Patch fittings for toughened glass assemblies
The DORMA-Glas range of fittings has matured into one of the most comprehensive available today. It offers ideal options for creating all standard toughened glass assemblies in a manner which is technically sound and visually attractive. This gives the designer a wide variety of options for individual expression in creating with toughened glass – either internally or externally.

All DORMA fittings are based on a modular system, consisting of a base unit, functional inserts and clip-on covers in the widest possible range of finishes. The glass preparations that are needed can be performed quickly and easily. Quality materials and thorough workmanship guarantee a long service life and a reflection of excellence for years to come.

Door rails and locks ideally complement the DORMA product range for toughened glass assemblies. The door rails grant all requests for wide and heavy doors, also for side panels. They guarantee the maximum protection for the lower glass edge. With its different types and finishes the lock programme DORMA SG meets various requirements for function, safety and appearance.

### Applications and features

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### Materials and finishes

- Aluminium, mill finish (100)
- Aluminium, silver anodised, EV1, C0 (101)
- Aluminium, dark bronze anodised DB14, MC1003, C34 (108)
- Aluminium, sim. to satin stainl. steel anodised (113, 107)
- Aluminium EV1 Deko (114)
- Bespoke colour anodising (199)
- Aluminium, white powder coated, similar to RAL 9016 (300)
- Bespoke powder coating (399)
- Brass, polished chromed (501)
- Brass, polished varnished (502)
- Brass, polished (503)
- Stainless steel, satin (700)
- Stainless steel polish (701)
2) **For door heights up to 2500 mm**
   For doors with a height of more than 2,500 mm we have to keep additional conditions/limits:
   - Glass thickness \( \geq 10 \text{ mm} \)
   - + Usage of a handle bar with 3 connection points in minimum and a minimum height of 2/3 door height

2) **Use of door closers:**
   Doors \( \geq 100 \text{ Kg} \) must be used with door closers type EN 4 (with or without back check) or a higher type (e.g. EN 5) without back check.

3) Laminated safety glass of 2 x toughened safety glass
4) Max. panel weight depends on product combination
5) Further possible glass panel heights on request at our application engineering
3) Under certain circumstances also 15 + 19 mm glass thicknesses

The glass dimension may differ due to items as follows:
- installation type,
- glass tolerance,
- generally use

- Optional
- Standard

* Only for double action doors with door rail top and bottom
UNIVERSAL

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– UNIVERSAL 27 – 37
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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 19) 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 24 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 130 kgs:

For heavier and wider doors up to a maximum of 150 kg and max. 1400 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 ex-stock (factory). Specials will be prepared promptly.
Toughened glass assemblies with fittings (55/65 mm pivot point) and locks. All standard assembly types see page 8.

**BTS** = Floor spring  
**GK** = Strike box  
**PT** = Centre hung door fittings  
**RTS** = Transom closer  
**US** = Lock

**Maximum door weight and width for UNIVERSAL fittings**  
Max. door weight: 130 kg*  
Max. door width: 1300 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 1100 mm. For door weights up to 150 kg and widths up to 1400 mm door rails should be used.

**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.

* For door heights up to 2500 mm  
For doors with a height of more than 2,500 mm we have to keep additional conditions/limits:  
- Glass thickness ≥ 10 mm  
- Use of a handle bar with 3 connection points in minimum and a minimum height of 2/3 door height  
* Use of door closers:  
Doors ≥ 100 Kg must be used with door closers type EN4 (with or without out back check) or a higher type (e.g. EN5) without back check.
PATCH FITTINGS

Shown with 10 mm glass. When used with 8 and 12 mm glass the measurements change accordingly. Accessories see page 56 and following.

**PT 10 bottom patch**
- with insert for DORMA floor spring spindle, or round pivot 14 mm Ø
- Not illustrated:
  - For 12 mm glass thickness, only in satin stainless steel
  - For 15 and 19 mm glass thicknesses. Please specify with order.

Art. No. 03.100

**Floor pivot bearing**
- for damp environments, with insert for PT 10, without floor recess, max. door weight 80 kg
- Weight in kg:
  - aluminium 0.564
  - brass 0.680
  - stainless steel 0.662

Art. No. 01.137

**PT 20 top patch**
- with plastic socket for top pivot 15 mm Ø
- Not illustrated:
  - For 12 mm glass thickness, only in satin stainless steel
  - For 15 and 19 mm glass thicknesses. Please specify with order.

Art. No. 03.110

**PT 22 top patch**
- with insert for DORMA RTS transom closer
- Not illustrated:
  - For 12 mm glass thickness, only in satin stainless steel

Art. No. 03.112

Art. No. 03.860

Art. No. 03.280

Art. No. 03.861

Art. No. 03.281

Art. No. 03.862
PT 29 top patch
with pivot fixing plate, to countersink into ceiling (pivot point = 55 mm)
max. door width: 1000 mm
max. door weight: 70 kg

Art. No. 03.114
Weight in kg:
aluminium 0.544
brass 0.692

PT 30 overpanel patch
with pivot 15 mm Ø, with M 8 tapped hole at the side

Not illustrated:
For 12 mm glass thickness, only in satin stainless steel
For 15 and 19 mm glass thicknesses. Please specify with order.

Art. No. 03.120
Art. No. 03.863
Art. No. 03.282
Weight in kg:
aluminium 0.528
brass 0.654
stainless steel 0.636

PT 30 overpanel patch
with stop insert

Not illustrated:
For 12 mm glass thickness, only in satin stainless steel
For 15 and 19 mm glass thicknesses. Please specify with order.

