

Bridge module BM4...BR...N with ball screw drive

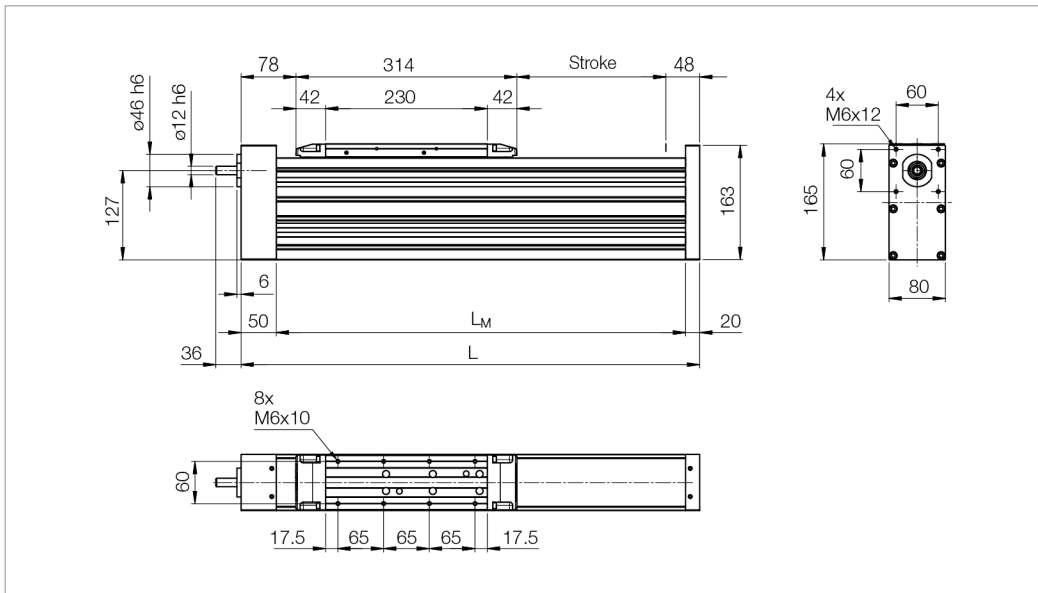
BM Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Acceleration a_{max} [m/s ²]	Axial play		Idle torque [Nm]
		C_0 [N]	C_{dyn} [N]				Type	Axial play [mm]	
BM4...R...	20x20	5705	4912	52/300	< 0.05 ¹⁾	10.0	A	< 0.20	0.200
							R	< 0.02	
							V	—	

d x p = screw diameter x thread pitch
¹⁾ backlash not factored in

A = axial play
 R = reduced play
 V = preloaded

BM Type	Movement speed		Moments of inertia		Stroke max. [mm]	Steel strip	Feed and friction force F_V [N]	Moved mass m_b [kg]
	Guide v_{max} [m/s]	Drive v_{max} [m/s]	I_y [cm ⁴]	I_z [cm ⁴]				
BM4...R...N	5.0	²⁾	708	332	3000	without with	25.00 35.00	2.500

²⁾ for ball screw drive, dependent on rotational speed characteristics, spindle length and relevant critical rotational speed.



Nominal size Designation	Dimensions				Weight [kg]
	L [mm]	L_M [mm]	Length ball screw [mm]	Length steel strip [mm]	
BM4...BR...N	Stroke + 440	L - 70	L + 30	L - 36	11.24 kg + 1.55 kg/100 mm Stroke

Bridge module Type	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
	static		dynamic		static			dynamic		
	$C_{y0,1,2}$	$C_{z0,1,2}$	$C_{y1,2}$	$C_{z1,2}$	M_{x0}	M_{y0}	M_{z0}	M_x	M_y	M_z
BM4...R...N	59.9	59.9	34.2	34.2	646	1107	1107	400	1069	1069

The determination of dynamic load ratings and torques is based on a 50,000 m stroke. If comparative values must be calculated for a 100,000 m stroke, the values for M_x , M_y , M_z and C must be divided by the factor 1.26.

With a view to serviceable life, loads of less than 20% of the dynamic load ratings have generally proved to be expedient.

CAD data

Enquiry (technical/quote)

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