Guide rail components – XS, XL, XM, XH, XK, XB

Guide rail components – introduction

Guide rail components

Guide rails are used to guide the products being conveyed and also to prevent them from falling off the conveyor. The FlexLink 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 discussed in this handbook section can be used with any of the six FlexLink sizes XS, XL, XM, XH, XK, and XB. Note however that the conveyor beam height of XS and XL is 65 mm whereas that of XM, XH, and XB is 75 mm. The height of the XK beam is 95 mm. This must be considered when you calculate the height of the guide rail. Also note that some guide rail brackets can hold XL angle plates only, whereas others can hold XM and XH angle plates only. Restrictions are specified where appropriate.

Special guide rail products are available for XL, XM, and XK pallet handling systems, and for the Series X products. See handbook sections Pallet systems, single track, Stainless steel conveyor system Series X and Hygienic conveyor system Series Y.

Quick adjust 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 flexible roller guide for smooth guidance is also available. See “Adjustable guide rail brackets, polyamide”, page 127.

General ordering information

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.
Guide rail support designs

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
**Introduction**

The guide rails are made of aluminium (with or without a polyamide coating), steel or plastic. The flexible plastic guide rails are especially suitable for bends. Flexible roller modules can be used instead of guide rails to minimize guidance friction.

A polyethylene guide rail cover is available to cover one side of the 15 mm wide aluminium guide rail, when products susceptible to scratching are carried on the conveyor. The cover is also available in UHMW polyethylene for additional wear resistance. The guide rail cover should be fixed at the end by means of an aluminium blind rivet.

The guide rails are kept in place by means of guide rail brackets. The following types of brackets are available:

- Fixed guide rail brackets, aluminium or polyamide
- Adjustable guide rail brackets, aluminium or polyamide, including quick release types
- Built-up guide rail brackets, aluminium

Guide discs can be used in place of conventional guide rail for the inner bend of horizontal wheel bends and horizontal bend drive units.

**Flexible roller module**

The new flexible roller module can be used instead of guide rails to reduce friction and wear to a minimum, especially in bends. Roller modules can be used in bends where the radius is minimum 275 mm. The flexible roller module is used as a sleeve on a roller module profile in aluminium. This profile is bent to the desired radius. The profile has a T-slot and is supported by a beam support bracket combination consisting of steel rod 5050887 and bracket type XLRF 30×71 K. Depending on the desired track width, type XLRD 15 K spacers may be required.

**Accessories**

Guide rails are normally joined by means of plastic connecting plugs (XLRJ 10/15). Open ends should be closed using end plugs (XLRE 10/15).

In some applications it is important to ensure that the guide rail will not bend out when subjected to side forces. Connecting sleeve XLRJ 100 provides a way of connecting guide rail ends while maintaining the bending resistance in the joint. Set screws prevent the rail ends from sliding apart in the sleeve.

The connection sleeve is suitable for both guide rail widths 10 mm and 15 mm. On the 15 mm wide guide rail it can be used together with guide rail cover XLRT 3/6×23, XLRT 3/6×23 U, or XLRT 3/6×33 D.

**Important**

Some combinations of conveyor chain, guide rail and guide rail bracket are not permitted. To avoid such unsuitable combinations, always make a drawing to scale of the cross-section of your conveyor design, including guide rail brackets and guide rail. Carefully check that the guide rail will not touch or interfere with the chain, including cleats, roller tops, steel top, etc.

**Ordering information**

Guide rails can be ordered in 3 m or 6 m lengths, with the exception of the 12 mm stainless steel rod and the polyamide coated guide rail, which are only available in 3 m lengths.

The flexible roller modules are made in 348 mm lengths. To prevent sideways movement, the end of each flexible roller module section requires an SK6SS 4×20 set screw or similar for attachment to roller module profile 5050889.
Guide rail bending machine

Bend guide rails with high repeatability

FlexLink bending machine 3922963 facilitates bending of guide rails with high quality and high repeatability. The machine can be used in the workshop or at the customer’s site. Bending angles up to 180° and radii down to 100 mm can be accommodated. This ensures high flexibility in customizing bends for special applications. The machine is designed for 10 mm and 15 mm aluminium guide rails.

Instructions for use

1. Mark the length of the rail to be bent. Leave approximately 200 mm straight sections at each end.
2. Place the rail horizontally between the top wheel and the lower wheels.
3. Operate the crank to run the rail back and forth while lowering the upper wheel step by step until the desired radius and angle is achieved.

If multiple bends with the same radius are to be made: note the final position of the upper wheel indicator scale to ensure correct radius of subsequent rails.

