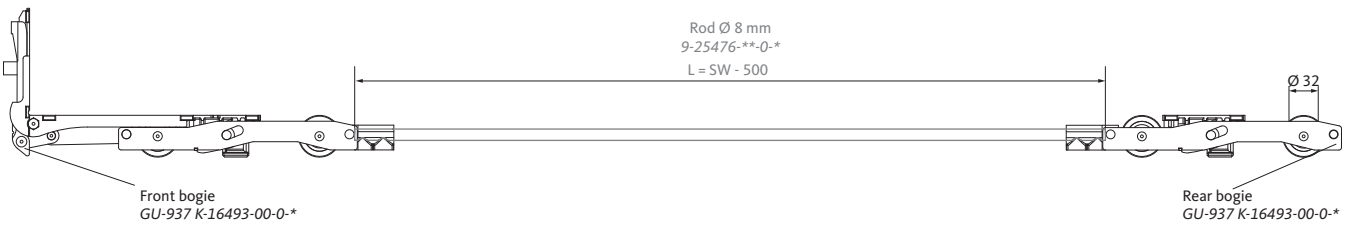


Fig.: L&S bogie GU-937

L&S tandem bogie with rod \varnothing 8 mm

Use with a minimum sash width of 1230 mm, respectively 1210 mm depending on the profile

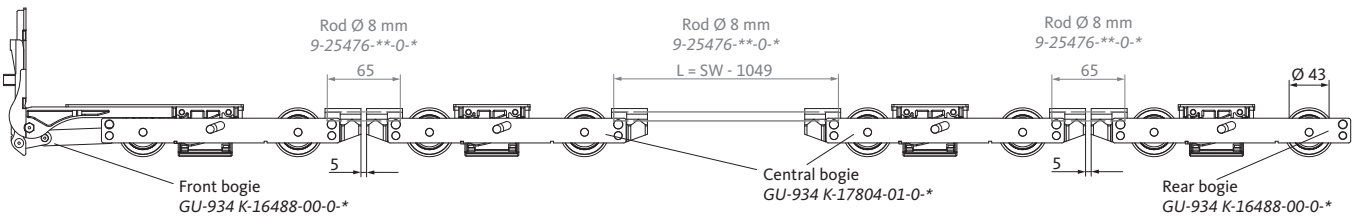


Fig.: L&S bogie GU-934 / L&S tandem bogie GU-934

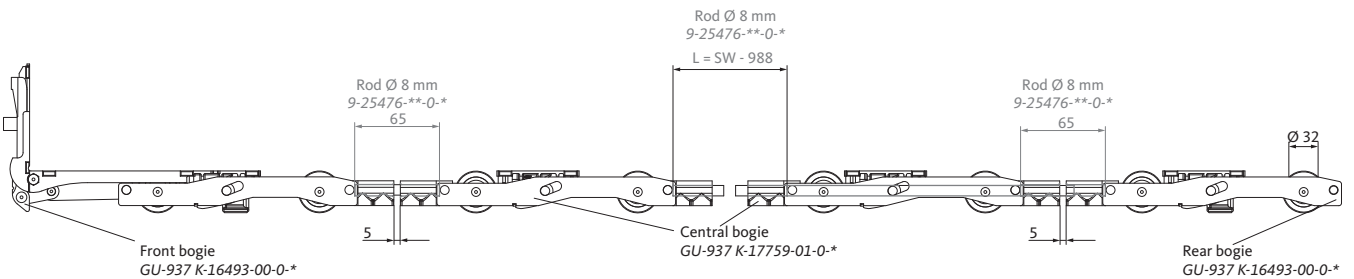


Fig.: L&S bogie GU-937 / L&S tandem bogie GU-937



L&S bogie GU-934 / L&S tandem bogie GU-934 [1]

| Designation | Application range [kg] | Contents | PU [2] | Order no. | |
|-----------------------------|------------------------|-----------------------------------|--------|----------------|-----------------|
| | | | | ferGUard | faceGUard |
| L&S bogie GU-934 | max. 350 | 1 x front bogie 1 x rear bogie | 1 | K-16488-00-0-1 | K-16488-00-0-18 |
| L&S tandem bogie GU-934 [3] | max. 400 | 2 x central bogies | 1 | K-17804-01-0-1 | K-17804-01-0-18 |

- [1] You can find more bogie designs for specific profiles on the relevant order pages in Chapter 1.0 from page 9.
 [2] One PU is required for each sliding sash.
 [3] The L&S tandem bogies GU-934 must be used in combination with the corresponding L&S bogies GU-934.

L&S bogie GU-937 / L&S tandem bogie GU-937 [1]

| Designation | Application range [kg] | Contents | PU [2] | Order no. | |
|-----------------------------|------------------------|-----------------------------------|--------|----------------|-----------------|
| | | | | ferGUard | faceGUard |
| L&S bogie GU-937 | max. 200 | 1 x front bogie 1 x rear bogie | 1 | K-16493-00-0-1 | K-16493-00-0-18 |
| L&S tandem bogie GU-937 [3] | max. 400 | 2 x central bogies | 1 | K-17759-01-0-1 | K-17759-01-0-18 |

- [1] You can find more bogie designs for specific profiles on the relevant order pages in Chapter 1.0 from page 9.
 [2] One PU is required for each sliding sash.
 [3] The L&S tandem bogies GU-937 must be used in combination with the corresponding L&S bogies GU-937.

Rod

The rods between the bogies are not included in the scope of delivery and must be fabricated separately from the Ø 8 mm rod. For the respective lengths, refer to the adjacent figures.

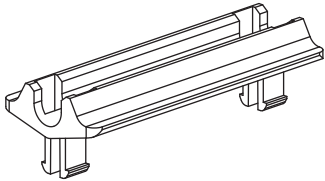
Rod Ø 8 mm

| Designation | Length [mm] | PU | Order no. | |
|-------------|-------------|----|----------------|-----------------|
| | | | ferGUard | faceGUard |
| Rod Ø 8 mm | 1100 | 1 | 9-25476-11-0-1 | 9-25476-11-0-18 |
| | 1350 | 1 | 9-25476-14-0-1 | 9-25476-14-0-18 |
| | 1850 | 1 | 9-25476-18-0-1 | 9-25476-18-0-18 |
| | 2800 | 1 | 9-25476-28-0-1 | 9-25476-28-0-18 |
| | 3300 | 1 | 9-25476-33-0-1 | 9-25476-33-0-18 |
| | 6000 | 1 | 9-25476-60-0-1 | 9-25476-60-0-18 |

L&S bogie support, adapter VT

for L&S bogie GU-934

GU

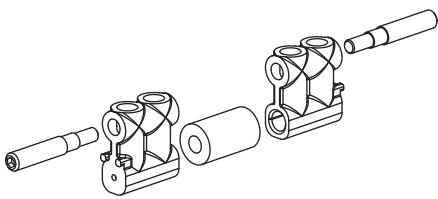


L&S bogie support GU-934

The L&S bogie supports can be used to ensure there is no load whatsoever on the rollers of the bogies when the sliding sash is lowered and its total weight is transmitted to the threshold via the roller track. Recommended for sliding sashes that are used infrequently.

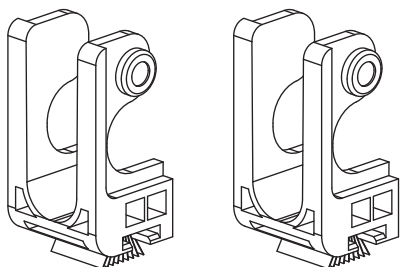
L&S bogie support GU-934 for roller track 'R 2.5'

| Designation | PU | Order no. |
|-----------------------------------|----|----------------|
| L&S bogie support GU-934 | 1 | K-17455-03-0-0 |
| Contains: 2 x bogie support R 2.5 | | |



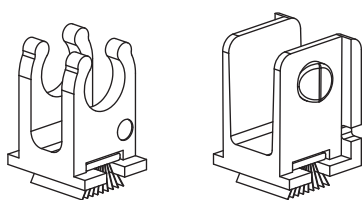
Adapter VT GU-934 for L&S bogie GU-934 with deep rod

| Designation | PU | Order no. |
|-------------------------------------|----|----------------|
| Adapter VT GU-934 | 1 | K-19940-00-0-1 |
| Contains: 2 x adapter VT, accessory | | |



HS CleanUnit GU-934

| Designation | PU | Order no. |
|------------------------------|----|----------------|
| HS CleanUnit GU-934 | 1 | K-19567-00-0-1 |
| Contains: 2 x cleaning brush | | |

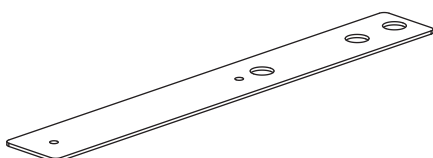


HS CleanUnit GU-937

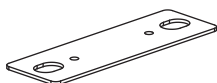
| Designation | PU | Order no. |
|------------------------------|----|----------------|
| HS CleanUnit GU-937 | 1 | K-19566-00-0-1 |
| Contains: 2 x cleaning brush | | |

Horizontal packers

for L&S bogie GU-934 / GU-937



Packer for L&S bogie GU-934, front



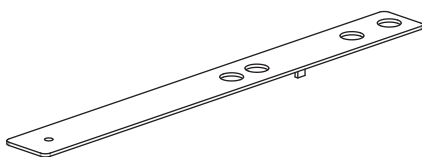
Packer for L&S bogie GU-934, rear

Horizontal packers

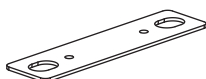
for L&S bogie GU-934

Versions/order numbers

| Designation | Thickness [mm] | PU | Order no. | |
|---|----------------|----|-----------------|----------------|
| | | | L&S front bogie | L&S rear bogie |
| Horizontal packers for L&S bogie GU-934 | 1.0 | 1 | 9-41680-01-0-1 | 9-41681-01-0-1 |
| | 1.5 | 1 | 9-41680-17-0-1 | 9-41681-17-0-1 |
| | 2.0 | 1 | 9-41680-02-0-1 | 9-41681-02-0-1 |
| | 3.0 | 1 | 9-41680-20-0-1 | 9-41681-20-0-1 |
| | 4.0 | 1 | 9-41680-14-0-1 | 9-41681-14-0-1 |
| | 5.0 | 1 | 9-41680-05-0-1 | 9-41681-05-0-1 |
| | 6.0 | 1 | 9-41680-16-0-1 | 9-41681-06-0-1 |



Packer for L&S bogie GU-937, front



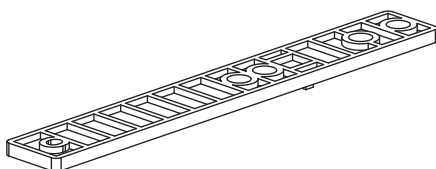
Packer for L&S bogie GU-937, rear

Horizontal packers

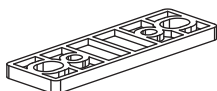
for L&S bogie GU-937

Versions/order numbers

| Designation | Thickness [mm] | PU | Order no. | |
|---|----------------|----|-----------------|----------------|
| | | | L&S front bogie | L&S rear bogie |
| Horizontal packers for L&S bogie GU-937 | 1.0 | 1 | 9-41680-11-0-1 | 9-41681-11-0-1 |
| | 1.5 | 1 | 9-41680-17-0-1 | 9-41681-17-0-1 |
| | 4.0 | 1 | 9-41680-14-0-1 | 9-41681-14-0-1 |
| | 6.0 | 1 | 9-41680-16-0-1 | 9-41681-06-0-1 |
| | 8.6 | 1 | 9-41680-18-0-1 | 9-41681-18-0-1 |



Adapters for horizontal packer L&S front bogie



Adapters for horizontal packer L&S rear bogie

Adapters for horizontal packers

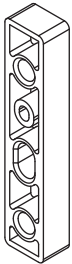
for exchanging GU-934 with GU-937 L&S bogies

Versions/order numbers

| Designation | Thickness [mm] | PU | Order no. | |
|---------------------------------|----------------|----|-----------------|----------------|
| | | | L&S front bogie | L&S rear bogie |
| Adapters for horizontal packers | 4.0 | 1 | 9-41680-14-0-1 | 9-41681-14-0-1 |
| | 6.0 | 1 | 9-41680-16-0-1 | 9-41681-06-0-1 |

Vertical packers

for L&S bogie GU-934 / GU-937



Vertical packers

for L&S bogie GU-934 / GU-937

Versions/order numbers

| Designation | Height [mm] | PU | Order no. |
|---|-------------|----|-----------------|
| | | | L&S front bogie |
| Vertical packers for L&S bogie GU-934 / GU-937 | 8.5 | 1 | 9-43818-02-0-1 |
| | 11.0 | 1 | 9-43818-04-0-1 |
| | 13.0 | 1 | 9-47295-01-0-1 |
| | 14.0 | 1 | 9-47295-02-0-1 |
| | 16.0 | 1 | 9-47295-04-0-1 |
| | 18.5 | 1 | 9-47295-06-0-1 |
| | 19.0 | 1 | 9-47295-07-0-1 |
| | 20.0 | 1 | 9-47295-08-0-1 |
| | 21.0 | 1 | 9-47295-09-0-1 |
| | 22.0 | 1 | 9-47295-10-0-1 |
| | 23.0 | 1 | 9-47295-11-0-1 |
| | 24.5 | 1 | 9-47295-12-0-1 |
| | 27.0 | 1 | 9-47295-13-0-1 |
| | 30.0 | 1 | 9-47295-16-0-1 |
| | 31.0 | 1 | 9-47295-17-0-1 |
| | 32.0 | 1 | 9-47295-18-0-1 |
| | 35.0 | 1 | 9-47295-20-0-1 |

Lift&Slide gears

for use with profile cylinders and round cylinders



Lift&Slide gears

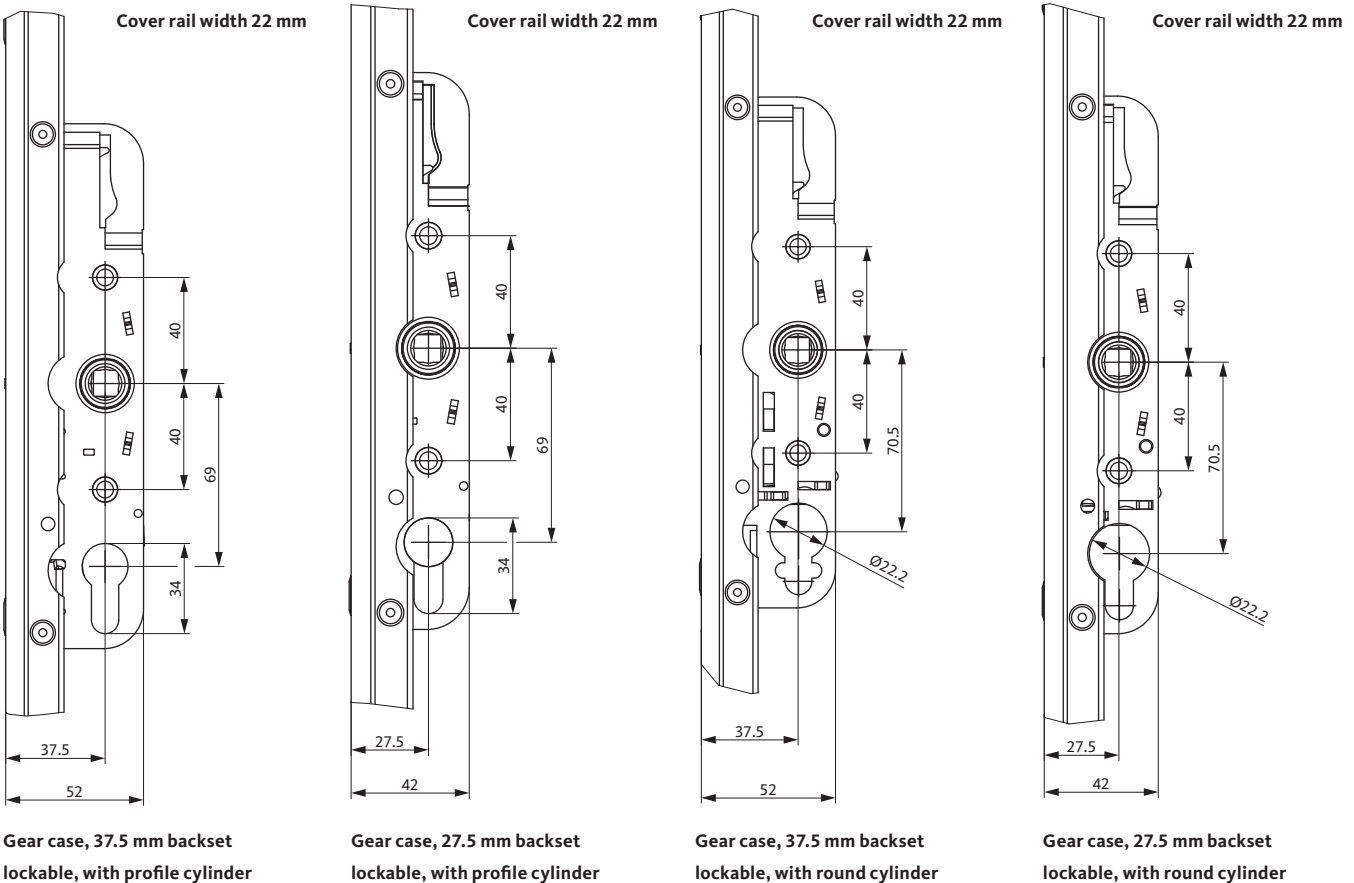
The specifications for the sash height and the handle height are general and may deviate minimally depending on the used roller track and profile system.

The system-related dimensions can be found in the profile system drawings.

Special size in the case of a non-standard handle height and gear length:

The gear size -98- specified in the following tables is a special size that is fabricated with the handle height at the customer's request. The application range depends on the basic size of the drive-gear that is used for the fabrication (sizes 19 to 44). Please request prices and delivery times in individual cases.

Installation drawing 0-44186





Lift&Slide gear – 37.5 mm backset – lockable, with profile cylinder

| Designation | SH [1] [mm] | Handle height [1] [mm] | Quantity of locks | Cover rail finish | | Lock case finish | | PU | Order no. |
|---|-------------|------------------------|-------------------|-------------------|---------------|------------------|-----------|-----------------|-----------------|
| | | | | EV 1 anodised | UC 5 anodised | ferGUard | faceGUard | | |
| Lift&Slide gear 37.5 mm backset lockable, with profile cylinder (PC) | 840 – 1260 | 400 | 1 + 1 optional | ■ | | ■ | | 1 | 6-30021-11-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30021-11-0-5 |
| | 1260 – 1840 | 400 | 2 | ■ | | ■ | | 1 | 6-30021-19-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30021-19-0-5 |
| | 1620 – 2340 | 1000 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30021-44-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30021-44-0-5 |
| | | | | ■ | | | ■ | 1 | 6-30021-44-0-18 |
| | | | | | | | | 1 | 6-30021-20-0-1 |
| | 1840 – 2340 | 840 | 2 | ■ | | ■ | | 1 | 6-30021-20-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30021-20-0-5 |
| | 1840 – 2340 | 1000 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30021-24-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30021-24-0-5 |
| | | | | ■ | | | ■ | 1 | 6-30021-24-0-18 |
| | 2340 – 2740 | 1000 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30021-28-0-1 |
| | | | | ■ | ■ | | 1 | 6-30021-28-0-5 | |
| ■ | | | | | | ■ | 1 | 6-30021-28-0-18 | |
| - 2740 | min. 400 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30021-98-0-1 | |

[1] Dimension specifications for use of the 5 mm roller track. When using the 10 and/or 15 mm roller tracks, the dimension specifications increase by 5 or 10 mm respectively.

Lift&Slide gear – 27.5 mm backset – lockable, with profile cylinder

| Designation | SH [1] [mm] | Handle height [1] [mm] | Quantity of locks | Cover rail finish | | Lock case finish | | PU | Order no. |
|---|-------------|------------------------|-------------------|-------------------|---------------|------------------|-----------|-----------------|-----------------|
| | | | | EV 1 anodised | UC 5 anodised | ferGUard | faceGUard | | |
| Lift&Slide gear 27.5 mm backset lockable, with profile cylinder (PC) | 840 – 1260 | 400 | 1 + 1 optional | ■ | | ■ | | 1 | 6-30019-11-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30019-11-0-5 |
| | 1260 – 1840 | 400 | 2 | ■ | | ■ | | 1 | 6-30019-19-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30019-19-0-5 |
| | | | | ■ | | | ■ | 1 | 6-30019-19-0-18 |
| | 1620 – 2340 | 1000 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30019-44-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30019-44-0-5 |
| | 1840 – 2120 | 700 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30019-40-0-1 |
| | | | | | | | | 1 | 6-30019-20-0-1 |
| | 1840 – 2340 | 840 | 2 | ■ | | ■ | | 1 | 6-30019-20-0-1 |
| | | | | ■ | | ■ | | 1 | 6-30019-24-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30019-24-0-5 |
| | 1840 – 2340 | 1000 | 2 + 1 optional | ■ | | | ■ | 1 | 6-30019-24-0-18 |
| | | | | | | | | 1 | 6-30019-28-0-1 |
| | | | | ■ | ■ | | 1 | 6-30019-28-0-5 | |
| ■ | | | | | | ■ | 1 | 6-30019-28-0-18 | |
| 2340 – 2740 | 1000 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30019-28-0-1 | |
| | | | | ■ | ■ | | 1 | 6-30019-28-0-5 | |
| | | | ■ | | | ■ | 1 | 6-30019-28-0-18 | |
| - 2740 | min. 400 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30019-98-0-1 | |

[1] Dimension specifications for use of the 5 mm roller track. When using the 10 and/or 15 mm roller tracks, the dimension specifications increase by 5 or 10 mm respectively.

Lift&Slide gears

for use with round cylinders – 37.5 mm and 27.5 mm backset



Lift&Slide gear – 37.5 mm backset – lockable, with round cylinder

| Designation | SH [1] [mm] | Handle height [1] [mm] | Quantity of locks | Cover rail finish | | Lock case finish | PU | Order no. |
|--|----------------|------------------------------|----------------------|-------------------|---------------|------------------|----|----------------|
| | | | | EV 1 anodised | UC 5 anodised | ferGUard | | |
| Lift&Slide gear 37.5 mm backset | 840 – 1260 | 400 | 1 + 1 optional | ■ | | ■ | 1 | 6-31020-11-0-1 |
| | 1260 – 1840 | 400 | 2 | ■ | | ■ | 1 | 6-31020-19-0-1 |
| | 1620 – 2340 | 1000 | 2 + 1 optional | ■ | | ■ | 1 | 6-31020-44-0-1 |
| Lockable, with round cylinder (CH-RC) | 1840 – 2340 | 1000 | 2 + 1 optional | ■ | | ■ | 1 | 6-31020-24-0-1 |
| | | | | | ■ | ■ | 1 | 6-31020-24-0-5 |
| | 2340 – 2740 | 1000 | 2 + 1 optional | ■ | | ■ | 1 | 6-31020-28-0-1 |

[1] Dimension specifications for use of the 5 mm roller track. When using the 10 and/or 15 mm roller tracks, the dimension specifications increase by 5 or 10 mm respectively.

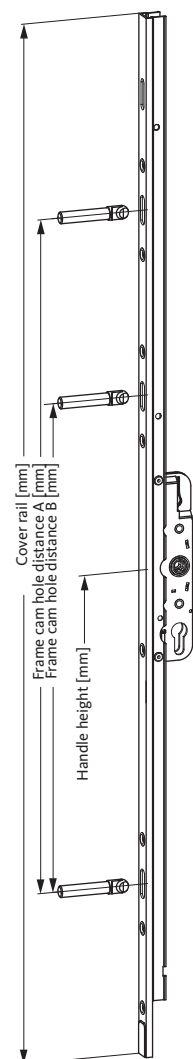
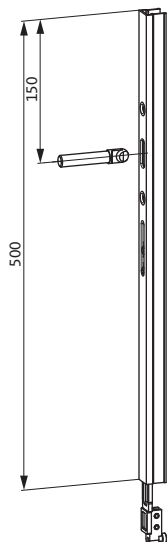
Lift&Slide gear – 27.5 mm backset – lockable, with round cylinder

| Designation | SH [1] [mm] | Handle height [1] [mm] | Quantity of locks | Cover rail finish | | Lock case finish | PU | Order no. |
|--|----------------|------------------------------|----------------------|-------------------|--|------------------|----|----------------|
| | | | | EV 1 anodised | | ferGUard | | |
| Lift&Slide gear 27.5 mm backset | 840 – 1260 | 400 | 1 + 1 optional | ■ | | ■ | 1 | 6-31021-11-0-1 |
| | 1260 – 1840 | 400 | 2 | ■ | | ■ | 1 | 6-31021-19-0-1 |
| Lockable, with round cylinder (CH-RC) | 1840 – 2340 | 1000 | 2 + 1 optional | ■ | | ■ | 1 | 6-31021-24-0-1 |
| | 2340 – 2740 | 1000 | 2 + 1 optional | ■ | | ■ | 1 | 6-31021-28-0-1 |

[1] Dimension specifications for use of the 5 mm roller track. When using the 10 and/or 15 mm roller tracks, the dimension specifications increase by 5 or 10 mm respectively.

Gear extensions and cover-rail extensions

for Lift&Slide gears



Depiction: Gear and cover-rail extension set

Gear extensions and cover-rail extensions

The gear and cover-rail extensions have a length of 500 mm and can be attached to any Lift&Slide gear. The extension is cropped to the necessary sash dimension on the Lift&Slide gear.

The gear extension features an additional locking point.

Position of the locking point: 150 mm below the top edge of the cover rail. See depiction "Gear extensions and cover-rail extensions".

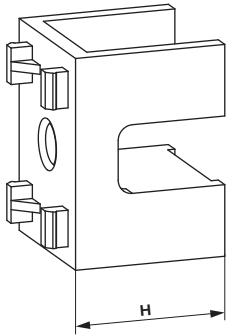
If necessary, the gear extensions can be coupled. Sash heights greater than 3250 mm require a technical test and special approval from Gretsch-Unitas.

Versions/order numbers

| Designation | Application range [kg] | Quantity of locks | Finish | | | | PU | Order no. |
|--------------------------------------|------------------------|-------------------|------------|------|----------------|-----------|----|-----------------|
| | | | Cover rail | | Connecting rod | | | |
| | | | EV 1 | UC 5 | ferGUard | faceGUard | | |
| GU-934 / GU-937 gear extension | max. 400 | 1 | ■ | - | ■ | - | 1 | 6-32030-00-0-1 |
| | | | - | ■ | ■ | - | 1 | 6-32030-00-0-5 |
| | | | ■ | - | - | ■ | 1 | 6-32030-00-0-18 |
| GU-934 / GU-937 cover-rail extension | max. 400 | - | ■ | - | - | - | 1 | 9-28483-05-0-1 |
| | | | - | ■ | - | - | 1 | 9-28483-05-0-5 |

Spacers

for Lift&Slide gears



Dimension H = Height in mm

Spacer

for Lift&Slide gears, backset 37.5 and 27.5 mm

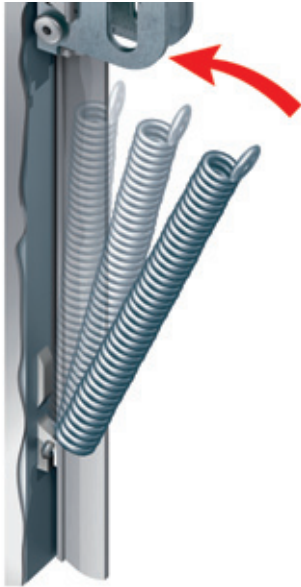
Versions/order numbers

| Designation | Height [mm] | PU | Order no. |
|-------------|-------------|----|----------------|
| | 8.0 | 1 | 9-47296-02-0-1 |
| | 11.0 | 1 | 9-47296-24-0-1 |
| | 12.0 | 1 | 9-47296-25-0-1 |
| | 13.0 | 1 | 9-47296-04-0-1 |
| | 14.0 | 1 | 9-47296-05-0-1 |
| | 16.0 | 1 | 9-47296-06-0-1 |
| | 18.0 | 1 | 9-47296-07-0-1 |
| | 19.0 | 1 | 9-47296-08-0-1 |
| | 20.0 | 1 | 9-47296-09-0-1 |
| | 21.0 | 1 | 9-47296-10-0-1 |
| | 22.0 | 1 | 9-47296-11-0-1 |
| | 23.0 | 1 | 9-47296-12-0-1 |
| | 24.5 | 1 | 9-47296-13-0-1 |
| | 25.0 | 1 | 9-47296-14-0-1 |
| | 27.0 | 1 | 9-47296-16-0-1 |
| | 29.0 | 1 | 9-47296-17-0-1 |
| | 30.0 | 1 | 9-47296-18-0-1 |
| | 31.0 | 1 | 9-47296-19-0-1 |
| | 32.0 | 1 | 9-47296-20-0-1 |
| | 35.0 | 1 | 9-47296-22-0-1 |

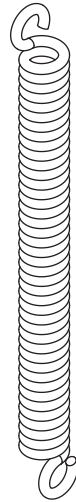
Spacer for Lift&Slide gears,
37.5 and 27.5 mm backset

Tension spring, L&S handle damper

for Lift&Slide gears



Installation drawing 0-46862



Tension spring for Lift&Slide gears

To reduce the operating force of sashes weighing over 200 kg.

