

Dynamic module DM3...ZS... XL with rack and pinion drive

DM	Rack and pinion drive	Axial load rating	Positioning accuracy	Repeating accuracy	Acceleration
Size	Stroke/R [mm]	F [N]	[μ /mm]	.../1000 mm [mm]	a_{max} [m/s ²]
DM3.ZS...	160.001 (50.93 x π) ¹⁾	37/1000 ²⁾	± 0.02 ²⁾	50 ³⁾

¹⁾ Depends on speed and load

²⁾ Without considering backlash and load

³⁾ Maximum possible value; precise value for your specific application to be determined with our technical sales department

DM	Travel speed	Area moment of inertia	Stroke max.	Feed and friction force	Mass/carriage transported (without gearbox)
Type	Guide v_{max} [m/min]	Drive v_{max} [m/min]	I_y [cm ⁴]	F_V [N]	m_b [kg]
DM3.ZS...	360 ⁶⁾	⁴⁾	4352	60 ⁷⁾	16.0

⁴⁾ Depends on load and gear ratio

⁵⁾ Longer strokes on request

⁶⁾ Higher speeds on request

⁷⁾ Without idling-torque gearbox; this is dependent on the gear ratio

- 1 carriage with gearbox left (Order code Carriage = A) or with gearbox right (Order code Carriage = B)

Nominal size	Dimensions		Weight (excluding gearbox) [kg]
Designation	L [mm]	L_M [mm]	
DM3.ZS...A/B...	Stroke + 534	L - 40	55.6 kg + 5.0 kg/100 mm Stroke

Load ratings

Torques

Dynamic module	Maximum permissible forces [kN]				Maximum permissible torques [Nm]					
	static		dynamic		static			dynamic		
	$C_{y0.1,2}$	$C_{z0.1,2}$	$C_{y1,2.50}$	$C_{z1,2.50}$	M_{x0}	M_{y0}	M_{z0}	$M_{x.50}$	$M_{y.50}$	$M_{z.50}$
DM3.ZS...	311.5	311.5	208.8	208.8	29600	35950	35950	19840	24470	24470