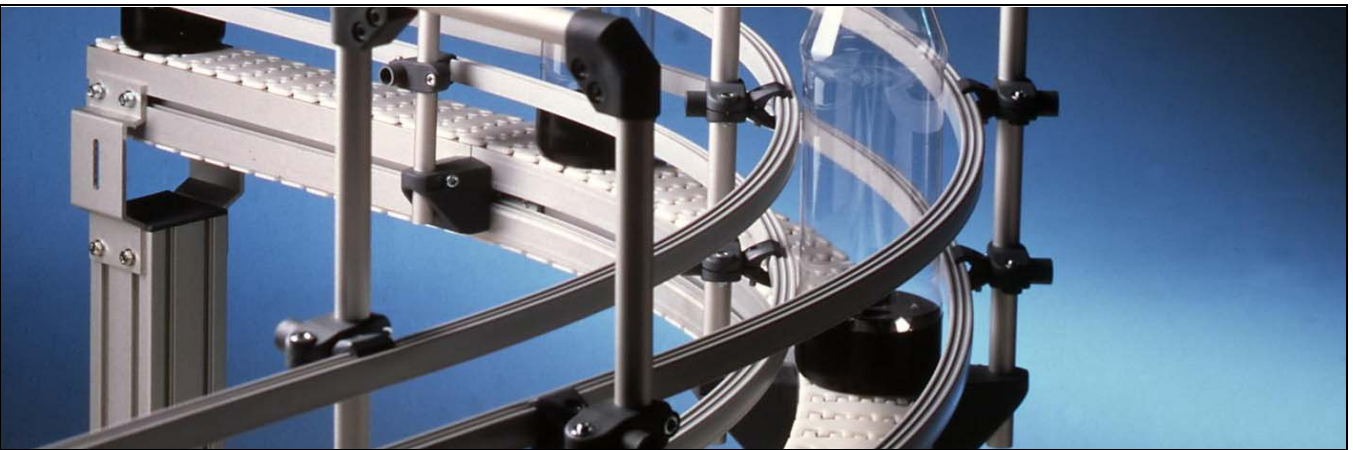


Guide rail components

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System information



Guide rail components

Guide rails are used to guide the products being conveyed and also to prevent them from falling off the conveyor. The conveyor system includes a versatile system of *guide rails* and *guide rail brackets* which make it possible to accommodate many different product sizes and shapes. Guide rail brackets are available in fixed or adjustable configurations.

Most guide rail components in this catalogue section can be used with any of the sizes XS, X45 H, X65, X85, XH, XK, X180/X300 and WL.

Note however that the distance from the T-slot in the conveyor beam to the top of chain (TOC) varies between conveyor platforms and with the chain selection. Special guide rail systems are used for the X65, X85 and XK pallet systems.

Note

Mounting hardware for guide rail brackets etc. must be ordered separately, unless otherwise noted.

Adjustable guide rail components

The guide rail components assortment includes several adjustable guide rail bracket components which allow manual width adjustment without the use of tools, for reduced setup time. A guide rail system for automatic adjustment of the track width has been developed. See page 315.



Distance between brackets

The distance between guide rail brackets depends 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.

Track width calculations

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.

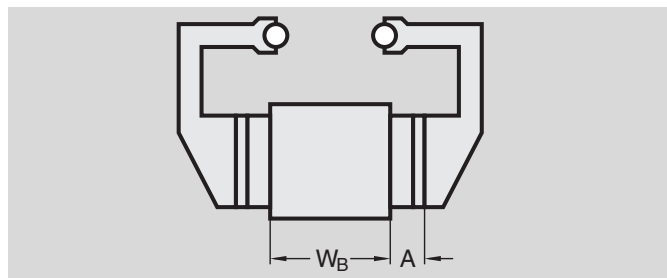
Table 1. Beam width

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
XLRD 6 K	6
XLRN 3	Custom width
XLRN 3 U	Custom width

Parameters W_B and A

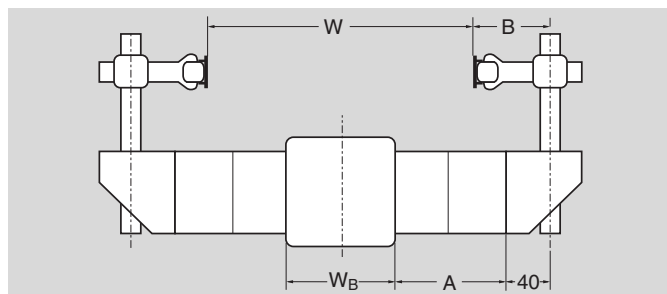


Using guide rail bracket support XLRF 42x18 V/VD

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 292. 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	15 mm	15+2 mm	18 mm
B mm	B mm	B mm	B mm	B mm
XLRK 18x40 C	41-55	46-60	48-62	42-56

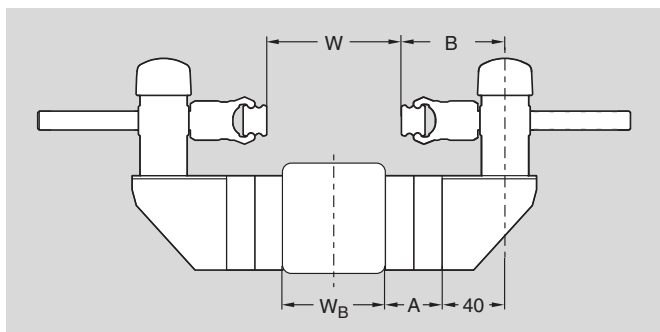
Guide rail	10 mm	15 mm	15+2 mm	18 mm
B mm	B mm	B mm	B mm	B mm
XLRK 18x60 C	41-75	46-80	48-82	42-76
XLRK 18x80 C	41-95	46-100	48-102	42-96
XLRL 18x110 C	21	26	28	22
XLRK 18 CE	57-	62-	64-	58-

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
XLRL 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	B mm
5051168/ 5050986 + XLRK 12 CE	62-121	67-126	69-128	63-122	-
5051168/ 5050986 + XLRK 12 DE	-	-	-	-	59-118 *

*Suitable for stainless steel applications.

Note.

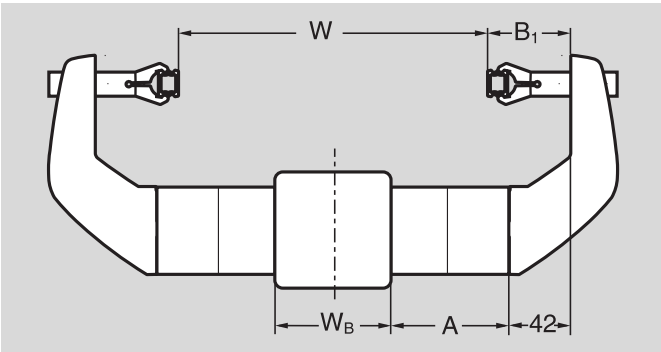
Guide rail clamp XLRK 12x100 D69 cannot be used with the quick release guide rail clamp support.









**Using guide rail bracket support
XLRF 42×62 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 42×62 A35/110



Guide rail				
	B mm	B mm	B mm	B mm
 XLRK 18×40 C	28–43	33–48	35–50	28–43
 XLRK 18×60 C	28–63	33–68	35–70	28–63
 XLRK 18×80 C	28–83	33–88	35–90	28–83
 XLRK 18 CE	44–	49–	51–	45–

Note

The maximum B value for XLRK 18×40/60/80 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 42×62 A35/110 cannot be used in an X180 conveyor for track widths smaller than 170 mm.

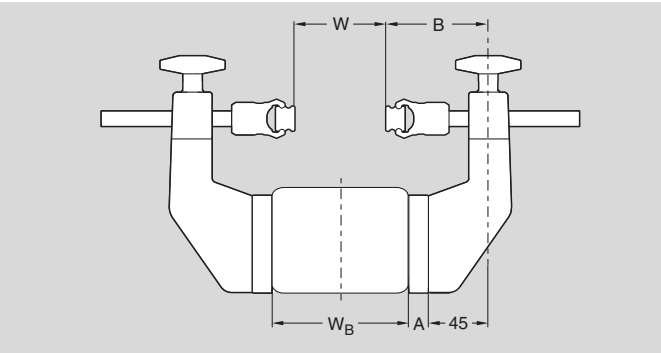
XLRK 18 CE is used in combination with 18 mm tube XLRR ...×18 C.









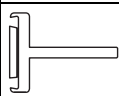

Using guide rail bracket support XLRF 30×71 K

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 Table 1 and 2. For parameter B : see Table 6.

$W = W_B + 2A + 90 - 2B$

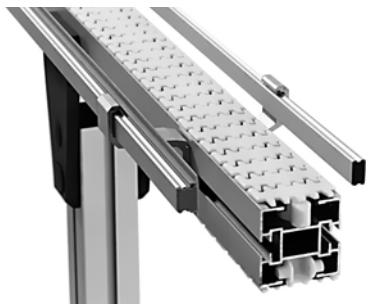
Table 6. Parameter B when using support type
XLRF 30×71 K



Guide rail						
	B mm	B mm	B mm	B mm	B mm	B mm
 XLRK 12 CE + 5050986	59–126	64–131	66–133	60–127	–	–
 XLRK 12 DE + 5050986	–	–	–	–	56–123	–
 XLRK 12×100 D69	–	–	–	–	40–110	48–118
 5050887 + 5050889	–	–	–	–	–	–

Suitable for stainless steel applications.

