

Guide rail components

Contents

QuickGuide	300
Examples QuickGuide	300
Track width calculations QuickGuide	301
Examples basic guide rail system	303
Configuration examples	304
Track width calculations basic guide rail system	305
Circular guide rails	307
Guide rails 10 mm	307
Guide rails 15 mm	308
Guide rail bending machine	309
Connecting sleeve	310
Flexible roller module	310
QuickGuide Bracket support	311
QuickGuide Spacers	312
QuickGuide Guide rail clamp support	314
QuickGuide Guide rail clamps	314
QuickGuide Accessories	314
Guide discs	315
Fixed guide rail brackets	316
Adjustable guide rail brackets, aluminium	318

Fixed guide rail brackets, polyamide	320
Bracket support components, polyamide	320
Bracket support components, Zinc	322
Spacers	322
Guide rail clamp supports	323
Guide rail clamps	324
Accessories	325
Guide rails system X45, X45H and X65	326
Width adjustment	326
Using Guide rail cover	327
Straight guide rails	327
Connecting strips	327
Guide rail bracket for X45	328
Guide rail bracket for X65 and X45H	328
Built-up guide rail brackets	329
Guide rail system for easy adjustment of track width	330
Automatic guiding system components	332



QuickGuide guide rail components

QuickGuide assortment is an, easy to assemble, guide rail component system that allows quick and sturdy installation on a conveyor solution. A complete QuickGuide guidance system can be mounted in minutes and easily be adjusted for the width needed.

Basic guide rail components

The basic guide rail components belong to the collection of guide rail supports that FlexLink has been offering and developing for a long time.

The collection consists of a wide variety of different components; brackets, supports, clamps etc., to fulfill the many needs of product guidance on a conveyor. All components are developed with different product and application experience in mind.

Distance between brackets

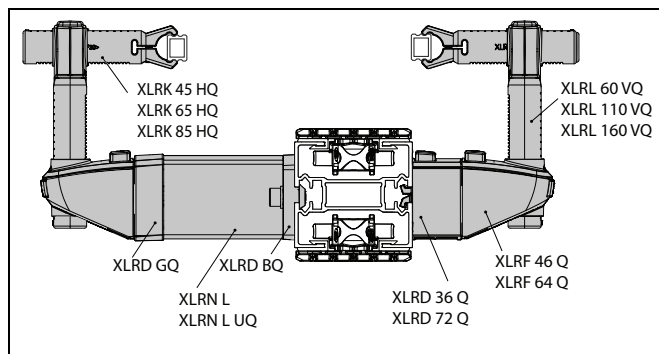
The distance between guide rail brackets depend on the side forces to be expected, and on the guide rail type and material. In buffer conveyors with side forces, much shorter distances between brackets are required than in non-buffering applications. The distance should be somewhere between 0,3 m and 1,5 m.

Dynamic & automatic adjustable guide rail components

A guide rail system for automatic adjustment of the track width is available for solutions requiring regular width adjustments. Make the adjustment quick and easy through the control system with no need of manual support. See page 330.

This is QuickGuide:

- Quick and easy width and height adjustment - with button click to adjust function
- Reduced assembly time – up to 70% compared to basic guide rail components
- Designed for all existing FlexLink aluminium conveyor offerings
- Distinct steps for rod adjustment
- Scale for height/length reading
- Poke-joke mechanism to minimize risk of wrong assembly
- Possibility to secure positioning with locking screws
- Patented solution

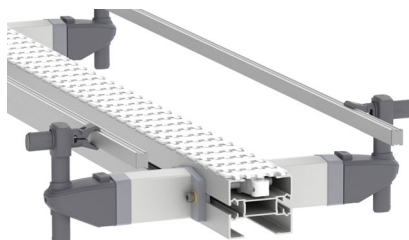


Quick and easy installation

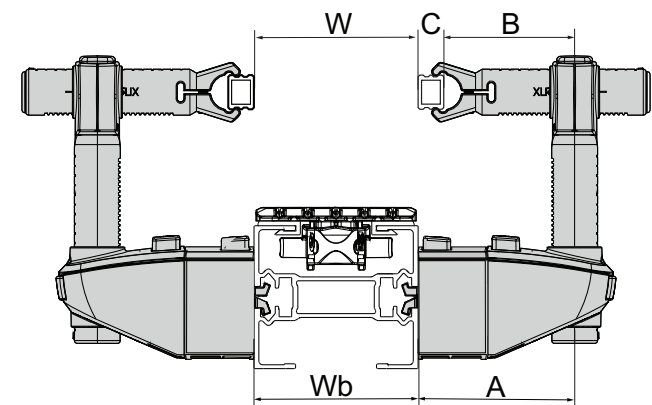


Examples QuickGuide

QuickGuide guide rail system



Using guide rail bracket support XLRF 46 Q and XLRF 64 Q



The following formula can be used to calculate the track width for a specific symmetrical combination of supports, clamps, and guide rails. See Table 1, 2, 7 and 8.

$$W = Wb + 2A - 2B - 2C$$

Table 1. Holder and spacer width (A)

Items	A mm	Change
 XLRF 46 Q	46	-
 XLRF 64 Q	64	+18
 XLRD 36 Q + XLRF 46 Q	82	+18
 XLRD 36 Q + XLRF 64 Q	100	+18
 XLRD 72 Q + XLRF 46 Q	118	+18
 XLRD 72 Q + XLRF 64 Q	136	+18

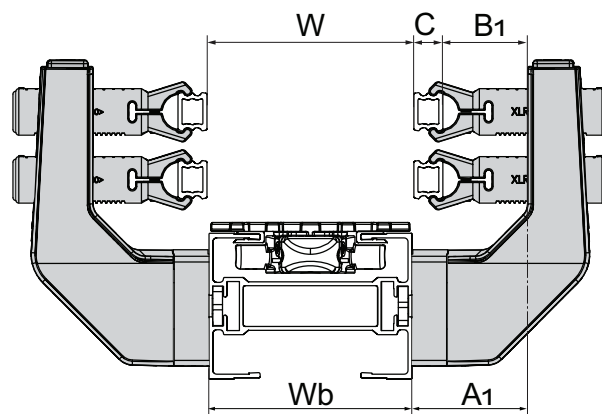
Table 2. Clamp length (B)

Items	B mm	Change
 XLRK 45 HQ	31-51	-
XLRK 65 HQ	31-57	+20
XLRK 85 HQ	31-91	+20

Table 3. Spacer widths for XLRF 46 Q and XLRF 64 Q

Spacer	mm
XLRD 36 Q	36
XLRD 72 Q	72
XLRN L	Custom width
XLRN L UQ	Custom width

Using guide rail bracket support XLRF A35 Q and XLRF A105 Q



The following formula can be used to calculate the track width for a specific symmetrical combination of supports, clamps, and guide rails. See Table 4, 5, 7 and 8.

$$W = Wb + 2A_1 - 2B_1 - 2C$$

Table 4. Bracket and spacer width (A₁)

Items	A ₁ mm	Change
 XLRF A35 Q	42	-
 XLRF A105 Q		
 XLRD 18A + XLRF A35 Q	60	+18
 XLRD 18A + XLRF A105 Q		
 XLRD 18A (2 pcs) + XLRF A35 Q	78	+18
 XLRD 18A (2 pcs) + XLRF A105 Q		
 XLRD 18A (3 pcs) + XLRF A35 Q	96	+18
 XLRD 18A (3 pcs) + XLRF A105 Q		

Table 5. Clamp length (B₁)

Items	B ₁ mm	Change
 XLRK 45 HQ	20-37	-
XLRK 65 HQ	20-57	+20
XLRK 85 HQ	20-77	+20

Table 6. Spacer widths for XLRF A35 Q / A105 Q

Spacer	mm
XLRD 18 A	18
XLRN L	Custom width
XLRN L UQ	Custom width

Basic parameters

Table 7. Beam width (Wb)

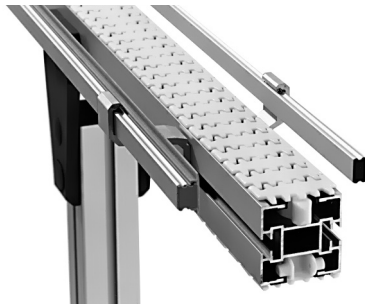
System	W _B mm
X45H	45
XS	47,6*
X65	65
XL	67,6*
X85	85
XK	105
XH	107,6*
X180/X300	182/300

* XLRD OQ (+2,6 mm) added

Table 8. Guide rails (C)

Spacer	C mm	Change
 10 mm	10	-
 15 mm	15	+5
 15 mm	17	+2
 18 mm	10	-

Fixed guide rail support

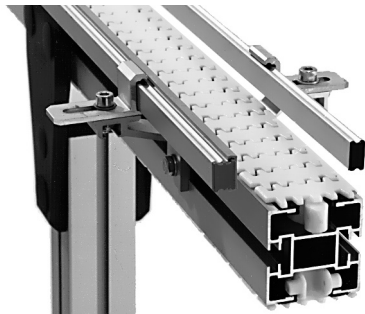


A. Guide rails with fixed guide rail brackets

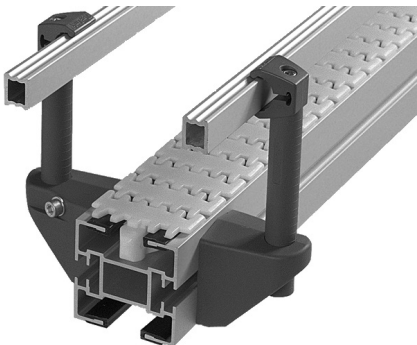


B. Guide rails with fixed guide rail brackets, polyamide

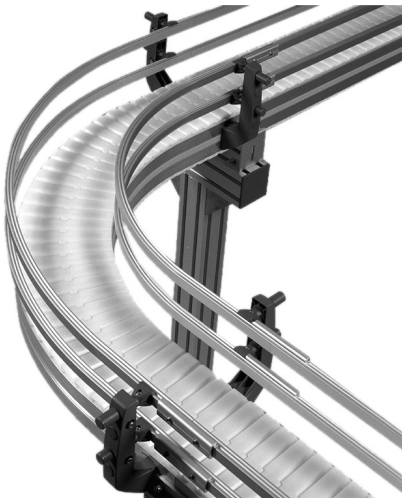
Adjustable guide rail support



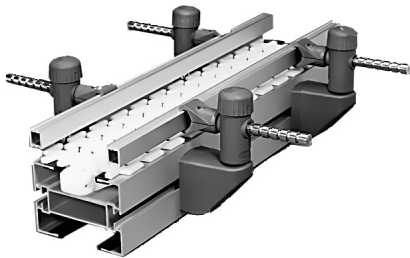
C. Guide rails with adjustable guide rail brackets, aluminium



D. Guide rails with polyamide guide rail brackets adjustable in height



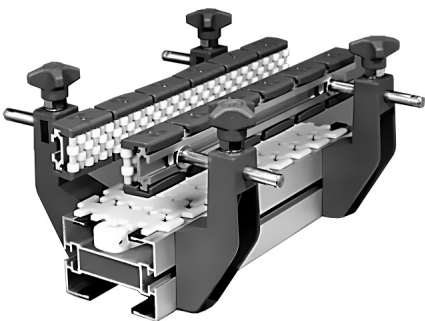
E. Guide rails at two levels with polyamide guide rail brackets, adjustable in width



