

DC Open Frame Solenoid

Rectifier for AC supply
Stroke up to 9mm
Work Rating up to 9.00 Ncm

1

Product group

Type GFC x 030 X00 E13

- 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
- Protection classification - DIN VDE0470/EN60529
Flying leads - IP00
- 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

Motor vehicles

Automation

Packaging and coin equipment

Office Machines

Remote control

Medical equipment

Textile Machinery



Fig. 1
Type GFCX 030 X00 E13

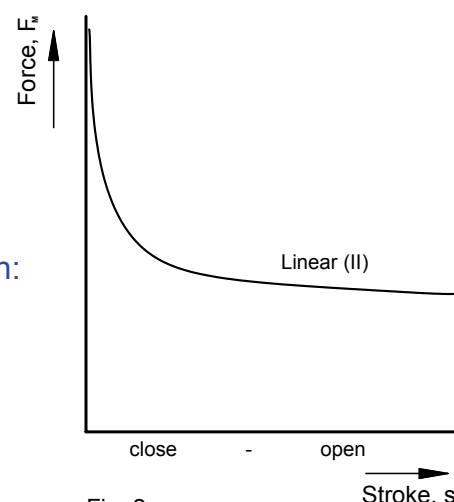


Fig. 2
Force characteristic

Performance and dimensional data for type GFCX 030 X00 E13

Duty Rating ED %		100% S1	40% S3	25% S3	15% S3	5% S3
Stroke s; rated stroke (max stroke) ¹⁾	(mm)	5 (9 max)				
Holding force	(N)	11	17	20	25	32
Magnetic force F _M at rated stroke	(N)	4.3	8.3	9.9	12.7	17.5
Magnet force F _M at max - stroke	(N)	0.8	1.8	2.6	4.5	
Work rating A _N	(Ncm)	2.15	4.15	4.95	6.35	8.75
Rated Power P ₂₀	(W)	7	15	20	36	83
Frequency of operation S _h	(1/h)	22000	15000	9000	5500	1900
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 _M	(kg)	0.16				

1) 0mm is completion of energised

Table Basis

The terms used are defined in Technical Explanation GXX

Magnetic forces F_M stated are based on

- 24v DC supply
- 35°C ambient temperature
- working in the Hot condition
- armature in horizontal attitude
- 90% of the rated voltage
- heat-insulated mounting

$$\text{Duty Rating ED, \% of energised time/cycle: } \frac{t_{\text{on}}}{t_{\text{on}} + t_{\text{off}}} \times 100$$

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

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

Rated Power P_{20} stated with coil at 20°C

Operating times t_1 / t_2 stated are based on

- Hot condition
- rated voltage
- weight load of 70% of F_M at and over rated stroke

Values given may vary by up to 10% owing to inherent and manufacturing tolerances

Supply Voltage

Standard voltages available : 24v DC and 205v DC (for rectified 230v 50/60Hz)

Other voltages upon request

Order Code

Type	GFCX 030 X00 E13
Voltage	24v DC
Duty rating (ED%)	100%

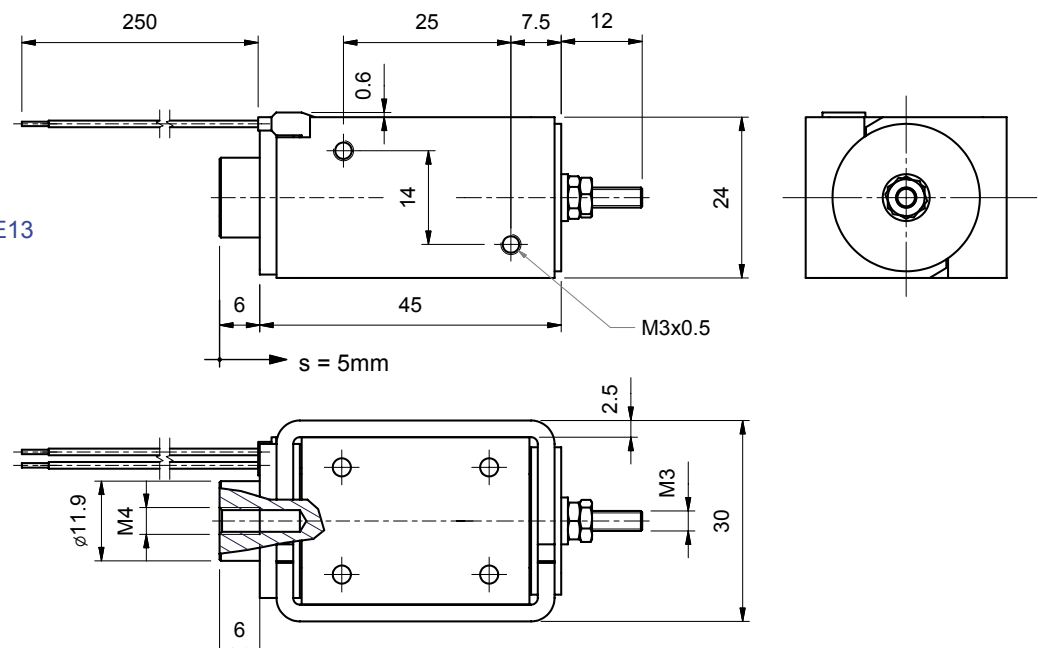


Fig 3.
GFCX 030 X00 E13