Fixed guide rail support

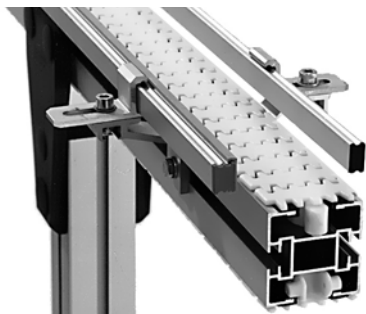


A. Guide rails with fixed guide rail brackets

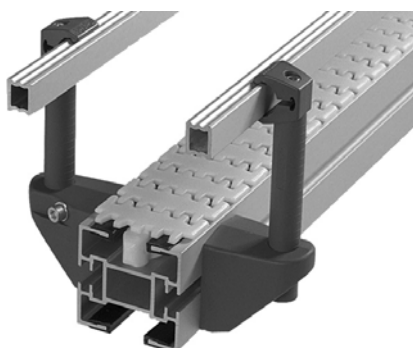


B. Guide rails with fixed guide rail brackets, polyamide

Adjustable guide rail support



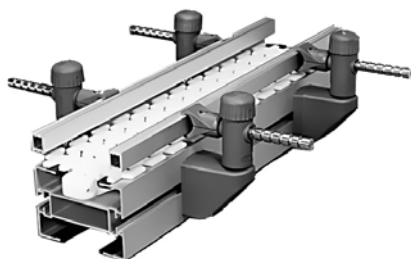
C. Guide rails with adjustable guide rail brackets, aluminium



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



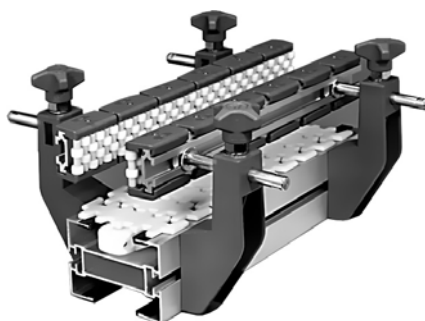
E. Guide rails at two levels with polyamide guide rail brackets, adjustable in width



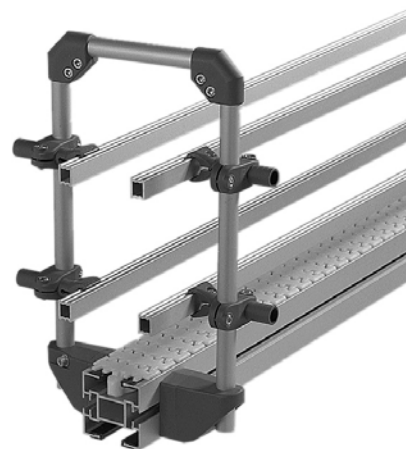
F. Guide rails with quick adjust guide rail support



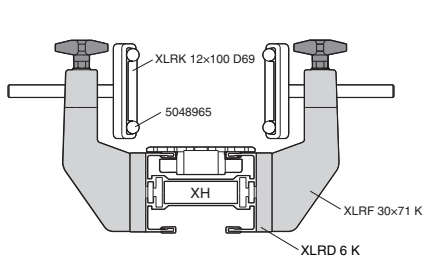
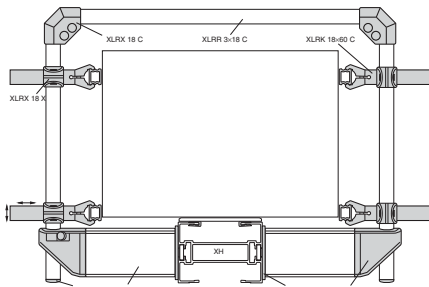
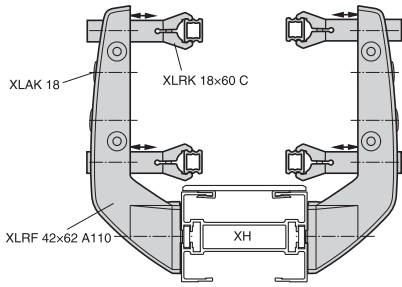
G. Guide rails with built-up guide rail brackets



H. Roller module guide rails with polyamide guide rail brackets

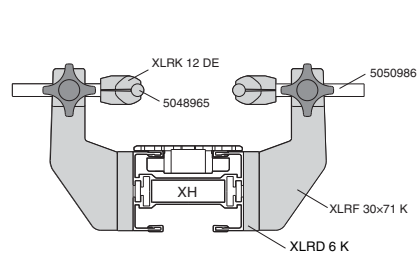
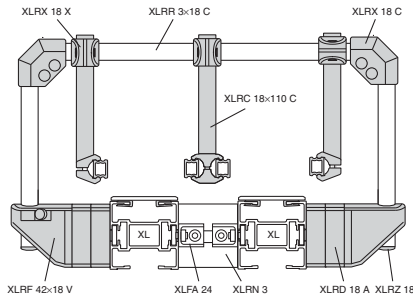
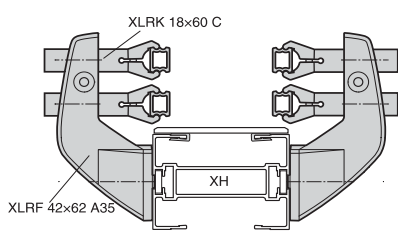


I. Two-level guide rail structure with polyamide guide rail bracket components



1. Guide rails with XLRF 42x62 A110 2. Guidance of wide & high products

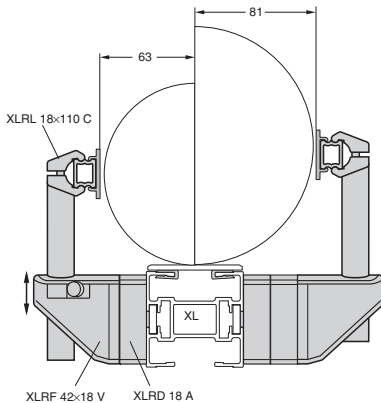
3. Twin-level steel guide rails



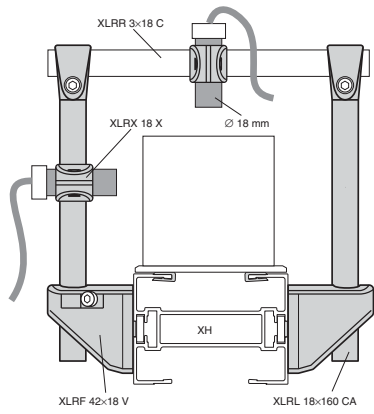
4. Guide rails with XLRF 42x62 A35

5. Double track guide rails

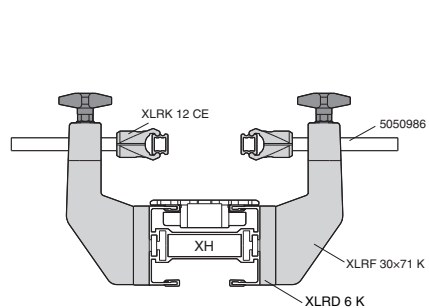
6. Steel guide rails, quick adjustment



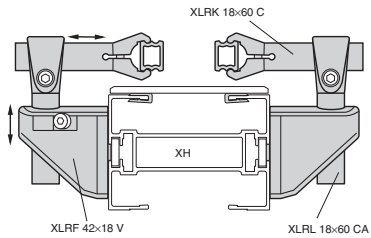
7. Application for tissue paper



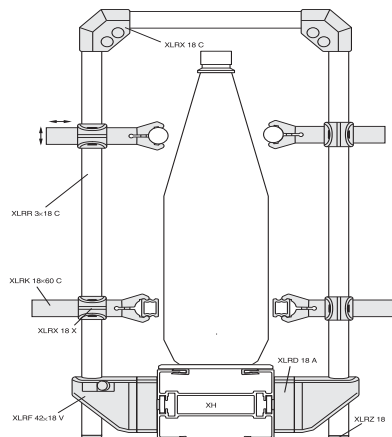
8. Attachment of sensors I



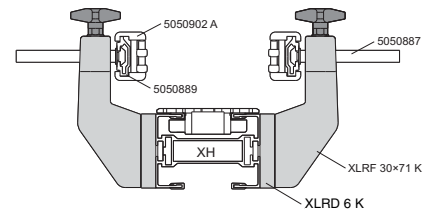
9. Plastic/aluminium guide rails, quick adjustment



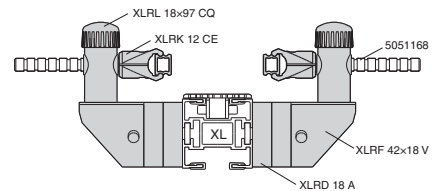
10. Adjustable in width and height



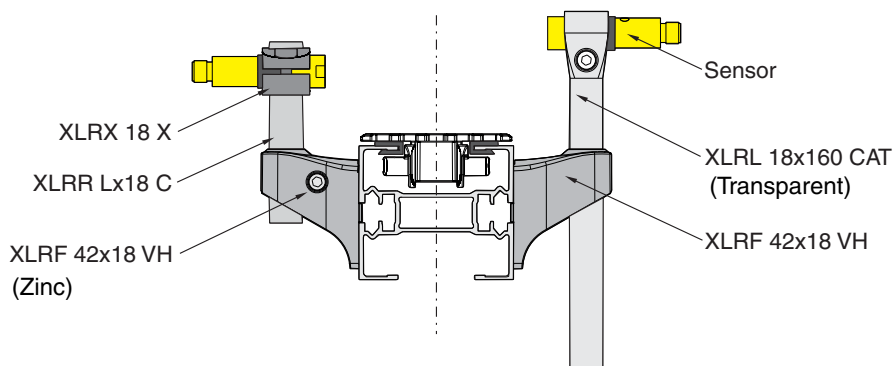
11. Guidance of bottles, etc.



