



## Electromagnetic Holding Solenoid Series GTB

This series includes a complete product range of round solenoids.

As connections there are free braids resp. cables for GT100B and higher. With sizes GT025B to GT080B a terminal is also possible.

The coil is potted with resin (protection class IP65) resp. unpotted (protection class IP54). The complete magnet housing including holding surface is zinc-coated. The mounting is achieved by a central thread at the rear side of the housing.

### Application

These solenoid systems are preferably used in fixture construction and in the industrial areas automation, transportation and handling.

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

### Advantages

- Maximum Holding force with low air gaps
- Compact design
- Manifold connection options
- Optimised copper and iron ratio

#### Technical Data

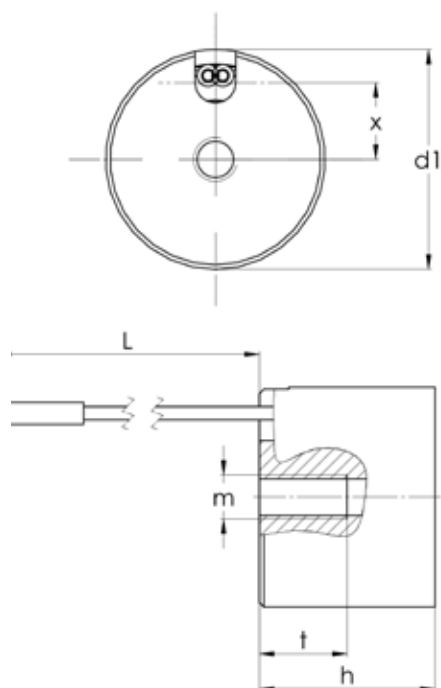
- Standard nominal voltage: 24 V DC
- Duty cycle: 100% ED
- Insulation class: E

#### Accessories

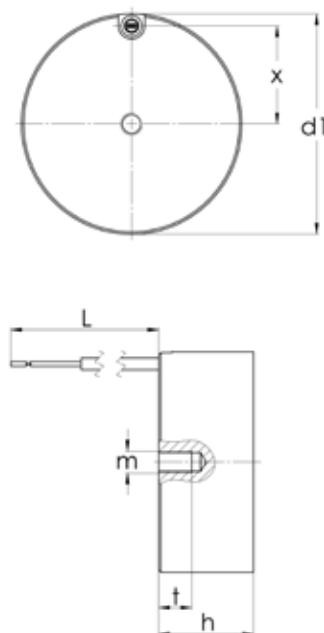
- Suitable anchor plates on request

## Cross sections

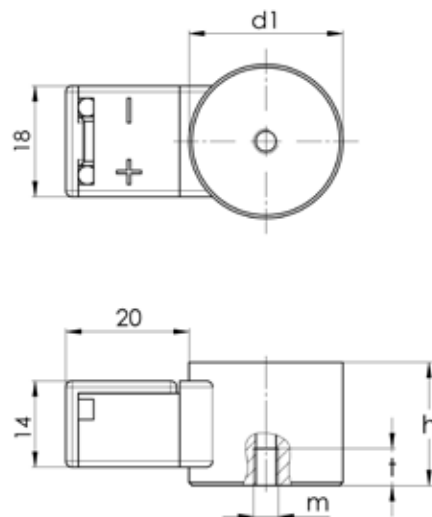
### Type GT015B bis GT090B with free braids



### Type GT100B to GT250B with cable



### Type GT025B to GT080B with terminal



## 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]
GT015B011	15 x 12	36	2	2	M3x6	5.5	200	0.02
GT018B001	18 x 11	45	1.4	2	M3x5	6.5	200	0.02
GT025B001	25 x 20	140	3.1	3	M4x6	10	200	0.06
GT032B001	32 x 22	230	3.5	3.6	M4x6	13.5	200	0.1
GT040B001	40 x 25.5	475	5.1	4.5	M5x8	17	200	0.2
GT050B001	50 x 27	750	6.2	6	M5x8	21.5	200	0.3
GT063B001	63 x 30	1,000	7.9	7	M8x12	27	200	0.6
GT070B001	70 x 35	1,500	12	8	M8x12	29	200	0.9
GT080B001	80 x 38	1,800	14.9	10	M8x12	34	200	1.2
GT090B001	90 x 42	2,400	14	10	M8x12	37	200	1.7
GT100B001	100 x 43	3,400	20.6	10.5	M10x15	45	300	2
GT150B001	150 x 56	9,000	37	17	M16x24	57	300	6
GT180B001	180 x 63	15,000	49	21	M24x36	71	300	10
GT250B001	250 x 80	30,000	90	29	M24x36	98	300	26

