

UNIVERSAL

UNIVERSAL ... as the name says

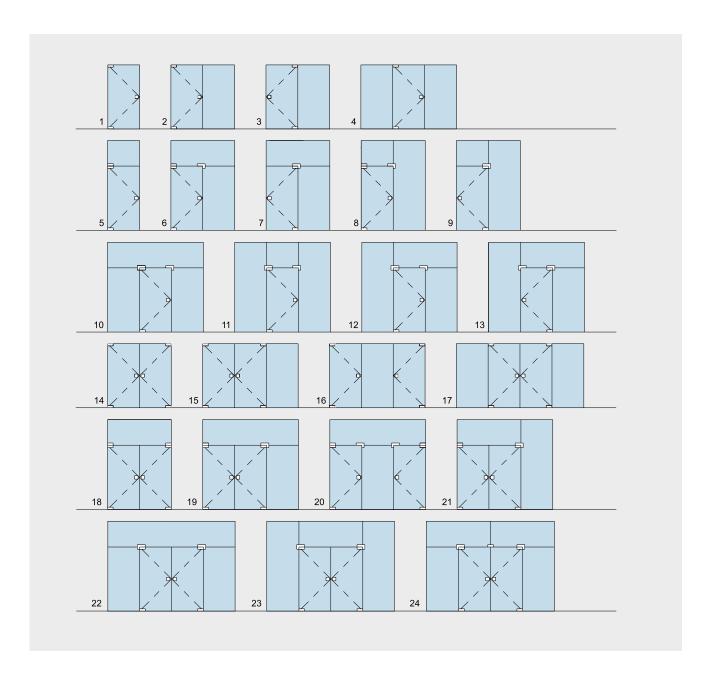
With its broad spectrum of basic types and variants, the UNIVERSAL range of patch fittings enables the realisation in toughened glass of almost any conceivable design. Toughened glass assemblies can be provided with fixed parts in widely differing arrangements – with corner fittings or fin fittings at different angles, and with double or single-action doors in single-leaf or double-leaf designs.

Easy glass preparation, secure fixing

DORMA-Glas has an intimate knowledge of the special properties of glass as a building material. This has led to the design of fittings requiring only minimal glass preparation – a quick and easy cut-out with additional holes. Carefully considered and positive measures have been taken to create the maximum clamping surface with optimum clamping efficiency.

Suitable for common glass thicknesses

UNIVERSAL fittings are supplied as standard with gasket to suit 10 mm glass (TSG). For 8 mm and 12 mm glass, correspondingly thicker and thinner gasket is available. Some patches are even designed to fit directly with different glass thicknesses.



Variable pivot point

The inserts for corner and overpanel patches in the UNIVERSAL program have been designed and manufactured to give two options in the pivot point distance from the sidepanel or frame. It can be either 55 mm or 65 mm. At 65 mm pivot point and the use of a special round profile (page 148) doors can be built with a constant air gap of only 4 mm. For information regarding patch fittings UNIVERSAL with 15 mm pivot point for pinch free doors see page 62 and following pages.

Reliability built in

Quality materials and thorough workmanship mean that UNIVERSAL fittings have the features necessary to meet the most demanding of specifications. The fittings are designed to cope with large and heavy doors up to a maximum weight of 110 kgs: for instance, a door blade 3,000 mm high by 1,100 mm wide, using 12 mm glass is quite possible. Please contact our Application Engineering department for more information. For heavier and wider doors up to a maximum of 150 kg and max. 1,400 mm and for high frequented doors, rails with reinforced straps are available.

Matching range of locks

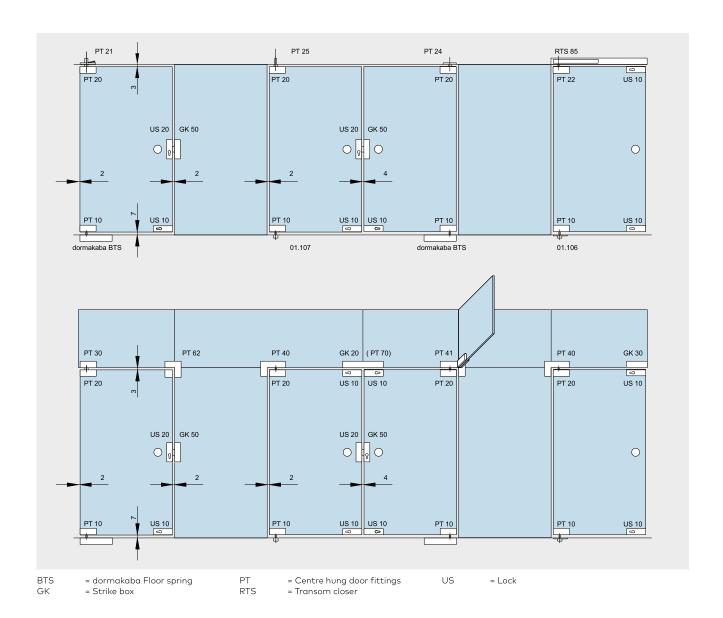
The UNIVERSAL range includes every type of accessory, and of course, a variety of locks and strike boxes in a matching design concept, giving the designer plenty of choice from the options available.

Short delivery times

All the common patterns and types are available exstock (factory). Specials will be prepared promptly.

Type section

Toughened glass assemblies with fittings (55/65 mm pivot point) and locks.
All standard assembly types see page 42.