F. Guide rails with quick adjust guide rail support



G. Guide rails with built-up guide rail brackets



H. Roller module guide rails with polyamide guide rail brackets



I. Two-level guide rail structure with polyamide guide rail bracket components

PO

CC

X45

XS

X65

X65P

X85

X85P

XH

XK

XKP

X180

X300

GR

CS

XT

HU

WL

WK

XC

XF

XD

ELV

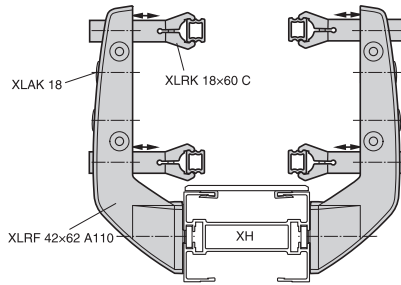
CTL

FST

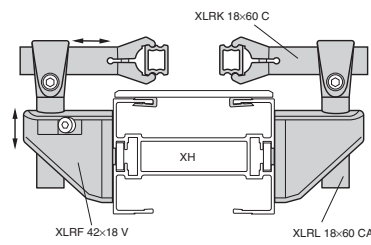
TR

APX

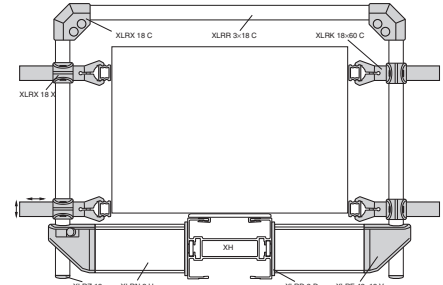
IDX



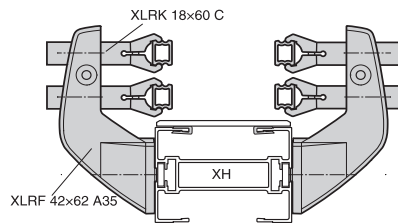
1. Guide rails with XLRF 42x62 A110



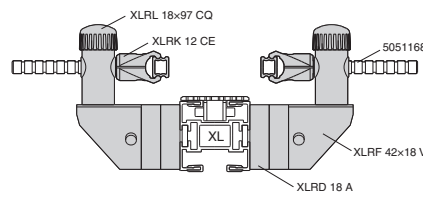
2. Adjustable in width and height



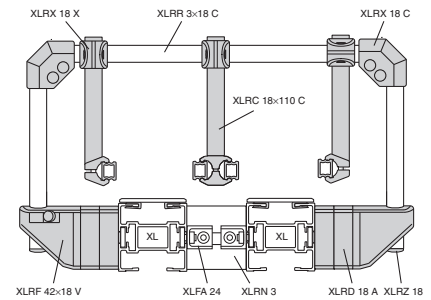
3. Guidance of wide & high products



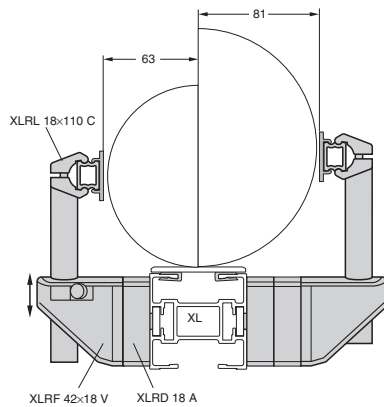
4. Guide rails with XLRF 42x62 A35



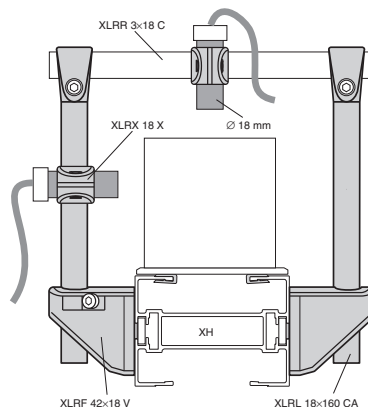
5. Quick-release guide rail brackets



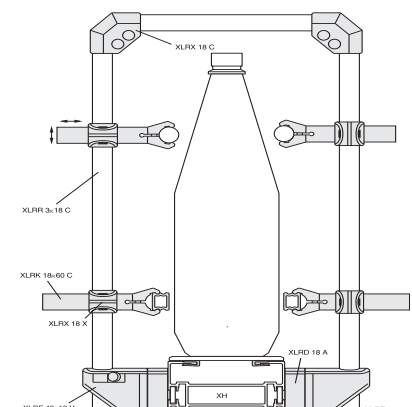
6. Double track guide rails



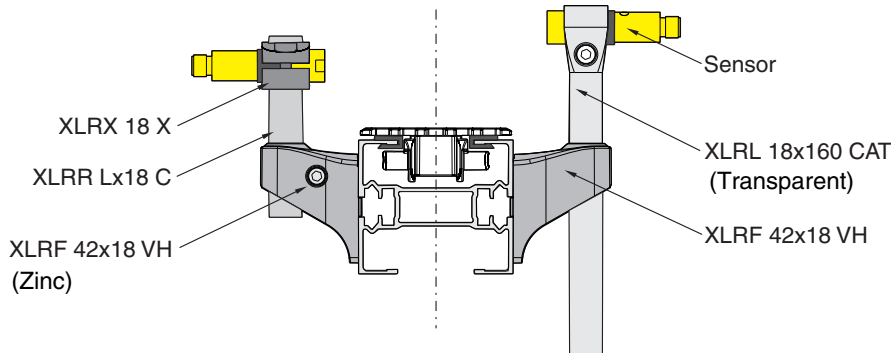
7. Application for tissue paper



8. Attachment of sensors I



9. Guidance of bottles, etc.



10. Attachment of sensors II

Track width calculations basic guide rail system

Basic parameters

The calculations of resulting track width require insertion of values for beam width W_B and spacer width A. See Tables 1 and 2. A is the sum of all spacers on one side.

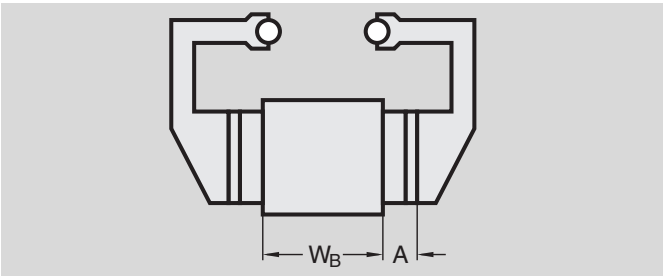
Table 1. Beam width

System	W_B mm
X45H	45
XS	45
X65	65
X85	85
XH, XK	105
X180/X300	182/300

Table 2. Spacer width

Spacer	mm
XLRD 6 A	6
XLRD 18 A	18
XLRD 3 D	3
XLRN 3	Custom width
XLRN 3 U	Custom width

Parameters W_B and A

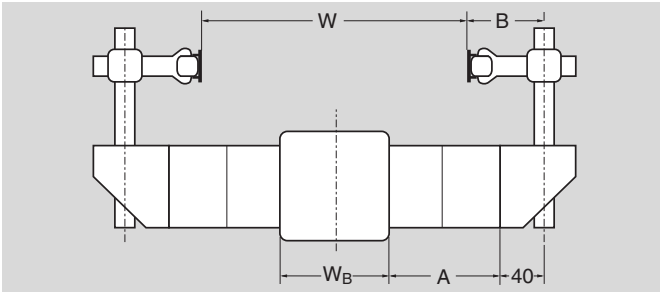


Using guide rail bracket support
XLRF 42x18 V/VD

The following formula can be used to calculate the track width for a specific symmetrical combination of supports, clamps, and guide rails. For W_B and A: see Tables 1 and 2 in “Basic parameters”, page 305. For parameter B: see Tables 3 and 4.

$$W = W_B + 2A + 80 - 2B$$

Table 3. Parameter B when using support type
XLRF 42x18 V/VD and XLRK/XLRL guide rail clamps



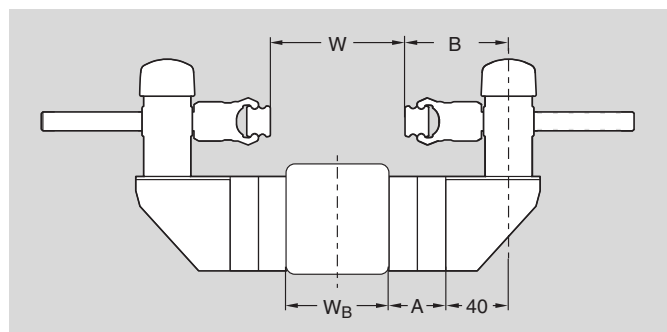
Guide rail	10 mm B mm	15 mm B mm	15+2 mm B mm	18 mm B mm
XLRK 18x40 C	41–55	46–60	48–62	42–56
XLRK 18x60 C	41–75	46–80	48–82	42–76
XLRK 18x80 C	41–95	46–100	48–102	42–96
XLRL 18x110 C	21	26	28	22
XLRK 18 CE	57–	62–	64–	58–

Note

The illustration shows a design with vertical 18 mm tube and cross connector XLRX 18 X. An alternative is to use guide rail clamp support Type CA (XLRL 18x... CA). The B values are the same.

Clamp type XLRK 18 CE is used in combination with a piece of horizontal 18 mm tube XLRR ...x18 C.

Table 4. Parameter B when using support type XLRF 42x18 V/VD and quick release guide rail clamp support XLRK 18x97 CQ



Guide rail	10 mm	15 mm	15+2 mm	18 mm	12 mm
	B mm	B mm	B mm	B mm	B mm
5051168 + XLRK 12 CE	62–121	67–126	69–128	63–122	–
5051168 + XLRK 12 DE	–	–	–	–	59–118*

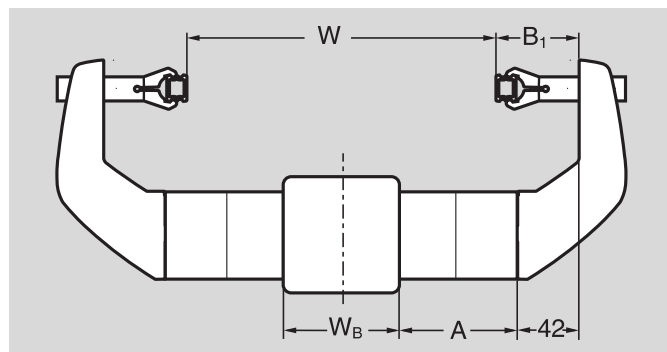
*Suitable for stainless steel applications.

Using guide rail bracket support XLRF 42x62 A35/110

The following formula can be used to calculate the track width for a specific symmetrical combination of supports, clamps, and guide rails (see illustrations). For W_B and A : see Table 1 and 2. For parameter B : see Table 5.

$$W = W_B + 2A + 84 - 2B$$

Table 5. Parameter B when using support type XLRF 42x62 A35/110



Guide rail	10 mm	15 mm	15+2 mm	18 mm
	B mm	B mm	B mm	B mm
XLRK 18x40 C	28–43	33–48	35–50	28–43
XLRK 18x60 C	28–63	33–68	35–70	28–63
XLRK 18x80 C	28–83	33–88	35–90	28–83
XLRK 18 CE	44–	49–	51–	45–

Note

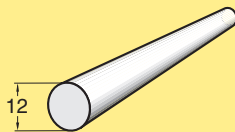
The maximum B value for XLRK 18x40/60/80 C applies to the guide rail clamp installed at the top level. At lower levels the maximum B value is up to 5 mm smaller.

The lowest level of XLRF 42x62 A35/110 cannot be used in an X180 conveyor for track widths smaller than 170 mm.

XLRK 18 CE is used in combination with 18 mm tube XLRR ...x18 C.

Circular guide rails

Steel rod 12 mm



Straight steel rod 12 mm
Stainless steel
Length 3 m

5048965

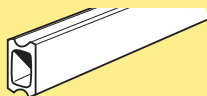
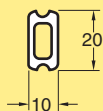
Aluminium tube 18 mm

Aluminium tube 18 mm
See page 325

XLRR ...x18 C

Guide rails 10 mm

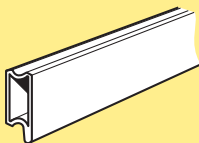
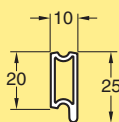
Guide rail 10 mm, aluminium



Straight rail 10 mm
Aluminium, length 3 m

XLRS 3x10

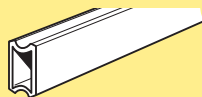
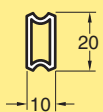
Guide rail 10 mm, aluminium, flanged



Straight rail 10 mm, flanged
Aluminium, length 3 m

XLRS 3x10 F

Guide rail 10 mm, steel



Straight rail 10 mm
Steel, length 3 m

XLRS 3x10 T

Connecting plug 10 mm

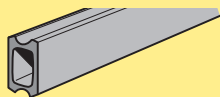
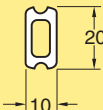


Connecting plug 10 mm

XLRJ 10

Note. Not for steel guide rail. Contains 10 pcs.

Guide rail 10 mm, polyethylene



Flexible rail 10 mm
Polyethylene, length 3 m

XLRS 3x10 P

End plug, 10 mm



End plug 10 mm

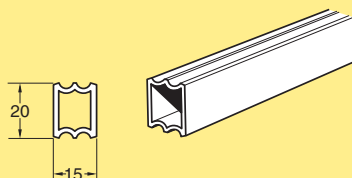
XLRE 10

Note. Not for steel guide rail. Contains 10 pcs.

PO
CC
X45
XS
X65
X65P
X85
X85P
XH
XK
XKP
X180
X300
GR
CS
XT
HU
WL
WK
XC
XF
XD
ELV
CTL
FST
TR
APX
IDX

Guide rails 15 mm

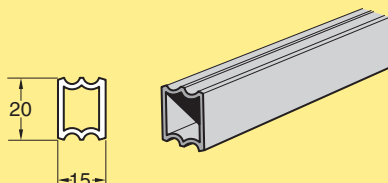
Guide rail 15 mm, aluminum



Straight rail 15 mm
Aluminum, length 3 m

XLRS 3x15

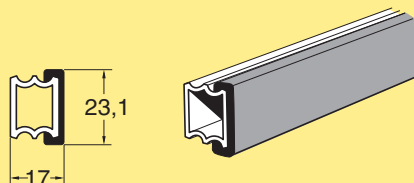
Guide rail 15 mm, polyethylene



Flexible rail 15 mm
Polyethylene, length 3 m

XLRS 3x15 P

Guide rail cover for 15 mm aluminium guide rail



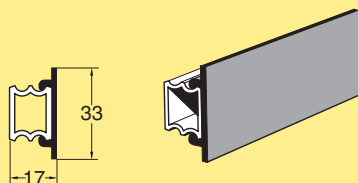
Guide rail cover for 15 mm guide rail
Polyethylene, length 3 m

XLRT 3x23

Guide rail cover for 15 mm guide rail
UHMW-PE, length 3 m

XLRT 3x23 U

Guide rail cover, flanged, for 15 mm aluminium guide rail



Guide rail cover for 15 mm guide rail
Polyethylene, length 3 m, flanged

XLRT 3x33 D

Connecting plug, 15 mm



Connecting plug 15 mm

XLRJ 15

Note. Contains 10 pcs.