Art. No. 03.420
Art. No. 03.873
Art. No. 03.482
Weight in kg:
aluminium 0.528
brass 0.654
stainless steel 0.580

PT 30 overpanel patch
with blank insert

Not illustrated:
for 15 and 19 mm glass thicknesses. Please specify with order.

Art. No. 03.421
Art. No. 03.484
Weight in kg:
aluminium 0.519
brass 0.645
stainless steel 0.571
Fixing plate
for overpanel patch PT 30
Art. No. 03.128
Weight in kg:
aluminium  0.016
brass  0.038
Stainless steel not available, satin chrome on brass supplied.

Wall anchor
with thread M 8 for overpanel patch PT 30
Art. No. 01.133
Weight in kg:  0.040

Threaded rod
M 8 with plug for overpanel patch PT 30
Art. No. 01.134
Weight in kg:  0.032

PT 51 patch for overpanel with fin fitting inside for back to back doors
with two pivots 15 mm Ø
Art. No. 03.160
Weight in kg:
aluminium  1.299
stainless steel  1.576

PT 40 patch for overpanel and sidelight
with pivot 15 mm Ø
Not illustrated:
For 15 and 19 mm glass thicknesses. Please specify with order.
Art. No. 03.140

Wall anchor with thread M 8 for overpanel patch PT 30
Art. No. 01.133
Weight in kg:  0.040
PT 40 patch for overpanel and sidelight
with stop insert

Not illustrated:
For 15 and 19 mm glass thickness. Please specify with order.

Art. No. 03.440
Weight in kg:
aluminium 0.755
brass 0.958
stainless steel 0.937

Art. No. 03.483

PT 40 patch for overpanel and sidelight
with blank insert

Not illustrated:
For 15 and 19 mm glass thickness. Please specify with order.

Art. No. 03.441
Weight in kg:
aluminium 0.746
brass 0.949
stainless steel 0.928

Art. No. 03.485

PT 41 patch for overpanels and sidelight
with fin fitting inside,
with pivot 15 mm Ø

Not illustrated:
PT 41 patch for overpanels and sidelight
with stop insert

Not illustrated:
PT 41 patch for overpanels and sidelight
with blank insert

Art. No. *03.162 / 03.163
Weight in kg:
aluminium 0.952
stainless steel 1.197

Art. No. *03.262 / 03.263

Art. No. *03.264 / 03.265

Art. No. 03.161
Weight in kg:
aluminium 1.149
stainless steel 1.457

* Left hand fin (illustration shows left hand) / right hand fin.
Left or right hand are determined by view from outside.
PT 41 patch for overpanel and sidelight,
with fin fitting inside,
with pivot 15 mm Ø
angle 135° – 179°

Glass preparation on request, please send your drawing.

PT 42 overpanel patch for single action doors
with angled connector inside,
pivot 15 mm, angle 90°

PT 42 overpanel patch for double or single action doors
with angled connector inside,
pivot 15 mm, angle 135°

Not illustrated:
angle 105°–134° / 136°–179°
(glass preparation on request)

PT 60/61 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:
For 15 and 19 mm glass
thicknesses. Please specify with
order.

Art. No. *03.168 / 03.169
Weight in kg:
aluminium 1.200
stainless steel 1.522

Art. No. *03.164 / 03.165

Art. No. *03.464 / 03.465

Art. No. *03.166 / 03.167
Weight in kg:
aluminium 0.882
stainless steel 1.059

Art. No. 03.150

Art. No. 03.452
Weight in kg:
aluminium 0.343
brass 0.461
stainless steel 0.436

* Left hand fin (illustration shows left hand) / right hand fin.
Left or right hand are determined by view from outside.
PT 60/61 connector
for overpanel and sidelight, for
double or single action doors,
with fin fitting inside, with one
stop insert and two blank
inserts

Also suitable for 12 mm
glass thickness.

Art. No. *03.158 / 03.157
Weight in kg:
aluminium 0.448
stainless steel 0.600

PT 60/61 connector
for overpanel and sidelight, for
double or single action doors,
with fin fitting on both sides,
with one stop insert and two blank
inserts

Also suitable for 12 mm
glass thickness.

Art. No. 03.159
Weight in kg:
aluminium 0.645
stainless steel 0.860

PT 60/61 connector
for overpanel and sidelight for
single action doors, with stop
inside, angle 90°

Not illustrated:
PT 60/61
for double or single action
doors, with one stop insert and
two blank inserts, angle 135°
angle 105°–134° / 136°–179°
(specify angle with order)

Also suitable for 12 mm
glass thickness.

Art. No. *03.454 / 03.455
Weight in kg:
aluminium 0.251
stainless steel 0.344

Art. No. *03.450 / 03.451
Art. No. *03.156 / 03.155

Art. No. *03.156 / 03.155
Weight in kg:
aluminium 0.343
stainless steel 0.435

Glass preparation on request.

* Left hand fin (illustration shows left hand) / right hand fin.
Left or right hand are determined by view from outside.
PT 62 connector
for overpanel and sidelight, with stop

Art. No. 03.173
Weight in kg:
- aluminium 0.475
- stainless steel 0.670

PT 70 overpanel connector
with two stop inserts and two blank inserts, also suitable for 12 mm glass thickness

Art. No. 01.150
Not illustrated:
For 15 and 19 mm glass thicknesses. Please specify with order.