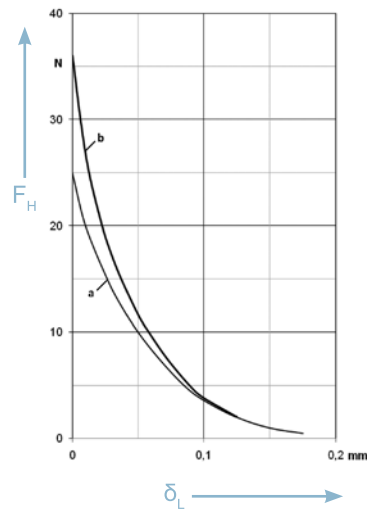


Special voltage configurations are available on request  
+34 977 206937 or binder@binder-es.com

## Holding Force Curves

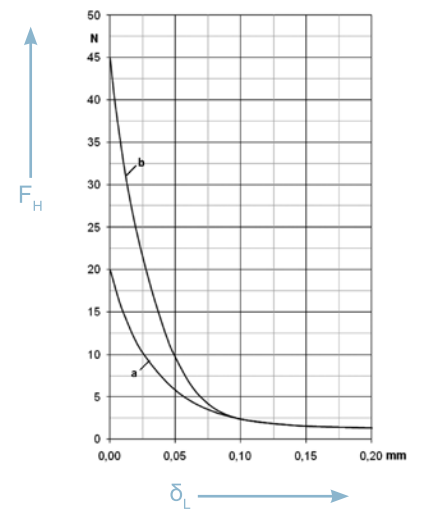
Holding forces  $F_H$  depending on air gap  $\delta_L$  between holding solenoid and workpiece and on the indicated layer thickness of the counter plate. The values are valid for workpieces of material S235JR with 100% coverage of the holding surface, 90% of nominal voltage and warmed up condition (appr. 70 K excessive temperature without additional heat dissipation).

### GT015B011



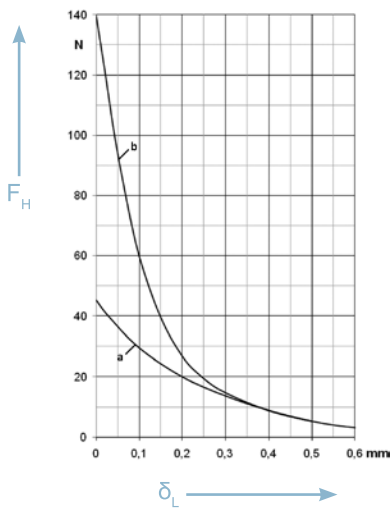
Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 2 mm

### GT018B001



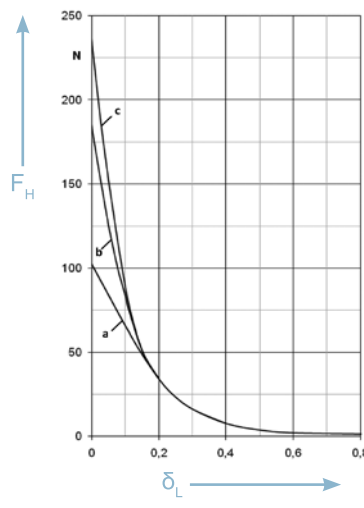
Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 3 mm

