



Permanent Magnetic Holding Solenoid Series 01 320 / PEM

These permanent magnetic holding solenoids are electrically switchable holding systems. They consist of a permanent magnet and a DC-excited coil to neutralize the permanent magnetic field at the pole surfaces. The open magnetic circuit allows to hold ferromagnetic workpieces.

The connection is made by free braids resp. cables for 01 320010B and higher. The coil is vacuum potted, the magnet housing is zinc-coated and the holding surface is ground.

The mounting is achieved by central bores on the bottom.

Applications

These systems are used where in currentless state a load, a workpiece or machine parts must be held reliably and safely.

Lateral force loading equates to a displacement force F_v of approximately $1/4 F_H$.

Advantages

- Saving of energy by currentless holding
- High holding force
- No remanent magnetization after neutralization
- Safe holding even in the case of power failure

Technical Data

- Standard nominal voltage: 24 V DC
- Duty cycle: 25% ED / 100% ED
- Insulation class: E

Safety note

- The attractive or repulsive forces of the permanent magnet can cause skin-contusion through sudden collide, even with larger distances. Therefore always wear protective gloves and glasses.

Accessories

- Suitable anchor plates under request

Technical Data

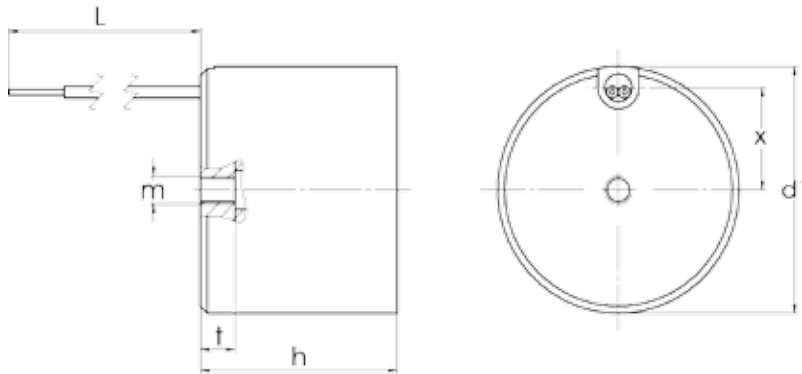
Designation	Diameter (d1) x height (h) [mm]	Max. holding force [N]	Nominal power [W]	Thickness counter plate [mm]	Thread (m) x depth (t) [mm]	Clearance (x) [mm]	Cable- / Lead length (L) [mm]	Weight [kg]
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Series 01 320...B; 24 V DC; 25% ED

01 32002B00	20 x 22	40	3.6	2.5	M4x4.5	10	200	0.04
01 32003B00	35 x 28	160	4.6	3	M4x5	15	200	0.15
01 32005B00	55 x 36	420	8.9	4.5	M5x5	23	200	0.50
01 32007B00	70 x 45	720	13.3	6	M8x5	30	200	0.90
01 32009B00	90 x 48	1,200	21.7	7.5	M8x7.5	39	200	1.50
01 32010B00	105 x 56	1,600	28	9	M10x10	47	300	2.70
01 32015B00	150 x 63	3,500	40.5	12.5	M16x16	68	300	6.40

Series 01 32003A1; 24 V DC; 100% ED

01 32003A1	32.2 x 40	260	6.2	14	M4x4.7	13	200	0.02
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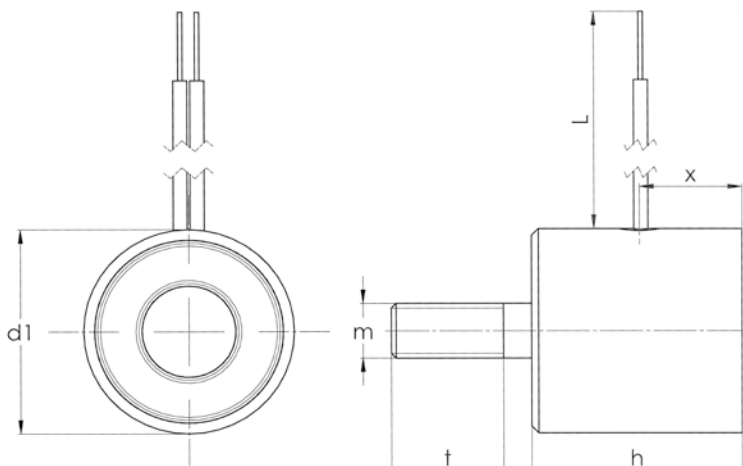


