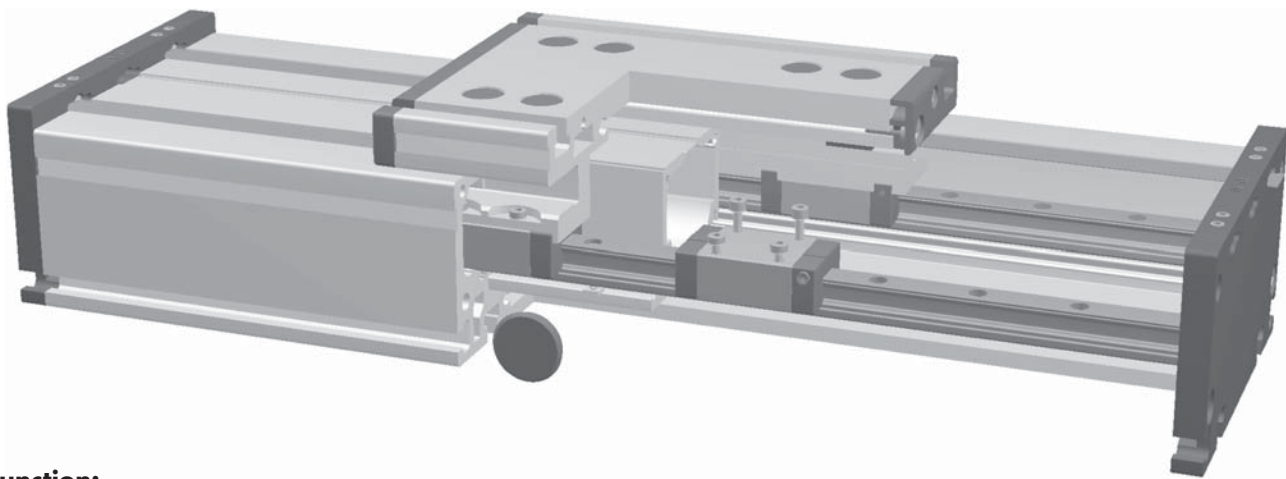


Modular Linear Actuator DSR 160, 200

Profile Rail, Non-Driven



Function:

This unit consists of a rectangular aluminium profile with 2 integrated profile rail guides. The openings of the guide body are sealed with 3 stainless steel cover bands to protect the guide from splash water and dust. Alternatively, the opening can also be covered with a bellow or can be delivered without cover bands. The positioning system is either driven by an internal pneumatic cylinder or other devices or it serves as load carrying linear slide.

Fitting length: As required. Max. length 6,000 mm single/extrusion.

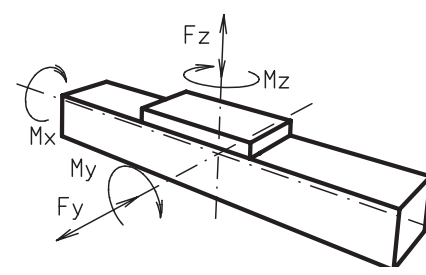
Carriage mounting: T-slots

Unit mounting: T-slots and mounting sets. The linear axis can be combined with any T-slot profile.

Carriage support: In the standard version, the carriage runs on 4 runner blocks which can be adjusted and serviced at a central servicing position. For longer carriages the number of runner blocks can be increased.



7

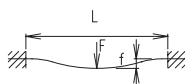
Forces and torques	Size	160		200	
	Forces/Torques	5000 km	10000 km	5000 km	10000 km
	F _y (N)*	2236	1775	5155	4092
	F _z (N)*	5278	4189	11311	8977
	M _x (Nm)*	282	224	752	597
	M _y (Nm)*	283	225	813	646
	M _z (Nm)*	300	238	862	684
	Speed				
	(m/sec) max	5		5	
Geometrical moments of inertia of aluminium profile					
	I _x mm ⁴	21,3x10 ⁵		23x10 ⁵	
	I _y mm ⁴	12,3x10 ⁵		27x10 ⁵	
	Elastic modulus N/mm ²	70000		70000	