Art. No. 01.158
Weight in kg:
- aluminium 0.272
- stainless steel 0.335

Overpanel-sidelight connector

Art. No. 12.536
Weight in kg:
- aluminium 0.146

PT 70 connector
with two stop inserts and two blank inserts, angle 90°

Art. No. 01.156
Not illustrated:
angle 135°
angle 91° – 134° / 136° – 179° (glass preparation on request)

Art. No. 01.157
Art. No. 01.155
Weight in kg:
- aluminium 0.272
- stainless steel 0.335

Also suitable for 12 mm glass thickness.
PT 71 overpanel connector
with fin fitting
Art. No. 01.161
Weight in kg:
aluminium 0.458
stainless steel 0.608

PT 80 connector
Art. No. 03.170
Not illustrated:
For 15 and 19 mm glass thicknesses. Please specify with order.
Art. No. 03.472
Weight in kg:
aluminium 0.555
stainless steel 0.780

PT 81 connector
with fin fitting
Art. No. 03.175
Weight in kg:
aluminium 0.784
stainless steel 1.065

PT 80 connector
angle 90°
Art. No. 03.171
Weight in kg:
aluminium 0.467
stainless steel 0.540
PT 80 connector, angle 135°
Art. No. 03.172

Not illustrated:
angle 91° – 134° / 136° – 179°
(Please specify angle with order)
Art. No. 03.178

Weight in kg:
aluminium 0.472
stainless steel 0.541

PT 80 connector, shortened, angle 90°
Art. No. 03.470

Not illustrated:
angle 91° – 134° / 136° – 179°
(Please specify angle with order)
Art. No. 03.179

Weight in kg:
aluminium 0.236
stainless steel 0.270

Three way box corner connector, angle 90°
Art. No. 03.198

Weight in kg:
aluminium 0.099
stainless steel 0.131

PT 90 screw on fitting
Art. No. 07.021

Weight in kg:
aluminium 0.120
brass 0.160
stainless steel 0.155

for 13.5–19 mm glass thicknesses
Art. No. 07.210

PT 91 corner fitting
Art. No. 07.023

Weight in kg:
aluminium 0.120
brass 0.160
stainless steel 0.155

for 13.5–19 mm glass thicknesses
Art. No. 07.211
Side connector with fixing plate
Also suitable for 12 mm glass thickness.

Art. No. 01.153
Weight in kg:
aluminium 0.313
stainless steel 0.376

Not illustrated:
Gasket
for 8 mm glass thickness
Art. No. 01.900
for 12 mm glass thickness
Art. No. 01.901
Please indicate glass thickness and Art. No. of fitting.

Aluminium 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. 2500 mm, higher dimension on request)
– Required preparation of the profile for top and bottom fittings

Art. No. 03.380
Art. No. 03.381
Art. No. 03.382
Art. No. 03.383

Aluminium round profile, as above, stock length 6000 mm (unprepared)
Aluminium round profile, as above, stock length 3000 mm (unprepared)
Aluminium round profile, as above, stock length 2800 mm (unprepared)

Weight in kg/m:
Aluminium 4.744

Not illustrated:
Gasket for 8 mm glass thickness
Gasket for 12 mm glass thickness
Please indicate glass thickness and Art. No. of fitting.
LOCKS, COMPLETE FOR 10 MM GLASS THICKNESS

US 10 corner lock,
prepared for Europrofile
Cylinder, single throw, bolt
projection 20 mm, with security
rosettes on both sides, 14 mm
thick.

For 10 mm glass thickness
Art. No. 03.206

Not illustrated:
For 12 mm glass thickness,
only in satin stainless steel

Art. No. 03.867

For 15 and 19 mm glass
thicknesses. Please specify with
order.

Art. No. 03.285

Prepared for KABA

Art. No. 03.340

For half profile cylinder

Art. No. 03.288

Left hand top/ right hand bottom

Art. No. 03.287

Left hand bottom/right hand top

Weight in kg:
aluminium 0.942
brass 1.061
stainless steel 1.053

Lock keeper plate,
stainless steel, two parts,
adjustable ± 5 mm

Art. No. 05.190

Weight in kg: 0.048

Alternative (not illustrated):
Floor sockets

Art. No. 05.190, 05.193,
05.194

GK 30 single overpanel
strike box
with threaded hole at side,
to suit US 10 corner lock

Art. No. 03.870

Not illustrated:
For 12 mm glass thickness,
only in satin stainless steel

Art. No.* 03.234/03.235

Not illustrated:
GK 30 with stop

Weight in kg:
aluminium 0.463
stainless steel 0.597

* Left or right hand are determined by view from outside.

** Extract from DIN 18251, class 3: Type-test with 50,000 locking bolt operating
cycles. Furthermore the lock was tested successfully by a neutral testing institute
with 100,000 locking bolt operating cycles.
GK 20 double overpanel strike box

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

Not illustrated:
For 12 mm glass thickness, only in satin stainless steel

Not illustrated:
GK 20 with stop

Not illustrated:
For 12 mm glass thickness, only in satin stainless steel

Art. No. 03.245

Weight in kg:
aluminium 0.844
brass 1.096
stainless steel 0.948

Art. No. 03.871

GK 40 corner overpanel strike box
to suit US 10 corner lock

Not illustrated:
GK 40 with stop

Art. No. 03.250

Weight in kg:
aluminium 0.754
brass 1.035
stainless steel 1.010

Art. No. *03.254 / 03.255

GK 41 strike box
to suit US 10 corner lock, with fin fitting

Art. No. *03.194 / 03.193

Weight in kg:
aluminium 0.906
stainless steel 1.270

Art. No. 03.195

GK 41 strike box with fin fitting on both sides

Weight in kg:
aluminium 1.103
stainless steel 1.411

* Order of Art. No.: left hand fin / right hand fin – determined by view from outside. (Illustration shows left hand)
**GK 42 strike box**, to suit US 10 corner lock, angle 90°, with stop inside

Not illustrated: angle 135°, without stop

(Glass preparation on request)

**US 20 centre lock**, prepared for Europrofile cylinder, single throw, bolt projection 20 mm, with security rosettes 14 mm thick.

