



## MLF52-245-E-ZR-FA517.2-FBALG [↗](#)

### Módulo lineal

Actuators with external track roller guidance system and toothed belt drive. With support rail in three segments and bellows

## Información técnica



### Variante de su producto actual

|                     |         |                        |
|---------------------|---------|------------------------|
| Size code           | 52      |                        |
| Length of carriage  | 245     | 245 mm                 |
| Carriage design     | E       | Strengthened carriage  |
| Drive type          | (3)ZR   | Toothed belt drive     |
| Additional carriage | /       | No additional carriage |
| Support rail design | FA517.2 | Three-piece            |
| Bellow              | FBALG   | Yes                    |

### Medidas principales y datos de rendimiento

|                |        |             |
|----------------|--------|-------------|
| B <sub>1</sub> | 145 mm | Total Width |
| H              | 125 mm | Altura      |
| L              | 245 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 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  | 24.000 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

|                    |                     |  |
|--------------------|---------------------|--|
| $m_{LAW}$          | 3,4 kg              | Mass of Carriage                               |
| $m_1$              | 3,68 kg             | Mass of Connecting Plates of Profiles          |
| $v_{max}$          | 8 m/s               | Maximum Speed                                  |
| $a_{max}$          | 40 m/s <sup>2</sup> | Maximum Acceleration                           |
| $R_x$              | 105 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    |
| $M_{0y\ per}$      | 800 Nm              | Max. permissible static moment per Carriage    |
| $M_{0z\ per}$      | 460 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

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

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