12. Roller module guidance, quick adjustment



13. Quick-release guide rail brackets

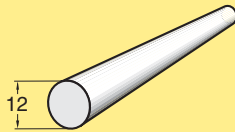


14. Attachment of sensors II

Circular guide rails

PO

Steel rod 12 mm



Straight steel rod 12 mm
Stainless steel
Length 3 m

5048965

Aluminium tube 18 mm

Aluminium tube 18 mm

XLRR ...x18 C

See page 310

CC

X45

XS

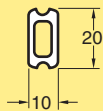
X65

X65P

Guide rails 10 mm

X85

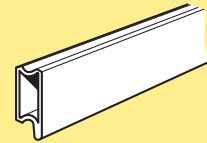
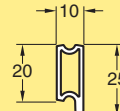
Guide rail 10 mm, aluminium



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

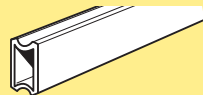
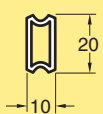
X85P

XH

XK

XKP

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. Must be ordered in multiples of 10

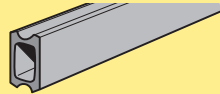
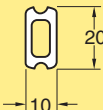
X180

X300

GR

CS

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. Must be ordered in multiples of 10

XT

WL

WK

XC

XF

XD

ELV

CTL

FST

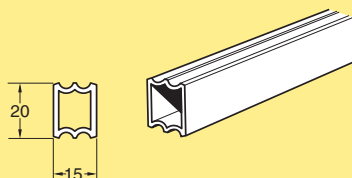
TR

APX

IDX

Guide rails 15 mm

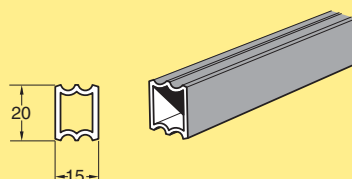
Guide rail 15 mm, aluminium



Straight rail 15 mm
Aluminium, length 3 m

XLRS 3x15

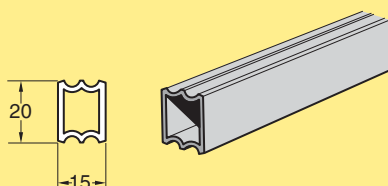
Guide rail 15 mm, aluminium, coated



Straight rail 15 mm
Aluminium with polyamide
coating, length 3 m

XLRS 3x15 C

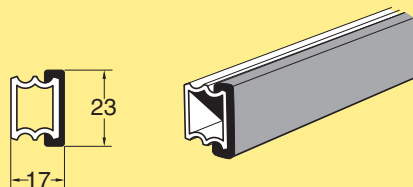
Guide rail 15 mm, polyethylene



Flexible rail 15 mm
Polyethylene, length 3 m

XLRS 3x15 P

Guide rail cover for 15 mm aluminium guide rail



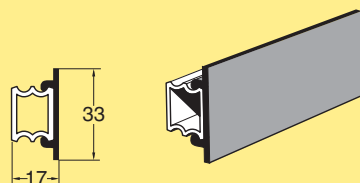
Guide rail cover for 15 mm guide rail
Polyethylene, length 3 m

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. Must be ordered in multiples of 10

End plug, 15 mm



End plug 15 mm

XLRE 15

Note. Must be ordered in multiples of 10

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

Connecting sleeve

PO

CC

X45

XS

X65

X65P

X85

X85P

XH

XK

XKP

X180

X300

GR

CS

XT

WL

WK

XC

XF

XD

ELV

CTL

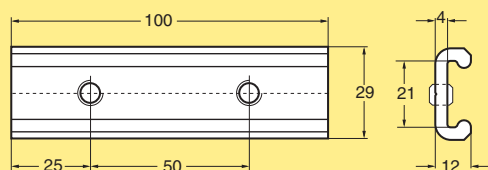
FST

TR

APX

IDX

Connecting sleeve

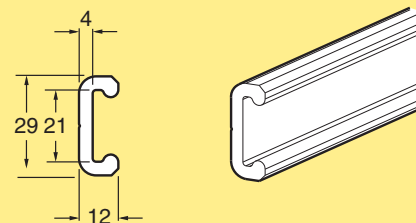


Connecting sleeve

XLRJ 100

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

Connecting sleeve



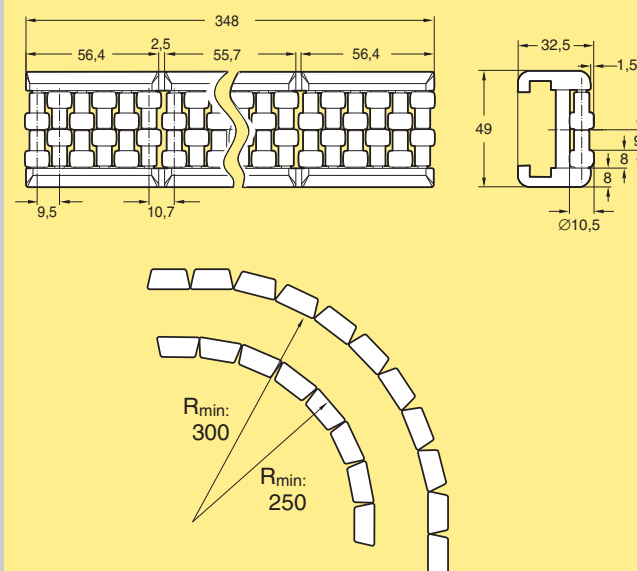
Connecting sleeve

Aluminium, length 3 m

5122544

Flexible roller module

Flexible roller module



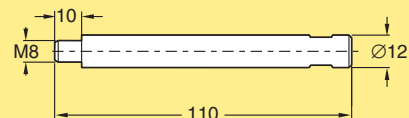
Flexible roller module

Length 348 mm

5050902 A

Mounting to profile 5050889: SK6SS 4x20

Rod for roller module profile



Rod for roller module profile

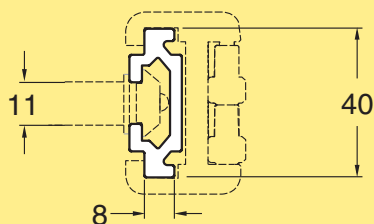
Ø12 mm

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 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

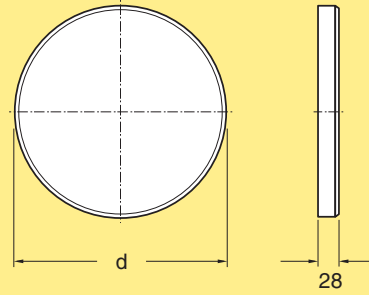
Conveyor system XH. Outer guide rail: 15 mm

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

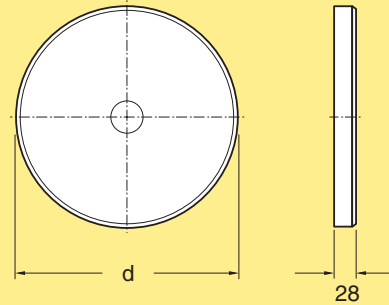
XLRG 235

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

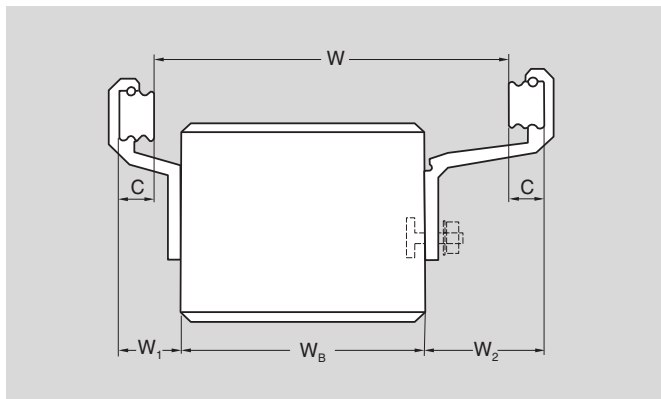
Effective track width

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

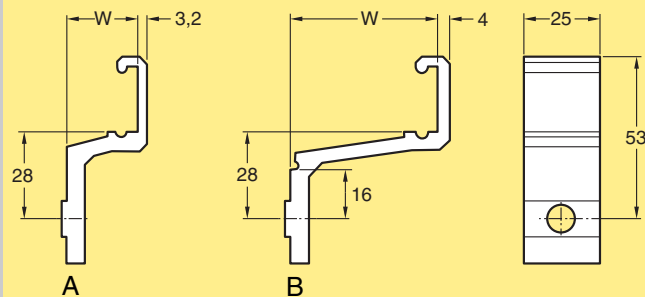
If type XLRB 35×30 is used with angle plate, use 10 mm guide rail.