For 10 mm glass thickness

For 12 mm glass thickness, only in satin stainless steel

Not illustrated: prepared for KABA

Prepared for half profile cylinder

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<td>03.215</td>
<td>– with regard to type-test according to DIN 18251, class 3**</td>
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<td><em>03.290 / 03.289</em></td>
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<td>03.290 / 03.289</td>
<td>aluminium 0.942, brass 1.061, stainless steel 1.053</td>
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* Order of Art.No.: left hand fin / right hand fin – determined by view from outside.

** Extract from DIN 18251, class 3: Type-test with 50,000 locking bolt operating cycles. Furthermore the lock was tested successfully by a neutral testing institute with 100,000 locking bolt operating cycles.
GK 50 strike box
to suit US 20 centre lock

For 10 mm glass thickness

For 12 mm glass thickness, only in satin stainless steel

Art. No. 03.224
Art. No. 03.869

Weight in kg:
aluminium 0.602
brass 0.730
stainless steel 0.727
**UNIVERSAL PINCH FREE**

Completely pinch free double swing doors
UNIVERSAL pinch free patch fittings with their 15 mm pivot point help to resolve this problem by means of the closeness of the pivot point to the frame. In order to eliminate finger traps completely, the special radiused edging strip should be used.

**TYPE SELECTION**

Toughened glass assemblies with patches for pinch free centre hung doors. All standard assembly types see page 8.

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BTS = Floor spring
X = 10 mm with Art. No. 01.200
X = see page 38 for Art. No. 01.201

**Maximum door weight and width for patch fittings**
max. door weight: 80 kg
max. door width: 1100 mm

For door weights up to 150 kg and widths up to 1400 mm, door rails should be used.

**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
Pinch free patch fittings with 15 mm pivot point, complete, for 10 mm glass thickness
Accessories see page 56.

**Bottom patch**
complete with spindle insert for DORMA BTS floor spring

**Art. No. 01.200**
Weight in kg:
aluminium 0.473
stainless steel 0.535

**Bottom patch**
complete with pivot insert and pivot bearing, with cover plate, height adjustable by 5 mm; floor clearance see page 38

**Art. No. 01.201**
Weight in kg:
aluminium 0.560
stainless steel 0.622

**Top patch fitting**
with pivot pin 15 mm Ø

**Art. No. 01.210**
Weight in kg:
aluminium 0.453
stainless steel 0.526

**Overpanel patch**
with 15 mm Ø pivot pin and threaded hole at side

**Art. No. 01.220**
Weight in kg:
aluminium 0.262
stainless steel 0.335
Fixing plate
for overpanel patch EP

Art. No. 01.127

Weight in kg:
aluminium 0.019
brass 0.045

Stainless steel not available, satined chrome on brass supplied.

Wall anchor
with thread M 8 for overpanel patch

Art. No. 01.133

Weight in kg: 0.040

Threaded rod
M 8 with plug for overpanel patch

Art. No. 01.134

Weight in kg: 0.032

Patch for overpanel and sidelight
with plastic socket for 15 mm Ø pivot pin, pivot point 15 mm in combination with patch fittings

Art. No. 01.240

Weight in kg:
aluminium 0.542
stainless steel 0.547

Not illustrated:
pivot point 18 mm in combination with door rails

Art. No. 01.245

Weight in kg:
aluminium 0.542
stainless steel 0.547

Radiused edging strip*
for pinch free doors, (strip is clamped onto free glass edge), acrylic.
Length: up to 4500 mm (please specify height)

Art. No. 01.231

Length: 2250 mm

Art. No. 01.230

Weight in kg/m: 0.408

* Important information: If radiused edging strip is used, special glass preparation is necessary (see page 39).
GLASS PREPARATION FITTINGS

PT 10, PT 20, PT 22, PT 29, PT 30
Top and bottom patches, overpanel patch
Art. No. 03.100, 03.110, 03.114, 03.120, 03.212, 03.280, 03.281, 03.282, 03.420, 03.421
Scale 1 : 2

PT 30
Installation PT 30 with wall connection profile

PT 40
Patch for overpanel and sidelight
Art. No. 03.140, 03.283, 03.440, 03.441
Scale 1 : 2
Glass preparation examples for overpanel patch with angled connector Art. No. 03.166, 03.167, 03.464, 03.465 available on request.