End plug, 15 mm

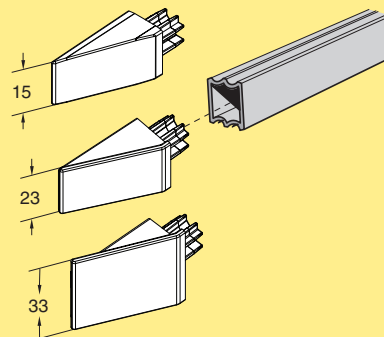


End plug 15 mm

XLRE 15

Note. Contains 10 pcs.

End guide for 15 mm aluminum guide rail



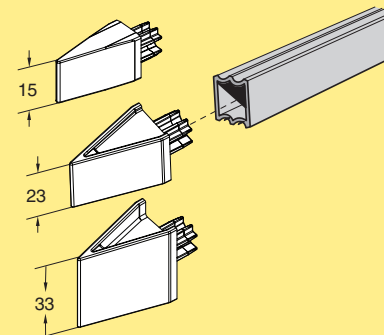
Single side guide,
Polyamide, length 35 mm

**XLRE 15-15C
XLRE 15-23C
XLRE 15-33C**

Adjusted to fit without rail cover and with cover rail XLRT 3x23 (U) / XLRT 3x33 D

Note. Contains 2 pcs.

End guide for 15 mm aluminum guide rail



Dual side guide
Polyamide, length 35 mm

**XLRE 15-15P
XLRE 15-23P
XLRE 15-33P**

Adjusted to fit without rail cover and with cover rail XLRT 3x23 (U) / XLRT 3x33 D

Note. Contains 2 pcs.

Flocked tape

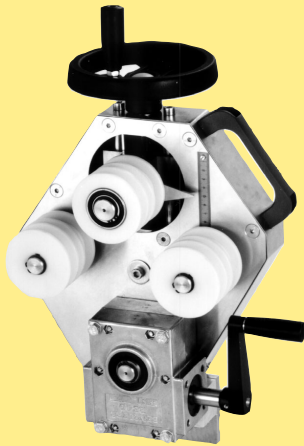


Flocked tape **5056398**
Width: 20 mm
Length: 12,5 m
Thickness: 0,21+ Flock
Material: PA 6.6

Flocked tape to protect fragile products, could be mounted on e.g. Guide rails

Guide rail bending machine

Guide rail bending machine

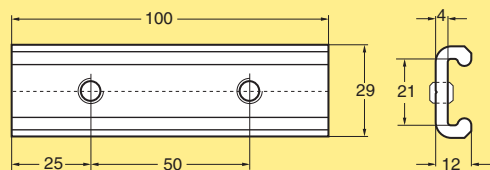


Guide rail bending machine
For 10/15 mm aluminium guide rails **3922963**
Height 550 mm, width 360 mm, depth 190 mm
Weight 16 kg
Maximum bend angle 180°
Minimum bend radius 100 mm

PO
CC
X45
XS
X65
X65P
X85
X85P
XH
XK
XKP
X180
X300
GR
CS
XT
HU
WL
WK
XC
XF
XD
ELV
CTL
FST
TR
APX
IDX

Connecting sleeve

Connecting sleeve

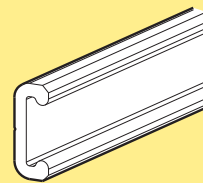
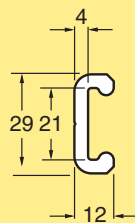


Connecting sleeve

XLRJ 100

Including set screws. For connecting two 10 mm or 15 mm XLRS guide rails end to end.

Connecting sleeve



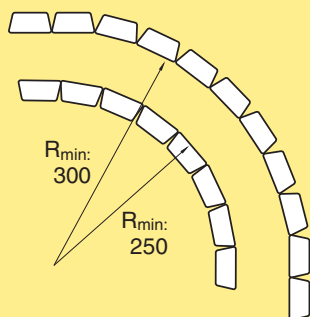
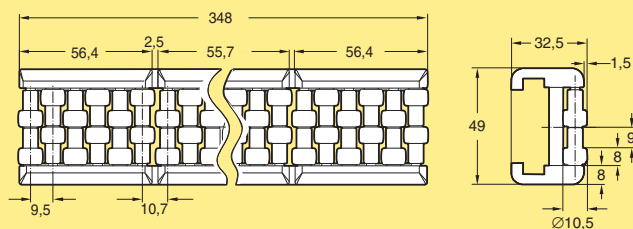
Connecting sleeve

Aluminium, length 3 m

5122544

Flexible roller module

Flexible roller module



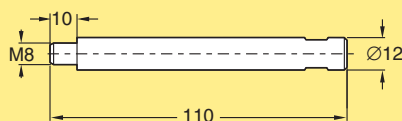
Flexible roller module

Length 348 mm

5050902 A

Mounting to profile 5050889: SK6SS 4x20

Rod for roller module profile



Rod for roller module profile

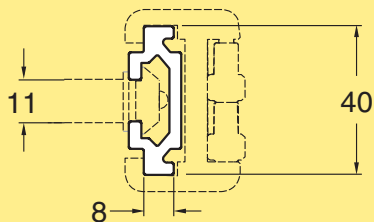
Ø12 mm

5050887

Mounting to roller module profile 5050889: XCAN 8, BRB 8.4x16.

For use with guide rail bracket support Type K.

Roller module profile



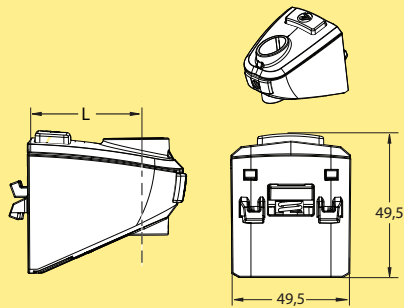
Roller module profile

Length 3 m

5050889

For use with roller module 5050902 A. Use connecting strip XLCJ 5x140 for joints.

Guide rail bracket support



Guide rail bracket support

L = 46 mm

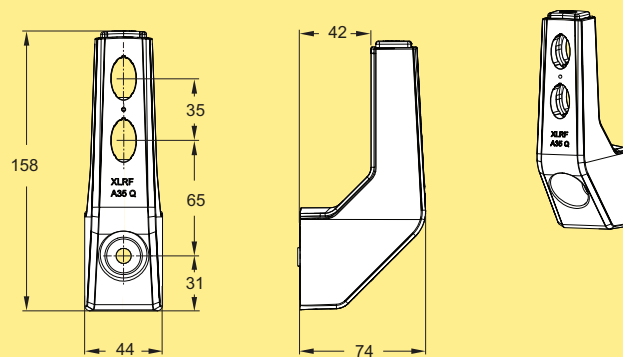
L = 64 mm

XLRF 46 Q

XLRF 64 Q

Note: Adapter plate XLRD OQ is required for mounting of XLRF brackets to system XS, XL, XM and XH.

Guide rail bracket support



Guide rail bracket support

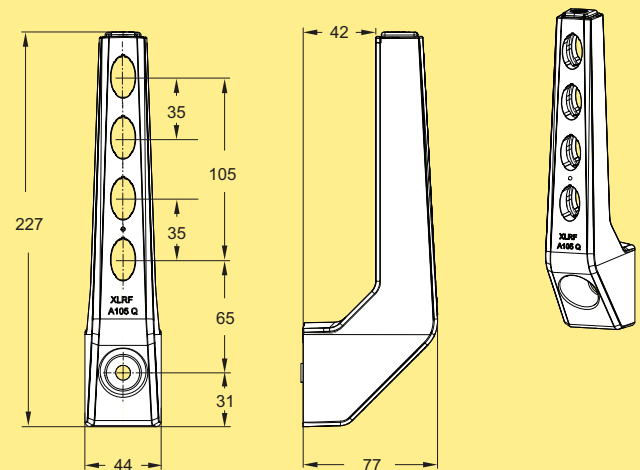
XLRF A35 Q

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4x16. Use socket wrench with 3/8" drive.

Mounting to spacer beam XLRN L/L UQ: MLC6S 8X14 (1x), BRB 8.4x16 (1x).

Do not overtighten (max torque: 10 Nm).

Guide rail bracket support



Guide rail bracket support

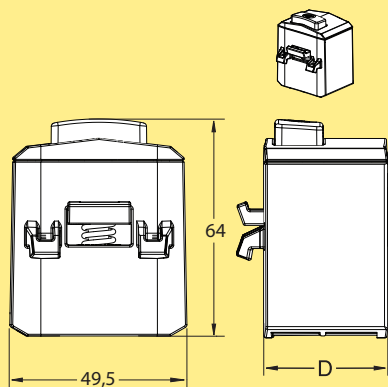
XLRF A105 Q

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4x16. Use socket wrench with 3/8" drive.

Mounting to spacer beam XLRN L/L UQ: MLC6S 8X14 (1x), BRB 8.4x16 (1x).

Do not overtighten (max torque: 10 Nm).

Spacer for guide rail bracket support



Distance piece

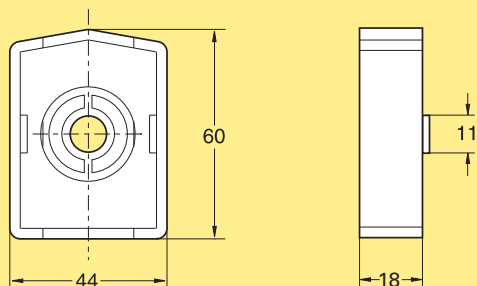
D=36 mm

D=72 mm

XLRD 36 Q
XLRD 72 Q

For use with guide rail bracket supports XLRF 46/64 Q

Spacer for guide rail bracket, polyamide



Distance piece Type A
Polyamide

XLRD 18 A

Mounting to beam:

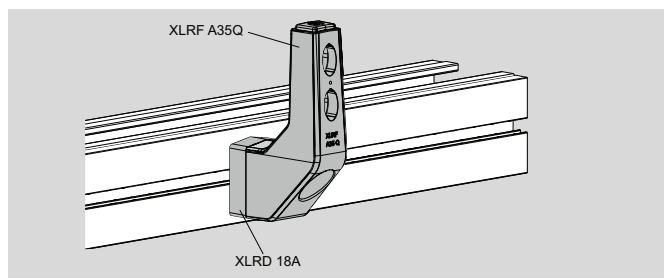
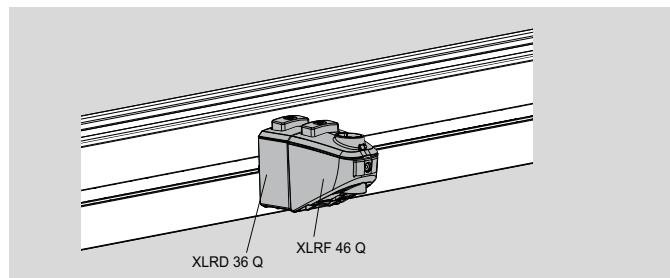
1 pc - XLAT 35, XLAN 8, BRB 8.4x16

2 pcs - XLAT 53, XLAN 8, BRB 8.4x16

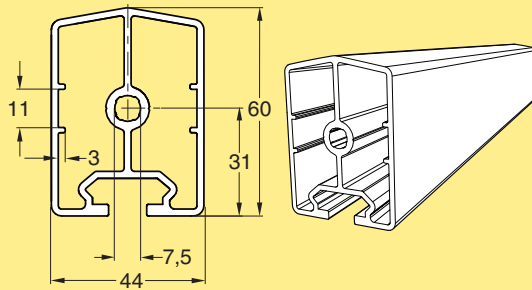
3 pcs - XLAT 71, XLAN 8, BRB 8.4x16

For use with guide rail bracket supports XLRF A35 Q / A105 Q

Note. Contains 10 pcs.



Spacer beam for guide rail bracket support



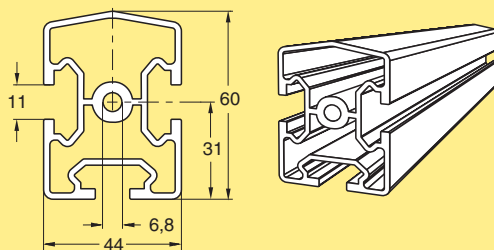
Spacer beam with flat sides
Length 3 m (3030 ±5 mm)
Length to order (30- 3000 mm)

XLRN 3 UQ
XLRN L UQ

For use with guide rail adapter plate XLRD GQ, end plate XLRD BQ and guide rail bracket support XLRF 46/64 Q or XLRF A35 Q / A105 Q.