Thanks to the use of tension springs in Lift&Slide gears, the operational force at the turn handle is significantly reduced for the user, greatly increasing operating convenience.

This makes the Lift&Slide door easy to operate, especially with high sash weights up to 400 kg.

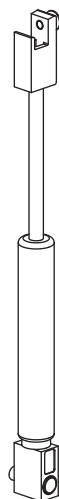
The tension spring can be retrofitted quickly and easily in every standard Lift&Slide gear.

Versions/order numbers

| Designation | SW [kg] | PU | Order no. |
|----------------|----------|----|----------------|
| Tension spring | from 200 | 1 | 9-40235-05-0-0 |



Installation drawing 0-46862



L&S handle damper for Lift&Slide gears

For even safer operation of sashes weighing more than 100 kg.

The L&S handle damper in Lift&Slide gears ensures controlled lowering of the sliding sash and prevents the turn handle from recoiling.

The L&S handle damper can also be retrofitted quickly and easily in every standard gear.

Versions/order numbers

| Designation | SW [kg] | PU | Order no. |
|-------------------|----------|----|----------------|
| L&S handle damper | from 100 | 1 | K-19053-00-0-6 |

Contains: 1 x handle damper, accessory

Frame cam



Frame cam

Profile-specific versions

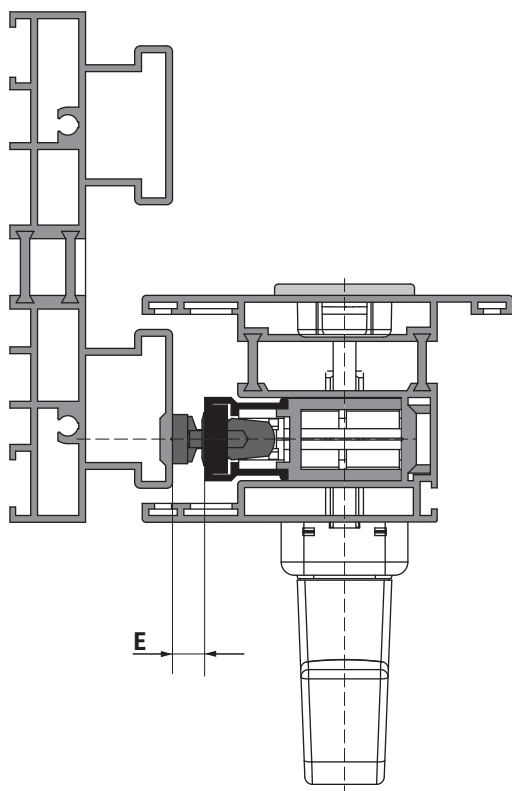
| Profile system | L&S bogie | Patterns | Dim. E [mm] | Finish | PU | Order no. | |
|------------------------------|-----------|-----------------------------|-------------|-----------------|----|----------------|------------------------------|
| | | | | | | Standard | Lift&Slide night vent module |
| Akothem AT 750 HS | GU-934 | depending on profile system | 5.5 | stainless steel | 1 | 6-22648-01-0-8 | - |
| Alcoa Europe | GU-934 | depending on profile system | 6.5 | stainless steel | 1 | 6-22648-02-0-8 | 9-43830-04-0-8 |
| Aliplast Ultraglidle | GU-934 | A / D / F | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| | | C / F | 17.0 | stainless steel | 1 | 6-22623-03-0-8 | - |
| Alsystem | GU-934 | depending on profile system | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| AluK SC140 | GU-934 | depending on profile system | 13.4 | stainless steel | 1 | 6-35190-00-0-8 | - |
| Alumil M300 | GU-934 | depending on profile system | 5.5 | stainless steel | 1 | 6-22648-01-0-8 | - |
| Aluprof MB-77HS | GU-934 | depending on profile system | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| Aluprof MB-77HS | GU-937 | depending on profile system | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| Etem E3000 | GU-934 | depending on profile system | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| Etem E50 | GU-937 | A / D / F | 13.4 | stainless steel | 1 | 9-38825-00-0-8 | - |
| | | C / F | 5.5 | stainless steel | 1 | 6-22648-01-0-8 | - |
| Etem E52 | GU-937 | A / D / F | 8.3 | stainless steel | 1 | 9-47530-02-0-8 | - |
| | | C / F | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| Etem E70 | GU-934 | depending on profile system | 6.5 | stainless steel | 1 | 6-22648-02-0-8 | 9-43830-04-0-8 |
| Etem E70 | GU-937 | depending on profile system | 6.5 | stainless steel | 1 | 6-22648-02-0-8 | 9-43830-04-0-8 |
| Exalco Albio 230 | GU-934 | depending on profile system | 5.5 | stainless steel | 1 | 6-22648-01-0-8 | - |
| Feal T 120 | GU-934 | A | 15.2 | stainless steel | 1 | 9-47530-01-0-8 | - |
| | | C | 6.5 | stainless steel | 1 | 6-22648-02-0-8 | 9-43830-04-0-8 |
| Gastaldello Sistemi | GU-934 | depending on profile system | 13.4 | stainless steel | 1 | 9-38825-00-0-8 | - |
| Gutmann SC 180 | GU-934 | depending on profile system | 9.5 | stainless steel | 1 | 6-22648-04-0-8 | - |
| Gutmann SC 180 | GU-937 | depending on profile system | 9.5 | stainless steel | 1 | 6-22648-04-0-8 | - |
| Metra NC 150 STH Rodos (45°) | GU-934 | A | 13.0 | stainless steel | 1 | 9-44211-00-0-8 | - |
| | | C | 21.5 | stainless steel | 1 | 6-22623-05-0-8 | - |
| Metra NC 150 STH Rodos (45°) | GU-937 | A | 13.0 | stainless steel | 1 | 9-44211-00-0-8 | - |
| | | C | 21.5 | stainless steel | 1 | 6-22623-05-0-8 | - |
| Metra NC 150 STH Rodos (90°) | GU-934 | A / D | 17.5 | ferGUard | 1 | 6-23793-00-L-1 | - |
| | | C | 21.5 | stainless steel | 1 | 6-22623-05-0-8 | - |
| Metra NC 150 STH Rodos (90°) | GU-937 | A / D | 17.5 | ferGUard | 1 | 6-23793-00-L-1 | - |
| | | C | 21.5 | stainless steel | 1 | 6-22623-05-0-8 | - |
| Ponzio SL1600 | GU-934 | depending on profile system | 13.4 | stainless steel | 1 | 9-38825-00-0-8 | - |
| Profilati | GU-934 | A / D / F | 11.8 | ferGUard | 1 | 9-26072-55-0-1 | - |
| | | C / F | 11.0 | stainless steel | 1 | 6-22648-05-0-8 | - |
| Reynaers CP 130-LS | GU-934 | depending on profile system | 6.5 | stainless steel | 1 | 6-22648-02-0-8 | 9-43830-04-0-8 |
| Reynaers CP 155 | GU-934 | A / D | 19.5 | stainless steel | 1 | 6-22623-04-0-8 | - |
| | | C | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| Reynaers TSL 110 | GU-934 | A | 6.5 | stainless steel | 1 | 6-22648-02-0-8 | 9-43830-04-0-8 |
| | | C | 16.0 | stainless steel | 1 | 6-23309-00-0-8 | - |
| Sapa Ekonal 125 | GU-934 | depending on profile system | 8.5 | stainless steel | 1 | 6-22648-03-0-8 | 9-43830-03-0-8 |
| TS Aluminium | GU-937 | depending on profile system | 5.5 | stainless steel | 1 | 6-22648-01-0-8 | - |
| Wicona Wicslide 160 | GU-934 | depending on profile system | 5.5 | stainless steel | 1 | 6-22648-01-0-8 | - |



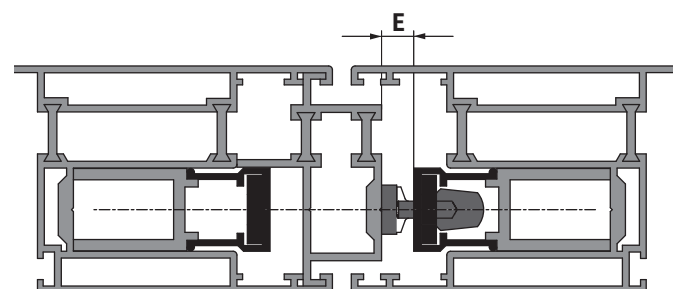
Packers for frame cams

Versions/order numbers

| Height [mm] | Finish | PU | Order no. |
|-------------|-----------------|----|----------------|
| 0.5 | stainless steel | 10 | K-18309-01-0-8 |
| 1.0 | stainless steel | 10 | K-18309-02-0-8 |

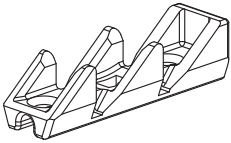


Locking into the frame, example shows pattern A



Sash locking at the meeting stile with pattern C and F

Bottom keepers

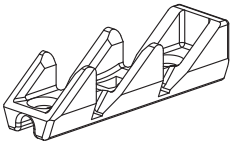


L&S bottom keeper

- With 2 bolt positions

Versions/order numbers

| Designation | Finish | PU | Order no. |
|--|----------|----|----------------|
| L&S bottom keeper | ferGUard | 1 | K-12057-00-0-1 |
| Contains: 1 x bottom keeper, fixing screws | | | |



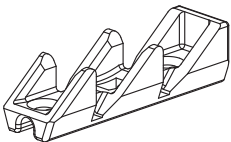
(milled off at the bottom)

Bottom keeper

- Profile systems Aluprof MB-77HS / Alumil M300
- With 2 bolt positions

Versions/order numbers

| Designation | Finish | PU | Order no. |
|--|----------|----|----------------|
| Bottom keeper set | ferGUard | 1 | K-17864-00-0-1 |
| Contains: 1 x bottom keeper, fixing screws | | | |



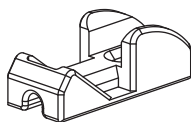
(for roller track with trapezoidal cross-section)

Bottom keeper

- Profile system Metra NC 150 STH Rodos
- With 2 bolt positions

Versions/order numbers

| Designation | Finish | PU | Order no. |
|--|----------|----|----------------|
| Bottom keeper set | ferGUard | 1 | K-14568-00-0-1 |
| Contains: 1 x bottom keeper, 1 x anti-jemmy device | | | |



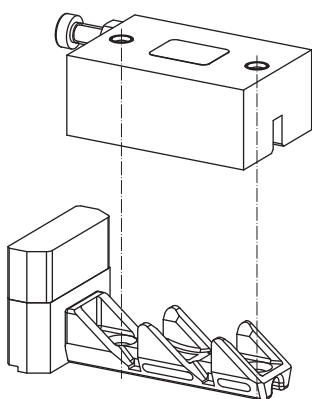
Bottom keeper

- With 1 bolt position

Versions/order numbers

| Designation | Material | PU | Order no. |
|---------------|-----------------|----|----------------|
| Bottom keeper | stainless steel | 1 | 9-47330-00-0-8 |

Note: can be optionally used to hold the passive sash in the closed position with pattern C



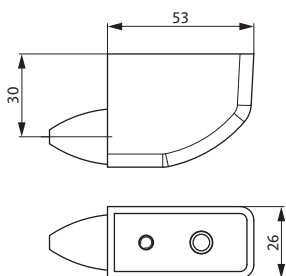
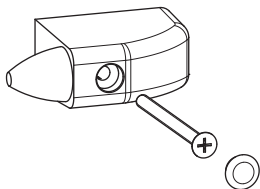
Drilling jig for the installation of the bottom keepers

Non-handed

Versions/order numbers

| Designation | Application | PU | Order no. |
|---|-----------------------|----|----------------|
| Drilling jig for the installation of the bottom keepers | Hardware installation | 1 | 6-34129-00-0-0 |

Buffers, rubber buffers



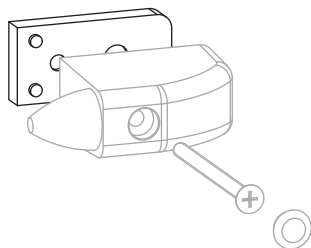
Buffer S

The buffer S is recommended for safe braking of the sliding sash in the opening direction and when using turn handles on both sides. It is positioned so that the sliding sash with the exterior handle cannot bump into the fixed-glazed sash. This prevents damage to the handle and the element. The buffer S brakes the sash in a particularly gentle way.

Versions/order numbers

| Designation | Finish | PU | Order no. |
|-------------|-------------|----|-----------------|
| Buffer S | black | 1 | K-19035-00-0-6 |
| | white | 1 | K-19035-00-0-7 |
| | cream white | 1 | K-19035-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

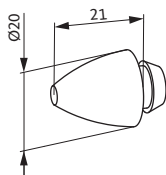


Packers

for buffer S

Versions/order numbers

| Designation | Height [mm] | Finish | PU | Order no. |
|----------------------|-------------|-------------|----|-----------------|
| Packers for buffer S | 8.0 | black | 1 | 9-30294-01-0-6 |
| | | white | 1 | 9-30294-01-0-7 |
| | | cream white | 1 | 9-30294-01-0-7Z |
| | 4.0 | black | 1 | 9-30294-02-0-6 |
| | | white | 1 | 9-30294-02-0-7 |
| | | cream white | 1 | 9-30294-02-0-7Z |

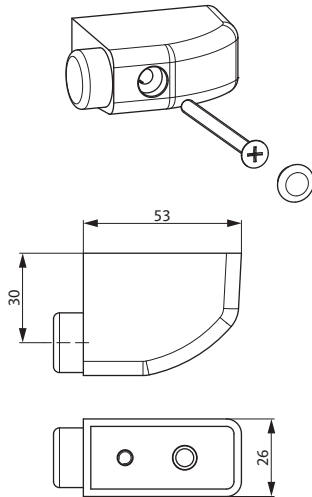


Rubber buffer

for reliable stopping at the frame
to prevent damage to the element and the frame

Versions/order numbers

| Designation | Finish | PU | Order no. |
|---------------|------------|----|----------------|
| Rubber buffer | light grey | 1 | 9-48849-00-0-1 |
| | black | 1 | 9-48849-00-0-6 |



L&S buffer 90

The L&S buffer 90 is recommended for safe braking of the sliding sash in the opening direction and when using turn handles on both sides. It is positioned so that the sliding sash with the exterior handle cannot bump into the fixed-glazed sash. This prevents damage to the handle and the element.

Versions/order numbers

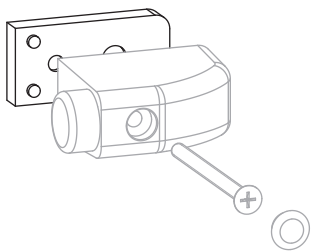
| Designation | Finish | PU | Order no. |
|---------------|-------------|----|-----------------|
| L&S buffer 90 | black | 1 | K-12024-00-0-6 |
| | white | 1 | K-12024-00-0-7 |
| | cream white | 1 | K-12024-00-0-7Z |

Contains: 1 x buffer, 1 x cover cap, fixing screws

Versions/order numbers

| Designation | Finish | PU | Order no. |
|---------------|--------|----|----------------|
| L&S buffer 90 | black | 1 | K-17134-00-0-6 |
| | white | 1 | K-17134-00-0-7 |

Contains: 1 x buffer, 1 x cover cap, fixing screws



Packers

for L&S buffer 90

Versions/order numbers

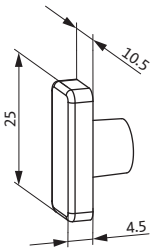
| Designation | Height [mm] | Finish | PU | Order no. |
|---------------------------|-------------|-------------|----|-----------------|
| Packers for L&S buffer 90 | 8.0 | black | 1 | 9-30294-01-0-6 |
| | | white | 1 | 9-30294-01-0-7 |
| | | cream white | 1 | 9-30294-01-0-7Z |
| | 4.0 | black | 1 | 9-30294-02-0-6 |
| | | white | 1 | 9-30294-02-0-7 |
| | | cream white | 1 | 9-30294-02-0-7Z |

Rubber buffer



Rubber buffer

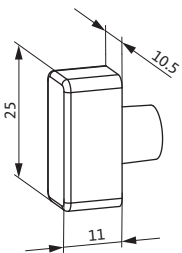
for reliable stopping at the frame
to prevent damage to the element and the frame



Rubber buffer 60

Versions/order numbers

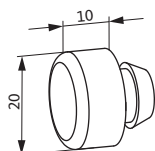
| Designation | Finish | PU | Order no. |
|------------------|--------|----|----------------|
| Rubber buffer 60 | black | 1 | 9-23793-00-0-0 |



Rubber buffer 62

Versions/order numbers

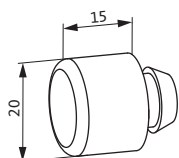
| Designation | Finish | PU | Order no. |
|------------------|--------|----|----------------|
| Rubber buffer 62 | black | 1 | 9-24292-00-0-0 |



Rubber buffer 80

Versions/order numbers

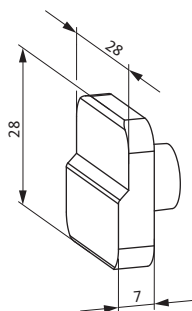
| Designation | Finish | PU | Order no. |
|------------------|------------|----|----------------|
| Rubber buffer 80 | light grey | 1 | 9-08488-00-0-1 |
| | black | 1 | 9-08488-00-0-6 |



Rubber buffer 80

Versions/order numbers

| Designation | Finish | PU | Order no. |
|------------------|------------|----|----------------|
| Rubber buffer 80 | light grey | 1 | 9-08488-15-0-1 |
| | black | 1 | 9-08488-15-0-6 |

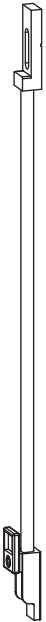


Rubber buffer 82

Versions/order numbers

| Designation | Finish | PU | Order no. |
|------------------|--------|----|----------------|
| Rubber buffer 82 | black | 1 | 9-22820-00-0-0 |

L&S lowering safeguard



L&S lowering safeguard

The L&S lowering safeguard is recommended when the sliding sash of the element is very light (under 80 kg) which means that its own weight is not sufficient to lower and lock 100 % reliably and ensure sufficient contact pressure with the horizontal gaskets.

Versions/order numbers

| Designation | PU | Order no. |
|--|----|----------------|
| L&S lowering safeguard | 1 | K-16621-00-0-1 |
| Contains: 1 x slider, 1 x reverser, 1 x pressure part, 1 x rod, 1 x rivet bolt | | |



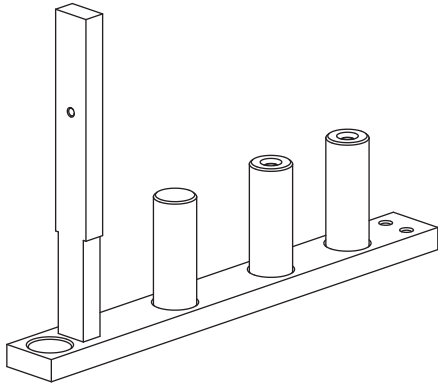


3.0 Drilling jigs and auxiliary tools

| | |
|--------------------------------|-----|
| Drilling jigs and milling jigs | 228 |
| Mounting tools | 231 |

Drilling jigs

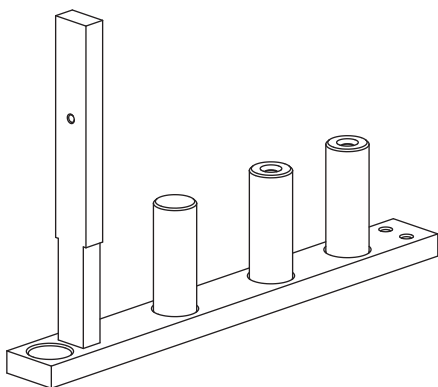
for installation of the L&S bogie GU-934 / GU-937



Drilling jig for installation of the L&S bogie GU-934

Versions/order numbers

| Designation | Application | PU | Order no. |
|--|---------------|----|----------------|
| Drilling jig for installation of the L&S bogie | GU-934 | 1 | 6-39690-01-0-0 |
| | GU-934 Tandem | 1 | K-19878-01-0-0 |



Drilling jig for installation of the L&S bogie GU-937

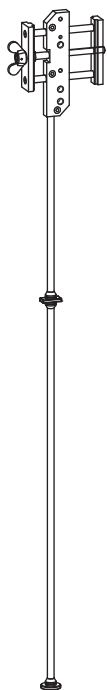
Versions/order numbers

| Designation | Application | PU | Order no. |
|--|---------------|----|----------------|
| Drilling jig for installation of the L&S bogie | GU-937 | 1 | 6-39690-02-0-0 |
| | GU-937 Tandem | 1 | K-19878-02-0-0 |

Milling jig, drilling jig

for the installation of turn handles

for the installation of flush pull and centre-closer



Drilling jig for the installation of turn handles

Non-handed

Used for aluminium profiles

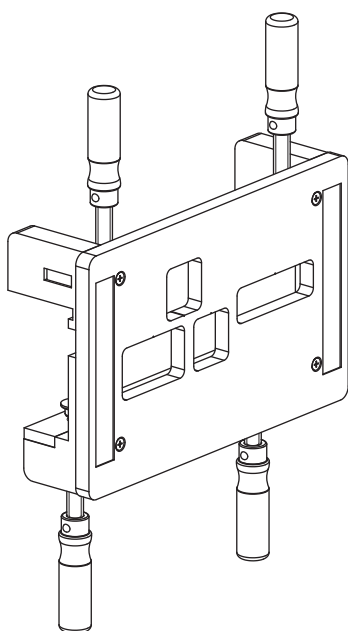
Versions/order numbers

| Designation | Application | PU | Order no. |
|--|-----------------------|----|----------------|
| Drilling jig for the installation of turn handles Aluminium profiles with Euro-groove | Hardware installation | 1 | 9-27272-01-0-1 |

Milling jig for flush pull and centre-closer

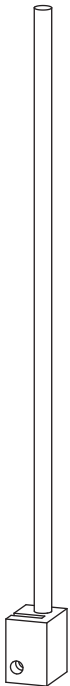
Versions/order numbers

| Designation | Application | PU | Order no. |
|--|-----------------------|----|----------------|
| Milling jig for flush pull/centre-closer | Hardware installation | 1 | 6-35035-00-0-0 |



Drilling jigs

for installation of the L&S handle damper
for installation of the bottom keepers



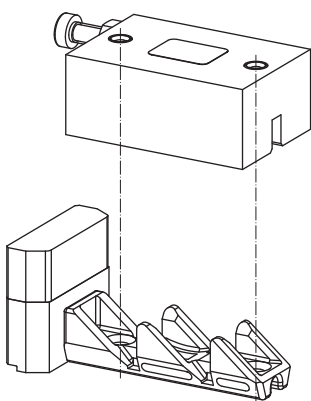
Drilling jig for L&S handle damper

Use according to installation drawing 0-46862

Versions/order numbers

| Designation | Application | PU | Order no. |
|--|-----------------------|----|----------------|
| Drilling jig for L&S handle damper [1] | Hardware installation | 1 | 6-37928-01-0-1 |

[1] Required for retrofitting on all Lift&Slide gears installed before July 2014.

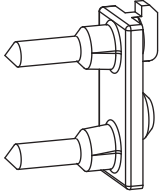


Drilling jig for the installation of the bottom keepers

Non-handed

Versions/order numbers

| Designation | Application | PU | Order no. |
|---|-----------------------|----|----------------|
| Drilling jig for the installation of the bottom keepers | Hardware installation | 1 | 6-34129-00-0-0 |



Centre punch for the installation of the frame cams

Versions/order numbers

| Designation | For frame cams | Centre punch length [mm] | PU | Order no. |
|---|--------------------|--------------------------|----|----------------|
| Centre punch for the installation of the frame cams | Hole spacing 25 mm | 31 | 1 | 6-33500-00-0-0 |
| | | 12 | 1 | 9-27315-00-0-0 |





4.1 Additional kit – comfort

| | |
|--|-----|
| HS LiftUnit | 236 |
| HS ePOWER motor-driven drive | 243 |
| HS Master motor-driven drive | 244 |
| Tension spring | 250 |
| L&S handle damper | 251 |
| Barrier freedom with regard to operation of the handle | 252 |



4.2 Additional kit – burglary

| | |
|---------------------|-----|
| Electronic security | 258 |
| Mechanical security | 259 |



4.3 Additional kit – operation

| | |
|------------------------------|-----|
| HS SilentClose / HS StopUnit | 268 |
| HS SpeedLimiter | 270 |



4.4 Additional kit – design

| | |
|---|-----|
| Lift&Slide turn handles in special design | 274 |
|---|-----|

Uncompromising comfort

COMFORT

MAXIMISED



As inventor and leading specialist partner for Lift&Slide hardware, Gretsch-Unitas has built a formidable reputation as provider of technically optimised solutions, many of which are unique on the market. The expertise and innovative technical prowess of Gretsch-Unitas has a proven track record in effectively responding to the increasing demands in relation to user friendliness of Lift&Slide systems.

Lift&Slide elements are exceptionally easy to access and use in combination with Gretsch-Unitas hardware. They are impressive because all parts are perfectly harmonised which ensures via the interaction of all components smooth operation and unparalleled comfort for users and door/window fabricators. Barrier-free versions are of course also available.

