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711-0595 711-0601

SOLENOID COMPANY LTD

ELECTROMAGNETIC EQUIPMENT



D.C. SMALL SHOTBOLT LOCK ASSEMBLY

Spring to lock - Energise to unlock
Stroke 10 mm
(Rectifier for A.C. supply)

1

Product group

April 1996

Type **G H U Z** 040 M20 D01
(supplement)

- 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).
- Spring to lock, energise to unlock
- Integral spring and high endurance, maintenance free bearings
- Robust cylindrical construction
- Threaded neck mounting
- Suitable for mounting and operation in any attitude
- Increasing force characteristic
- For direct-acting solenoid equivalent see list G TC A
- Coil with insulation to class F, for voltages up to 250 volts.
- Protection classification - DIN VDE 0470/EN 60529
Flying leads - IP 00
- Shotbolt, ratchet and holding magnet locks available in other product groups
- Application:
Machine tool guards, security doors and gates
indexing and general interlocking applications
in commerce and industry

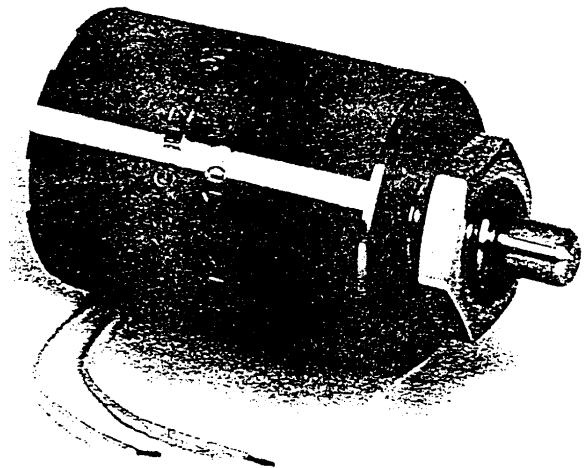


Fig.1
Type G H U Z 040 M20 D01



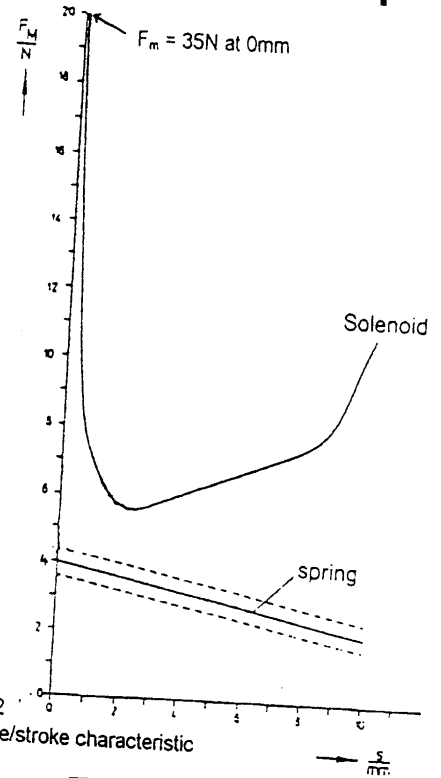
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Product group **1**

Performance and dimensions for type G HU Z 040 M20 D01

G HU Z 040 M20 D01		
Duty rating (ED)	(%)	100
Stroke (s)	(mm)	10
Work rating (A _n)	(Ncm)	10.8
Power consumption (P ₂₀)	(W)	12.9
Ambient temperature (δ ₁₁)	(°C)	35
Frequency of operating (S _h max.)	(1/h)	25000
Closing time (t ₁)	(ms)	85
Opening time (t ₂)	(ms)	50
Armature weight (m _a)	(kg)	0.078
Solenoid weight (m _M)	(kg)	0.46
Radial bolt load (max.) allowable (approx.)	static	(N) 1500
	stroke	(N) 8



PERFORMANCE TABLE terms are explained in Technical Bulletin G XX & VDE 0580

TABLE BASIS 24V D.C. - 100% duty. Ambient temp. 35°C. Heat insulated, free air, horizontal/pull mounted. Tolerance ± 10% (inherent & manufacture)

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 a 20° C coil temperature (decrease/Hot).

