MAGNET-SCHULTZ
SOLENOIDS AND SOLUTIONS

QUALITY SINCE 1912

DC Small Shotbolt Lock Assembly

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

1

Product group

G HU Z 040 M20 D03

Fig. 1
G HU Z 040 M20 D03

Function

- force characteristic (fig.2)
- spring to lock, energise to lock
- integral return spring

Construction

- robust cylindrical construction
- coil insulation class F up to 250 volts
- thread nose mounting
- suitable for mounting in any attitude
- high performance maintenance-free bearings
- protection rating IP54, IP65 and ATEX versions available

Applications

- machine tools access controls shutters interlocks
- guards interlocking applications in commerce and industry and gates indexing

Standards

- designed and tested to VDE 0580
- manufactured to ISO 9001

Magnet Schultz Limited • 3-4 Capital Park • Old Woking • Surrey • GU22 9LD • UK
☏+44(0)1483 794700 • 🖷+44(0)1483 757298 • sales@magnetschultz.co.uk • www.magnetschultz.co.uk

Sales@magnetschultz.co.uk
+44(0)1483 794700

Performance and dimensions for type G HU Z 040 M20 D03

G HU Z 040 M20 D03		
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})	(^{0}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

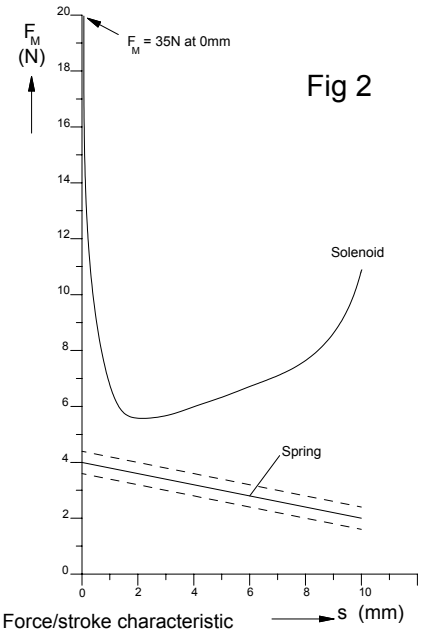

Fig 2
Force/stroke characteristic

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

TABLE BASIS
24V DC 100% duty. Ambient temperature 35^{0}C
Heat insulated,free air. horizontal/pull mounted
Tolerance +/- 10% (inherent and manufacture)

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

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

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

POWER CONSUMPTION (P_{20})
Listed wth a 20^{0}C coil temperature (decrease/HOT)

MAGNETIC FORCE (F_M)
Listed in HOT condition at 90% of rated voltage (increase approx 20% at rated voltage). Adjust for armature weight

OPERATING TIMES
(t_1/t_2) are listed per cycle of operating in HOT condition at rated voltage with weight load of 70% of force (F_M) at and over rated stroke

SUPPLY VOLTAGE
The standard supply voltages are: 12V and 24V, DC other voltages upon request

PROTECTION
Passivated zinc body

EXAMPLE ORDER CODE

Type	G HU Z 040 M20 D03
Voltage	24V D.c.
Duty rating (ED%)	100%

Fig.3
G HU Z 040 M20 D03