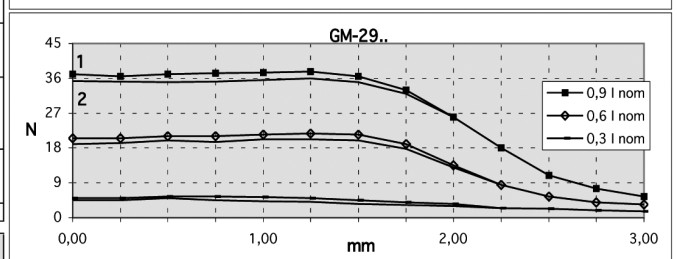
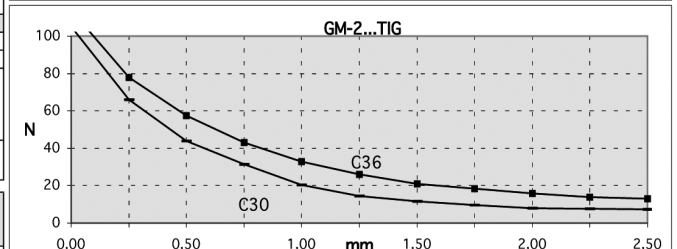
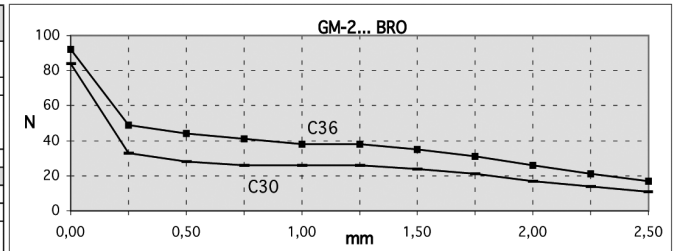


# Type GM-2

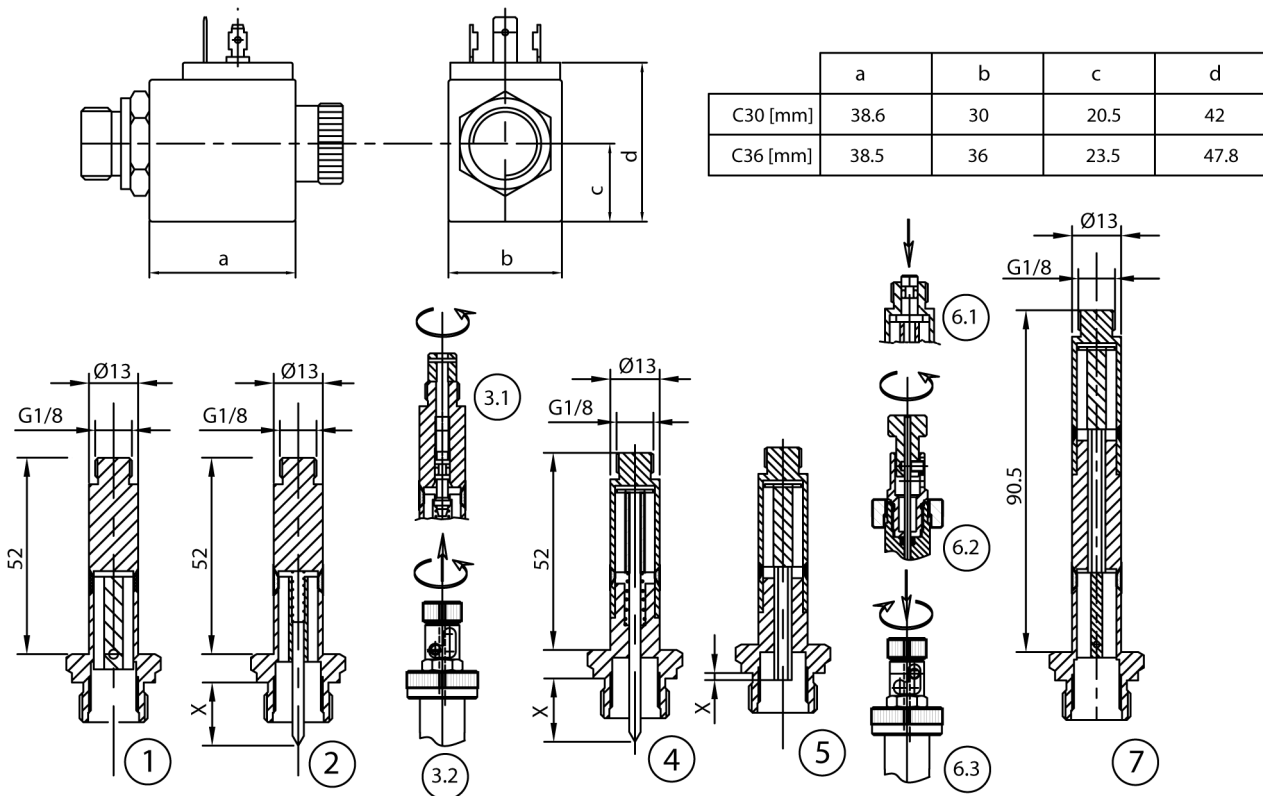
PUSH, PULL, DOUBLE AND PROPORTIONAL  
EXT. DIA. OF TUBE 13 MM

3020  
ELECTROMAGNETIC SOLENOIDS

CHARACTERISTICS OF STANDARDIZED EXECUTIONS				
- other executions are available on request				
operation: pulling on/off-code GM-23..., pushing on/off-code GM-20				
on/off double, pulling and pushing-code GM-26..., proportional code GM-29...				
		external	internal	
standardised threads		3/4"-16UNF	1/2"-20UNF	external
(interface to the valve)		5/8"-18UNF	1/2"-20UNF	internal
-other variants: on request		3/4"-16UNF	M13x1	M18x1,5
				M18x1,5
				M20x1,5
				M13x1
max dynamic pressure: up to 250 and 350 bar				
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.				
Note: curves can be modified according to operating characteristics requested by the valve.				
Versions GM-2...BRO differ from versions GM-2...TIG for a different magnetic structure of tube				
2-PROPORTIONAL SOLENOIDS - see also tab.3200				
nominal stroke: 1,5 mm - extra strokes on request				
air bleed-off valve or manual override: available on request - see tab. 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; curve 1 is with stroke back from end, curve 2 with stroke forward. Force-stroke curves can be modified on request				
STANDARD COILS - ED 100 % - see tables 5020 & 5025				
- 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)	electric connection	supply voltage - V (+/- 10%)	nominal power (3)	insulation class
available for all executions				
C30A***	AMP-Junior	DC: 12; 24; 48 & 21,6; 43,2; 98; 196 (2)	18W	F
C30D***	DIN43650	AC 50 Hz: 24; 42; 48; 110; 220; 380	28 VA	F
C30C***	flying leads	AC 60 Hz: 24;110; 220	28 VA	F
C36A***	AMP-Junior	DC: 12; 24 & 21,6 ; 98; 196 (2)	22 W	H
C36D***	DIN43650	AC 50 Hz: 110; 220	32 VA	H
C36C***	flying leads			
C36K***	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	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