



® Trademark
MAGNET-SCHULTZ

EMESSEM SOLENOID COMPANY LTD.

SPECIALISTS IN ELECTROMAGNETIC EQUIPMENT

3 & 4 CAPITAL PARK

OLD WOKING

Telephone 01483 794700 main

SURREY GU22 9LD

01483 794701 sales

E-mail: sales@emessem-solenoid.co.uk

HIGH STREET

ENGLAND

01483 757298 fax

Product
Group

GFC

with
spring-return
attachments

D.C. Light-duty Solenoid Type G FC with Spring Return, Shotbolt Lock and Fork Attachments

Rectifier for A.C. supplies (VDE 0580)

For each of six sizes of pull-and-push
Type G FC:

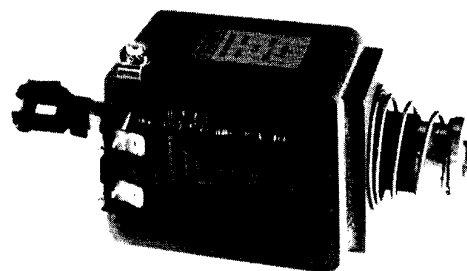
spring-return assembly (R) with optional
shotbolt attachment — spring to lock (D)
energise to lock (C)

fork attachment — energise to push (B)
energise to pull (A)

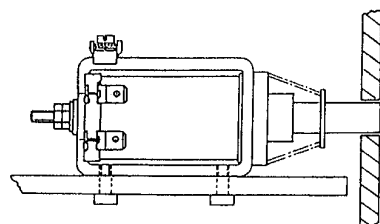
- Conical stainless steel spring
- High endurance, maintenance free teflon armature and push-rod bearings
- Coil with Class F insulation for voltages up to 250V D.C. — external rectifier for A.C. supplies
- Shotbolt, ratchet and holding-magnet locks listed in Product Groups:
 - G TC A/W and G TU W — Types 57, 58, 59
 - G TC E — flameproof type
 - G FC (incl. right-angle types 60, 61)
 - G HU Z; G DA and G DC; G MH and G MP
- General purpose, light duty solenoids for service in:

machine tools
automation
textile machines
guard door locks

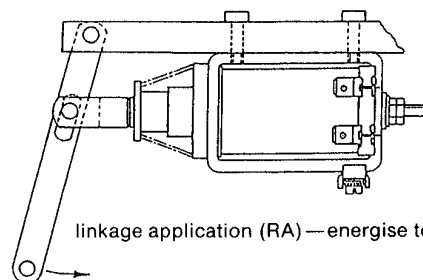
office machines
remote control
packaging and coin equipment



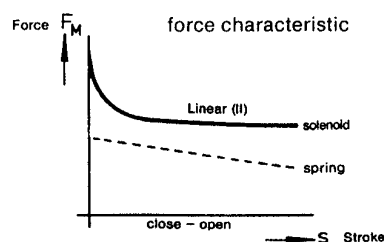
solenoid Type G FC X 040 X 00 B12 RB —
with spring return and push fork



shotbolt application (RD) — spring to lock



linkage application (RA) — energise to pull





Performance and dimension tables for type G FC with spring return

Duty Rating continuous (100%)	G FC	025	030	035	040	050	060						
Power consumption (W)		6.3	7	10	14	20	26						
Stroke (rated) (mm)		0	4 (8)	0	5 (9)	0	7 (11)	0	8 (12)	0	10 (15)	0	12 (20)
Magnetic Force F_M (without spring) (N)		7	3	11	4	17	8	41	12	71	21	90	33
Spring Force (N)		3	2	4	2	6	4	12	5	18	9	27	16

Type	G FC							
Size	025	030	035	040	050	060		
Dim.	Dimension (mm)							
solenoid	a*	2	2.5	2	4	4	4	
	b ₁	25	30	35	40	50	60	
	d ₃	M3	M3	M3	M4	M5	M6	
	d ₄	M3	M4	M4	M5	M5	M6	
	d ₅ †	M3	M3	M3	M4	M4	M5	
	e ₁	20	25	30	40	45	50	
	e ₂	12	14	18	18	28	32	
	e ₃	7.5	7.5	10	10	12.5	15	
	h ₂	39	45	55	65	76	88	
	l ₁	12	12	12	16	18	22	
	l ₂	13	16	18	20	30	33	
t ₁	20	24	30	32	41	50		
shotbolt (C,D)	d ₁	8	8	8	10	10	12	
	d ₂	8	8	10	10	10	12	
	l ₅	22	22	22	24	26	33	
	l ₆	25	28	31	31	41	48	
	l ₇	15	15	15	15	15	20	
	fork end (A,B)	b ₂	4	4	4	5	5	6
		b ₃	4	4	4	4	5	6
d ₆		4	4	4	5	5	6	
d ₇		4	4	4	4	5	6	
l ₃		29	30	33	36	47	53	
l ₄		23	23	23	25	31.5	37	

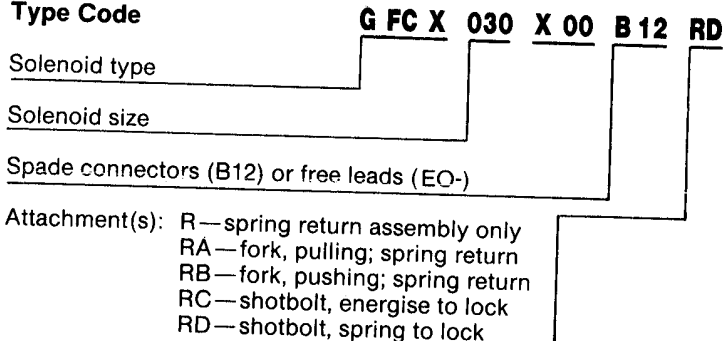
Performance table

The Performance Table terms are fully defined and explained in our Technical Bulletin G XX and in VDE 0580/35. The Magnetic Force (F_M) listed is for the *hot* condition at 90% of the rated voltage, and will increase by approximately 20% at the rated voltage. The Magnetic Force does not include the Spring Force, which is listed separately; the spring forces given are those for continuous (100%) duty. By adjusting the lock-nuts, the stroke can be increased: marginally for attachments RB and RC, and up to the maximum shown in brackets for assemblies RA and RD — though with a considerable reduction of the Magnetic Force.

Supply voltages

The standard supply voltages are: 24 V, 97 V, 195 V, 215 V (for rectified 110 V, 220 V, 240 V A.C.)

Type Code



*Sizes 050 060—4 fixingholes *Do not use overlength screws

Thread locking compounds are not used in assembly

Specify also: Voltage (V)

Conversion factors
 1 N = 0,102kp 0.1kg
 1 kg = 2.2lb
 1mm = 0,039 in.
 1 Ncm = 0.086 in. lb.