Bending machine features

- Upper wheel is adjustable in height by means of hand wheel.
- Carrying handle
- Scale for indication of vertical position of upper wheel.
- Each wheel has three grooves: 10 mm and 15 mm wide for vertical bends, and 20 mm wide for horizontal bends.
- Wheels driven by crank (supplied) connected to worm gear.
- Vertical solid steel plate for fixing the bending machine rigidly in a vice.
- Vice (not supplied)

Drilling machine can be used instead of crank drive
Guide discs for bends

Introduction

The standard guide rail types (aluminium and polyethylene) are flexible enough to be used in bends.

Polyamide guide discs are used in place of conventional guide rail for the inner bend of horizontal wheel bends. Four guide disc diameters are available, providing four different track widths for each conveyor system. Guide discs for horizontal wheel bends are snap fitted. Note that the guide discs rotate with the bend wheels.

Guide discs made for horizontal bend drive units can also be ordered.

Technical specifications

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

<table>
<thead>
<tr>
<th>Track width</th>
<th>Guide rail bracket</th>
<th>Guide disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>56 mm</td>
<td>XLRB 11×30</td>
<td>XLRG 235 (H*)</td>
</tr>
<tr>
<td>80 mm</td>
<td>XLRB 23×30</td>
<td>XLRG 212 (H*)</td>
</tr>
<tr>
<td>104 mm</td>
<td>XLRB 35×30</td>
<td>XLRG 187 (H*)</td>
</tr>
<tr>
<td>130 mm</td>
<td>XLRB 48×30</td>
<td>XLRG 162 (H*)</td>
</tr>
</tbody>
</table>

### Conveyor system XL. Outer guide rail: 10 mm

<table>
<thead>
<tr>
<th>Track width</th>
<th>Guide rail bracket</th>
<th>Guide disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>67 mm</td>
<td>XLRB 11×30</td>
<td>XLRG 235 (H*)</td>
</tr>
<tr>
<td>90 mm</td>
<td>XLRB 23×30</td>
<td>XLRG 212 (H*)</td>
</tr>
<tr>
<td>115 mm</td>
<td>XLRB 35×30</td>
<td>XLRG 187 (H*)</td>
</tr>
<tr>
<td>140 mm</td>
<td>XLRB 48×30</td>
<td>XLRG 162 (H*)</td>
</tr>
</tbody>
</table>

### Conveyor system XM. Outer guide rail: 15 mm

<table>
<thead>
<tr>
<th>Track width</th>
<th>Guide rail bracket</th>
<th>Guide disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>87 mm</td>
<td>XLRB 16×42</td>
<td>XLRG 235 (H*)</td>
</tr>
<tr>
<td>110 mm</td>
<td>XLRB 28×42</td>
<td>XLRG 212 (H*)</td>
</tr>
<tr>
<td>135 mm</td>
<td>XLRB 40×42</td>
<td>XLRG 187 (H*)</td>
</tr>
<tr>
<td>160 mm</td>
<td>XLRB 53×42</td>
<td>XLRG 162 (H*)</td>
</tr>
</tbody>
</table>

### Conveyor system XH. Outer guide rail: 15 mm

<table>
<thead>
<tr>
<th>Track width</th>
<th>Guide rail bracket</th>
<th>Guide disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>107 mm</td>
<td>XLRB 16×42</td>
<td>XLRG 235 (H*)</td>
</tr>
<tr>
<td>130 mm</td>
<td>XLRB 28×42</td>
<td>XLRG 212 (H*)</td>
</tr>
<tr>
<td>155 mm</td>
<td>XLRB 40×42</td>
<td>XLRG 187 (H*)</td>
</tr>
<tr>
<td>180 mm</td>
<td>XLRB 53×42</td>
<td>XLRG 162 (H*)</td>
</tr>
</tbody>
</table>

* Suffix H is used for guide discs for horizontal bend drive units.

Note

Guide discs are not used with conveyor systems XK and XB.
**Introduction**

The guide rails are supported by brackets which are attached to the beams by means of T-bolts and nuts. The fixed guide rail brackets are available in several different sizes. In addition, it is possible to combine the fixed brackets with distance pieces to obtain other track widths. The plastic distance piece can also be used to hold angle plates. (XL only).

Additional track widths can be obtained if a non-symmetrical track can be accepted. In this case, combinations of guide rail bracket sizes can be used. Note that fixed brackets are available for two different heights: 30 mm and 42 mm. The 30 mm type should not be used with XM and XH conveyors.

