MAGNET-SCHULTZ SOLENOIDS AND SOLUTIONS



Miniature DC Holding Magnet

20mm diameter Holding force 70 N Rectifier for AC supply

Type GMH x020x00D01

(supplement)

Product group

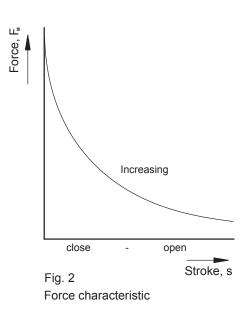
- According to VDE 0580 and ISO 9001 (conform with article 10 of direction 73/23/EEC - according to CENELEC memorandum no. 3 of March 1987
- Energise to hold
- Miniature 20mm diameter
- High holding force 70 N
- Robust construction, zinc plated and passivated
- Rear face fixing
- Increasing force characteristic (Fig.2)
- Coil with insulation to class B, for voltages up to 110 volts (external rectifer for AC supply)
- Protection classification DIN VDE 0470/E 60529
 Flying leads IP 00
- Larger electromagnets 25 to 100 mm diameter (forces up to 3370 N) available, see list G MH
- Electropermanent (energise to release) magnets available, see list G MP

Application

Locking of access flaps and hatches Robotic handling systems Machine tools Short stroke/high force operations Textile machinery



Type GMH X020X00D01 Fig. 1



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QUALITY SINCE 1912

Performance and dimensional data

| GMH X020X00D01 | | |
|---|------|-------|
| Duty rating (ED) | % | 100 |
| Holding force (F _M) ¹⁾ | (N) | 70 |
| Power consumption (P ₂₀) | (W) | 1.9 |
| Ambient temperature (11) | (°C) | 35 |
| Weight | (kg) | 0.025 |
| Armature thickness | (mm) | 2.5 |
| Armature diameter | (mm) | 20 |

PERFORMANCE TABLE

Terms are explained in Technical Bulletin G XX & VDE 0580/35

TABLE BASIS

24V/100% (S1) dutyHeat Insulated baseAmbient temperature 35°CFree air mountedLifting vertically. Tolerance +/- 10% (inherent and manufacture)

SUPPLY VOLTAGE

Standard DC: 24V, Separate external rectifier can be provided for AC supply

DUTY RATING

% of energised time per operation cycle: $\frac{t (on)}{t (on) + t (off)} \times 100$

Max energized time/cycle: 100% (S1) continuous: 40% (S3) - 120 secs, 25% (S3) - 75secs, 15% (S3) - 15secs, (Force figures available for respective duty ratings)

PROTECTION

The body and pole faces of the magnet are passivated zinc plated for corrosion protection

NOTES

1. That force produced when using plain pole faces and plain steel armature of material (ST37) (9S Mn 28) with thickness as in table and a surface finish of 15μ m

2. The forces will be reduced if other material specification, thickness and surfaces are used, or if the armature fails to make contact over the full diameter of the magnet face.

MOUNTING

Single tapped hole in rear face. Any attitude may be used.

MAGNETIC FORCE (F_M)

is listed in HOT condition at 90% of rated voltage (increase approx 20% at rated voltage). Adjust for armature weight

POWER CONSUMPTION (P₂₀)

is listed with 25°C coil temperature (decrease/HOT). The temperature rise is limited to 60°C to provide a low surface contact temperature. the magnetic forces can therefore be increased with special coil winding for continuous or short duty