Maximum door weight and width for UNIVERSAL fittings

max. door weight: 110 kg* max. door width: 1,100 mm** For doors with higher frequency and in public areas we would advice to use a door rail for doors above 110 kg and door width larger than 1,100 mm. For door weights up to 150 kg and widths up to 1,400 mm door rails should be used.

* For door heights up to 2,500 mm

For doors with a height of more than 2,500 mm we have to keep additional conditions/limits:

- Glass thickness >/= 10 mm
- + Usage of a handle bar with 3 connection points in minimum and a minimum height of 1/2 door height

** Use of door closers:

Doors < / = 1,100 mm must be provided with door closers of type EN 3 (with or without backcheck), and doors > / = 1,100 mm need to be fitted with larger door closers (e.g. EN 4, 5 or 6) without backcheck.

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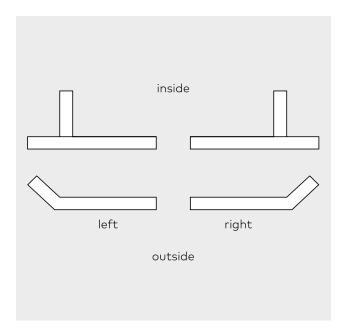
44

Torque for fixing screws

Screws M 6: 10 Nm (4 mm)* Screws M 6: 15 Nm (5 mm)* Screws M 8: 20 Nm (5 mm)* *Allan key size

Please note If angle fittings or fin fittings are used:

"Left" or "Right" have to be determined in any case by view from outside and above.



UNIVERSAL Motion – the self-closing patch fitting

A patch fitting with hydraulic self-closing function is not just convenient but also efficient: The hydraulic technology proves its advantage without requiring a power supply and any visible mechanism. UNIVERSAL Motion is like a reliable employee with intrinsic values: the space-saving technology is integrated in the compact bottom patch fitting and does not require any additional installation space.

Eight reasons for the one.

- **Completely smart.** In UNIVERSAL Motion, the door closing function is integrated in a compact, well-shaped unit. A subtly functional design.
- Almost invisible. What looks like a patch fitting manages the closing of doors by itself. An additional floor spring is not required.
- **Clear savings.** Less effort and cost-efficient. You need only two fittings for the self-closing swing door: UNIVERSAL Motion and PT 20.
- **Comfortable function.** The door closes softly by itself. The hydraulic door movement is achieved simply in the fitting without extra installation, without power supply.
- **Simple installation.** UNIVERSAL Motion consists of very few parts. The glass door is clamped in the fitting. No prior changes to the floor are required.
- For the existing building. Retrofitting is clearly simpler than before. The floor need not be sawn nor milled beforehand.
- **Simple positioning.** The material and composition of the floor are not critical factors. You need to place only four vertical bores for the bottom pivot bearing.
- Individual colour design. Based on the stainless steel surface and using our own powder coating facility, the DORMA-Glas colour palette creates systematic diversity. The colour spectrum corresponds to the standard UNIVERSAL fittings. Individual colour design according to RAL is also possible. Simply matching the contemporary interior.



Technical features:

Glass thickness: 10 + 12 mm ESG

Door width: von 650 mm bis 950 mm*

Door height: max. 3,000 mm
Door weight: max. 80 kg **Pivot point: 65 mm**

The screw depth in the bottom of the supplied screws for the floor pivot bearing is 30 mm.

Available in the surface variants stainless steel and the product variants with 90 degree hold-open (Tolerance window: +/- 3 degrees) and without hold-open.

UNIVERSAL Motion is intended for indoor use. The fitting is not suitable for outdoor applications and for doors in high-frequency areas / public buildings.

UNIVERSAL Motion is tested by DORMA-Glas according to DIN EN 1191:2013 for 200,000 test cycles.

Technical notes:

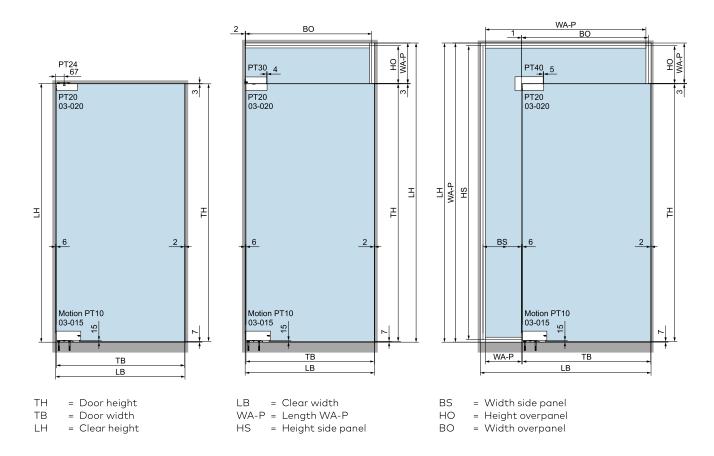
The 90-degree detection has a tolerance range of +/- 3 degrees due to the manufacturing process.

The self-closing function of the fitting takes place between 4 degrees and 70 degrees opening angle of the door.

Due to insufficient pressure equalisation within the rooms, the door can lose its zero position when closed, caused by pressure or suction loads. This is due to the environment or external influences and does not represent a product defect. All spring-supported and hydraulic closing devices are affected. The problem can only be mitigated or avoided by creating significantly larger and stronger floor springs (e.g. dormakaba BTS 80) can be used (depending on the wind loads).