Special voltage configurations
are available on request
+34 977 206937 or
binder@binder-es.com

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Series PEM; 24V DC; 100% ED / 15% ED

PEM1213A	12 x 13	8	1.0	2.0	M4x10	6.5	130	0.01
PEM1515A	15 x 15	30	1.5	2.0	M4x10	7.5	130	0.02
PEM2020A	20 x 20	60	2.0	2.5	M5x12	10	130	0.04
PEM2525A (15% ED)	25 x 25	140	9.6	3.5	M6x15	14	130	0.08

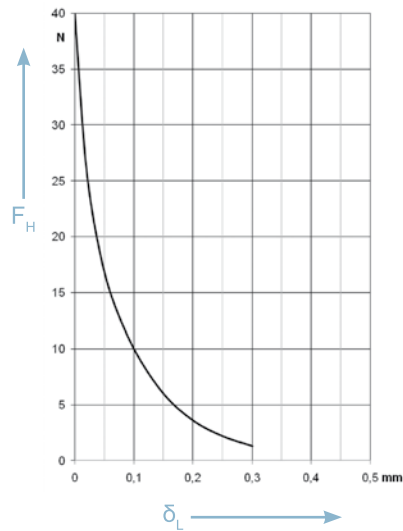


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Holding Force Curves

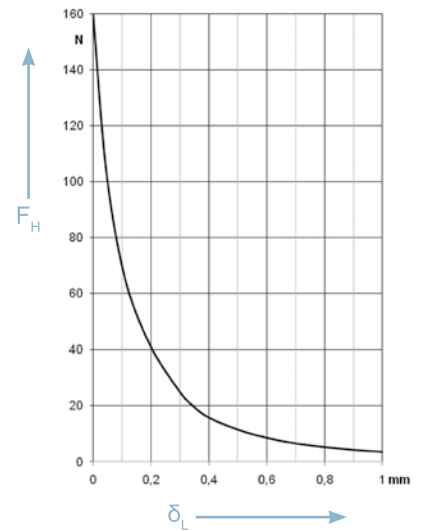
Holding forces F_H depending on air gap δ_L between holding solenoid and workpiece and on the indicated layer thickness of the counter plate. The values are valid for workpieces of material S235JR with 100% coverage of the holding surface and warmed up condition.

01 32002B00



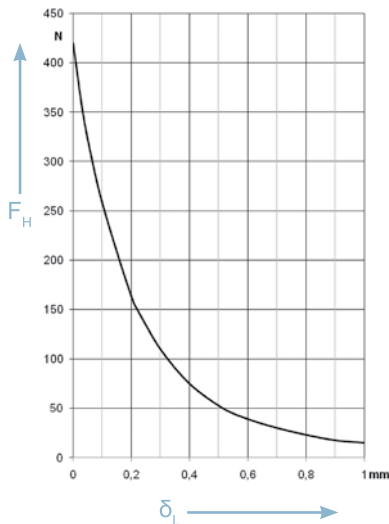
Layer thickness $\hat{=}$ Material thickness: 2.5 mm