End plate XLRD GQ not required for guide rail bracket support XLRF A 35 Q / 105 Q.

Spacer beam for guide rail bracket support



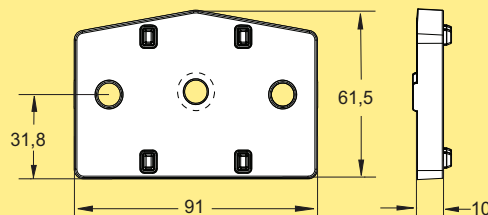
Spacer beam with T-slots
Length 3 m (3030 ±5 mm)
Length to order (30- 3000 mm)

XLRN 3
XLRN L

For use with guide rail adapter plate XLRD GQ, end plate XLRD BQ and guide rail bracket support XLRF 46/64 Q or XLRF A35 Q / A105 Q.

End plate XLRD GQ not required for guide rail bracket support XLRF A 35 Q / 105 Q.

End plate



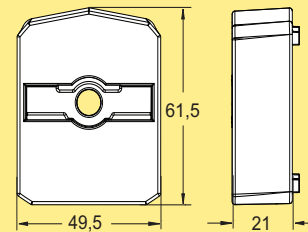
End plate

XLRD BQ

For use with spacer beam XLRN L/ XLRN L UQ

Mounting: XCAN 8 (2x), BRB 8.4x16 (2x), M6S 8x18 (x2), MF6S 8x18 (1x) (not included)

Adapter plate

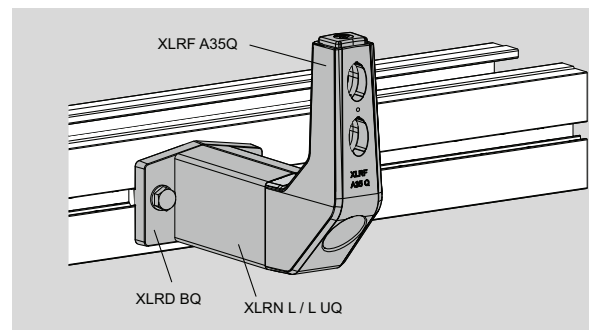
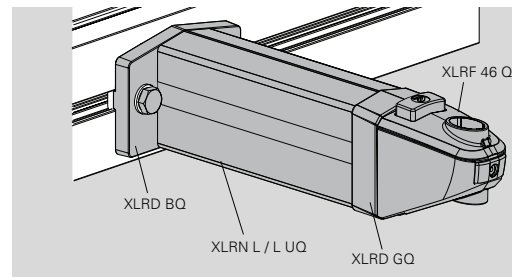


Adapter plate

XLRD GQ

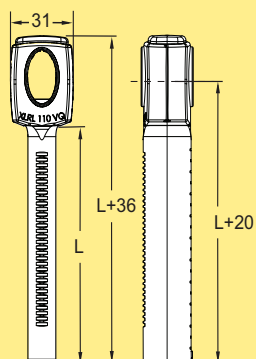
For use with spacer beam XLRN L/ XLRN L UQ

Mounting: MLC6S 8x14 (1x) (not included)



QuickGuide Guide rail clamp support

Guide rail clamp support



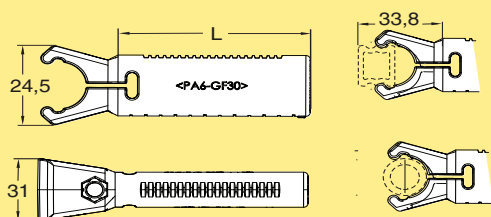
Guide rail clamp support

L=60 mm
L=110 mm
L=160 mm

XLRL 60 VQ
XLRL 110 VQ
XLRL 160 VQ

QuickGuideGuide rail clamps

Guide rail clamp 1



Guide rail clamp

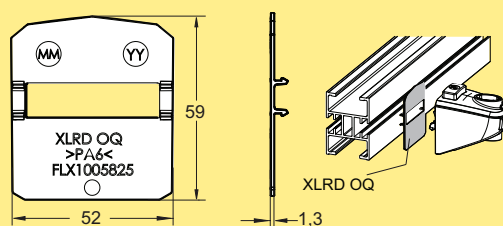
L=45 mm
L=65 mm
L=85 mm

XLRK 45 HQ
XLRK 65 HQ
XLRK 85 HQ

Including screw and nut
For use with guide rail bracket supports Type 46/64 Q,
guide rail clamp supports Type VQ,

QuickGuide Accessories

Adapter plate

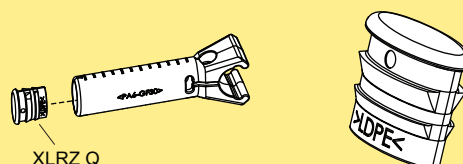


Adapter plate

XLRD OQ

Use in combination with the old type of T-slots in conveyor beams (XS, XL, XM and XH)

End cap

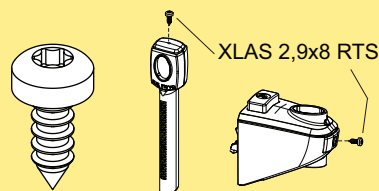


End cap

XLRZ Q

For use with XLRL 60/110/160 VQ and XLRK 45/65/85 HQ. Contains 10 pcs.

Screw

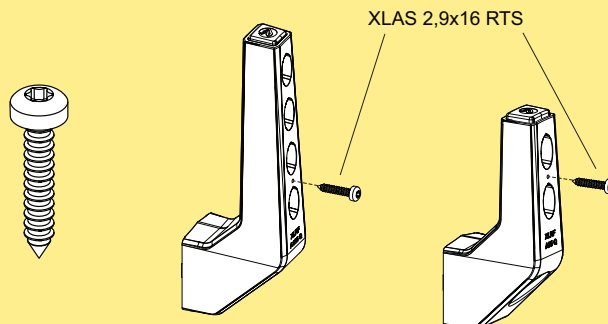


Stop screw for bracket support and clamp support
Ø2,9 mm

XLAS 2,9x8 RTS

Use to block vertical adjustment of the clamp support or horizontal adjustment of the guide rail clamp after installation (if needed). Kit contains 50 pcs.

Screw



Stop screw for bracket support
Ø2,9 mm

XLAS 2,9x16 RTS

Use to block vertical adjustment of XLRF A35 Q or XLRF A105 Q after installation (if needed). Kit contains 50 pcs.

Guide discs

Guide discs are used in place of conventional guide rail for the inner bend of Plain bends/Bend drive units. The guide discs are snap-fitted onto the large discs.

The guide discs correspond to fixed guide rail brackets as shown in the following tables. Other combinations are possible if a non-symmetrical track can be accepted.

Conveyor system XS. Outer guide rail: 10 mm

Track width	Guide rail bracket	Guide disc
56 mm	XLRB 11×30	XLRG 235
80 mm	XLRB 23×30	XLRG 212
104 mm	XLRB 35×30	XLRG 187
130 mm	XLRB 48×30	XLRG 162

Conveyor system X65. Outer guide rail: 10 mm

Track width	Guide rail bracket	Guide disc
67 mm	XLRB 11×30	XLRG 235
90 mm	XLRB 23×30	XLRG 212
115 mm	XLRB 35×30	XLRG 187
140 mm	XLRB 48×30	XLRG 162

Conveyor system X85. Outer guide rail: 15 mm

Track width	Guide rail bracket	Guide disc
87 mm	XLRB 16×42	XLRG 235
110 mm	XLRB 28×42	XLRG 212
135 mm	XLRB 40×42	XLRG 187
160 mm	XLRB 53×42	XLRG 162

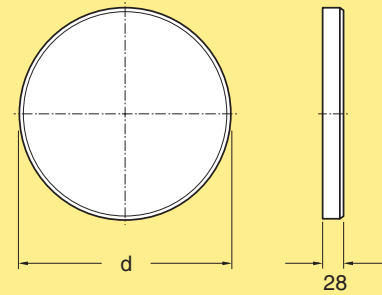
Conveyor system XH. Outer guide rail: 15 mm

Track width	Guide rail bracket	Guide disc
107 mm	XLRB 16×42	XLRG 235
130 mm	XLRB 28×42	XLRG 212
155 mm	XLRB 40×42	XLRG 187
180 mm	XLRB 53×42	XLRG 162

Note

Guide discs are not used with conveyor systems XK and X180/X300.

Guide disc for wheel bend

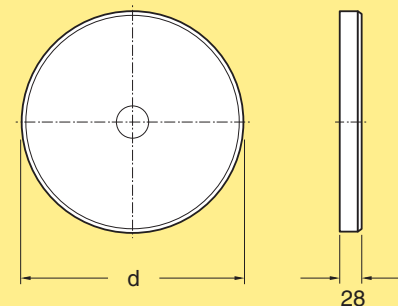


Guide disc for wheel bend

Polyamide
d=230 mm
d=212 mm
d=187 mm
d=162 mm

XLRG 235
XLRG 212
XLRG 187
XLRG 162

Guide disc for bend drive unit



Guide disc for bend drive unit

Polyamide
d=230 mm
d=212 mm
d=187 mm
d=162 mm

XLRG 235 H
XLRG 212 H
XLRG 187 H
XLRG 162 H

Fixed guide rail brackets

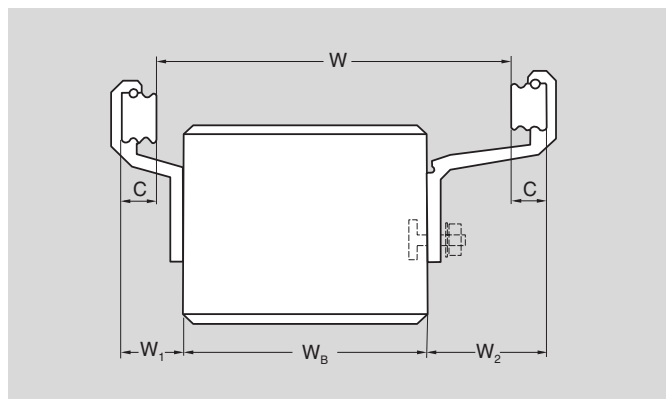
Effective track width

Effective track width W (see illustration) for symmetrical tracks with 15 mm guide rail. For 10 mm guide rail: add 10 mm.

Bracket type	XS mm	X65 mm	X85 mm	XH mm	XK mm	X180 mm	X300 mm
XLRB 11×30	47	67	—	—	—	—	—
XLRB 23×30	61	81	—	—	—	—	—
XLRB 35×30	85	105	—	—	—	—	—
XLRB 48×30	111	131	—	—	—	—	—
XLRB 29×36	72	92	—	—	—	—	—
XLRB 16×42	47	67	87	107	—	184	302
XLRB 28×42	71	91	111	131	—	208	326
XLRB 40×42	95	115	135	155	—	232	350
XLRB 49×42	113	133	153	173	—	250	368
XLRB 53×42	121	141	161	181	—	258	376
XLRB 65×42	145	165	185	205	—	282	400
XLRB 90×42	195	215	235	255	—	332	450
XLRB 16×54	—	—	—	—	107	184	302
XLRB 40×54	—	—	—	—	155	232	350
XLRB 65×54	—	—	—	—	205	282	400

10 mm guide rail only

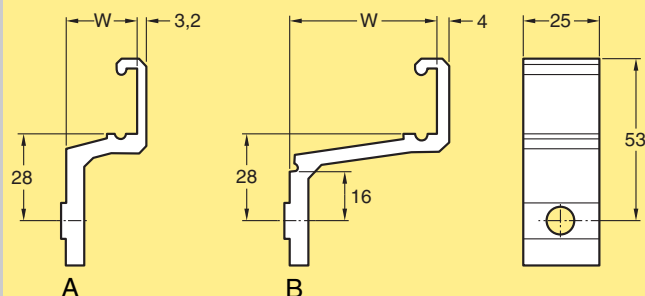
If type XLRB 35×30 is used with angle plate, use 10 mm guide rail.



Mounting hardware

Screws, nuts, and washers for mounting of guide rail brackets to the conveyor beam must be ordered separately.

Fixed guide rail bracket, aluminium (XS, X65)



Fixed guide rail bracket

$W=11$ mm Fig. A

$W=23$ mm Fig. A

$W=35$ mm Fig. B

$W=48$ mm Fig. B

XLRB 11×30

XLRB 23×30

XLRB 35×30

XLRB 48×30

Fixed guide rail bracket for X65 pallets

$W=29$ mm

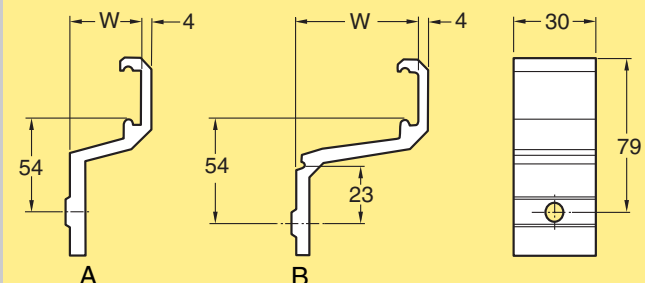
XLRB 29×36

Note. Bracket type B can take angle plates when used with X65 conveyor. Type XLRB 35×30 with angle plate can only be used with 10 mm guide rail.