ACCESS COMFORT

- 1 Makes light work of lifting heavy sashes
HS LiftUnit



- 2 Elegant, comfortable and barrier-free
HS ePOWER motor-driven drive



- 3 Added comfort which is easy to retrofit
HS Master motor-driven drive



EASY OPERATION

- 4** For rebound-free, controlled lowering of the sash
Handle damper

5 Reduces the operating force at the turn handle
Tension spring in Lift&Slide gear

6 Tight controlled closing, also for light window sashes
Lowering safeguard
- 7** Barrier-free in handle area
Extended RONDO handle 400 mm

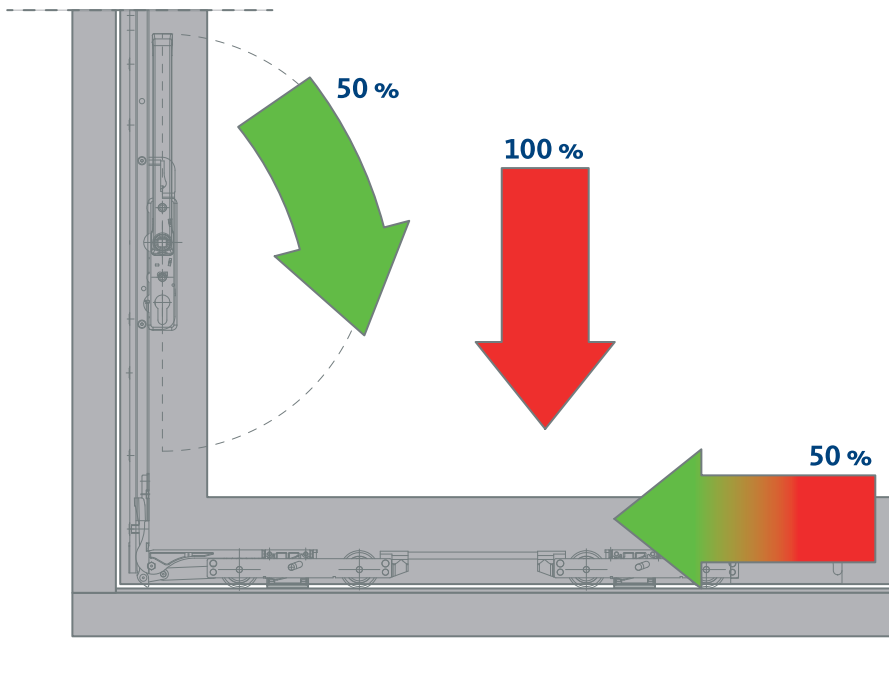
8 Moving large elements with the greatest of ease
Lift&Slide bogies

HS LiftUnit

Important notes and range of application



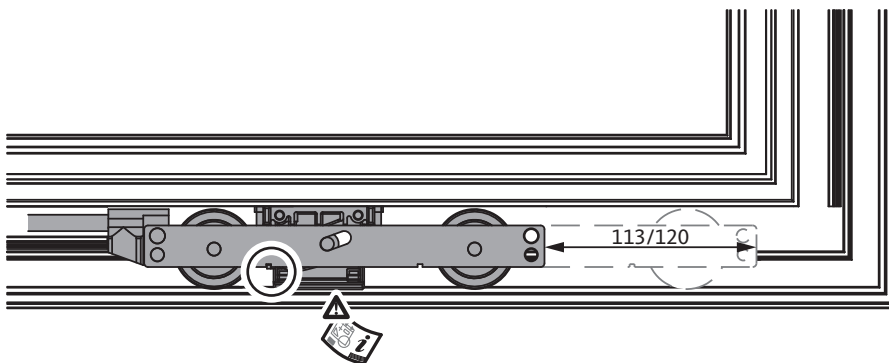
Functional principle



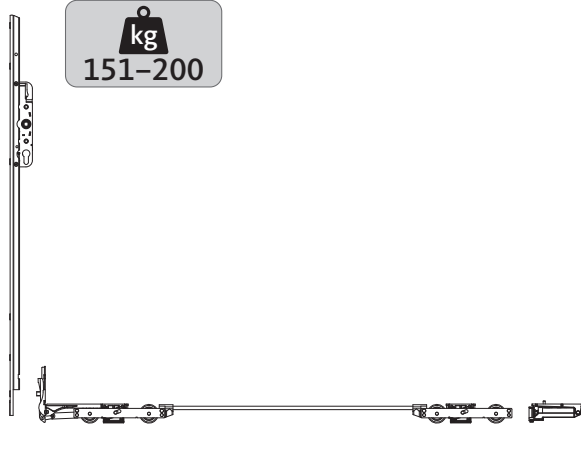
Notes

- The HS LiftUnit can be installed in any Lift&Slide system
 - with bogie GU-934 / GU-937
 - with hardware groove of min. 22 mm
- Suitable for all customary sash arrangement patterns
- Delivery includes installation instructions 0-48605 (GU-934) / 0-48807 (GU-937)

Thanks to the HS LiftUnit, operation of the Lift&Slide door is comfortable and simple, as the operating forces have been noticeably reduced



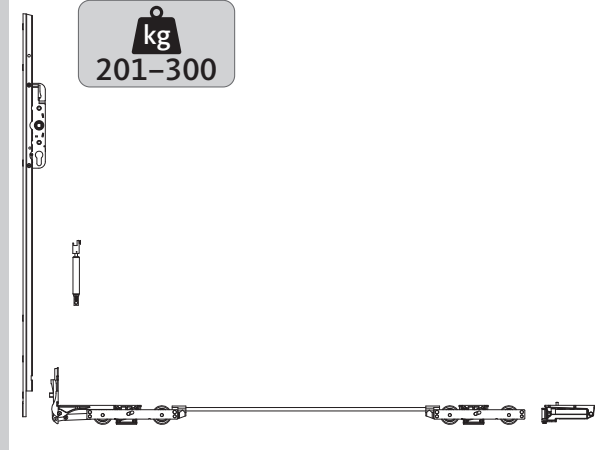
The rear bogie's position is moved towards the sash centre by 113 mm (GU-934) / 120 mm (GU-937)



kg
151-200

Hardware requirements

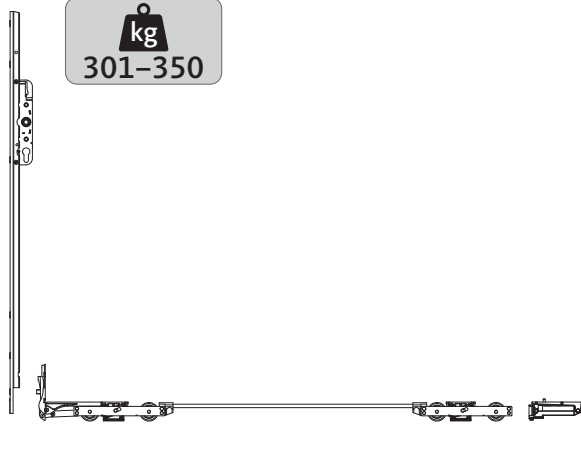
- 1 x Lift&Slide gear
- 1 x L&S bogie GU-934
- 1 x HS LiftUnit Standard



kg
201-300

Hardware requirements

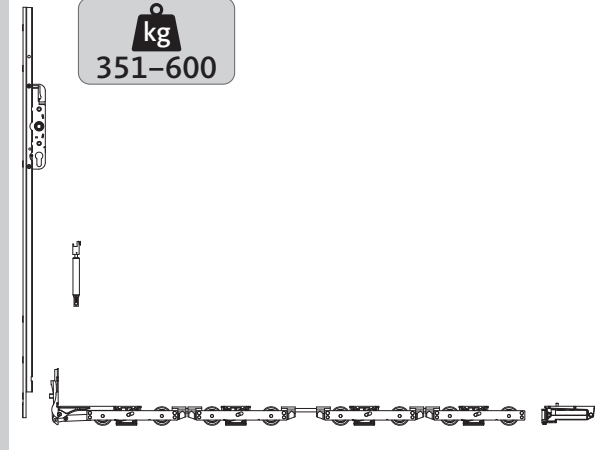
- 1 x Lift&Slide gear
- 1 x L&S handle damper
- 1 x L&S bogie GU-934
- 1 x HS LiftUnit Standard



kg
301-350

Hardware requirements

- 1 x Lift&Slide gear
- 1 x L&S bogie GU-934
- 1 x HS LiftUnit heavy



kg
351-600

Hardware requirements

- 1 x Lift&Slide gear
- 1 x L&S handle damper
- 1 x L&S bogie GU-934
- 1 x L&S tandem bogie GU-934
- 1 x HS LiftUnit heavy

The standard application range for the GU-934 bogie remains the same.
GU-934 bogie up to 350 kg / GU-934 tandem bogie up to 400 kg.

Sash weights exceeding 400 kg are only possible when using the HS LiftUnit.

Therefore please pay attention to the GU installation instructions as well as to the processing guidelines of the system provider.

HS LiftUnit GU-934

Order information



Application range 151–200 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-934 | ferGUard | 1 | K-16488-00-0-1 |
| | faceGUard | 1 | K-16488-00-0-18 |
| HS LiftUnit Standard | EV 1 / light grey | 1 | K-19877-01-0-1 |
| Drilling jig for HS LiftUnit | – | 1 | K-20067-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.

Application range 201–300 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-934 | ferGUard | 1 | K-16488-00-0-1 |
| | faceGUard | 1 | K-16488-00-0-18 |
| L&S handle damper | black | 1 | K-19053-00-0-6 |
| HS LiftUnit Standard | EV 1 / light grey | 1 | K-19877-01-0-1 |
| Drilling jig for HS LiftUnit | – | 1 | K-20067-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.



Application range 301–350 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-934 | ferGUard | 1 | K-16488-00-0-1 |
| | faceGUard | 1 | K-16488-00-0-18 |
| HS LiftUnit heavy | EV 1 / light grey | 1 | K-19877-00-0-1 |
| Drilling jig for HS LiftUnit | - | 1 | K-20067-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.

Application range 351–600 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-934 | ferGUard | 1 | K-16488-00-0-1 |
| | faceGUard | 1 | K-16488-00-0-18 |
| L&S bogie GU-934 Tandem | ferGUard | 1 | K-17804-01-0-1 |
| | faceGUard | 1 | K-17804-01-0-18 |
| L&S handle damper | black | 1 | K-19053-00-0-6 |
| HS LiftUnit heavy | EV 1 / light grey | 1 | K-19877-00-0-1 |
| Drilling jig for HS LiftUnit | - | 1 | K-20067-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.

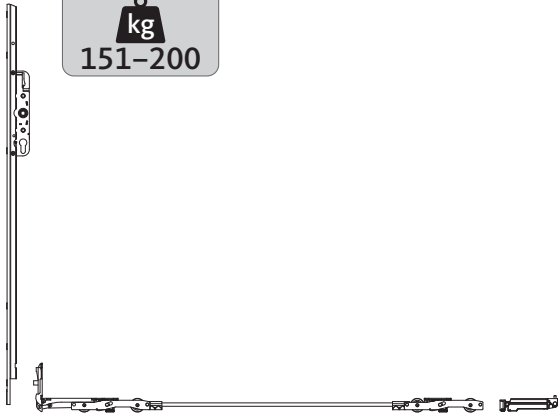
HS LiftUnit GU-937

Important notes and range of application



GU

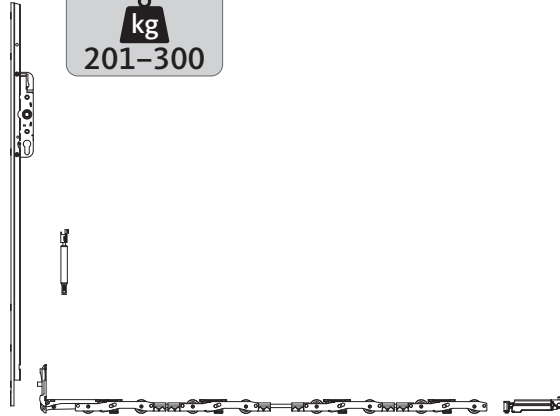
kg
151–200



Hardware requirements

- 1 x Lift&Slide gear
- 1 x L&S bogie GU-937
- 1 x HS LiftUnit Standard

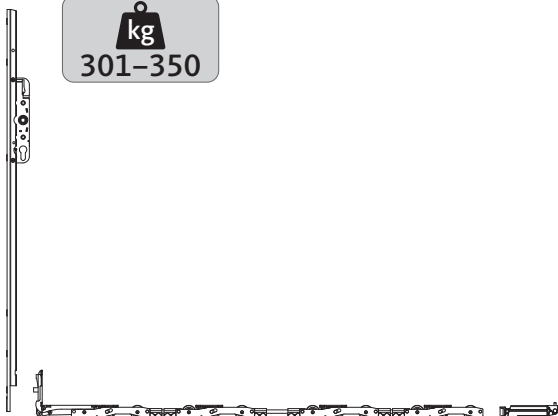
kg
201–300



Hardware requirements

- 1 x Lift&Slide gear
- 1 x L&S handle damper
- 1 x L&S bogie GU-937
- 1 x L&S tandem bogie GU-937
- 1 x HS LiftUnit Standard

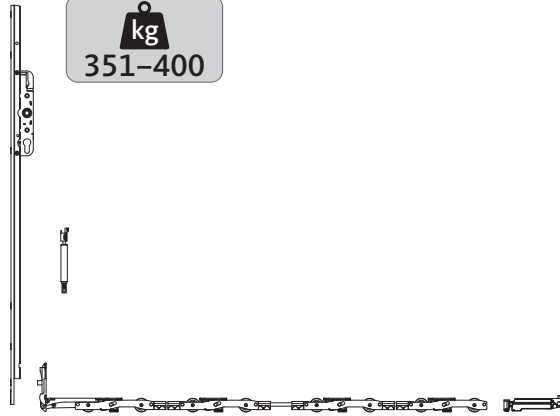
kg
301–350



Hardware requirements

- 1 x Lift&Slide gear
- 1 x L&S bogie GU-937
- 1 x L&S tandem bogie GU-937
- 1 x HS LiftUnit heavy

kg
351–400



Hardware requirements

- 1 x Lift&Slide gear
- 1 x L&S handle damper
- 1 x L&S bogie GU-937
- 1 x L&S tandem bogie GU-937
- 1 x HS LiftUnit heavy

The standard application range for the GU-937 bogie remains the same.
GU-937 bogie up to 200 kg / GU-937 tandem bogie up to 400 kg.

Therefore please pay attention to the GU installation instructions as well as to the processing guidelines of the system provider.



Application range 151–200 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-937 | ferGUard | 1 | K-16493-00-0-1 |
| | faceGUard | 1 | K-16493-00-0-18 |
| HS LiftUnit Standard GU-937 | EV 1 / light grey | 1 | K-20186-01-0-1 |
| Drilling jig for HS LiftUnit | - | 1 | K-20236-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.

Application range 201–300 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-937 | ferGUard | 1 | K-16493-00-0-1 |
| | faceGUard | 1 | K-16493-00-0-18 |
| L&S tandem bogie GU-937 | ferGUard | 1 | K-17759-01-0-1 |
| | faceGUard | 1 | K-17759-01-0-18 |
| L&S handle damper | black | 1 | K-19053-00-0-6 |
| HS LiftUnit Standard GU-937 | EV 1 / light grey | 1 | K-20186-01-0-1 |
| Drilling jig for HS LiftUnit | - | 1 | K-20236-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.

HS LiftUnit GU-937

Order information



Application range 301–350 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-937 | ferGUard | 1 | K-16493-00-0-1 |
| | faceGUard | 1 | K-16493-00-0-18 |
| L&S tandem bogie GU-937 | ferGUard | 1 | K-17759-01-0-1 |
| | faceGUard | 1 | K-17759-01-0-18 |
| HS LiftUnit Heavy GU-937 | EV 1 / light grey | 1 | K-20186-00-0-1 |
| Drilling jig for HS LiftUnit | – | 1 | K-20236-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.

Application range 351–400 kg

| Hardware requirements | | | |
|------------------------------|-------------------|----|-----------------|
| Designation | Finish | PU | Order no. |
| L&S bogie GU-937 | ferGUard | 1 | K-16493-00-0-1 |
| | faceGUard | 1 | K-16493-00-0-18 |
| L&S tandem bogie GU-937 | ferGUard | 1 | K-17759-01-0-1 |
| | faceGUard | 1 | K-17759-01-0-18 |
| L&S handle damper | black | 1 | K-19053-00-0-6 |
| HS LiftUnit Heavy GU-937 | EV 1 / light grey | 1 | K-20186-00-0-1 |
| Drilling jig for HS LiftUnit | – | 1 | K-20236-00-0-0 |

The Lift&Slide gear must be selected for the specific system. For the corresponding order information, see page 9 onwards.



Order notes:

- The HS ePOWER can be installed in any Lift&Slide system
 - with L&S bogie GU-934
 - with sash thicknesses from 78 mm
 - with roller track 5 mm
 - with sash weights up to 400 kg
 - Pattern A with sliding sashes on the inside
- Pre-assembled, plug-in modules allow the assembly to be carried out quickly, easily and safely according to the plug-and-play principle and the door can be commissioned immediately
- Current transmission without cables via tappet contacts from frame to sash
- Control by means of operating element on Lift&Slide sash
- Optional extensions:
 - Locking monitoring set
 - Radio remote control
 - Status request can be triggered via Smartphone or Somfy

Technical documentation

| Documentation | |
|--|------------------------------------|
| Designation | Document no. |
| Installation instructions HS ePOWER (timber) | 0-47612 |
| Commissioning instructions HS ePOWER | 0-47613 |
| Operating instructions HS ePOWER | 0-47614 |
| Brief commissioning instructions HS ePOWER | 0-48062 |
| Instructions for handheld radio transmitter (B-55281-02-0-9) | contained in the scope of delivery |
| Instructions for radio transmitter (B-55281-05-1-9) | contained in the scope of delivery |
| Instructions for radio receiver (B-55280-03-0-6) | contained in the scope of delivery |

Delivery on request

Profile-specific installation is only possible following a technical check and approval by GU and the system provider. Please ask your field consultant for more information.

HS Master motor-driven drive

Important notes and range of application



Important notes

- The HS Master can be installed on every Lift&Slide system shown in Chapter 1.0 (pattern A)
- The standard Lift&Slide gear is replaced with the HS Master Lift&Slide gear
- With HS Master, the backset is always 37.5 mm. The sash profile must be dimensioned accordingly
- Due to the crush guard, the passage opening is reduced by 150 mm. The Lift&Slide door stops 150 mm before the door frame at the fixed-glazed sash; if necessary, the door can be opened fully manually
- The drive case at the rear is 17 mm shorter than the cover profile that is visible from the front and below
- The scope of delivery includes the installation and maintenance manual 0-46554
- The scope of delivery includes the operating manual 0-46555, which must be passed on to the end customer
- The valid installation drawing 0-44355 must be followed
- We shall be glad to advise you in the event of any deviations from the general conditions described here. Please feel free to contact your field consultant

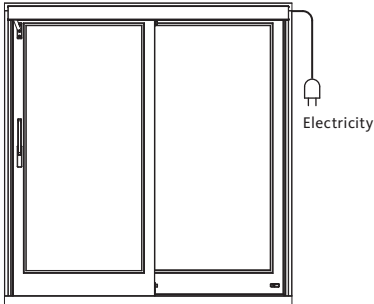
General application ranges

(Deviations possible depending on the profile)

| Pattern A | |
|---------------------------|-----------------|
| Min. length of drive [mm] | 2050 |
| Max. length of drive [mm] | 6700 |
| Sash width [mm] | 950 – 3300 |
| Sash height [mm]* | 1855 – 2765 [1] |
| Max. sash weight [kg] | 400 |

* The sash height depends on which top guide track is used and the height of the roller track. For the dimensions of the various Lift&Slide systems, refer to the corresponding installation drawings.

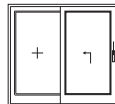
[1] Sash heights from 2765 mm to 3265 mm can be implemented on request with the cover-rail extension set and require approval of the system provider.



Interior view – pattern A

(illustration shows version with handle on left; right laterally reversed)

Ordering specifications

| Drive details | | | | |
|---------------------------------------|-------|---|--|--------------------------------|
| Length of drive case | [mm] | | | |
| Surface of drive case | | <input type="checkbox"/> EV 1 / light grey | <input type="checkbox"/> UC 5 / dark bronze | <input type="checkbox"/> white |
| Element details | | | | |
| Dimension X (min. 90 mm) see page 246 | [mm] | | | |
| Width of reveal | [mm] | | | |
| Sash thickness | [mm] | | | |
| Total frame width | [mm] | | | |
| Sash width | [mm] | | | |
| Sash height | [mm] | | | |
| Sash distance | [mm] | | | |
| Handle position, interior view | | <input type="checkbox"/> on left  | <input type="checkbox"/> on right  | |
| Remote control | | <input type="checkbox"/> yes | <input type="checkbox"/> no | |
| Number of handheld radio transmitters | [pc.] | | | |
| Profile details | | | | |
| Manufacturer | | | | |
| Profile series | | | | |

HS Master motor-driven drive

Important dimension specifications



The following dimension specifications must be observed and complied with without fail

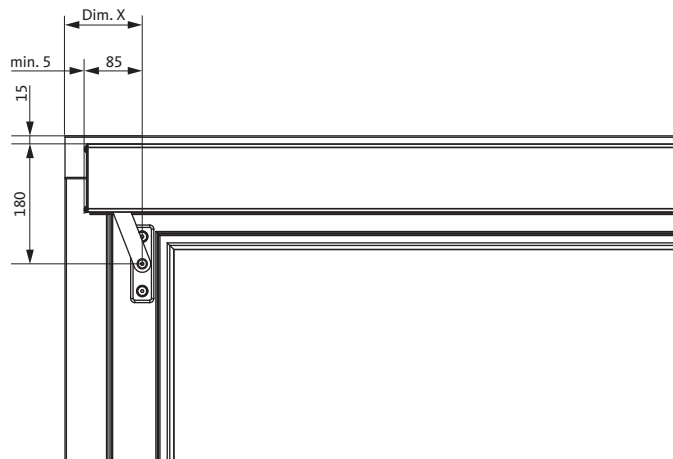
The space requirement for the linkage is 85 mm measured from the pivot of the gear to the outer edge of the drive case.

The minimum distance from the drive case to the edge of the plaster is 5 mm.

These two dimensions produce dimension X, which is necessary for the order.

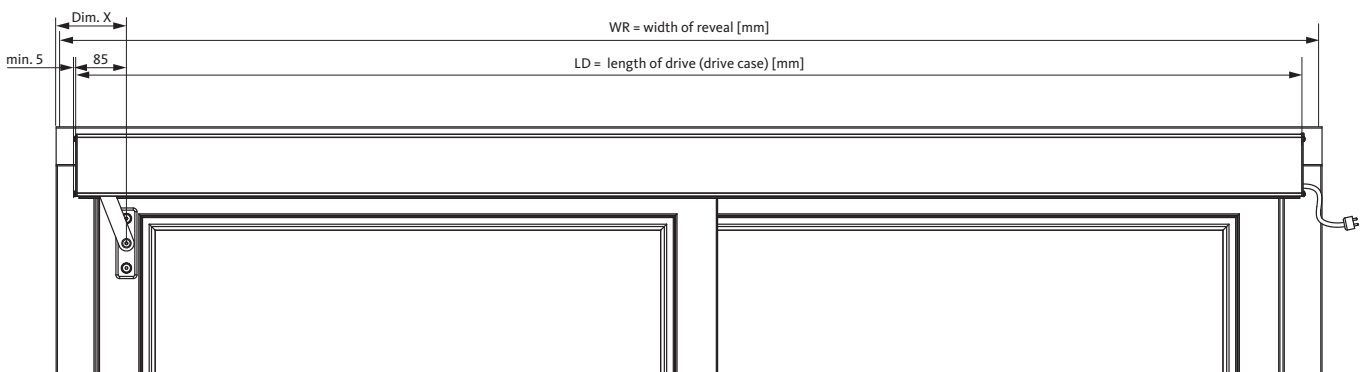
In order to guarantee error-free installation and function, these dimensions must be observed without fail: lower values are not acceptable.

Installation drawing 0-44355



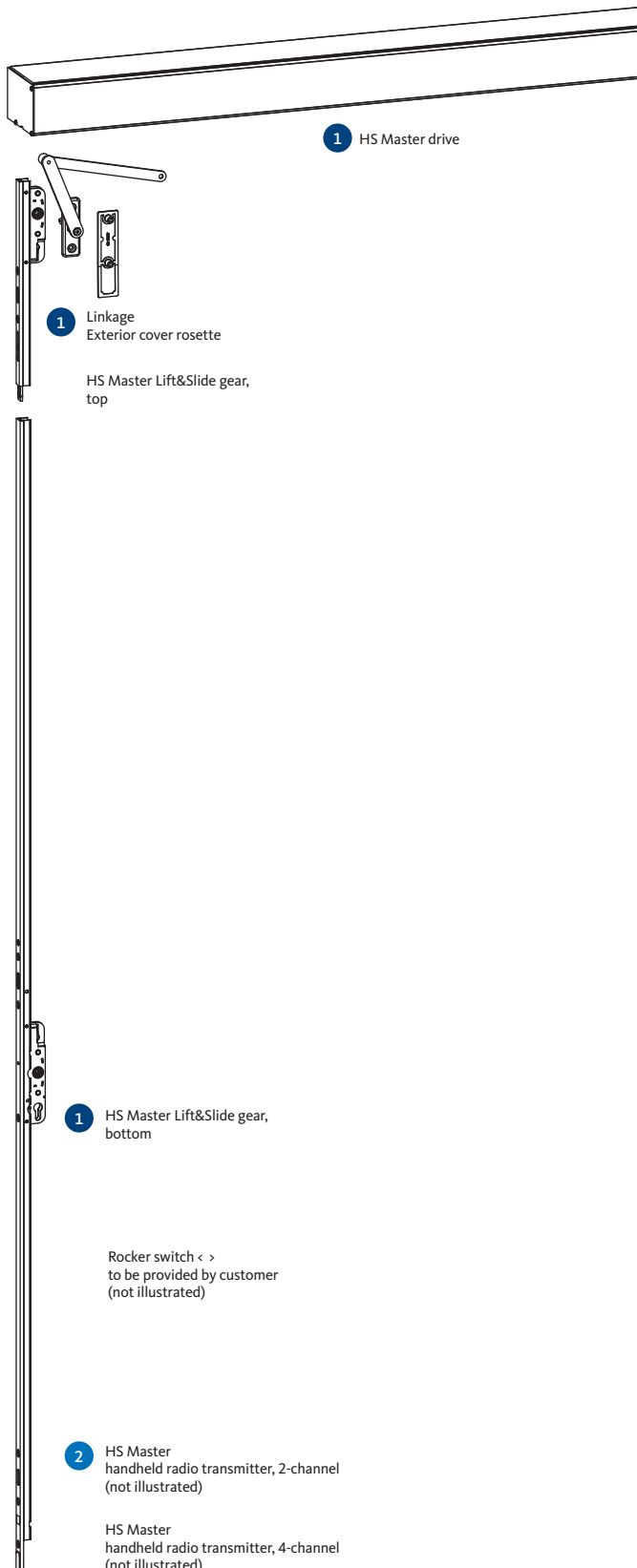
The drive case at the rear is 17 mm shorter than the cover profile that is visible from the front and below. If dimension X increases because the frame has been widened, the difference between the cover casing and the cover profile will also be greater than 17 mm.

A minimum distance of 5 mm must be measured on both sides between the drive case on the top door frame of the Lift&Slide element and the edge of the plaster of the neighbouring masonry. The dimension between the plaster edges at the sides is specified in the ordering specifications as the width of reveal.



