

## Dynamic module DM3...ZS... with rack and pinion drive

| DM        | Rack and pinion drive  | Axial load rating   | Positioning accuracy  | Repeating accuracy   | Acceleration                            |
|-----------|------------------------|---------------------|-----------------------|----------------------|-----------------------------------------|
| Size      | Stroke/R<br>[mm]       | F<br>[N]            | [μm/mm]               | .../1000 mm<br>[mm]  | a <sub>max</sub><br>[m/s <sup>2</sup> ] |
| DM3.ZS... | 160.001<br>(50.93 x π) | ..... <sup>1)</sup> | 37/1000 <sup>2)</sup> | ± 0.02 <sup>2)</sup> | 50 <sup>3)</sup>                        |

1) Depends on speed and load

2) Without considering backlash and load

<sup>3)</sup> Maximum possible value; precise value for your specific application to be determined with our technical sales department

| DM        | Travel speed                   |                                | Area moment of inertia      |                             | Stroke max.                                                         | Feed and friction force | Mass/carriage transported (without gearbox) |
|-----------|--------------------------------|--------------------------------|-----------------------------|-----------------------------|---------------------------------------------------------------------|-------------------------|---------------------------------------------|
| Type      | Guide<br>$v_{\max}$<br>[m/min] | Drive<br>$v_{\max}$<br>[m/min] | $I_Y$<br>[cm <sup>4</sup> ] | $I_Z$<br>[cm <sup>4</sup> ] | [mm]                                                                | $F_v$<br>[N]            | $m_b$<br>[kg]                               |
| DM3.ZS... | 360 <sup>6)</sup>              | 4) <sup>4)</sup>               | 4352                        | 8260                        | 5450 (1 carriage) <sup>5)</sup><br>5000 (2 carriages) <sup>5)</sup> | 60 <sup>7)</sup>        | 16.0                                        |

4) Depends on load and gear ratio

<sup>5)</sup> Longer strokes on request

6) Higher speeds on request

<sup>7)</sup> Without idling-torque gearbox; this is dependent on the gear ratio