The XLRB...×30 brackets cannot be used with a guide rail passing through the inner curve of a wheel bend. The guide rail will interfere with the wheel. If possible, use a guide disc.

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16.

Fixed guide rail bracket, aluminium (XK, X180/X300)



Fixed guide rail bracket

$W=16$ mm Fig. A

$W=40$ mm Fig. B

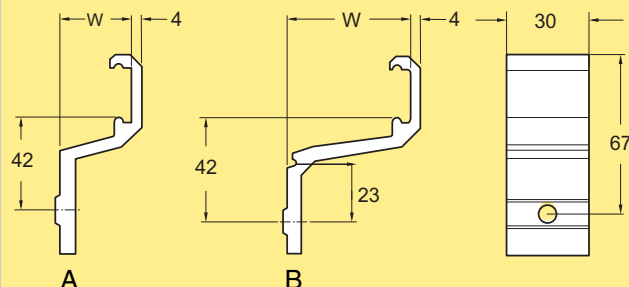
$W=65$ mm Fig. B

XLRB 16×54

XLRB 40×54

XLRB 65×54

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16.

**Fixed guide rail bracket, aluminium
(XS, X65, X85, XH, X180/X300)****Fixed guide rail bracket**

W=16 mm Fig. A

W=28 mm Fig. A

W=40 mm Fig. B

W=49 mm Fig. B

W=53 mm Fig. B

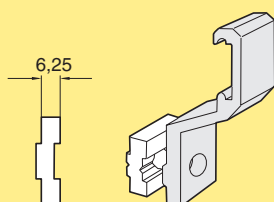
W=65 mm Fig. B

W=90 mm Fig. B

XLRB 16×42**XLRB 28×42****XLRB 40×42****XLRB 49×42****XLRB 53×42****XLRB 65×42****XLRB 90×42**

Note. All brackets except 16 mm and 28 mm types can take angle plates when used with X85 and XH conveyor. (XLRB 40×42: angle plate XLRP 3/6 only). Although XLRB ..×42 can be used with X180/X300 conveyors, the resulting height of the guide rail is often insufficient for safe guidance, especially for the wider brackets. Use adjustable polyamide brackets or built-up brackets if type XLRB ..×54 are not suitable.

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16.

Distance piece (aluminium)**Distance piece (aluminium)**

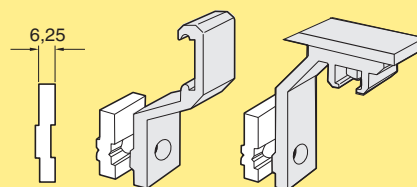
Thickness 6,25 mm

XLRD 6

Not for conveyor system XK (use XLRD 6 C).

Suitable, longer T-bolts: see Fasteners.

Note. Contains 10 pcs.

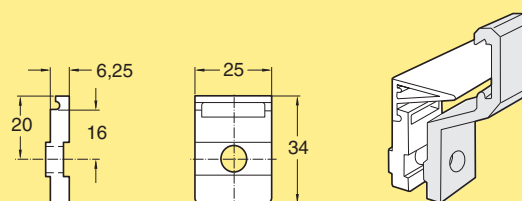
Distance piece (aluminium) for conveyor system XK**Distance piece (aluminium) for
conveyor system XK**

Thickness 6,25 mm

XLRD 6 C

Suitable, longer T-bolts: see Fasteners.

Note. Contains 10 pcs.

Distance piece (polyamide)**Distance piece (polyamide)**

Thickness 6,25 mm

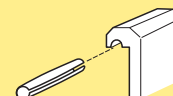
XLRD 6 P

Can hold angle plates (X65 only)

Not for conveyor system XK (use XLRD 6 C).

Suitable, longer T-bolts: see Fasteners.

Note. Contains 10 pcs.

Spring pin for guide rail bracket**Spring pin for guide rail bracket****XLAP 28**

The spring pins are used to secure the guide rails to the guide rail brackets.

Note. Contains 50 pcs.

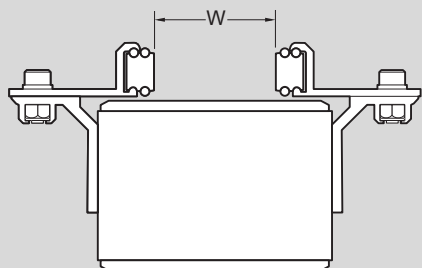
Adjustable guide rail brackets, aluminium

Effective track width

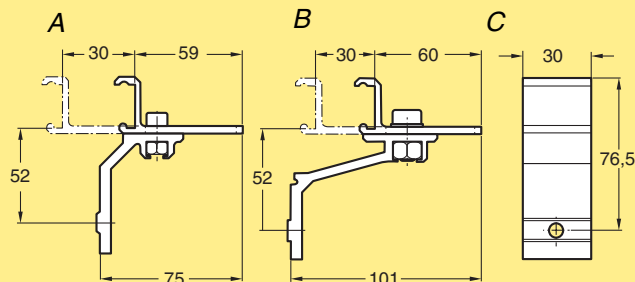
Effective track width W (see illustration) with 15 mm guide rail. For 10 mm guide rail: add 10 mm.

Bracket type	XS mm	X65 mm	X85 mm	XH mm
XLRA 8x9x45	16–34	36–54	–	–
XLRA 8x39x45	0–34	0–54	–	–
XLRA 26x9x45	52–70	72–90	–	–
XLRA 26x39x45	0–70	12–90	–	–
XLRA 16x30x52	0–49	9–69	29–89	49–109
XLRA 41x30x52	39–99	59–119	79–139	99–159

Bracket type	XK mm	X180 mm	X300 mm
XLRA 16x30x64	49–109	126–186	246–306
XLRA 41x30x52	–	176–236	296–356



Adjustable guide rail bracket, aluminium (XS, X65, X85, XH, X180/X300)



Adjustable guide rail bracket assembly

See Figure A, C

See Figure B, C

XLRA 16x30x52

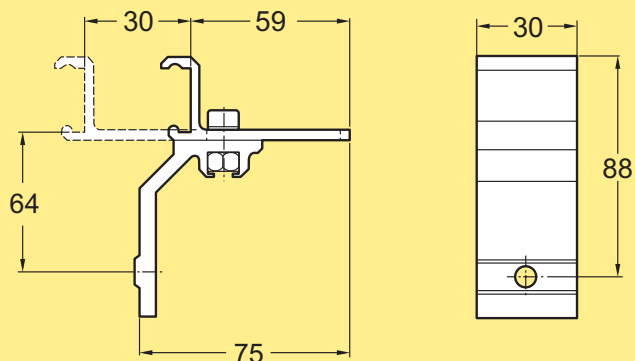
XLRA 41x30x52

Including bolt and nut

Note. Bracket type B can take angle plates when used with X85 and XH conveyor.

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4x16.

Adjustable guide rail bracket, aluminium (XK, X180/X300)



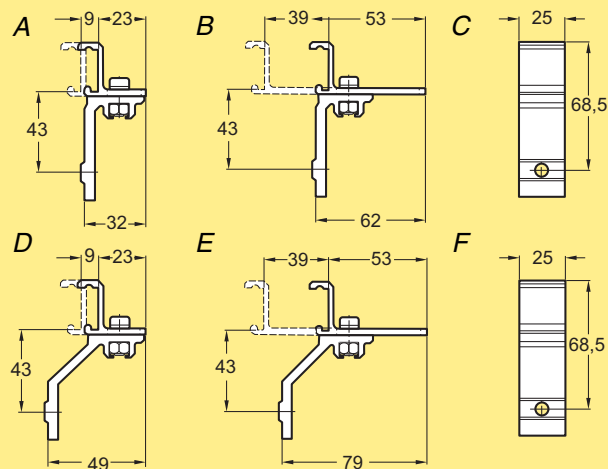
Adjustable guide rail bracket assembly

XLRA 16x30x64

Including bolt and nut

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4x16.

Adjustable guide rail bracket, aluminium (XS, X65)



Adjustable guide rail bracket assembly

See Figure A, C

See Figure B, C

See Figure D, F

See Figure E, F

XLRA 8x9x45

XLRA 8x39x45

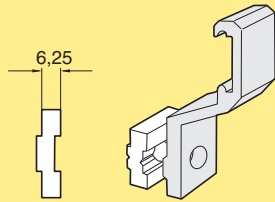
XLRA 26x9x45

XLRA 26x39x45

Including bolt and nut

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4x16.

Distance piece (aluminium)



Distance piece (aluminium)
Thickness 6,25 mm

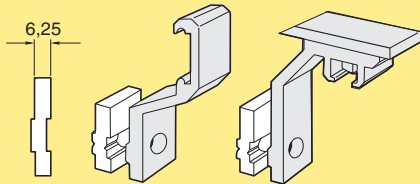
XLRD 6

Not for conveyor system XK (use XLRD 6 C).

Suitable, longer T-bolts: see Fasteners.

Note. Contains 10 pcs.

Distance piece (aluminium) for conveyor system XK



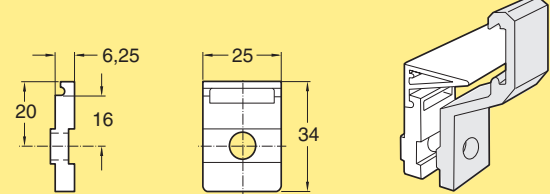
Distance piece (aluminium) for
conveyor system XK
Thickness 6,25 mm

XLRD 6 C

Suitable, longer T-bolts: see Fasteners.

Note. Contains 10 pcs.

Distance piece (polyamide)



Distance piece (polyamide)
Thickness 6,25 mm

XLRD 6 P

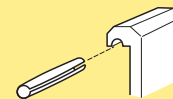
Can hold angle plates (X65 only)

Not for conveyor system XK (use XLRD 6 C).

Suitable, longer T-bolts: see Fasteners.

Note. Contains 10 pcs.

Spring pin for guide rail bracket

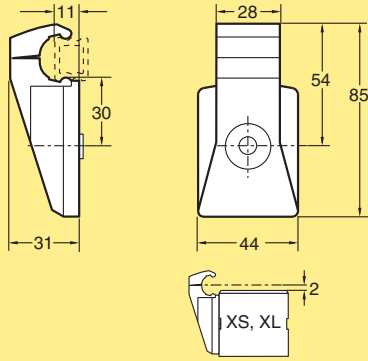


Spring pin for guide rail bracket **XLAP 28**

*The spring pins are used to secure the guide rails to the
guide rail brackets.*

Note. Contains 50 pcs.

Fixed guide rail bracket, polyamide (XS, X65)

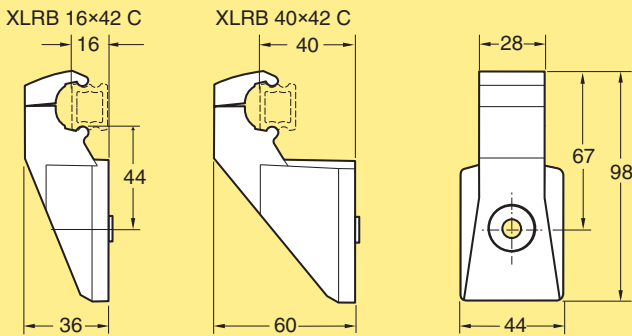


Fixed guide rail bracket
Polyamide **XLRB 11×30 C**

Can be used with XS and X65 conveyor beam.
Track widths: see table on page 316.

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16.
Do not overtighten (max torque: 10 Nm).

Fixed guide rail bracket, polyamide (XS, X65, X85, XH, X180/X300)

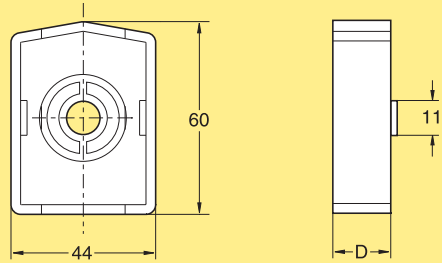


Fixed guide rail bracket
Polyamide
Width 16 mm **XLRB 16×42 C**
Width 40 mm **XLRB 40×42 C**

Can be used with XS, X65, X85, XH, X180/X300 conveyor beam.
Track widths: see table on page 316.

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16
Do not overtighten (max torque: 10 Nm).

Spacer for guide rail bracket, polyamide



Distance piece Type A
Polyamide
D= 6 mm
D= 18 mm

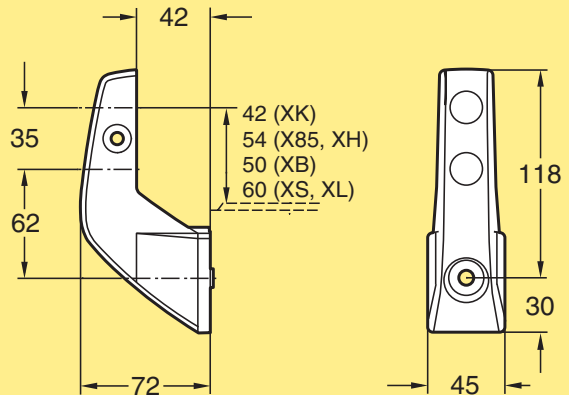
XLRD 6 A
XLRD 18 A

Spacer beams are also available. See page 322.

