

Manual Sliding Door Systems

Technical brochure 2020

MUTO RS 120/ RS 120 Synchro MANET Compact/ Concept RSP 80



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Manual sliding door system with track system integrated functional elements



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for manual sliding
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Design your rooms the way you want them

Whether for living or office areas, wherever elegant transitions from one room to another need to be provided, toughened glass assemblies offer the architectural elegance of open, transparent, inviting access.

Sliding doors also add a certain lightness and a more generous appearance to small rooms. Easy-to-install solutions mean that your space-defining idea in glass can be readily made reality.

MUTO

The manual sliding door system for timber panels. Compact, flexible and with a wide range of options. Simple installation and adjustability from the front. Convenience "Comfort" options such automatic closing function and integrated battery-operated lock eliminating the need for an external power supply MUTO is also available as telescopic variant.

Applications and features		MUTO M 60	MUTO L 80	MUTO Premium XL 80/150
Suspended sliding door		•	•	•
Integrated / concealed carrier		•	•	•
1 panelled sliding door		•	•	•
2 panelled bi-parting sliding door			•	•
Integrated locking device			•	•
Status indicator			•	•
Suspended ceilings			•	•
Self-Closing				
Synchro version			•	•
Telescopic function (panel moves in	sync)			
End-position engage cushioning		•	•	•
Installation at wall		•	•	•
Installation at wall; version with lar for bridging existing frames + direc		•	•	•
Installation at ceiling		•	•	•
Fixed at glass			•	•
Safe use of laminated safety glass elements		•	•	•
System integration of fixed side pa	nels	•	•	•
Timber sliding door possible		•	•	•
Curved systems				
Panel attachment with no glass pr	eparation ¹⁾	•	•	•
Max. sliding panel weight		60 kg	80 kg	80 / 150 kg
Min. sliding panel width (mm)	without DORMOTION	600 3) 6)	660 ³⁾	660 ³⁾
	with DORMOTION	600 3) 6)	660	810 / 1,020 3)
Max. sliding panel width (mm)		1,300	1,500 (max. 2,000) ⁷⁾	1,500 (max. 2,500) ⁷⁾
Max. sliding panel height (mm)		2,500	3,000	3,000
Glass thicknesses (mm) sliding pan	el	8 – 12	8 – 13.5	8 – 13.5
Glass type		TSG / LSG 4) 5)	TSG / LSG 4) 5)	TSG / LSG 4) 5)
Wood thickness (mm) sliding panel		28 – 50	28 – 50	28 – 50
Glass thicknesses (mm) integrated si	delights	8 – 13.5	8 – 13.5	8 – 13.5
Page		22	32	50

- 1) Glass machining only necessary for individual thumbturn or other handle types.
- 2) 120 kg for glass or timber panels with two carriers. 150 kg for glass panels with three carriers.
- 3) To ensure optimal operation, we recommend an aspect ratio of 1:2 or 1:3
- LSG with accessory set LSG
- 5) LSG consisting of 2 x TSG
- 6) After consultation: without DORMOTION min. 400 mm possible, with DORMOTION min. 550 mm possible

RS 120

Robust clamp-type carriers designed for glass or timber panels up to 120 kg. The visible system surface and finish is achieved on the basis of clip-on cover profiles.

MANET

With its flexible modular system, MANET offers designers plenty of scope in planning spatial configurations. The basic module is the single-point fixing inserted in countersunk holes to ensure that it is flushed with the glass surface – just one of its visual highlights.

RSP 80

This sliding door system comes with a visible roller assembly capable of carrying glass or timber door panels of up to 80 kg suspended from the track. A plastic running surface ensures a particularly smooth and quiet operation.

MUTO Premium Self-Closing 120	MUTO Premium Telescopic 80	RS 120	MANET Compact	MANET Concept	RSP 80
•	•	•	•	•	•
•	•	•			
•	(2 panels, move in sync)	•	•	•	•
•	(2+2 panels, move in sync)	•	•	•	•
•	•				
•	•				
•	•				
•					
		•			
	•				
•	•				
•	•	•	•	•	•
•	•		•	•	0
•	•	•		•	
•	•		•	•	
•	•			•	
•	•	•	•	•	
•	•	•		•	•
				•	
•	•	•			
120 kg	2 x 80 kg	120 / 150 kg	100 kg	120 kg	80 kg
660 ³⁾	from page 92	500 ³⁾	500 ³⁾	500 ³⁾	500 ³⁾
850 ³⁾	onwards				
1,500 ⁸⁾	from page 92 onwards	1,500 ⁷⁾	1,200 ⁷⁾	1,500 ⁷⁾	1,200 7)
3,000	3,000	3,000	2,500	3,000	2,500
8 – 13.5	8 – 13.5	8, 10, 12	8, 10, 12	8 – 17.5	8, 10
TSG / LSG ^{4) 5)}	TSG / LSG ^{4) 5)}	TSG	TSG	TSG / LSG	TSG
28 – 50	28 – 50	26 – 38		20 – 40	25 – 40
8 – 13.5	8 – 13.5		10, 12	10 – 17.5	
70	88	116	126	136	166

