**MLFI140-500-3ZR-W2-N-FA517.1** [↗](#)

Módulo lineal

Actuators with internal track roller guidance system and toothed belt drive. With triple toothed belt, support rail in two segments, second, driven carriage and fixing slots in carriage

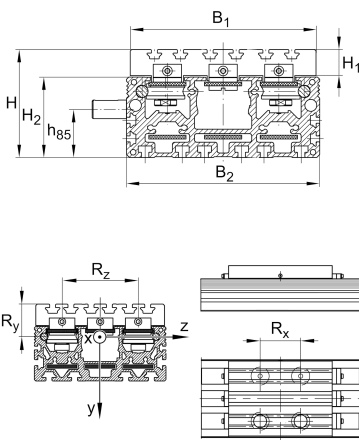
Información técnica

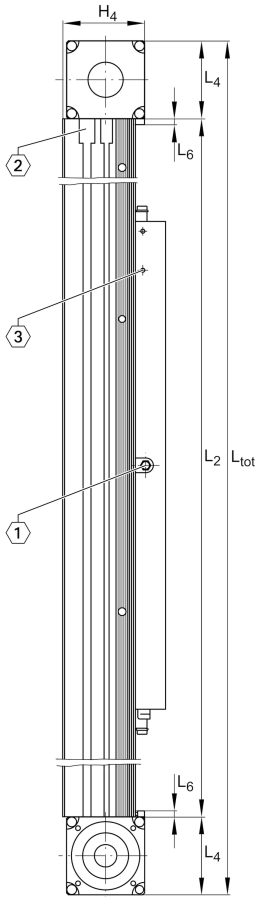
Variante de su producto actual

| | | |
|----------------------------|---------|-------------------------|
| Size code | 140 | |
| Length of carriage | 500 | 500 mm |
| Version | / | Standard |
| Ejecución | / | Basis |
| Drive type | (3)ZR | Toothed belt drive |
| Additional carriage | W2 | Second, driven carriage |
| Attachment to the carriage | N | T-Slots |
| Support rail design | FA517.1 | Two-Piece |

Medidas principales y datos de rendimiento

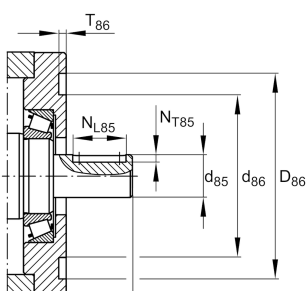
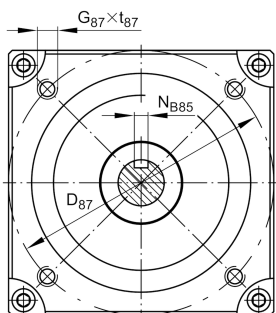
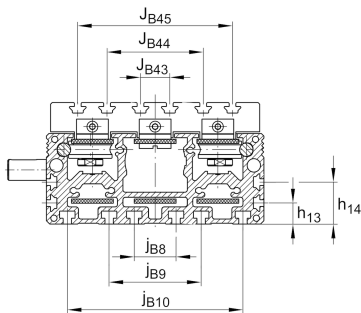
| | | |
|----------------|--------|-------------|
| B ₂ | 180 mm | Total Width |
| H | 105 mm | Altura |
| L | 500 mm | Longitud |

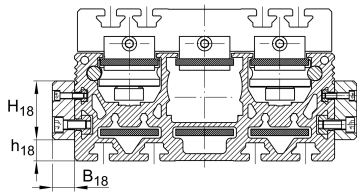
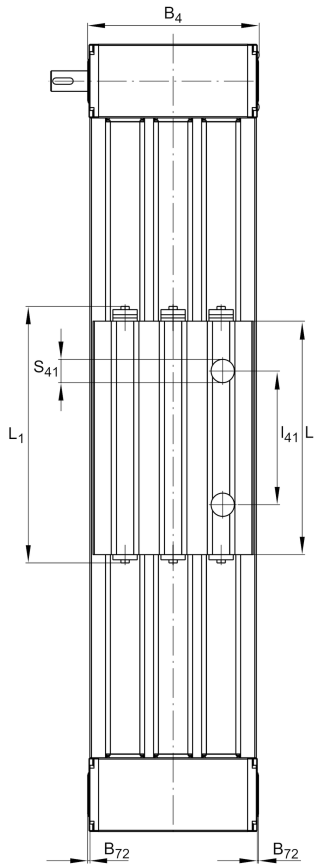




