

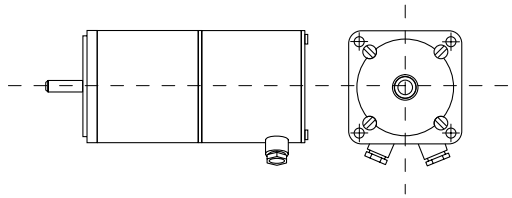
38 stepping motor – equipment

Stepping motor with holding brake

brake type: **permanent magnetical brake**
 voltage supply: **24VDC (-10% / +15%)**
 protection: **as motor protection – until IP68**
the brake is integrated in the motor housing

Holding brakes are used as emergency brakes in vertical axis (Z-axis). If the motor current is switched off or in case of a power line fault the motor shaft will be retarded.

The brake must be supplied by 24VDC to release the motor shaft.



The dimensions of the different motor types with brake can be found in the table of page 39.

| stepping motor with holding brake | | | | brake | | | | |
|-----------------------------------|-----------------|-----------|-------------------------|-------------------------|-------------------|----------------|--------|--|
| series | type | weight kg | rotor inertia | | holding torque Nm | switching time | | electr. power / consumption at 24 VDC W / mA |
| | | | total kgcm ² | brake kgcm ² | | ON ms | OFF ms | |
| 56 | SM 56.1.18...B | 0.8 | 0.15 | 0.02 | 1 | 7 | 15 | 10 / 417 |
| | SM 56.2.18...B | 1.2 | 0.27 | | | | | |
| | SM 56.3.18...B | 1.6 | 0.4 | | | | | |
| 87 | SM 87.1.18...B | 2.1 | 0.8 | 0.15 | 4.5 | 20 | 15 | 12 / 500 |
| | SM 87.2.18...B | 3 | 1.45 | | | | | |
| | SM 87.3.18...B | 4 | 2.1 | | | | | |
| | SM 87.4.18...B | 5 | 2.75 | | | | | |
| 88 | SM 88.1.18...B | 2.3 | 1.5 | 0.15 | 4.5 | 20 | 15 | 12 / 500 |
| | SM 88.2.18...B | 3.2 | 2.85 | | | | | |
| | SM 88.3.18...B | 4.2 | 4.2 | | | | | |
| | SM 88.4.18...B | 5.2 | 5.55 | | | | | |
| 107 | SM 107.1.18...B | 5.2 | 4.65 | 0.63 | 6 | 35 | 25 | 18 / 750 |
| | SM 107.2.18...B | 8.1 | 8.65 | | | | | |
| | SM 107.3.18...B | 10.7 | 12.65 | | | | | |
| | SM 107.4.18...B | 13.4 | 16.65 | | | | | |

Connections brake