HS Master motor-driven drive

Order information, pattern A



| Order overview | |
|----------------|--|
| | Description |
| 1 | Required components |
| 2 | Accessories for new systems and for retrofitting |

HS Master motor-driven drive

Order information, pattern A



Step 1: Order your standard hardware set

- Exception: The standard Lift&Slide gear is replaced with the HS Master Lift&Slide gear

| Standard hardware sets | | |
|------------------------|---|-------------------------------|
| Pattern A | Standard hardware sets | Order information from page |
| 1 | Lift&Slide hardware GU-934 (without Lift&Slide gear) | see particular profile system |
| 1 | Lift&Slide hardware GU-934 Tandem (without Lift&Slide gear) | see particular profile system |

Step 2: In addition to the standard hardware set, order the following components:

1 General hardware requirements for pattern A

| HS Master drive – standard version [1] | | | | | | |
|---|-----------------|--|--------------------|----|----------------|----------------|
| Pattern A | Designation | Description | Finish | PU | Order no. | |
| | | | | | on left | on right |
| 1 | HS Master drive | Standard version for – Operation via turn handle / Push & Go function – Operation via rocker switch (provided by customer) | EV 1 / light grey | 1 | 6-32205-98-L-1 | 6-32205-98-R-1 |
| | | | UC 5 / dark bronze | 1 | 6-32205-98-L-5 | 6-32205-98-R-5 |
| | | | white | 1 | 6-32205-98-L-7 | 6-32205-98-R-7 |
| Alternative: HS Master drive – radio-controlled version [2] | | | | | | |
| 1 | HS Master drive | as standard version, and also prepared for operation via handheld radio transmitter | EV 1 / light grey | 1 | 6-32654-98-L-1 | 6-32654-98-R-1 |
| | | | UC 5 / dark bronze | 1 | 6-32654-98-L-5 | 6-32654-98-R-5 |
| | | | white | 1 | 6-32654-98-L-7 | 6-32654-98-R-7 |

[1] Manufacture according to ordering specifications – see page 245.
[2] The radio receiver is installed. 1 handheld radio transmitter is included in the scope of delivery; other handheld radio transmitters may be ordered separately as accessories.

| HS Master linkage | | | | |
|-------------------|-------------------|--------------------|----|----------------|
| Pattern A | Designation | Finish | PU | Order no. |
| 1 | HS Master linkage | EV 1 / light grey | 1 | K-16750-00-0-1 |
| | | UC 5 / dark bronze | 1 | K-16750-00-0-5 |
| | | white | 1 | K-16750-00-0-7 |

Contains: 1 x linkage, 1 x outside cover rosette, fixing material

| HS Master Lift&Slide gear [1] | | | | |
|-------------------------------|---------------------------|-------------------|----|----------------|
| Pattern A | Designation | Finish | PU | Order no. |
| 1 | HS Master Lift&Slide gear | EV 1 / light grey | 1 | K-16748-00-0-1 |

Contains: 2 x Lift&Slide gear, 1 x connecting rod, 1 x drilling template
[1] Sash heights from 2765 mm to 3265 mm can be implemented on request with the cover-rail extension set.

| HS Master cover-rail extension | | | | |
|--------------------------------|--------------------------------|-------------------|----|----------------|
| Pattern A | Designation | Finish | PU | Order no. |
| 1 | HS Master cover-rail extension | EV 1 / light grey | 1 | K-18896-00-0-1 |

Contains: 1 x cover rail, 1 x connecting rod



2 Accessories for new systems and for retrofitting

HS Master handheld radio transmitter

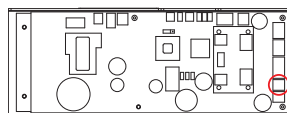
| Pattern A | Designation | Description | Finish | PU | Order no. |
|---|--------------------------------------|--|-----------------|----|----------------|
| 1 | HS Master handheld radio transmitter | 2-channel with GU-specific coding, for HS Master drives in radio-controlled version, spare button battery CR 2016, 2 x | grey-blue | 1 | 6-32264-01-0-0 |
| | | | grey-anthracite | 1 | 6-32264-03-0-0 |
| Alternative: HS Master handheld radio transmitter, 4-channel | | | | | |
| 1 | HS Master handheld radio transmitter | 4-channel | grey-yellow | 1 | 6-33788-00-0-0 |

HS Master radio receiver card

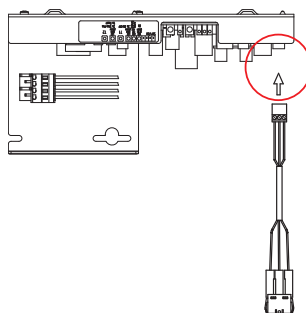
| Pattern A | Designation | Finish | PU | Order no. |
|-----------|-------------------------------|--------|----|----------------|
| 1 | HS Master radio receiver card | - | 1 | 6-32627-00-0-0 |

HS Master commissioning set / operating sticker

| Pattern A | Designation | Finish | PU | Order no. |
|-----------|-----------------------------|--------|----|----------------|
| 1 | HS Master commissioning set | - | 1 | 6-36125-00-0-0 |
| 1 | Operating sticker | - | 1 | 9-47818-01-0-0 |



HS Master commissioning set
Plug-in position on inside: slots 4 5 6

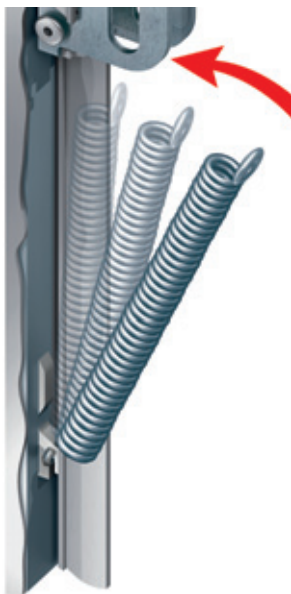


Tension spring

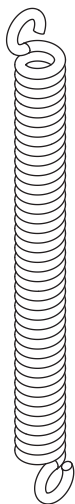
for Lift&Slide gears



GU



Installation drawing 0-46862



Tension spring for Lift&Slide gears

To reduce the operating force of sashes weighing over 200 kg.

Thanks to the use of tension springs in Lift&Slide gears, the operational force at the turn handle is significantly reduced for the user, greatly increasing operating convenience.

This makes the Lift&Slide door easy to operate, especially with high sash weights up to 400 kg.

Versions/order numbers

| Designation | SW [kg] | PU | Order no. |
|----------------|----------|----|----------------|
| Tension spring | from 200 | 1 | 9-40235-05-0-0 |



L&S handle damper for Lift&Slide gears

For even safer operation of sashes weighing more than 100 kg.

The L&S handle damper in Lift&Slide gears ensures controlled lowering of the sliding sash and prevents the turn handle from recoiling. The L&S handle damper can also be retrofitted quickly and easily in every standard gear.

Versions/order numbers

| Designation | SW [kg] | PU | Order no. |
|-------------------|----------|----|----------------|
| L&S handle damper | from 100 | 1 | K-19053-00-0-6 |

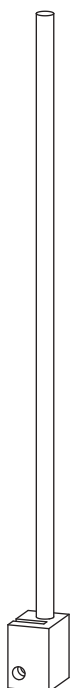
Installation drawing 0-46862

Drilling jig for L&S handle damper

Versions/order numbers

| Designation | PU | Order no. |
|--|----|----------------|
| Drilling jig for L&S handle damper [1] | 1 | 6-37928-01-0-1 |

[1] Required for retrofitting on all Lift&Slide gears installed before July 2014.



Installation drawing 0-46862

Barrier freedom with regard to operation of the handle

Extended handle – RONDO series – interior turn handle with PC hole

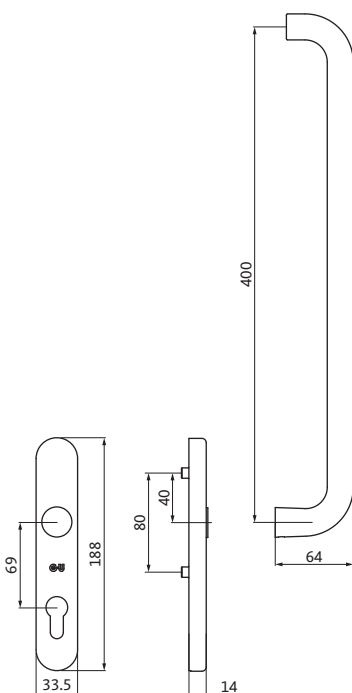


Product information

- High-quality stainless steel handle with PC hole
- Handle length 400 mm
- Handle height 78 mm
- With 10 mm square size and 80 mm distance between screw centres
- Square spindle adjustable
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- For sash thicknesses up to 110 mm

Suitable for barrier-free construction in accordance with DIN 18040

The operating force for raising the sliding sash can be reduced by up to 50% due to the extended turn handle.



You can find ordering information on the individual handle variants in Chapter 5.0 "Turn handles and accessories" on pages 298 – 299.

Barrier freedom with regard to operation of the handle

Extended handle – RONDO series – interior turn handle without PC hole

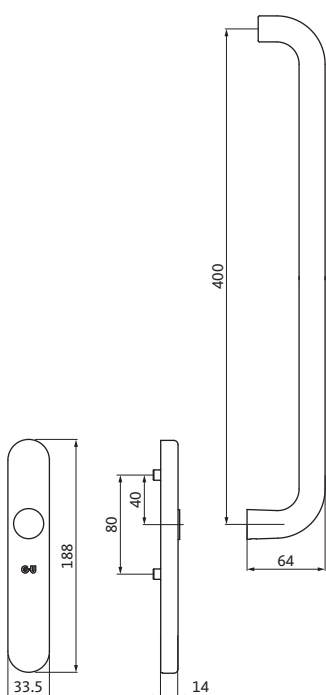


Product information

- High-quality stainless steel turn handle without PC hole
- Handle length 400 mm
- Handle height 78 mm
- With 10 mm square size and 80 mm distance between screw centres
- Square spindle adjustable
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- For sash thicknesses up to 110 mm

Suitable for barrier-free construction in accordance with DIN 18040

The operating force for raising the sliding sash can be reduced by up to 50% due to the extended turn handle.



You can find ordering information on the individual handle variants in Chapter 5.0 "Turn handles and accessories" on pages 300 – 301.

Barrier freedom with regard to operation of the handle

Lift&Slide gear with profile cylinder – handle height 840 mm and handle height variable



Note

The specifications for the range of applications (sash heights) and the handle height are general and may deviate minimally depending on the roller track height and the used profile system. The system-related dimensions can be found in the profile system drawings.

Special size -98-

The size -98- specified in the table is a special size that is fabricated with the handle height at the customer's request.

The application range depends on the basic size of the drive-gear that is used for the fabrication (sizes -19- to -44-).

Please request prices and delivery times in individual cases.

Installation drawing 0-44186

Lift&Slide gear – 37.5 mm backset – lockable, with profile cylinder

| Backset [mm] | SH [mm] | Handle height [mm] | Quantity of locks | Cover rail finish | | Lock case finish | | PU | Order no. |
|--------------|-------------|--------------------|-------------------|-------------------|---------------|------------------|--|----|----------------|
| | | | | EV 1 anodised | UC 5 anodised | ferGUard | | | |
| 37.5 | 1840 – 2340 | 840 | 2 | ■ | | ■ | | 1 | 6-30021-20-0-1 |
| | | | | | ■ | ■ | | 1 | 6-30021-20-0-5 |
| | up to 2740 | min. 400 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30021-98-0-1 |

Lift&Slide gear – 27.5 mm backset – lockable, with profile cylinder

| Backset [mm] | SH [mm] | Handle height [mm] | Quantity of locks | Cover rail finish | | Lock case finish | | PU | Order no. |
|--------------|-------------|--------------------|-------------------|-------------------|---------------|------------------|--|----|----------------|
| | | | | EV 1 anodised | UC 5 anodised | ferGUard | | | |
| 27.5 | 1840 – 2340 | 840 | 2 | ■ | | ■ | | 1 | 6-30019-20-0-1 |
| | up to 2740 | min. 400 | 2 + 1 optional | ■ | | ■ | | 1 | 6-30019-98-0-1 |



Tested security for maximum burglar inhibition

BURGLARY

PROTECTED



Protection against burglary is one of the greatest challenges for Lift&Slide systems. After all, insufficiently secured windows and doors make it easy for unwelcome visitors to intrude into your home. It is therefore important also to equip Lift&Slide elements with security-relevant components.

Thanks to the burglar-inhibiting design of many of its hardware components, Gretsch-Unitas gives its customers greater peace of mind, because they know they are effectively protected against manipulation attempts.

All timber and PVC systems are tested at least to DIN EN 1627-1630 RC 2, and also up to RC 3 in timber. With Gretsch-Unitas, every element can essentially be designed to satisfy the stringent requirements of resistance class RC 3. We provide assistance with planning and design.

1 Open or locked, recognisable at a glance
Electronic locking monitoring with magnetic switch, VdS-tested

2 An anti-jemmy device with a secure grip
L&S meeting-stile security profile

3 A firm handle on security
SK3-tested DIRIGENT turn-handle

4 Anti-jemmy protection of sash
Anti-jemmy device top horizontal

Exclusively
available only from
Gretsch-Unitas

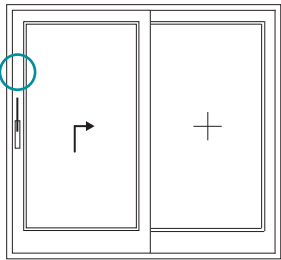


Electronic security

L&S locking monitoring set

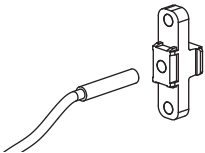


Pattern A



Installation instructions 0-44449

VdS certificate no. G 105012



Locking monitoring set



Eccentric plug

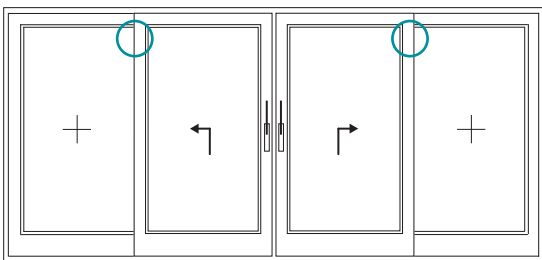
L&S locking monitoring set

Magnetic locking monitoring
between door frame and sliding sash

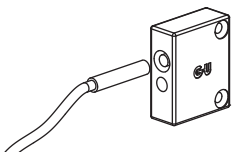
Versions/order numbers

| Designation | Cable length [m] | PU | Order no. |
|--|------------------|----|----------------|
| L&S locking monitoring set | 4.0 | 1 | K-16752-00-0-0 |
| | 10.0 | 1 | K-16752-10-0-0 |
| Contains: 1 x magnetic cam, 1 x magnetic switch, accessories | | | |
| Designation | Finish | PU | Order no. |
| Eccentric plug | brown | 1 | 6-33079-00-0-5 |
| | white | 1 | 6-33079-00-0-7 |

Pattern C



Installation instructions 0-44768



L&S locking monitoring set

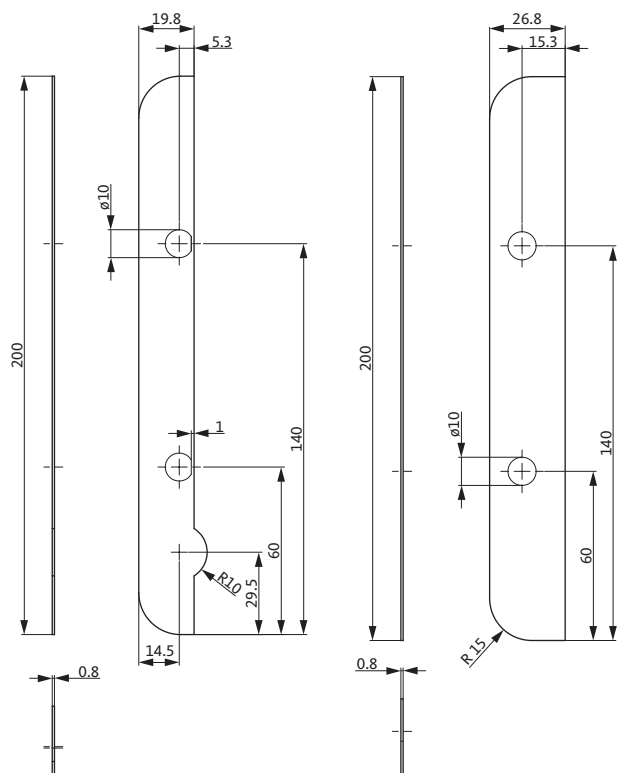
Magnetic locking monitoring
between sliding sashes and fixed-glazed sashes

Versions/order numbers

| Designation | Cable length [m] | PU | Order no. |
|---|------------------|----|----------------|
| L&S locking monitoring set | 4.0 | 1 | K-17322-00-0-7 |
| | 10.0 | 1 | K-17322-10-0-7 |
| Contains: 2 x magnetic switch, 2 x magnet holder, accessories | | | |



RC2



9-41309-01-0-0

9-41309-02-0-0

Anti-drill plate for L&S geared turn handles

Accessories for RC 2 versions

Versions/order numbers

| Designation | Lift&Slide gear Backset [mm] | PU | Order no. |
|---------------------------|------------------------------|----|----------------|
| Anti-drill plate for gear | 27.5 | 1 | 9-41309-01-0-0 |
| | 37.5 | 1 | 9-41309-02-0-0 |

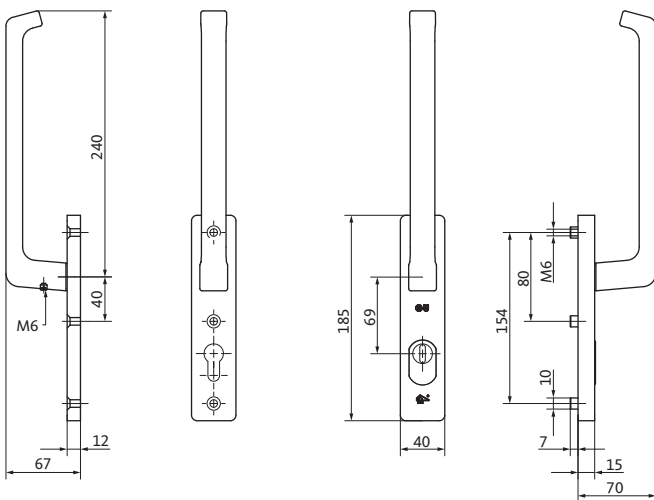
Mechanical security

L&S interior/exterior turn handle set, with PC hole – DIRIGENT – PZ ZA – SK3



Product information

- High-quality aluminium turn handle, interior and exterior, with PC hole
- Exterior handle with cylinder cover
- The security cylinder cover is suitable for a cylinder projection of 9–12 mm
- With 10 mm square size and 80/74 mm distance between screw centres
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Tested according to EN 1906 burglar protection category in the protection classes 2 and 3
- With SKG*** certificate
- Handle length 240 mm, handle height 74 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221





| Versions/order numbers | | | | | | | |
|--|--------|-----------|----------------|----------|-----------------|----|-----------------|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT L&S turn handle exterior PZ ZA, SK3 | 180° | aluminium | with lugs | yes | EV 1 | 1 | H-01230-00-0-1 |
| | | | | | white, RAL 9016 | 1 | H-01230-00-0-7 |
| | | | | | cream white | 1 | H-01230-00-0-7V |
| DIRIGENT L&S turn handle interior | 180° | aluminium | without lugs | yes | EV 1 | 1 | H-01231-00-0-1 |
| | | | | | white, RAL 9016 | 1 | H-01231-00-0-7 |
| | | | | | cream white | 1 | H-01231-00-0-7V |

Note about square spindle: With square spindle for sash thicknesses up to 90 mm. If the sash thicknesses vary the square spindle must be ordered separately.

Note about fixing screws: For other sash thicknesses, the fixing screws must be ordered separately.

Square spindle

| Versions/order numbers | | | |
|------------------------|---------|-------------|--------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 145 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | | |
| | 90 | | |
| | 92 | 150 | 9-24377-15-0-1 |
| | 110 | 170 | 9-24377-18-0-1 |

Fixing screws

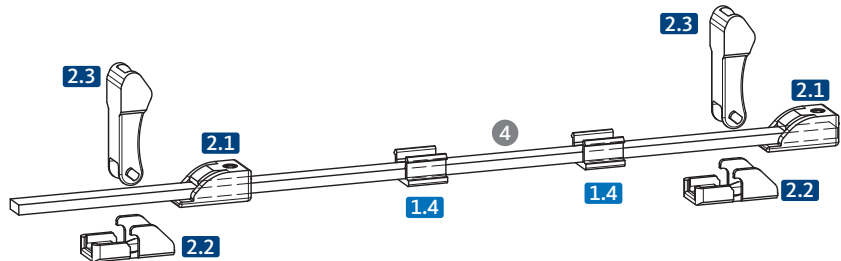
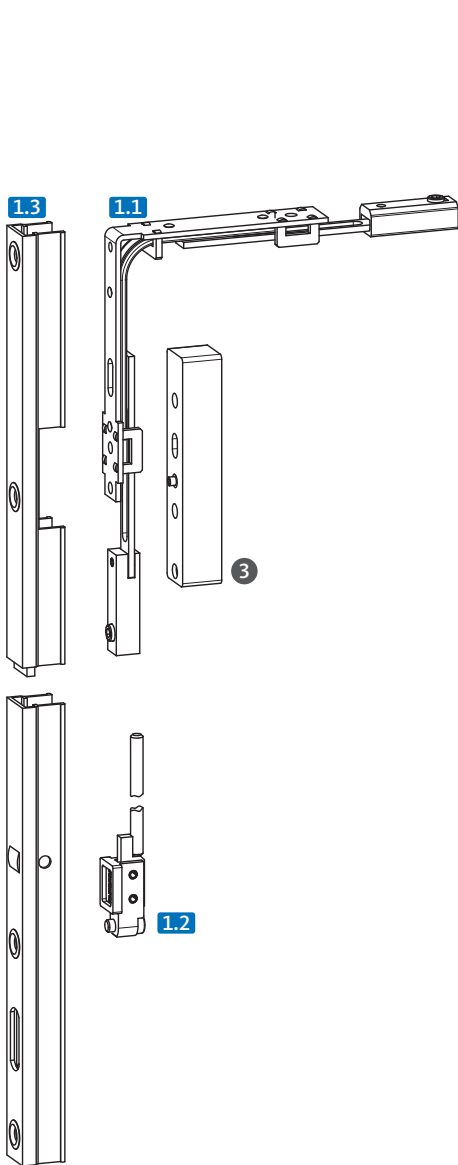
| Versions/order numbers | | |
|------------------------------------|-----------|----------------|
| Designation | ST [mm] | Order no. |
| Set of fixing screws M6 (DIN 7991) | 54 – 60 | H-01232-01-0-1 |
| | 59 – 65 | H-01232-02-0-1 |
| | 64 – 70 | H-01232-03-0-1 |
| | 69 – 75 | H-01232-04-0-1 |
| | 74 – 80 | H-01232-05-0-1 |
| | 84 – 90 | H-01232-06-0-1 |
| | 109 – 115 | H-01232-07-0-1 |

Mechanical security

Anti-jemmy device – hardware requirements



RC2



Anti-jemmy device (standard)*

Hardware requirements

1 L&S corner-drive with anti-jemmy device

| Designation | Finish | PU | Order no. |
|---|---------------------|----|----------------|
| L&S corner-drive with anti-jemmy device | EV 1 / light grey | 1 | K-16570-00-0-1 |
| | UC 5 / dark bronze | 1 | K-16570-00-0-5 |
| Contents | | | |
| 1.1 | Corner-drive | | |
| 1.2 | Extension, complete | | |
| 1.3 | Cover | | |
| 1.4 | Guide | | |
| Stay arm slide block | | | |
| Lever complete | | | |
| Countersunk screw M5 x 16 mm | | | |

2 L&S anti-jemmy device

| Designation | Finish | PU | Order no. |
|-----------------------|-------------------|----|----------------|
| L&S anti-jemmy device | EV 1 / light grey | 1 | K-16569-00-0-1 |
| Contents | | | |
| 2.1 | Wedge | | |
| 2.2 | Support | | |
| 2.3 | Lever | | |

3 Vertical packer

| Designation | PU | Order no. |
|-----------------|----|-----------|
| Vertical packer | 1 | [1] |

[1] The profile-specific version can be found on the next page and on the corresponding order pages in Section 1.0 from page 9.

4 P 959 connecting rod for L&S anti-jemmy device

| Designation | SW [mm] | Length [mm] | Finish | PU | Order no. |
|--|--------------|-------------|----------|----|----------------|
| P 959 connecting rod for L&S anti-jemmy device | 600 – 1220 | 1000 | ferGUard | 1 | 9-28355-10-0-1 |
| | 1221 – 1720 | 1500 | ferGUard | 1 | 9-28355-15-0-1 |
| | 1721 – 2020 | 1800 | ferGUard | 1 | 9-28355-18-0-1 |
| | 2021 – 3000 | 2600 | ferGUard | 1 | 9-28355-26-0-1 |
| | Stock length | 4800 | ferGUard | 1 | 9-28355-48-0-1 |

* Profile-specific versions can be found on the next page and on the corresponding order pages in Section 1.0 from page 9.



Versions/order numbers

| Profile system | L&S bogie | Anti-jemmy device components | | | | Page |
|------------------------------|-----------|------------------------------|---|-----------------|--|------|
| | | L&S anti-jemmy device | L&S corner-drive with anti-jemmy device | Packer vertical | P 959 connecting rod for L&S anti-jemmy device | |
| Akootherm AT 750 HS | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-08-0-1 | 9-28355-**-0-1 | 13 |
| Alcoa Europe | GU-934 | – | – | – | – | – |
| Aliplast Ultraglide | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-06-0-1 | 9-28355-**-0-1 | 27 |
| Alsistem | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-06-0-1 | 9-28355-**-0-1 | 35 |
| AluK SC140 | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | – | 9-28355-**-0-1 | 41 |
| Alumil M300 | GU-934 | – | – | – | – | – |
| Aluprof MB-77HS | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-04-0-1 | 9-28355-**-0-1 | 55 |
| Aluprof MB-77HS | GU-937 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-06-0-1 | 9-28355-**-0-1 | 61 |
| Etem E3000 | GU-934 | – | – | – | – | – |
| Etem E50 | GU-937 | – | – | – | – | – |
| Etem E52 | GU-937 | – | – | – | – | – |
| Etem E70 | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-06-0-1 | 9-28355-**-0-1 | 87 |
| Etem E70 | GU-937 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-06-0-1 | 9-28355-**-0-1 | 93 |
| Exalco Albio 230 | GU-934 | – | – | – | – | – |
| Feal T 120 | GU-934 | – | – | – | – | – |
| Gastaldello Sistemi | GU-934 | – | – | – | – | – |
| Gutmann SC 180 | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-25740-07-0-1 | 9-28355-**-0-1 | 115 |
| Gutmann SC 180 | GU-937 | K-16569-00-0-1 | K-16570-00-0-* | 9-25740-07-0-1 | 9-28355-**-0-1 | 121 |
| Metra NC 150 STH Rodos (45°) | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-11-0-1 | 9-28355-**-0-1 | 127 |
| Metra NC 150 STH Rodos (45°) | GU-937 | K-16569-00-0-1 | K-16570-00-0-* | 9-25740-08-0-0 | 9-28355-**-0-1 | 133 |
| Metra NC 150 STH Rodos (90°) | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-11-0-1 | 9-28355-**-0-1 | 141 |
| Metra NC 150 STH Rodos (90°) | GU-937 | K-16569-00-0-1 | K-16570-00-0-* | 9-25740-08-0-0 | 9-28355-**-0-1 | 147 |
| Ponzio SL1600 | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-06-0-1 | 9-28355-**-0-1 | 155 |
| Profilati | GU-934 | – | – | – | – | – |
| Reynaers CP 130-LS | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-11-0-1 | 9-28355-**-0-1 | 169 |
| Reynaers CP 155 | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-11-0-1 | 9-28355-**-0-1 | 177 |
| Reynaers TSL 110 | GU-934 | – | – | – | – | – |
| Sapa Ekonol 125 | GU-934 | – | – | – | – | – |
| TS Aluminium | GU-937 | – | – | – | – | – |
| Wicona Wicslide 160 | GU-934 | K-16569-00-0-1 | K-16570-00-0-* | 9-47295-08-0-1 | 9-28355-**-0-1 | 199 |

* Finish 1 = EV 1 / light grey or 5 = UC 5 / dark bronze

** Size 10, 15, 18, 26 or 48 (depending on the sash width)

Mechanical security

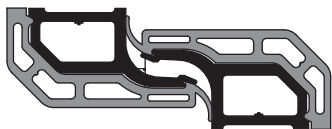
Meeting stile security profiles



Meeting-stile security profile L&S 10 RC



Meeting-stile security profile L&S 16/22 RC



Meeting-stile security profile L&S 25/29 RC

Installation drawing 0-44188

L&S meeting stile security profile set

Versions/order numbers

| Designation | SD [mm] | Length [mm] | Finish | PU | Order no. |
|---|---------|-------------|--------|----|----------------|
| Meeting-stile security profile set L&S 10 RC | 10 | 2400 | grey | 1 | K-15797-24-0-1 |
| | | | black | 1 | K-15797-24-0-6 |
| | | | white | 1 | K-15797-24-0-7 |
| | 10 | 2900 | grey | 1 | K-15797-29-0-1 |
| | | | black | 1 | K-15797-29-0-6 |
| | | | white | 1 | K-15797-29-0-7 |
| Meeting-stile security profile set L&S 16/22 RC | 16 – 22 | 2400 | grey | 1 | K-15798-24-0-1 |
| | | | black | 1 | K-15798-24-0-6 |
| | | | white | 1 | K-15798-24-0-7 |
| | 16 – 22 | 2900 | grey | 1 | K-15798-29-0-1 |
| | | | black | 1 | K-15798-29-0-6 |
| | | | white | 1 | K-15798-29-0-7 |
| Meeting-stile security profile set L&S 25/29 RC | 25 – 29 | 2400 | grey | 1 | K-15799-24-0-1 |
| | | | black | 1 | K-15799-24-0-6 |
| | | | white | 1 | K-15799-24-0-7 |
| | 25 – 29 | 2900 | grey | 1 | K-15799-29-0-1 |
| | | | black | 1 | K-15799-29-0-6 |
| | | | white | 1 | K-15799-29-0-7 |



Extension L&S 10 RC



Extension L&S 25/29 RC

L&S extension set

Versions/order numbers

| Designation | SD [mm] | Length [mm] | Finish | PU | Order no. |
|----------------------------|---------|-------------|--------|----|----------------|
| Extension set L&S 10 RC | 10 | 500 | grey | 1 | K-16855-00-0-1 |
| | | | white | 1 | K-16857-00-0-1 |
| Extension set L&S 25/29 RC | 25 – 29 | 500 | black | 1 | K-16857-00-0-6 |
| | | | white | 1 | K-16857-00-0-7 |
| | | | white | 1 | K-16857-00-0-7 |

Accessories for meeting stile security profile

Versions/order numbers

| Designation | Dim. [mm] | Requirements per meeting stile security profile set | PU | Order no. |
|-------------|-----------|---|----|----------------|
| Spax screw | 5 x 50 | 24 | 1 | H-00112-50-0-1 |
| Spax screw | 5 x 60 | 24 | 1 | H-00112-60-0-1 |
| Spax screw | 3.5 x 35 | 1 | 1 | H-00109-35-0-1 |



Moving safely and easily

OPERATION

SAFED



In modern construction, the requirements in relation to functionality and operating reliability of Lift&Slide elements are becoming increasingly complex. The experience and technical expertise of Gretsch-Unitas gives it the leading edge which is proving successful in moving large and heavy Lift&Slide elements comfortably and safely.