⁷⁾ For other possible glass panel widths, please consult our application technology department.

The glass dimensions may differ due to the following factors: type of installation, glass tolerances, general usage considerations.

⁸⁾ Max. travel 1,450 mm

Standard

O Optional

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RS 120/ RS 120 Synchro

General information



Rugged track

The hollow profiled aluminum track is light yet rugged and resistant to twisting. It can be fixed directly under the ceiling or onto a wall and simply cut to the required size.

Clip-on covers

The covers are made of aluminum, and are easily clipped onto the track. If the track is top fixed, onto the ceiling, the covers are used on both sides; if the track is side fixed, the cover is used on the exposed side only. The covers also can easily be cut to size.

Sidelight profile

A special profile to be hung and screwed into the track is available for the use with fixed sidelights. It ensures that the sidelight glass is mounted with the correct distance to the track.

As a matter of course the sidelight profile can be provided with clip-on covers. Furthermore the free sidelight profile in the passage area can be covered from below by a bottom view protection profile.

Gentle, easy action

The carriers run on large nylon wheels, with needle bearings, giving a quiet and very low friction ride. They are made from high grade, glass fibre reinforced nylon, which is corrosion-resistant and extremely strong.

End stop and holder

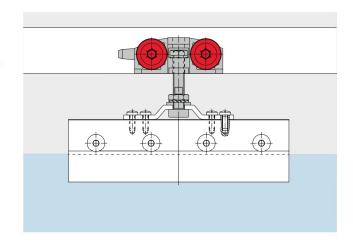
There is a clever device in the track which operates as a cushioned end stop, retaining the door securely in the end positions.

Synchro version

By a special cable and deflection device a synchronously opening system for a two-panel assembly can be realised. As only one of the panels has to be moved, the greatest possible operating convenience for maximum passage width is guaranteed.

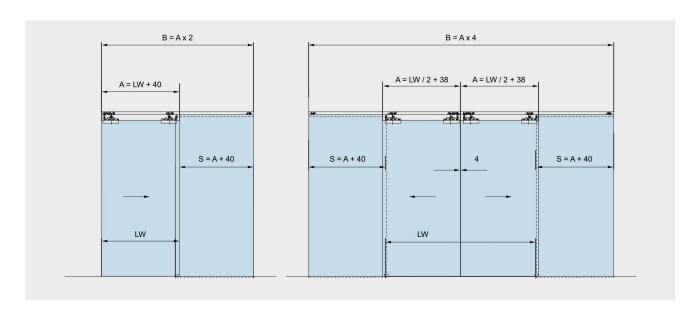
No glass preparation

dormakaba has a wide experience in working with toughened glass, and this has led to the development of a clamping system which is all that is required for securing the glass blades in the RS sliding door gear. This has the additional benefit of allowing some door height adjustment, after the door is hung, without dismantling the already fixed glass.

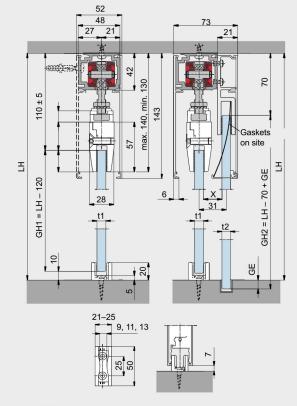


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Type illustrations



Fixed at ceiling



Adjustable floor guide

t1	x
6 mm	23 mm
10 mm	21 mm
12 mm	19 mm

Product description

For one or more door panels, with or without sidelights; 8, 10 and 12 mm glass thickness.