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^{*} Door widths smaller than 700 mm can be realized from a product technical point of view. However, this is not recommended, as the opening forces to be applied then lie outside the DIN 12217 standard.



Note:

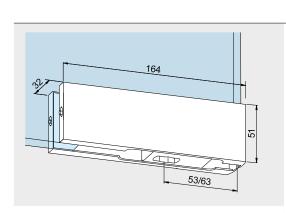
To extend the tolerance range, it is possible to increase the glass bore for the PT20 from \emptyset 20 to \emptyset 22.

Produktbeschreibung	Glasdicke	ArtNr.
UNIVERSAL Motion, lower corner fitting with hydraulic door closing function, including floor pivot bearing and fixing material with 90 degrees hold-open without hold-open Weight in kg: Satin stainless steel: 2.413	10 + 12 mm 10 + 12 mm	03.147 03.148

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Patch fittings UNIVERSAL

Shown with 10 mm glass. From 12 mm glass the measurements change accordingly.
Accessories see page 204 and following.



Product description Glass thickness Art. No. thickness *03.100

13 - 19 mm

03.280

PI 10 UNIVERSAL

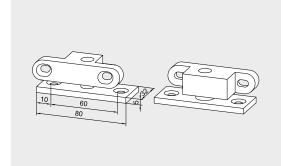
Bottom patch with insert for floor spring spindle, or round

with insert for floor spring spindle, or round pivot $14 \text{ mm } \varnothing$

With the order please indicate the exact glass thickness!

Weight in kg:

Aluminum 0.564 Brass 0.680 Stainless steel 0.662



Floor pivot bearing 10 mm 01.137

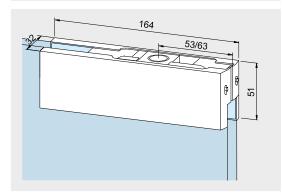
for damp environments, with insert for PT 10 UNIVERSAL (not suitable for MUNDUS PT10)

without floor recess,

max. door weight 80 kg

Weight in kg: 0.195

Only for UNIVERSAL applications, not suitable for MUNDUS.



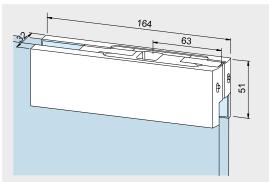
PT 20 UNIVERSAL 10 mm *03.110 Top patch 13 - 19 mm 03.281

with plastic socket for top pivot 15 mm \varnothing

With the order please indicate the exact glass thickness!

Weight in kg:

Aluminum 0.477 Brass 0.593 Stainless steel 0.575



PT 22 UNIVERSAL 10 mm **03.112**

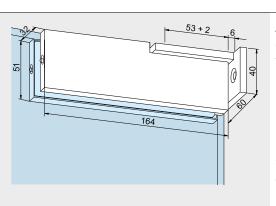
Top patch

with insert for RTS transom closer

Weight in kg:

Aluminum 0.578 Brass 0.695 Stainless steel 0.677

 $^{^{\}ast}$ Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness. These are available on page 212.



Product description	Glass thickness	Art. No.
PT 29 UNIVERSAL	10 mm	03.114

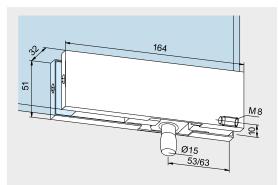
Top patch

with pivot fixing plate, to countersink into ceiling (pivot point = 55 mm)

max. door width: 1,000 mm max. door weight: 70 kg

Weight in kg:

Aluminum 0.544 Brass 0.692



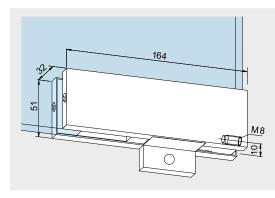
PT 30 UNIVERSAL 10 mm *03.120 13 **-** 19 mm Overpanel patch 03.282

with pivot 15 mm Ø, with M8 tapped hole at the side

With the order please indicate the exact glass thickness!

Weight in kg:

Aluminum 0.528 0.654 Brass Stainless steel 0.636



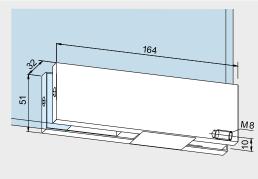
PT 30 UNIVERSAL 10 mm *03.420 Overpanel patch 13 - 19 mm 03.482

with stop insert

With the order please indicate the exact glass thickness!

Weight in kg:

Aluminum 0.528 Brass 0.654 Stainless steel 0.580



PT 30 UNIVERSAL 10 mm *03.421 Overpanel patch 13 - 19 mm 03.484 not illustrated with blank insert

With the order please indicate the exact glass thickness!

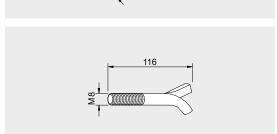
Weight in kg:

Aluminum 0.519 Brass 0.645 Stainless steel 0.571

^{*} Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness. These are available on page 212.

Product description Glass Art. No. thickness Fixing plate 03.128 for overpanel patch PT 30 UNIVERSAL Weight in kg: 0.016 Aluminum

Brass



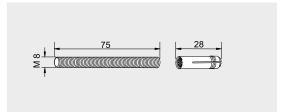
Wall anchor 01.133

with thread M 8 for overpanel patch PT 30

Stainless steel not available, satin chrome on brass supplied.