### GT025B001



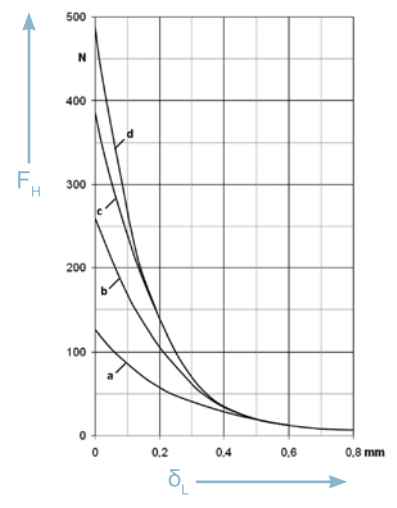
Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 2 mm

### GT032B001



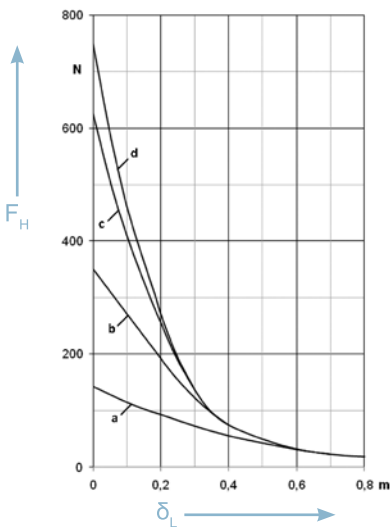
Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 2 mm  
c = 3.6 mm

### GT040B001



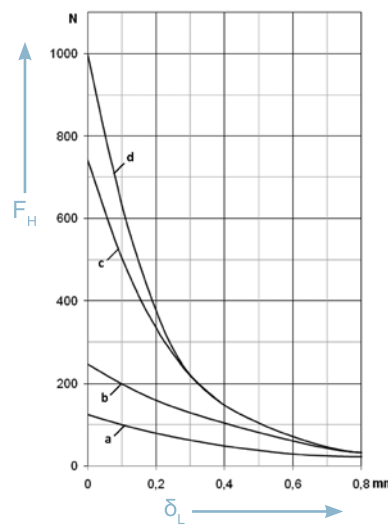
Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 2 mm  
c = 3 mm      d = 4.5 mm

### GT050B001



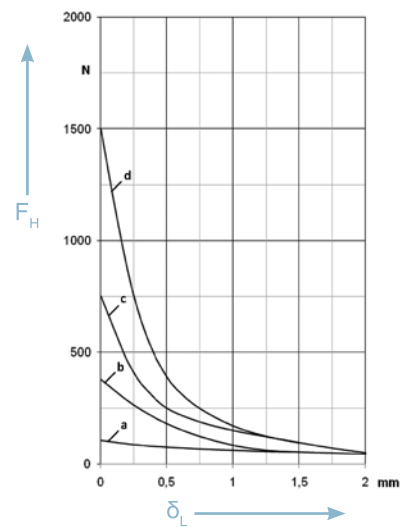
Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 2 mm  
c = 4 mm      d = 6 mm

### GT063B001



Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 2 mm  
c = 4 mm      d = 7 mm

### GT070B001

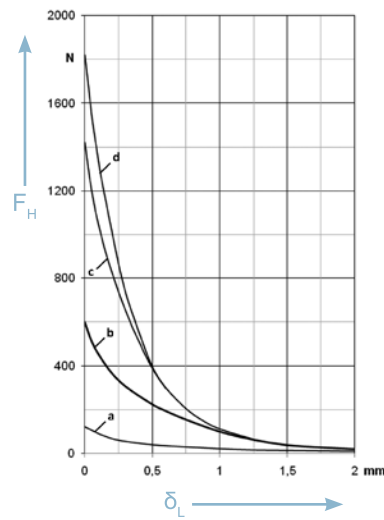


Layer thickness  $\triangleq$  Material thickness:  
a = 1 mm      b = 3 mm  
c = 5 mm      d = 8 mm