Maximum weight of door panels

No. of carriers	max weight (kg) per door leaf
2	120
3	150

Torque for screws in the clamping patches

20 Nm

Calculation of glass height

Height of sliding door leaf: GH1 = LH - 120 (see drawing left hand)

Height of sidelight:

GH2 = LH - 70 mm + GE (see drawing right hand)

Calculation of glass width

Width of sliding door leaf: A = LW + 40 (min. 500)

Width of sidelight:

S = A + 40

In order to maximise the protection afforded to the glass, we recommend that spacer 29.420 be fitted to sliding doors that move in opposite directions (see page 123).

Width of door leaf

В Length of track

GH1 = Glass height of sliding door leaf

Glass height of sidelight GH2 =Glass rebate depth

LW S

LH

Clear opening width

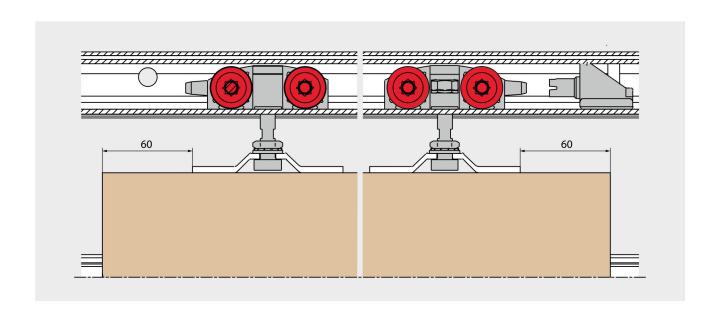
Width of sidelight

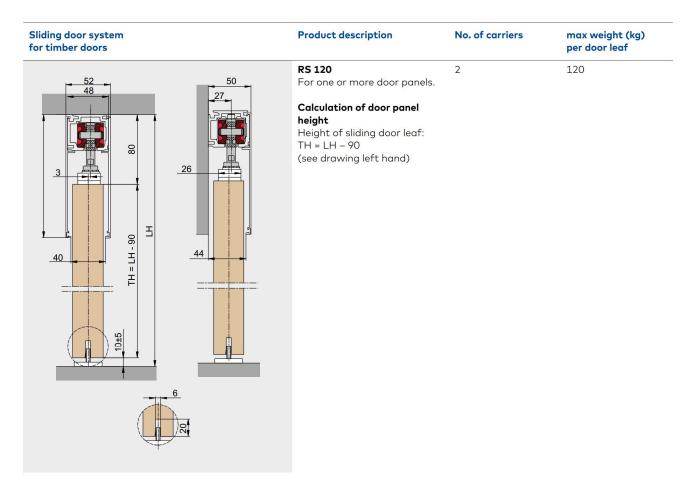
t1 Glass thickness sliding panel

Clear opening height

t2 Glass thickness side panel

Sliding door system for timber doors



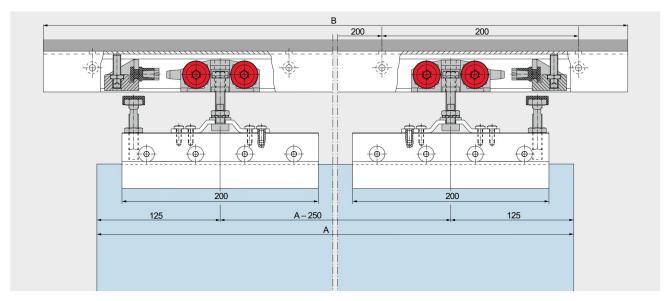


TH = door height

LH = clear opening height

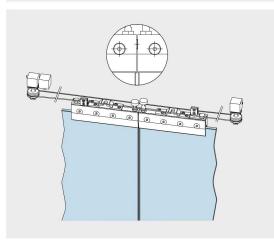
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Type illustrations ceiling installation



Opening to right side, Closing to left side (DIN Left)

Fixed at ceiling	Product description	Track length B in mm	Weight in kg	Art. No.
	Sliding door gear RS 120 complete, consisting of: 1 track, 2 carriers with clamping patches and support screw for 8 and 10 mm glass thicknesses, 2 end stops and 1 floor guide.	1,900 2,900	4.503 5.858	07.101 07.102



Sliding door gear RS 120 Synchro For 2-panel synchronously opening system,

max. panel width
= 2 x 1,000 mm,
max. panel weight
= 80 kg per panel,
consisting of:
2 x accessory set 07.125
1 x deflection device incl.
cable, adjustable

07.150

Track, if necessary sidelight profile, cover profile

+ view protection profile have to be ordered separately (see page 122).