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

Max. energised time/cycle: 100% continuous: 40%-120 secs., 25%-75 secs., 15%-45 secs, 5%-15 secs.

OPERATING TIMES (t₁/t₂ are listed per cycle of operating in HOT condition at rated voltage with weight load of 705 of force (F_m) at and over rated stroke.

LOCK-BOLT Radial load to the bolt should be kept within the max. allowable (see table above) so ensuring maximum reliability and operational life with a minimum of maintenance. Electronic control is available to give increased stroke force with continuous duty hold. Over-voltage of 2 : 1 will give approx. 20N at initiation of stroke.

MOUNTING Threaded neck mounting with lock nut provides high rigidity. Shotbolts of other sizes and mounting arrangements including ratchet and holding magnet locks are available in product groups: G HU Z 032/040/050/110, G FC, G TC A, G TC E, G DA, G DC, G MH, G MP.

SUPPLY VOLTAGE The standard supply voltages are: 12 V, 24 V, 97 V, 195 V, 205 V, 214 V D.C. (for externally rectified 110 V, 220 V, 230 V, 240 V 50/60 Hz A.C.)

PROTECTION Passivated zinc body.

Conversion factors
 1 N = 0,102 kp ≈ 0,1 kg
 1 kg = 2,2 lb
 1 mm = 0,039 in
 1 Ncm = 0,086 in lb

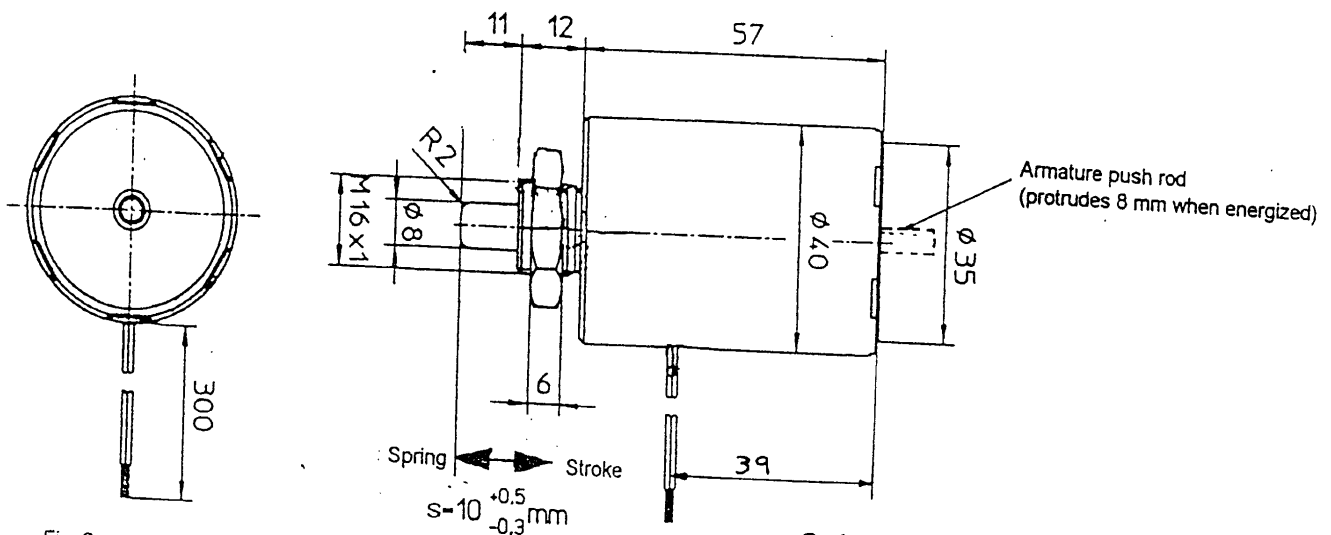


Fig. 3
Type G HU Z 040 M20 D01

Order code

Type **G HU Z 040 M20 D01**
 Voltage **24V D.C.**
 Duty rating (ED%) **100%**