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<tr>
<th>Angle</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>179° – 105°</td>
<td>46 mm</td>
</tr>
<tr>
<td>104° – 91°</td>
<td>65 mm</td>
</tr>
</tbody>
</table>

PT 41, GK 41
Patch for overpanel and sidelight with fin fitting inside Art. No. 03.162, 03.163, 03.193, 03.194

Scale 1 : 2

PT 42, GK 42
Overpanel patch with angled connector Art. No. 03.164, 03.165, 03.274, 03.275

Scale 1 : 2
PT 51
Overpanel fin fitting for back to back doors
Art. No. 03.160
Scale 1 : 2.5

PT 60/61, PT 62
Connectors for overpanels and sidelights
Art. No. 03.150
and connector with stop
Art. No. 03.173
Scale 1 : 2
Art. No. 03.157, 03.158
Glass preparation for fin fitting see PT 81
Art. No. 03.159, 03.452
Glass preparation for fin fitting both sides see PT 81

PT 70
Overpanel connector
Art. No. 01.150, 01.158
Scale 1 : 2
PT 70
Connectors for overpanels and sidelights, 90°
Art. No. 01.156

Glass preparation examples for angles between 91° – 179° available on request.

Scale 1 : 2

PT 71
Overpanel connector with fin fitting
Art. No. 01.161

Scale 1 : 2
**Overpanel-sidelight connector**

Art. No. 12.536

Weight in kg:
aluminium 0.146

---

**PT 80**
Connector
Art. No. 03.170, 03.472

Scale 1 : 2

---

**PT 81**
Connector with fin fitting
Art. No. 03.175

Scale 1 : 2
PT 80
Angled connector, 90°
Art. No. 03.171

Glass preparation examples for angles between 91° – 134° / 136° – 179° available on request.

Scale 1 : 2

PT 80
Angled connector, 135°
Art. No. 03.172

Glass preparation examples for angles between 91° – 134° / 136° – 179° available on request.

Scale 1 : 2
**PT 80 shortened**
Angled connector, 90° shortened
Art. No. 03.470

Glass preparation examples for angles between
91° – 134° / 136° – 179° available on request.

*Scale 1 : 2*

**PT 41, GK 41**
Patch for overpanel and sidelight with fin fitting on both sides
Art. No. 03.161, 03.195

*Scale 1 : 2*
Three way box corner connector
angle 90°
Art. No. 03.198
Scale 1 : 2

PT 90
Screw on fitting
Art. No. 07.021
Scale 1 : 2

PT 91
Corner fitting
Art. No. 07.023
Scale 1 : 2

Sidelight connector
with fixing plate
Art. No. 01.153
Scale 1 : 2
GLASS PREPARATION LOCKS

US 10
Corner locks
Art. No. 03.206, 03.285, 03.287, 03.288, 03.340
Scale 1 : 2

GK 30 (PT 30)
Single overpanel strike box
Art. No. 03.230, 03.234, 03.235
Scale 1 : 2

GK 20
Double overpanel strike box
Art. No. 03.245, 03.247
Scale 1 : 2

GK 40 (PT 40)
Corner overpanel strike box
Art. No. 03.250, 03.254, 03.255
Scale 1 : 2
US 20, GK 50
Centre lock
Art. No. 03.215, 03.345, 03.289, 03.290

and strike box to suit centre lock
Art. No. 03.224

Scale 1 : 2
Fixing of top pivots and top centres for PT 20.

Fixing of floor springs, pivot bearings for PT 10.
**GLASS PREPARATION**

**Bottom patch fitting**
Art. No. 01.200, 01.201

Scale 1 : 2

**Top patch fittings**
Art. No. 01.210*

Scale 1 : 2

**Overpanel patch fittings**
Art. No. 01.220*

Scale 1 : 2

* When used in conjunction with pinch free bottom rail, with 18 mm pivot point

**Important information:**
If radiused edging strip is used, special glass preparation is necessary. (see page 39).
Top and bottom patch fittings
Art. No. 01.200, 01.201 and 01.210, in conjunction with radiused edge strip
Art. No. 01.021.001.00

Scale 1 : 2

Top patch fitting
Art. No. 01.210

in conjunction with bottom rail and radiused edge strip
Art. No. 01.021.001.00

Scale 1 : 2
OVERPANEL AND SIDELIGHT

**Divided overpanel**
Art. No. 01.240, 01.245
Scale 1 : 2

**Undivided overpanel**
Art. No. 01.240, 01.245
Scale 1 : 2
Using the bottom patch on pivot bearing with cover plate (Art. No. 01.201) the air gap between floor and glass is 15–20 mm (by height adjustability). To reduce the air gap to 10 mm: Embed base plate into the floor.
UNIVERSAL ARCOS

- General information 44
- Type illustration 45
- Components 46 – 51
- Glass preparation 52 – 55
- Accessories 56 – 62
- Safety-related information 63
VERSATILITY PLUS MULTIPLEMENTY

Patch fittings and connector hardware for overpanels and side panels, fin fittings for particularly large systems – with the curved arc motif of the Arcos design always incorporated in each component. Gentle reflections that change with the planes give both the glass and its fittings the appearance of a harmonious whole.

**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 Arcos fittings are supplied as standard with gasket to suit 10 mm glass. 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**

All the inserts for corner and overpanel patches in the UNIVERSAL Arcos 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.

**Reliability built in**

Quality materials and thorough workmanship mean that UNIVERSAL Arcos 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 130 kg*: for instance, a door blade 3,000 mm high by 1,300 mm* wide, using 12 mm glass is quite possible.

**Clip-on technique**

The innovative clip-on technique incorporated in the hardware ensures that the cover caps can be secured to the basic components so that the fixing is virtually invisible.

**Matching range of locks**

The UNIVERSAL Arcos 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 ex-stock (factory). Specials will be prepared promptly.
TYPE SECTION

Toughened glass assemblies with fittings and locks. All standard assembly types see page 5.