Note. Contains 10 pcs.

Bracket support components, polyamide

Guide rail bracket support Type A35



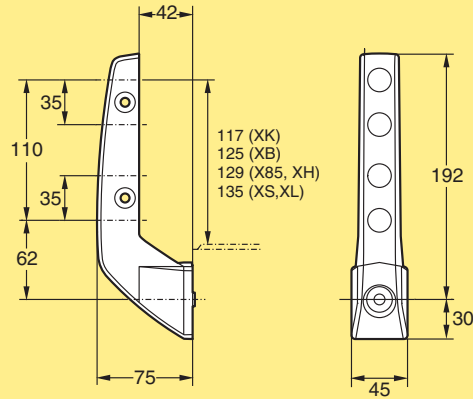
Guide rail bracket support **XLRF 42×62 A35**

To be used with guide rail clamp XLRK 18×40/60/80 C.
For 1–2 guide rail levels. Including screw and nut.
Screw can be replaced by star knob XLAR 6×20

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16.
Use socket wrench with 3/8" drive. Do not overtighten
(max torque: 10 Nm).

Note. Always install dummy plugs XLAK 18 (page 321)
in unused clamp positions to ensure positive locking of
the adjacent clamp.

Guide rail bracket support Type A110



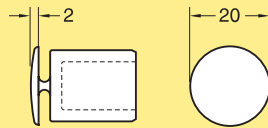
Guide rail bracket support **XLRF 42×62 A110**

To be used with guide rail clamp **XLRK 18×40/60/80 C**. For 1–4 guide rail levels. Including screw and nut. Screw can be replaced by star knob **XLAR 6×20**

Mounting to beam: **XLAT 17**, **XLAN 8**, **BRB 8.4×16**
Use socket wrench with 3/8" drive. Do not overtighten (max torque: 10 Nm).

Note. Always install dummy plugs **XLAK 18** (page 321) in unused clamp positions to ensure positive locking of the adjacent clamp.

Dummy plug

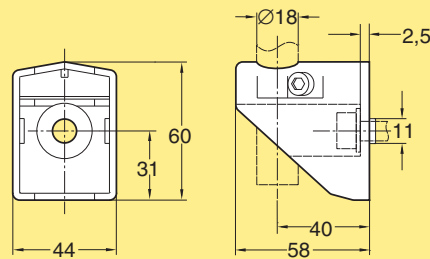


Dummy plug for **XLRF 42×62 A35/110**

XLAK 18

Note. Contains 10 pcs.

Guide rail bracket support Type V



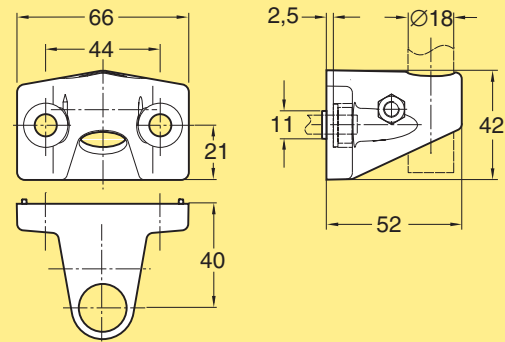
Guide rail bracket support **XLRF 42×18 V**

To be used with vertical 18 mm tube or rod, guide rail clamp **XLRL/XLRC 18×110 C**, or with quick release clamp **XLRL 18×97 CQ**.

Mounting to beam: **XLAT 17**, **XLAN 8**, **BRB 8.4×16**
Use socket wrench with 3/8" drive.
Do not overtighten (max torque: 10 Nm).

Clamp screw can be replaced by star knob **XLAR 6×20**

Guide rail bracket support Type VD



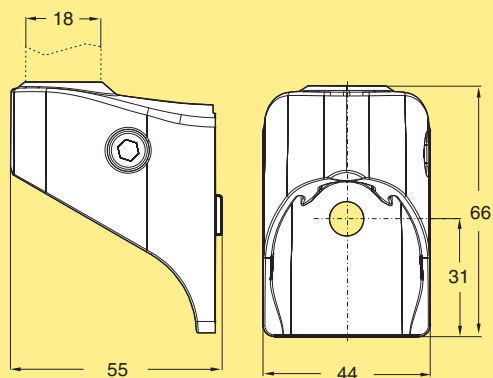
Guide rail bracket support

XLRF 40×18 VD

To be used with vertical 18 mm tube or rod, or guide rail clamp **XLRL/XLRC 18×110 C**.

Mounting to beam: 2 each of **MC6S 8×14**, **XLAQ 8**, **BRB 8.4×16**

Reinforced Guide rail bracket support Type VH



Reinforced Guide rail bracket support, material: Zinc

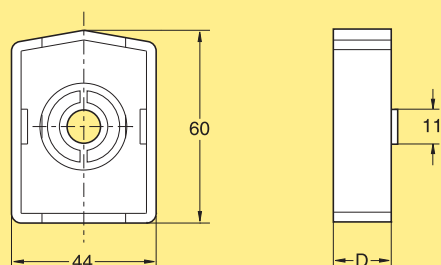
XLRF 42×18 VH

To be used with vertical 18 mm tube or rod, guide rail clamp XLRL/XLRC 18×110 C, or with quick release clamp XLRL 18×97 CQ.

Mounting to beam: XLAT 17, XLAN 8, BRB 8.4×16
Use socket wrench with 3/8" drive.
Do not overtighten (max torque: 10 Nm).

Spacers

Spacer for guide rail bracket support Type A



Distance piece Type A

Polyamide

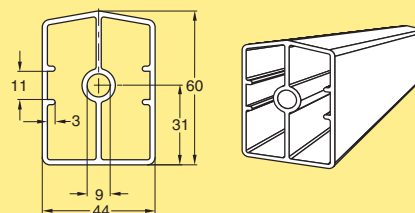
D= 6 mm

D= 18 mm

XLRD 6 A
XLRD 18 A

For use with guide rail bracket supports XLRF 42×...
Note. Contains 10 pcs.

Spacer beam for guide rail bracket support



Spacer beam with flat sides

Length 3 m (3030 ±5 mm)

Length to order (30- 3000 mm)

XLRN 3 U
XLRN L U

For use with guide rail bracket supports XLRF 42×...

Mounting: M8 through screw BRB 8.4×16, XLAQ 8, XLRD 3 D

CC

X85P

XK

X180

X300

GR

CS

XT

HU

WL

WK

XC

XF

XD

ELV

CTL

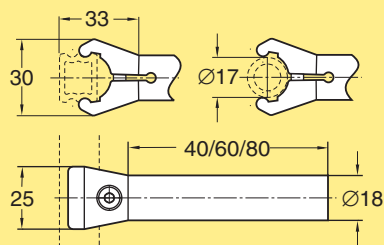
FST

TR

APX

IDX

Guide rail clamp 1



Guide rail clamp 1

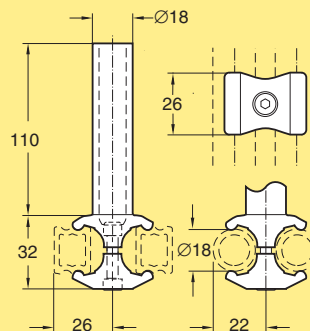
L=40 mm
L=60 mm
L=80 mm

XLRK 18×40 C
XLRK 18×60 C
XLRK 18×80 C

Including screw and nut

For use with guide rail bracket supports Type A35/A110, guide rail clamp supports Type CA, or cross connector XLRX 18 X.

Guide rail clamp for double track conveyor

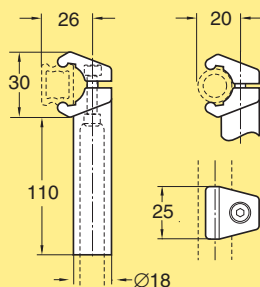


Guide rail clamp for double track conveyor

XLRC 18×110 C

Including screw and nut. Suitable for use with cross connector XLRX 18 X and a crossing 18 mm aluminium tube above the double track.

Guide rail clamp 2

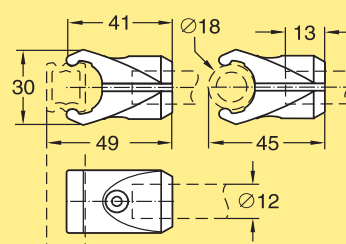


Guide rail clamp 2

XLRL 18×110 C

Including screw. To be used directly with guide rail bracket supports XLRF 42×18 V or XLRF 40×18 VD.

Guide rail clamp 4

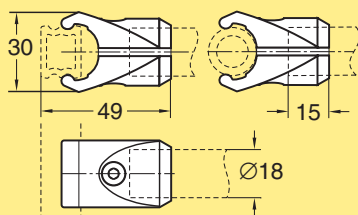


Guide rail clamp 4

XLRK 12 CE

Including screw and nut. For use with 12 mm guide rail clamp rod 5051168. Suitable guide rail types: XLRX ... or 18 mm tube/rod.

Guide rail clamp 3

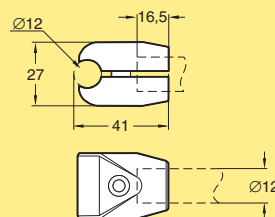


Guide rail clamp 3

XLRK 18 CE

Including screw and nut. For use with 18 mm tube XLRR ...×18 C.

Guide rail clamp 5

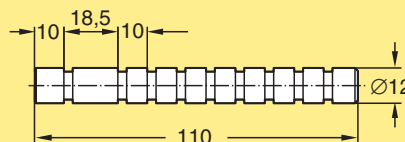


Guide rail clamp 5

XLRK 12 DE

Including stainless steel screw and nut. For use with 12 mm guide rail clamp rod 5051168. Suitable guide rail type: 12 mm steel rod type 5048965.

Guide rail clamp rod with grooves, 12 mm

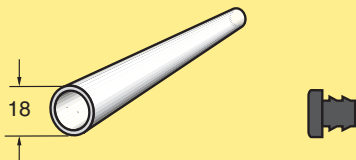


Guide rail clamp rod with grooves Stainless steel

5051168

For use with guide rail clamps XLRK 12 CE/DE and clamp support XLRL 18×97 CQ.

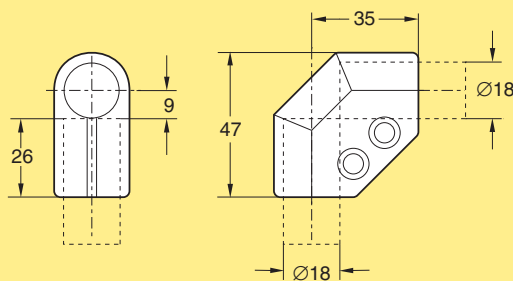
Guide rail support tube, aluminium



Guide rail support tube
Aluminium
Length 3 m (3030 ±5 mm) **XLRR 3×18 C**
Length to order (30- 3000 mm) **XLRR L×18 C**
End cap **XLRZ 18**

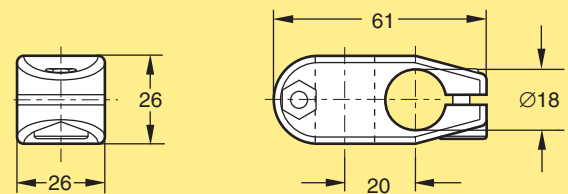
Note. Contains 10 pcs.
The tube can also be used as guide rail in combination with suitable guide rail clamps.

Corner connector



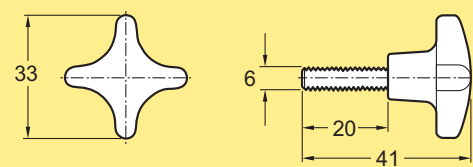
Corner connector **XLRX 18 C**
Including screws and nuts. For use with 18 mm aluminium tube type XLRR ..× 18 C.