A trend which is becoming more and more prevalent, not only in residential buildings but also in commercial or public buildings, is the use of large-format Lift&Slide systems to maximise opening widths that are also subject to intensive use, often by different persons. As Lift&Slide sashes become increasingly heavier, the challenge is to ensure they can still be moved safely and easily, without causing injury to persons, or damage to the element or building structure.

1 Gentle braking operation
HS SilentClose

2 Reliable stopping before end position
HS StopUnit

3 Outstanding operating reliability
HS SpeedLimiter

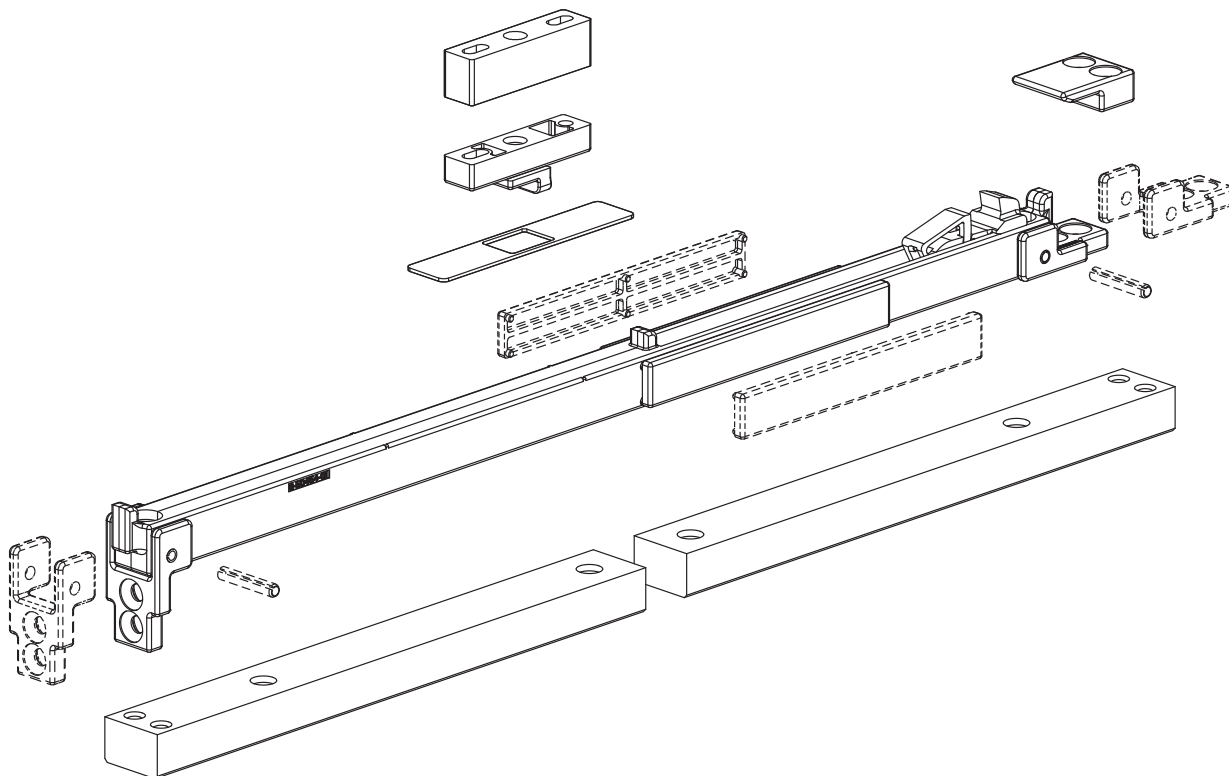
Exclusively
available only from
Gretsch-Unitas



- 4 For rebound-free lowering of the sash
Handle damper
- 5 Damped installation without damages
Buffer S

HS SilentClose and HS StopUnit damping units

Order information



HS SilentClose / HS StopUnit for aluminium profiles (neutral representation; profile-specific deviations are possible)

Installation instructions 0-48095 / installation drawings depending on profile system

Note:

The HS SilentClose and HS StopUnit damping units are not designed as safety components to protect people. They are designed to provide convenience and to protect the element.

The HS SilentClose and HS StopUnit damping units cannot always be used in the open position direction due to different profile systems.

Due to the profile-specific sealing systems, the closing force of the HS SilentClose may not be sufficient to move the L&S sash completely into the closed position.

Using the HS StopUnit does not increase the operating force. Depending on the damping unit design, the HS SilentClose slightly increases the operating force because the damping unit must be pretensioned in order to move the L&S sash to the end position.



HS SilentClose damping unit

For even safer operation of sashes weighing up to 200 kg and up to 400 kg

HS SilentClose damping unit gently brakes the L&S sash as it travels to the open and closed position and moves it to the corresponding end position. The installation is concealed.

Up to two damping units can be used per sliding sash (open and closed position). The HS StopUnit damping unit and the HS SilentClose damping unit can be combined. Opening and closing can be controlled separately via both products.

For the profile-specific application options, please refer to the installation drawing for the profile system.

Versions/order numbers

| Designation | SW [kg] | PU | Order no. |
|-----------------------------|-----------|----|----------------|
| HS SilentClose damping unit | up to 200 | 1 | K-19463-01-0-6 |
| | up to 400 | 1 | K-19463-00-0-6 |

HS StopUnit damping unit

For even safer operation of sashes weighing up to 200 kg and up to 400 kg

The HS StopUnit damping unit gently brakes the L&S sash as it travels to the open and closed position. The L&S sash must be consciously moved to the corresponding end position. The installation is concealed.

Up to two damping units can be used per sliding sash (open and closed position). The HS StopUnit damping unit and the HS SilentClose damping unit can be combined. Opening and closing can be controlled separately via both products.

For the profile-specific application options, please refer to the installation drawing for the profile system.

Versions/order numbers

| Designation | SW [kg] | PU | Order no. |
|--------------------------|-----------|----|----------------|
| HS StopUnit damping unit | up to 200 | 1 | K-19955-01-0-6 |
| | up to 400 | 1 | K-19955-00-0-6 |

Accessories for HS SilentClose and HS StopUnit

- Depending on profile system
- Depending on the damping unit, an accessories PU must be ordered

Versions/Order numbers

| Profile system | Finish | PU | Order no. |
|--|--------|----|----------------|
| Akotherm AT 750 HS Installation drawing 0-45754 | black | 1 | K-19887-00-0-6 |
| Gutmann SC 180 Installation drawing 0-46014 | black | 1 | K-19781-00-0-6 |
| Ponzio SL1600 Installation drawing 0-46501 | black | 1 | K-19834-00-0-6 |
| Reynaers CP 155 Installation drawing 0-45582 | black | 1 | K-19889-00-0-6 |

HS SpeedLimiter

Benefits and application ranges



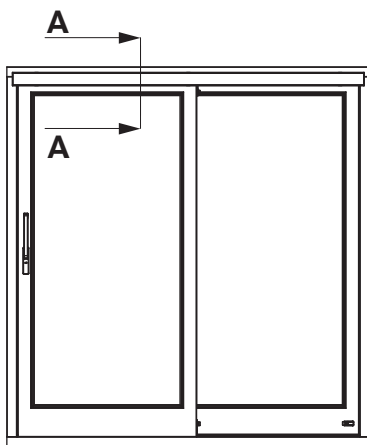
Benefits

- The HS SpeedLimiter prevents the sliding sash from accelerating to avoid
 - personal injury
 - damage to the structure
- Unrestricted ease of operation
- Simple installation; retrofittable
- Ideally suited for installation in public buildings such as, e.g. schools
- Suitable for elements of timber, PVC, and aluminium
- Sticker with operating instructions 9-50594-00-0-1 to be ordered separately

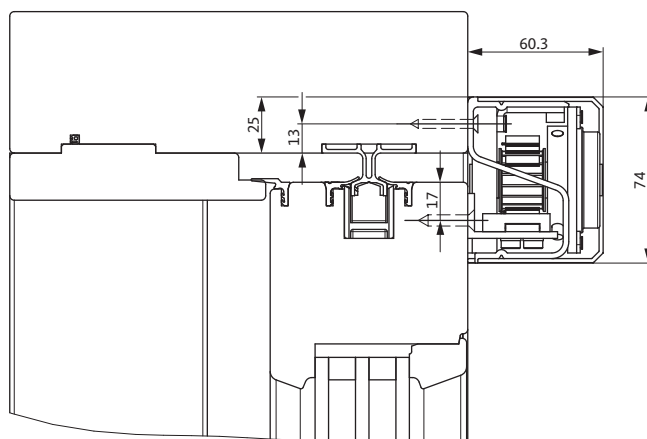
Application ranges

| HS SpeedLimiter | |
|--|-------------------|
| Sliding speed [m/s] | 0.2 [1] |
| Sash width [mm] | max. 3300 [2] [3] |
| Sash height [mm] | max. 2765 [2] [3] |
| Sash weight [kg] | max. 400 [2] |
| Sash configurations | Pattern A and C |
| [1] The HS SpeedLimiter complies with the maximum sliding speed of 0.2 m/s stipulated in the German accident prevention regulations and in the VHBH directive. [2] Coordinated with Lift&Slide hardware GU-934 [3] Coordinated with Lift&Slide hardware GU-937 | |

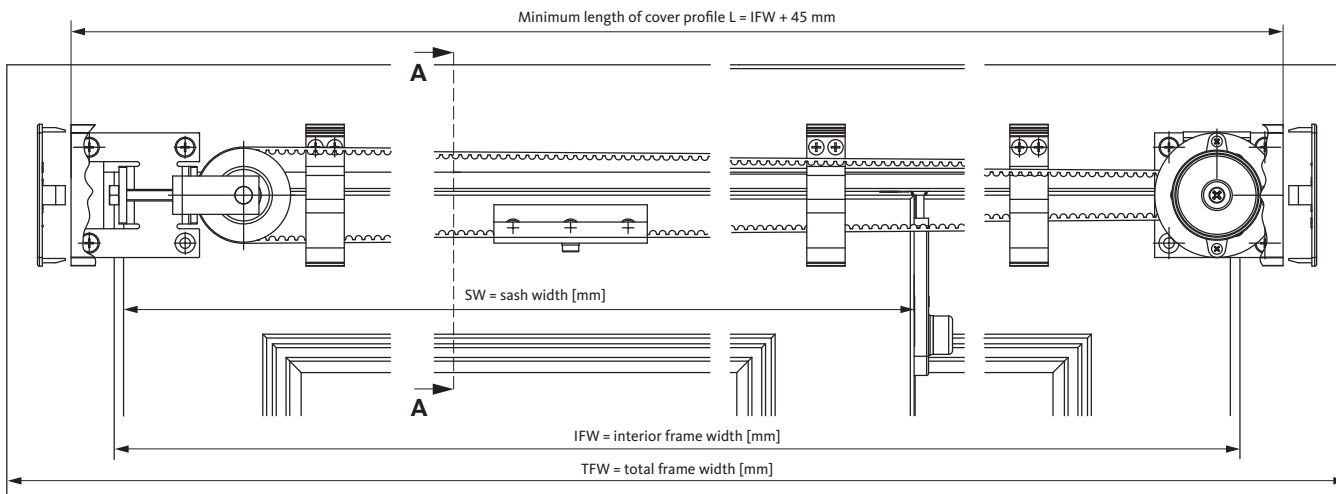
Installation drawing 0-44550



Interior view – pattern A



Section A – A





Hardware requirements depending on sash size for pattern A and C

HS SpeedLimiter basic hardware set

| Pattern | | Designation | Finish | PU | Order no. |
|---------|---|------------------------------------|-------------------|----|----------------|
| A | C | | | | |
| 1 | 2 | HS SpeedLimiter basic hardware set | EV 1 / light grey | 1 | K-17179-20-0-1 |

Set of profiles for HS SpeedLimiter

| Pattern | | SW [mm] | TFW [mm] | Finish | PU | Order no. |
|---------|---|-------------|--------------|-------------------|----|----------------|
| A | C | | | | | |
| 1 | - | - 1950 | - 4000 | EV 1 / light grey | 1 | K-17180-40-0-1 |
| 1 | - | 1951 - 3300 | 4001 - 6700 | EV 1 / light grey | 1 | K-17180-67-0-1 |
| - | 1 | - 1450 | - 6700 | EV 1 / light grey | 1 | K-17180-67-0-1 |
| - | 2 | 1451 - 1950 | 6701 - 8000 | EV 1 / light grey | 1 | K-17180-40-0-1 |
| - | 2 | 1951 - 3300 | 8001 - 13400 | EV 1 / light grey | 1 | K-17180-67-0-1 |

Design and function are not mutually exclusive

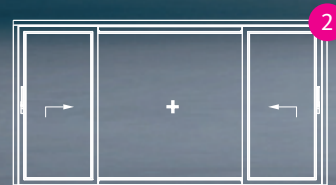
DESIGN

HONED TO PERFECTION



Large-format glass frontages have a decisive impact on the architectural design of modern buildings. They must inspire and enthuse both functionally and aesthetically.

Complex technical solutions are required to meet the increasing demands in relation to the security and comfort of Lift&Slide doors. The expectations in relation to the aesthetic quality of buildings that provide an environment that is highly conducive to living and working are however also increasing. As far as Gretsch-Unitas is concerned, perfect functionality always goes hand in hand with aesthetic design that can be adapted to the required ambience in each case.



The right sash configuration for every room design – up to a total width of 20 metres.

1 Comfortable operation with appealing design
Turn handles

2 Versatile and multi-faceted
Patterns A–L

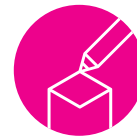
3 Elegant, comfortable and barrier-free
HS ePOWER motor-driven drive

Exclusively
available only from
Gretsch-Unitas



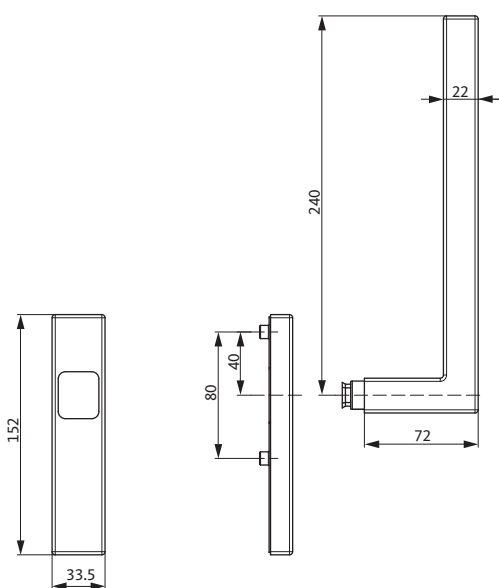
L&S turn handles in special design

Special form, square



Product information

- High-quality stainless steel turn handle, interior, with dummy backplate
- With 10 mm square size and 80 mm distance between screw centres
- Flush pull must be ordered separately
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



You can find detailed overviews, specifications about dimensions and various versions in the catalogue section 5.0 "Turn handles and accessories".

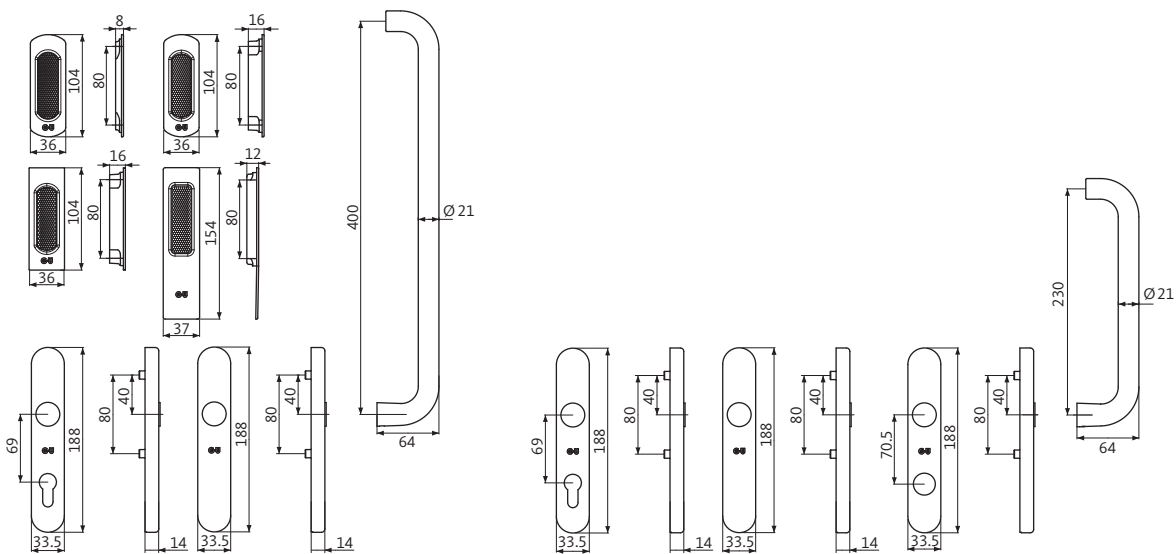
L&S turn handles in special design

RONDO series



Product information

- High-quality stainless steel turn handles, optionally with
 - Dummy backplate
 - Profile cylinder hole (PC) or
 - Round cylinder hole (CH-RC)
- With 10 mm square size and 80 mm distance between screw centres
- Optionally with exterior handle or exterior flush pull
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



You can find detailed overviews, specifications about dimensions and various versions in the catalogue section 5.0 "Turn handles and accessories".

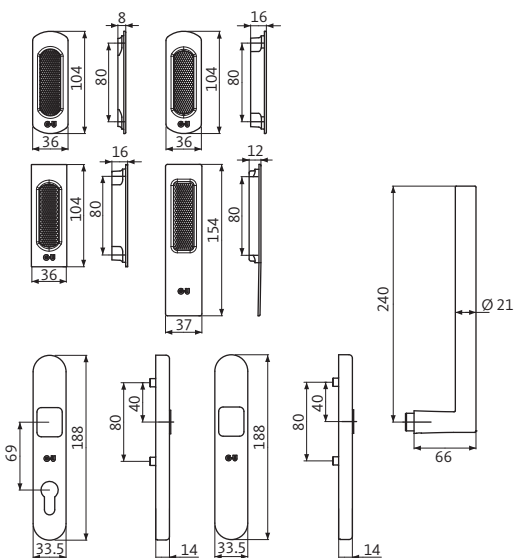
L&S turn handles in special design

BELCANTO series



Product information

- High-quality stainless steel turn handles, optionally with
 - Dummy backplate or
 - Profile cylinder hole (PC)
- With 10 mm square size and 80 mm distance between screw centres
- Optionally with exterior handle or exterior flush pull
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



You can find detailed overviews, specifications about dimensions and various versions in the catalogue section 6.0 "Turn handles and accessories".

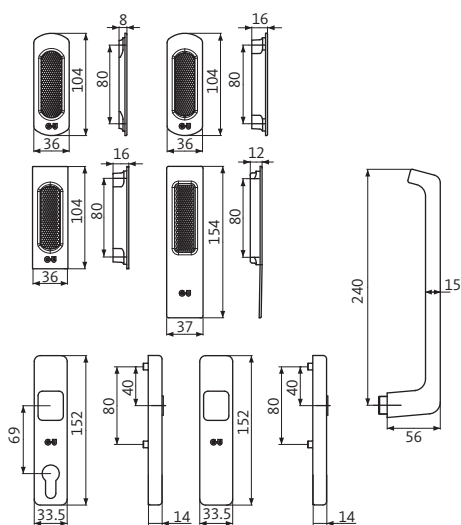
L&S turn handles in special design

DIRIGENT series



Product information

- High-quality stainless steel turn handles, optionally with
 - Dummy backplate or
 - Profile cylinder hole (PC)
- With 10 mm square size and 80 mm distance between screw centres
- Optionally with exterior handle or exterior flush pull
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



You can find detailed overviews, specifications about dimensions and various versions in the catalogue section 6.0 "Turn handles and accessories".



5.0 Turn handles and accessories

| | |
|----------------------------|-----|
| Turn handle – Special form | 280 |
| RONDO series | 283 |
| BELCANTO series | 303 |
| DIRIGENT series | 315 |
| Accessories | 354 |

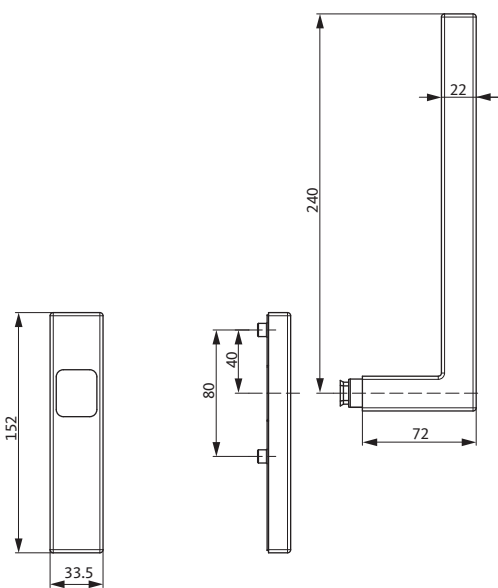
Special form, square – interior L&S turn handle without PC hole

without flush pull



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm, handle height 78 mm
- The cover rosette cannot subsequently be exchanged



Special form, square – interior L&S turn handle without PC hole

without flush pull

L&S turn handles

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
|---|--------|-----------------|----------------|----------|----|----------------|
| Special form, square – interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | 1 | K-18684-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| Special form, square – interior L&S turn handle without PC hole | 1 |
| Square spindle (suitable for ST 88 to 92 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

Versions/order numbers

| Designation | ST [mm] | Length [mm] | Order no. |
|-------------------------|---------|-------------|-----------------------------------|
| Square spindle 10 mm | 56 | 80 | 9-24377-40-0-1 |
| | 68 | 80 | 9-24377-40-0-1 |
| | 78 | 80 | 9-24377-40-0-1 |
| | 88 | 90 | Included in PU for turn handle |
| | 90 | 90 | |
| | 92 | 90 | |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

Versions/order numbers

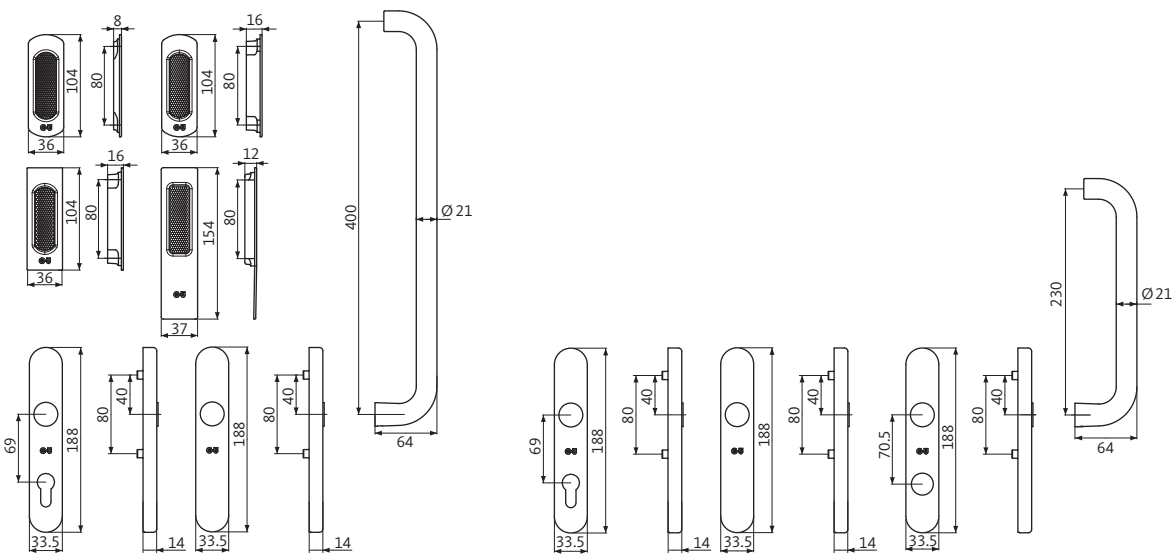
| Drilling jigs | PU | Order no. |
|---|----|----------------|
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |





Product information

- High-quality stainless steel turn handles, optionally with
 - Dummy backplate
 - Profile cylinder hole (PC) or
 - Round cylinder hole (CH-RC)
- With 10 mm square size and 80 mm distance between screw centres
- Optionally with exterior handle or exterior flush pull
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



Some products in this series are suitable for



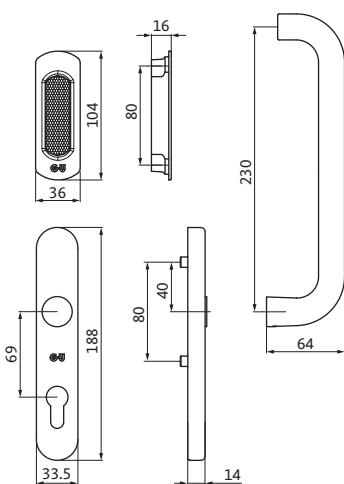
RONDO – interior L&S turn handle with PC hole

with exterior flush pull



Product information

- High-quality stainless steel turn handle, interior, with PC hole
- Exterior flush pull
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm



RONDO – interior L&S turn handle with PC hole

with exterior flush pull



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle, with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-16797-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-16863-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| RONDO interior L&S turn handle, with PC hole | 1 |
| L&S flush pull | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