0.038

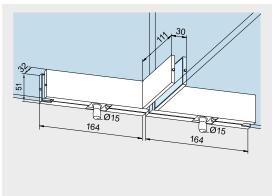
0.040 Weight in kg:



Threaded rod 01.134

M 8 with plug for overpanel patch PT 30

0.032 Weight in kg:



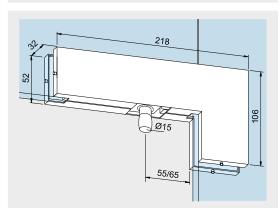
PT 51 UNIVERSAL 10 mm 03.160

Double overpanel fitting

with fin fitting on one side and 2 pins 15 mm diameter Usable for glass thicknesses up to 12 mm. If thicker glasses are required, please talk to our Application Engineering people.

Weight in kg:

Aluminum 1.299 Stainless steel 1.576



PT 40 UNIVERSAL 10 mm *03.140 Patch for overpanel and sidelight 13 - 19 mm 03.283 with pivot 15 mm \varnothing not illustrated

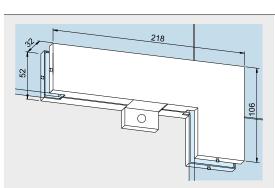
With the order please indicate the exact glass thickness!

Weight in kg:

Aluminum 0.755 Brass 0.958 0.937 Stainless steel

^{*} Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness. These are available on page 212.

not illustrated



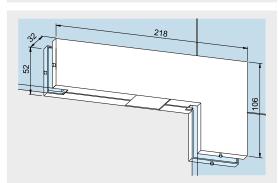
Product description	Glass thickness	Art. No.
PT 40 UNIVERSAL	10 mm	*03.440
Patch for overpanel and sidelight	13 - 19 mm	03.483

With the order please indicate the exact glass thickness!

Weight in kg:

with stop insert

Aluminum 0.755 0.958 Brass Stainless steel 0.937

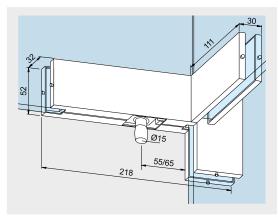


PT 40 UNIVERSAL 10 mm *03.441 Patch for overpanel and sidelight 13 - 19 mm 03.485 with blank insert not illustrated

With the order please indicate the exact glass thickness!

Weight in kg:

0.746 Aluminum Brass 0.949 Stainless steel 0.928



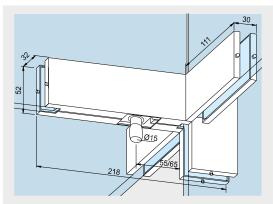
PT 41 UNIVERSAL 10 mm **03.162/ Patch for overpanel and sidelight 03.163

with fin fitting inside, with pivot 15 mm \varnothing

PT 41 UNIVERSAL 10 mm **03.262/ Patch for overpanels and sidelight 03.263 with stop insert not illustrated

Weight in kg:

0.952 Aluminum Stainless steel 1.197



PT 41 UNIVERSAL 10 mm 03.161

Patch for overpanels and sidelight with fin fitting on both sides,

with pivot 15 mm Ø

Weight in kg:

1.149 Aluminum Stainless steel 1.457

Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness. These are available on page 212.

^{**} Left hand fin (illustration shows left hand) / right hand fin. Left or right hand are determined by view from outside.

Ø15 55/65

Product description

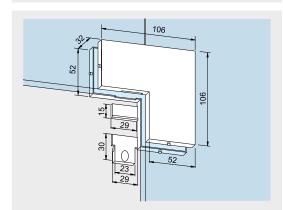
Glass thickness Art. No.

PT 42 UNIVERSAL

Overpanel patch for single action doors

with angled connector inside, pivot 15 mm, angle 90°

**03.164/ 03.165



PT 60/61 UNIVERSAL

10 mm 13 - 19 mm *03.150 03.452

03.173

Connector

for overpanel and sidelight, for double or single action doors with one stop insert and two blank inserts, also suitable for 12 mm glass thickness.

not illustrated

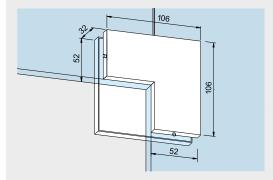
With the order please indicate the exact glass thickness!

0.343

Weight in kg:

Aluminum

0.461 Brass Stainless steel 0.436



PT 62 UNIVERSAL

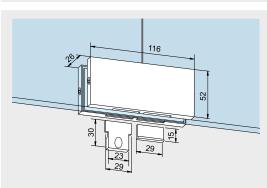
Connector

for overpanel and sidelight, with stop

Weight in kg:

Aluminum

0.475 Stainless steel 0.670



PT 70 UNIVERSAL Overpanel connector

*01.150 13 - 19 mm 01.158

with two stop inserts and two blank inserts, also suitable for 12 mm glass thickness

not illustrated

With the order please indicate the exact glass thickness!

Weight in kg:

Aluminum 0.272

0.335 Stainless steel

- $^{\star}~$ Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness.
- These are available on page 212.

 ** Left hand fin (illustration shows left hand) / right hand fin. Left or right hand are determined by view from outside.