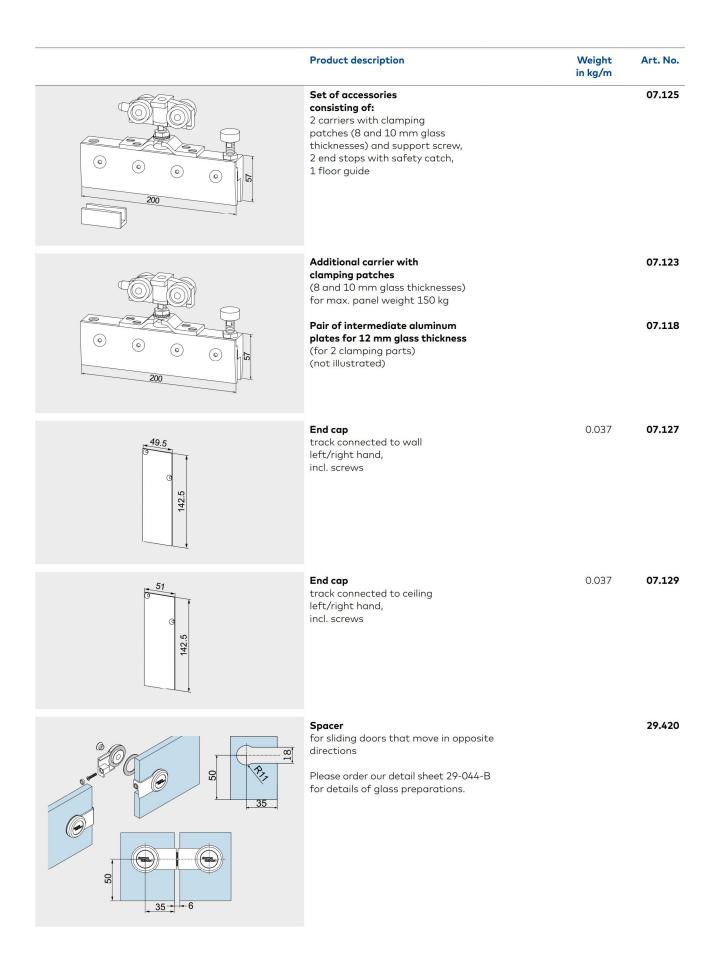
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Component parts RS 120/RS 120 Syncro

	Product description	Weight in kg/m	Art. No.
17.5 24	Track profile prepared for top or side fixing fixed length stock length 6,000 mm	1.355	07.131 07.121
140	Cover profile for clip attachment with connecting web for view protection profile 07.137/138 fixed length stock length 6,000 mm	0.826	07.141 07.140
88	Sidelight profile non prepared fixed length stock length 6,000 mm	1.680	07.132 07.122
	Bottom view protection profile (only in combination with sidelight profile 07.132/122 and cover profile 07.141/140) fixed length stock length 6,000 mm	0.164	07.137 07.138

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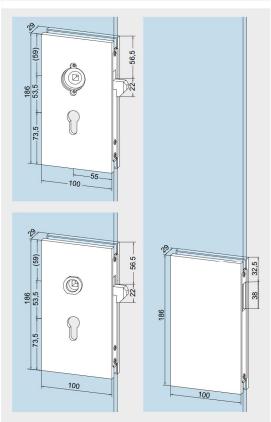
Accessories RS 120/RS 120 Syncro



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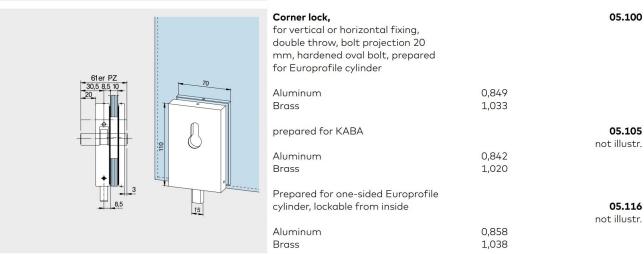
20





50

Hook lock 05.200 for sliding doors, nightlatch function, suitable for **aluminum lever** handles with round roses (10.307), prepared for Europrofile cylinder, left hand and right hand, with lock keeper plate 1,325 Aluminum Suitable for lever handles with follower 05.202 1,325 Aluminum 05.201 Strike box to suit hook lock, (05.200, 05.202), non-handed Aluminum 0,890

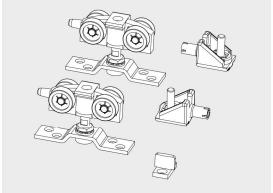


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Component parts for RS 120 for timber applications

Product description

Art. No.



