



## Technische Information Technical Information

Beschläge für Ganzglas-Faltanlagen  
mit Einzelgelenken an den Flügeln

System >VISTAfold<

Fittings for frameless glass-folding doors

System >VISTAfold<

Gruppe 9 / Group 9

Juli 2015 / July 2015

Technische Änderungen vorbehalten / Technical changes can be made without prior notice



## Technical remarks:

### 1) Type designation:

The folding doors described in this Technical Information are called >VISTAfold<.

The working method of folding doors is basically known by the fact that all panels are connected by means of hinges and the unit is "folded" while opening.

With **folding doors** the pivot of the final panel (panel 1) and the rollers of the other panels is always almost at the end of the panel. The folding of the whole panel width from the middle axis occurs while opening the unit. So the main focus of the panels also shifts out of the middle axis. A bottom floor guide (U-channel) is essential for most folding doors (at least with from 3 panels or more).

### 2) Number of panels:

In general, a unit consists of 1 to 5 panels. Folding doors with more than 5 panels are possible, however, they require precise adjustment of the fittings on the glass as well as exact assembly.

### 3) Size of panels:

folding doors                      max. panel size (= size of glass) is limited to 900 x 2.500 mm

### 4) Glass thickness:

The fittings are prepared for a glass thickness of 8 or 10 mm. Please indicate thickness when ordering the fittings.

### 5) Finish of fittings:

All fittings are made of aluminum (apart from bolts, rollers etc.). Besides anodizing in the known colours, any type of powder-coating can be applied.

### 6) Notes for assembly:

When fittings are attached to the glass, please make sure that the hinges are adjusted parallel resp. at right angles to the glass edges. Hinges connecting two panels require precise alignment of the bolt between the glass joints. The gaskets are to be glued to the fittings and the gasket and glass also have to be glued together. We recommend to put two panels next to each other on racks (starting with panel 1 and 2), remove panel 1 after the fittings have been attached and continue with panel 3 etc.. The vertical glass joint is kept constant by means of spacers.

### 7) Notes for installation:

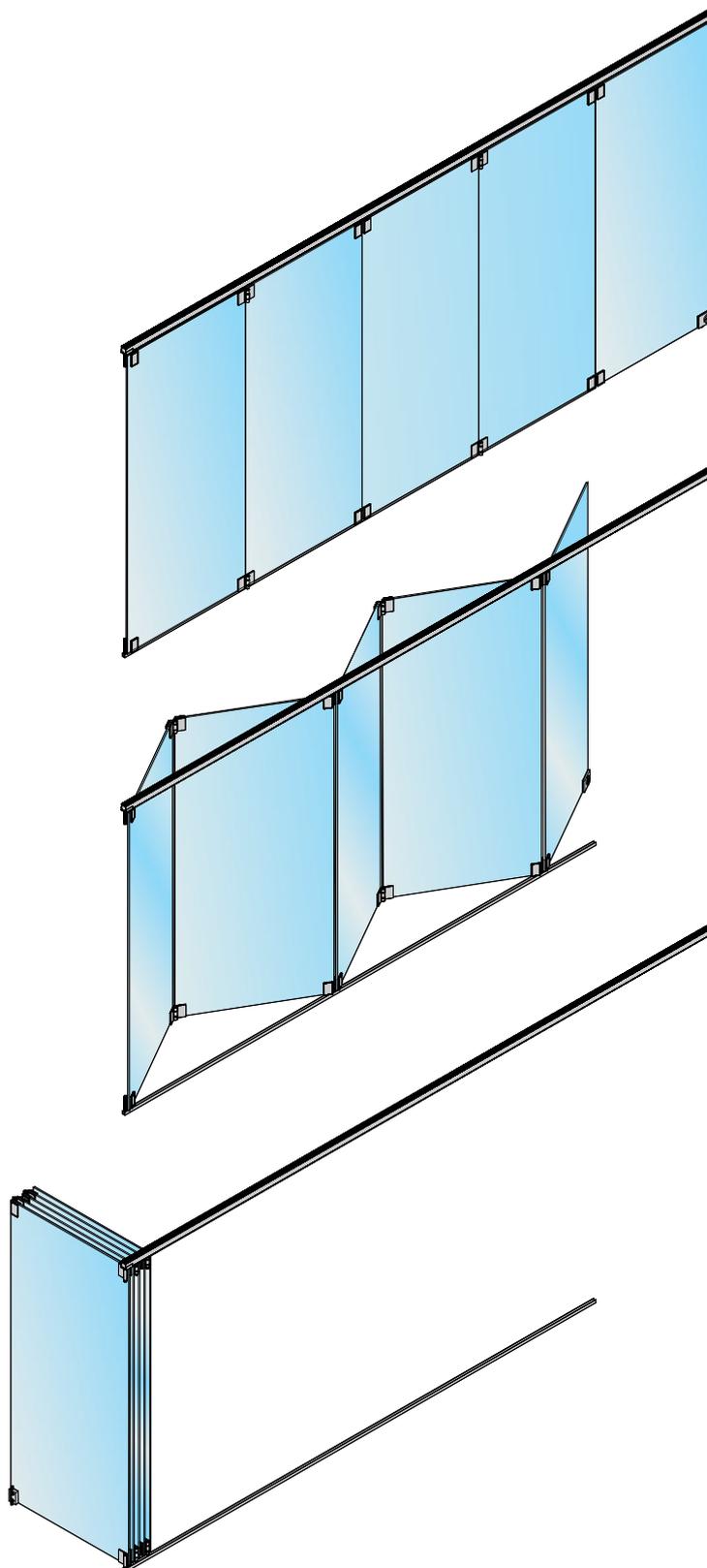
The upper track has to be horizontally aligned. Distortion of the profile section is to be prevented. The bottom U-channel is to be set in a vertical line below the centre of the profile section of the upper track on folding doors.

### 8) Order information:

Number of units, total width resp. length of upper track, number of article, type, glass thickness, finish of fittings.  
(By the way: We would gladly help you with checking your calculated glass measurements)

# Faltanlagen > VISTAfold <

## Folding doors > VISTAfold <

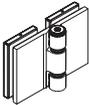
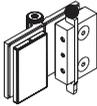
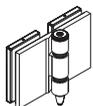
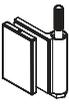
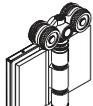
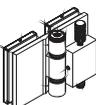


**Art.No.9-111** bestehend aus:

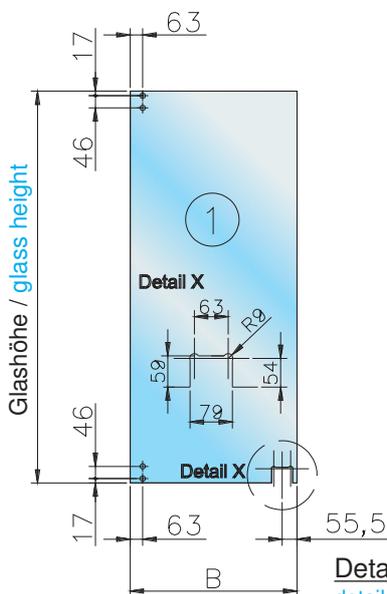
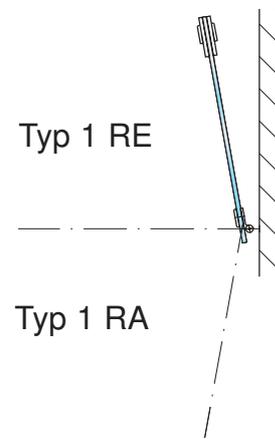
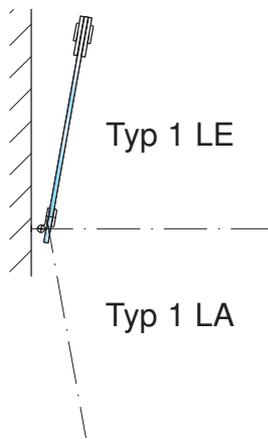
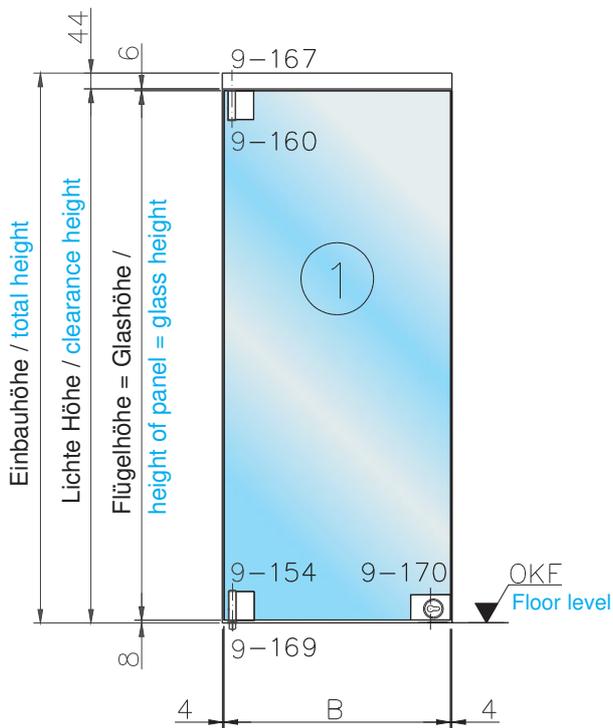
Art.No.9-111 consisting of:

Wenn sie den kompletten Art. No. 9-111 bestellen, brauchen Sie die Einzel-Art. No. nicht aufzuführen.

When ordering the complete art. no. 9-111 you don't have to specify the individual art. no.

	Art.No.	Type LE	Type RE	Type LA	Type RA	
	<b>9-150</b>					<b>Normalgelenk oben oder unten</b> upper normal hinge or lower normal hinge
	<b>9-153</b>					<b>Normalgelenk unten mit Riegelbock</b> lower normal hinge with locking block
	<b>9-154</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk unten mit Delrin-Führungsrolle</b> lower end panel hinge with delrin guide roller
	<b>9-155</b>					<b>Normalgelenk unten mit Delrin-Führungsrolle</b> lower normal hinge with delrin guide roller
	<b>9-160</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben für Bolzenträger (inkl. Sechskantschraube M10)</b> upper end panel hinge for pin carrier (incl. hexagon head screw M10)
	<b>9-161</b>					<b>Normalgelenk oben mit Laufrolle</b> upper normal hinge with roller
	<b>9-162</b>					<b>Endflügelgelenk oben mit Laufrolle</b> upper end panel hinge with roller
	<b>9-163</b>					<b>Einsatzstück für Enddrehpunkt in unterer Führungsschiene</b> mounting piece for end pivot in lower guide rail
	<b>9-164</b>					<b>Gelenk mit Riegelbock</b> (für nach außen aufgehende Anlagen), mit Bodenbuchse 8-685 hinge with locking block (for glass wall opening to the outside), with floor bushing 8-685
	<b>4-311</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Leichtmetall-Laufprofil (35 x 44 mm)</b> upper track made from aluminum (35x44 mm)
	<b>9-170</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Riegelschloss inkl. Profilzylinder</b> (Zylinderlänge 51 mm), mit Bodenbuchse 9-168 bolt lock incl. cylinder (length 51 mm) and floor bushing 9-168
	<b>9-167</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bolzenträger für Endflügel mit unterer Abdeckung</b> first panel pin carrier with cover below
	<b>9-169</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bodenlager aus Niro für Anlagen ohne unteres Führungs-U-Profil</b> floor support from stainless steel for units without bottom U-channel

## Art. No. 9-111



Detail X: siehe auch Seite 27  
 detail X: see also page 27

Glasbearbeitung: alle Bohrungen  $\varnothing$  20 mm; alle Kanten feinjustiert

Art. No. 9-111 kann auch ohne obere Laufschiene ausgeführt werden. Bitte fragen Sie an.

Glass preparation: all holes  $\varnothing$  20 mm; all edges precision adjusted

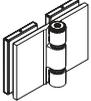
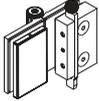
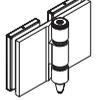
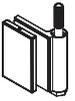
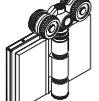
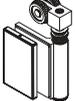
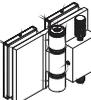
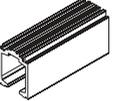
Upon request art. no. 9-111 can be installed without upper track. Please request on.

