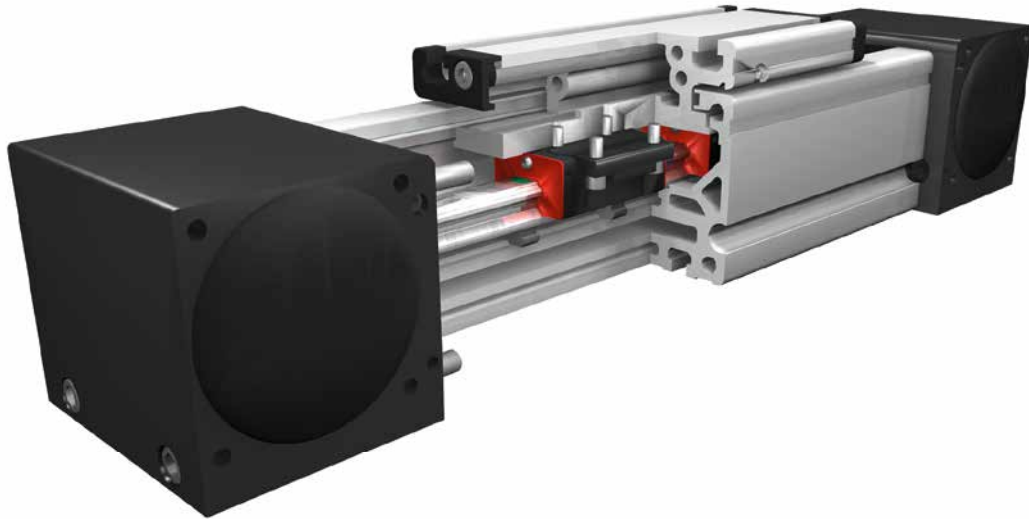


Rail guide

**Function:**

This unit consists of a square aluminium profile with an integrated ball rail. The carriage is with lead nut and without drive.

Fitting position:

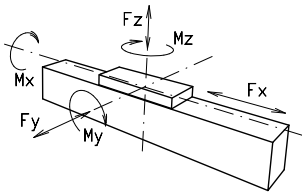
As required, max. length 6.000mm

Carriage connection:

By T-slots

Unit mounting:

By half round slots and tapped holes in the bearing blocks, mounting sets.

Forces and torques

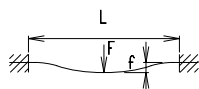
Size	QSRZ 60		QSRZ 80		QSRZ 100		QSRZ 125	
permitted dyn. forces*	5000 km	10000 km	5000 km	10000 km	5000 km	10000 km	5000 km	10000 km
F_x (N)	1410	990	3570	2550	4080	2900	6892	5470
F_y (N)	3520	2500	8500	6050	10300	7270	17205	13659
M_x (Nm)	33	23	107	75	142	101	288	228
M_y (Nm)	104	73	310	222	439	311	1110	881
M_z (Nm)	100	70	296	210	412	292	1012	803
All forces and torques related to the following:								
existing values $\frac{F_y}{F_{y_{dyn}}} + \frac{F_z}{F_{z_{dyn}}} + \frac{M_x}{M_{x_{dyn}}} + \frac{M_y}{M_{y_{dyn}}} + \frac{M_z}{M_{z_{dyn}}} \leq 1$								
table values $\frac{F_y}{F_{y_{dyn}}} + \frac{F_z}{F_{z_{dyn}}} + \frac{M_x}{M_{x_{dyn}}} + \frac{M_y}{M_{y_{dyn}}} + \frac{M_z}{M_{z_{dyn}}} \leq 1$								
Geometrical moments of inertia of aluminium profile								
I_x mm ⁴	4,3x10 ⁵		16,5x10 ⁵		43,0x10 ⁵		74,9x10 ⁵	
I_y mm ⁴	4,8x10 ⁵		18,7x10 ⁵		48,8x10 ⁵		106,5x10 ⁵	
E-Modulus N/mm ²	70000		70000		70000		70000	

For life-time calculation use our homepage.

