

710-7614

emessem
SOLENOID COMPANY LTD
 ELECTROMAGNETIC EQUIPMENT



D.C. Open Frame Solenoid

Encapsulated coil, plated iron parts

Rectifier for A.C. supply

Stroke up to 9mm

Work Rating up to 9.00 Ncm

1

Product group

Type **GFC** X 030 X00 E13
 (supplement)

- According to VDE 0580 and ISO 9001 (conform with article 10 of directions 73/23/EEC - according to CENELEC memorandum no.3 of March 1987).
- Increasing force characteristic (fig.2)
- Small dimensions
- Push and pull operation - Conical spring return available.
- High endurance, maintenance free P.T.F.E. armature and pushrod bearings.
- Coil with insulation to class F, for voltages up to 250 volts.
- Protection classification - DIN VDE 0470 / EN60529
 Flying leads - IP 00
- Encapsulated coil
- Plated iron parts, pole piece and armature.
- Suitable for mounting in any attitude.
- Available with linear shotbolt / spring return for energise to lock or unlock operation.
- Fork ends (list ZGA).

Increased protection open frame solenoid for arduous service on:

Machine tools	Office machines
Motor vehicles	Remote control
Automation	Medical equipment
Packaging and coin equipment	
Textile machinery	

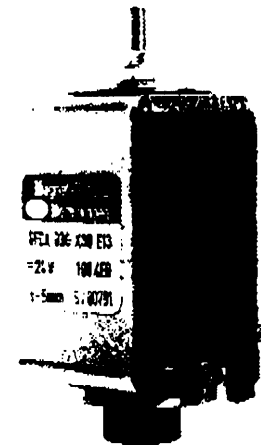


Fig. 1
 GFCX 030 X00 E13

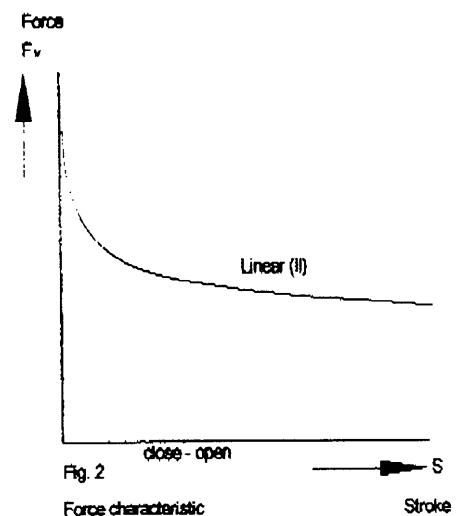


Fig. 2

Force characteristic

Stroke



London

Product group 1

Performance and dimensional data for type GFCX 030 X00 E13

Duty rating ED	(%)	100	40	25	15	5
Stroke s rated stroke (max stk.) ¹⁾	(mm)	5 (9 max.)				
Holding force	(N)	11	17	20	25	32
Force rating F_M at rated stroke	(N)	4.3	8.1	10.2	14.2	21.2
Force rating F_M at max. stroke	(N)	0.8	1.8	2.6	4.5	8.8
Work rating A_N	(Ncm)	2.2	3.9	4.8	8.3	9.0
Power Consumption P_{20}	(W)	7	15	20	36	83
Closing time t_1	(ms)	70	70	70	70	70
Opening time t_2	(ms)	50	45	40	35	32
Armature weight m_A	(kg)	0.03				
Solenoid weight m_s	(kg)	0.16				

¹ 0mm is completion of energised stroke.

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

24V/5 - 100% duty. Ambient temperature 35°C.
Heat insulated base. Free air mounted.
Horizontal working. Pull arrangement.
Tolerance +/- 10% (inherent and manufacture).

¹ Listed in HOT condition at 90% of rated voltage (increase approx. 20% at rated voltage).
Adjust for armature weight.

is listed with a 20°C coil temperature (decrease / HOT).

$$\% \text{ of energised time per operation cycle: } \frac{t_{on}}{t_{on} + t_{off}} \times 100$$

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

The operating life of high wattage coils should be confirmed by test in the application.

are listed per cycle of operation in HOT condition at rated voltage with weight load of 70% of force (F_w) at and over rated stroke.

Standard DC: 24V, 97V, 205V (for A.C. 50 / 60Hz rectified, 110V, 230V) (max. 250V).
Separate external rectifier can be provided for A.C. supply.

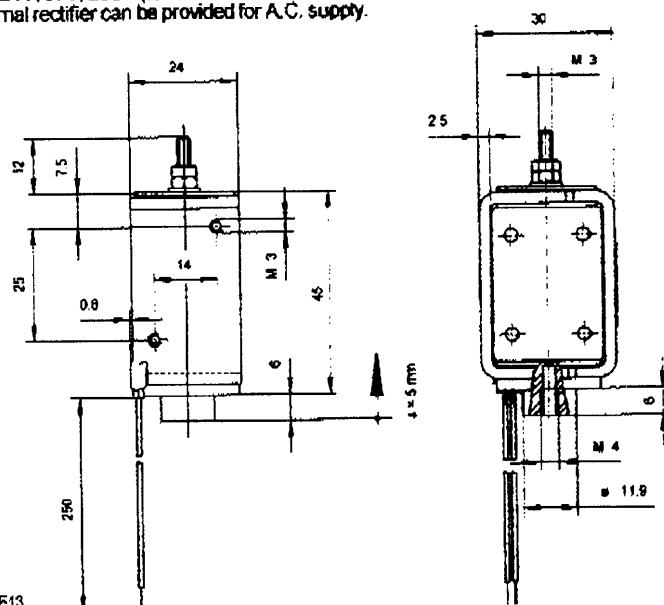


Fig. 3
GFC X 030 X00 E13

Dimensions without guarantee - modifications reserved

Subject to our Standard Conditions

$1 \text{ N} = 0.102 \text{ kp} \approx 0.1 \text{ kp}$
 $1 \text{ Ncm} = 0.102 \text{ kp}\cdot\text{cm} \approx 0.1 \text{ kp}\cdot\text{cm}$
 $1 \text{ kp} = 1 \text{ kg} = 2.2 \text{ lbs}$
 $1 \text{ mm} = 0.039 \text{ in.}$
 $1 \text{ cm}\cdot\text{kp} = 0.856 \text{ in.}\cdot\text{lbs}$

Type	GFCX 030 X00 E13
Voltage	24v D.C.
Duty rating (ED%)	100%

0999