Three fixed guide rail brackets in aluminium with a height of 54 mm have been developed for conveyor system XK. They are also suitable for XB conveyors. They should not be used with XS, XL, XM or XH conveyors.

Fixed guide rail brackets for pallet handling conveyors are also available. See handbook section Pallet systems, single track for details. For fixed guide rail brackets in polyamide, see page 126.

**Technical specifications**

To calculate the track width of a non-symmetrical track use the following formula. See the illustration.

\[ W (\text{mm}) = W_B + W_1 + W_2 - 2C \]

\[ W_B = \text{XS:} 45, \text{XL:} 65, \text{XM:} 85, \text{XH, XK:} 105, \text{XB:} 182/300 \text{ mm} \]

\[ W_1, W_2 = \]

b) XM, XH, XB: 16–28–40–49–53–65–90 mm
c) XK, XB: 16–40–65 mm

\[ C = \text{Guide rail width (10 mm or 15 mm)} \]

**Effective track width – symmetrical track**

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

<table>
<thead>
<tr>
<th>Bracket type</th>
<th>XS mm</th>
<th>XL mm</th>
<th>XM mm</th>
<th>XH mm</th>
<th>XK mm</th>
<th>XB mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRB 11×30*</td>
<td>47</td>
<td>67</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRB 23×30</td>
<td>61</td>
<td>81</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRB 35×30**</td>
<td>85</td>
<td>105</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRB 48×30</td>
<td>111</td>
<td>131</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRB 29×36</td>
<td>72</td>
<td>92</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRB 16×42</td>
<td>47</td>
<td>67</td>
<td>87</td>
<td>107</td>
<td>–</td>
<td>184</td>
</tr>
<tr>
<td>XLRB 28×42</td>
<td>71</td>
<td>91</td>
<td>111</td>
<td>131</td>
<td>–</td>
<td>208</td>
</tr>
<tr>
<td>XLRB 40×42</td>
<td>95</td>
<td>115</td>
<td>135</td>
<td>155</td>
<td>–</td>
<td>232</td>
</tr>
<tr>
<td>XLRB 49×42</td>
<td>113</td>
<td>133</td>
<td>153</td>
<td>173</td>
<td>–</td>
<td>250</td>
</tr>
<tr>
<td>XLRB 53×42</td>
<td>121</td>
<td>141</td>
<td>161</td>
<td>181</td>
<td>–</td>
<td>258</td>
</tr>
<tr>
<td>XLRB 65×42</td>
<td>145</td>
<td>165</td>
<td>185</td>
<td>205</td>
<td>–</td>
<td>282</td>
</tr>
<tr>
<td>XLRB 90×42</td>
<td>195</td>
<td>215</td>
<td>235</td>
<td>255</td>
<td>–</td>
<td>332</td>
</tr>
<tr>
<td>XLRB 16×54</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>107</td>
<td>184</td>
</tr>
<tr>
<td>XLRB 40×54</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>155</td>
<td>232</td>
</tr>
<tr>
<td>XLRB 65×54</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>205</td>
<td>282</td>
</tr>
</tbody>
</table>

* 10 mm guide rail only

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

**Note 1**

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.

**Note 2**

Although XLRB ..×42 can be used with XB 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.
**Adjustable guide rail brackets, aluminium**

**Introduction**

Adjustable guide rail brackets are recommended when quick adjustment of the conveyor track width is important. They can even provide an effective track width that is narrower than the conveyor chain.

For adjustable guide rail brackets in polyamide, see page 127.

**Important**

Note that with cleated chain, roller top chain, and steel top chain, the guide rail brackets cannot be adjusted to narrow track widths.

**Tools and accessories**

Distance pieces (spacers) are available to increase the maximum track width.

**Note**

If distance pieces are needed with XK conveyors, type XLRD 6 C should be used.

T-bolts and nuts are used to fasten the guide rail brackets to the beam. Longer T-bolts must be used if distance pieces are used with the brackets. See product catalogue section *Fasteners*.

The guide rails are secured to the guide rail brackets by means of spring pins (XLAP 28).