Maximum door weight and width for UNIVERSAL fittings
- max. door weight: 130 kg*
- max. door width: 1300 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 1100 mm. For door weights up to 150 kg and widths up to 1400 mm door rails should be used.

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.

* For door heights up to 2500 mm
For doors with a height of more than 2,500 mm we have to keep additional conditions/limits:
- Glass thickness \( \geq 10 \) mm
- Usage of a handle bar with 3 connection points in minimum and a minimum height of 2/3 door height
* Use of door closers:
Doors \( \geq 100 \) Kg must be used with door closers type EN4 (with or without out back check) or a higher type (e.g. EN5) without back check
PATCH FITTINGS

Shown with 10 mm glass. When used with 8 and 12 mm glass measurements change accordingly. Accessories see page 56.

Arcos PT 10  
**bottom patch**  
with insert for DORMA floor spring spindle, or round pivot  
14 mm Ø  
Weight in kg:  
aluminium 0.564  
stainless steel 0.662  
Art. No. 26.100

Floor pivot bearing  
for damp environments, with insert for PT 10, without floor recess  
max. door weight 80 kg  
Weight in kg:  
0.195  
Art. No. 01.137

Arcos PT 20  
**top patch**  
with plastic socket for top pivot  
15 mm Ø  
Weight in kg:  
aluminium 0.477  
stainless steel 0.575  
Art. No. 26.100

Arcos PT 22  
**top patch**  
with insert for DORMA RTS transom closer  
Weight in kg:  
aluminium 0.578  
stainless steel 0.677  
Art. No. 26.112

Arcos PT 30  
**overpanel patch**  
with pivot 15 mm Ø, with M 8 tapped hole at side  
Weight in kg:  
aluminium 0.528  
stainless steel 0.636  
Art. No. 26.120

---

_Patch fittings_ — Shown with 10 mm glass. When used with 8 and 12 mm glass measurements change accordingly. Accessories see page 56.

---

**Art. No. 26.100**

**Arcos PT 10**  
**bottom patch**  
with insert for DORMA floor spring spindle, or round pivot  
14 mm Ø  
Weight in kg:  
aluminium 0.564  
stainless steel 0.662

**Art. No. 01.137**

**Floor pivot bearing**  
for damp environments, with insert for PT 10, without floor recess  
max. door weight 80 kg  
Weight in kg:  
0.195

**Art. No. 26.100**

**Arcos PT 20**  
**top patch**  
with plastic socket for top pivot  
15 mm Ø  
Weight in kg:  
aluminium 0.477  
stainless steel 0.575

**Art. No. 26.112**

**Arcos PT 22**  
**top patch**  
with insert for DORMA RTS transom closer  
Weight in kg:  
aluminium 0.578  
stainless steel 0.677

**Art. No. 26.120**

**Arcos PT 30**  
**overpanel patch**  
with pivot 15 mm Ø, with M 8 tapped hole at side  
Weight in kg:  
aluminium 0.528  
stainless steel 0.636

---

_Patch fittings_ — Shown with 10 mm glass. When used with 8 and 12 mm glass measurements change accordingly. Accessories see page 56.
Arcos PT 30 overpanel patch
with stop insert
Weight in kg:
aluminium 0.528
stainless steel 0.580

Art. No. 26.420

Arcos PT 30 overpanel patch
with blanking insert
Weight in kg:
aluminium 0.519
stainless steel 0.571

Art. No. 26.421

Fixing plate
for overpanel patch PT 30
Weight in kg:
aluminium 0.016
brass 0.038
Stainless steel not available, satin chrome on brass supplied.

Art. No. 03.128

Wall anchor
with thread M 8 for overpanel patch PT 30
Weight in kg: 0.040

Art. No. 01.133

Threaded rod
M 8 with plug for overpanel patch PT 30
Weight in kg: 0.032

Art. No. 01.134
**PATCH FITTINGS**

**Arcos PT 40 patch for overpanel and side panel**
- Art. No. 26.140
- with pivot 15 mm Ø
- Weight in kg:
  - aluminium: 0.755
  - stainless steel: 0.937

**Arcos PT 40 patch for overpanel and side panel**
- Art. No. 26.440
- with stop insert
- Weight in kg:
  - aluminium: 0.755
  - stainless steel: 0.937

**Arcos PT 40 patch for overpanel and side panel**
- Art. No. 26.441
- with blanking insert
- Weight in kg:
  - aluminium: 0.746
  - stainless steel: 0.928

**Arcos PT 41 patch for overpanels and side panel with fin fitting**
- Art. No. 26.162 / 26.163
- with pivot 15 mm Ø
- do. with stop insert (not illustrated)
- do. with blanking insert (not illustrated)
- Weight in kg:
  - aluminium: 0.952
  - stainless steel: 1.197

*Left hand fin (illustration shows left hand) / Right hand fin
Left or right hand are determined by view from outside.
For 10 mm glass thickness. Accessories are shown from page 56 on.

