

**MLF52-300-ZR-FBALG**

## Módulo lineal

Actuators with external track roller guidance system and toothed belt drive. With bellows

## Información técnica



## Variante de su producto actual

|                     |       |                        |
|---------------------|-------|------------------------|
| Size code           | 52    |                        |
| Length of carriage  | 300   | 300 mm                 |
| Carriage design     | /     | Carro estándar         |
| Drive type          | (3)ZR | Toothed belt drive     |
| Additional carriage | /     | No additional carriage |
| Support rail design | /     | One-piece              |
| Bellow              | FBALG | Yes                    |

## Medidas principales y datos de rendimiento

|                |        |             |
|----------------|--------|-------------|
| B <sub>1</sub> | 130 mm | Total Width |
| H              | 119 mm | Altura      |
| L              | 300 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        | 90 mm   |                     |
| J L43        | 110 mm  | Tolerance $\pm 0,2$ |
| J L44        | 210 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     | 20 mm   | Depth of Thread     |
| t 87 max     | 15 mm   |                     |





## Medidas

|                    |          |                                   |
|--------------------|----------|-----------------------------------|
| B <sub>2</sub>     | 112 mm   | Width of Support Rail             |
| B <sub>4</sub>     | 111 mm   | Width of Return Unit              |
| B <sub>72</sub>    | 2 mm     |                                   |
| H <sub>1</sub>     | 46,1 mm  |                                   |
| H <sub>2</sub>     | 98,6 mm  | Altura                            |
| H <sub>4</sub>     | 118,3 mm | Height of Return Unit             |
| H <sub>7</sub>     | 65,4 mm  |                                   |
| h <sub>13</sub>    | 25 mm    |                                   |
| h <sub>14</sub>    | 50 mm    |                                   |
| L <sub>2 max</sub> | 8.000 mm | Maximum length of Support Rail    |
| L <sub>4</sub>     | 115,5 mm |                                   |
| F <sub>BL</sub>    | 1,37     | Effective length factor of bellow |
| S                  | 85 mm    | Medida                            |





### Datos técnicos

|                     |                     |  |
|---------------------|---------------------|--|
| $m_{LAW}$           | 2,93 kg             | Mass of Carriage                               |
| $v_{max}$           | 8 m/s               | Maximum Speed                                  |
| $a_{max}$           | 40 m/s <sup>2</sup> | Maximum Acceleration                           |
| $R_x$               | 160 mm              |  |
| $R_y$               | 29,3 mm             |  |
| $R_z$               | 83 mm               |  |
| I C                 | 10.000 N            | Load direction I: compressive load             |
| I C <sub>0</sub>    | 5.200 N             | Load direction I: compressive load             |
| II C                | 10.000 N            | Load direction II: tensile load                |
| II C <sub>0</sub>   | 5.200 N             | Load direction II: tensile load                |
| III C               | 16.800 N            | Load direction III: lateral load               |
| III C <sub>0</sub>  | 10.000 N            | Load direction III: lateral load               |
| M <sub>0x per</sub> | 110 Nm              | Max. permissible static moment per Carriage    |
| M <sub>0y per</sub> | 760 Nm              | Max. permissible static moment per Carriage    |
| M <sub>0z per</sub> | 390 Nm              | Max. permissible static moment per Carriage    |
| I <sub>y</sub>      | 386 cm <sup>4</sup> | Geometrical moments of inertia of Support Rail |
| I <sub>z</sub>      | 301 cm <sup>4</sup> | Geometrical moments of inertia of Support Rail |

### Información adicional

|  |                         |  |
|--|-------------------------|--|
|  | 73,5 Nm                 | Max. permissible drive torque            |
|  | 4 x LFR5201-10-2Z       | 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 |