**Art.No.9-112 Bola** bestehend aus:

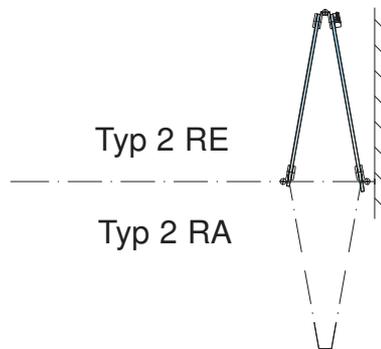
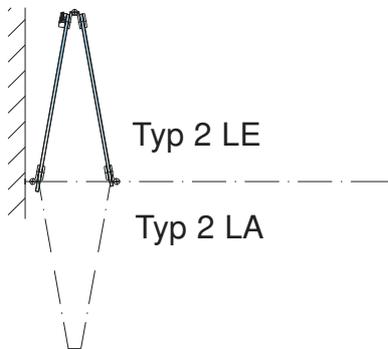
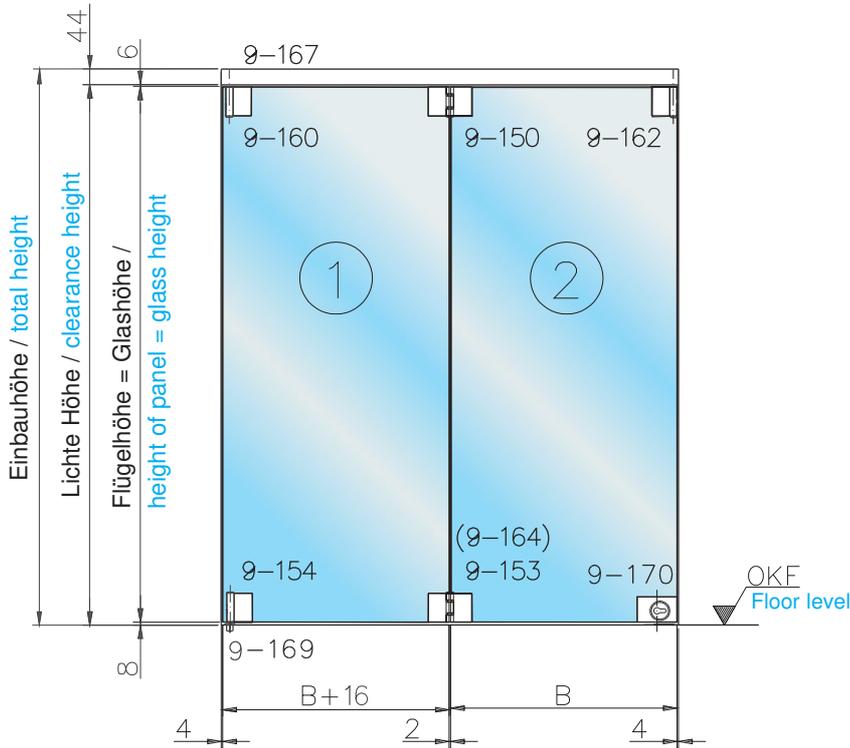
**Art.No.9-112 Bola** consisting of:

Wenn sie den kompletten Art. No. 9-112 Bola bestellen, brauchen Sie die Einzel-Art. No. nicht aufzuführen.

When ordering the complete art. no. 9-112 Bola you don't have to specify the individual art. no.

	Art.No.	Type LE	Type RE	Type LA	Type RA	
	<b>9-150</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk oben oder unten</b> upper normal hinge or lower normal hinge
	<b>9-153</b>	<b>1</b>	<b>1</b>			<b>Normalgelenk unten mit Riegelbock</b> lower normal hinge with locking block
	<b>9-154</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk unten mit Delrin-Führungsrolle</b> lower end panel hinge with delrin guide roller
	<b>9-155</b>					<b>Normalgelenk unten mit Delrin-Führungsrolle</b> lower normal hinge with delrin guide roller
	<b>9-160</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben für Bolzenträger (inkl. Sechskantschraube M10)</b> upper end panel hinge for pin carrier (incl. hexagon head screw M10)
	<b>9-161</b>					<b>Normalgelenk oben mit Laufrolle</b> upper normal hinge with roller
	<b>9-162</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben mit Laufrolle</b> upper end panel hinge with roller
	<b>9-163</b>					<b>Einsatzstück für Enddrehpunkt in unterer Führungsschiene</b> mounting piece for end pivot in lower guide rail
	<b>9-164</b>			<b>1</b>	<b>1</b>	<b>Gelenk mit Riegelbock (für nach außen aufgehende Anlagen), mit Bodenbuchse 8-685</b> hinge with locking block (for glass wall opening to the outside), with floor bushing 8-685
	<b>4-311</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Leichtmetall-Laufprofil (35 x 44 mm)</b> upper track made from aluminum (35x44 mm)
	<b>9-170</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Riegelschloss inkl. Profilzylinder (Zylinderlänge 51 mm), mit Bodenbuchse 9-168</b> bolt lock incl. cylinder (length 51 mm) and floor bushing 9-168
	<b>9-167</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bolzenträger für Endflügel mit unterer Abdeckung</b> first panel pin carrier with cover below
	<b>9-169</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bodenlager aus Niro für Anlagen ohne unteres Führungs-U-Profil</b> floor support from stainless steel for units without bottom U-channel

## Art. No. 9-112 mit Bodenlager / with floor support



Ermittlung der Glasmaße:

$$B_2 = \text{Lichte Breite} - (10+16) : 2$$

$$B_1 = B_2 + 16$$

Glasbearbeitung: alle Bohrungen  $\varnothing$  20 mm; alle Kanten feinjustiert

Art. No. 9-112 Bola kann auch ohne obere Laufschiene ausgeführt werden. Bitte fragen Sie an.

Calculation of glass dimensions:

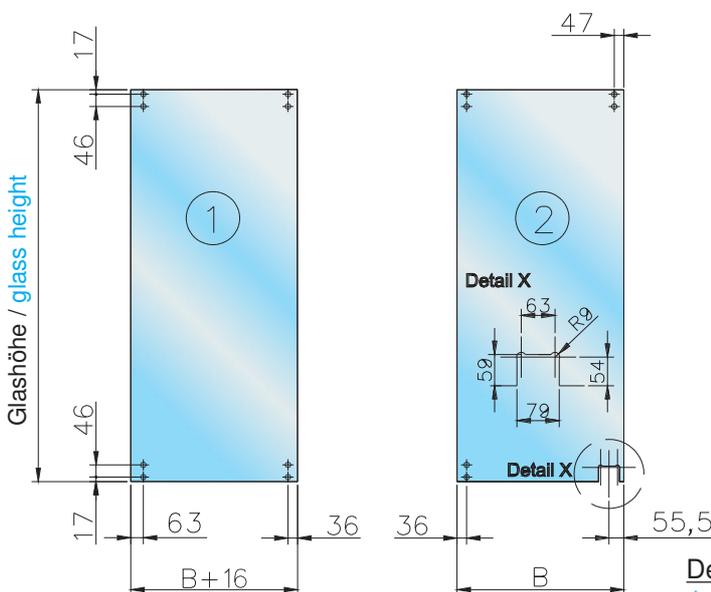
$$B_2 = \text{Total width} - (10+16) : 2$$

$$B_1 = B_2 + 16$$

Glass preparation: all holes  $\varnothing$  20 mm; all edges precision adjusted

Upon request art. no. 9-112 Bola can be installed without upper track. Please request on.

Detail X: siehe auch Seite 27  
detail X: see also page 27

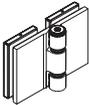
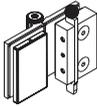
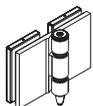
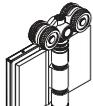
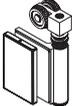
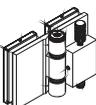


**Art.No.9-112** bestehend aus:

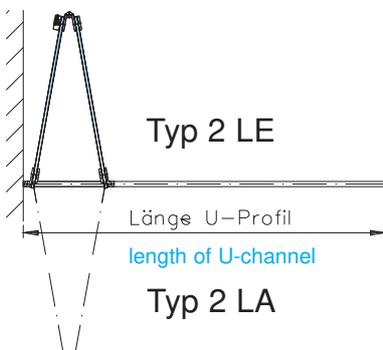
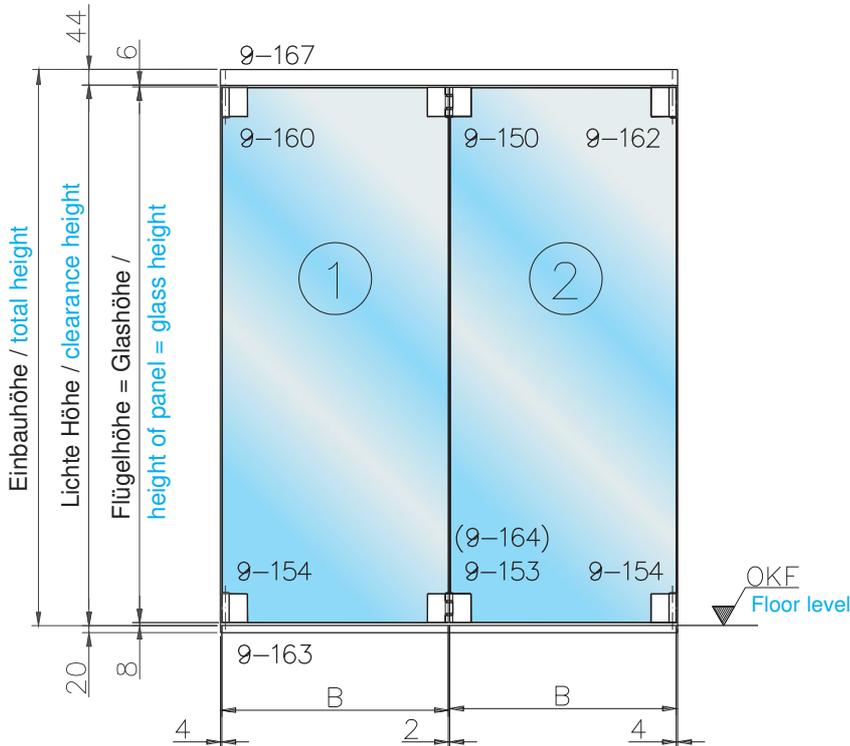
Art.No.9-112 consisting of:

Wenn sie den kompletten Art. No. 9-112 bestellen, brauchen Sie die Einzel-Art. No. nicht aufzuführen.

When ordering the complete art. no. 9-112 you don't have to specify the individual art. no.

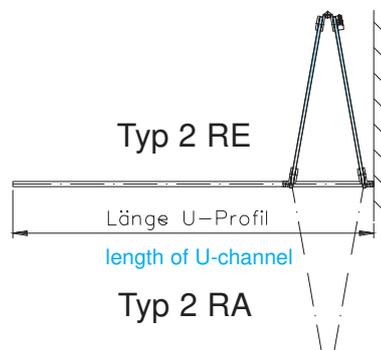
	Art.No.	Type LE	Type RE	Type LA	Type RA	
	<b>9-150</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk oben oder unten</b> upper normal hinge or lower normal hinge
	<b>9-153</b>	<b>1</b>	<b>1</b>			<b>Normalgelenk unten mit Riegelbock</b> lower normal hinge with locking block
	<b>9-154</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Endflügelgelenk unten mit Delrin-Führungsrolle</b> lower end panel hinge with delrin guide roller
	<b>9-155</b>					<b>Normalgelenk unten mit Delrin-Führungsrolle</b> lower normal hinge with delrin guide roller
	<b>9-160</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben für Bolzenträger (inkl. Sechskantschraube M10)</b> upper end panel hinge for pin carrier (incl. hexagon head screw M10)
	<b>9-161</b>					<b>Normalgelenk oben mit Laufrolle</b> upper normal hinge with roller
	<b>9-162</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben mit Laufrolle</b> upper end panel hinge with roller
	<b>9-163</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Einsatzstück für Enddrehpunkt in unterer Führungsschiene</b> mounting piece for end pivot in lower guide rail
	<b>9-164</b>			<b>1</b>	<b>1</b>	<b>Gelenk mit Riegelbock (für nach außen aufgehende Anlagen), mit Bodenbuchse 8-685</b> hinge with locking block (for glass wall opening to the outside), with floor bushing 8-685
	<b>4-311</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Leichtmetall-Laufprofil (35 x 44 mm)</b> upper track made from aluminum (35x44 mm)
	<b>9-170</b>					<b>Riegelschloss inkl. Profilzylinder (Zylinderlänge 51 mm), mit Bodenbuchse 9-168</b> bolt lock incl. cylinder (length 51 mm) and floor bushing 9-168
	<b>9-167</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bolzenträger für Endflügel mit unterer Abdeckung</b> first panel pin carrier with cover below
	<b>9-171</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Unteres Führungs-U-Profil aus Leichtmetall (20/20/20/3,5 mm) in EV1</b> bottom U-channel made from aluminum (20/20/20/3,5 mm) in EV1