Glass **Product description** Art. No. thickness

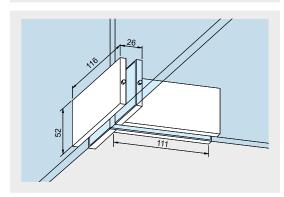
Overpanel-sidelight connector

12.536

Weight in kg:

Aluminum

0.146



PT 71 UNIVERSAL Overpanel connector

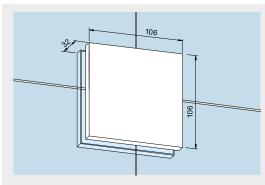
01.161

with fin fitting

Weight in kg: Aluminum

0.458

Stainless steel 803.0



PT 80 UNIVERSAL

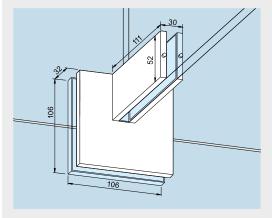
*03.170

Connector

With the order please indicate the exact 13 - 19 mm 03.472 glass thickness! not illustrated

Weight in kg:

Aluminum 0.555 0.780 Stainless steel



PT 81 UNIVERSAL Connector

03.175

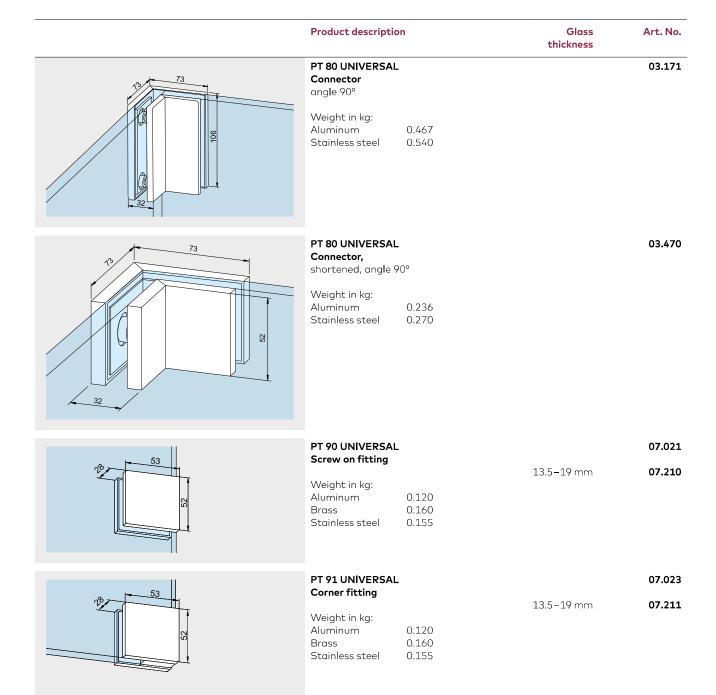
with fin fitting

Weight in kg:

Aluminum

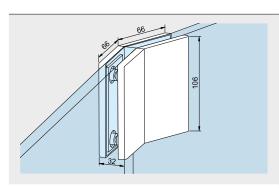
0.784 1.065 Stainless steel

^{*} Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness. These are available on page 212.



 $^{^{\}star}$ Suitable gaskets have to be used for systems with an 8 or 12 mm glass thickness. These are available on page 212.

UNIVERSAL Components



Product description Glass Art. No. thickness

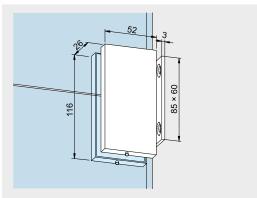
PT 80 UNIVERSAL Connector,

angle 135°

9

Weight in kg:

Aluminum 0.472 Stainless steel 0.541



Side connector 10, 12 mm **01.153**

with fixing plate

Also suitable for 8 mm glass thickness.

Weight in kg:

Aluminum 0.313 Stainless steel 0.376

Gasket 8 mm **01.900**

not illustrated

03.380

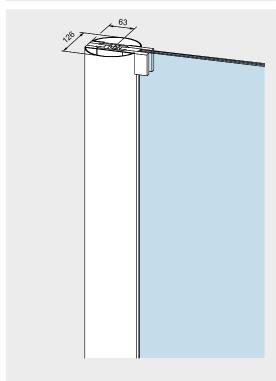
03.382

03.383

03.172

Please indicate glass thickness and Art. No. 12 mm **01.901**

of fitting.



Aluminum round profile

for pinch free doors with 65 mm pivot point, consisting of 2 halves, prepared for UNIVERSAL fittings or door

rails (76.5 mm or 100 mm).

Please indicate:

- Panel height (max. 2,500 mm, higher dimension on request)
- Required preparation of the profile for top and bottom fittings

Aluminum round profile, 03.381

as above, stock lenght 6,000 mm (unprepared)

Aluminum round profile,

as above,

stock lenght 3,000 mm (unprepared)

Aluminum round profile,

as above,

stock lenght 2,800 mm (unprepared)

Weight in kg/m:

Aluminum 4.744

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Locks, complete for 10 mm glass thickness