RS 120 accessories

for timber applications consisting of:

2 carriers,

2 end stops with safety catch,

1 floor guide

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07.135

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Accessories

Pull handles, door knobs and recessed pull grip

The pull handle/knob system is designed for glass of 8, 10 and 12 mm thickness.

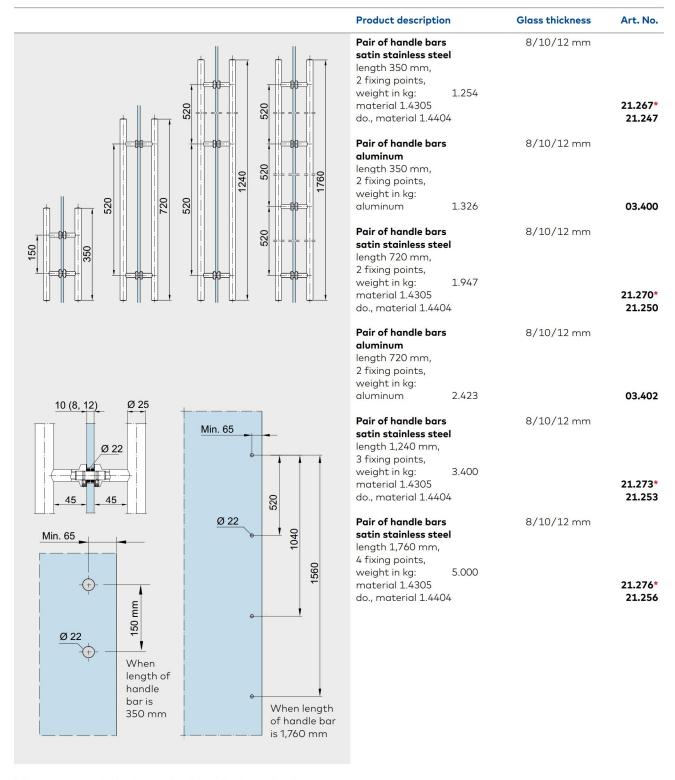
The pull handles can be fixed to both sliding and pivoting (swing) doors on one face using the appropriate connectors or on both faces by through-bolting (back-to-back arrangement).

Due to a flat structure recessed pull grips are also suitable for sliding doors.

The single-point fixings and through bolts are included as standard equipment in the scope of supply.

The pull handles can be fitted horizontally, vertically or in a handrail arrangement.



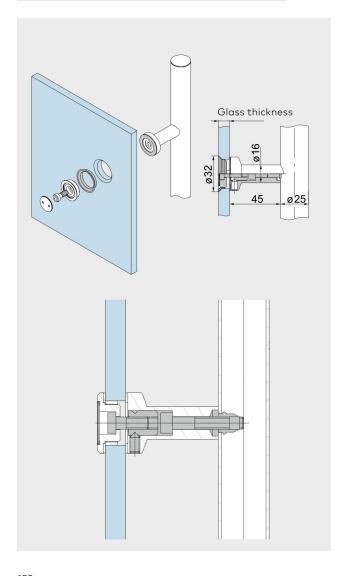


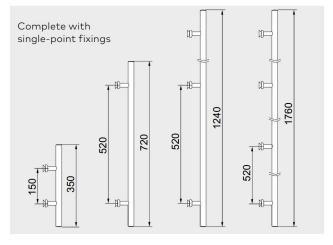
^{*} Conversion sets for back to back pull handles for timber doors resp. other glass thicknesses see unter "Spacing adjustment for pull handles and door knobs", page 183.

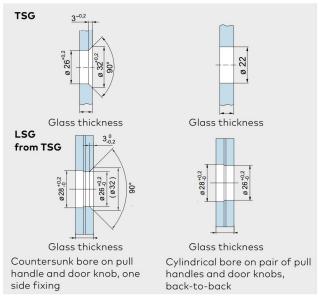
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Pull handles single