Arcos US 10 corner lock, prepared for Europrofile cylinder, single throw, bolt projection 20 mm, with security rosettes on both sides, 14 mm high.
Lock insert:
- high corrosion resistance according to EN 1670, class 4
- with regard to type-test according to DIN 18251, class 3* for 10 mm glass thickness

Attention:
Modified position of locking bolt in comparison to standard US 10

Weight in kg:
aluminium 0.942
stainless steel 1.053

Lock keeper plate, stainless steel, two parts, adjustable ± 5 mm
Weight in kg: 0.048
alternative:
Floor sockets (not illustrated)

*Extract from DIN 18251, class 3: Type-test with 50,000 locking bolt operating cycles. Furthermore the lock was tested successfully by a neutral testing institute with 100,000 locking bolt operating cycles.
LO CKS

**Arcos GK 30**

*Single overpanel strike box*

- with threaded hole at side,
- to suit Arcos US 10 corner lock

Weight in kg:
- aluminium 0.418
- stainless steel 0.536

**Arcos GK 20 double overpanel strike box**

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

Weight in kg:
- aluminium 0.844
- stainless steel 0.948

**Arcos GK 40 corner overpanel strike box**

- to suit Arcos US 10 corner lock

Weight in kg:
- aluminium 0.709
- stainless steel 1.010

**Arcos GK 41 strike box**

- to suit Arcos US 10 corner lock, with fin fitting

Weight in kg:
- aluminium 0.906
- stainless steel 1.270

*Left hand fin (illustration shows left hand) / Right hand fin
Left or right hand are determined by view from outside.*
**US 20 centre lock,**
prepared for Europrofile cylinder,
single throw, bolt projection
20 mm, with security rosettes
14 mm thick.
Lock insert:
- high corrosion resistance
  according to EN 1670,
class 4
- with regard to type-test
  according to DIN 18251,
class 3* 

**Attention:**
Modified position of locking bolt
in comparison to standard US 20
for 10 mm glass thickness

**Weight in kg:**
aluminium 0.942
stainless steel 1.053

**Arcos GK 50 strike box**
to suit Arcos US 20 centre lock

**Weight in kg:**
aluminium 0.602
stainless steel 0.727

*Extract from DIN 18251, class 3: Type-test with 50,000 locking bolt operating cycles.
Furthermore the lock was tested successfully by a neutral testing institute with 100,000 locking bolt operating cycles.*
GLASS PREPARATION

Arcos US 20, GK 50

Centre lock and strike box to suit centre lock
Scale 1 : 2

Art. No. 26.215
Art. No. 26.224

Overpanel-sidelight connector

Weight in kg:
aluminium 0,146

Art. No. 12.136

Sidelight and Overpanel

Tension cut

*Recommendation
Fixing of pivots and top centres
Fixing top pivots and top centres for Arcos PT 20 and Arcos PT 22.
Fixing floor springs, pivot bearings for Arcos PT 10.
GLASS PREPARATION

Arcos PT 10, PT 20, PT 22, PT 30

Top and bottom patches, overpanel patch
Scale 1 : 2


Arcos PT 40

Patch for overpanel and side panel
Scale 1 : 2


Arcos PT 41, GK 41

Patch for overpanel and side panel with fin fitting inside
Scale 1 : 2

Arcos US 10

Corner locks
Scale 1 : 2
Art. No. 26.206

Arcos GK 30 (PT 30)

Single overpanel strike box
Scale 1 : 2
Art. No. 26.230

Arcos GK 20

Double overpanel strike box
Scale 1 : 2.5
Art. No. 26.245

Arcos GK 40 (PT 40)

Corner overpanel strike box
Scale 1 : 2
Art. No. 26.250
ACCESSORIES

Floor bearings, pivots, cylinders
59 – 60

Profiles
61

Gasket sets
62

Safety-related information
63
PERFECTION IN DETAIL

Original accessories for patch fittings, door rails and locks, matched to the DORMA-Glas product range, are available. They ideally complement the range of DORMA-Glas hardware to optimise the technical excellence and cost effectiveness of toughened glass systems of all types.

Aside from functional components such as special floor pivots – including models for wet rooms – DORMA also offers a choice of security-relevant options. Their installation further enhances the exceptional functional efficiency, reliability and long service life expected of DORMA-Glas systems.
TOP BEARING, PIVOTS

PT 21 frame portion
- top centre with removable pin
- 15 mm Ø

Art. No. 01.117
- Weight in kg: 0.335

PT 21 frame portion
- top centre with removable pin
- 15 mm Ø, with cover plate

Art. No. 01.118
- Weight in kg: 0.345

PT 24 pivot
- 15 mm Ø, with fixing plate, material thickness 6 mm, to let into ceiling

Art. No. 01.116
- Weight in kg: aluminium 0.058

PT 24 pivot
- 15 mm Ø, with fixing plate, material thickness 3 mm, to screw on the ceiling

Art. No. 01.123
- Weight in kg: aluminium 0.042
- stainless steel 0.074

PT 25 pivot
- 15 mm Ø with plug

Art. No. 01.115
- Weight in kg: 0.044
**Top pivot bearing,**
brass, nickel plated,
for installation in frame or
ceiling for 15 mm Ø pivot pin

Art. No. 01.129
Weight in kg: 0.065

---

**Top pivot bearing,**
aluminium, for installation in
frame or ceiling for 15 mm Ø pivot pin

Art. No. 01.130
Weight in kg: 0.018

---

**Top pivot bearing**
with steel fixing plate,
for 15 mm Ø pivot pin

Art. No. 01.131
Weight in kg: 0.160

---

**Top pivot bearing**
with aluminium fixing plate,
for 15 mm Ø pivot pin

Art. No. 01.132
Weight in kg: 0.099
**Aluminium 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. 2500 mm, higher dim. on request)
- Required preparation of the profile for top and bottom fittings

Fixed length
Stock length 6000 mm
Stock length 3000 mm

<table>
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<tr>
<th>Art. No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>03.380</td>
<td>Aluminium</td>
</tr>
<tr>
<td>03.381</td>
<td>Aluminium</td>
</tr>
<tr>
<td>03.382</td>
<td>Aluminium</td>
</tr>
</tbody>
</table>

Weight in kg/m: aluminium 4.744

**Radiused edging strip**

for fittings with 15 mm/18 mm pivot point. For pinch free doors, (strip is clamped onto free glass edge), Acrylic.

