Type GM-4

PUSH, PULL, DOUBLE AND PROPORTIONAL
EXT. DIA. OF TUBE 16 MM

CHARACTERISTICS OF STANDARDIZED EXECUTIONS
- other executions are available on request

operation: pulling on/off-code GM-43.., pushing on/off-code GM-40..
on/off double, pulling and pushing-code GM-46.., proportional code GM-49..

standardised threads	external	internal	external	internal
(interface to the valve)	3/4"-16UNF	1/2"-20UNF	M20x1,5	M14x1
-other variants: on request	7/8"-14UNF	1/2"-20UNF	M22x1,5	M16x1
max dynamic pressure: up to 250 and 350 bar			7/8"-14UNF	M16x1

1- ON/OFF SOLENOIDS

stroke: on request — **push rod options** : see below

manual override: available for all versions

curves of force-stroke: diagrams refer to supply 0,66 Vnom. and stroke back from end stop.
Note: curves can be modified according to operating characteristics requested by the valve.

2-PROPORTIONAL SOLENOIDS - see also tab.3200

nominal stroke: 2 mm - extra strokes on request

air bleed-off valve or manual override: available on request - see table 3200

general notes: recommended supply is by closed-loop current with dither or PWM; this supply could produce undesired vibrations on regulation, that are easily damped by providing solenoid plunger with throttling orifices. Coils are plastic encapsulated, ED 100%; they are preferably designed with low resistance and inductance for the best dynamic performance of system.

curves of force-stroke: diagrams refer to different supply of current; curve1 is with stroke back from end, curve2 with stroke forward. Force-stroke curves can be modified on request

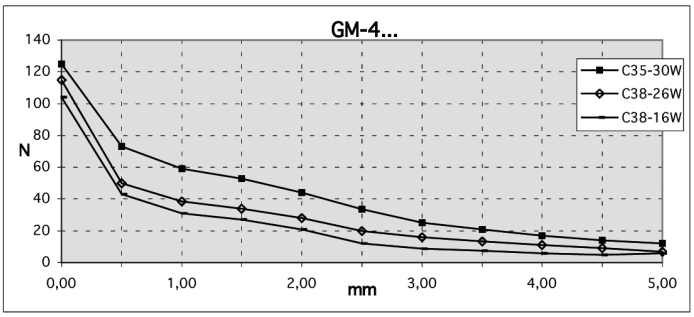
STANDARD COILS - ED 100% - see tables 5040 & 5045
- other voltages, electric powers, insulation class, electric terminals, ED : on request
all coils can be supplied with transient suppressor Z-diode moulded-in

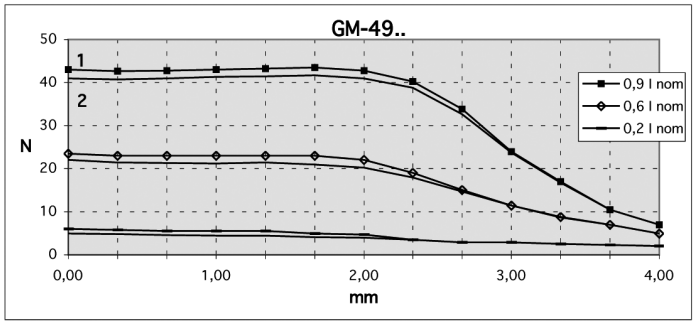
code of (1) coil	electric connection	supply voltage - V (+/- 10%) available for all executions	nominal power (3)	insulation class
C35A***	AMP-Junior			
C35D***	DIN43650	**DC:** 12; 24; 48 & 21,6; 43,2; 98; 196 (2)	30 W	H
C35C***	flying leads			
C35K***	Kostal			
C38A***	AMP-Junior			
C38D***	DIN43650	**DC:** 12; 24; 48 & 21,6; 43,2; 98; 196 (2)	16 or 26 W	F, H respect.
C38C***	flying leads	**AC 50 Hz and 60 Hz:** 24;110; 220	50 VA	H
C38K***	Kostal			