Product description	Glass thickness	Art. No.
Pull handles with single-point fixings, countersunk Edelstahl Pull handle 350 mm with 2 fixings, material 1.4305 do., AISI 316L Pull handle 720 mm with 2 fixings, material 1.4305 do., AISI 316L Pull handle 1,240 mm with 3 fixings, material 1.4305 do., AISI 316L Pull handle 1,760 mm with 4 fixings, material 1.4305 do., AISI 316L	8/10/12 mm	29.268 29.269 29.271 29.272 29.274 29.275 29.277 29.278
Pull handles with single-point fixings, clamping disc Pull handle 350 mm with 2 fixings, material 1.4305 Pull handle 720 mm with 2 fixings, material 1.4305 do., AISI 316L Pull handle 1,240 mm with 3 fixings, material 1.4305 Pull handle 1,760 mm with 4 fixings, material 1.4305 do., AISI 316L	8/10/12 mm	21.240 21.241 21.281 21.242 21.243 21.283







Spacing adjustment for pull handles and door knobs

		Product description	Door thickness	Art. No.
		Conversion set 1 for glass doors, pair of pull handles / knob back-to-back	13.5 – 21.5 mm	21.285
		without distance washer	13.5 mm	
		with 1 distance washer	15 mm	
		with 2 distance washers	17.5 mm	
Distance washer 2 mm		with 3 distance washers	19 mm	
		with 4 distance washers	21.5 mm	
		Conversion set 2 for timber doors, pair of pull handles / knob back-to-back	20 – 40 mm	21.286
	- ABBUT - ABBU	without distance washer	20 mm	
	A PLEASE OF THE PROPERTY OF TH	with 1 distance washer	25 mm	
		with 2 distance washers	30 mm	
		with 3 distance washers with 4 distance washers	35 mm	
		with 4 distance wasners	40 mm	
Distance washer 5 mm				
^		Conversion set 3 for glass / timber doors*,		21.287
		pair of pull handles / knob back-to-		
(9)		back, countersunk 15 - 40 mm glass /		
		timber thickness		
				21.288
(a)				
		Conversion set 4 for glass / timber		
	6	doors*, pair of pull handles / knob back-		
	•	to-back, clamping disc 15 - 40 mm		
6.1.2	C + /	glass / timber thickness		
Set 3	Set 4			
		Conversion set 5 for glass doors*,		21.295
		recessed pull grip		
•	^	13.5 - 21.5 mm glass thickness		
	6	Communication and 6 for timely and a rest		21,296
		Conversion set 6 for timber doors*, recessed pull grip		21.290
		20 - 40 mm timber thickness		
6	0	20 40 Hill diffiser thickness		
0				
Set 5	Set 6			
		Conversion set 7 for glass / timber		21.297
		doors*, for pull handles fixed on both		£1,£7/
		sides to pull handle fixed on one side,		
		countersunk 8 - 40 mm glass / timber		
		thickness		
		1 set per pull handle fixing		
				04.00-
		Conversion set 8 for glass / timber		21.298
9		doors*, for pull handles fixed on both sides to pull handle fixed on one side,		
		clamping disc 8 - 40 mm glass / timber		
6		thickness		
6 : 7	C-+ 0	1 set per pull handle fixing		
Set 7	Set 8	1 1 1 1		

^{*}Not suitable for Arcos pull handles 26.500 / 26.510

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Pair of pull handles

Pair of stainless steel handlebars, lockable on both sides, prepared for standard PZ, length 1200 mm, incl. filoor socket Pair of stainless steel handlebars, lockable on one side, prepared for standard PZ, length 1200 mm, incl. filoor socket	Product description Glass thickness Art.	No.
handlebars, lockable on one side, prepared for standard PZ, length 1200 mm, incl. floor	handlebars, lockable on both sides, prepared for standard PZ, length 1200 mm, incl. floor	580
	handlebars, lockable on one side, prepared for standard PZ, length 1200 mm, incl. floor	581

Arcos pull handle

824

Product description

Glass thickness

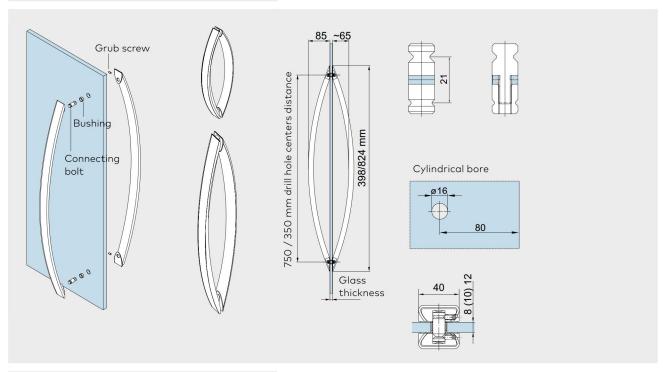
8/10/12 mm

Art. No.