	Product description	Glass thickness	Art. No.
164	US 10 UNIVERSAL corner lock, prepared for Europrofile cylinder, single throw, bolt projection 20 mm, with security rosettes on both sides, 14 mm thick. Lock insert: • high corrosion resistance according to EN 1670, class 4 • with regard to type-test according to EN 12209:2003** With the order please indicate the exact	10 mm 13, 15, 19 mm	03.206 03.285
	glass thickness!		03.340
	prepared for round cylinder For half profile cylinder		03.340
	Left hand top/ right hand bottom		03.288
	Weight in kg: Aluminum 0.942 Brass 1.061 Stainless steel 1.053		03.287
	Lock keeper plate, stainless steel,		05.190
94	two parts, adjustable ± 5 mm Weight in kg: 0.048 Alternative (not illustrated): Floor sockets		05.192 05.193 05.194
	GK 30 UNIVERSAL		03.230
164 M8	Single overpanel strike box with threaded hole at side, to suit US 10 corner lock With the order please indicate the exact glass thickness! Weight in kg: Aluminum 0.418 Brass 0.555 Stainless steel 0.536 GK 30 UNIVERSAL with stop	13, 15, 19 mm	03.295 not illustrated *03.234/03.235
	Weight in kg:		not illustrated
	Aluminum 0.463 Stainless steel 0.597		

^{*} Left or right hand are determined by view from outside.
** Successful type testing according to EN 12209:2003 to 200,000 movement cycles.

164

Product description Glass Art. No. thickness

GK 20 UNIVERSAL

.....

Double overpanel

strike box to suit US 10 corner lock, consisting of two GK 30 with threaded connecting bolt

Weight in kg:

Aluminum 0.844 Brass 1.096 Stainless steel 0.948

GK 20 UNIVERSAL with stop

03.247

03.245

not illustrated

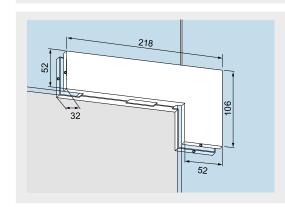
Weight in kg:

Aluminum 1.490 Brass 4.465

Weight in kg:

Aluminum 0.709 Brass 1.035 Stainless steel 1.010

Can be used for glass thickness of up to max. 12 mm. If you wish to use thicker glasses, please get in touch with our Application Engineering department beforehand.



GK 40 UNIVERSAL 03.250 Corner overpanel strike box

to suit US 10 corner lock

GK 40 UNIVERSAL with stop

*03.254/03.255

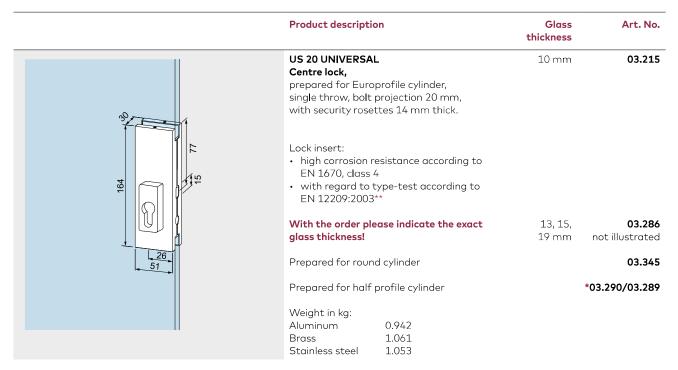
not illustrated

Weight in kg:

Aluminum 0.754 Brass 1.035 Stainless steel 1.010

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 $^{^{\}ast}$ Order of Art. No.: left hand fin / right hand fin – determined by view from outside. (Illustration shows left hand)

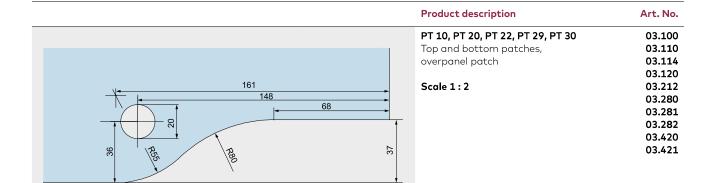


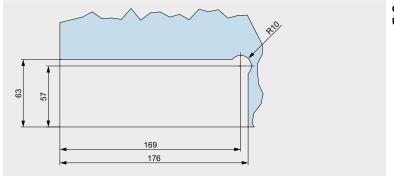
 $^{^{\}star}$ Left or right hand are determined by view from outside. (illustration shows left hand) ** Successful type testing according to EN 12209:2003 to 200,000 movement cycles.

	Product description	Glass thickness	Art. No.
39	GK 50 UNIVERSAL Strike box to suit US 20 centre lock	10 mm	03.224
51	With the order please indicate the exact glass thickness! Weight in kg: Aluminum 0.602 Brass 0.730 Stainless steel 0.727	13, 15, 19 mm	03.296

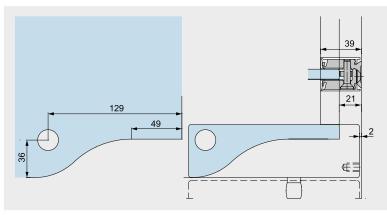
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Glass preparation fittings

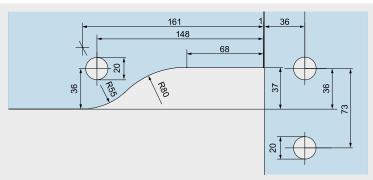




Glass preparation UNIVERSAL Motion



PT 30
Installation PT 30 with wall connection profile



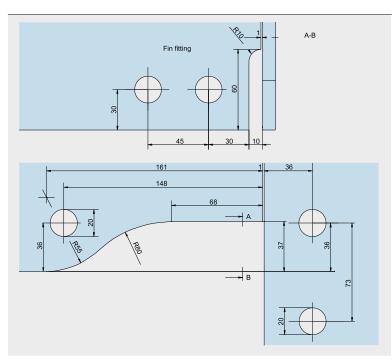
PT 40	03.140
Patch for overpanel and sidelight	03.283
	03.440
Scale 1:2	03.441

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Art. No.