01 32003B00



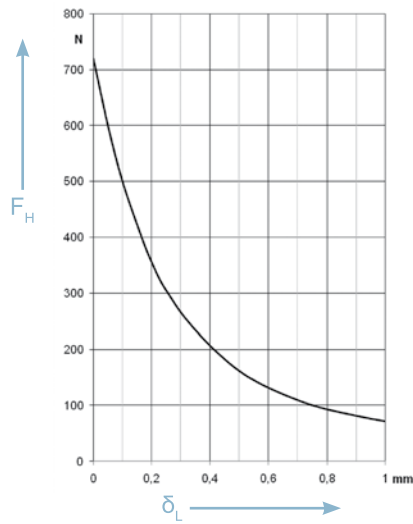
Layer thickness $\hat{=}$ Material thickness: 3 mm

01 32005B00



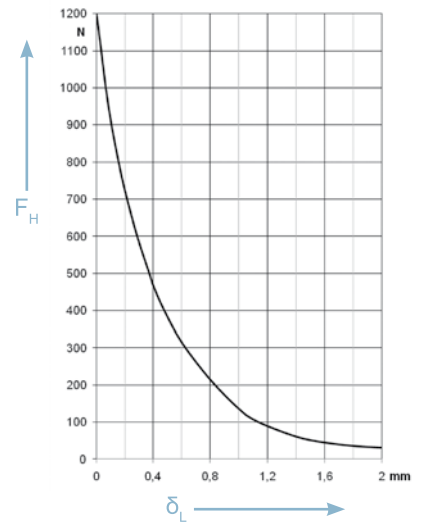
Layer thickness $\hat{=}$ Material thickness: 4.5 mm

01 32007B00



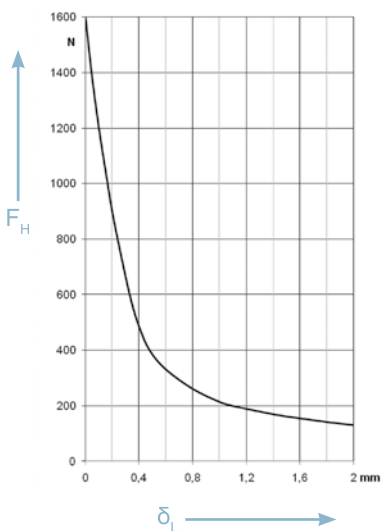
Layer thickness $\hat{=}$ Material thickness: 6 mm

01 32009B00



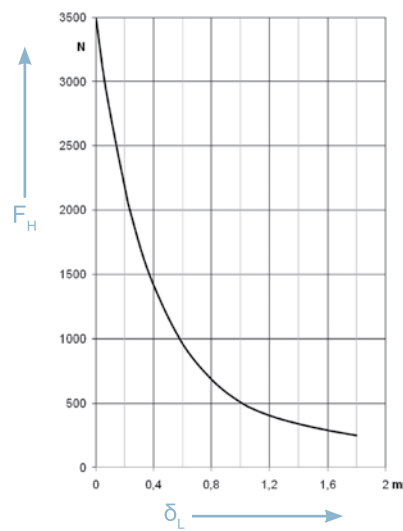
Layer thickness $\hat{=}$ Material thickness: 5 mm

01 32010B00



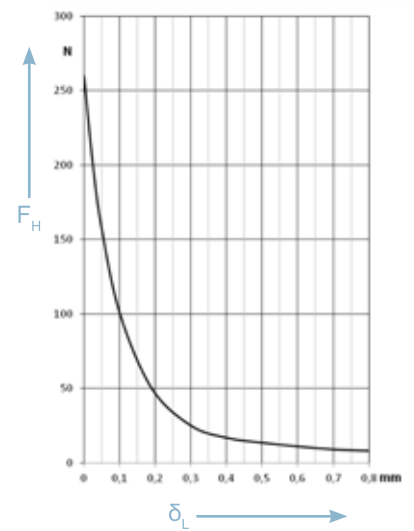
Layer thickness $\hat{=}$ Material thickness: 9 mm

01 32015B00



Layer thickness $\hat{=}$ Material thickness: 7.5 mm

01 32003A1



Layer thickness $\hat{=}$ Material thickness: 9 mm