



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

### Módulo lineal

Actuators with external track roller guidance system and toothed belt drive. With support rail in two segments 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	/	No additional carriage
Support rail design	FA517.1	Two-piece
Bellow	FBALG	Yes

### Medidas principales y datos de rendimiento

B <sub>1</sub>	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 $\pm 0,2$
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 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
$v_{max}$	8 m/s	Maximum Speed
$a_{max}$	40 m/s <sup>2</sup>	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 <sub>0</sub>	8.900 N	Load direction I: compressive load
II C	17.800 N	Load direction II: tensile load
II C <sub>0</sub>	8.900 N	Load direction II: tensile load
III C	28.400 N	Load direction III: lateral load
III C <sub>0</sub>	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 <sup>4</sup>	Geometrical moments of inertia of Support Rail
$I_z$	301 cm <sup>4</sup>	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 <sup>2</sup>	Mass moment of inertia of Gears



### Rango de temperatura

---

T <sub>min</sub>	0 °C	Minimum operating Temperatur
------------------	------	------------------------------

T <sub>max</sub>	80 °C	Maximum operating Temperatur
------------------	-------	------------------------------