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

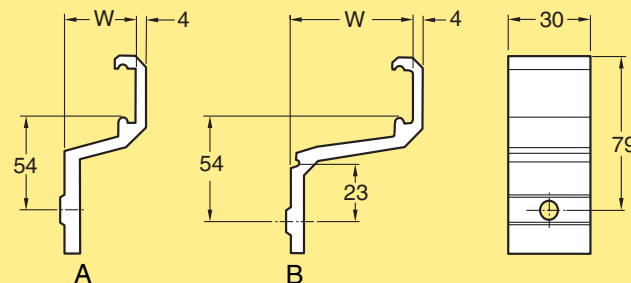
XLRB 29×36

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

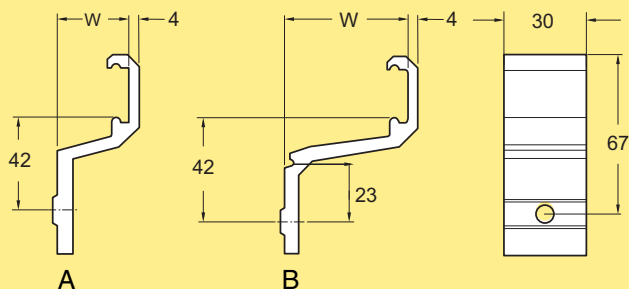
XLRB 16×54

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)



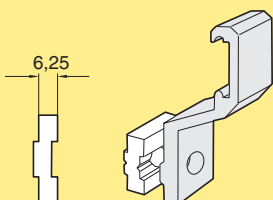
Fixed guide rail bracket

W=16 mm Fig. A	XLRB 16×42
W=28 mm Fig. A	XLRB 28×42
W=40 mm Fig. B	XLRB 40×42
W=49 mm Fig. B	XLRB 49×42
W=53 mm Fig. B	XLRB 53×42
W=65 mm Fig. B	XLRB 65×42
W=90 mm Fig. B	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)

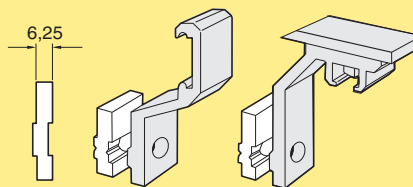
Thickness 6,25 mm **XLRD 6**

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

Suitable, longer T-bolts: see Fasteners.

Note. Must be ordered in multiples of 10

Distance piece (aluminium) for conveyor system XK



Distance piece (aluminium) for conveyor system XK

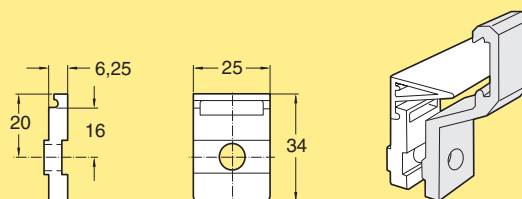
Thickness 6,25 mm

XLRD 6 C

Suitable, longer T-bolts: see Fasteners.

Note. Must be ordered in multiples of 10

Distance piece (polyamide)



Distance piece (polyamide)

Thickness 6,25 mm

XLRD 6 P

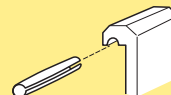
Can hold angle plates (X65 only)

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

Suitable, longer T-bolts: see Fasteners.

Note. Must be ordered in multiples of 10

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.

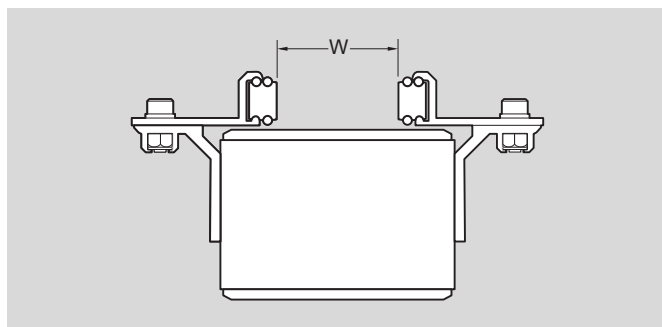
Note. Must be ordered in multiples of 50

Effective track width

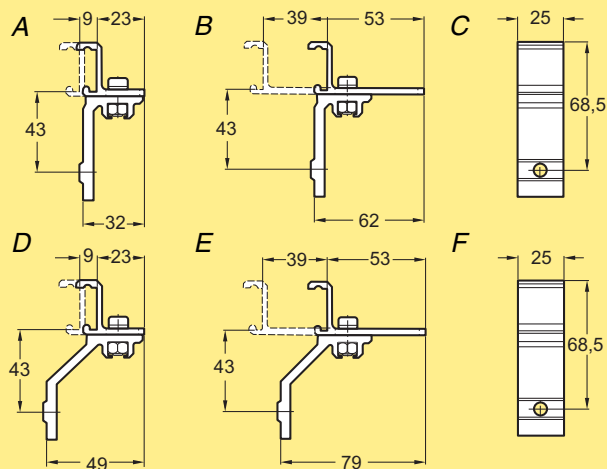
Effective track width W (see illustration) with 15 mm guide rail. For 10 mm guide rail: add 10 mm.

Bracket type	XS mm	X65 mm	X85 mm	XH mm
XLRA 8×9×45	16–34	36–54	–	–
XLRA 8×39×45	0–34	0–54	–	–
XLRA 26×9×45	52–70	72–90	–	–
XLRA 26×39×45	0–70	12–90	–	–
XLRA 16×30×52	0–49	9–69	29–89	49–109
XLRA 41×30×52	39–99	59–119	79–139	99–159

Bracket type	XK mm	X180 mm	X300 mm
XLRA 16×30×64	49–109	126–186	246–306
XLRA 41×30×52	–	176–236	296–356



Adjustable guide rail bracket, aluminium (XS, X65)



Adjustable guide rail bracket assembly

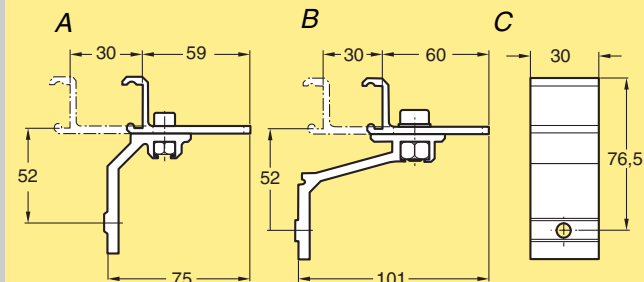
See Figure A, C
See Figure B, C
See Figure D, F
See Figure E, F

XLRA 8×9×45
XLRA 8×39×45
XLRA 26×9×45
XLRA 26×39×45

Including bolt and nut

Mounting to beam: XLAT 17, XLAN 8, BRB 8,4×16.

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



Adjustable guide rail bracket assembly

See Figure A, C
See Figure B, C

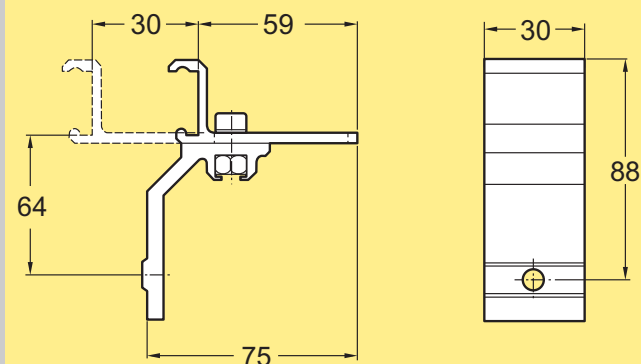
XLRA 16×30×52
XLRA 41×30×52

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 8,4×16.

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



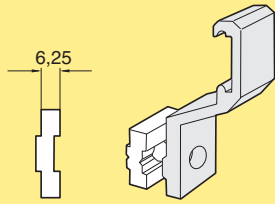
Adjustable guide rail bracket assembly

XLRA 16×30×64

Including bolt and nut

Mounting to beam: XLAT 17, XLAN 8, BRB 8,4×16.

Distance piece (aluminium)



Distance piece (aluminium)
Thickness 6,25 mm

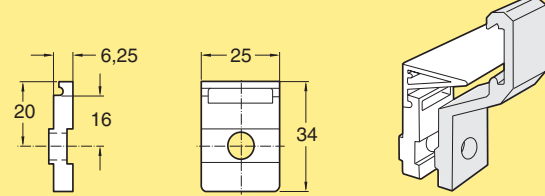
XLRD 6

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

Suitable, longer T-bolts: see Fasteners.

Note. Must be ordered in multiples of 10

Distance piece (polyamide)



Distance piece (polyamide)
Thickness 6,25 mm

XLRD 6 P

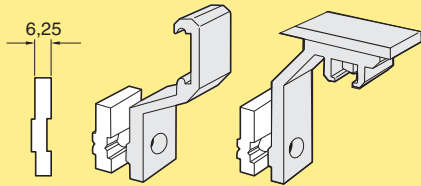
Can hold angle plates (X65 only)

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

Suitable, longer T-bolts: see Fasteners.

Note. Must be ordered in multiples of 10

Distance piece (aluminium) for conveyor system XK



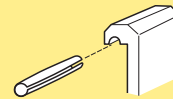
Distance piece (aluminium) for
conveyor system XK
Thickness 6,25 mm

XLRD 6 C

Suitable, longer T-bolts: see Fasteners.