**Technical specifications**

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

<table>
<thead>
<tr>
<th>Bracket type</th>
<th>XS mm</th>
<th>XL mm</th>
<th>XM mm</th>
<th>XH mm</th>
<th>XB mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRA 8×9×45</td>
<td>16–34</td>
<td>36–54</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRA 8×39×45</td>
<td>0–34</td>
<td>0–54</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRA 26×9×45</td>
<td>52–70</td>
<td>72–90</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRA 26×39×45</td>
<td>0–70</td>
<td>12–90</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRA 16×30×52</td>
<td>0–49</td>
<td>9–69</td>
<td>29–89</td>
<td>49–109</td>
<td>126–186</td>
</tr>
<tr>
<td>XLRA 41×30×52</td>
<td>39–99</td>
<td>59–119</td>
<td>79–139</td>
<td>99–159</td>
<td>176–236</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bracket type</th>
<th>XK mm</th>
<th>XB mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRA 16×30×64</td>
<td>49–109</td>
<td>126–186</td>
</tr>
</tbody>
</table>
Introduction
The fixed guide rails, polyamide, are attached to the conveyor beam by means of T-bolts and nuts. They are available in three sizes, each size equivalent to an aluminium version (see page 124). In addition, it is possible to combine the fixed brackets with distance pieces (spacers) to obtain other track widths.

Additional track widths can be obtained if a non-symmetrical track can be accepted. In this case, combinations of guide rail bracket sizes can be used. Note that fixed brackets are available for two different heights: 30 mm and 42 mm. The 30 mm type should not be used with XM, XH, and XB conveyors.

Technical specifications
Track width calculations
The fixed guide rail brackets, polyamide, are direct replacements for the aluminium types with the corresponding designations. The track width W (see illustration) for symmetrical tracks with 15 mm guide rail can be obtained from the following table. For 10 mm guide rail: add 10 mm. Other track widths can be obtained by means of distance pieces.

<table>
<thead>
<tr>
<th>Bracket type</th>
<th>XS mm</th>
<th>XL mm</th>
<th>XM mm</th>
<th>XH mm</th>
<th>XB mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRB 11×30 C</td>
<td>47</td>
<td>67</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>XLRB 16×42 C</td>
<td>47</td>
<td>67</td>
<td>87</td>
<td>107</td>
<td>184</td>
</tr>
<tr>
<td>XLRB 40×42 C</td>
<td>95</td>
<td>115</td>
<td>135</td>
<td>155</td>
<td>232</td>
</tr>
</tbody>
</table>

Note
Type XLRB 11×30 C is not compatible with flanged guide rail cover XLRT 3/6×33 D.
Introduction

The adjustable guide rail brackets, polyamide, include components for construction of a wide variety of guide rail configurations. This includes basic types as well as high and wide guide rails in various adjustable configurations. How to combine the various components is best understood by studying the examples on the following pages.

Components

Basic building blocks for adjustable brackets:
- Guide rail bracket supports (four types)
- Guide rail clamp supports (two types)
- Guide rail clamps
- Support tube 18 mm (aluminium)
- Cross connector
- Corner connector

Accessory components

- Spacers to increase the track width.
- Spacer beam (aluminium), for large increases in track width. The beam is available with or without T-slots on the sides.
- Star knob for easy adjustment of guide rail height and width.

Materials

Except where otherwise noted, the guide rail bracket components are made of glass-fibre reinforced polyamide.

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>
<thead>
<tr>
<th>System</th>
<th>$W_B$ mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XS</td>
<td>45</td>
</tr>
<tr>
<td>XL</td>
<td>65</td>
</tr>
<tr>
<td>XM</td>
<td>85</td>
</tr>
<tr>
<td>XH, XK</td>
<td>105</td>
</tr>
<tr>
<td>XB</td>
<td>182/300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spacer</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRD 6 A</td>
<td>6</td>
</tr>
<tr>
<td>XLRD 18 A</td>
<td>18</td>
</tr>
<tr>
<td>XLRD 3 D</td>
<td>3</td>
</tr>
<tr>
<td>XLRD 15 K</td>
<td>15</td>
</tr>
<tr>
<td>XLRN 3 Custom width</td>
<td></td>
</tr>
<tr>
<td>XLRN 3 U Custom width</td>
<td></td>
</tr>
</tbody>
</table>

Parameters $W_B$ and $A$
Using guide rail bracket support XLRF 42×18 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 127. For parameter \( B \): see Tables 3 and 4.

\[
W = W_B + 2A + 80 - 2B
\]

Table 3. Parameter \( B \) when using support type XLRF 42×18 V/VD and XLRK/XLRL guide rail clamps

<table>
<thead>
<tr>
<th>Guide rail</th>
<th>B mm</th>
<th>B mm</th>
<th>B mm</th>
<th>B mm</th>
<th>B mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRK 18×40 C</td>
<td>41–55</td>
<td>46–60</td>
<td>48–62</td>
<td>42–56</td>
<td></td>
</tr>
<tr>
<td>XLRK 18×60 C</td>
<td>41–75</td>
<td>46–80</td>
<td>48–82</td>
<td>42–76</td>
<td></td>
</tr>
<tr>
<td>XLRK 18×80 C</td>
<td>41–95</td>
<td>46–100</td>
<td>48–102</td>
<td>42–96</td>
<td></td>
</tr>
<tr>
<td>XLRL 18×110 C</td>
<td>21</td>
<td>26</td>
<td>28</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>XLRK 18 CE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>57–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58–</td>
</tr>
</tbody>
</table>

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 18×... 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 ...×18 C.