## Art. No. 9-112 mit U-Profil / with U-channel



Innen  
inside

Außen  
outside



Ermittlung der Glasmaße:

$$B = (\text{Lichte Breite} - 10) : 2$$

Glasbearbeitung: alle Bohrungen  $\varnothing$  20 mm; alle Kanten feinjustiert

Länge des LM-U-Profils:

$$\text{U-Profil} = \text{Lichte Breite}$$

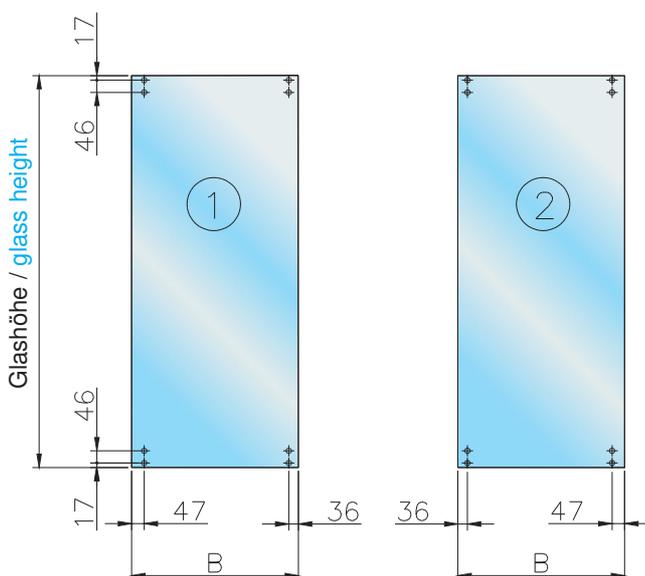
Calculation of glass dimensions:

$$B = (\text{Total width} - 10) : 2$$

Glass preparation: all holes  $\varnothing$  20 mm; all edges precision adjusted

Length of aluminum U-channel:

$$\text{U-channel} = \text{total width}$$

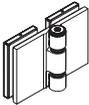
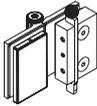
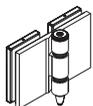
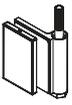
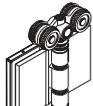
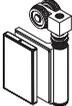
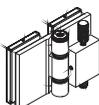
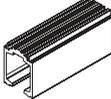


**Art.No.9-113** bestehend aus:

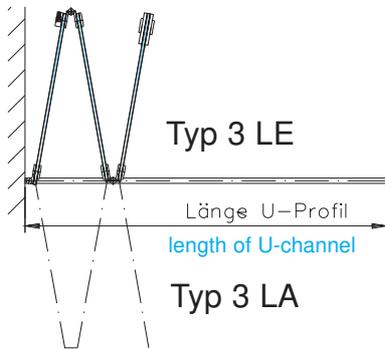
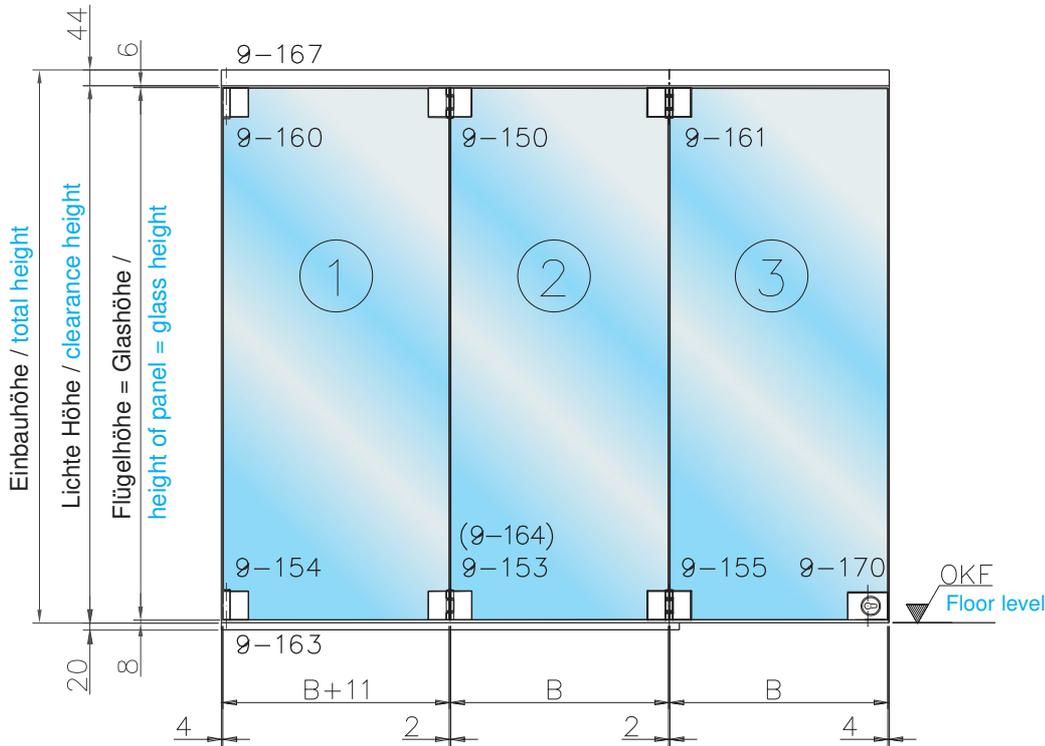
**Art.No.9-113** consisting of:

Wenn sie den kompletten Art. No. 9-113 bestellen, brauchen Sie die Einzel-Art. No. nicht aufzuführen.

When ordering the complete art. no. 9-113 you don't have to specify the individual art. no.

	Art.No.	Type LE	Type RE	Type LA	Type RA	
	<b>9-150</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk oben oder unten</b> upper normal hinge or lower normal hinge
	<b>9-153</b>	<b>1</b>	<b>1</b>			<b>Normalgelenk unten mit Riegelbock</b> lower normal hinge with locking block
	<b>9-154</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk unten mit Delrin-Führungsrolle</b> lower end panel hinge with delrin guide roller
	<b>9-155</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk unten mit Delrin-Führungsrolle</b> lower normal hinge with delrin guide roller
	<b>9-160</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben für Bolzenträger (inkl. Sechskantschraube M10)</b> upper end panel hinge for pin carrier (incl. hexagon head screw M10)
	<b>9-161</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk oben mit Laufrolle</b> upper normal hinge with roller
	<b>9-162</b>					<b>Endflügelgelenk oben mit Laufrolle</b> upper end panel hinge with roller
	<b>9-163</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Einsatzstück für Enddrehpunkt in unterer Führungsschiene</b> mounting piece for end pivot in lower guide rail
	<b>9-164</b>			<b>1</b>	<b>1</b>	<b>Gelenk mit Riegelbock (für nach außen aufgehende Anlagen), mit Bodenbuchse 8-685</b> hinge with locking block (for glass wall opening to the outside), with floor bushing 8-685
	<b>4-311</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Leichtmetall-Laufprofil (35 x 44 mm)</b> upper track made from aluminum (35x44 mm)
	<b>9-170</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Riegelschloss inkl. Profilzylinder (Zylinderlänge 51 mm), mit Bodenbuchse 9-168</b> bolt lock incl. cylinder (length 51 mm) and floor bushing 9-168
	<b>9-167</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bolzenträger für Endflügel mit unterer Abdeckung</b> first panel pin carrier with cover below
	<b>9-171</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Unteres Führungs-U-Profil aus Leichtmetall (20/20/20/3,5 mm) in EV1</b> bottom U-channel made from aluminum (20/20/20/3,5 mm) in EV1

## Art. No. 9-113

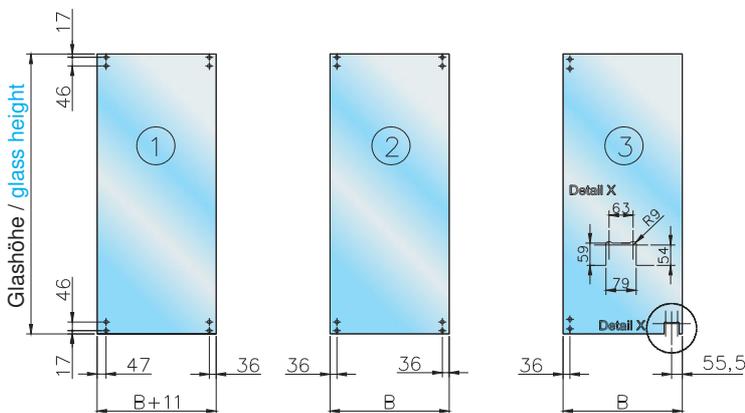


Innen  
inside

Typ 3 RE

Außen  
outside

Typ 3 RA



**Ermittlung der Glasmaße:**

$$B_{2,3} = \text{Lichte Breite} - (12+11) : 3$$

$$B_1 = B_{2,3} + 11$$

**Glasbearbeitung:** alle Bohrungen  $\varnothing$  20 mm; alle Kanten feinjustiert

**Länge des LM-U-Profiles:**

$$2B + 40 \text{ mm}$$

**Calculation of glass dimensions:**

$$B_{2,3} = \text{Total width} - (12+11) : 3$$

$$B_1 = B_{2,3} + 11$$

**Glass preparation:** all holes  $\varnothing$  20 mm; all edges precision adjusted

**Detail X:** siehe auch Seite 27  
detail X: see also page 27

**Length of aluminum U-channel:**  
 $2B + 40 \text{ mm}$

# TEUFELBESCHLAG

Wir machen Glas beweglich !

Das komplette Beschlagprogramm  
für Sicherheitsglas

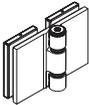
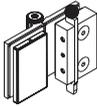
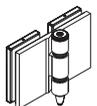
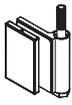
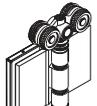
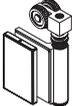
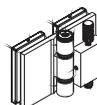
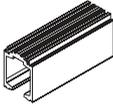
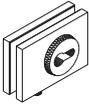
The complete fittings programme  
for safety glass

**Art.No.9-114** bestehend aus:

**Art.No.9-114** consisting of:

Wenn sie den kompletten Art. No. 9-114 bestellen, brauchen Sie die Einzel-Art. No. nicht aufzuführen.

When ordering the complete art. no. 9-114 you don't have to specify the individual art. no.

	Art.No.	Type LE	Type RE	Type LA	Type RA	
	<b>9-150</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Normalgelenk oben oder unten</b> upper normal hinge or lower normal hinge
	<b>9-153</b>	<b>2</b>	<b>2</b>			<b>Normalgelenk unten mit Riegelbock</b> lower normal hinge with locking block
	<b>9-154</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Endflügelgelenk unten mit Delrin-Führungsrolle</b> lower end panel hinge with delrin guide roller
	<b>9-155</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk unten mit Delrin-Führungsrolle</b> lower normal hinge with delrin guide roller
	<b>9-160</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben für Bolzenträger (inkl. Sechskantschraube M10)</b> upper end panel hinge for pin carrier (incl. hexagon head screw M10)
	<b>9-161</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Normalgelenk oben mit Laufrolle</b> upper normal hinge with roller
	<b>9-162</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben mit Laufrolle</b> upper end panel hinge with roller
	<b>9-163</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Einsatzstück für Enddrehpunkt in unterer Führungsschiene</b> mounting piece for end pivot in lower guide rail
	<b>9-164</b>			<b>2</b>	<b>2</b>	<b>Gelenk mit Riegelbock (für nach außen aufgehende Anlagen), mit Bodenbuchse 8-685</b> hinge with locking block (for glass wall opening to the outside), with floor bushing 8-685
	<b>4-311</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Leichtmetall-Laufprofil (35 x 44 mm)</b> upper track made from aluminum (35x44 mm)
	<b>9-170</b>					<b>Riegelschloss inkl. Profilzylinder (Zylinderlänge 51 mm), mit Bodenbuchse 9-168</b> bolt lock incl. cylinder (length 51 mm) and floor bushing 9-168
	<b>9-167</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bolzenträger für Endflügel mit unterer Abdeckung</b> first panel pin carrier with cover below
	<b>9-171</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Unteres Führungs-U-Profil aus Leichtmetall (20/20/20/3,5 mm) in EV1</b> bottom U-channel made from aluminum (20/20/20/3,5 mm) in EV1

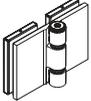
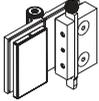
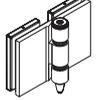
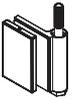
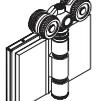
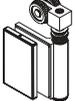
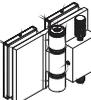


