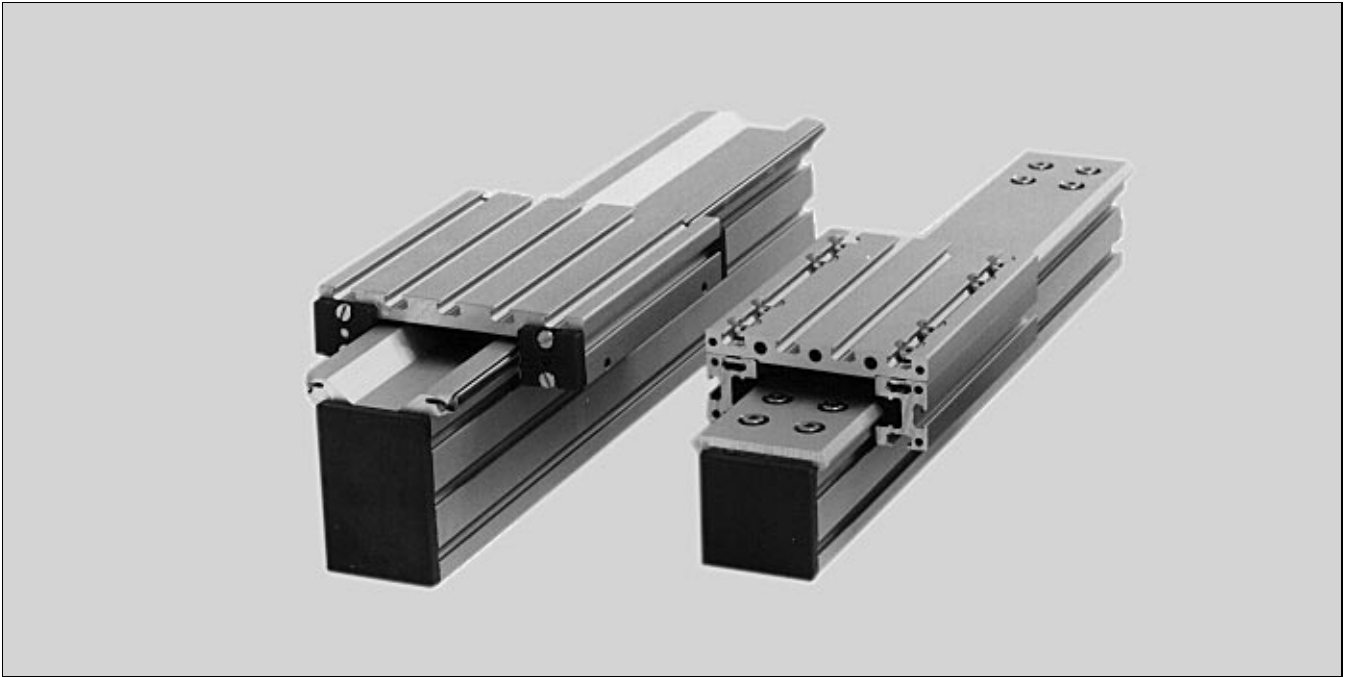


Components for linear motion



Slide modules for guide profile

A system of slide modules in combination with matching guide profiles connected to XD beams permits linear sliding motion with high precision. Two slide modules are connected by means of a connecting plate. Guide profile XDLG 3×44 A can also be connected to a 44 mm XC beam.

Two connecting plate widths are available, adapted to 22 mm or 44 mm beam width. The slide modules and connecting plates can be obtained in 120 mm lengths. See [page 27](#).

UHMW polyethylene

Ultra-high molecular weight polyethylene is specially suited for low-friction, low-wear sliding applications. Important features include very high wear resistance, high impact and flexing strength, and no adhesion. The material does not absorb water and has a very low coefficient of friction (0,05–0,07). The maximum operating temperature is 40 °C.

Rollers on steel shaft

For applications requiring high loading capability (including moment loads), rollers are recommended. The roller unit (saddle) travels on steel shafts for maximum precision and low friction. End caps on the saddle incorporate felt pads for shaft lubrication and cleaning. See [pages 28–31](#).

Steel, hardened

The steel used for the steel shaft is precision ground, polished, and hardened (60–64 HRC). Tolerance h6.

Flexibility

The slide module/connecting plate combination, and the roller unit, have T-slots on three sides. This means that they can be connected to other components in many different configurations. Several units can be combined.

Ordering information

Screws, nuts, and washers must be ordered separately unless otherwise specified.