Note. Must be ordered in multiples of 10

Spring pin for guide rail bracket

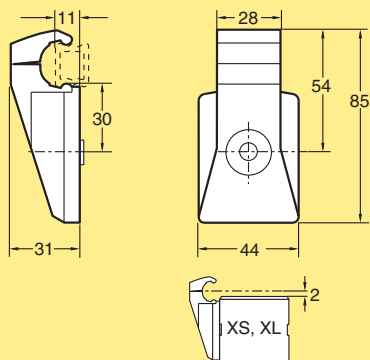


Spring pin for guide rail bracket **XLAP 28**

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

Note. Must be ordered in multiples of 50

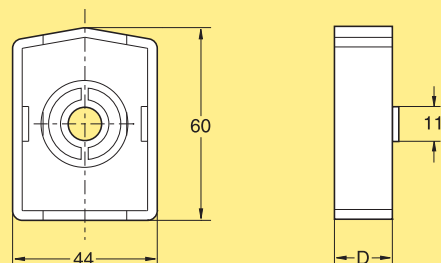
Fixed guide rail bracket, polyamide (XS, X65)

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

Can be used with XS and X65 conveyor beam.
Track widths: see table on page 301.

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

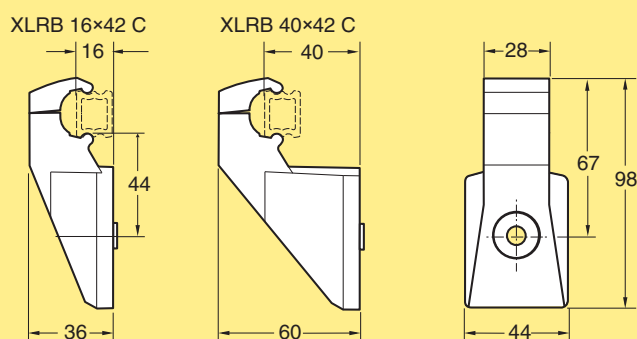
D= 6 mm

D= 18 mm

XLRD 6 A
XLRD 18 A

Spacer beams are also available. See page 307.

Note. Must be ordered in multiples of 10

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

Width 16 mm

Width 40 mm

XLRB 16×42 C
XLRB 40×42 C

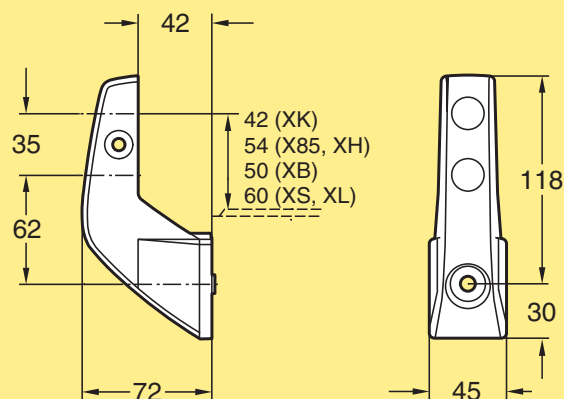
Can be used with XS, X65, X85, XH, X180/X300 conveyor beam.

Track widths: see table on page 301.

Mounting to beam: XLAT 17, XLAN 8, BRB 8,4×16
Do not overtighten (max torque: 10 Nm).

Bracket support components, polyamide

Guide rail bracket support Type A35



Guide rail bracket support

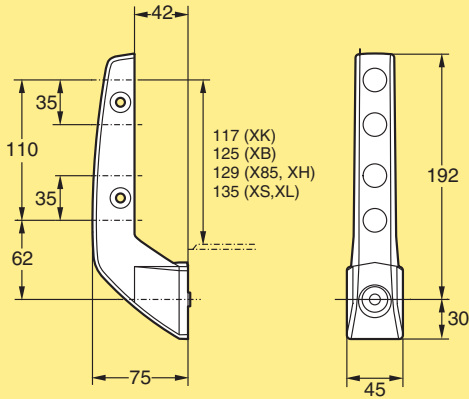
XLRF 42×62 A35

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 306)
in unused clamp positions to ensure positive locking of
the adjacent clamp.

Guide rail bracket support Type A110



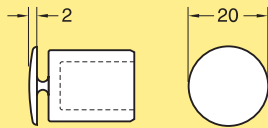
Guide rail bracket support **XLRF 42×62 A110**

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 306)
in unused clamp positions to ensure positive locking of
the adjacent clamp.

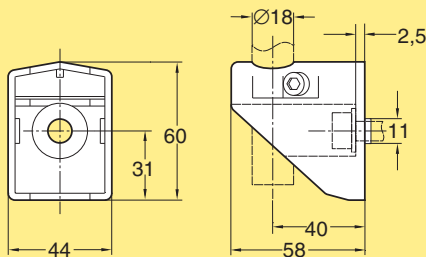
Dummy plug



Dummy plug for **XLRF 42×62 A35/110** **XLAK 18**

Note. Must be ordered in multiples of 10

Guide rail bracket support Type V



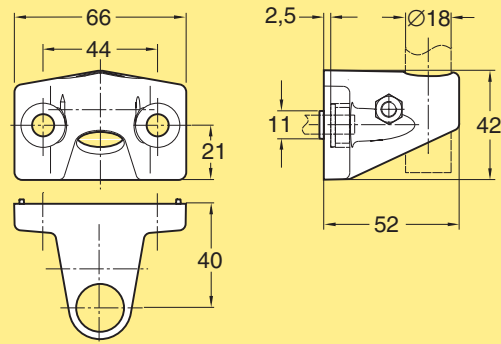
Guide rail bracket support **XLRF 42×18 V**

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

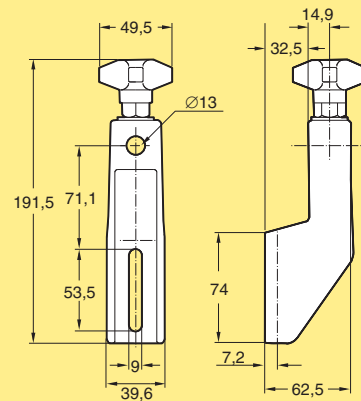


Guide rail bracket support **XLRF 40×18 VD**

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

Guide rail bracket support Type K



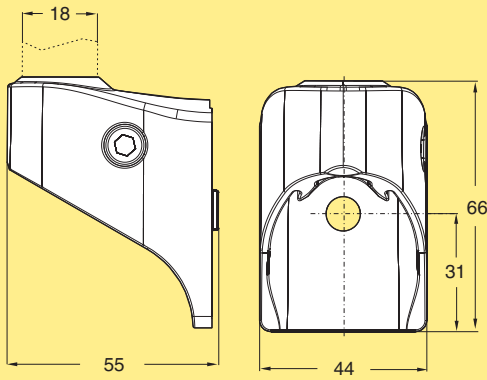
Guide rail bracket support with star knob

XLRF 30×71 K

To be used with guide rail clamps based on 12 mm steel
rods, e.g. **XLRK 12×100 D69**, **5050986**, or **5050887** (for
roller module).

Mounting to beam: **XLAT 17**, **XLAN 8**, **BRB 8,4×16**

Reinforced Guide rail bracket support Type VH



Reinforced Guide rail bracket support, material: Zinc

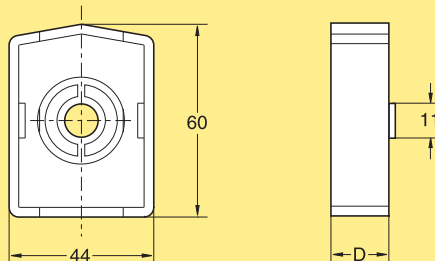
XLRF 42×18 VH

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

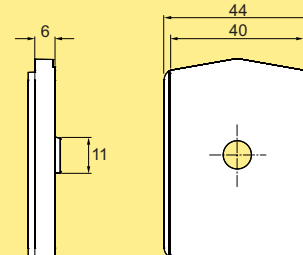
D= 6 mm

D= 18 mm

XLRD 6 A
XLRD 18 A

For use with guide rail bracket supports XLRF 42×...
Note. Must be ordered in multiples of 10

Spacer for guide rail bracket support Type K



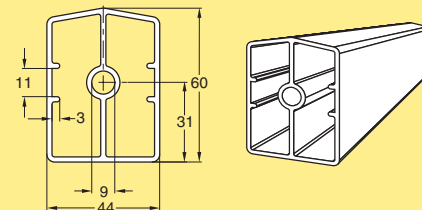
Distance piece Type K

Polyamide

XLRD 6 K

For use with guide rail bracket support XLRF 30×71 K
Note. Must be ordered in multiples of 10

Spacer beam for guide rail bracket support



Spacer beam with flat sides

Length 3 m (3030 ±5 mm)

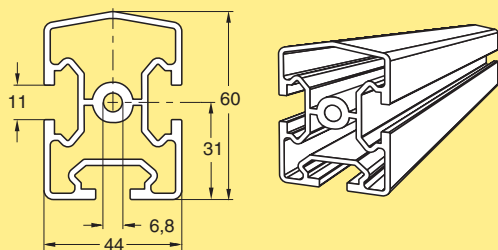
Length to order (30- 3000 mm)

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

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

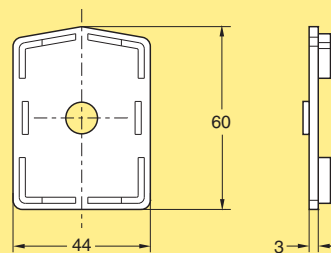
XLRN L

For use with guide rail bracket supports **XLRF 42x...**

Mounting, conveyor beam side: **XCFA 44 B (2)**,
XLAT 17 (4), **XLAN 8 (4)**

Mounting, bracket side: **ISO 4762 M8 x16 St 8.8**,
BRB 8,4x16 (M8 threading of centre hole in beam is required)