**Art.No.9-115** bestehend aus:

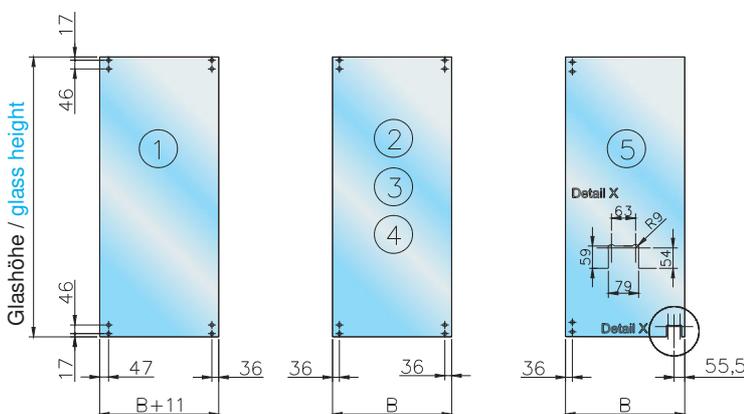
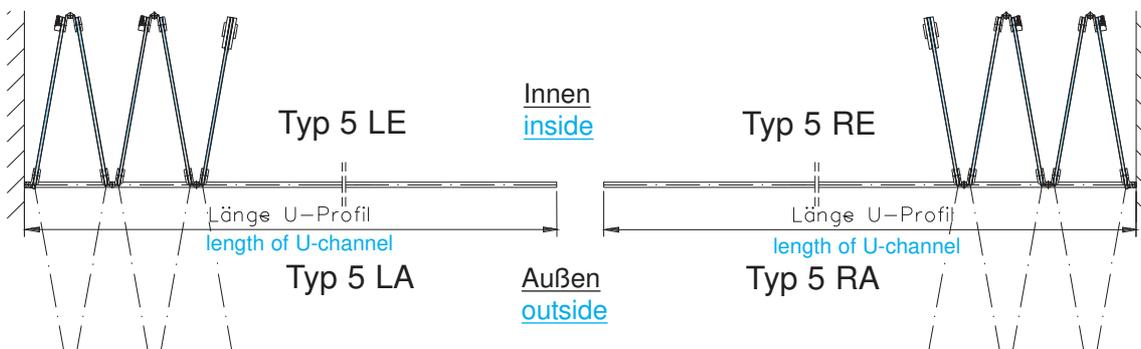
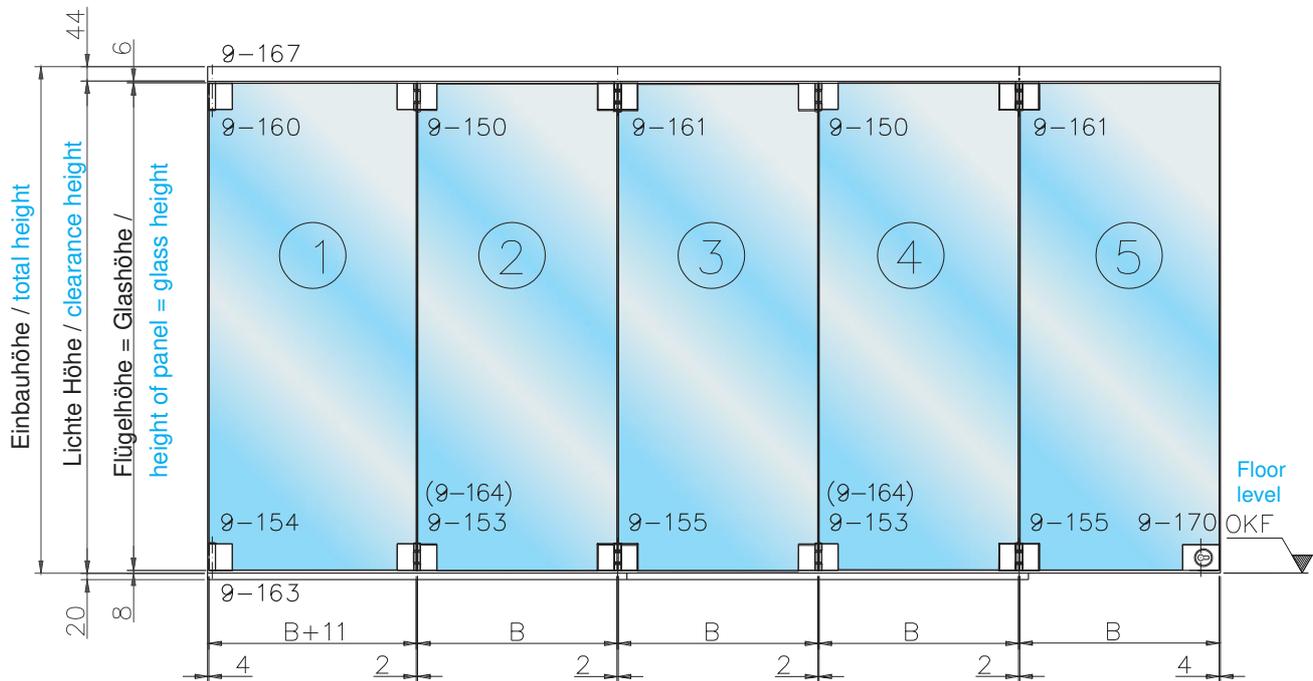
**Art.No.9-115** consisting of:

Wenn sie den kompletten Art. No. 9-115 bestellen, brauchen Sie die Einzel-Art. No. nicht aufzuführen.

When ordering the complete art. no. 9-115 you don't have to specify the individual art. no.

	Art.No.	Type LE	Type RE	Type LA	Type RA	
	<b>9-150</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Normalgelenk oben oder unten</b> upper normal hinge or lower normal hinge
	<b>9-153</b>	<b>2</b>	<b>2</b>			<b>Normalgelenk unten mit Riegelbock</b> lower normal hinge with locking block
	<b>9-154</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk unten mit Delrin-Führungsrolle</b> lower end panel hinge with delrin guide roller
	<b>9-155</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Normalgelenk unten mit Delrin-Führungsrolle</b> lower normal hinge with delrin guide roller
	<b>9-160</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Endflügelgelenk oben für Bolzenträger (inkl. Sechskantschraube M10)</b> upper end panel hinge for pin carrier (incl. hexagon head screw M10)
	<b>9-161</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Normalgelenk oben mit Laufrolle</b> upper normal hinge with roller
	<b>9-162</b>					<b>Endflügelgelenk oben mit Laufrolle</b> upper end panel hinge with roller
	<b>9-163</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Einsatzstück für Enddrehpunkt in unterer Führungsschiene</b> mounting piece for end pivot in lower guide rail
	<b>9-164</b>			<b>2</b>	<b>2</b>	<b>Gelenk mit Riegelbock (für nach außen aufgehende Anlagen), mit Bodenbuchse 8-685</b> hinge with locking block (for glass wall opening to the outside), with floor bushing 8-685
	<b>4-311</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Leichtmetall-Laufprofil (35 x 44 mm)</b> upper track made from aluminum (35x44 mm)
	<b>9-170</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Riegelschloss inkl. Profilzylinder (Zylinderlänge 51 mm), mit Bodenbuchse 9-168</b> bolt lock incl. cylinder (length 51 mm) and floor bushing 9-168
	<b>9-167</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Bolzenträger für Endflügel mit unterer Abdeckung</b> first panel pin carrier with cover below
	<b>9-171</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>Unteres Führungs-U-Profil aus Leichtmetall (20/20/20/3,5 mm) in EV1</b> bottom U-channel made from aluminum (20/20/20/3,5 mm) in EV1

## Art. No. 9-115



### Ermittlung der Glasmaße:

$$B_{2,3,4,5} = \text{Lichte Breite} - (16+11) : 5$$

$$B_1 = B_{2,3,4,5} + 11$$

**Glasbearbeitung:** alle Bohrungen  $\varnothing$  20 mm;  
alle Kanten feinjustiert

### Länge des LM-U-Profiles:

$$4B + 40 \text{ mm}$$

### Calculation of glass dimensions:

$$B_{2,3,4,5} = \text{Total width} - (16+11) : 5$$

$$B_1 = B_{2,3,4,5} + 11$$

**Glass preparation:** all holes  $\varnothing$  20 mm; all edges precision adjusted

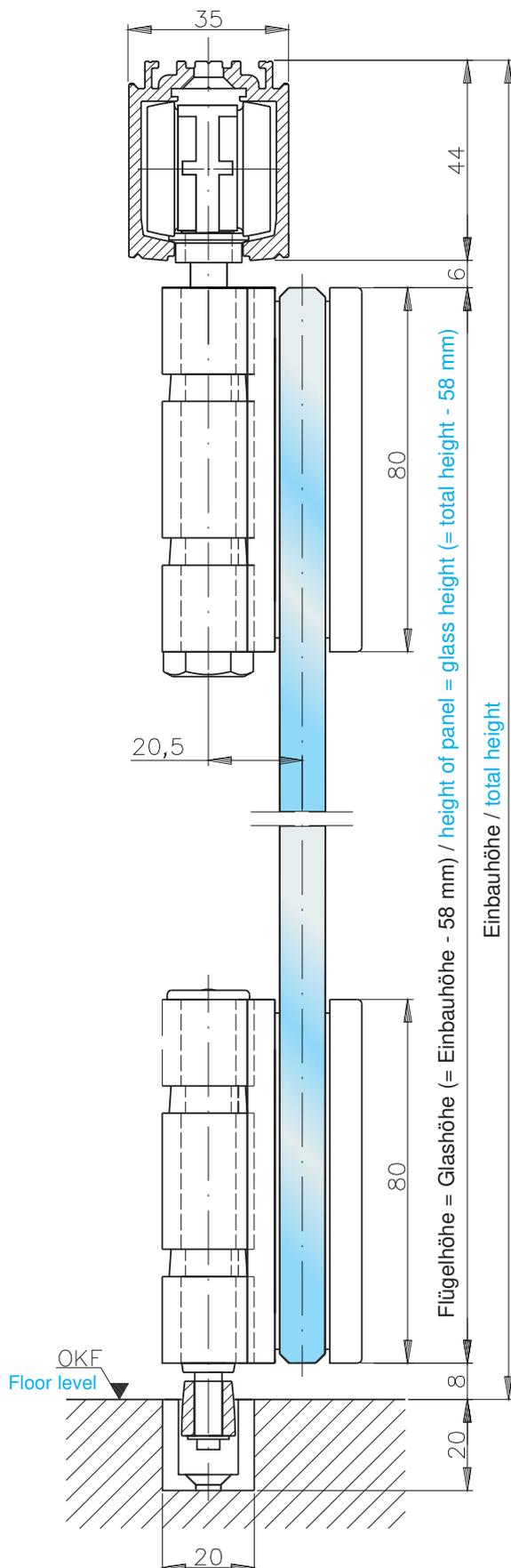
### Length of aluminum U-channel:

$$4B + 40 \text{ mm}$$

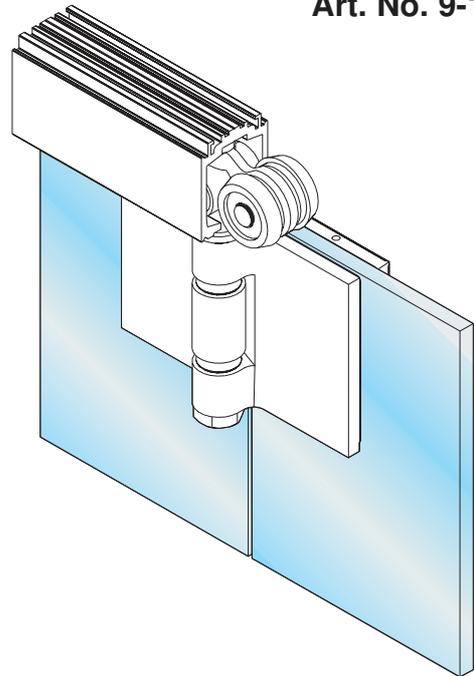
**Detail X:** siehe auch Seite 27  
detail X: see also page 27

**Vertikalschnitt - schematische Darstellung** (ohne Maßstab)

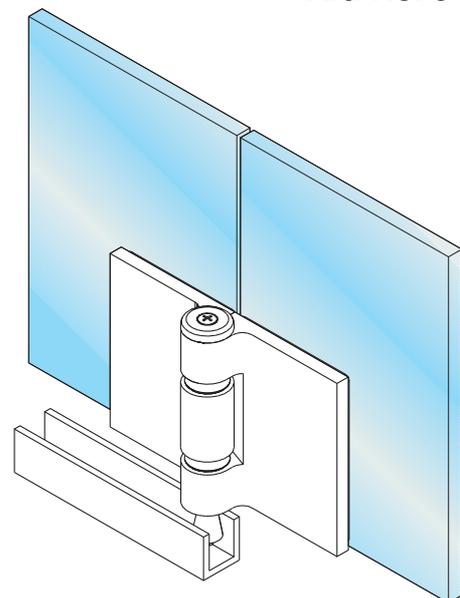
**Vertical section - systematic description** (without scale)