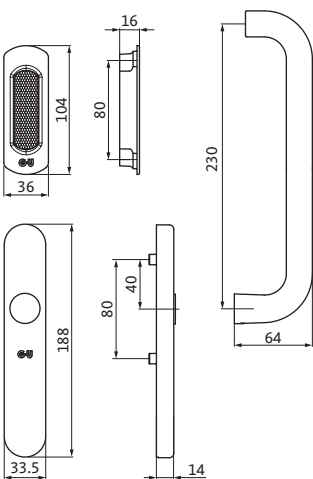
RONDO – interior L&S turn handle without PC hole

with exterior flush pull



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- Exterior flush pull
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | 1 | K-16796-00-0-8 |
| | 90° | stainless steel | with lugs | no | 1 | K-16862-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| RONDO interior L&S turn handle without PC hole | 1 |
| L&S flush pull | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

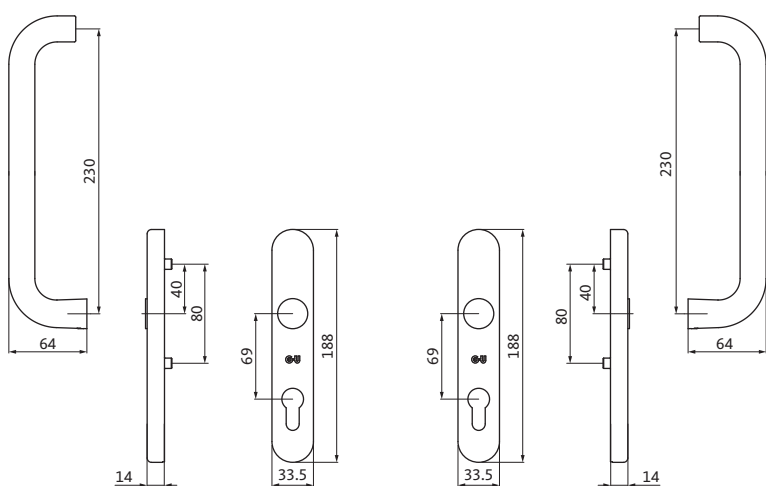
| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

RONDO – interior/exterior L&S turn handle set with PC hole



Product information

- High-quality stainless steel turn handles, interior and exterior, with PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior/exterior L&S turn handle set with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-16798-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-16864-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| RONDO interior/exterior L&S turn handle set with PC hole | 1 |
| Fixing screws M6 x 100 mm | 2 |
| Square spindle (sash thickness up to 90 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 145 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | | |
| | 90 | | |
| | 92 | 150 | 9-24377-15-0-1 |
| | 110 | 170 | 9-24377-18-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 70 | 9-13274-70-0-1 |
| | 68 | 80 | 9-13274-80-0-1 |
| | 78 | 90 | 9-13274-90-0-1 |
| | 88 | 100 | Included in PU for turn handle |
| | 90 | | |
| | 92 | | |
| | | 110 | 125 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

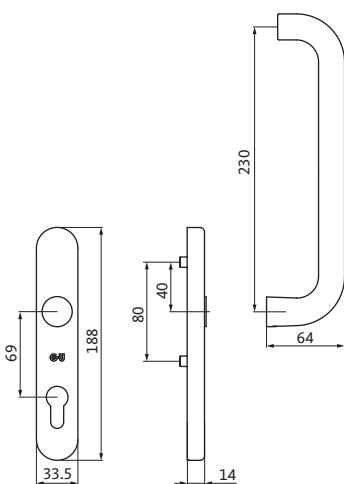
RONDO – interior L&S turn handle with PC hole

without flush pull



Product information

- High-quality stainless steel turn handle, interior, with PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm



RONDO – interior L&S turn handle with PC hole

without flush pull



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-16808-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-16866-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| RONDO interior L&S turn handle with PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

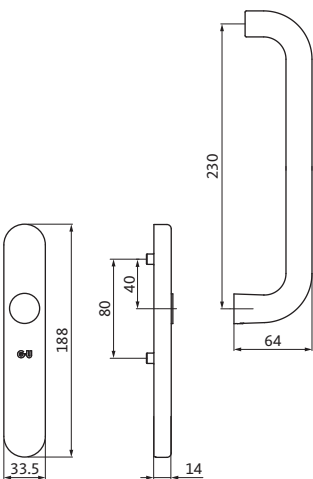
RONDO – interior L&S turn handle without PC hole

without flush pull



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | 1 | K-16807-00-0-8 |
| | 90° | stainless steel | with lugs | no | 1 | K-16868-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| RONDO interior L&S turn handle without PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

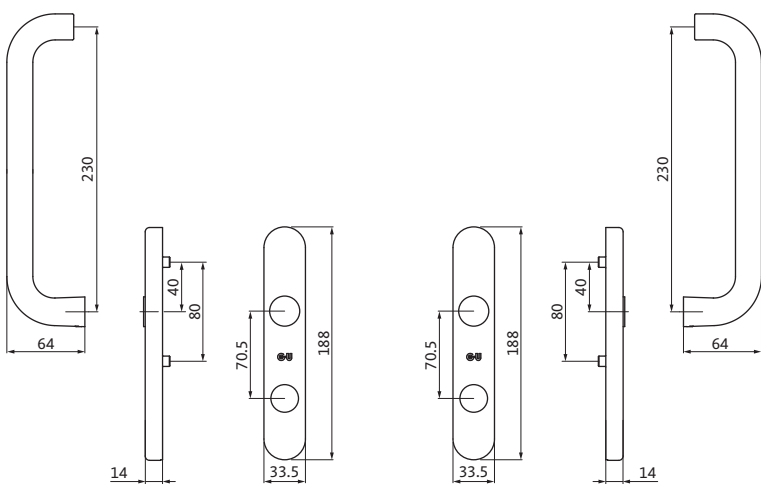
| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

RONDO – interior/exterior L&S turn handle set with CH-RC hole



Product information

- High-quality stainless steel turn handles, interior and exterior, with 22 mm CH-RC hole-type
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



RONDO – interior/exterior L&S turn handle set with CH-RC hole



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior/exterior L&S turn handle set with CH-RC hole | 180° | stainless steel | with lugs | yes | 1 | K-16908-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| RONDO interior/exterior L&S turn handle set with CH-RC hole | 1 |
| Fixing screws M6 x 100 mm | 2 |
| Square spindle (sash thickness up to 90 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 145 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | | |
| | 90 | 150 | 9-24377-15-0-1 |
| | 92 | | |
| | 110 | 170 | 9-24377-18-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 70 | 9-13274-70-0-1 |
| | 68 | 80 | 9-13274-80-0-1 |
| | 78 | 90 | 9-13274-90-0-1 |
| | 88 | 100 | Included in PU for turn handle |
| | 90 | | |
| | 92 | | |
| | | 110 | 125 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

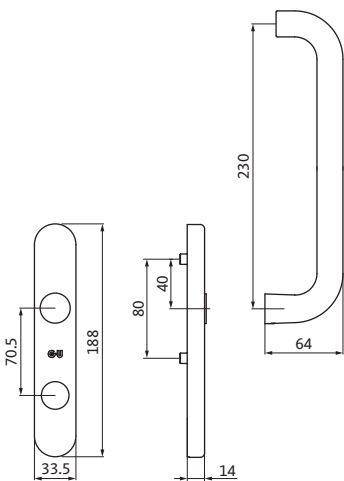
RONDO – interior L&S turn handle with CH-RC hole

without flush pull



Product information

- High-quality stainless steel turn handle, interior, with 22 mm CH-RC hole-type
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 78 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle with CH-RC hole | 180° | stainless steel | with lugs | yes | 1 | K-17624-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| RONDO interior L&S turn handle with CH-RC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

RONDO – interior L&S turn handle with PC hole

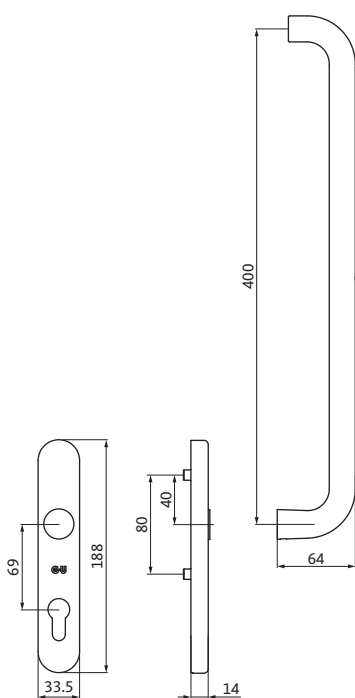
extended handle



Product information

- High-quality stainless steel turn handle, interior, with PC hole
- Special length 400 mm
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 400 mm
- Handle height 78 mm

This product is suitable for use in accordance with



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-17232-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| RONDO interior L&S turn handle with PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

RONDO – interior L&S turn handle without PC hole

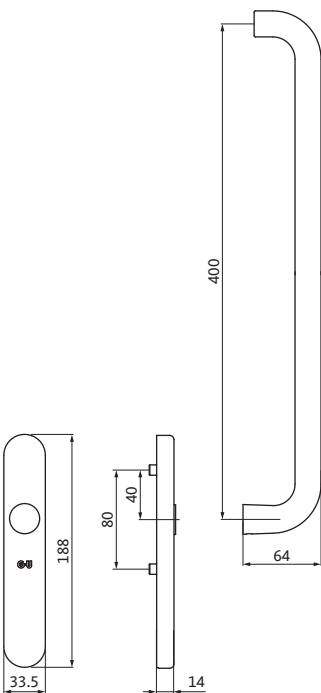
extended handle



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- Special length 400 mm
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 400 mm
- Handle height 78 mm

This product is suitable for use in accordance with



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| RONDO interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | 1 | K-17231-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| RONDO interior L&S turn handle without PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

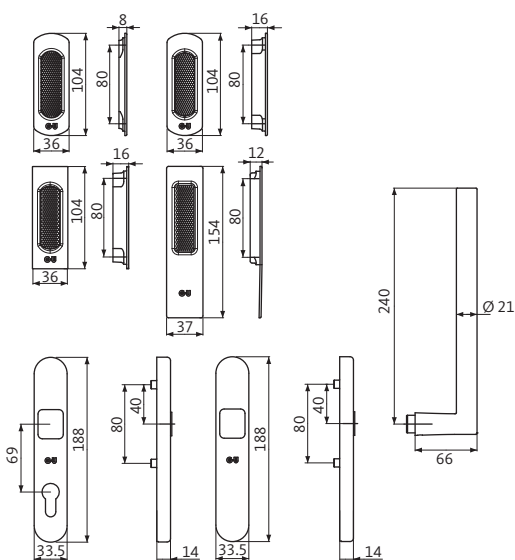
| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |





Product information

- High-quality stainless steel turn handles, optionally with
 - Dummy backplate
 - Profile-cylinder hole (PC)
- With 10 mm square size and 80 mm distance between screw centres
- Optionally with exterior handle or exterior flush pull
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



Some products in this series are suitable for



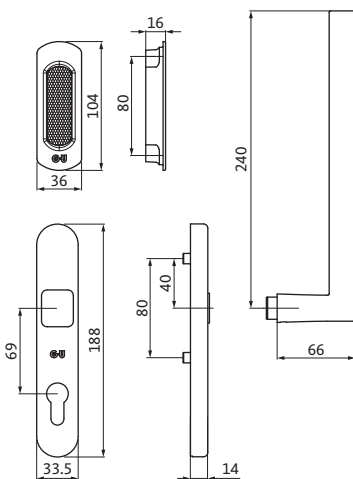
BELCANTO – interior L&S turn handle with PC hole

with exterior flush pull



Product information

- High-quality stainless steel turn handle, interior, with PC hole
- Exterior flush pull
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 80 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| BELCANTO interior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-17016-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-17021-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| BELCANTO interior L&S turn handle with PC hole | 1 |
| L&S flush pull | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

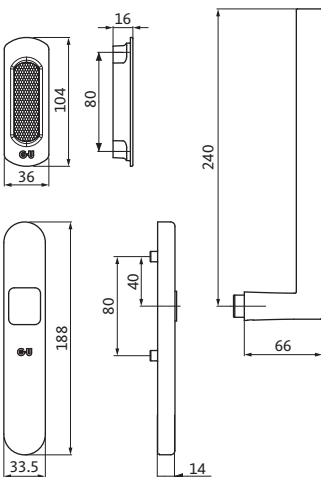
BELCANTO – interior L&S turn handle without PC hole

with exterior flush pull



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- Exterior flush pull
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 80 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| BELCANTO interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | 1 | K-17015-00-0-8 |
| | 90° | stainless steel | with lugs | no | 1 | K-17020-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| BELCANTO interior L&S turn handle without PC hole | 1 |
| L&S flush pull | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

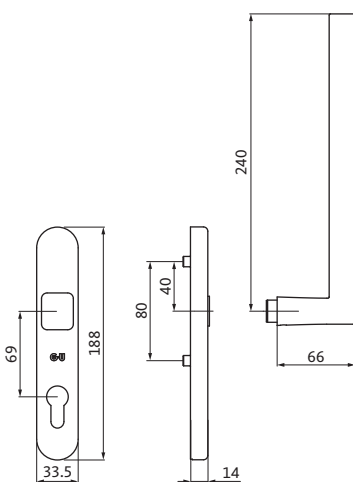
BELCANTO – interior L&S turn handle with PC hole

without flush pull



Product information

- High-quality stainless steel turn handle, interior, with PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 80 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| BELCANTO interior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-17014-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-17019-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| BELCANTO interior L&S turn handle with PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 6-27272-01-0-1 |

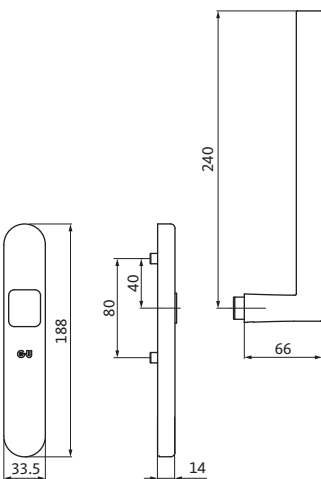
BELCANTO – interior L&S turn handle without PC hole

without flush pull



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 80 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| BELCANTO interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | yes | 1 | K-17013-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-17018-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| BELCANTO interior L&S turn handle without PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

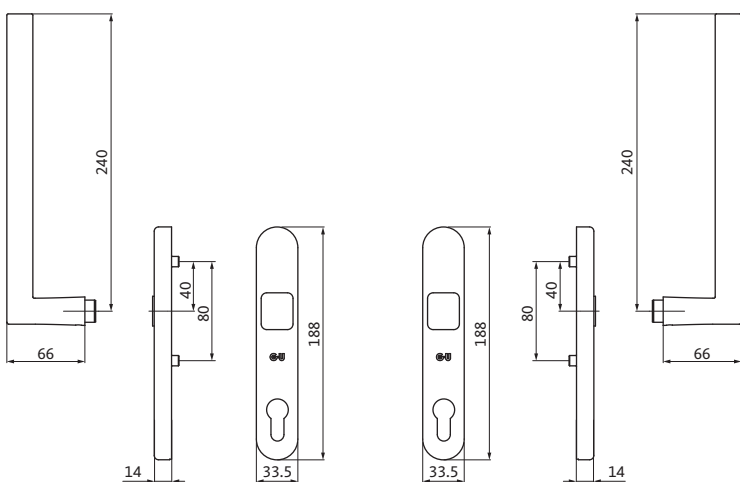
| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 6-27272-01-0-1 |

BELCANTO – L&S interior/exterior turn handle set with PC hole



Product information

- High-quality stainless steel turn handles, interior and exterior, with PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 80 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| BELCANTO interior/exterior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-17017-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-17022-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| BELCANTO interior/exterior L&S turn handle with PC hole | 1 |
| Fixing screws M6 x 100 mm | 2 |
| Square spindle (sash thickness up to 90 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 145 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | | |
| | 90 | | |
| | 92 | 150 | 9-24377-15-0-1 |
| | 110 | 170 | 9-24377-18-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 70 | 9-13274-70-0-1 |
| | 68 | 80 | 9-13274-80-0-1 |
| | 78 | 90 | 9-13274-90-0-1 |
| | 88 | 100 | Included in PU for turn handle |
| | 90 | | |
| | 92 | | |
| | | 110 | 125 |

Drilling jigs

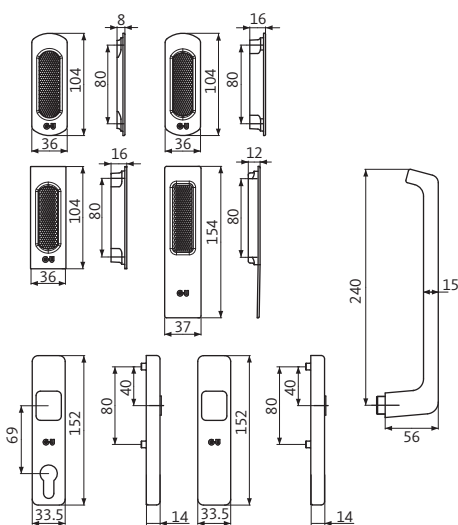
| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |





Product information

- High-quality stainless steel turn handles, optionally with
 - Dummy backplate
 - Profile-cylinder hole (PC)
- With 10 mm square size and 80 mm distance between screw centres
- Optionally with exterior handle or exterior flush pull
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



Some products in this series are suitable for



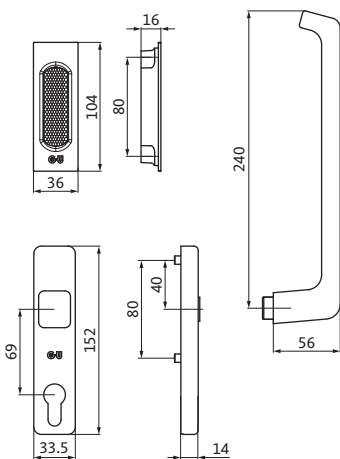
DIRIGENT – interior L&S turn handle with PC hole

with exterior flush pull



Product information

- High-quality stainless steel turn handle, interior, with PC hole
- Exterior flush pull
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|--|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| DIRIGENT interior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | 1 | K-16794-00-0-8 |
| | 90° | stainless steel | with lugs | yes | 1 | K-16860-00-0-8 |

| Contents | Piece(s) |
|--|----------|
| DIRIGENT interior L&S turn handle with PC hole | 1 |
| L&S flush pull | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

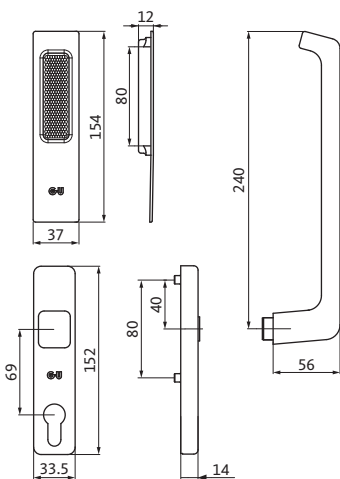
DIRIGENT – interior L&S turn handle with PC hole

with extended exterior flush pull



Product information

- High-quality aluminium turn handle, interior, with PC hole
- Exterior flush pull, extended
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm



L&S turn handles

| Versions/order numbers | | | | | | | |
|--|--------|-----------|----------------|----------|------------------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT interior L&S turn handle with PC hole | 180° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-13266-00-0-1 |
| | | | | | dark brown [1] | 1 | K-13266-00-0-5 |
| | | | | | white, RAL 9016 | 1 | K-13266-00-0-7 |
| | 90° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-13263-00-0-1 |
| | | | | | dark brown [1] | 1 | K-13263-00-0-5 |
| | | | | | white, RAL 9016 | 1 | K-13263-00-0-7 |

[1] Similar to RAL 8022

| Contents | Piece(s) |
|--|----------|
| DIRIGENT interior L&S turn handle with PC hole | 1 |
| L&S flush pull, extended | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|------------------------|---------|-------------|--------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

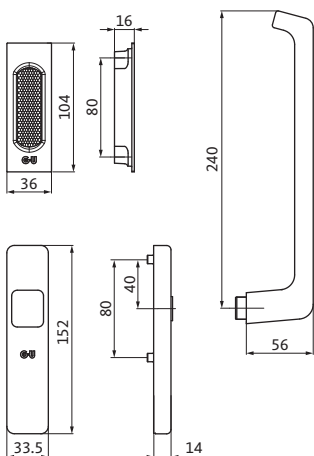
DIRIGENT – interior L&S turn handle without PC hole

with exterior flush pull



Product information

- High-quality stainless steel turn handle, interior, without PC hole
- Exterior flush pull
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm



L&S turn handles

| Versions/order numbers | | | | | | |
|---|--------|-----------------|----------------|----------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | PU | Order no. |
| DIRIGENT interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | 1 | K-16793-00-0-8 |
| | 90° | stainless steel | with lugs | no | 1 | K-16859-00-0-8 |

| Contents | Piece(s) |
|---|----------|
| DIRIGENT interior L&S turn handle without PC hole | 1 |
| L&S flush pull | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

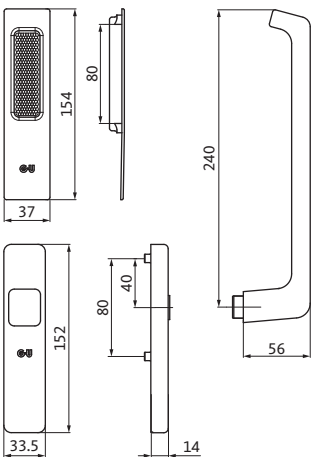
DIRIGENT – interior L&S turn handle without PC hole

with extended exterior flush pull



Product information

- High-quality aluminium turn handle, interior, without PC hole
- Exterior flush pull, extended
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber and PVC Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thickness up to 56 mm, fixed square spindle
- Suitable for sash thickness from 68 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm



DIRIGENT – interior L&S turn handle without PC hole

with extended exterior flush pull



L&S turn handles

| Versions/order numbers | | | | | | | | |
|---|--------|--------------|-----------|----------------|----------|------------------|----|----------------|
| Designation | Detent | ST [mm] | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT interior L&S turn handle without PC hole | 180° | up to 56 [1] | aluminium | with lugs | no | silver/EV 1 look | 1 | K-13265-00-0-1 |
| | | | | | | dark brown [3] | 1 | K-13265-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | K-13265-00-0-7 |
| | 180° | up to 78 [2] | aluminium | with lugs | no | silver/EV 1 look | 1 | K-13785-00-0-1 |
| | | | | | | dark brown [3] | 1 | K-13785-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | K-13785-00-0-7 |
| | 90° | up to 56 [1] | aluminium | with lugs | no | silver/EV 1 look | 1 | K-13262-00-0-1 |
| | | | | | | dark brown [3] | 1 | K-13262-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | K-13262-00-0-7 |
| | 90° | up to 78 [2] | aluminium | with lugs | no | silver/EV 1 look | 1 | K-13787-00-0-1 |
| | | | | | | dark brown [3] | 1 | K-13787-00-0-5 |
| | | | | | | white, RAL 9016 | 1 | K-13787-00-0-7 |

[1] Square spindle, fixed
 [2] Square spindle, adjustable
 [3] Similar to RAL 8022

| Contents (with ST up to 56 mm) | Piece(s) |
|---|----------|
| DIRIGENT interior L&S turn handle without PC hole | 1 |
| L&S flush pull, extended | 1 |
| Square spindle (sash thickness up to 56 mm) | 1 |

Note about fixing screws:

The fixing screws must be ordered separately depending on the sash thickness.

| Contents (with sash thickness up to 78 mm) | Piece(s) |
|---|----------|
| DIRIGENT interior L&S turn handle without PC hole | 1 |
| L&S flush pull, extended | 1 |
| Square spindle (suitable for ST 68 to 80 mm) | 1 |

Note about square spindle:

If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws:

The fixing screws must be ordered separately depending on the sash thickness.

DIRIGENT – interior L&S turn handle without PC hole

with extended exterior flush pull



Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 65 | 9-13274-65-0-1 |
| | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 |

Drilling jigs

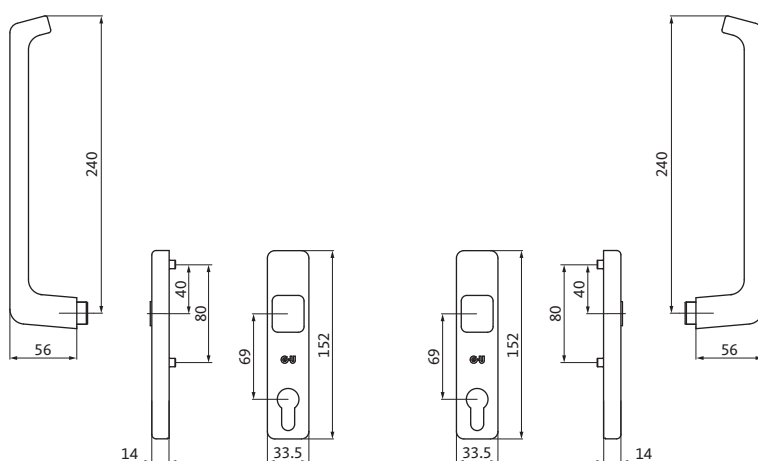
| Versions/order numbers | | |
|--|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |

DIRIGENT – interior/exterior L&S turn handle set with PC hole



Product information

- High-quality aluminium, stainless steel or brass turn handles, interior and exterior, with PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm
- Note: We recommend the use of a buffer – see pages 220 and 221



DIRIGENT – interior/exterior L&S turn handle set with PC hole



L&S turn handles – aluminium

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
|---|--------|-----------|----------------|----------|------------------|----|----------------|
| DIRIGENT interior/exterior L&S turn handle with PC hole with fixing screws | 180° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-13267-00-0-1 |
| | | | | | dark brown [1] | 1 | K-13267-00-0-5 |
| | | | | | white, RAL 9016 | 1 | K-13267-00-0-7 |
| | 90° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-13264-00-0-1 |
| | | | | | dark brown [1] | 1 | K-13264-00-0-5 |
| | | | | | white, RAL 9016 | 1 | K-13264-00-0-7 |
| For aluminium profiles only | | | | | | | |
| DIRIGENT interior/exterior L&S turn handle with PC hole without fixing screws | 180° | aluminium | with lugs | yes | silver/EV 1 look | 1 | 6-24615-96-0-1 |
| | | | | | dark brown [1] | 1 | 6-24615-96-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24615-96-0-7 |
| | 90° | aluminium | with lugs | yes | silver/EV 1 look | 1 | 6-24616-96-0-1 |
| | | | | | dark brown [1] | 1 | 6-24616-96-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24616-96-0-7 |

[1] Similar to RAL 8022

L&S turn handles – stainless steel

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | | PU | Order no. |
|--|--------|-----------------|----------------|----------|--|----|----------------|
| DIRIGENT interior/exterior L&S turn handle with PC hole with fixing screws | 180° | stainless steel | with lugs | yes | | 1 | K-16795-00-0-8 |
| | 90° | stainless steel | with lugs | yes | | 1 | K-16861-00-0-8 |

L&S turn handles – brass

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | | PU | Order no. |
|---|--------|----------------|----------------|----------|--|----|----------------|
| DIRIGENT interior/exterior L&S turn handle with PC hole without fixing screws | 180° | polished brass | with lugs | yes | | 1 | 6-26731-00-0-B |
| | 90° | polished brass | with lugs | yes | | 1 | 6-26732-00-0-B |

Contents: set, DIRIGENT turn handle: aluminium, stainless steel or brass

| Contents | Piece(s) |
|---|----------|
| DIRIGENT interior/exterior L&S turn handle set with PC hole | 1 |
| Fixing screws M6 x 100 mm | 2 |
| Square spindle (sash thickness up to 90 mm) | 1 |

Note about square spindle:

If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws:

The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 145 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | | |
| | 90 | | |
| | 92 | 150 | 9-24377-15-0-1 |
| | 110 | 170 | 9-24377-18-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 70 | 9-13274-70-0-1 |
| | 68 | 80 | 9-13274-80-0-1 |
| | 78 | 90 | 9-13274-90-0-1 |
| | 88 | 100 | 9-13274-97-R-3 * |
| | 90 | 100 | 9-13274-97-R-3 * |
| | 92 | 100 | 9-13274-97-R-3 * |
| | 110 | 125 | 9-13274-96-R-1 |

* Order only with version without lugs

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

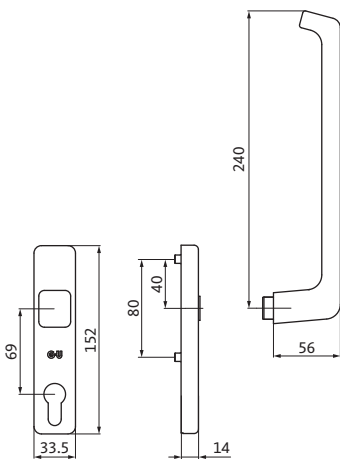
DIRIGENT – interior L&S turn handle with PC hole

without flush pull



Product information

- High-quality aluminium, stainless steel or brass turn handle, interior, with PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm



L&S turn handles – aluminium

| Versions/order numbers | | | | | | | |
|--|--------|-----------|----------------|----------|------------------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| For aluminium profiles only | | | | | | | |
| DIRIGENT interior L&S turn handle with PC hole | 180° | aluminium | with lugs | yes | silver/EV 1 look | 1 | 6-24607-00-0-1 |
| | | | | | dark brown [1] | 1 | 6-24607-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24607-00-0-7 |
| | 180° | aluminium | without lugs | yes | silver/EV 1 look | 1 | 6-24609-00-0-1 |
| | | | | | dark brown [1] | 1 | 6-24609-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24609-00-0-7 |
| | 90° | aluminium | without lugs | yes | silver/EV 1 look | 1 | 6-24614-00-0-1 |
| | | | | | dark brown [1] | 1 | 6-24614-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24614-00-0-7 |

[1] Similar to RAL 8022

L&S turn handles – stainless steel

| Versions/order numbers | | | | | | | |
|--|--------|-----------------|----------------|----------|--|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | | PU | Order no. |
| DIRIGENT interior L&S turn handle with PC hole | 180° | stainless steel | with lugs | yes | | 1 | K-16805-00-0-8 |
| | 90° | stainless steel | with lugs | yes | | 1 | K-16865-00-0-8 |

L&S turn handles – brass

| Versions/order numbers | | | | | | | |
|--|--------|----------------|----------------|----------|--|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | | PU | Order no. |
| DIRIGENT interior L&S turn handle with PC hole | 180° | polished brass | with lugs | yes | | 1 | 6-26728-02-0-B |
| | 90° | polished brass | with lugs | yes | | 1 | 6-26729-02-0-B |

Contents: DIRIGENT L&S turn handle: aluminium, stainless steel or brass

| Contents | Piece(s) |
|--|----------|
| DIRIGENT interior L&S turn handle with PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle:

If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws:

The fixing screws must be ordered separately depending on the sash thickness.

