DC Control Colenoid for Hydraulic Application

4

Product group

G AA ... 035 / 060

- According to DIN VDE 0580
- Armature space pressure tight
  Rated static pressure: BG 035 200 bar
  BG 060 300 bar
- Increasing force vs. stroke characteristic
- Push type
- Armature guided in pressure tight armature tube
- Insulating materials used in the exciter coil correspond to thermal class F
- Electrical connection and protection class with duly executed installation
  - Plug connection by receptacles according to DIN 46247
    Protection class according to DIN VDE 0470 / EN 60529 – IP00 (P00)
  - Plug connection by plug connector Z KB according to DIN 43650
    cable gland (4 times 90° rotatable)
    Protection class according to DIN VDE 0470 / EN 60529 – IP 65 (P54)
- Fastening with 4 screws
- Manual override
- Sealing between solenoid and valve with o-ring
- Modifications and special designs on request
- Application examples:
  Actuation of hydraulic and special valves

Fig. 1: Type G AA X 035 F20 D02

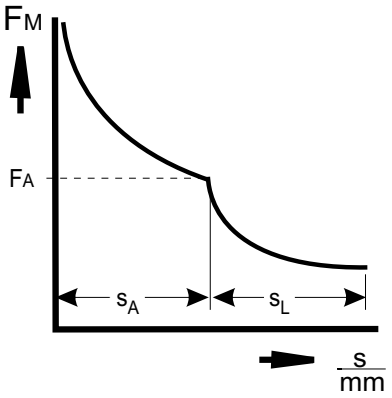


Fig. 2: Force vs. stroke characteristic

Technical data

		G AA X 035 F20 D02	G AA Y 060 F43 A01
Operating mode		S1 (100%)	S1 (100%)
Stroke s(mm)		Magnetic force F_M (N)	Magnetic force F_M (N)
	0	86	235
	1	55	143
	2	48	115
	2,5	36	
	3	25	99
	4	14,5	90
	5	10	65
	5,5	8,5	
	6		39
	7		25
	8		17
	9		11,5
Rated work W_N	(Ncm)	9	36
Working stroke s_w	(mm)	2,5	4
Rated power P_{20}	(W)	37	34,5
Operating frequency S_h max.	(1/h)	3600	3600
Actuation time t_1	(ms)	70	110
Fall time t_2	(ms)	30	40
Armature weight m_A	(kg)	0,05	0,16
Solenoid weight m_M	(kg)	0,55	1,87

Rated voltage ⎓ 24 V, an adaptation of the exciter coil to a rated voltage of max. ⎓ 250 V is possible on request.

This part list is a document for technically qualified personnel. The present publication is for informational purposes only and shall not been construed as mandatory illustration of the products unless otherwise confirmed expressively.

Please make sure that the described devices are suitable for your application. Supplementary information concerning its duly assembly can be found also in -Technical Explanations, in the effective DIN VDE0580 as well as in the relevant specifications.

Information and remarks concerning European directives can be taken from the correspondent information sheet which is available under *Produktinfo.Magnet-Schultz.com*.

Note on the RoHS Directive

According to our current state of knowledge the devices pictured in this document do not contain any substances in concentration values or applications for which putting into circulation with products manufactured from them is prohibited in accordance to RoHS.

Table values (times)

The times indicated in the tables refer to the rated voltage, max. stroke, weight load and 70% of the rated force. They can decrease considerably with hydraulic load (slide against spring).

Table values (magnetic force)

The indicated magnetic force values refer to 90% of the rated voltage (U = ⎓ 24 V, for other voltages deviations of magnetic force may occur) and to the normal operating temperature.

Due to natural dispersion the force values may deviate by ± 10% from the values indicated in the tables.

The normal operating temperature is based on:

a) Mounting on a oil filled valve box with the minimum dimensions of 46 x 46 x 66 mm and a base plate of 46 x 66 x 30 mm

b) Rated voltage ⎓ 24 V

c) Operating mode S1 (100 % ED)

d) Reference temperature 50 °C

With deviations from the indicated operating conditions an adaptation of the coil winding is necessary. With other dimensions of the box and other reference temperatures the magnetic force may be adapted by modifications of the exciter coil.