Art. No. 9-161

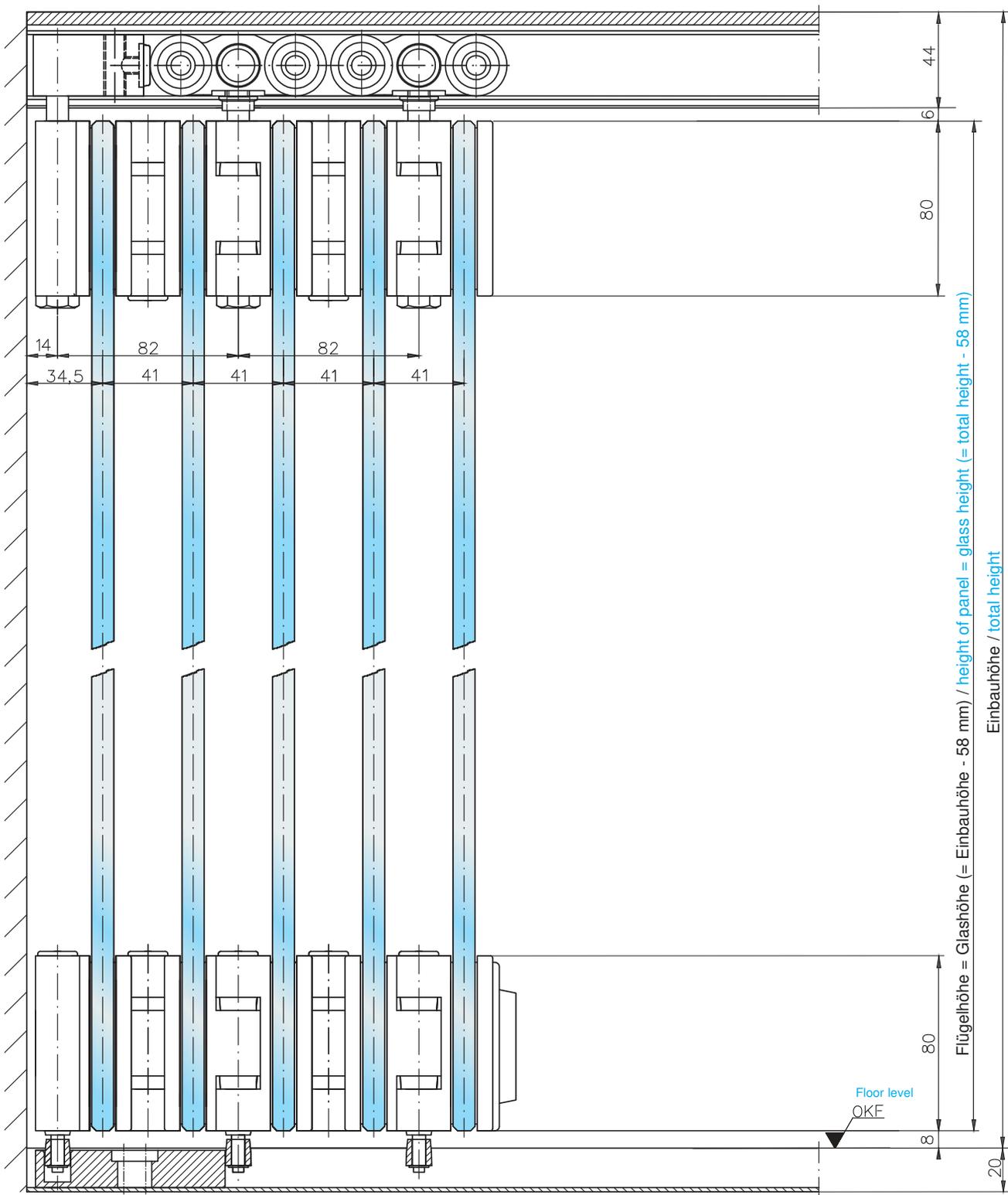


Art. No. 9-155



## Seitenansicht im geöffneten Zustand Art. No. 9-105 Typ 5 LE

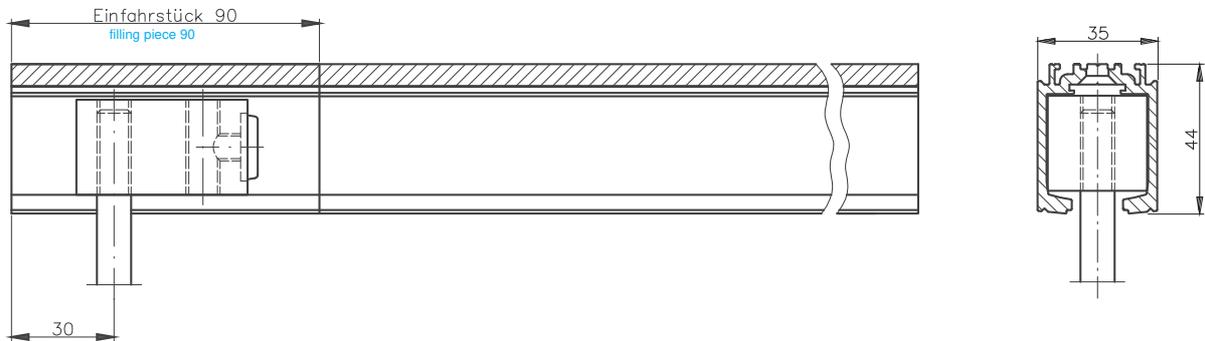
Side-view in opened position art. no. 9-105 type 5 LE



## Schematische Darstellung der Anordnung der Rollen und Bolzenträger **ohne U-Profil** Systematic description of arrangement of rollers and pin carrier **without U-channel**

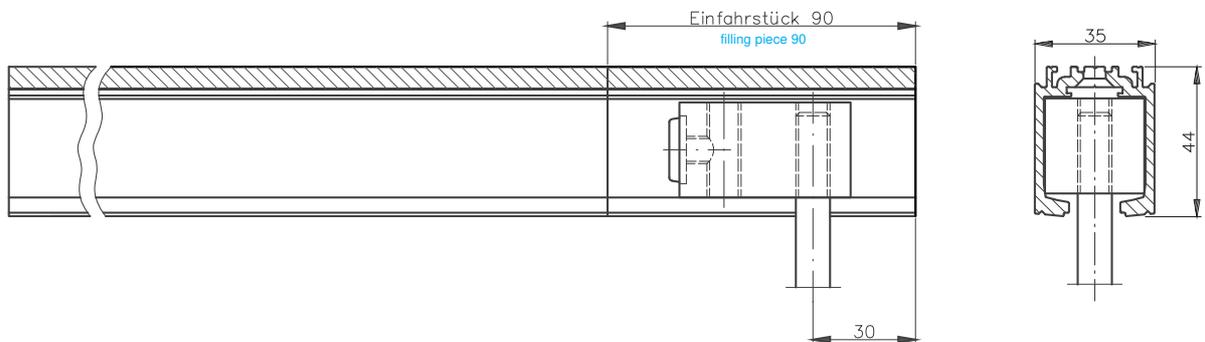
Ansicht von aussen  
view from outside

*Typ 1LE und 1LA*



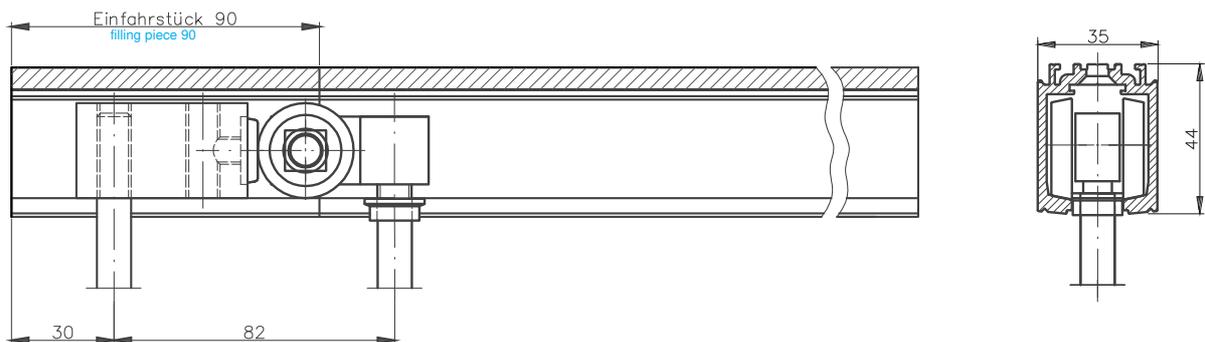
Ansicht von aussen  
view from outside

*Typ 1RE und 1RA*



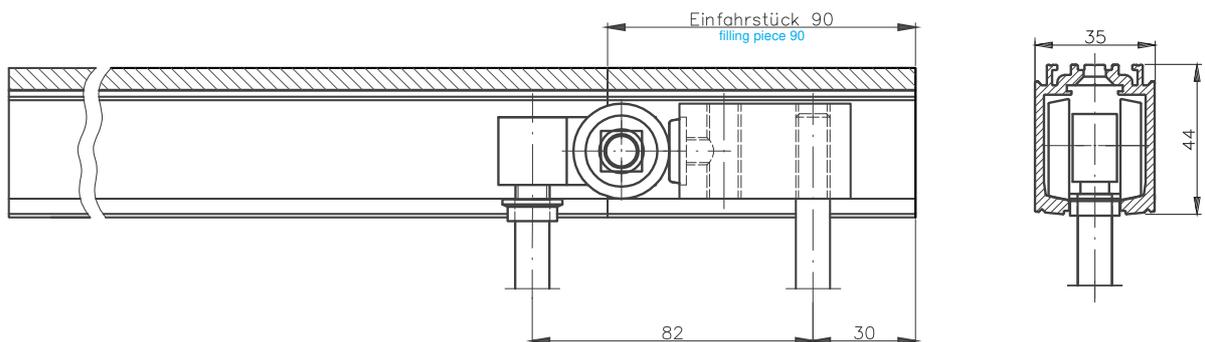
Ansicht von aussen  
view from outside

*Typ 2LE und 2LA*



Ansicht von aussen  
view from outside

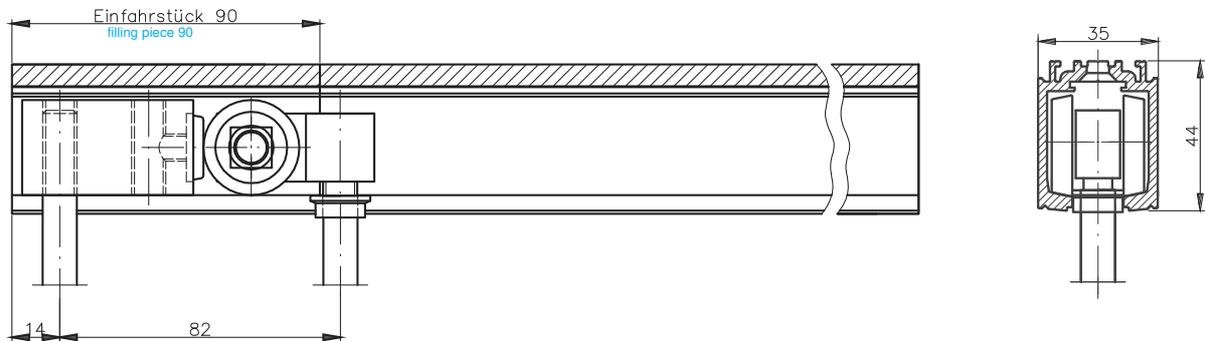
*Typ 2RE und 2RA*



## Schematische Darstellung der Anordnung der Rollen und Bolzenträger mit U-Profil Systematic description of arrangement of rollers and pin carrier with U-channel