DIRIGENT – interior L&S turn handle with PC hole

without flush pull



Square spindle

Versions/order numbers

| Designation | ST [mm] | Length [mm] | Order no. |
|-------------------------|---------|-------------|-----------------------------------|
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

Versions/order numbers

| Drilling jigs | PU | Order no. |
|---|----|----------------|
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

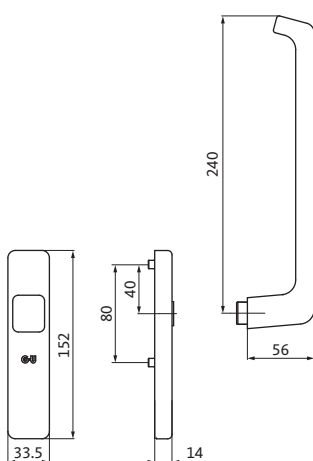
DIRIGENT – interior L&S turn handle without PC hole

without flush pull



Product information

- High-quality aluminium, stainless steel or brass turn handle, interior, without PC hole
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 70 mm



DIRIGENT – interior L&S turn handle without PC hole

without flush pull



L&S turn handles – aluminium

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
|---|--------|-----------|----------------|----------|------------------|----|--------------------|
| DIRIGENT interior L&S turn handle without PC hole | 180° | aluminium | with lugs | no | silver/EV 1 look | 1 | 6-24606-00-0-1 [2] |
| | | | | | dark brown [1] | 1 | 6-24606-00-0-5 [2] |
| | | | | | white, RAL 9016 | 1 | 6-24606-00-0-7 [2] |
| | 180° | aluminium | without lugs | no | silver/EV 1 look | 1 | 6-24608-00-0-1 |
| | | | | | dark brown [1] | 1 | 6-24608-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24608-00-0-7 |
| | 90° | aluminium | without lugs | no | silver/EV 1 look | 1 | 6-24613-00-0-1 |
| | | | | | dark brown [1] | 1 | 6-24613-00-0-5 |
| | | | | | white, RAL 9016 | 1 | 6-24613-00-0-7 |

[1] Similar to RAL 8022 [2] Sash thickness up to 78 mm, square spindle not adjustable

L&S turn handles – stainless steel

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | | PU | Order no. |
|---|--------|-----------------|----------------|----------|--|----|----------------|
| DIRIGENT interior L&S turn handle without PC hole | 180° | stainless steel | with lugs | no | | 1 | K-16804-00-0-8 |

L&S turn handles – brass

Versions/order numbers

| Designation | Detent | Material | Specifications | Lockable | | PU | Order no. |
|---|--------|----------------|----------------|----------|--|----|----------------|
| DIRIGENT interior L&S turn handle without PC hole | 180° | polished brass | with lugs | no | | 1 | 6-26728-01-0-B |
| | 90° | polished brass | with lugs | no | | 1 | 6-26729-01-0-B |

Contents: DIRIGENT L&S turn handle: aluminium, stainless steel or brass

| Contents | Piece(s) |
|---|----------|
| DIRIGENT interior L&S turn handle without PC hole | 1 |
| Square spindle (sash thickness up to 80 mm) | 1 |

Note about square spindle:

If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws:

The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|-------------------------|---------|-------------|-----------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | Included in PU for turn handle |
| | 68 | | |
| | 78 | | |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | 9-24377-60-0-1 |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 6-27272-01-0-1 |

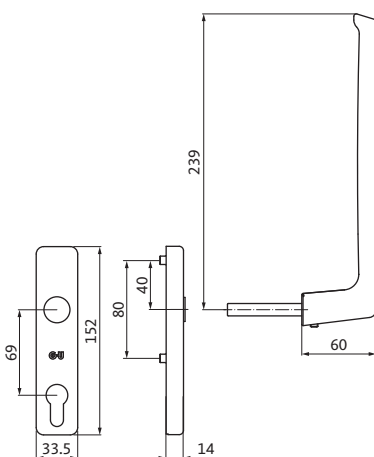
DIRIGENT – interior L&S turn handle with PC hole

without flush pull, removable



Product information

- High-quality aluminium turn handle, interior, with PC hole
- Removable, suitable for customer's own coating
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 74 mm



L&S turn handles

| Versions/order numbers | | | | | | | | |
|--|------------------------------------|-----------|----------------|----------|------------------|----|----------------|--|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. | |
| DIRIGENT interior L&S turn handle with PC hole | 180° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-17397-00-0-1 | |
| | | | | | dark brown [1] | 1 | K-17397-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | K-17397-00-0-7 | |
| | For aluminium profiles only | | | | | | | |
| | 180° | aluminium | without lugs | yes | silver/EV 1 look | 1 | K-17399-00-0-1 | |
| | | | | | dark brown [1] | 1 | K-17399-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | K-17399-00-0-7 | |

[1] Similar to RAL 8022

| Contents | Piece(s) |
|--|----------|
| DIRIGENT interior L&S turn handle with PC hole | 1 |
| Square spindle (suitable for ST 110 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|------------------------|---------|-------------|--------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | 9-24377-40-0-1 |
| | 68 | 80 | 9-24377-40-0-1 |
| | 78 | 80 | 9-24377-40-0-1 |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | Included in PU for turn handle |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

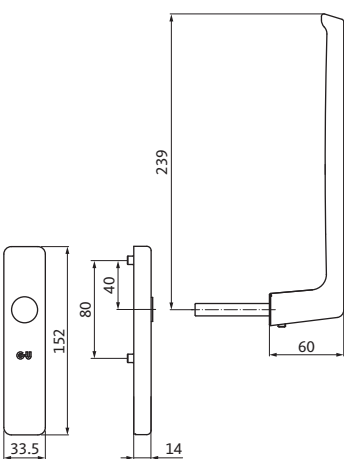
DIRIGENT – interior L&S turn handle without PC hole

without flush pull, removable



Product information

- High-quality aluminium turn handle, interior, without PC hole
- Removable, suitable for customer's own coating
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm
- Handle height 74 mm



L&S turn handles

| Versions/order numbers | | | | | | | | |
|---|------------------------------------|-----------|----------------|----------|------------------|----|----------------|--|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. | |
| DIRIGENT interior L&S turn handle without PC hole | 180° | aluminium | with lugs | no | silver/EV 1 look | 1 | K-17396-00-0-1 | |
| | | | | | dark brown [1] | 1 | K-17396-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | K-17396-00-0-7 | |
| | For aluminium profiles only | | | | | | | |
| | 180° | aluminium | without lugs | no | silver/EV 1 look | 1 | K-17398-00-0-1 | |
| | | | | | dark brown [1] | 1 | K-17398-00-0-5 | |
| | | | | | white, RAL 9016 | 1 | K-17398-00-0-7 | |

[1] Similar to RAL 8022

| Contents | Piece(s) |
|---|----------|
| DIRIGENT interior L&S turn handle without PC hole | 1 |
| Square spindle (suitable for ST 110 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|------------------------|---------|-------------|--------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | 9-24377-40-0-1 |
| | 68 | 80 | 9-24377-40-0-1 |
| | 78 | 80 | 9-24377-40-0-1 |
| | 88 | 90 | 9-24377-50-0-1 |
| | 90 | 90 | 9-24377-50-0-1 |
| | 92 | 90 | 9-24377-50-0-1 |
| | 110 | 100 | Included in PU for turn handle |

Fixing screws

When attaching L&S turn handles on one side, please use suitable fixing screws for the material type and sash thickness of the Lift&Slide element.

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

DIRIGENT – interior/exterior L&S turn handle set

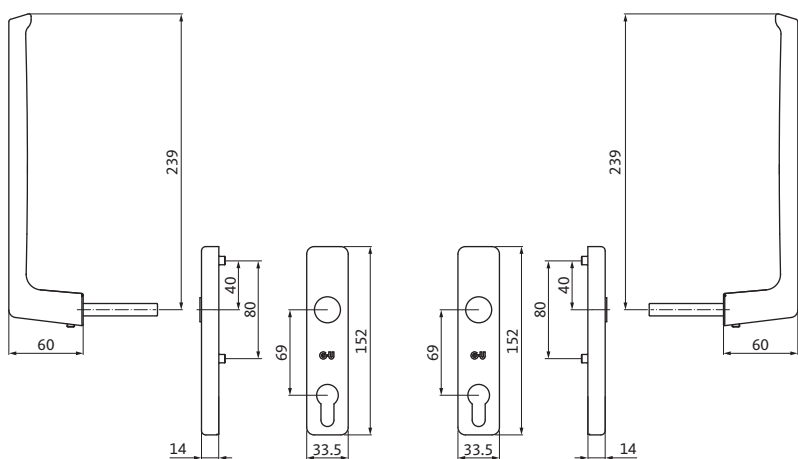
with PC hole

removable



Product information

- High-quality aluminium turn handles, interior and exterior, with PC hole
- Removable, suitable for customer's own coating
- With 10 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- Suitable for sash thicknesses up to 110 mm, adjustable square spindle
- Handle length 240 mm, handle height 74 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



DIRIGENT – interior/exterior L&S turn handle set with PC hole

removable



L&S turn handles

| Versions/order numbers | | | | | | | |
|---|--------|-----------|----------------|----------|------------------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT interior/exterior L&S turn handle with PC hole | 180° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-17400-00-0-1 |
| | | | | | dark brown [1] | 1 | K-17400-00-0-5 |
| | | | | | white, RAL 9016 | 1 | K-17400-00-0-7 |

[1] Similar to RAL 8022

| Contents | Piece(s) |
|---|----------|
| DIRIGENT interior/exterior L&S turn handle set with PC hole | 1 |
| Square spindle (suitable for ST 92 mm) | 1 |

Note about square spindle: If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|------------------------|---------|-------------|--------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 145 | 9-24377-96-0-1 |
| | 68 | 145 | 9-24377-96-0-1 |
| | 78 | 145 | 9-24377-96-0-1 |
| | 88 | 145 | 9-24377-96-0-1 |
| | 90 | 145 | 9-24377-96-0-1 |
| | 92 | 150 | Included in PU for turn handle |
| | 110 | 170 | 9-24377-18-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 70 | 9-13274-70-0-1 |
| | 68 | 80 | 9-13274-80-0-1 |
| | 78 | 90 | 9-13274-90-0-1 |
| | 88 | 100 | 9-13274-97-R-3 |
| | 90 | 100 | 9-13274-97-R-3 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 125 | 9-13274-96-R-1 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

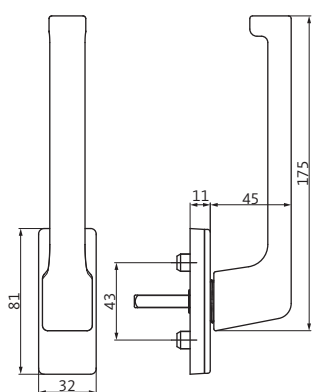
DIRIGENT – HL interior L&S turn handle without PC hole

for light Lift&Slide elements



Product information

- High-quality aluminium turn handle, interior, without PC hole
- With 7 x 37 mm square spindle, 43 mm distance between screw centres
- The square spindle can be enlarged to 10 mm (requires handle adapter set K-16554-01-0-1)
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 120 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16
- For sash thicknesses up to 56 mm
- Handle length 160 mm
- Handle height 58 mm



DIRIGENT – HL interior L&S turn handle without PC hole

for light Lift&Slide elements



Versions/order numbers – L&S turn handle

| Designation | Material | Specifications | Lockable | Finish | PU | Order no. |
|--|-----------|----------------|----------|------------------|----|----------------|
| DIRIGENT HL interior L&S turn handle without PC hole | aluminium | with lugs | no | silver/EV 1 look | 1 | 6-31809-37-0-1 |
| | | | | dark brown [1] | 1 | 6-31809-37-0-5 |
| | | | | white, RAL 9016 | 1 | 6-31809-37-0-7 |

[1] Similar to RAL 8022

Versions/order numbers – required accessories

| Designation | PU | Order no. |
|--------------------|----|----------------|
| Handle adapter set | 1 | K-16554-01-0-1 |

Contains: 1 x fixing plate, 1 x spindle sleeve, fixing screws

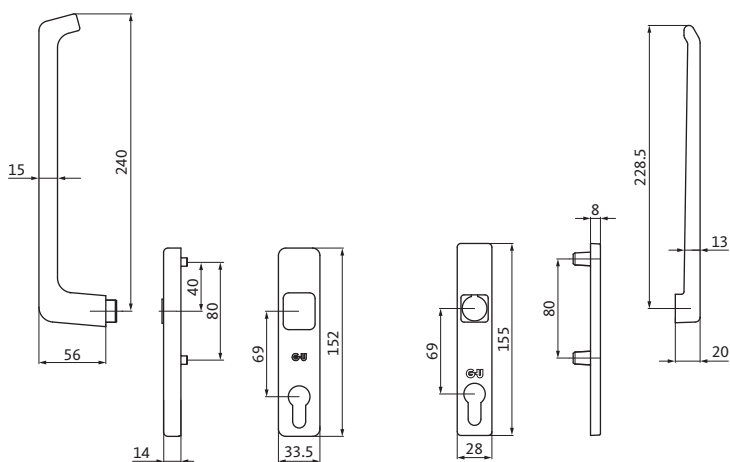
DIRIGENT – interior/exterior L&S turn handle set with PC hole

flat on the outside – outside height 30 mm



Product information

- High-quality aluminium turn handles, interior and exterior, with PC hole
- With 8 mm square size and 80 mm distance between screw centres
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 17
- Suitable for sash thickness up to 110 mm, square spindle can be cropped to necessary sash thickness
- Interior handle
 - Handle length 240 mm
 - Handle height 70 mm
- Exterior handle
 - Handle length 228.5 mm
 - Handle height 30 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



DIRIGENT – interior/exterior L&S turn handle set with PC hole



flat on the outside – outside height 30 mm

L&S turn handles

| Versions/order numbers | | | | | | | |
|---|--------|-----------|----------------|----------|------------------|----|----------------|
| Designation | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT interior/exterior L&S turn handle with PC hole | 90° | aluminium | with lugs | yes | silver/EV 1 look | 1 | K-12919-00-0-1 |
| | | | | | dark brown [1] | 1 | K-12919-00-0-5 |
| | | | | | white, RAL 9016 | 1 | K-12919-00-0-7 |

[1] Similar to RAL 8022

| Contents | Piece(s) |
|---|----------|
| DIRIGENT interior/exterior L&S turn handle set with PC hole | 1 |
| Fixing screws M6 x 75 mm (suitable for ST up to 56 mm) | 2 |

Note about square spindle:

If the sash thicknesses differ, the square spindle must be ordered separately.

Note about fixing screws:

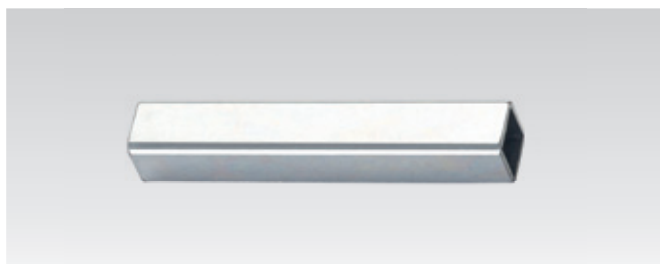
The fixing screws must be ordered separately depending on the sash thickness.

Square spindle

| Versions/order numbers | | | |
|------------------------|----------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 8 mm | up to 88 | 90 | 9-30482-90-0-1 |
| | > 88 | 135 | 9-30482-95-0-1 |
| | > 88 | 150 | 9-30482-96-0-1 |

Fixing screws

| Versions/order numbers | | | |
|------------------------|---------|-------------|--------------------------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| M6 fixing screws | 56 | 75 | Included in PU for turn handle |
| | 68 | 80 | 9-13274-80-0-1 |
| | 78 | 90 | 9-13274-90-0-1 |
| | 88 | 100 | 9-13274-97-R-3 |
| | 90 | 100 | 9-13274-97-R-3 |
| | 92 | 100 | 9-13274-97-R-3 |
| | 110 | 125 | 9-13274-96-R-1 |



Spindle sleeve

to convert a 8 mm square size spindle to 10 mm

| Versions/order numbers | | |
|------------------------|----|----------------|
| Designation | PU | Order no. |
| Spindle sleeve | 1 | 9-43986-00-0-1 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

DIRIGENT 4.0 – interior L&S turn handle with PC hole

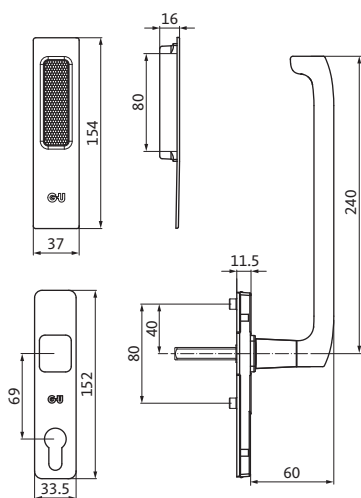
with exterior flush pull



Product information

The Lift&Slide turn handle generation DIRIGENT 4.0 adapts to the design of our DIRIGENT door handle hardware and, with a large distance between the handle and PC cover, offers users outstanding operating comfort.

- High-quality aluminium turn handle, interior, with PC hole
- Exterior flush pull
- Version with 10 mm fixed square with concealed fixing
- Distance between screw centres 80 mm
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Fixed backplate with friction washer
- Concealed screw connection
- Handle length 240 mm
- Handle height 78 mm



L&S turn handles

| Versions/Order numbers | | | | | | | | |
|--|-------------------------|--------|-----------|----------------|----------|-----------------|----|-----------------|
| Designation | For sash thickness [mm] | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT 4.0 interior L&S turn handle with PC hole | 68–78 ^[1] | 180° | aluminium | with lugs | yes | EV1 silver | 1 | K-20216-50-0-1 |
| | | | | | | brown | 1 | K-20216-50-0-5 |
| | | | | | | black | 1 | K-20216-50-0-6 |
| | | | | | | white | 1 | K-20216-50-0-7 |
| | | | | | | cream white | 1 | K-20216-50-0-7V |
| | | | | | | titanium colour | 1 | K-20216-50-0-CL |
| | 88–92 ^[1] | 180° | aluminium | with lugs | yes | EV1 silver | 1 | K-20216-60-0-1 |
| | | | | | | brown | 1 | K-20216-60-0-5 |
| | | | | | | black | 1 | K-20216-60-0-6 |
| | | | | | | white | 1 | K-20216-60-0-7 |
| | | | | | | cream white | 1 | K-20216-60-0-7V |
| | | | | | | titanium colour | 1 | K-20216-60-0-CL |

[1] May vary, depending on the material type and handle height

| Contents (K-20216-50) | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior L&S turn handle with PC hole | 1 |
| L&S flush pull | 1 |
| Fixed spindle square, with 50 mm projection (for sash thickness 68–78 mm) | 1 |

| Contents (K-20216-60) | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior L&S turn handle with PC hole | 1 |
| L&S flush pull | 1 |
| Fixed spindle square, with 60 mm projection (for sash thickness 88–92 mm) | 1 |

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Fixing screws

| Versions/Order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order number |
| M6 fixing screws | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

DIRIGENT 4.0 – interior L&S turn handle without PC hole-type

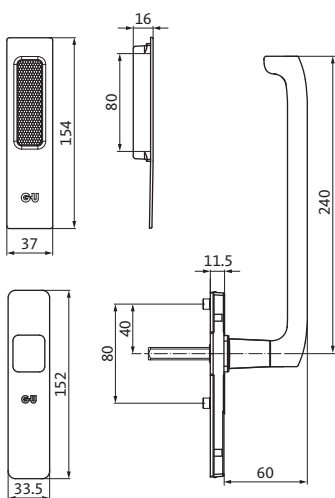
with exterior flush pull



Product information

The Lift&Slide turn handle generation DIRIGENT 4.0 adapts to the design of our DIRIGENT door handle hardware and, with a large distance between the handle and PC cover, offers users outstanding operating comfort.

- High-quality aluminium turn handle, interior, without PC hole-type
- Exterior flush pull
- Version with 10 mm fixed square with concealed fixing
- Distance between screw centres 80 mm
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Fixed backplate with friction washer
- Concealed screw connection
- Handle length 240 mm
- Handle height 78 mm



DIRIGENT 4.0 – interior L&S turn handle without PC hole-type

with exterior flush pull



L&S turn handles

| Versions/Order numbers | | | | | | | | |
|---|-------------------------|--------|-----------|----------------|----------|-----------------|----|-----------------|
| Designation | For sash thickness [mm] | Detent | Material | Specifications | Lockable | Finish | PU | Order no. |
| DIRIGENT 4.0 interior L&S turn handle without PC hole | 68–78 ^[1] | 180° | aluminium | with lugs | no | EV1 silver | 1 | K-19844-50-0-1 |
| | | | | | | brown | 1 | K-19844-50-0-5 |
| | | | | | | black | 1 | K-19844-50-0-6 |
| | | | | | | white | 1 | K-19844-50-0-7 |
| | | | | | | cream white | 1 | K-19844-50-0-7V |
| | | | | | | titanium colour | 1 | K-19844-50-0-CL |
| | 88–92 ^[1] | 180° | aluminium | with lugs | no | EV1 silver | 1 | K-19844-60-0-1 |
| | | | | | | brown | 1 | K-19844-60-0-5 |
| | | | | | | black | 1 | K-19844-60-0-6 |
| | | | | | | white | 1 | K-19844-60-0-7 |
| | | | | | | cream white | 1 | K-19844-60-0-7V |
| | | | | | | titanium colour | 1 | K-19844-60-0-CL |

[1] May vary, depending on the material type and handle height

| Contents (K-19844-50) | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior L&S turn handle without PC hole-type | 1 |
| L&S flush pull | 1 |
| Fixed spindle square, with 50 mm projection (for sash thickness 68–78 mm) | 1 |

| Contents (K-19844-60) | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior L&S turn handle without PC hole-type | 1 |
| L&S flush pull | 1 |
| Fixed spindle square, with 60 mm projection (for sash thickness 88–92 mm) | 1 |

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Fixing screws

| Versions/Order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order number |
| M6 fixing screws | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

DIRIGENT 4.0 – interior L&S turn handle without PC hole-type

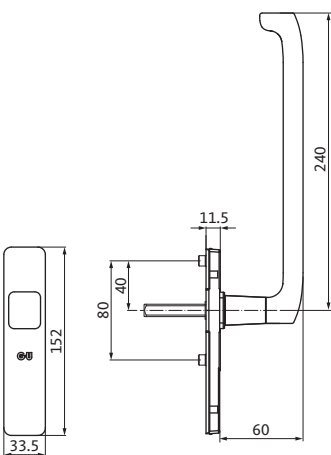
without flush pull



Product information

The Lift&Slide turn handle generation DIRIGENT 4.0 adapts to the design of our DIRIGENT door handle hardware and, with a large distance between the handle and PC cover, offers users outstanding operating comfort.

- High-quality stainless steel turn handle, interior, without PC hole
- Version with 10 mm fixed square with concealed fixing
- Distance between screw centres 80 mm
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Fixed backplate with friction washer
- Concealed screw connection
- Handle length 240 mm
- Handle height 78 mm



DIRIGENT 4.0 – interior L&S turn handle without PC hole-type

without flush pull



L&S turn handles

| Versions/Order numbers | | | | | | | | |
|---|-------------------------|--------|-----------------|----------------|----------|--|----|----------------|
| Designation | For sash thickness [mm] | Detent | Material | Specifications | Lockable | | PU | Order no. |
| DIRIGENT 4.0 interior L&S turn handle without PC hole | 68–78 ^[1] | 180° | stainless steel | with lugs | no | | 1 | K-19846-50-0-8 |

[1] May vary, depending on the material type and handle height

| Contents | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior L&S turn handle without PC hole-type | 1 |
| Fixed spindle square, with 50 mm projection (for sash thickness 68–78 mm) | 1 |

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Fixing screws

| Versions/Order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order number |
| M6 fixing screws | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

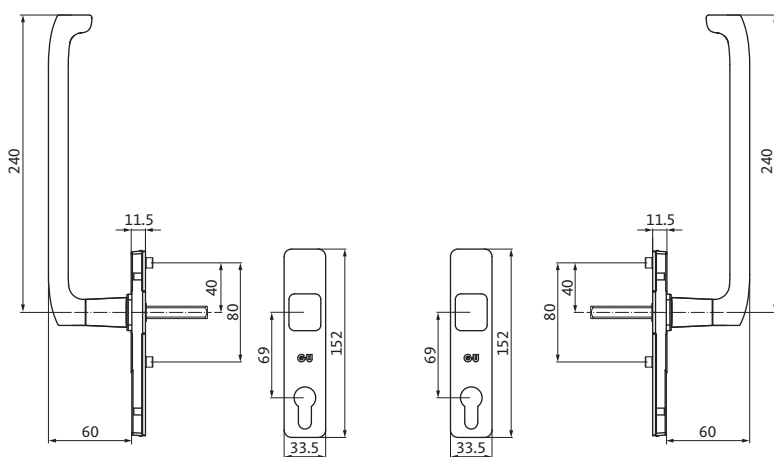
DIRIGENT 4.0 – interior/exterior L&S turn handle set with PC hole



Product information

The Lift&Slide turn handle generation DIRIGENT 4.0 adapts to the design of our DIRIGENT door handle hardware and, with a large distance between the handle and PC cover, offers users outstanding operating comfort.