Other FlexLink products for linear motion

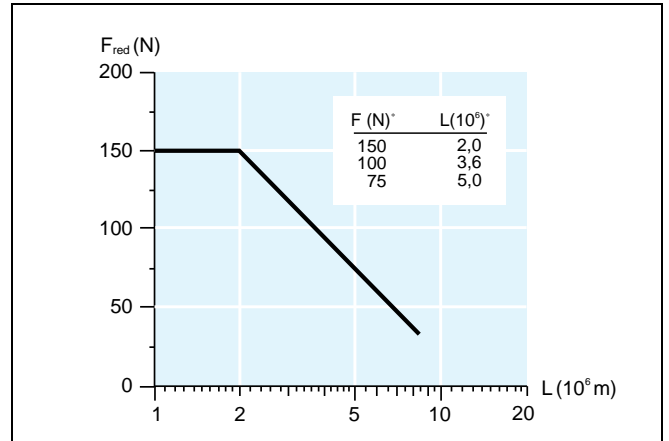
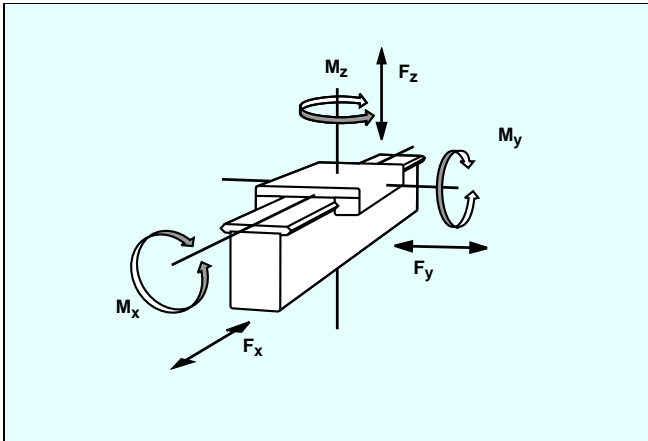
FlexLink structural system XC includes a range of components for linear motion:

- Sliding elements for T-slot
- Sliding elements for guide profile
- Wheels and runners.

See section *Structural system XC*.

Linear drive unit XR is a range of screw or belt driven linear drive units which provide accurate and repeatable positioning. All units are supplied assembled according to individual requirements of stroke, load, saddle configuration and drive method. See section *Linear drive unit XR*.

Sliding motion



Slide module for guide profile

Max. static and dynamic loads

$$F_z \text{ (stat)} = 300 \text{ N}$$

$$F_y \text{ (stat)} = 300 \text{ N}$$

$$F_z \text{ (dyn)} = 150 \text{ N (maximum speed = 0,3 m/s)}$$

$$F_y \text{ (dyn)} = 150 \text{ N (maximum speed = 0,3 m/s)}$$

Max. moment load (maximum speed = 0,3 m/s)

Slide module + connecting plate	Maximum moment load (Nm)		
	M _x (dyn)	M _y (dyn)	M _z (dyn)
XDLM 120 GA, XDBC 120×66 A	3,5	10	10
XDLM 120 GA, XDBC 120×88 A	6,0	10	10

Calculation of resulting maximum load

Use the following formulas to calculate the maximum force applied to the sliding module:

XDLM 120 GA + XDBC 120×66 A:

$$F_{red} = F_z + F_y + M_x \cdot 42 + M_y \cdot 15 + M_z \cdot 15$$

XDLM 120 GA + XDBC 120×88 A:

