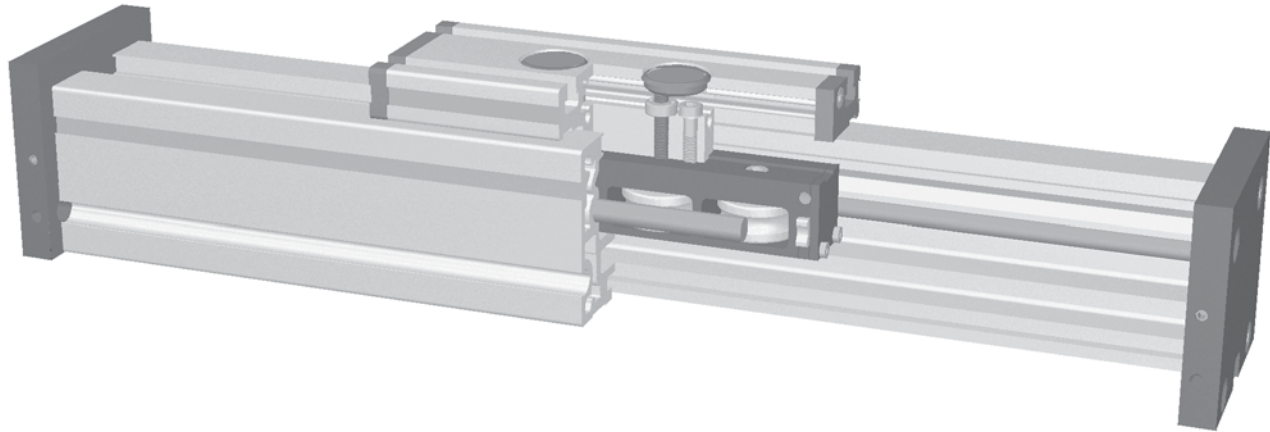
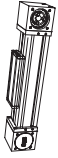


Modular Linear Actuator QLR 60, 80, 100

Internal Roller Guide Non-Driven

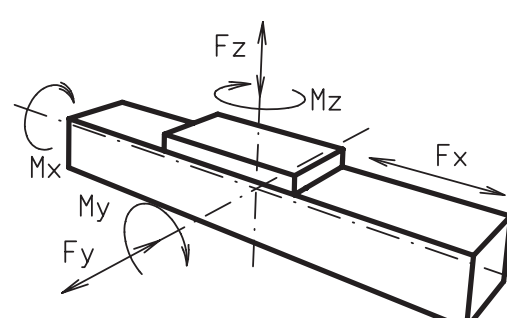


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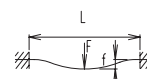
Function:

This unit consists of a square aluminium profile with an internal roller guide. The carriage has internal linear ball bearings that can be adjusted free of play. This roller guide can be driven by a pneumatic cylinder or other actuation or it can serve as a load carrying slide unit.

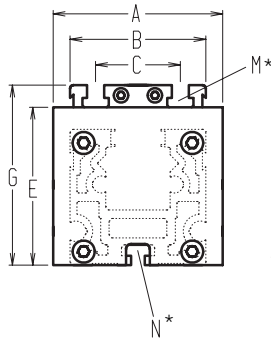
- Fitting length:** As required. Max. length 6,000 mm single/extrusion.
- Carriage mounting:** T-slots
- Unit mounting:** T-slots or tapped holes in the bearing block
- Carriage support:** The carriage runs on 4 rollers which can be adjusted and serviced

Forces and torques	Size	60		80		100	
	Forces/torques	static	dynamic	static	dynamic	static	dynamic
	F_x (N)	-	-	-	-	-	-
	F_y (N)	600	500	1600	1240	1900	1500
	F_z (N)	900	650	1500	1200	2100	1700
	M_x (Nm)	15	10	50	40	85	60
	M_y (Nm)	60	50	100	80	140	110
	M_z (Nm)	40	30	75	60	110	90
	Speed						
(m/sec) max	4		6				
Geometrical moments of inertia of aluminium profile							
I_x mm ⁴	4,3x10 ⁵		16,5x10 ⁵		43,0x10 ⁵		
I_y mm ⁴	4,8x10 ⁵		18,7x10 ⁵		48,8x10 ⁵		
Elastic modulus N/mm ²	70000		70000		70000		

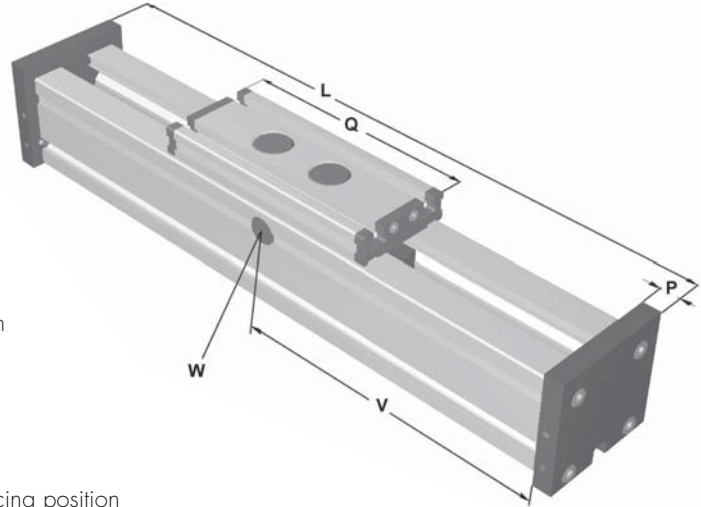
Formula: QLR

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


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 the accessory section

W = servicing position

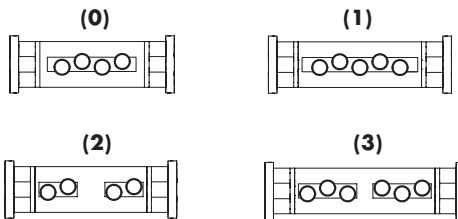
Size	Basic length L	A	B	C	E	G	N	M	P	Q	Basic weight	Additional Weight per 100 mm
QLR 60	180	80	60	36	60	79	M5	M6	12	152	1,45 kg	0,36 kg
QLR 80	240	100	80	50	93	106	M6	M8	17	196	4,2 kg	0,75 kg
QLR 100	310	130	100	66	110	129	M10	M10	20	260	7,2 kg	1,42 kg

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Choice of body profile:

0 (0) standard (1) stainless guide rods (2) stainless guide rods and screws (3) stainless guide rods, rollers and screws

Choice of carriages:



Size	Version 0		Version 1		Version 2		Version 3	
	Q	L	Q	L	Q	L	Q	L
60	152	180	192	220	>152	>180	>232	>260
80	196	240	246	290	>196	>240	>296	>340
100	260	310	320	370	>280	>310	>380	>430

1500 Basic length + stroke = total length

QLR 80 0 0 0 0 0 0 0 0 0 1500

Pos. 1 2 3 4 5 6 7

Sample ordering code:

QLR80 with standard body profile, standard carriage and 1260 mm stroke