- High-quality aluminium turn handles, interior and exterior, with PC hole
- Version with 10 mm fixed square with concealed fixing
- Distance between screw centres 80 mm
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Fixed backplate with friction washer
- Concealed screw connection
- Handle length 240 mm
- Handle height 78 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



L&S turn handles

| Versions/Order numbers | | | | | | | | |
|---|-------------------------|--------|-----------|----------------|----------|-----------------|----|-----------------|
| Designation | For sash thickness [mm] | Detent | Material | Specifications | Lockable | Finish | PU | Order number |
| DIRIGENT 4.0 interior/exterior L&S turn handle with PC hole | 68–92 ^[1] | 180° | aluminium | with lugs | yes | EV1 silver | 1 | K-20217-C0-0-1 |
| | | | | | | brown | 1 | K-20217-C0-0-5 |
| | | | | | | black | 1 | K-20217-C0-0-6 |
| | | | | | | white | 1 | K-20217-C0-0-7 |
| | | | | | | cream white | 1 | K-20217-C0-0-7V |
| | | | | | | titanium colour | 1 | K-20217-C0-0-CL |

[1] May vary, depending on the material type and handle height

| Contents | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior/exterior L&S turn handle set with PC hole | 1 |
| Fixed square spindle (for sash thickness 68-92 mm) | 1 |

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Fixing screws

| Versions/Order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order number |
| M6 fixing screws | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |
| | 90 | 95 | 9-13274-95-R-1 |
| | 92 | 100 | 9-13274-97-R-3 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

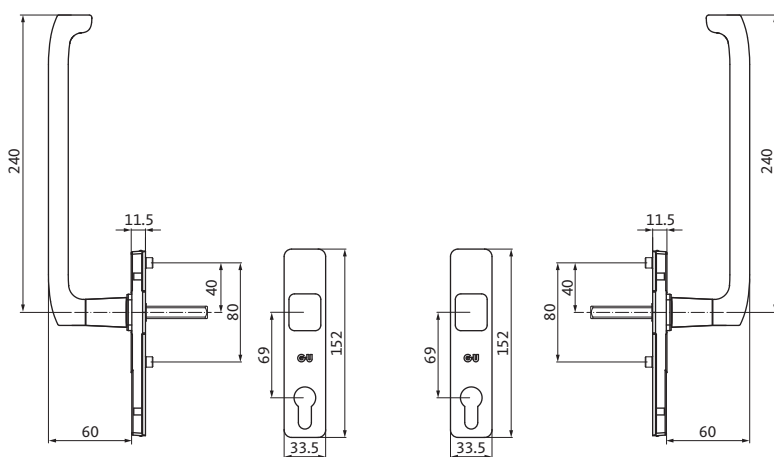
DIRIGENT 4.0 – interior/exterior L&S turn handle set with PC hole



Product information

The Lift&Slide turn handle generation DIRIGENT 4.0 adapts to the design of our DIRIGENT door handle hardware and, with a large distance between the handle and PC cover, offers users outstanding operating comfort.

- High-quality stainless steel turn handles, interior and exterior, with PC hole
- Version with 10 mm fixed square with concealed fixing
- Distance between screw centres 80 mm
- Suitable for use with all customary timber, PVC or aluminium Lift&Slide profile systems for up to 400 kg sash weight
- Fixed backplate with friction washer
- Concealed screw connection
- Handle length 240 mm
- Handle height 78 mm
- **Note:** We recommend the use of a buffer – see pages 220 and 221



L&S turn handles

| Versions/Order numbers | | | | | | | | |
|---|-------------------------|--------|-----------------|----------------|----------|--|----|----------------|
| Designation | For sash thickness [mm] | Detent | Material | Specifications | Lockable | | PU | Order number |
| DIRIGENT 4.0 interior/exterior L&S turn handle with PC hole | 68–88 ^[1] | 180° | stainless steel | with lugs | yes | | 1 | K-19847-C0-0-8 |

[1] May vary, depending on the material type and handle height

| Contents | Piece(s) |
|---|----------|
| DIRIGENT 4.0 interior/exterior L&S turn handle set with PC hole | 1 |
| Fixed square spindle (for sash thickness 68-88 mm) | 1 |

Note about fixing screws: The fixing screws must be ordered separately depending on the sash thickness.

Fixing screws

| Versions/Order numbers | | | |
|------------------------|---------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order number |
| M6 fixing screws | 68 | 75 | 9-13274-75-0-1 |
| | 78 | 85 | 9-13274-85-0-1 |
| | 88 | 95 | 9-13274-95-R-1 |

Drilling jigs

| Versions/order numbers | | |
|---|----|----------------|
| Drilling jigs | PU | Order no. |
| Drilling jig for the installation of turn handles – timber profiles | 1 | 6-35524-00-0-1 |
| Drilling jig for the installation of turn handles – PVC profiles | 1 | 9-27272-00-0-1 |
| Drilling jig for the installation of turn handles – aluminium profiles with Euro-groove | 1 | 9-27272-01-0-1 |

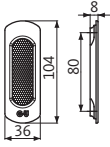
Accessories

L&S flush pull, round



Product information

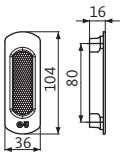
- High-quality flush pull made of stainless steel
- Distance between screw centres 80 mm
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



L&S flush pull, stainless steel

| Designation | GU logo | Overall depth | Specifications | Finish | PU | Order no. |
|-----------------------|---------|---------------|------------------|------------------|----|----------------|
| L&S flush pull, round | yes | 6 mm | without lugs | silver/EV 1 look | 1 | 9-46686-00-0-1 |
| | | | | dark brown [1] | 1 | 9-46686-00-0-5 |
| | | | | white, RAL 9016 | 1 | 9-46686-00-0-7 |
| | | | | stainless steel | 1 | 9-46686-00-0-8 |
| L&S flush pull, round | yes | 6 + 3 mm | with lugs (3 mm) | stainless steel | 1 | 9-46686-01-0-8 |

[1] Similar to RAL 8022



L&S flush pull, stainless steel

| Designation | GU logo | Overall depth | Specifications | Finish | PU | Order no. |
|-----------------------|---------|---------------|----------------|-----------------|----|----------------|
| L&S flush pull, round | yes | 14 mm | without lugs | stainless steel | 1 | 9-39035-01-0-8 |
| L&S flush pull, round | no | 14 mm | without lugs | stainless steel | 1 | 9-39035-02-0-8 |

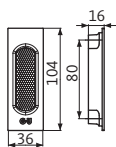
Accessories

L&S flush pull, square



Product information

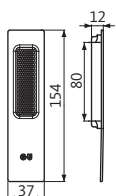
- High-quality flush pull made of stainless steel, aluminium or brass
- Distance between screw centres 80 mm
- Suitable for use with all customary Lift&Slide profile systems for up to 400 kg sash weight
- Durability test with 25 000 cycles in compliance with DIN 13126 part 16



L&S flush pull, stainless steel

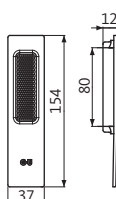
| Designation | GU logo | Overall depth | Specifications | Finish | PU | Order no. |
|---------------------------|---------|---------------|----------------|------------------|----|----------------|
| L&S flush pull, square | yes | 14 mm | without lugs | stainless steel | 1 | 9-42539-01-0-8 |
| L&S flush pull, square | no | 14 mm | without lugs | stainless steel | 1 | 9-42539-02-0-8 |
| Sec L&S flush pull square | no | 12 mm | without lugs | silver/EV 1 look | 1 | 9-29622-00-0-1 |
| | | | | dark brown [1] | 1 | 9-29622-00-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29622-00-0-7 |
| | | | | stainless steel | 1 | 9-29622-00-0-8 |

[1] Similar to RAL 8022



L&S flush pull, stainless steel

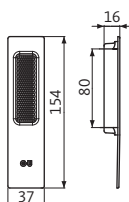
| Designation | GU logo | Overall depth | Specifications | Finish | PU | Order no. |
|------------------------|---------|---------------|----------------|-----------------|----|----------------|
| L&S flush pull, square | yes | 10 mm | without lugs | stainless steel | 1 | 9-42737-01-0-8 |
| L&S flush pull, square | no | 10 mm | without lugs | stainless steel | 1 | 9-42737-00-0-8 |



L&S flush pull, aluminium

| Designation | GU logo | Overall depth | Specifications | Finish | PU | Order no. |
|---------------------------|---------|---------------|----------------|------------------|----|----------------|
| L&S flush pull MS, square | yes | 10 mm | without lugs | silver/EV 1 look | 1 | 9-29992-02-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-02-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-02-0-7 |
| L&S flush pull MS, square | yes | 10 mm | without lugs | silver/EV 1 look | 1 | 9-29992-01-0-1 |
| | | | | dark brown [1] | 1 | 9-29992-01-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29992-01-0-7 |
| L&S flush pull, square | yes | 14 mm | without lugs | silver/EV 1 look | 1 | 9-29526-00-0-1 |
| | | | | dark brown [1] | 1 | 9-29526-00-0-5 |
| | | | | white, RAL 9016 | 1 | 9-29526-00-0-7 |

[1] Similar to RAL 8022



L&S flush pull, brass

| Designation | GU logo | Overall depth | Specifications | Finish | PU | Order no. |
|---------------------------|---------|---------------|----------------|--------|----|----------------|
| L&S flush pull MS, square | yes | 14 mm | without lugs | brass | 1 | 9-34957-00-0-B |

Accessories

Service handle, cover rosette



DIRIGENT service handle

Versions/order numbers

| Designation | Finish | PU | Order no. |
|---|------------------|----|----------------|
| DIRIGENT service handle Handle length 240 mm | silver/EV 1 look | 1 | 6-24619-00-0-1 |
| | dark brown [1] | 1 | 6-24619-00-0-5 |
| | white, RAL 9016 | 1 | 6-24619-00-0-7 |

[1] Similar to RAL 8022



Interior cover rosette

without PC hole

Versions/order numbers

| Designation | Finish | PU | Order no. |
|---|------------------|----|----------------|
| Interior cover rosette without PC hole | silver/EV 1 look | 1 | 6-23243-01-0-1 |
| | dark brown [1] | 1 | 6-23243-01-0-5 |
| | white, RAL 9016 | 1 | 6-23243-01-0-7 |

[1] Similar to RAL 8022



Interior cover rosette

with PC hole

Versions/order numbers

| Designation | Finish | PU | Order no. |
|--|------------------|----|----------------|
| Interior cover rosette with PC hole | silver/EV 1 look | 1 | 6-23243-02-0-1 |
| | dark brown [1] | 1 | 6-23243-02-0-5 |
| | white, RAL 9016 | 1 | 6-23243-02-0-7 |

[1] Similar to RAL 8022



Exterior cover rosette

Versions/order numbers

| Designation | Finish | PU | Order no. |
|------------------------|------------------|----|----------------|
| Exterior cover rosette | silver/EV 1 look | 1 | 9-29527-00-0-1 |
| | dark brown [1] | 1 | 9-29527-00-0-5 |
| | white, RAL 9016 | 1 | 9-29527-00-0-7 |

[1] Similar to RAL 8022



Set of cover discs

Versions/order numbers

| Designation | Finish | PU | Order no. |
|--------------------|----------------------------|----|----------------|
| Set of cover discs | silver/EV 1 look | 1 | K-17481-00-0-1 |
| | dark brown [1] | 1 | K-17841-00-0-5 |
| | black | 1 | K-17841-00-0-6 |
| | white, RAL 9016 | 1 | K-17841-00-0-7 |
| | stainless steel appearance | 1 | K-17841-00-0-8 |

Contains: 1 x cover disc, 1 x bushing, fixing screws

[1] Similar to RAL 8022

Accessories

Gasket plates



Gasket plate for exterior and interior turn handle

The optional gasket plate which is universally applicable for all handle models provides increased tightness, especially in Blower Door Tests. The profile cylinder insert is removable so the gasket ensures optimal sealing for all handle variants.

Versions/order numbers

| Designation | Finish | PU | Order no. |
|------------------------------|--------|----|----------------|
| Gasket plate for turn handle | black | 1 | 9-47210-01-0-6 |



Gasket plate for flush pull

The optional gasket plate which is universally applicable for all flush pulls provides increased tightness, especially in Blower Door Tests. The adaptable gasket plate ensures optimal sealing for all flush pull models.

Versions/order numbers

| Designation | Finish | PU | Order no. |
|-----------------------------|--------|----|----------------|
| Gasket plate for flush pull | black | 1 | 9-47211-01-0-6 |



Square spindles

The length of the optional square spindles must be determined depending on the follower square size of the lock case. Wrongly dimensioned or short square spindles are not permissible as they cause damage to the window gear and the turn handle.

| Versions/order numbers | | | | | |
|------------------------|---------|---|----------------|-----------------------------------|----------------|
| Designation | ST [mm] | Interior turn handle / exterior flush pull / exterior cover rosette | | Interior/exterior turn handle set | |
| | | Length [mm] | Order no. | Length [mm] | Order no. |
| Square spindle 10 mm | 56 | 80 | 9-24377-40-0-1 | 145 | 9-24377-96-0-1 |
| | 68 | 80 | 9-24377-40-0-1 | 145 | 9-24377-96-0-1 |
| | 78 | 80 | 9-24377-40-0-1 | 145 | 9-24377-96-0-1 |
| | 88 | 90 | 9-24377-50-0-1 | 145 | 9-24377-96-0-1 |
| | 90 | 90 | 9-24377-50-0-1 | 145 | 9-24377-96-0-1 |
| | 92 | 90 | 9-24377-50-0-1 | 150 | 9-24377-15-0-1 |
| | 110 | 100 | 9-24377-60-0-1 | 170 | 9-24377-18-0-1 |

| Versions/order numbers | | | |
|------------------------|----------|-------------|----------------|
| Designation | ST [mm] | Length [mm] | Order no. |
| Square spindle 8 mm | up to 88 | 90 | 9-30482-90-0-1 |
| | > 88 | 135 | 9-30482-95-0-1 |
| | > 88 | 150 | 9-30482-96-0-1 |



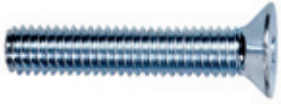
Spindle sleeve

to convert a 8 mm square size spindle to 10 mm

| Versions/order numbers | | |
|------------------------|----|----------------|
| Designation | PU | Order no. |
| Spindle sleeve | 1 | 9-43986-00-0-1 |

Accessories

Fixing screws



Fixing screws

The approved Lift&Slide handles must be screwed into the mounting thread of the gear lock case using 2 metric screws M6 x length. Make sure that the full length of the threads is used. Fastening the handles on the sash using screws for timber constructions is not permitted.

Versions/order numbers

| Designation | ST [mm] | Interior turn handle / exterior flush pull / exterior cover rosette | | Interior/exterior turn handle set | |
|--------------------|------------|---|----------------|--------------------------------------|----------------|
| | | Length [mm] | Order no. | Length [mm] | Order no. |
| Fixing screw M6 | 56 | 65 | 9-13274-65-0-1 | 70 | 9-13274-70-0-1 |
| | 68 | 75 | 9-13274-75-0-1 | 80 | 9-13274-80-0-1 |
| | 78 | 85 | 9-13274-85-0-1 | 90 | 9-13274-90-0-1 |
| | 88 | 95 | 9-13274-95-R-1 | 100 | 9-13274-97-R-3 |
| | 90 | 95 | 9-13274-95-R-1 | 100 | 9-13274-97-R-3 |
| | 92 | 100 | 9-13274-97-R-3 | 100 | 9-13274-97-R-3 |
| | 110 | 110 | 9-13274-98-R-3 | 125 | 9-13274-96-R-1 |







Lift&Slide hardware

Product information

366

L&S bogie, Lift&Slide gears

Installation dimensions, drilling dimensions, milling dimensions

367

L&S turn handles and flush pulls

Materials and finishes

368

Drilling-hole patterns and dimensions

369

List of abbreviations

Overview

370

Lift&Slide hardware

Product information



Applications

With Lift&Slide hardware from Gretsch-Unitas, it is possible to produce Lift&Slide elements as

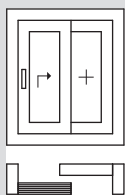
- Lift&Slide doors in 2- to 6-part versions and
- Lift&Slide windows in 2- to 6-part versions

Sash configuration according to patterns A to L

The patterns to be implemented are system-dependent.

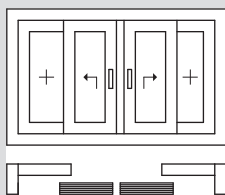
In Chapter 1.0 | System overviews for aluminium Lift&Slide elements, you will find the respective, possible patterns for all the systems.

Sash configurations



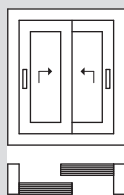
Pattern A

1 Lift&Slide door
1 Fixed-glazed sash
Fig.: sliding direction to the right



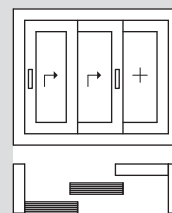
Pattern C

2 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left



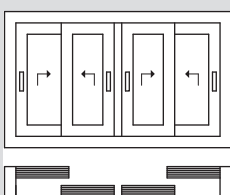
Pattern D

2 Lift&Slide doors
Fig.: sliding direction to the right and left



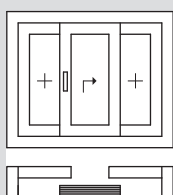
Pattern E

2 Lift&Slide doors
1 Fixed-glazed sash
Fig.: sliding direction to the right



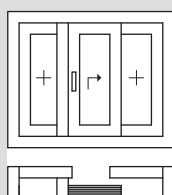
Pattern F

4 Lift&Slide doors
Fig.: sliding direction to the right and left



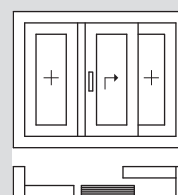
Pattern G1 symmetrical

1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right



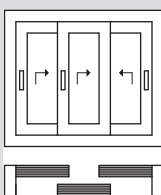
Pattern G2 asymmetrical

With fixed mullion
1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right



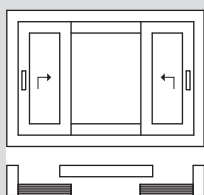
Pattern G3 symmetrical

1 Lift&Slide door
2 Fixed-glazed sashes
Fig.: sliding direction to the right



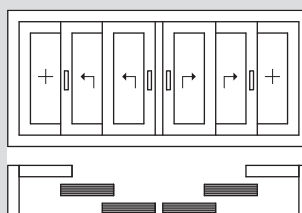
Pattern H

3 Lift&Slide doors
Fig.: sliding direction to the right and left



Pattern K

2 Lift&Slide doors
1 Fixed-glazed sash
Fig.: sliding direction to the right and left

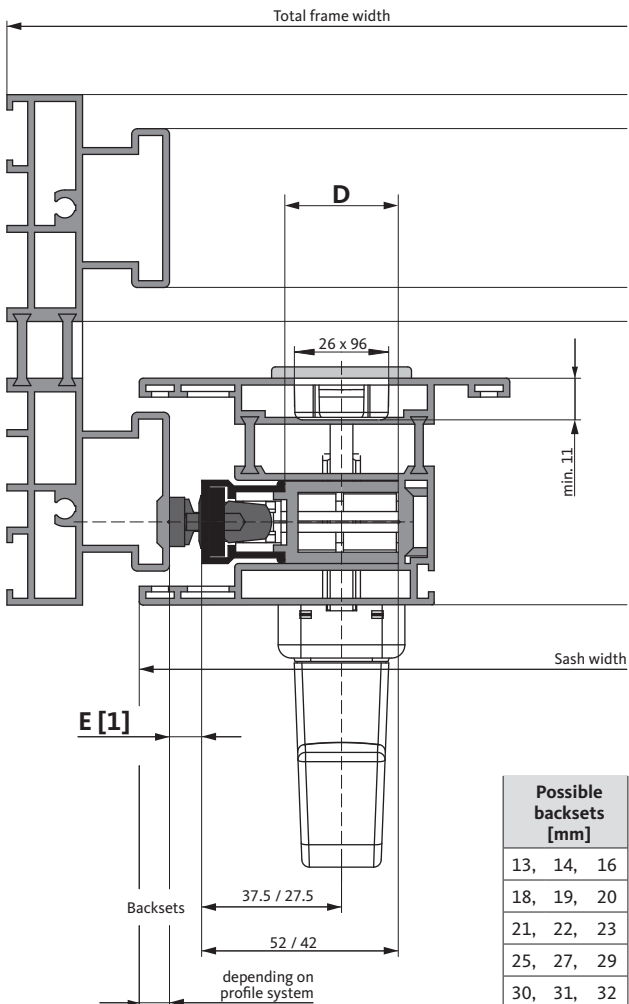


Pattern L

4 Lift&Slide doors
2 Fixed-glazed sashes
Fig.: sliding direction to the right and left

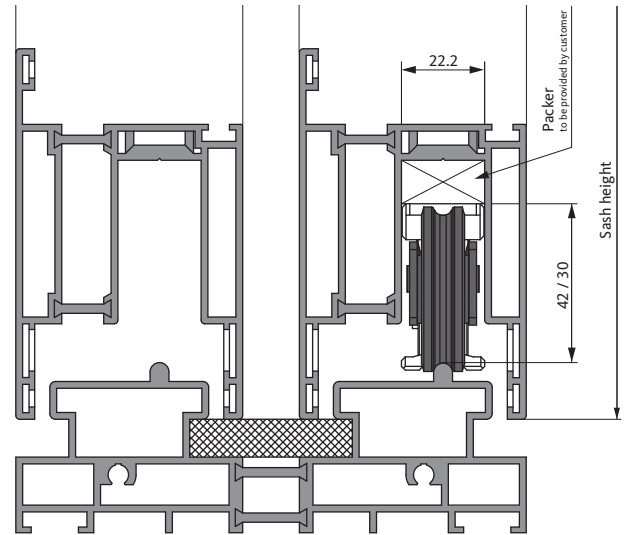
L&S bogie, Lift&Slide gears

Installation dimensions, drilling dimensions, milling dimensions



Lift&Slide gears

| Possible backsets [mm] |
|------------------------|
| 13, 14, 16 |
| 18, 19, 20 |
| 21, 22, 23 |
| 25, 27, 29 |
| 30, 31, 32 |
| 34, 35, 40 |

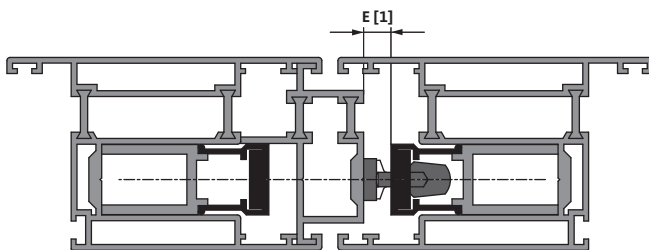


L&S bogie GU-934 / GU-937

Installation heights

GU-934 = 42 mm

GU-937 = 30 mm



Sash locking at the meeting stile with pattern C and F

[1] Details of Dimension E for specific profiles can be found in Chapter 2.0 "Individual parts overviews for Lift&Slide hardware" on pages 216 and 217.

L&S turn handles

Materials and finishes



RONDO series



BELCANTO series



DIRIGENT series



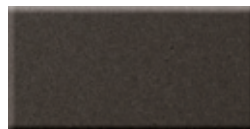
Silver / EV 1 look

With its cool, slightly reflective finish, the silver/EV 1 look offers the perfect complement to modern interiors. The robust finish is also impressive owing to its high impact- and scratch-resistance.



Solid brass

One of the outstanding versions of Lift&Slide turn handles is the brass cast made of solid metal. This important hardware is characterized in long-term use by its excellent corrosion resistance and its extremely low maintenance requirements.



**Dark brown (similar to RAL 8022)
White (RAL 9016)**

Gretsch-Unitas creates ideally resistant surfaces – even in various different RAL colour shades – through product-specific coating procedures, which are characterized by a high-quality appearance and a particularly long service life.



Satin stainless steel

The satin stainless steel finish is particularly durable, which makes it an ideal alternative to other surface finishes.

Finish: 9 – more finishes available on request

Our turn handles are also available in various special colours on request. Individual design solutions and colour concepts can therefore be realised harmoniously throughout the entire building thanks to the expertise of Gretsch-Unitas.

Variety of profile cylinders

Delivery can be completed with compatible profile cylinders from the BKS locking cylinder range. Swiss round cylinders (CH-RC hole-type) round off the range.

L&S turn handles and L&S flush pulls

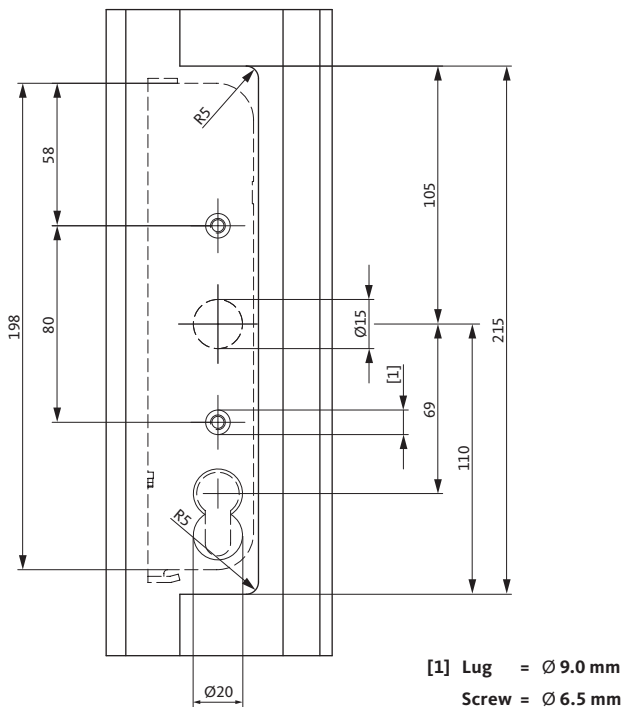
Drilling dimensions, milling dimensions



The turn handles and flush pulls for Lift&Slide elements are available in various materials and finishes. The turn handle range is rounded off with turn handles for actuation on both sides and variants with a CH-RC hole-type, as well as special versions.

Choose the right solution for you from our RONDO, BELCANTO and DIRIGENT series.

Drilling and milling dimensions for installation in the sash



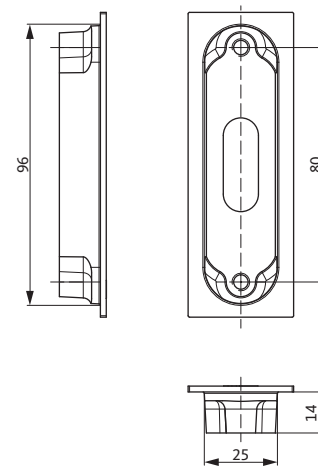
Drilling-hole pattern for turn handle

Drilling jig

The corresponding drilling jig can be found in Chapter 3.0 Drilling jigs and auxiliary tools on page 229.

Drilling and milling pattern for flush pull

The milling depth depends on the overall depth of the flush pull. Depending on the version, the milling depth varies between 6 and 14 mm.



List of abbreviations



| List of abbreviations | |
|-----------------------|-------------------------|
| CH-RC | Swiss round cylinder |
| FGSW | Fixed-glazed sash width |
| FW | Frame profile width |
| HD | Handle distance |
| IFW | Interior frame width |
| LD | Length of drive case |
| PC | Profile cylinder |
| PU | Packing unit |
| RT | Roller track |
| SD | Sash distance |
| SH | Sash height |
| ST | Sash thickness |
| SW | Sash weight |
| SW | Sash width |
| TFH | Total frame height |
| TFW | Total frame width |
| WR | Width of reveal |





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