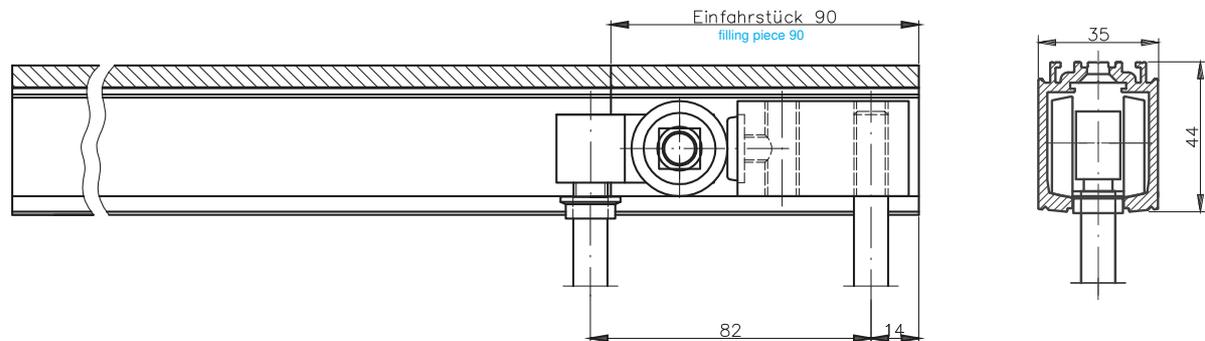
Ansicht von aussen  
view from outside

*Typ 2LE und 2LA*



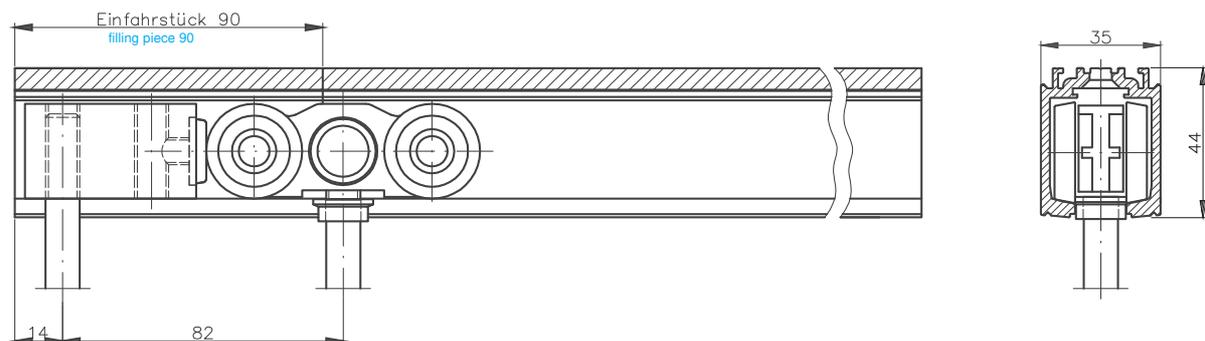
Ansicht von aussen  
view from outside

*Typ 2RE und 2RA*



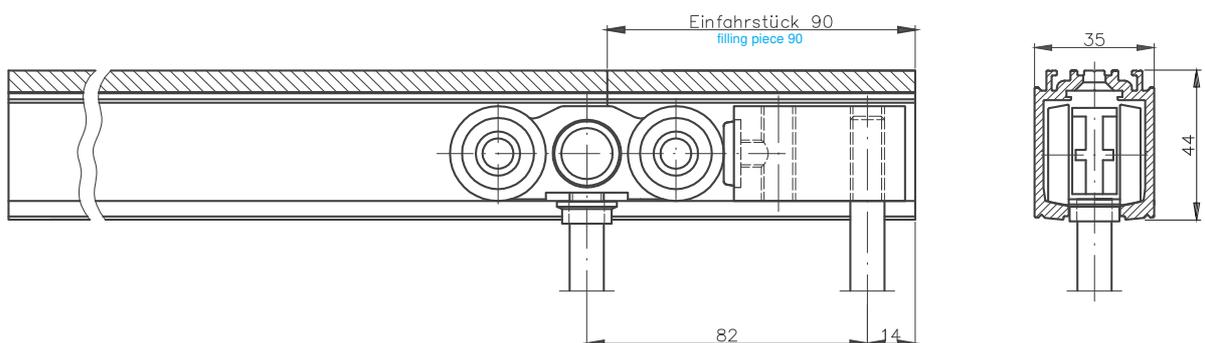
Ansicht von aussen  
view from outside

*Typ 3LE und 3LA*



Ansicht von aussen  
view from outside

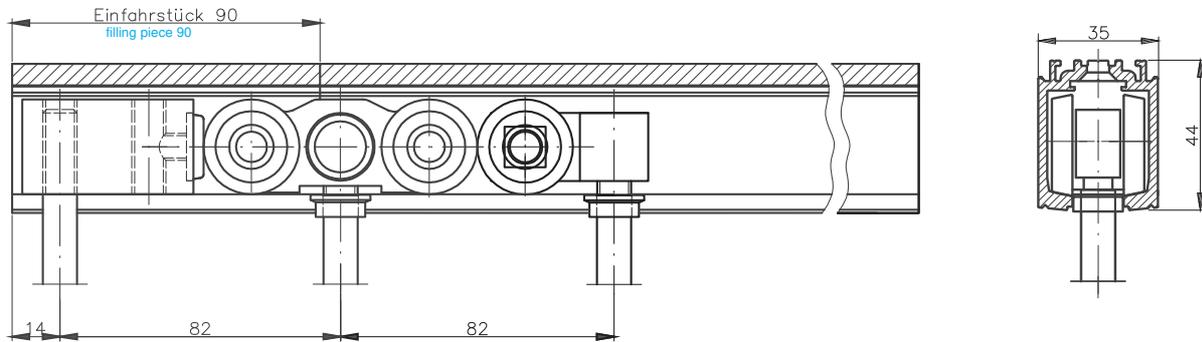
*Typ 3RE und 3RA*



## Schematische Darstellung der Anordnung der Rollen und Bolzenträger mit U-Profil Schematic of arrangement of rollers and pin carrier with U-channel

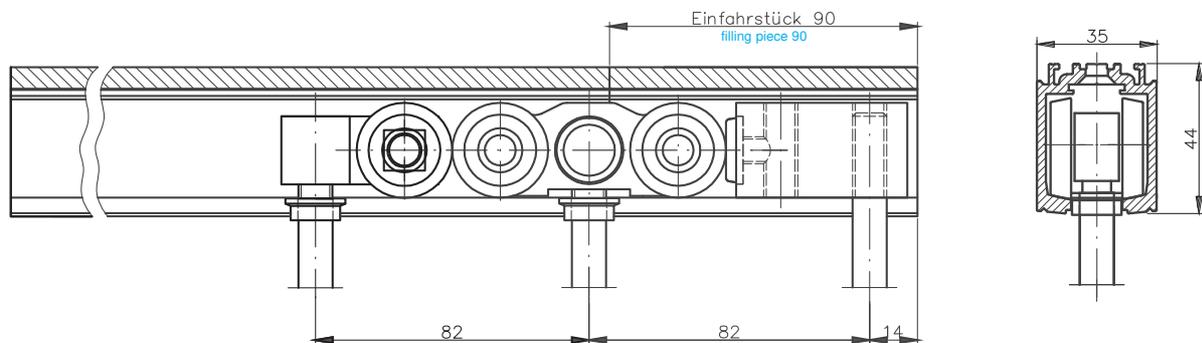
Ansicht von aussen  
view from outside

*Typ 4LE und 4LA*



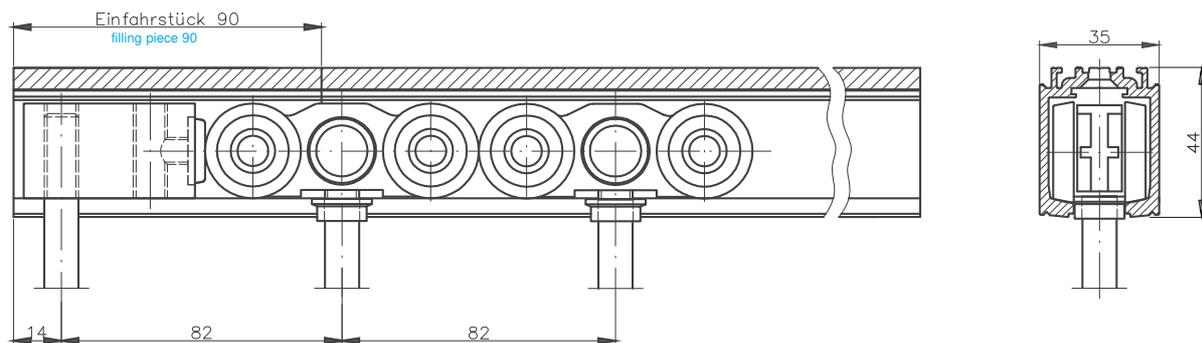
Ansicht von aussen  
view from outside

*Typ 4RE und 4RA*



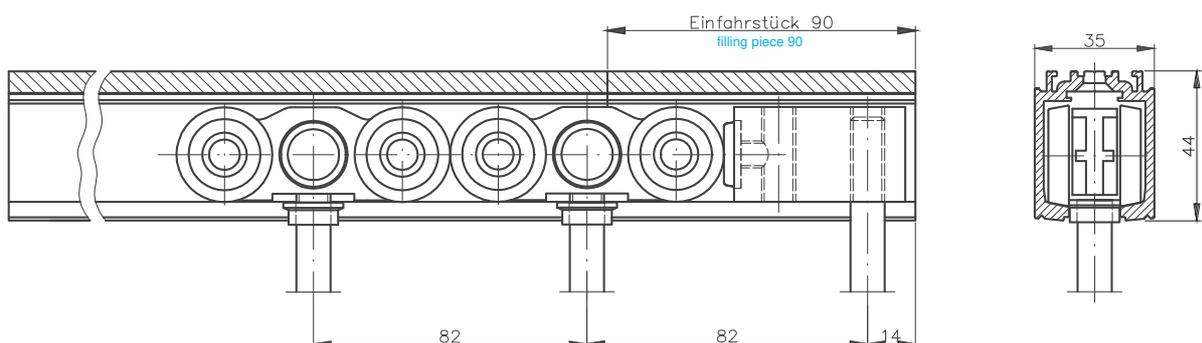
Ansicht von aussen  
view from outside

*Typ 5LE und 5LA*



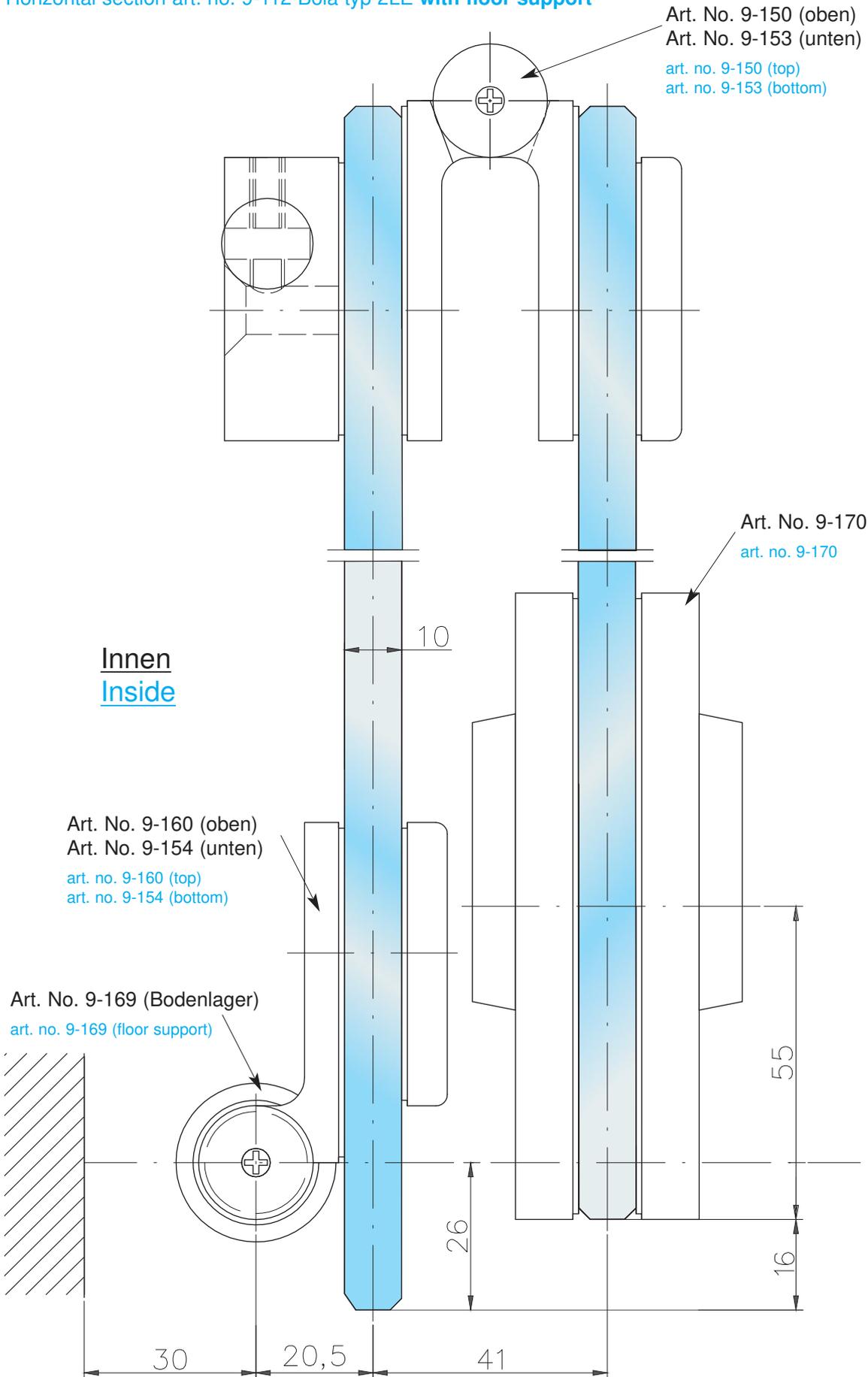
Ansicht von aussen  
view from outside

*Typ 5RE und 5RA*



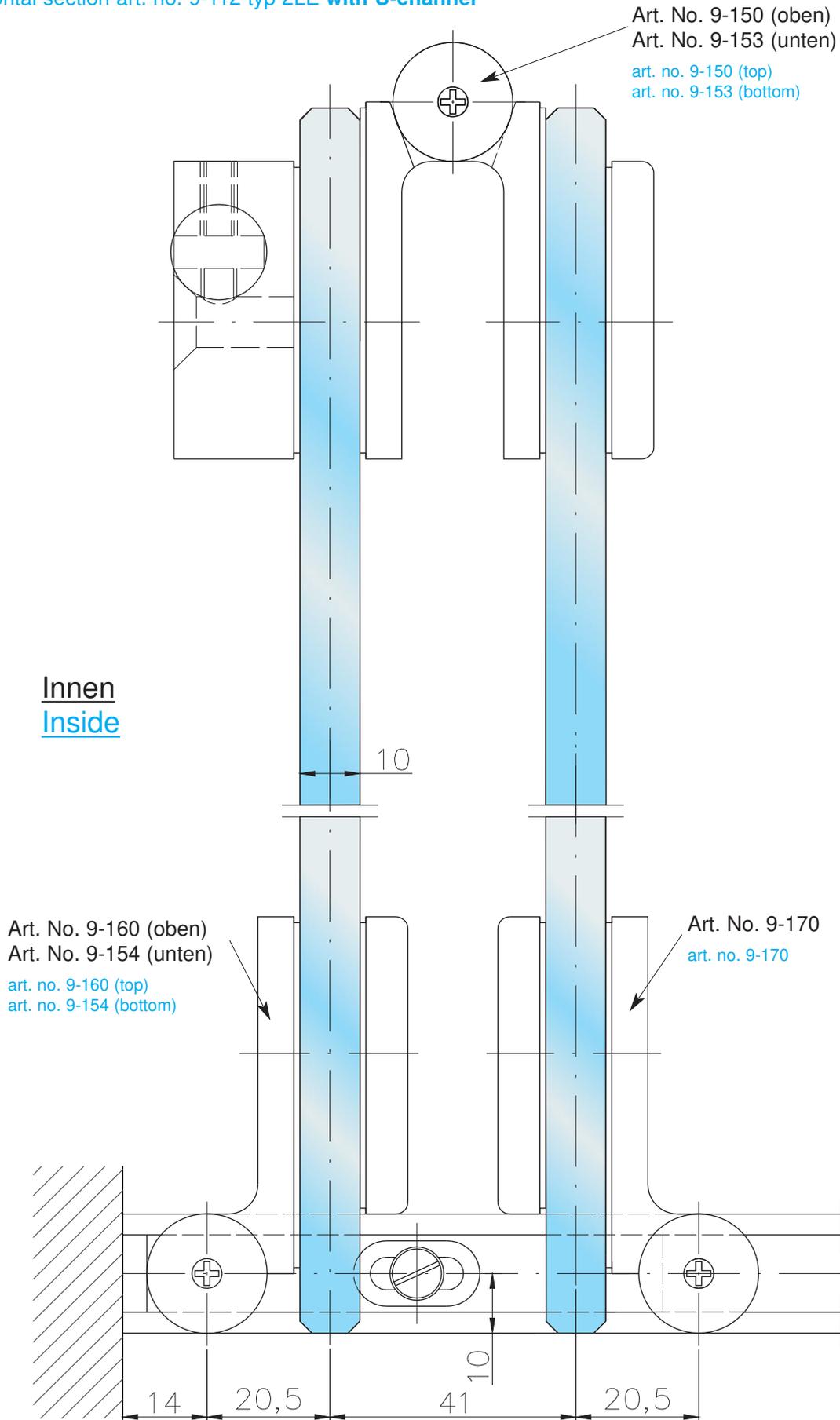
## Horizontalschnitt Art. No. 9-112 Bola Typ 2LE mit Bodenlager