Cross connector



Cross connector **XLRX 18 X**
Including screws and nuts. For use with 18 mm aluminium tube type XLRR ..× 18 C and/or guide rail clamps XLRL/XLRC 18×110 C.
Can be used with star knob XLAR 6×20 for easy re-adjustment

Star knob

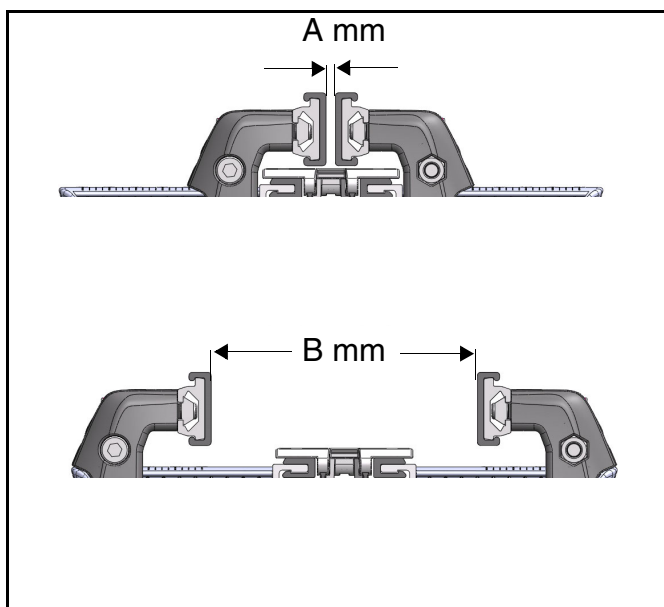


Star knob
M6 **XLAR 6×20**
Note. Contains 10 pcs.
To be used with XLRF 42×18 V, XLRF 42×62 A35/110, and XLRX 18 X.



Width adjustment

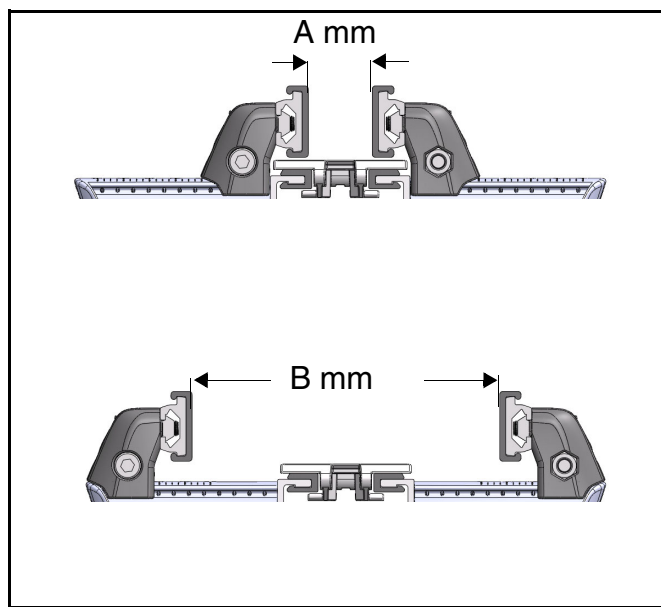
Width adjustment XURA 30x41x37 and XLRA 30x41x50 A



When using XURA 30x41x37 the minimum A width is 2 mm and the maximum B width is 84 mm

When using XLRA 30x41x50 A the minimum A width is 34 mm and the maximum B width is 104 mm

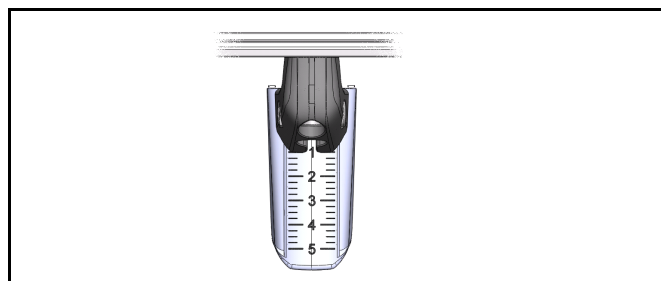
Width adjustment XURA 40x41x37 and XLRA 40x41x50 A



When using XURA 40x41x37 the minimum A width is 20 mm and the maximum B width is 102 mm

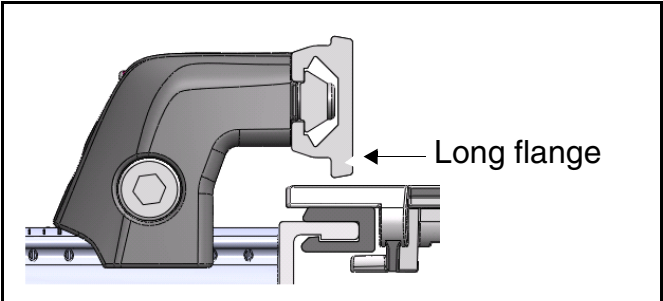
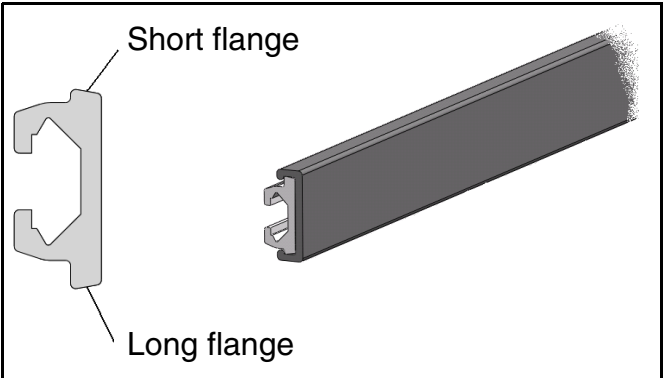
When using XLRA 40x41x50 A the minimum A width is 50 mm and the maximum B width is 120 mm

Width scale

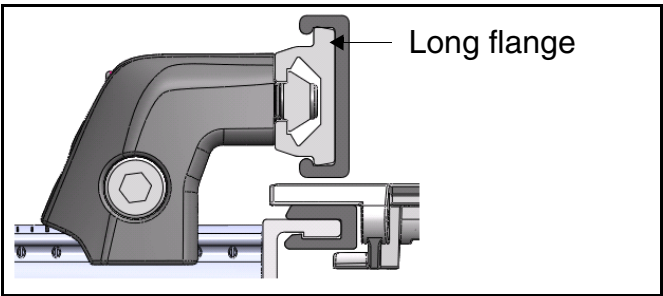


The guide rail bracket has an adjustment scale which can be used as a reference when adjusting the guide rails to correct width

Guide rail cover XLRT 3x23, XLRT 3x23E



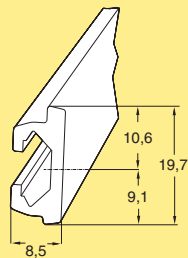
When not using the Guide rail cover the guide rail can be orientated with the long flange down



When using the Guide rail cover the rail is to be orientated with the long flange up

Straight guide rails

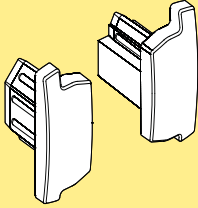
Guide rail, aluminium



Guide rail
Length 3 m
T-slot for XDAN T-slot nuts

XURS 3x8

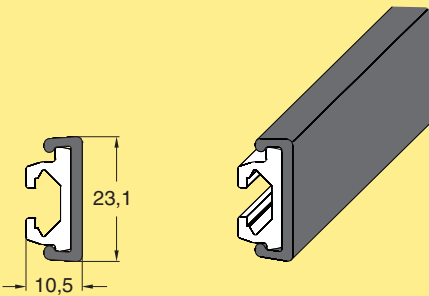
End plug



End plug
Contains 10 pcs. pair

XURE 8

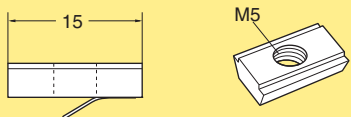
Guide rail cover



Guide rail cover
Polyethylene, length 3 m
Guide rail cover
PE-UHMW, (conductive) length 3 m

XLRT 3x23
XLRT 3x23 E

T-slot nut

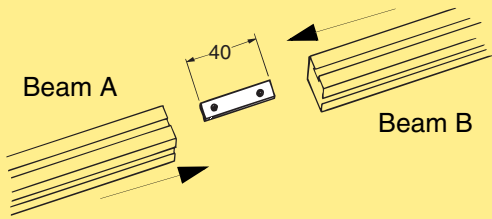


T-slot nut
Steel, zinc-chromated
M5 Contains 10 pcs

XDAN 5 A

Connecting strips

Connecting strip for guide rail



Connecting strip, straight
Including set screws
Steel, electro-zinc-plated

XDFC 9x40

Guide rail bracket for X45

Guide rail bracket

Guide rail bracket for X45 **XURA 30x41x37**
Including mounting hardware

Guide rail bracket

Guide rail bracket for X45 **XURA 40x41x37**
Including mounting hardware

Guide rail bracket for X65 and X45H

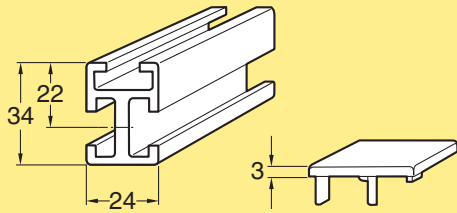
Guide rail bracket

Guide rail bracket for X 65 and X45H **XLRA 30x41x50 A**
Including mounting hardware

Guide rail bracket

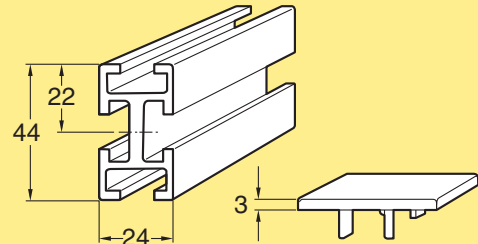
Guide rail bracket for X65 and X45H **XLRA 40x41x50 A**
Including mounting hardware

Small beam 24x34



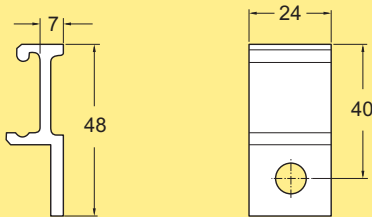
Beam 24 mm x 34 mm
Length 3 m (3030 ±5 mm) **XCBB 3x24x34**
Length to order (30- 3000 mm) **XCBB Lx24x34**
End cap for XCBB 3x24x34 **XCBE 24x34**

Small beam 24x44



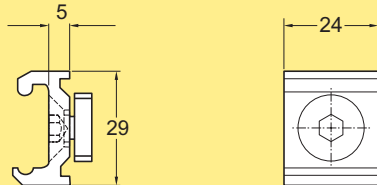
Beam 24 mm x 44 mm
Length 3 m (3030 ±5 mm) **XCBB 3x24x44**
Length to order (30- 3000 mm) **XCBB Lx24x44**
End cap for XCBB 3x24x44 **XCBE 24x44**

Guide rail bracket



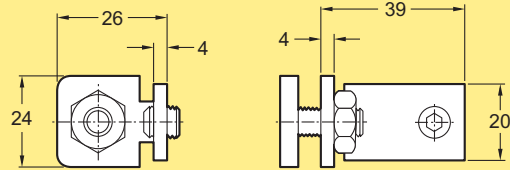
Guide rail bracket **XLRC 20**

Guide rail bracket



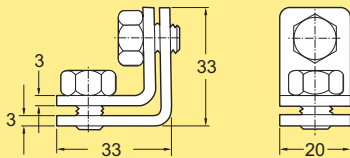
Guide rail bracket **XLRC 20 A**
Including M8 screw and square nut

Inner fitting 90°



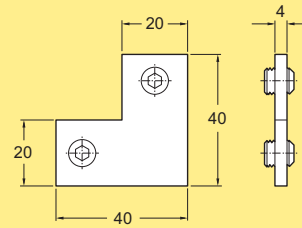
Inner fitting 90° **XMRX 20**
Including T-bolt, nut, set screw
Note. Contains 10 pcs.

Inner fitting 90°



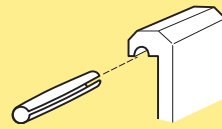
Inner fitting 90° **XMRY 20**
Including screws
Note. Contains 10 pcs.

Corner fitting 90°



Corner fitting 90° **XMRW 20**
Including set screws
Note. Contains 10 pcs.

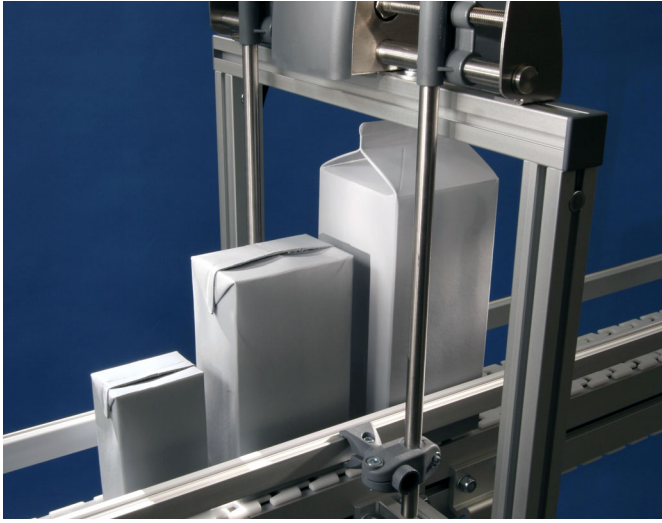
Spring pin for guide rail bracket



Spring pin for guide rail bracket **XLAP 28**
Note. Contains 50 pcs.

