



MLF52-500-E-ZR-W2-FA517.1-FBALG [↗](#)

Módulo lineal

Actuators with external track roller guidance system and toothed belt drive. With support rail in two segments, second, driven carriage and bellows

Información técnica



Variante de su producto actual

Size code	52	
Length of carriage	500	500 mm
Carriage design	E	Strengthened carriage
Drive type	(3)ZR	Toothed belt drive
Additional carriage	W2	Second, driven carriage
Support rail design	FA517.1	Two-piece
Bellow	FBALG	Yes

Medidas principales y datos de rendimiento

B ₁	145 mm	Total Width
H	125 mm	Altura
L	500 mm	Longitud

**Medidas de montaje**

D 86	95 mm	
D 87	115 mm	Ø Bolt circle
d 85	20 mm	
d 86	76 mm	Ø Inner Fit
L 88	31 mm	
G 43	M10	Thread
G 87	M8	Thread
h 85	60,6 mm	
J B43	105 mm	
J L43	160 mm	Tolerance ±0,2
J L44	415 mm	
j B8	80 mm	
N B85	6 mm	Width of Keyway
N L85	25 mm	Length of Keyway
N T85	3,5 mm	Depth of Keyway
T 86	4 mm	Depth Fit
Tol T 86 up	0,5 mm	Upper tolerance
Tol T 86 low	0 mm	Lower tolerance
t 43 max	24 mm	Depth of Thread
t 87 max	15 mm	



Medidas

B ₂	112 mm	Width of Support Rail
B ₄	111 mm	Width of Return Unit
B ₁₈	15 mm	
B ₇₂	2 mm	
H ₁	53,8 mm	
H ₂	98,6 mm	Altura
H ₄	118,3 mm	Height of Return Unit
H ₇	65,4 mm	
H ₁₈	45 mm	
h ₁₃	25 mm	
h ₁₄	50 mm	
h ₁₈	15 mm	
L _{2 max}	16.000 mm	Maximum length of Support Rail
L ₄	115,5 mm	
L ₁₈	400 mm	
L _{x1 min}	50 mm	Minimum distance between the Carriages
L _{Tn min}	500 mm	Support Rail in Segments length min
L _{Tn max}	8.000 mm	Support Rail in Segments length max
F _{BL}	1,37	Effective length factor of bellow
S	85 mm	Medida



Datos técnicos

m_{LAW}	6,67 kg	Mass of Carriage
m_1	1,84 kg	Mass of Connecting Plates of Profiles
m_3	6,67 kg	Mass of additional Carriage
v_{max}	8 m/s	Maximum Speed
a_{max}	40 m/s ²	Maximum Acceleration
R_x	360 mm	
R_y	35,3 mm	
R_z	90 mm	
I C	17.800 N	Load direction I: compressive load
I C ₀	8.900 N	Load direction I: compressive load
II C	17.800 N	Load direction II: tensile load
II C ₀	8.900 N	Load direction II: tensile load
III C	28.400 N	Load direction III: lateral load
III C ₀	15.500 N	Load direction III: lateral load
$M_{0x\ per}$	180 Nm	Max. permissible static moment per Carriage
$M_{0y\ per}$	2.750 Nm	Max. permissible static moment per Carriage
$M_{0z\ per}$	1.700 Nm	Max. permissible static moment per Carriage
I_y	386 cm ⁴	Geometrical moments of inertia of Support Rail
I_z	301 cm ⁴	Geometrical moments of inertia of Support Rail



Información adicional

73,5 Nm	Max. permissible drive torque
4 x LFR5301-10-2Z	Track Rollers
0,1 mm	Repeat Accuracy ±
270 mm	Feed (mm/rotation)
32AT10	Toothed Belt
0,2 kg/m	Mass of Toothed Belt
1.750 N	Permissible Toothed Belt operating force
12,6 kg*cm ²	Mass moment of inertia of Gears

Rango de temperatura

T _{min}	0 °C	Minimum operating Temperatur
T _{max}	80 °C	Maximum operating Temperatur