## Holding Force Curves

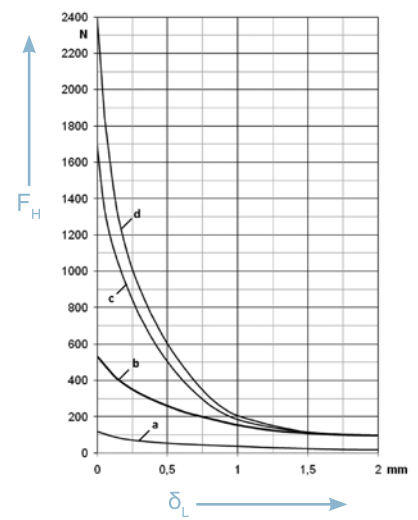
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### GT080B001



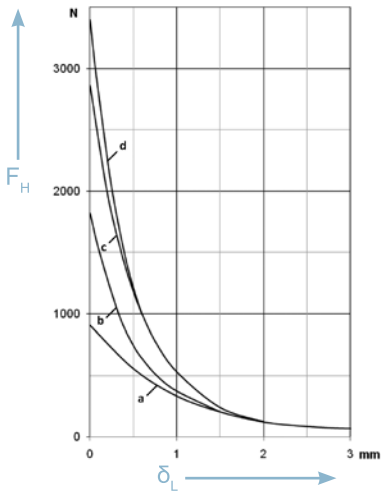
Layer thickness  $\triangleq$  Material thickness:  
 a = 1 mm      b = 3 mm  
 c = 6 mm      d = 10 mm

### GT090B001



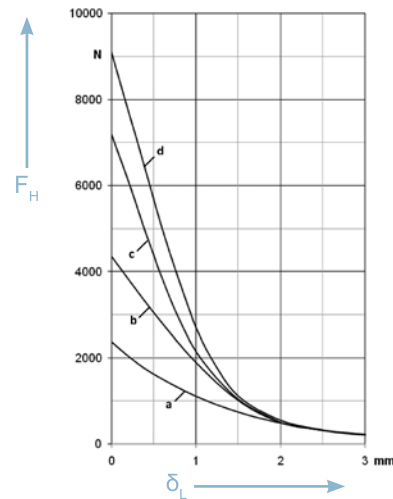
Layer thickness  $\triangleq$  Material thickness:  
 a = 1 mm      b = 3 mm  
 c = 6 mm      d = 10 mm

### GT100B001



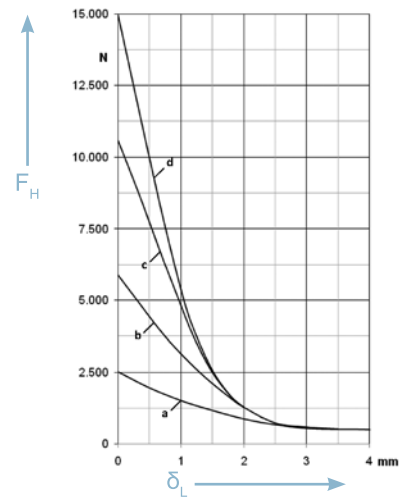
Layer thickness  $\triangleq$  Material thickness:  
 a = 3.5 mm      b = 5.5 mm  
 c = 7.5 mm      d = 10.5 mm

### GT150B001



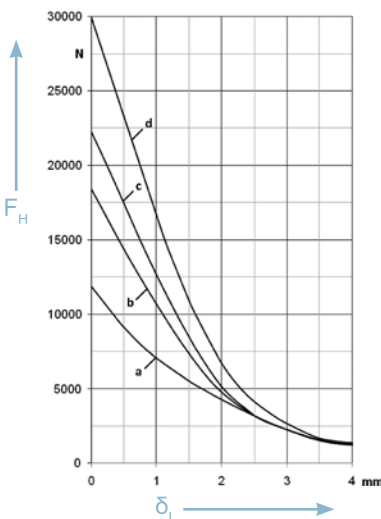
Layer thickness  $\triangleq$  Material thickness:  
 a = 5 mm      b = 8 mm  
 c = 12 mm      d = 17 mm

### GT180B001



Layer thickness  $\triangleq$  Material thickness:  
 a = 5 mm      b = 9 mm  
 c = 13 mm      d = 21 mm

### GT250B001



Layer thickness  $\triangleq$  Material thickness:  
 a = 13 mm      b = 18 mm  
 c = 21 mm      d = 29 mm