PO
CC
X45
XS
X65
X65P
X85
X85P
XH
XK
XKP
X180
X300
GR
CS
XT
HU
WL
WK
XC
XF
XD
ELV
CTL
FST
TR
APX
IDX

Guide rail system for easy adjustment of track width



The automatic adjustable guiding system provides a very flexible way to add width adjustment for conveyors in a production line. The system offers easy automatic resetting of product guiding systems in production flows. The effect is increased line efficiency and safe product distribution throughout the line.

The system has a modular design and consists of guide units for the guiding, control boxes for the control of the guide units and junction boxes for power supply. The system can be linked to the line control system and one control box can control up to 132 or 220 guide units.

Standard features

- Automatic resetting for different product sizes
- Easy to install and expand
- Easy to integrate with existing installations
- Safe
- Each unit is self-driven with high accuracy
- Available in versions with or without position feedback.

Standard products

A system includes the following standard products:

- Guide units (standard or feedback type, basic or heavy version)
- Guide rail components
- Control box (Type 1/2/2b)
- Junction box

Guide unit (GU)

The guide unit has a built-in gear motor that adjusts the guide rails in and out by means of a rotating threaded shaft. The 24 V AC motor provides high enough force for width adjustment but still low enough force to stop if something gets jammed.

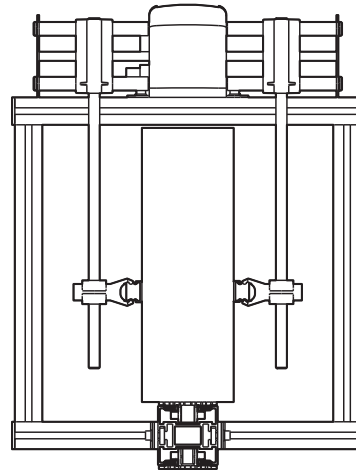
Each guide unit includes a cable that is daisy chained to the next guide unit. The synchronous AC motors ensure that the guide units move in parallel.

The feedback version (suffix F) has two sensors, one at the outer position for resetting, and one which counts pulses as the threaded shaft rotates, to indicate the current position. Cables from the sensors are connected to the fieldbus module in the control box.

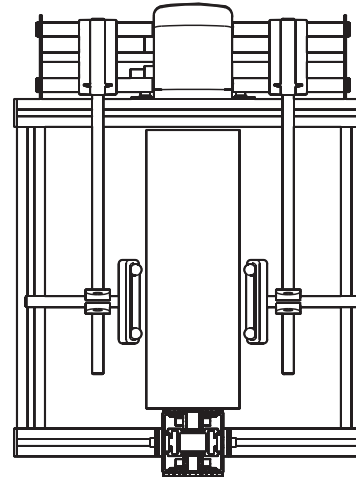
System reset is done by running the guide units until all guide rails are in the maximum width position.

Basic GU version

The basic version is designed to be positioned above the conveyor track. It comes with Ø12 mm vertical bars in two lengths: 196 mm and 296 mm and includes a 2 m GU cable. Recommended distance between guide units is 1 m. Using standard FlexLink's guide rail components, it is possible to get two guide rail configurations: A and B:

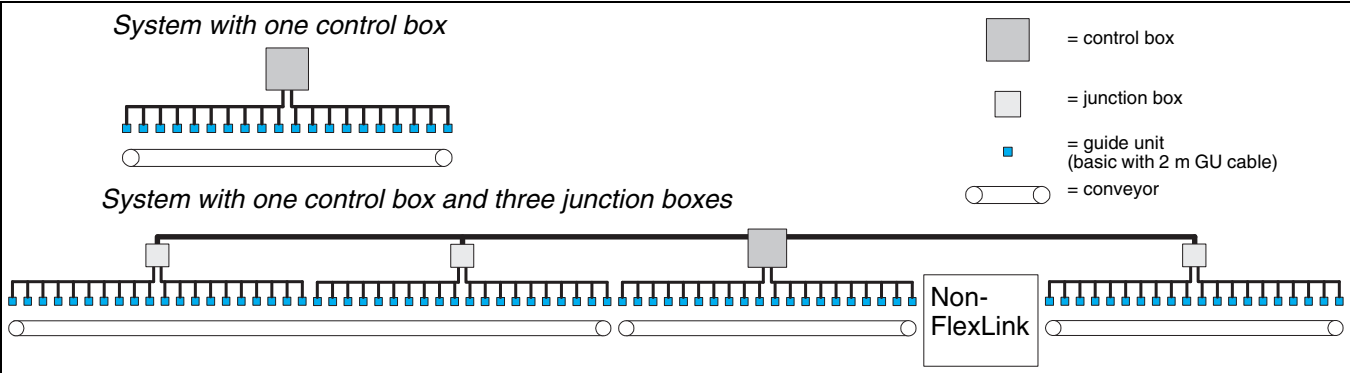


Configuration A



Configuration B

Control system



Control box

- The basic control box, Type 1, for manual setting has a switch with three positions: IN/0/OUT.
- The advanced control box, Type 2, automatic setting, has a built-in fieldbus module, which receives control signals from the conveyor system's PLC.
- Control box Type 2b has provisions for installing customer specified communications, such as any preferred type of fieldbus module, or hardwired communications.

In a small system, one Type 1 or Type 2 control box controls a GU group. A larger system can be built by adding junction boxes. Each additional GU group needs a junction box. Systems larger than this require an extra control box.

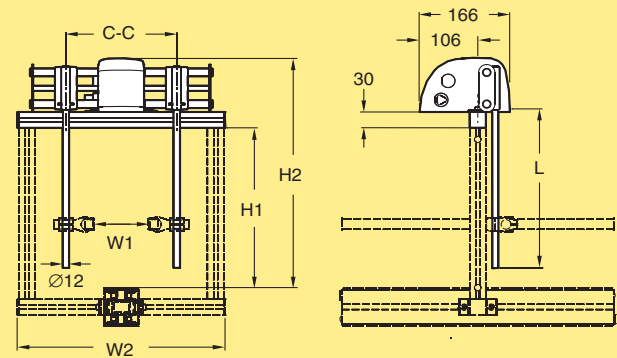
Position feedback system

The track width can be easily controlled from an operator panel if a control box Type 2 is used in combination with a GU made for position feedback (see *Guide unit* above). Only one such GU is required in a line.

Junction box

In addition to one GU group, a control box can have a maximum of 10 junction boxes (5 in each direction). Each junction box can control one GU group. A group of basic guide units can include up to 20 guide units, whereas a heavy GU group can include maximum 12 guide units. This means a total of 220 basic guide units.

Guide unit



Guide unit, including horizontal beam XFBM 30, no feedback

- | | |
|----------------------|-----------------------|
| Guide unit 284×196 C | XLRQ 284×196 D |
| Guide unit 455×196 C | XLRQ 455×196 D |
| Guide unit 284×296 C | XLRQ 284×296 D |
| Guide unit 455×296 C | XLRQ 455×296 D |

Guide unit, including horizontal beam XFBM 30, with position feedback

- | | |
|-----------------------|------------------------|
| Guide unit 284×196 CF | XLRQ 284×196 DF |
| Guide unit 455×196 CF | XLRQ 455×196 DF |
| Guide unit 284×296 CF | XLRQ 284×296 DF |
| Guide unit 455×296 CF | XLRQ 455×296 DF |

Item	H1	H2	W1	W2	C-C (max.)	L
XLRQ 284×196 ..	165	295	35–190	377	284	196
XLRQ 455×196 ..	165	295	35–360	548	455	196
XLRQ 284×296 ..	265	395	35–190	377	284	296
XLRQ 455×296 ..	265	395	35–360	548	455	296

Includes a 2 m GU cable. Feedback version (suffix BF) includes the necessary sensors.

Distance piece



Distance piece **5055818**

Adapter for fitting cross connectors or guide rail clamps to the Ø12 mm vertical bars of the guide units.

Extra GU cable

- | | |
|------------|----------------|
| Cable, 2 m | 5057678 |
| Cable, 3 m | 5057691 |

Additional components

Components required for both configurations A&B (page 330):

Item	Designation	Qty
Washer M6	BRB 6.4×12	4
Beam 30×30 mm	XFBM L×30	720–1160 mm
End cap	XFBE 30	4
Fastener yoke	XFAF 30	4
Mounting plate	XFFB 30	2
Screw	MF6S 6×30	2
Screw	MC6S 6×14	4
Square nut	XLAQ 6	4
Cross connector	XLRX 18 X	2–4
Distance piece (see above)	5055818	2–4

Additional components required for configuration A (page 330)

Item	Designation	Qty
Guide rail clamp	XLRK 18×40 C	2–4

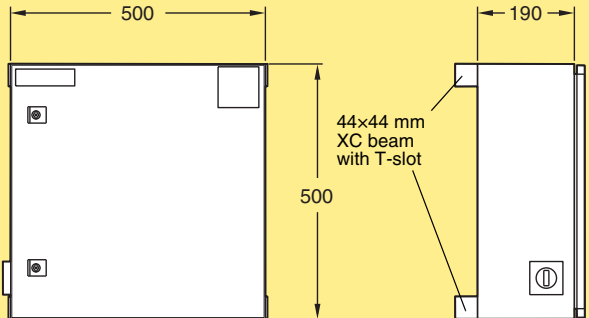
Additional components required for configuration B (page 330)

Item	Designation	Qty
Guide rail clamp, double	XLRKX 18×50 D69	2

Compatibility with previous GU models

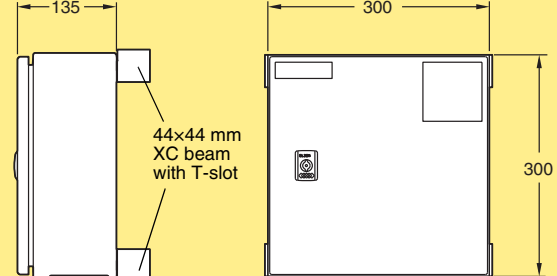
Due to a speed difference, GU types XLRQ ... B/XLRQ ... BF should not be mixed with the previous types without B in the suffix in a line controlled by a common control unit.

Control box



Control box
Type 1, manual setting, 50 Hz **5113439**
Type 2, automatic (Profibus), 50 Hz **5113440**
Type 2, automatic (DeviceNet), 60 Hz **5057420**
Type 2b, automatic, 50 Hz **5113449**

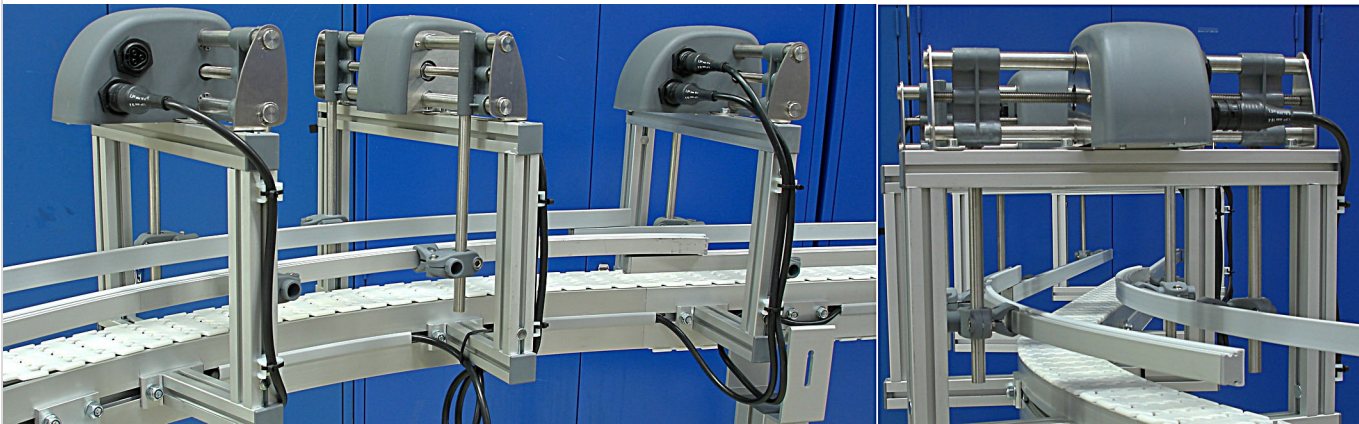
Junction box



Junction box, 50 Hz **5113441**
Junction box, 60 Hz **5057479**

Customer specified communications

Guide rails in bends

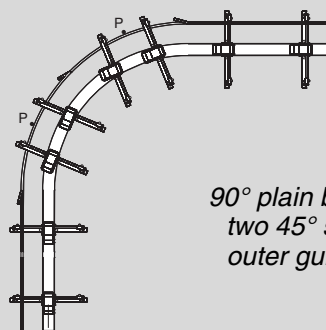


The guide rail sections should overlap each other.

Example: 90° plain bend:

The guide rail is divided into 45° segments. Two guide units are used for each 45° segment. These guide units must be mounted in parallel.

The mid-point of each segment (P) will move with the same accuracy as the straight guide rail sections. If higher accuracy is needed, a 90° bend can be divided into three 30° sections.



90° plain bend divided into two 45° segments (only outer guide rail shown).

More information

Please contact FlexLink Systems for design assistance. See www.flexlink.com for detailed documentation and CAD files.