*Suitable for stainless steel applications.

Note
Guide rail clamp XLRK 12×100 D69 cannot be used with the quick release guide rail clamp support.
Track width calculations (continued)

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

<table>
<thead>
<tr>
<th>Guide rail</th>
<th>10 mm</th>
<th>15 mm</th>
<th>15+2 mm</th>
<th>18 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLRK 18×40 C</td>
<td>28–43</td>
<td>33–48</td>
<td>35–50</td>
<td>28–43</td>
</tr>
<tr>
<td>XLRK 18×60 C</td>
<td>28–63</td>
<td>33–68</td>
<td>35–70</td>
<td>28–63</td>
</tr>
<tr>
<td>XLRK 18×80 C</td>
<td>28–83</td>
<td>33–88</td>
<td>35–90</td>
<td>28–83</td>
</tr>
<tr>
<td>XLRK 18 CE</td>
<td>44–</td>
<td>49–</td>
<td>51–</td>
<td>45–</td>
</tr>
</tbody>
</table>

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 XB 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

*Suitable for stainless steel applications.
Configuration examples (continued)

**Double track guide rails**

**Steel guide rails, quick adjustment**

**Plastic/aluminium guide rails, quick adjustment**

**Roller module guidance, quick adjustment**

**Quick-release guide rail brackets**

**Twin-level steel guide rails**
Introduction
The built-up guide rail brackets are made up from pieces of small beam with T-slots on three or four sides. The beam is cut to suitable lengths and connected to form brackets with the desired height and width.

Special fittings are used to connect the beam pieces to each other, to the conveyor beam, and to the guide rail. It is possible to use more than one guide rail on each side.

Technical specifications
The maximum height and width of built-up guide rail brackets depends on the application. High or wide bracket designs can be stabilized by means of horizontal beams connecting the brackets across the track.

The minimum effective track width $W_{MIN}$ depends on the type of L bracket used (see figure), on the guide rail width $W_R$, and on the conveyor type. See the following table. The values are for XLRC 20. For XLRC 20 A: add 4 mm.

Minimum effective track width $W_{MIN}$

<table>
<thead>
<tr>
<th>$W_R$</th>
<th>Two L brackets Type 1</th>
<th>Two L brackets Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 mm 15 mm</td>
<td>10 mm 15 mm</td>
</tr>
<tr>
<td>XS</td>
<td>71 61</td>
<td>105 95</td>
</tr>
<tr>
<td>XL</td>
<td>91 81</td>
<td>125 115</td>
</tr>
<tr>
<td>XM</td>
<td>111 101</td>
<td>145 135</td>
</tr>
<tr>
<td>XH, XK</td>
<td>131 121</td>
<td>165 155</td>
</tr>
<tr>
<td>XB</td>
<td>208 198</td>
<td>242 232</td>
</tr>
</tbody>
</table>

Ordering information
For each basic built-up rail bracket the following accessories are required:

Guide rail to bracket:
- XLRC 20/XLRC 20 A guide rail bracket ...... 1*
- XLAP 28 spring pin ...................................... 1*
- XLAN 17 T-bolt for XLRC 20 ........................ 1*
- XLAN 8 nut for XLRC 20 .............................. 1*

*per guide rail

$L$ bracket Type 1 (see figure):
- XMRY 20 inner fitting .................................. 1
- XCBB 3x24x34/XCBB 3x24x44 beam

$L$ bracket Type 2 (see figure):
- XMRW 20 corner fitting .............................. 2
- XCBB 3x24x34/XCBB 3x24x44 beam

Bracket to conveyor beam:
- XMRX 20 inner fitting ................................. 2

XLRC 20 or XLRC 20 A
Bracket type XLRC 20 is recommended if the mounting screw must be accessible after installation of the guide rail. Type XLRC 20 A permits compact stacking of several guide rails.

Bolts and nuts for XLRC 20 must be ordered separately. XLRC 20 A comes complete with square nut and M8 screw.