$$F_{red} = F_z + F_y + M_x \cdot 25 + M_y \cdot 15 + M_z \cdot 15$$

F_{red} must be lower than or equal to 150 N

Operational life of slide module

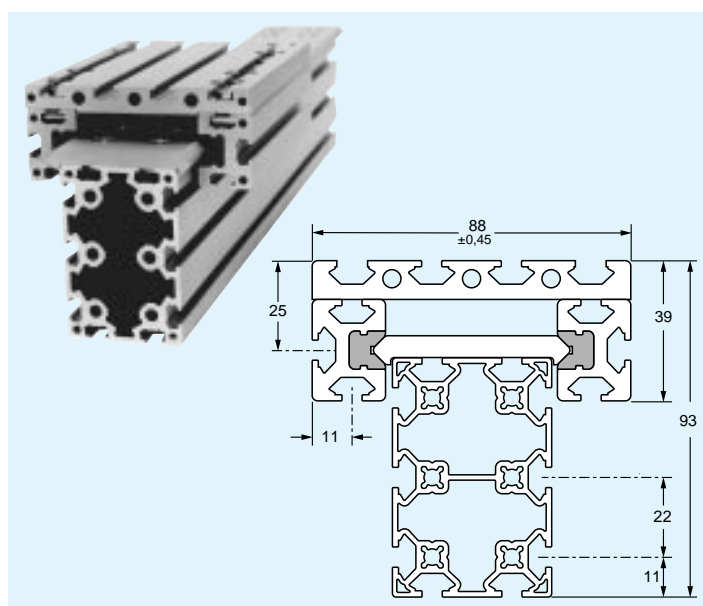
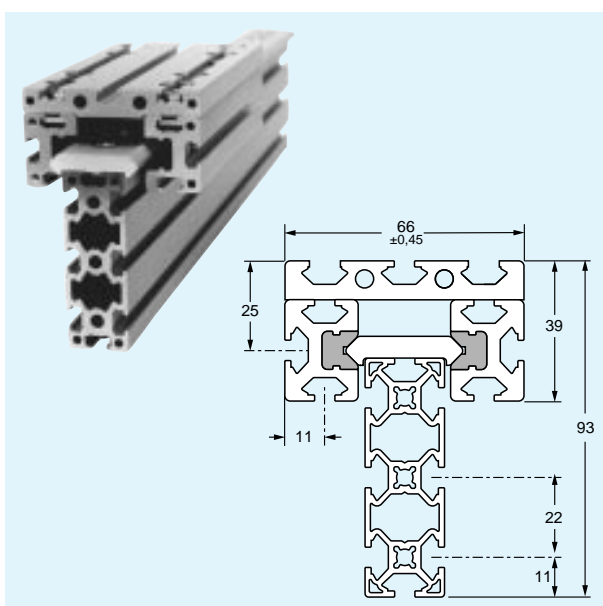
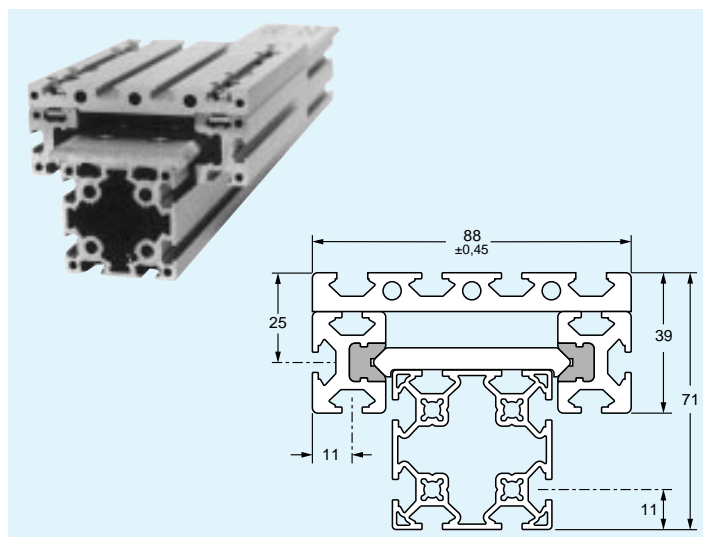
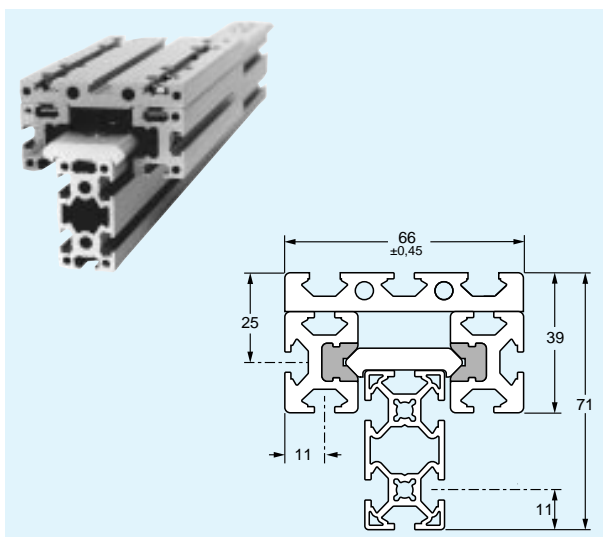
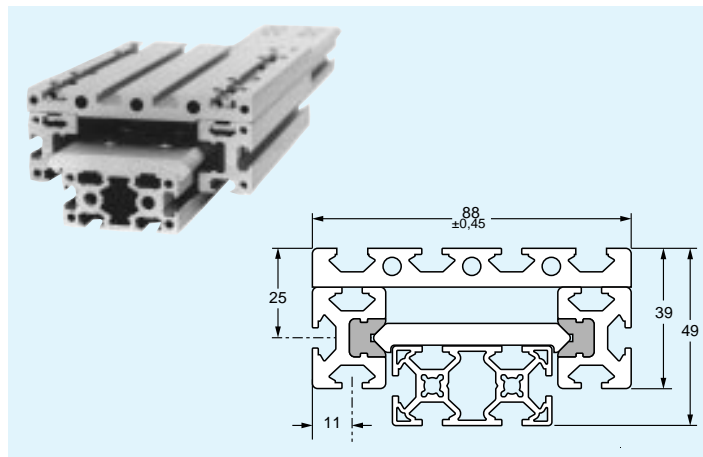
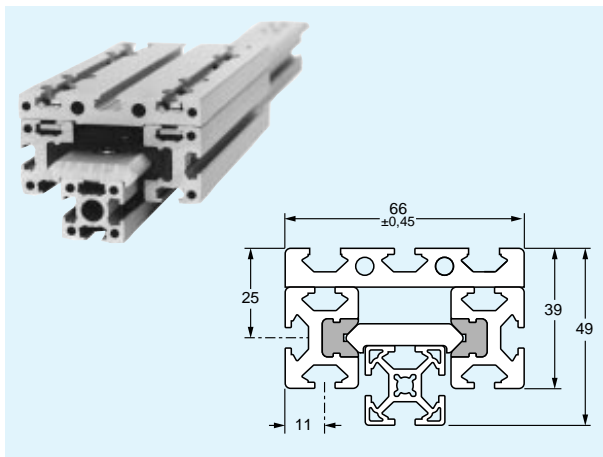
The diagram above shows the operational life of the UHMW-PE slide blocks as a function of F_{red}. Operational life limit: the slide block has worn down by 0,2 mm at the contact surface. The load limits are calculated from practical tests and will provide a life of 2 000 000 m with pneumatic drive.