* referred to life-time

Deflection:

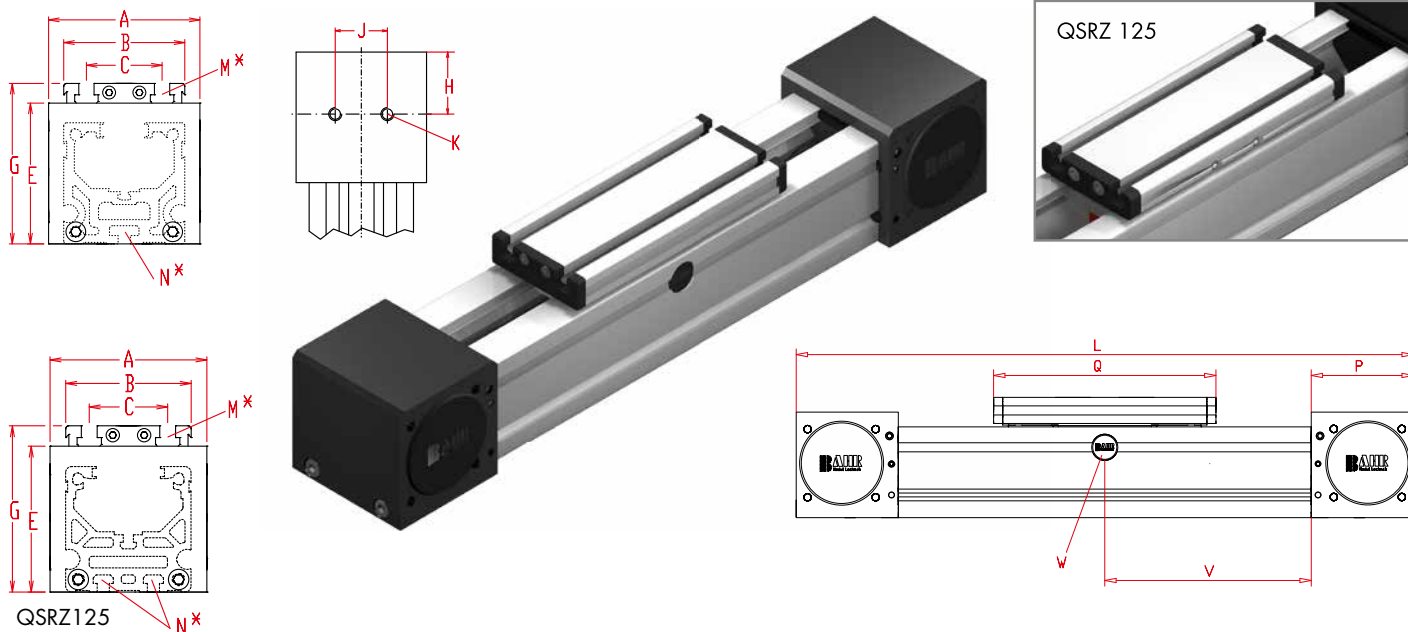
$$f = \frac{F \cdot L^3}{E \cdot I \cdot 192}$$



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

Positioning system QSRZ 60, 80, 100, 125

Dimensions (mm)



V = Q + 100 mm
W = servicing position

*For slide nuts refer to chapter 2.2 page 2

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

Size	Basic length L	A	B	C	E	G	H	J	K	N for	M for	P	Q	Basic weight	Weight per 100 mm
QSRZ 60	300	80	60	36	63	79	29,5	30	M 8	M 5	M 6	59	177	3,5 kg	0,55 kg
QSRZ 80	430	100	80	50	93	106	47,5	40	M 10	M 6	M 8	90	232	10,4 kg	0,96 kg
QSRZ 100	510	130	100	66	110	129	55	50	M 12	M 10	M 10	110	268	15,9 kg	1,47 kg
QSRZ 125	570	160	125	82	134,5	157,5	65	60	M 12	M 10	M 12	130	300	30,5 kg	2,21 kg

7.1

0 Choice of guide body profile:

- (0) Standard (1) corrosion-protected screws
- (4) expanded corrosion-protected version (depending on the availability of components)

0 Choice of carriages:

Size	Version 0		Version 1		Version 2		Version 3	
	Q	L	Q	L	Q	L	Q	L
60	177	300	152	280	242	370	302	430
80	232	430	196	390	312	510	390	585
100	268	510	260	500	362	610	448	690
125	300	570	260	530	365	635	467	740

Basic length + stroke = total length

For additional accessories refer to chapter 2.2 – 3.2

QSRZ 80 0 0 0 0 0 0 0 0 01500

Pos. 1 2 3 4 5 6 7

Sample ordering code:

QSRZ80 with standard body profile, standard carriage, coupling claw on one side, 1070 mm stroke

