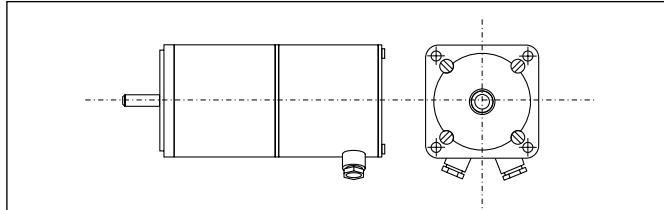


**Stepping motor with holding brake**

brake type: **permanent magnetical brake**  
 voltage supply: **24VDC (-10% / +15%)**  
 operating temperature: **max. 100°C**  
 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 36.

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 <sup>2</sup>	brake kgcm <sup>2</sup>		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**