Horizontal section art. no. 9-112 Bola typ 2LE with floor support



## Horizontalschnitt Art. No. 9-112 Typ 2LE mit U-Profil

Horizontal section art. no. 9-112 typ 2LE with U-channel



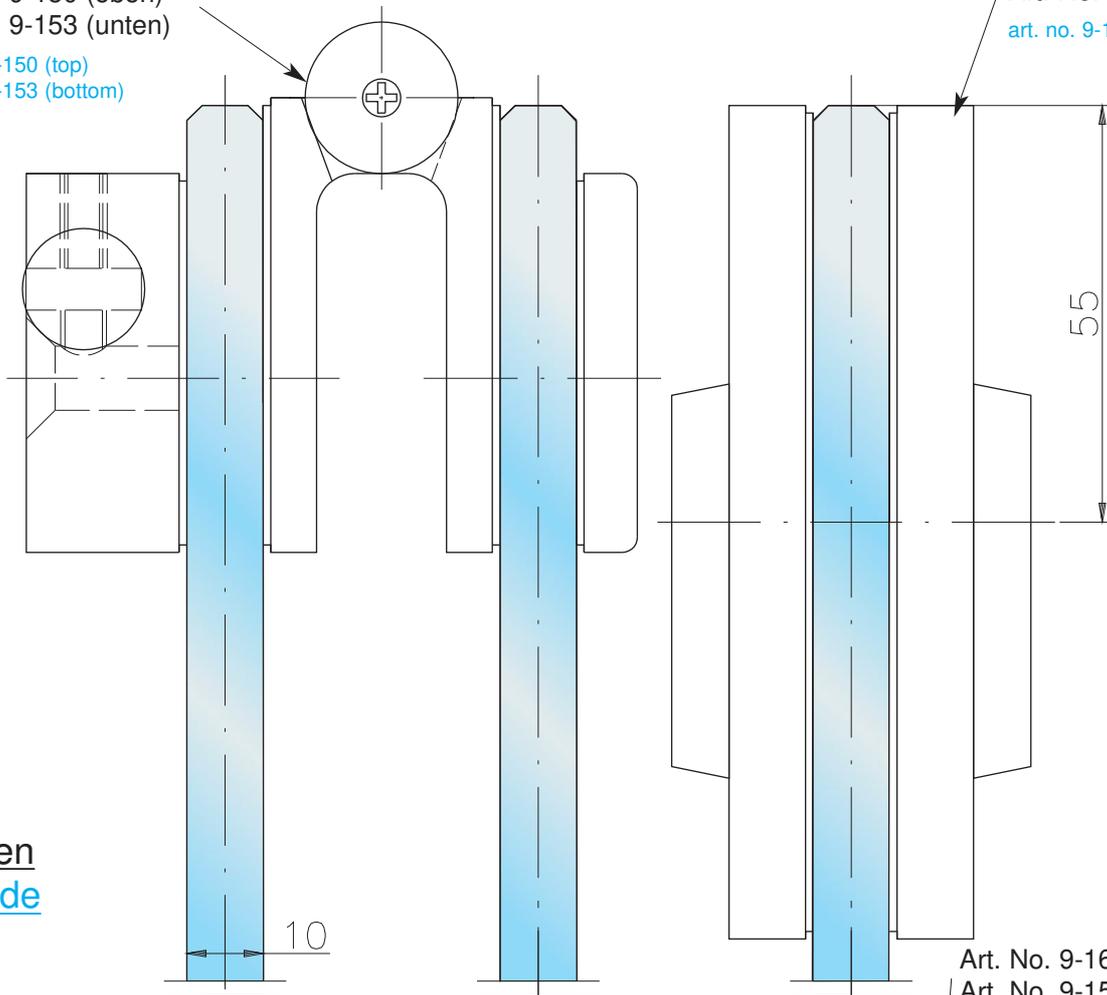
## Horizontalschnitt Art. No. 9-113 Typ 3LE

Horizontal section art. no. 9-113 typ 3LE

Art. No. 9-150 (oben)  
Art. No. 9-153 (unten)

art. no. 9-150 (top)  
art. no. 9-153 (bottom)

Art. No. 9-170  
art. no. 9-170



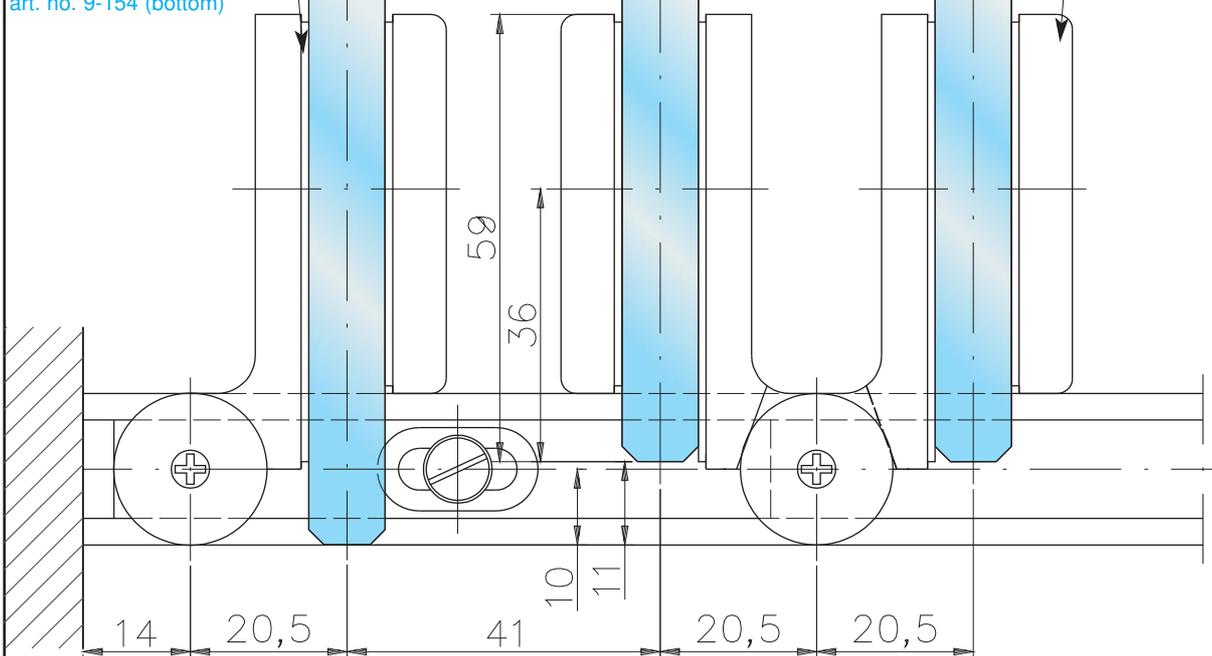
Innen  
Inside

Art. No. 9-160 (oben)  
Art. No. 9-154 (unten)

art. no. 9-160 (top)  
art. no. 9-154 (bottom)

Art. No. 9-161 (oben)  
Art. No. 9-155 (unten)

art. no. 9-161 (top)  
art. no. 9-155 (bottom)



Horizontalschnitt 3 flg. Anlage Typ 3LE  
OHNE Schloss aber MIT Verriegelung innen  
Horizontal section 3 panel installation typ 3LE  
WITHOUT lock but WITH locking at inside

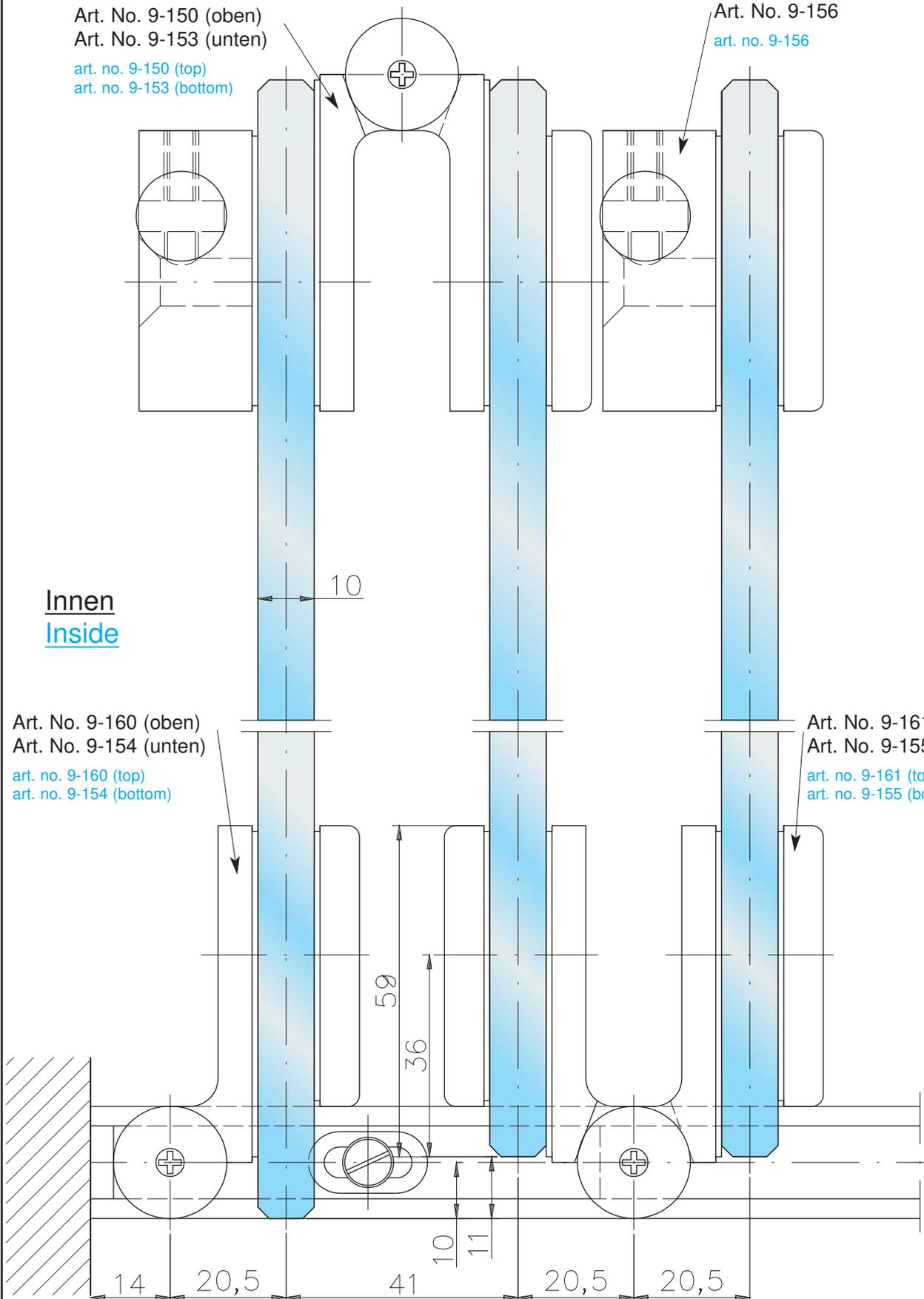
Art. No. 9-150 (oben)  
Art. No. 9-153 (unten)  
art. no. 9-150 (top)  
art. no. 9-153 (bottom)