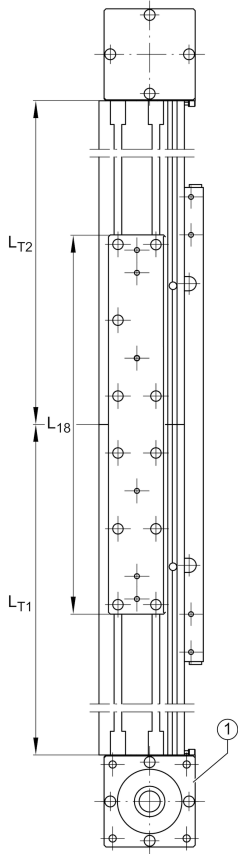
Medidas de montaje

| | | |
|--------------|--------|-------------------------------|
| D 86 | 70 mm | |
| Tol D 86 | G7 | Tolerance |
| D 87 | 80 mm | Ø Bolt circle |
| d 85 | 25 mm | |
| Tol d 85 | h7 | Tolerance |
| L 88 | 45 mm | |
| d 86 | 61 mm | Ø Inner Fit |
| G 87 | M6 | Thread |
| h 85 | 44 mm | |
| J B43 | 80 mm | |
| J B44 | 130 mm | |
| J B8 | 70 mm | |
| j B9 | 140 mm | |
| l 41 | 354 mm | |
| N B85 | 8 mm | Width of Keyway |
| Tol N B85 | P9 | Tolerance |
| N L85 | 25 mm | Length of Keyway |
| N T85 | 4 mm | Depth of Keyway, Tolerance P9 |
| T 86 | 2,3 mm | Depth Fit |
| Tol T 86 up | 0,3 mm | Upper Tolerance |
| Tol T 86 low | 0 mm | Lower Tolerance |
| t 87 max | 12 mm | |

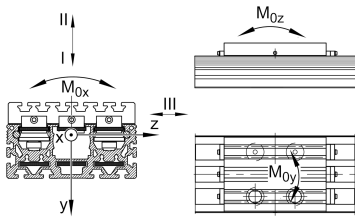


**Medidas**

| | | |
|----------|-----------|--|
| B 1 | 176 mm | Width of Carriage |
| B 4 | 195 mm | Width of Return Unit |
| B 18 | 15 mm | |
| B 72 | 2 mm | |
| H 1 | 29,3 mm | Height of Carriage |
| H 2 | 74,5 mm | Altura |
| H 4 | 84 mm | Height of Return Unit |
| H 18 | 50 mm | |
| h 13 | 25 mm | |
| h 14 | 45 mm | |
| h 18 | 2 mm | |
| L 1 | 542 mm | Longitud |
| L 2 max | 16.000 mm | Maximum length of Support Rail |
| L 4 | 80 mm | |
| L 6 | 6 mm | Length of Wiper Brushes |
| L 18 | 400 mm | |
| L x1 min | 100 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 41 | 30 mm | |
| S | 85 mm | Medida |

**Datos técnicos**

| | | |
|----------------------|-----------------------|--|
| m_{LAW} | 8,87 kg | Mass of Carriage |
| m_1 | 1,84 kg | Mass of Connecting Plates of Profiles |
| m_3 | 8,87 kg | Mass of additional Carriage |
| v_{max} | 8 m/s | Maximum Speed |
| a_{max} | 40 m/s ² | Maximum Acceleration |
| R_x | 354 mm | |
| R_y | 44,5 mm | |
| R_z | 104,5 mm | |
| I C | 17.500 N | Load direction I: compressive load |
| I C ₀ | 8.000 N | Load direction I: compressive load |
| II C | 17.500 N | Load direction II: tensile load |
| II C ₀ | 8.000 N | Load direction II: tensile load |
| III C | 27.600 N | Load direction III: lateral load |
| III C ₀ | 14.800 N | Load direction III: lateral load |
| $M_{0x \text{ per}}$ | 610 Nm | Max. permissible static moment per Carriage |
| $M_{0y \text{ per}}$ | 2.630 Nm | Max. permissible static moment per Carriage |
| $M_{0z \text{ per}}$ | 1.450 Nm | Max. permissible static moment per Carriage |
| I_y | 1.636 cm ⁴ | Geometrical moments of inertia of Support Rail |
| I_z | 200 cm ⁴ | Geometrical moments of inertia of Support Rail |





Información adicional

| | |
|------------------------|---|
| 115 Nm | Max. permissible drive torque |
| 4 x LFR5301-10-2Z | Track Rollers |
| 0,1 mm | Repeat Accuracy ± |
| 160 mm | Feed (mm/rotation) |
| 40AT10 | Toothed Belt |
| 0,75 kg/m | Mass of Toothed Belt |
| 4.500 N | Permissible Toothed Belt operating force |
| 8,2 kg*cm ² | Mass moment of inertia of Gears and Gearboxes |

Rango de temperatura

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