Arcos pair of pull handle

incl. connecting bolt Aluminium, stainless steel look

Pull handle 350 mm with 2 fixings Pull handle 750 mm with 2 fixings 26.500 26.510



479 / 629 / 929

BEYOND pull handle

Glas thickness 10 / 12 mm with 2 fixing points (through bore diameter 22 mm)

Length 450 mm Length 600 mm Length 900 mm 30.300 30.305 30.310

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Art. No.

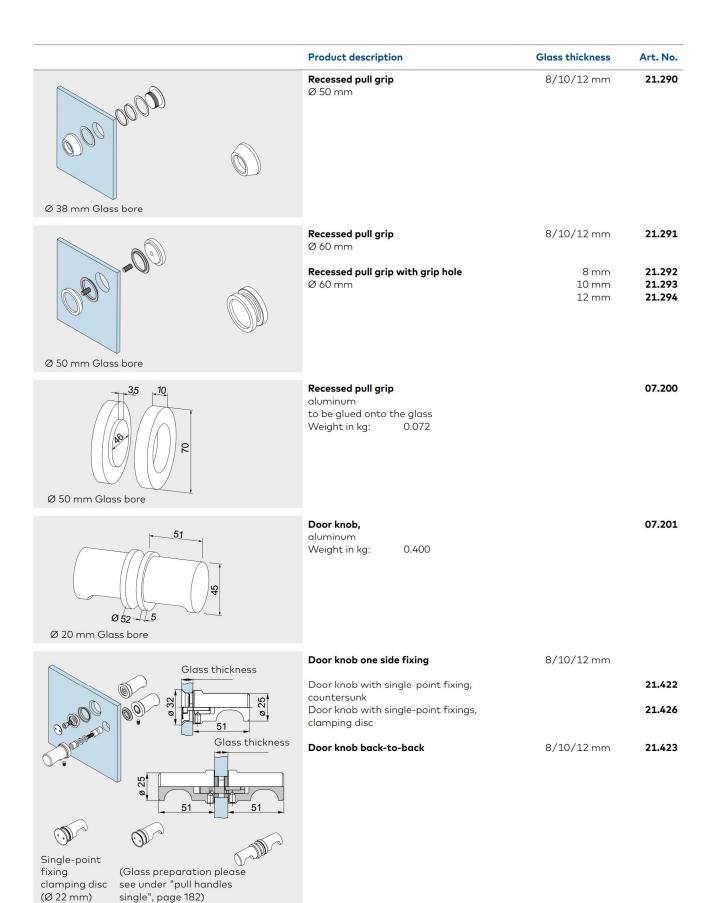
75.084

75.085

Handle bars

Pull handle "Quadrat" Glas thickness 6 - 10 mm with 2 fixings Length 300 mm Length 500 mm

Recessed pull grips and door knobs



Note: To ensure better load transmission, please use a pull handle in conjunction with the DORMOTION damping unit.

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Brush seals

Brush seals for sliding doors	Product description	Art. No.
3	MUTO reception profile for vertical brush seals stock length: 4,500 mm	36.826
3	fixed length up to 4,500 mm	36.827
	MUTO reception profile with vertical brush seals fixed length up to 4,500 mm	
13	for 13-16 mm gap	36.828
19	for 16-19 mm gap	36.829
23	for 19-23 mm gap	36.830
	for 23-77 mm gap	36.831
	MUTO vertical brush seal fixed length up to 4,500 mm	
16	for 13-16 mm gap	36.860
	for 16-19 mm gap	36.861
23	for 19-23 mm gap	36.862
	for 23-77 mm gap	36.863
	MUTO vertical brush seals	
	for 13-16 mm gap (300 m roll)	36.864 not illustr.
	for 16-19 mm gap (250 m roll)	36.865 not illustr.
	for 19-23 mm gap (250 m roll)	36.866 not illustr.
	for 23-77 mm gap (150 m roll)	36.867 not illustr.
	Aluminum brush profile	
	similar satin stainless steel	
	for gap size 14-18mm stock length 3,000 mm	07.402
	fixed length up to 6,000 mm	07.403
	for gap size 10,5-13mm stock length 3,000 mm	07.400
	fixed length up to 6,000 mm	07.401
15.5 for 8 mm glass 13.5 for 10 mm glass 11.5 for 12 mm glass		