03.162

03.163

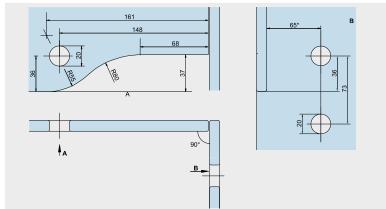


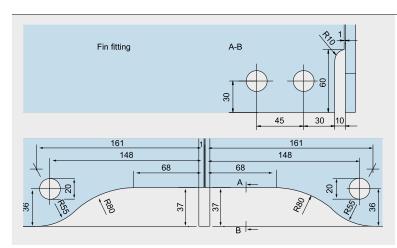
PT 41 Patch for overpanel and sidelight with fin fitting inside

Scale 1:2



Scale 1:2





Product description

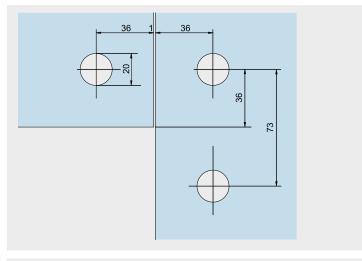
Art. No. 03.160

03.173

PT 51

Overpanel fin fitting for back to back doors

Scale 1:2.5



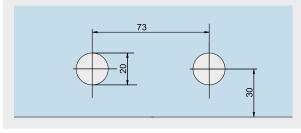
PT 60/61, PT 62 03.150

Winkelverbindung

Connectors for overpanels and sidelights

Scale 1:2

Glass preparation for fin **03.452** fitting both sides see PT 81



PT 70 01.150 Overpanel connector 01.158

Scale 1:2

73 30 Fin fitting А-В 30 39 45

Product description

Art. No.

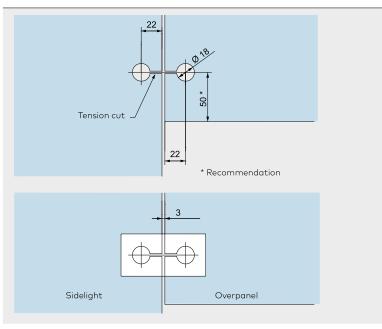
Overpanel connector with fin fitting

Scale 1:2

PT 71

12/20 63

01.161



Product description

Art. No.

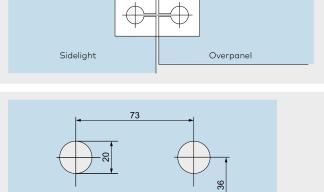
Overpanel-sidelight connector

12.536

Weight in kg:

Aluminum

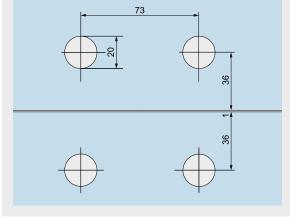
0.146

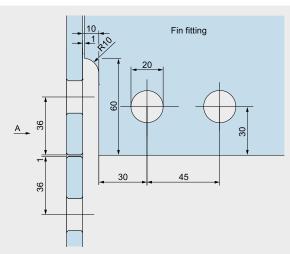


PT 80 Connector 03.170 03.472

03.175

Scale 1:2





PT 81

Connector with fin fitting

Scale 1:2

36 73 36

Product description

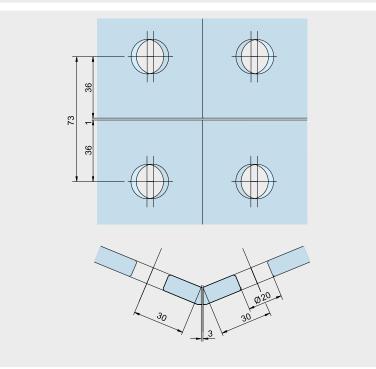
Art. No. 03.171

03.172

PT 80

Angled connector, 90°

Scale 1:2



PT 80 Angled connector, 135°

Scale 1:2

65

98 Laboratorial Properties of the control of the co

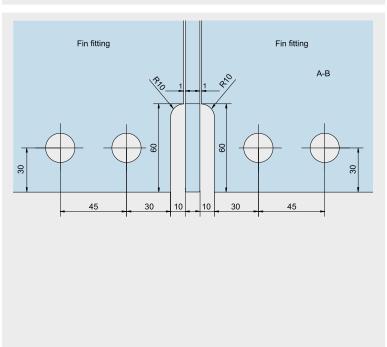
Product description

Art. No.