Length: up to 4500 mm (specify height)
Length: 2250 mm

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.230</td>
<td>Acrylic</td>
</tr>
<tr>
<td>01.231</td>
<td>Acrylic</td>
</tr>
</tbody>
</table>

Weight in kg/m: 0.408
## Gasket Sets

**Gasket sets for 12 mm glass thickness**

<table>
<thead>
<tr>
<th>Description</th>
<th>Art. No.</th>
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</thead>
<tbody>
<tr>
<td>for PT10/20/22/29/30/GK30</td>
<td>03.900</td>
</tr>
<tr>
<td>for US 10/20/GK50</td>
<td>03.901</td>
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<tr>
<td>for PT40/41/42/GK40/41/42</td>
<td>03.902</td>
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<td>for PT51</td>
<td>03.903</td>
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<td>for PT80/81</td>
<td>03.906</td>
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<td>for PT80 semi-high</td>
<td>03.907</td>
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<td>for PT90/91</td>
<td>03.908</td>
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<tr>
<td>for sidelight connector 01.153</td>
<td>03.909</td>
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<tr>
<td>for patch fitting 03.198, for patch fittings with 15 mm pivot point 01.200/01.201/01.220</td>
<td>03.910</td>
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<tr>
<td>for patch fittings for overpanels with 15 mm pivot point 01.240/01.245</td>
<td>03.911</td>
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**Gasket sets for 8 mm glass thickness**

<table>
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<th>Description</th>
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<td>for PT10/20/22/29/30/GK30</td>
<td>03.920</td>
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<tr>
<td>for US 10/20/GK50</td>
<td>03.921</td>
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<td>for PT40/41/42/GK40/41/42</td>
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<td>for PT51</td>
<td>03.923</td>
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<td>for PT60/61/62</td>
<td>03.924</td>
</tr>
<tr>
<td>for PT70/71</td>
<td>03.925</td>
</tr>
<tr>
<td>for PT80/81</td>
<td>03.926</td>
</tr>
<tr>
<td>for PT80 semi-high</td>
<td>03.927</td>
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<tr>
<td>for PT90/91</td>
<td>03.928</td>
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<tr>
<td>for sidelight connector 01.153</td>
<td>03.929</td>
</tr>
<tr>
<td>for patch fitting 03.198</td>
<td>03.930</td>
</tr>
</tbody>
</table>
SAFETY-RELATED INFORMATION

Important safety-related information for the mounting and use of DORMA glass fittings
(Follow these instructions in addition to the mounting and operating instructions in order to avoid damage of product and damage to person or property.)

Important: All users have to be informed about relevant points mentioned in these safety-related information and the mounting and operating instructions!

General information
1. DORMA recommends using TSG-H (heat soaked toughened safety glass) to DIN EN 12150-1.
2. DORMA glass fittings are not suitable for application in rooms where chemicals (e.g., chlorine) are used such as indoor swimming pools, saunas or salt-water pools.
3. Never move sliding panels faster than walking speed and always stop the door manually before it reaches end position.
4. Do not shut swing doors with excessive force. Install door stop to prevent door from opening too far.

Mounting
1. Only properly qualified and specially trained staff is authorised to mount DORMA glass fittings.
2. Never use glass with conchoidal fractures and/or damaged edges.
3. Due to crushing hazards – among others in the area of the secondary closing edge – and possible injury caused by breakage of glass during mounting, corresponding protective clothing (especially gloves and protective goggles) is required.
4. Clean clamping area with fat solvent (standard commercial cleaning agent) before mounting the glass fitting.
5. Never use clamping shoes on structured glass surfaces (except on satined glass) or glass of heavily varying thickness unless with a corresponding levelling layer.
7. When adjusting glass elements, always stick to the required clearance for the respective fitting. Adjust clearance so that the glass does not touch hard components such as glass, metal or concrete.
8. Make sure not to use excessive force when installing the glass (avoid local stress resulting from very tight screws).

Maintenance
Check fittings at regular intervals for proper positioning and smooth running and door for correct adjustment. Especially highly-frequented door systems require inspection by properly qualified staff (specialised companies or installation firms). Immediately replace damaged glass elements (no glass flaking and/or conchoidal fractures)!

General care instructions
The surface finishes of the fittings are not maintenance-free and should be cleaned according to their material and design.

- For metallic surfaces (anodised finishes, stainless steel) please use appropriate cleaning agents without abrasive additives only.
- For varnished surfaces please use appropriate solvent-free cleaning agents only.
- Brass surfaces (without surface protection) have to be treated with an appropriate maintenance agent on occasion, to avoid tarnishing.

The printed colours indicating the surface finishes are not 100% true, but do provide a useful guide.

Statements made with regard to the nature or use of the products are for the purposes of descriptions. Assent with regard to the existence of particular properties or particular uses always requires special written agreement. Pictures may show special designs which are different to the standard scope of delivery.

Subject to change without notice.