Profile overview - seal system

	Product description	Product description
D	Tubular seal (Art. No. 15.508, for doors that close against the wall, and for double-panel/biparting systems)	Brush
	Brush reception profile	Flat alu section (by others)

Application of profiles		13	16	19	23	2.5
MUTO Comfort M 60						
at wall	•	•				
at ceiling	•	•				
at ceiling with side light	•	•				
MUTO Comfort L 80						
at wall	•	•				•
at ceiling	•		•			
at ceiling with side light	•		•			
at glass	•		•			
MUTO Premium XL 80/150 MUTO Premium Self-Closing 120	i					
at wall	•		•			•
at ceiling	•			•		
at ceiling with side light	•			•		
at glass	•			•		
MUTO Premium Telescopic 80						
at wall						
glass thickness: 8–10 mm	2X	•			•	•
glass thickness: 10–12 mm	2X	•			•	•
glass thickness: 12–13.5 mm	2X	•		•		•
at ceiling with side light						
glass thickness: 8–10 mm	2X		•		•	
glass thickness: 10–12 mm	2X		•		•	
glass thickness: 12–13.5 mm	2X		•	•		
at glass						
glass thickness: 8–10 mm	2X		•		•	
glass thickness: 10–12 mm	2X		•		•	
glass thickness: 12–13.5 mm	2X		•	•		

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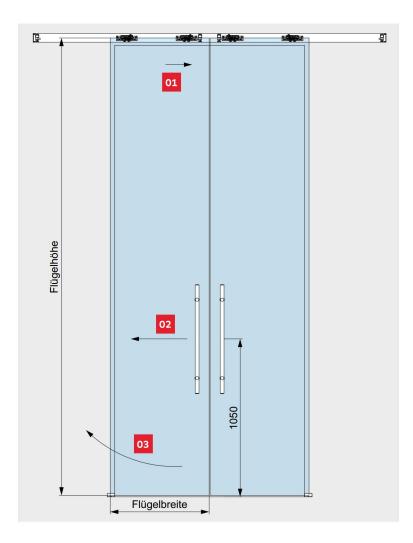
Accessories / Assembling aid

Product description	Art. No.
Assembling tool for MANET single-point fixing	21.134
Clip-on cover for single-point fixing with spring, 5 pieces material 1.4305 do.material 1.4404	29.217 29.219
Drilling jig for MANET single-point fixing serie S32/35	21.137

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Tips and tricks

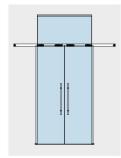
Sliding panel with unfavourable aspect ratio



Excessively high sliding panels in relation to the panel width can lead to unpleasant handling and malfunction due to physical reasons (recommendation of the aspect ratio: between 1:2 and 1:3).

- **01** The door is to be moved by means of a handle.
- **02** End stop, Dormotion unit and synchro function brake the panel within the track.
- **03** The door only moves down in the corresponding direction (door rotates)

This problem can be slightly improved by increasing the glass thickness and thus increasing the mass (weight) of the panel.



We recommend in such cases to use the application on glass and to use an overpanel. This reduces the door height and improves the aspect ratio.

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Space for your notes

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Safety-related information

Important safety-related information for the mounting and use of dormakaba 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. dormakaba recommends using TSG-H (heat soaked toughened safety glass) to DIN EN 12150-1.
- dormakaba 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 dormakaba 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.
- Never use clamping shoes on structured glass surfaces (except on satined glass) or glass of heavily varying thickness unless with a corresponding levelling layer.
- 6. Never use clamping shoes on self-cleaning coatings.
- 7. When adjusting glass elements, always stick to the required clearance for the respective fitting. Adjust clearance so that the glass does not touch hart 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 class 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.

For practical planning, please use our drawings dormakaba DETAIL.

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.

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Our products



Interior Glass Systems

System solutions made from glass for a wide range of everyday and office applications



Mechanical Key Systems

Systems that enable access rights and key control to all rooms within the premises



Lodging Systems

Hotel locks and locking systems as well as access management solutions for holiday homes



Electronic Access & Data

Electronic access control and workforce management for efficient access management, security and data collection



Entrance Systems

Automated access solutions for convenient access to buildings



Door Hardware

Solutions for residential or commercial projects



Safe Locks

Security locks for preventing unauthorized access to goods, valuables, information or hazardous substances



Services

Tailor-made services and customized maintenance for long-term functional integrity of access and security solutions

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