03.470

PT 80 shortened Angled connector, 90° shortened

Scale 1:2

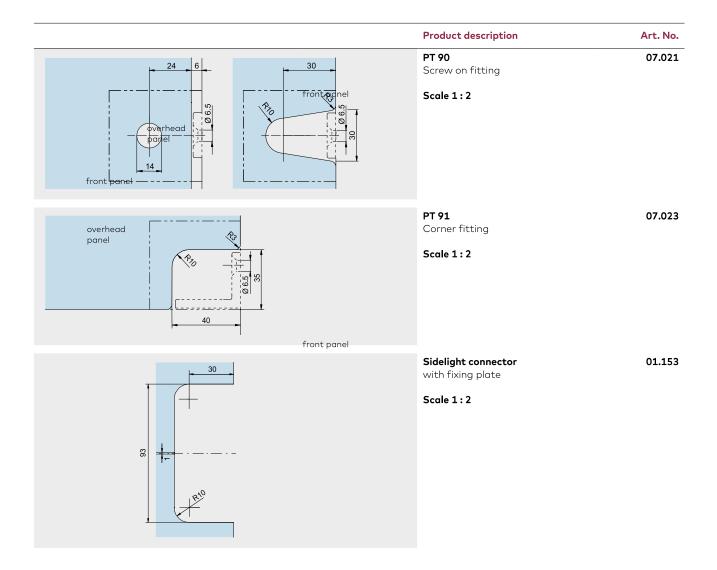


PT 41, GK 41

03.161

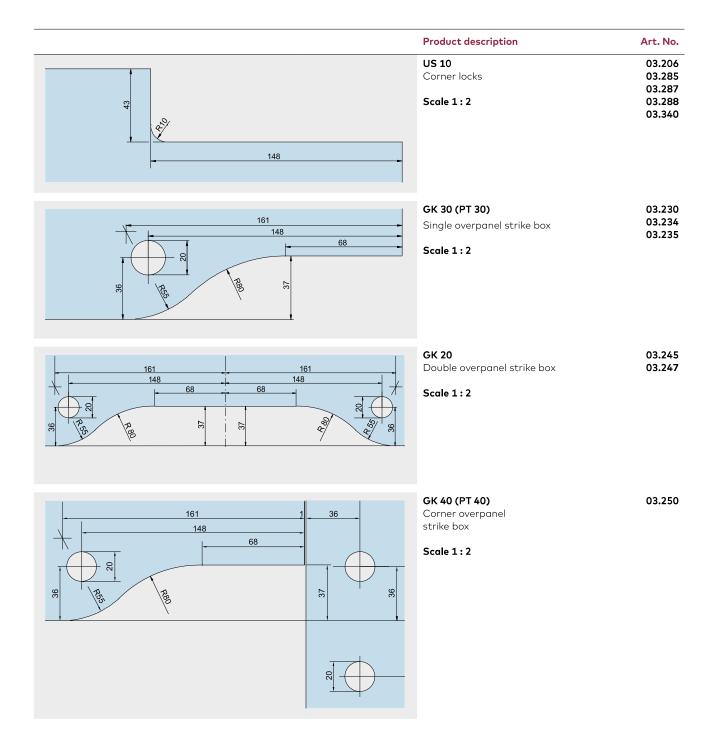
Patch for overpanel and sidelight with fin fitting on both sides

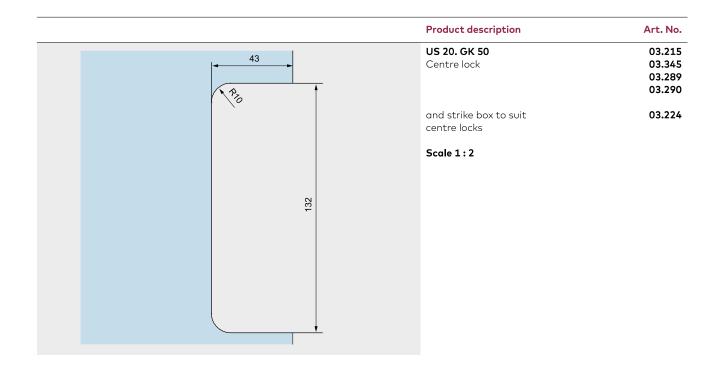
Scale 1:2



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Glass preparation locks

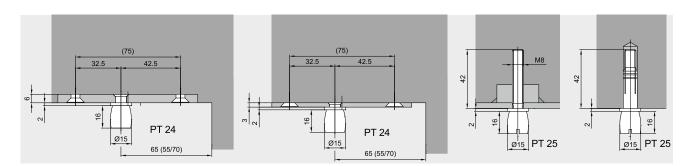


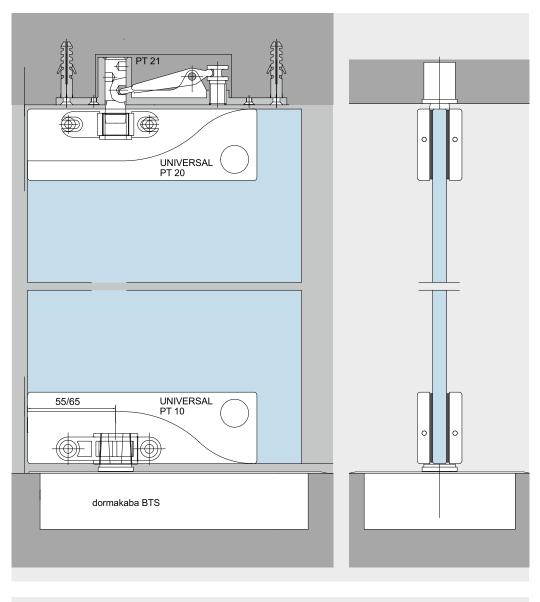


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Installation details

Advisory: Please note that the upper pivots for UNIVERSAL and those for MUNDUS are not mutually compatible. The spigot diameters of the MUNDUS fittings vary..





01.106

Fixing of top pivots and top centres for PT 20.

Fixing of floor springs, pivot bearings for PT 10.

01.107