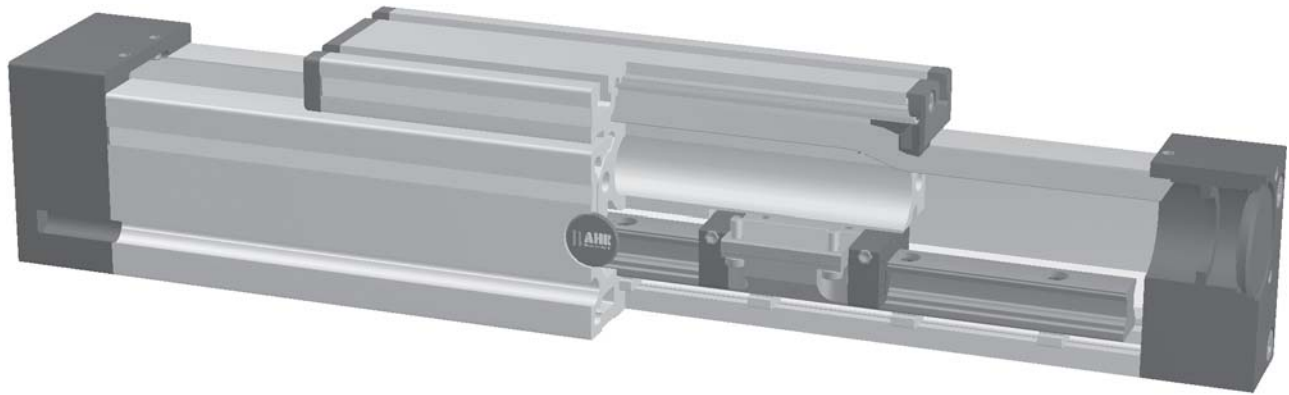


Positioning system QSSR 60, 80, 100

Specifications

Rail guide



6.1

Function:

This unit consists of a square aluminium profile with an integrated ball rail. The carriage is with leading nut and without drive. The openings of the guide body are covered by a stainless steel cover band to protect the system from splash water and dust.

Fitting position:

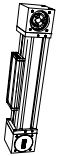
As required, max. length 6.000mm

Carriage connection:

By T-slots

Unit mounting:

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



Forces and torques	Size	QSSR 60		QSSR 80		QSSR 100	
	permitted dyn. Forces*	5000 km	10000 km	5000 km	10000 km	5000 km	10000 km
F_y (N)		274	218	567	450	1288	1023
F_z (N)		2991	2374	4955	3933	7146	5671
M_x (Nm)		18	14	41	33	70	56
$M_y = M_z$ (Nm)		54	43	121	96	197	157
All forces and torques related to the following:							
existing values	$\frac{F_y}{F_{y_{dyn}}} + \frac{F_z}{F_{z_{dyn}}} + \frac{M_x}{M_{x_{dyn}}} + \frac{M_y}{M_{y_{dyn}}} + \frac{M_z}{M_{z_{dyn}}} \leq 1$						
values of table							
Geometrical moments of inertia of aluminium profile							
I_x mm ⁴		4,3x10 ⁵		14,0x10 ⁵		43,0x10 ⁵	
I_y mm ⁴		4,8x10 ⁵		16,6x10 ⁵		48,8x10 ⁵	
E-Modulus N/mm ²		70000		70000		70000	

* referred to life-time

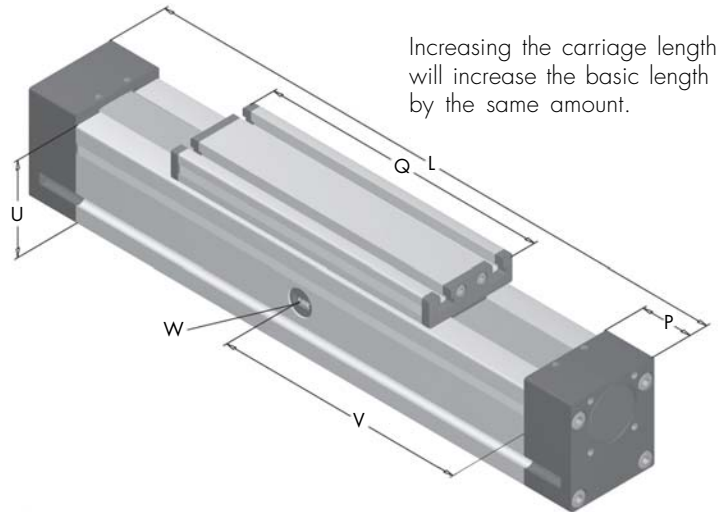
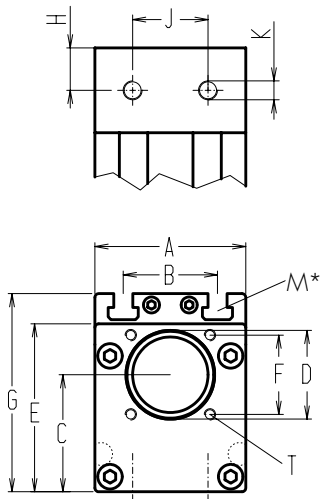
Formula: QSSR

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

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

Positioning system QSSR 60, 80, 100

Dimensions (mm)



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

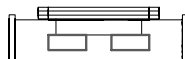
*For slide-nuts refer to main catalogue chapter 2.2 page 2 V = Q + 100 mm W = servicing position

Size □	Basic length L	A	B	C	D Ø	E	F □	G	H	J	K for	M for	P	Q	T for	U	Basic weight	Weight per 100 mm
QSSR 60	270	60	36	45	37	67	32	79	19	18	M6	M6	38	188	M5	60	3,1 kg	0,3 kg
QSSR 80	350	80	50	62	47	89	42	106	22,5	40	M10	M8	45	250	M6	80	5,7 kg	0,8 kg
QSSR 100	410	100	66	75	68	112	60	129	28,5	50	M10	M10	57	288	M8	100	10,2 kg	1,2 kg

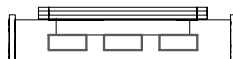
6.1



0 Choice of carriage (0)



(1)



Size	Carriage version 1	
	Q	Basic length L
60	255	350
80	336	436
100	383	510

1500 Basic length + stroke = total length

QSSR	80	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1500
Pos.	1	2	3	4	5	6	7												

Sample ordering code:
QSSR80, standard carriage, 1150 mm stroke.