(1) *** code must be completed by voltage supply and requested power
(2) voltages normally provided for AC supply at 24, 48, 110, 220 with rectifier
(3) holding value at cold coil; inrush power for AC coils is about 3,5 time the holding value

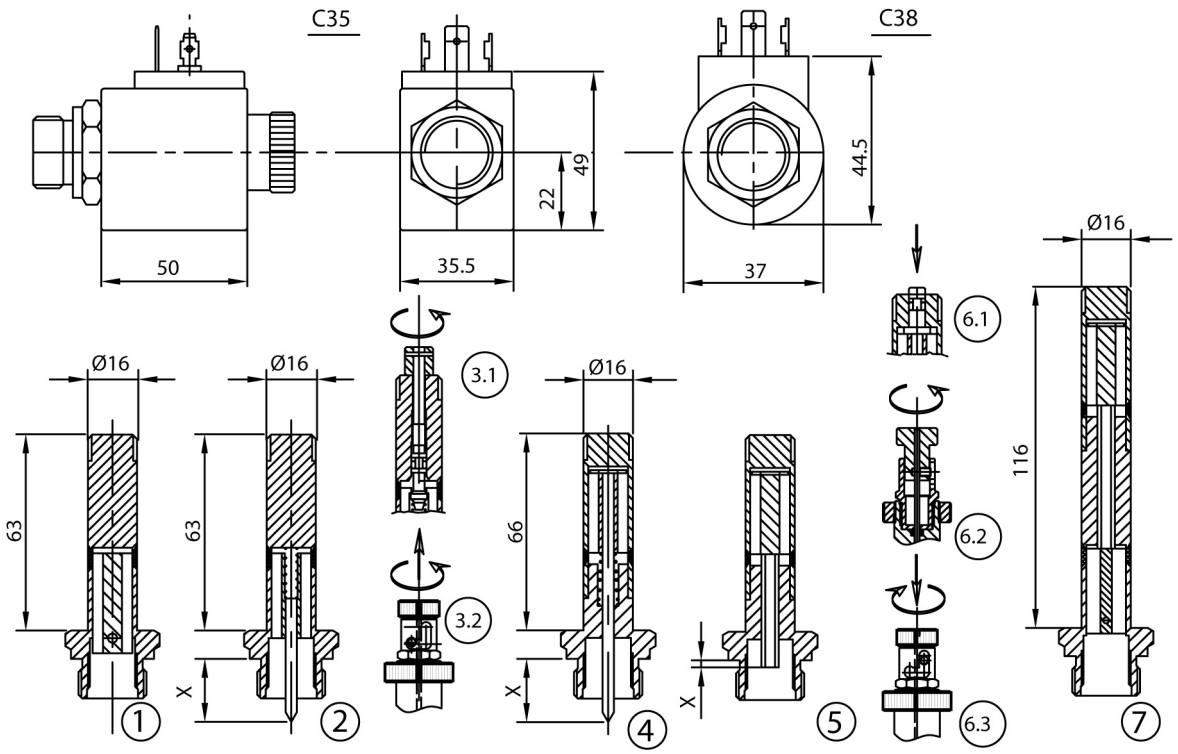
ambient temperature: -30° C to +50° C ; max delta T of wiring: 125 °C

Technical data are given for information only, without commitment; before ordering ask for confirmation of technical data, in particular on dimensions, performance, pressure.





for all options of plungers, manual overrides and nuts for coils see tab.3100 and 3200



EXECUTIONS - dimensions in mm		**2-** pulling, **4-** pushing - with conic end push rod 55-60 Hrc	**5-** pushing, on-off and proportional, loose push rod
units are shown in rest position (coil deenergized)		manual override-pulling versions: **3.1** screwed type, screw off knob to operate	manual override-pushing versions: **6.1** operation by pushing knob or **6.2** by
dimension X : on request	**spring** : on request	plunger; screw-in to release. **3.2** twist & lock device, to operate the device	screwing them or **6.3** by pushing and twisting by 90° for locking in position
1- pulling, plunger arranged for connection to spool		rotate by 90° knob and release; push and rotate by 90 ° to exclude the device	**7-** double, push-pull, plunger arranged for connection to spool