

**MLF52-500-E-ZR-WN2-FA517.1** [↗](#)

Módulo lineal

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

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	WN2	Second, non-driven carriage
Support rail design	FA517.1	Two-piece
Bellow	/	No

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 ₆	6 mm	Length of Wiper Brushes
L ₁₈	400 mm	
L _{x1 min}	5 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
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