Spacer beam connector



Spacer beam connector

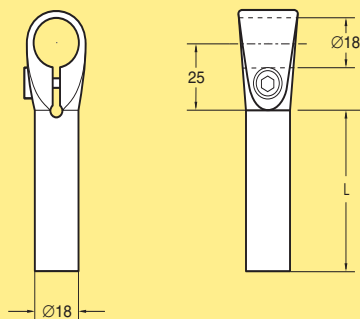
XLRD 3 D

For use with spacer beam type **XLRN 3 U**

Note. Must be ordered in multiples of 10

Guide rail clamp supports

Guide rail clamp support Type CA



Guide rail clamp support

L=60 mm

L=110 mm

L=160 mm

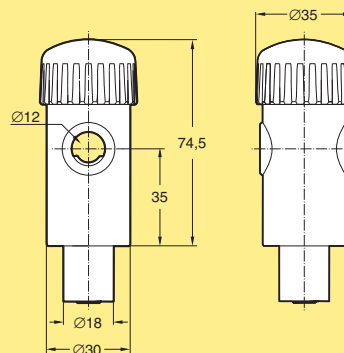
XLRL 18x60 CA

XLRL 18x110 CA

XLRL 18x160 CA

Including screw and nut. For use with
XLRK 18x40/60/80 C

Quick release guide rail clamp support

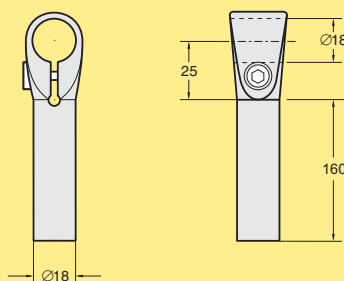


Quick release guide rail clamp support

XLRL 18x97 CQ

For use with guide rail bracket support **XLRF 42x18 V**
and a 12 mm guide rail clamp rod, e.g. **5051168** (or
5050986 with custom grooves)

Guide rail clamp support Type CAT, Transparent



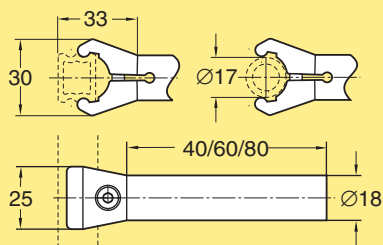
Guide rail clamp support

Material: Plastic

XLRL 18x160 CAT

Including screw and nut. For use together with sensor
and reflector brackets.

Guide rail clamp 1



Guide rail clamp 1

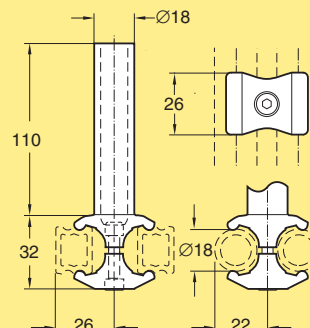
L=40 mm
L=60 mm
L=80 mm

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

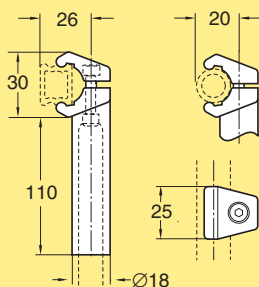


Guide rail clamp for double track conveyor

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

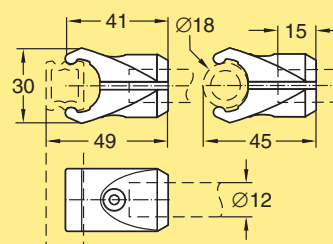


Guide rail clamp 2

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

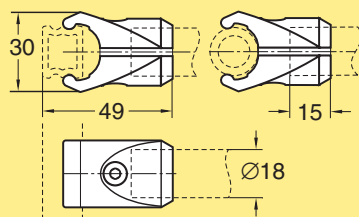


Guide rail clamp 4

XLRK 12 CE

Including screw and nut. For use with 12 mm guide rail clamp rod 5051168 or 5050986. Suitable guide rail types: XLRs ... or 18 mm tube/rod.

Guide rail clamp 3

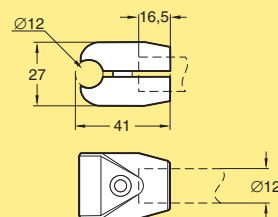


Guide rail clamp 3

XLRK 18 CE

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

Guide rail clamp 5

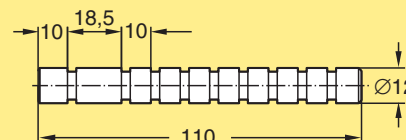


Guide rail clamp 5

XLRK 12 DE

Including stainless steel screw and nut. For use with 12 mm guide rail clamp rod 5051168 or 5050986. Suitable guide rail type: 12 mm steel rod type 5048965.

Guide rail clamp rod with grooves, 12 mm

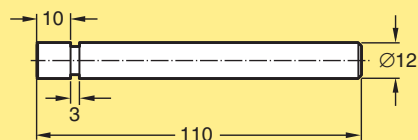


Guide rail clamp rod with grooves
Stainless steel

5051168

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

Guide rail clamp rod, plain, 12 mm

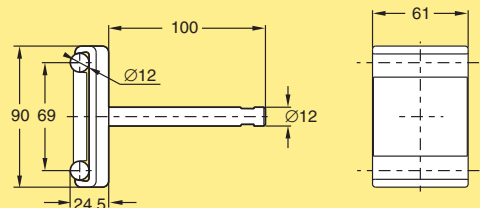


Guide rail clamp rod, plain
Stainless steel

5050986

For use with guide rail clamp **XLRK 12 CE/DE** and bracket support **XLRF 30x71 K**.

Guide rail clamp, double



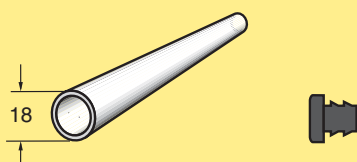
Guide rail clamp, double

XLRK 12x100 D69

Including stainless steel rod, screw and nut. Suitable guide rail type: 12 mm steel rod type 5048965. For use with bracket support **XLRF 30x71 K**

Accessories

Guide rail support tube, aluminium



Guide rail support tube
Aluminium

Length 3 m (3030 ± 5 mm)

Length to order (30- 3000 mm)

XLRR 3x18 C

XLRR Lx18 C

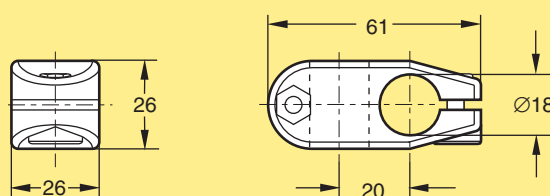
End cap

XLRR 18

Note. Must be ordered in multiples of 10

The tube can also be used as guide rail in combination with suitable guide rail clamps.

Cross connector



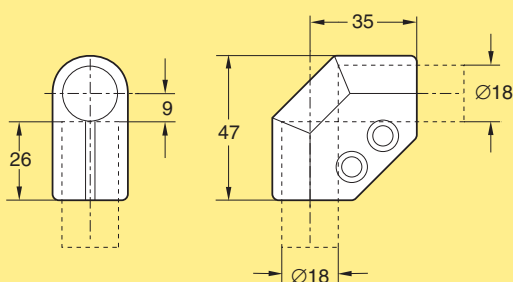
Cross connector

XLRX 18 X

Including screws and nuts. For use with 18 mm aluminium tube type **XLRR ..x 18 C** and/or guide rail clamps **XLRL/XLRC 18x110 C**.

Can be used with star knob **XLAR 6x20** for easy re-adjustment

Corner connector

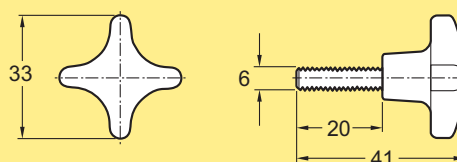


Corner connector

XLRX 18 C

Including screws and nuts. For use with 18 mm aluminium tube type **XLRR ..x 18 C**.

Star knob



Star knob

M6

XLAR 6x20

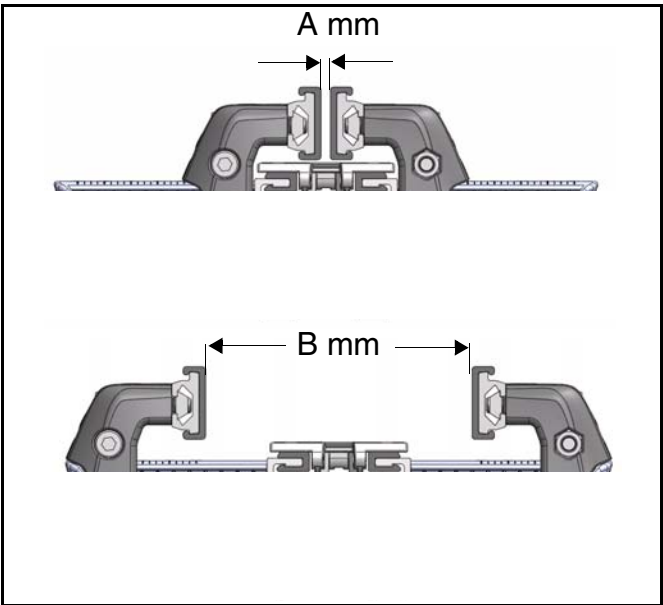
Note. Must be ordered in multiples of 10

To be used with **XLRF 42x18 V**, **XLRF 42x62 A35/110**, and **XLRX 18 X**.



