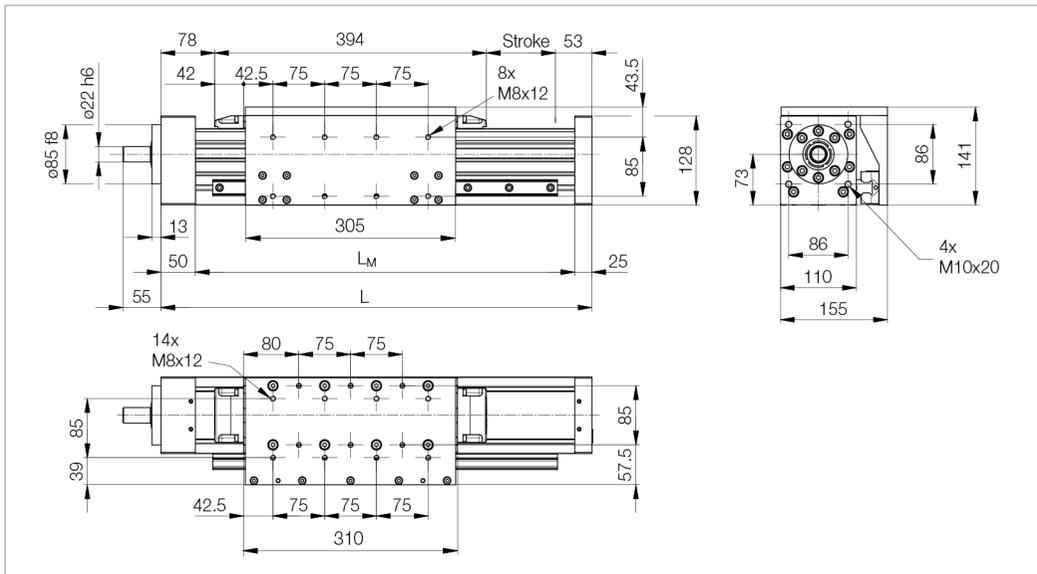


Linear module LM5...BR...L/R... with ball screw drive and lateral support rail left/right



| Nominal size | Dimensions | | | | |
|----------------|--------------|---------------------|------------------------|-------------------------|----------------------------------|
| Designation | L [mm] | L _M [mm] | Length ball screw [mm] | Length steel strip [mm] | Weight [kg] |
| LM5...BR...L/R | Stroke + 525 | L - 75 | L + 50 | L - 44 | 21.75 kg + 2.21 kg/100 mm stroke |

| LM Size | BSD d x p [mm] | Axial load rates | | Positioning accuracy [μm/mm] | Repeating accuracy [mm] | Acceleration a _{max} [m/s ²] | Axial play | | Idle torque [Nm] |
|------------|----------------|--------------------|----------------------|------------------------------|--|---|------------|-----------------|------------------|
| | | C ₀ [N] | C _{dyn} [N] | | | | Type | Axial play [mm] | |
| LM5...R... | 32 x 5 | 11538 | 8947 | 52/300 | < 0.03 ¹⁾ < 0.01 ¹⁾ | 10.0 | R | < 0.02 | 0.080 |
| | | | | | | | V | — | 0.200 |
| | 32 x 10 | 11538 | 8947 | 52/300 | < 0.03 ¹⁾ < 0.01 ¹⁾ | 10.0 | R | < 0.02 | 0.160 |
| | | | | | | | V | — | 0.400 |
| | 32 x 20 | 11538 | 8947 | 52/300 | < 0.03 ¹⁾ < 0.01 ¹⁾ | 10.0 | R | < 0.02 | 0.320 |
| | | | | | | | V | — | 0.800 |
| | 32 x 32 | 11538 | 8947 | 52/300 | < 0.03 ¹⁾ < 0.01 ¹⁾ | 10.0 | R | < 0.02 | 0.600 |
| | | | | | | | V | — | 1.200 |

d x p = screw diameter x thread pitch
¹⁾ backlash not factored in

R = reduced axial play
 V = preloaded

| LM Type | Movement speed | Moments of inertia | | Hub max. | Steel strip | Feed and friction force | Moved mass |
|---------------|------------------------------|------------------------------|-----------------------------------|-----------------------------------|-------------|-------------------------|---------------------|
| | Guide v _{max} [m/s] | Drive v _{max} [m/s] | I _y [cm ⁴] | I _z [cm ⁴] | [mm] | F _V [N] | m _b [kg] |
| LM5...R...L/R | 5.0 | ²⁾ | 434.6 | 595.3 | 3000 | ohne mit 60.00 70.00 | 8.820 |

²⁾ for ball screw drive, dependent on rotational speed characteristics, spindle length and relevant critical rotational speed.

| Linear modul Type | Maximum permissible load [kN] | | | | Maximum permissible torque [Nm] | | | | | |
|-------------------|-------------------------------|---------------------|-------------------|-------------------|---------------------------------|-----------------|-----------------|----------------|----------------|----------------|
| | static | | dynamic | | static | | dynamic | | | |
| | C _{y0,1,2} | C _{z0,1,2} | C _{y1,2} | C _{z1,2} | M _{x0} | M _{y0} | M _{z0} | M _x | M _y | M _z |
| LM4...R...L/R | 119.9 | 119.9 | 68.4 | 68.4 | 3030 | 3860 | 3860 | 1868 | 3432 | 3432 |

The determination of dynamic load ratings and torques is based on a 50,000 m stroke. If comparative values must be calculated for a 100,000 m stroke, the values for M_x, M_y, M_z and C must be divided by the factor 1.26.

With a view to serviceable life, loads of less than 20% of the dynamic load ratings have generally proved to be expedient.

CAD data

Enquiry (technical/quote)

Download data sheet (PDF)

Download catalogue (PDF)