Art. No. 9-156  
art. no. 9-156

Innen  
Inside

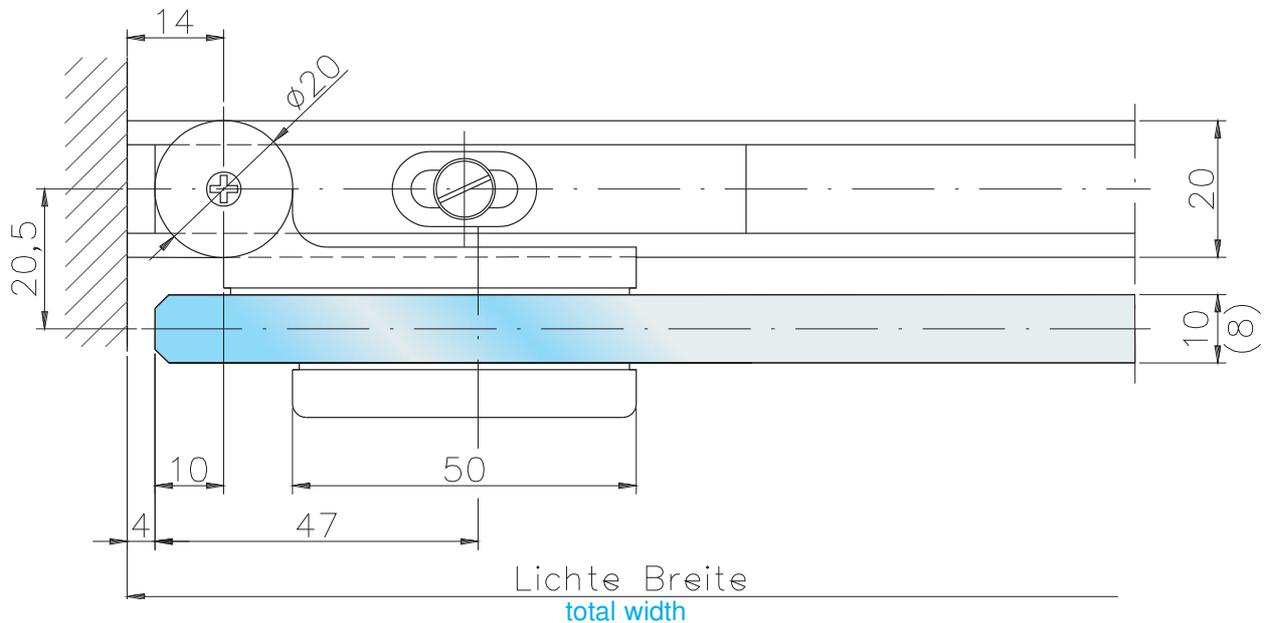
Art. No. 9-160 (oben)  
Art. No. 9-154 (unten)  
art. no. 9-160 (top)  
art. no. 9-154 (bottom)

Art. No. 9-161 (oben)  
Art. No. 9-155 (unten)  
art. no. 9-161 (top)  
art. no. 9-155 (bottom)



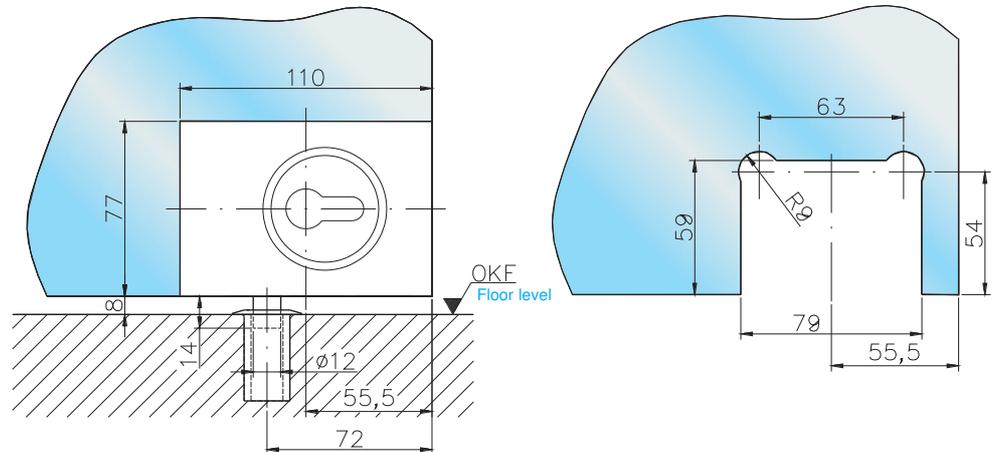
Detail Art. No. 9-154 (Endflügelgelenk unten)  
mit Art. No. 9-163 (Einsatzstück in LM-U-Profil) im geschlossenen Zustand

Detail of art. no. 9-154 (lower end panel hinge)  
with art. no. 9-163 (mounting piece in aluminum U-channel) in closed position.



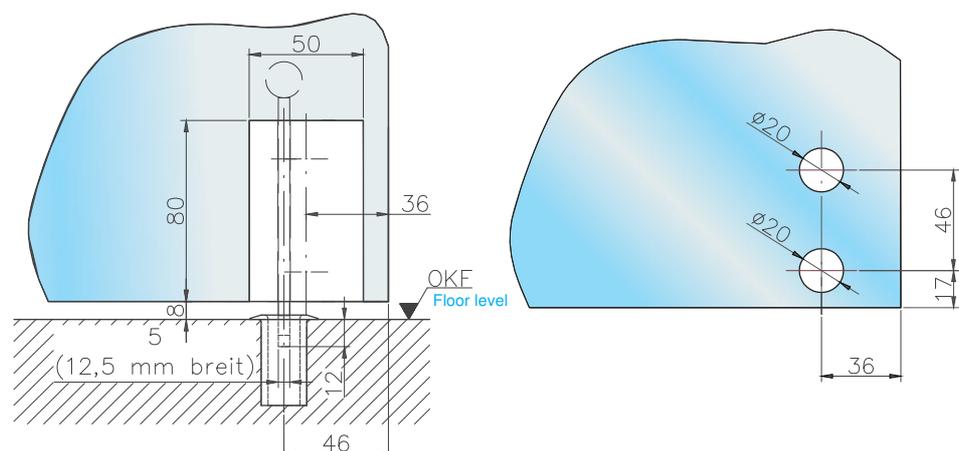
Detail X für Schloss  
Art. No. 9-170  
mit Bodenbuchse  
Art. No. 9-168  
sowie dazugehörige  
Glasbearbeitung

Detail X of lock  
art. no. 9-170  
with floor bushing  
art. no. 9-168  
and corresponding  
glass preparation



Detail für Verriegelung  
Art. No. 9-156  
mit Bodenbuchse  
Art. No. 9-168  
sowie dazugehörige  
Glasbearbeitung

Detail of locking  
art. no. 9-156  
with floor bushing  
art. no. 9-168  
and corresponding  
glass preparation



## Anordnung des Riegelschlosses (Art. No. 9-170)

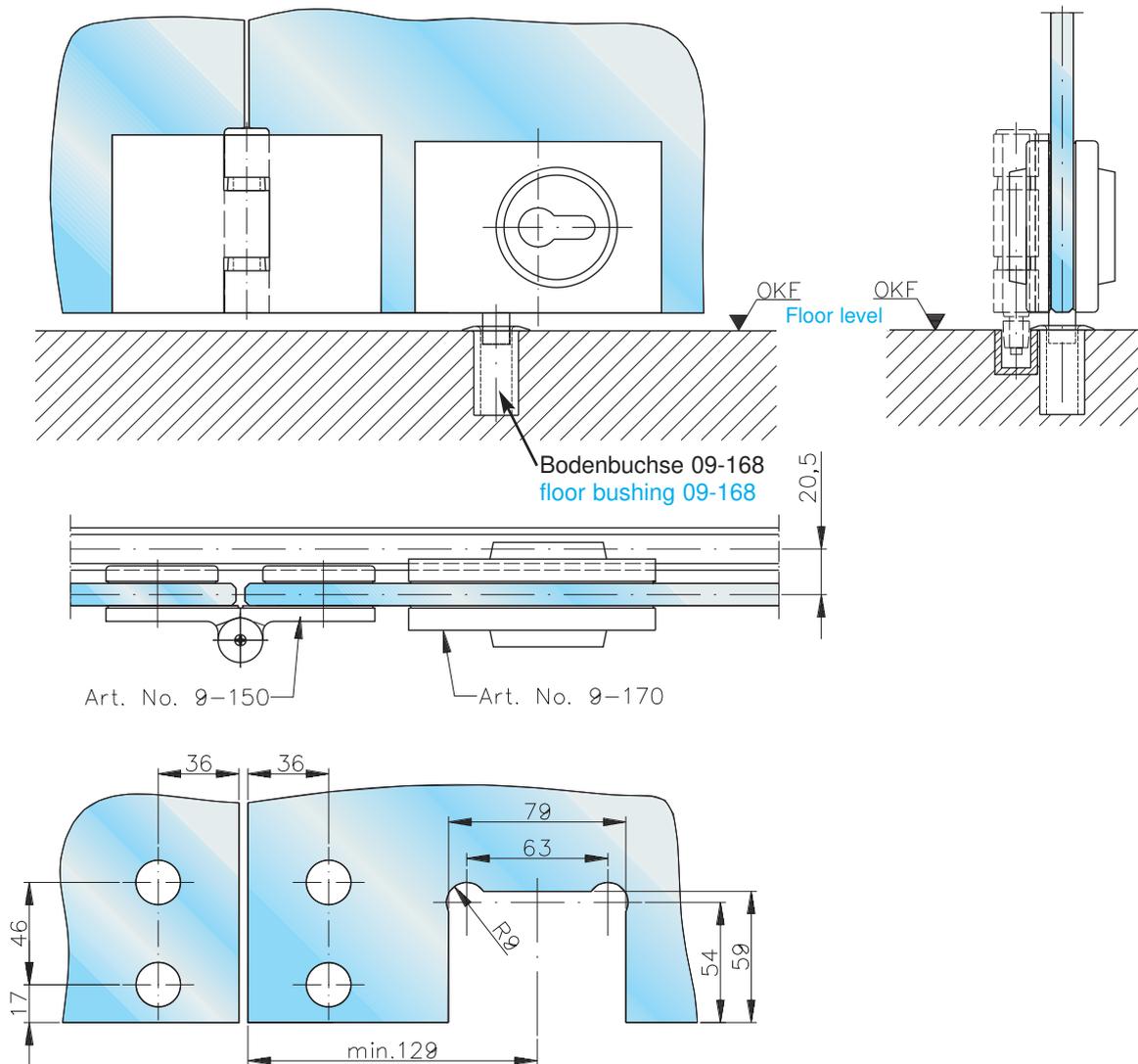
Das Riegelschloss (Art. No. 9-170) ist bei den Art. No. 9-112 (2 - flügelig) und Art. No. 9-114 (4 - flügelig) nicht notwendig, wenn diese Falttüranlagen von innen zugänglich sind.

Sollte dies nicht zutreffen, kommt das Riegelschloss (an einem Flügel unten) zur Anwendung. Dann entfällt einmal das Normalgelenk unten (Art. No. 9-153) und wird durch das Normalgelenk Art. No. 9-150 ersetzt.

## Arrangement of bolt lock (art. no. 9-170)

The bolt lock (art. no. 9-170) is not required for art. no. 9-112 (2 panels) and art. no. 9-114 (4 panels) if these folding panels are accessible from inside.

Failing this, a bolt lock is fitted to the bottom of one panel and its normal hinge (art. no. 9-153) is replaced by the normal hinge art. no. 9-150



## Unser Gesamt- programm auf einen Blick

### Gruppe 1

Beschläge für Ganzglas-, Pendel- und Anschlagtüren  
**Universalbeschläge Standard**  
**Universalbeschläge JUMBO**  
**Universalbeschläge TUBO**  
**Griffstangen**

### Gruppe 2

**Türschienen**  
für Ganzglas-, Pendel- und Anschlagtüren

### Gruppe 3

**Rauchschutztüren** in Ganzglaskonstruktion  
**TEUBA RS**

### Gruppe 4

Schiebetürbeschläge für Ganzglaselemente  
**PRAKTICA**  
**miniMOline**  
**VARIANT**  
**MULTIslide**

### Gruppe 8

Beschläge für Ganzglas-, Falt- und Harmonikatüren  
mit durchgehenden Türschienen an den Flügeln  
**Faltanlage Reihe 100**  
**Harmonikaanlage Reihe 200**

Beschläge für Ganzglas-Falttören mit Einzelgelenken  
an den Flügeln  
**Leichte Faltwand Reihe 500**

Beschläge für Ganzglas-Horizontalschiebetüren mit  
durchgehenden Türschienen an den Flügeln  
**HSW Reihe 700**  
**HSW Reihe 750**  
**HSW Reihe 800**

Beschläge für Ganzglas-Horizontalschiebetüren mit  
Einzelbeschlägen an den Flügeln  
**HSW Reihe 700 JUNIOR**  
**HSW PUNKTO**

### Gruppe 9

Beschläge für Ganzglas-Falttören mit Einzelgelenken  
an den Flügeln  
**Faltanlage VISTAfold**  
**Harmonikaanlage VISTAfold**

### Gruppe 10

Universal-LM-Profile, Wandanschlußprofile

## TEUFELBESCHLAG GmbH

Am Brand 8  
D-82299 Türkenfeld  
Telefon (0 81 93) 93 93 9-0  
Fax Vertrieb (0 81 93) 93 93 99  
Fax Technik (0 81 93) 93 93 98

e-mail: [info@teufelbeschlag.de](mailto:info@teufelbeschlag.de)  
<http://www.teufelbeschlag.de>