Slide modules

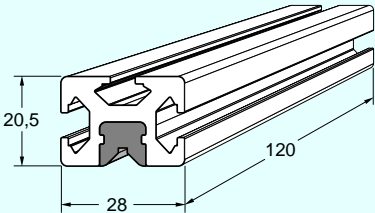
Basic configurations

The slide modules for guide profile can be combined with the FlexLink XD beams in six configurations. The drawings on this page provide the key dimensions of the various configurations.

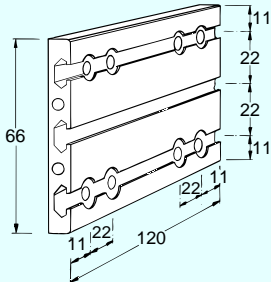
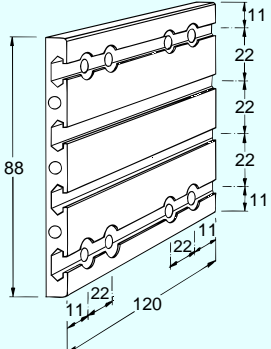
The slide modules can also be combined with XC beams with 44 mm side.



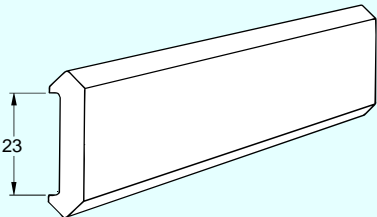
Slide modules

<p>XDLM 120 GA</p>	<p>Slide module for guide profile Aluminium, anodized With low friction slide blocks (UHMW-PE)</p>	
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Connecting plates

<p>XDBC 120×66 A</p>	<p>Connecting plate for 22 mm beam Aluminium, anodized Including screws and nut strip</p>	
<p>XDBC 120×88 A</p>	<p>Connecting plate for 44 mm beam Aluminium, anodized Including screws and nut strip</p>	

Guide profiles

<p>XDLG 3×22 A XDLG L×22 A</p>	<p>Guide profile 22 mm Aluminium, anodized Mounting: MC6S 5×12 BRB 5,3×10 XDAN 5 A Length 3 m Length to order</p>	
<p>XDLG 3×44 A XDLG L×44 A</p>	<p>Guide profile 44 mm Aluminium, anodized Mounting to XD beam: MC6S 5×12 BRB 5,3×10 XDAN 5 A Mounting to XC beam: MC6S 6×16 BRB 6,4×12 XCAN 6 Length 3 m Length to order</p>	