Width adjustment

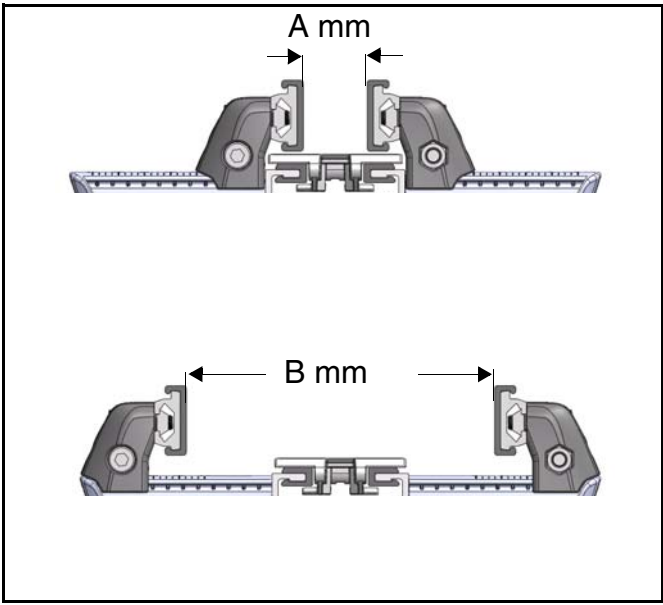
Width adjustment XURA 30x41x37 and XLRA 30x41x50 A



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

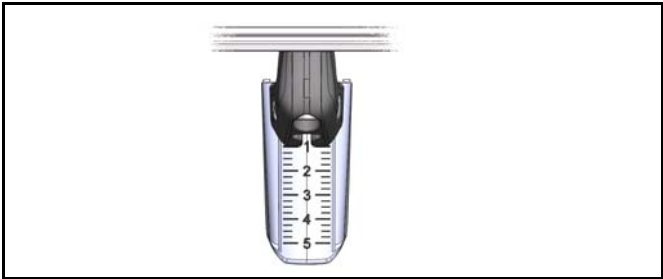
Width adjustment XURA 40x41x37 and XLRA 40x41x50 A



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

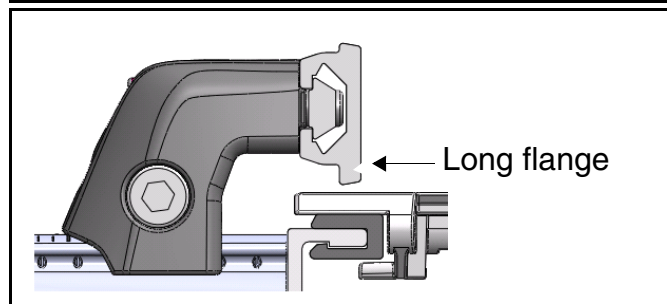
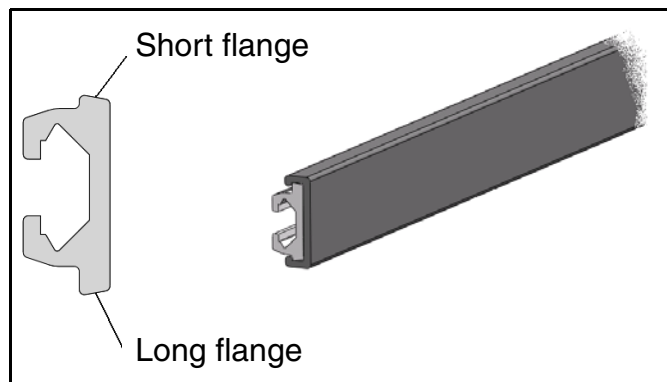
Width scale



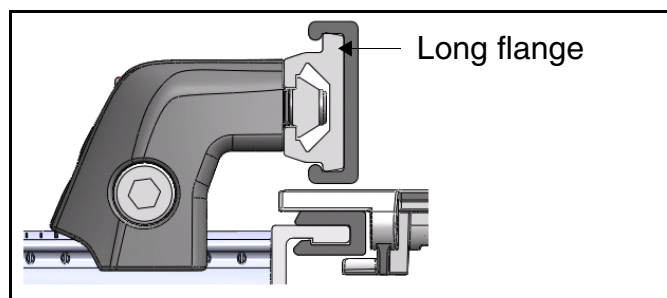
The guide rail bracket has an adjustment scale which can be used as a reference when adjusting the guide rails to correct width

Using Guide rail cover

Guide rail cover XLRT 3x23, XLRT 3x23E



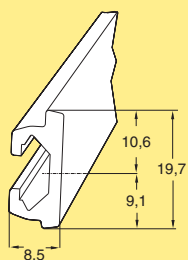
When not using the Guide rail cover the guide rail can be orientated with the long flange down



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

Straight guide rails

Guide rail, aluminium

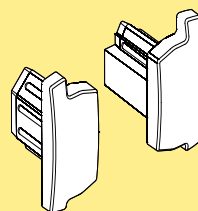


Guide rail
Length 3 m

XURS 3x8

T-slot for XDAN T-slot nuts

End plug

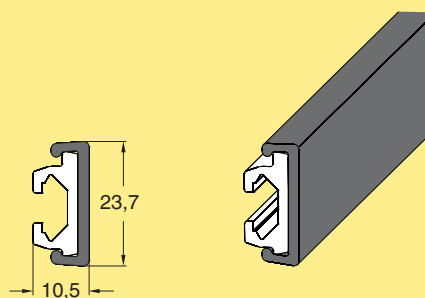


End plug

XURE 8

Must be ordered in multiples of 10 pair

Guide rail cover

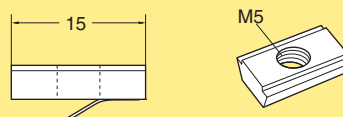


Guide rail cover
Polyethylene, length 3 m

XLRT 3x23

Guide rail cover
PE-UHMW, (conductive) length 3 m **XLRT 3x23 E**

T-slot nut



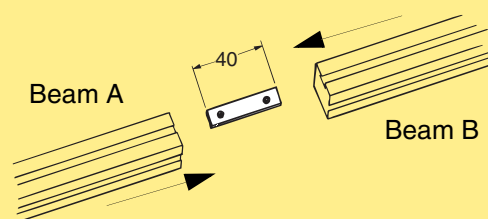
T-slot nut

Steel, zinc-chromated
M5

XDAN 5 A

Connecting strips

Connecting strip for guide rail

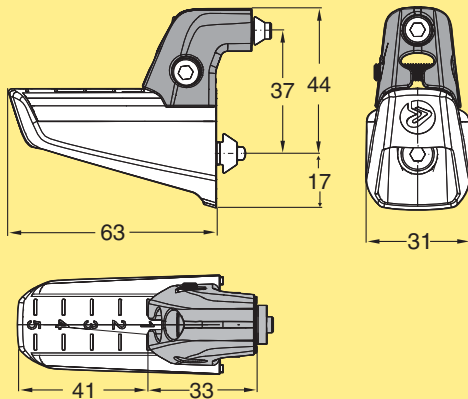


Connecting strip, straight
Including set screws
Steel, electro-zinc-plated

XDFC 9x40

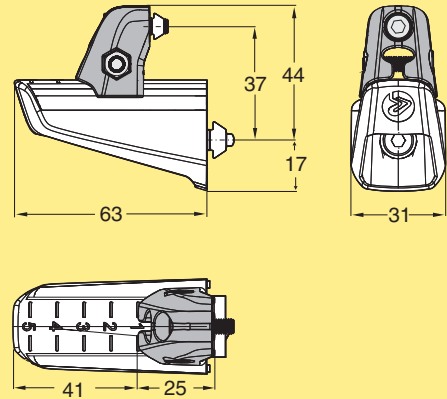
Guide rail bracket for X45

Guide rail bracket



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

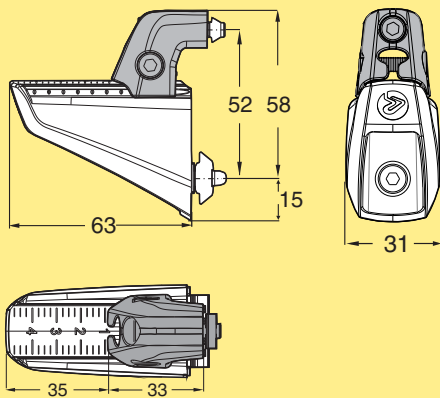
Guide rail bracket



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

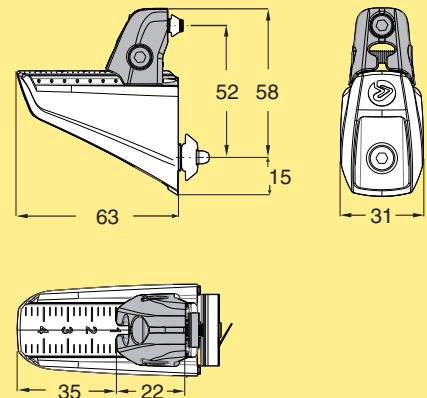
Guide rail bracket for X65 and X45H

Guide rail bracket



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

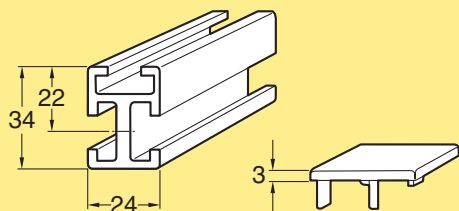
Guide rail bracket



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

P0
CC
X45
XS
X65
X65P
X85
X85P
XH
XK
XKP
X180
X300
GR
CS
XT
WL
WK
XC
XF
XD
ELV
CTL
FST
TR
APX
IDX

Small beam 24×34



Beam 24 mm × 34 mm

Length 3 m (3030 ±5 mm)