*The given values refer to a nominal lifetime of 100.000 m

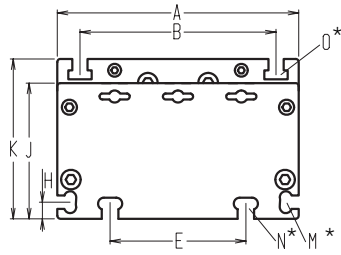
Formula: DSR

Deflection:

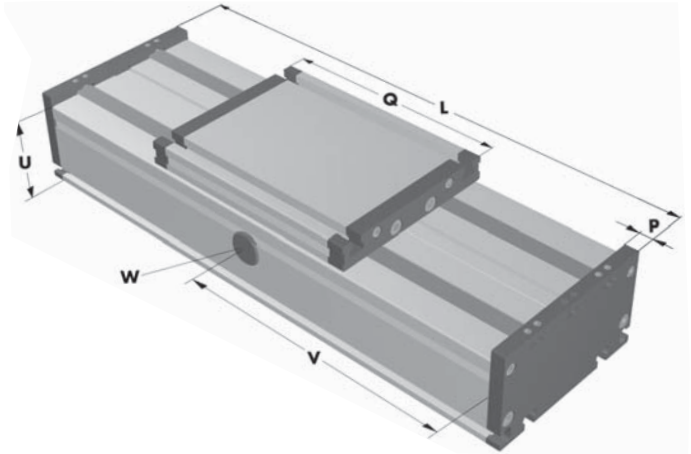
$$f = \frac{F \cdot L^3}{E \cdot I \cdot 192}$$



f = deflection (mm)
 F = load (N)
 L = free length (mm)
 E = elastic modulus 70000 (N/mm²)
 I = second moment of area (mm⁴)



Increasing the carriage length will increase the basic length by the same amount.

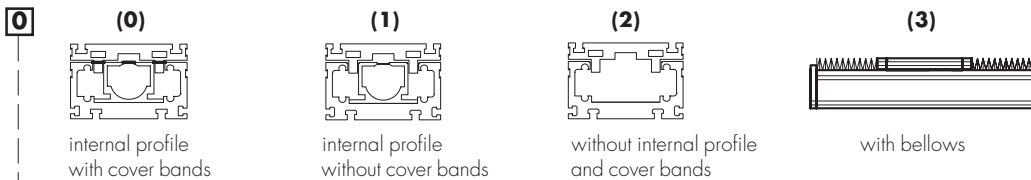


*For T-nuts refer to accessory section

W = servicing position

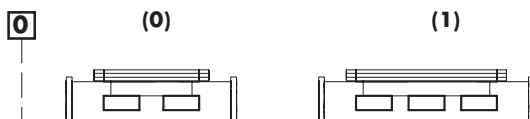
Size	Basic length L	A	B	E	H	J	K	M	N	O	P	Q	U	Basic weight	Additional Weight per 100 mm
DSR 160	240	160	130	90	11	90	106	M6	M8	M8	12	200	80	7,0 kg	1,5 kg
DSR 200	320	200	160	140	15	110	129	M8	M10	M10	15	270	100	15,0 kg	2,9 kg

Choice of guide body profile:



Guide body profile with stainless screws upon request.

Choice of carriages:



Size	Version 0		Version 1	
	Q	L	Q	L
160	200	240	>230	>270
200	270	320	>360	>410

1500 Basic length + stroke = total length

DSR 160 0 0 0 0 0 0 0 0 0 1500
Pos. 1 2 3 4 5 6 7

Inductive proximity switch sets, which can be mounted inside of the square profile, are available as accessories. Coupling and a special plug are mounted from the outside. See accessory section.



Sample ordering code:
DSR160, with internal profile and cover bands, standard runner blocks, 1260 mm stroke.