Length to order (30- 3000 mm)

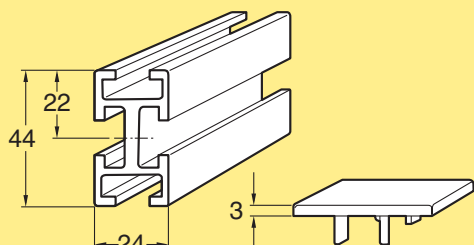
XCBB 3×24×34

XCBB L×24×34

End cap for XCBB 3×24×34

XCBE 24×34

Small beam 24×44



Beam 24 mm × 44 mm

Length 3 m (3030 ±5 mm)

Length to order (30- 3000 mm)

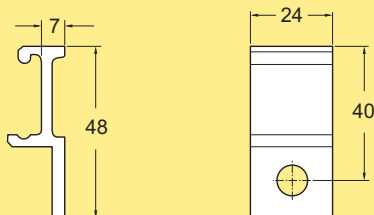
XCBB 3×24×44

XCBB L×24×44

End cap for XCBB 3×24×44

XCBE 24×44

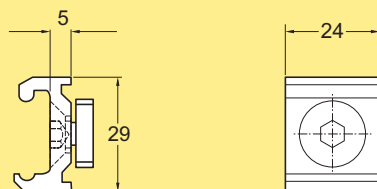
Guide rail bracket



Guide rail bracket

XLRC 20

Guide rail bracket

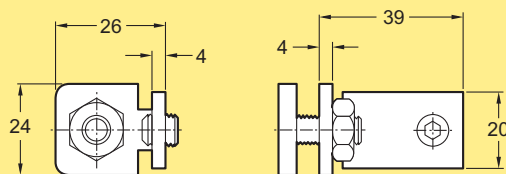


Guide rail bracket

XLRC 20 A

Including M8 screw and square nut

Inner fitting 90°



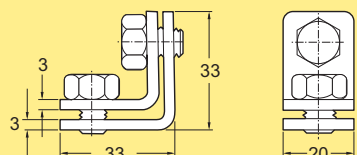
Inner fitting 90°

XMRX 20

Including T-bolt, nut, set screw

Note. Must be ordered in multiples of 10

Inner fitting 90°



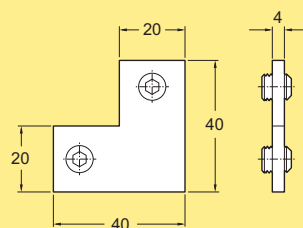
Inner fitting 90°

XMRY 20

Including screws

Note. Must be ordered in multiples of 10

Corner fitting 90°



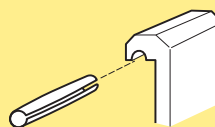
Corner fitting 90°

XMRW 20

Including set screws

Note. Must be ordered in multiples of 10

Spring pin for guide rail bracket



Spring pin for guide rail bracket

XLAP 28

Note. Must be ordered in multiples of 50



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.

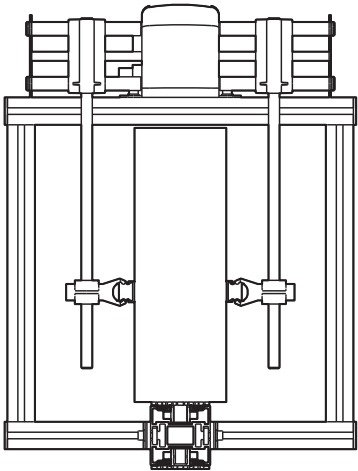
Each guide unit includes a cable that is daisy chained to the next guide unit. The synchronous AC motors ensure that the guide units move in parallel.

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.

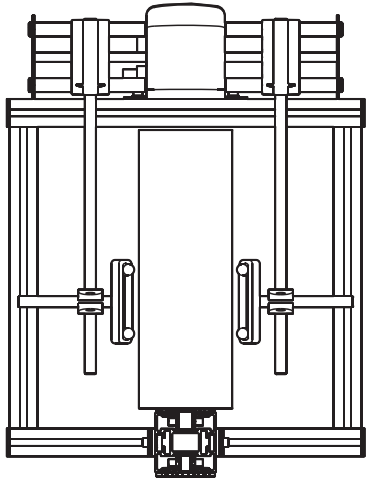
System reset is done by running the guide units until all guide rails are in the maximum width position.

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:



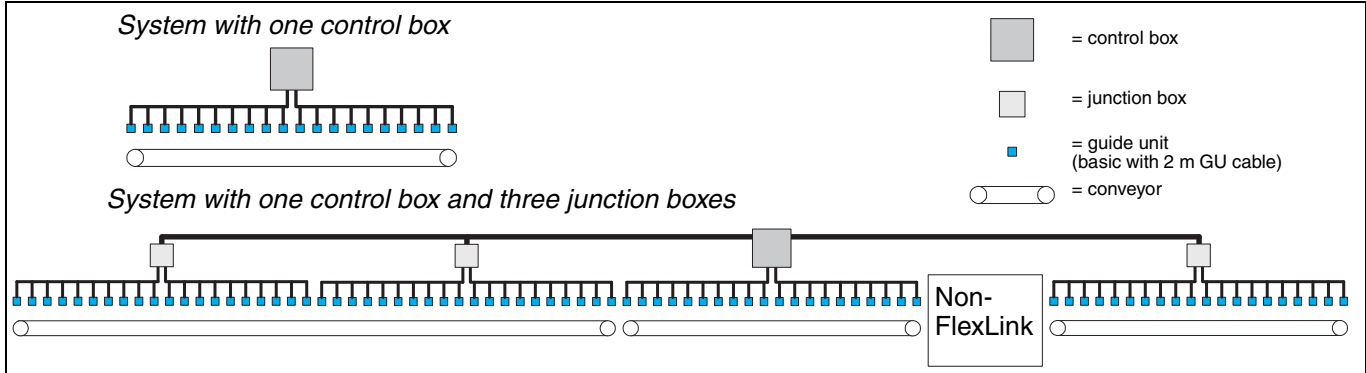
Configuration A



Configuration B

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

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.

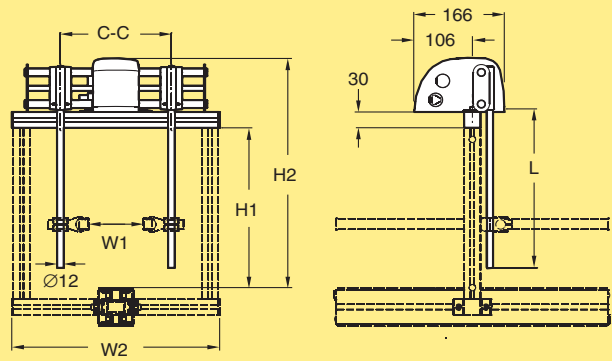
Position feedback system

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
Guide unit 455×196 C
Guide unit 284×296 C
Guide unit 455×296 C

XLRQ 284×196 C
XLRQ 455×196 C
XLRQ 284×296 C
XLRQ 455×296 C

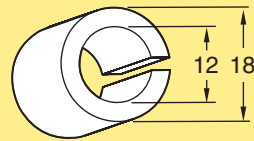
Guide unit, including horizontal beam XFBM 30, with position feedback
Guide unit 284×196 CF
Guide unit 455×196 CF
Guide unit 284×296 CF
Guide unit 455×296 CF

XLRQ 284×196 CF
XLRQ 455×196 CF
XLRQ 284×296 CF
XLRQ 455×296 CF

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 315):

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 315)

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

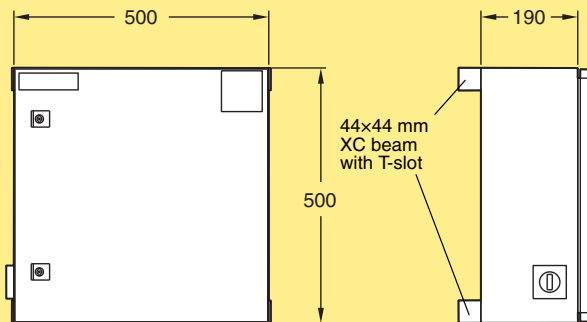
Additional components required for configuration B (page 315)

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

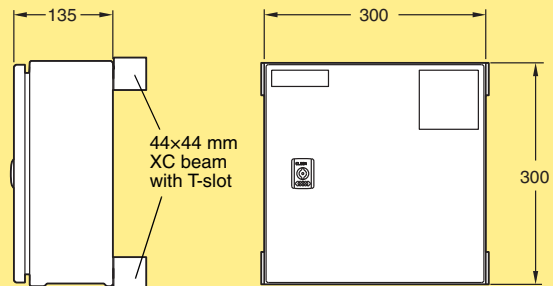


Control box

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

Customer specified communications

Junction box



Junction box, 50 Hz
Junction box, 60 Hz

5113441
5057479

Guide rails in bends

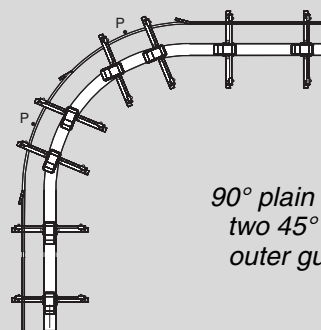


The guide rail sections should overlap each other.

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.