Dimensional table

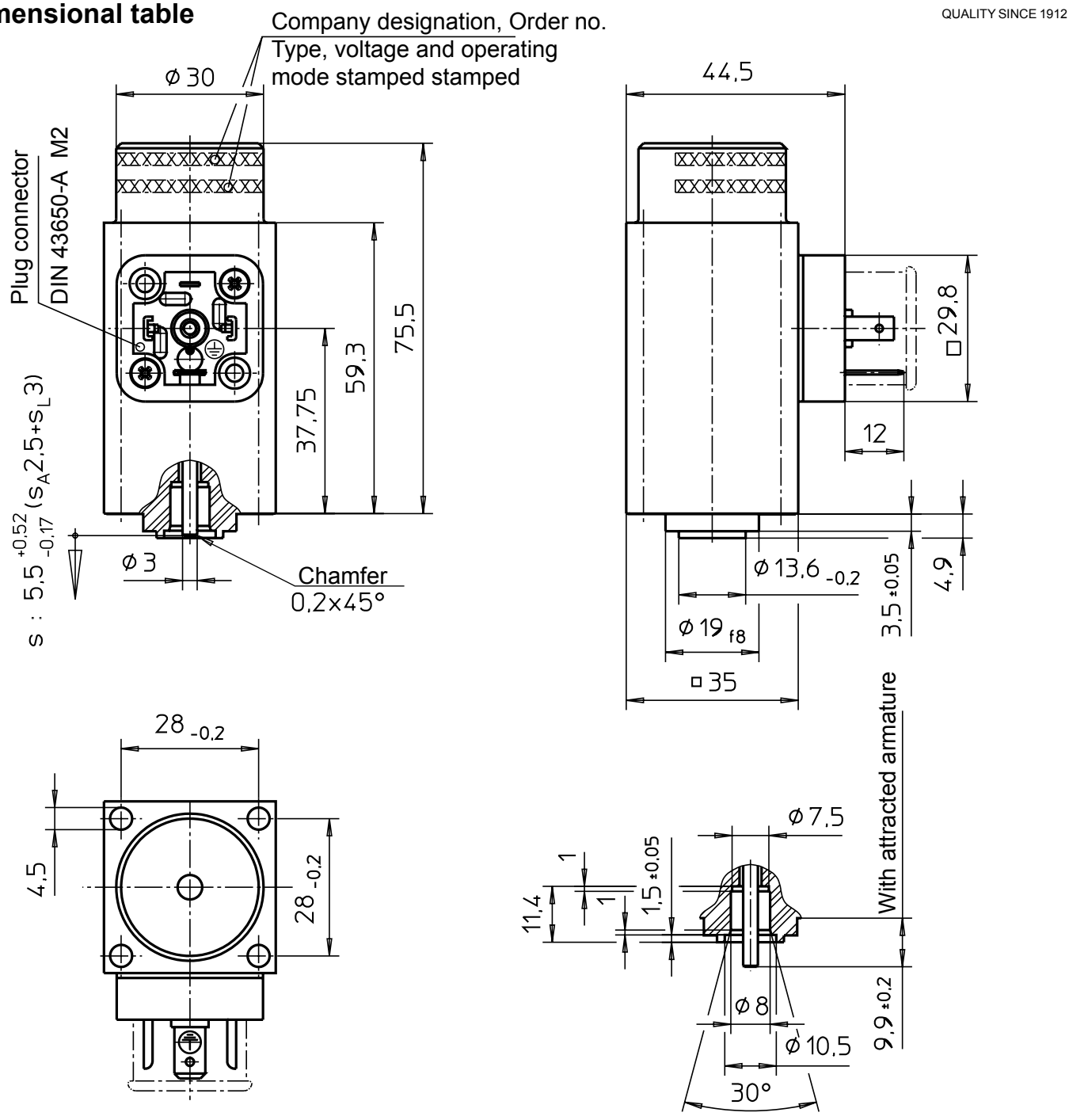
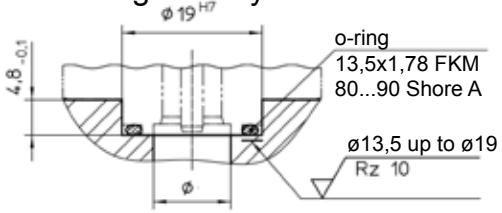


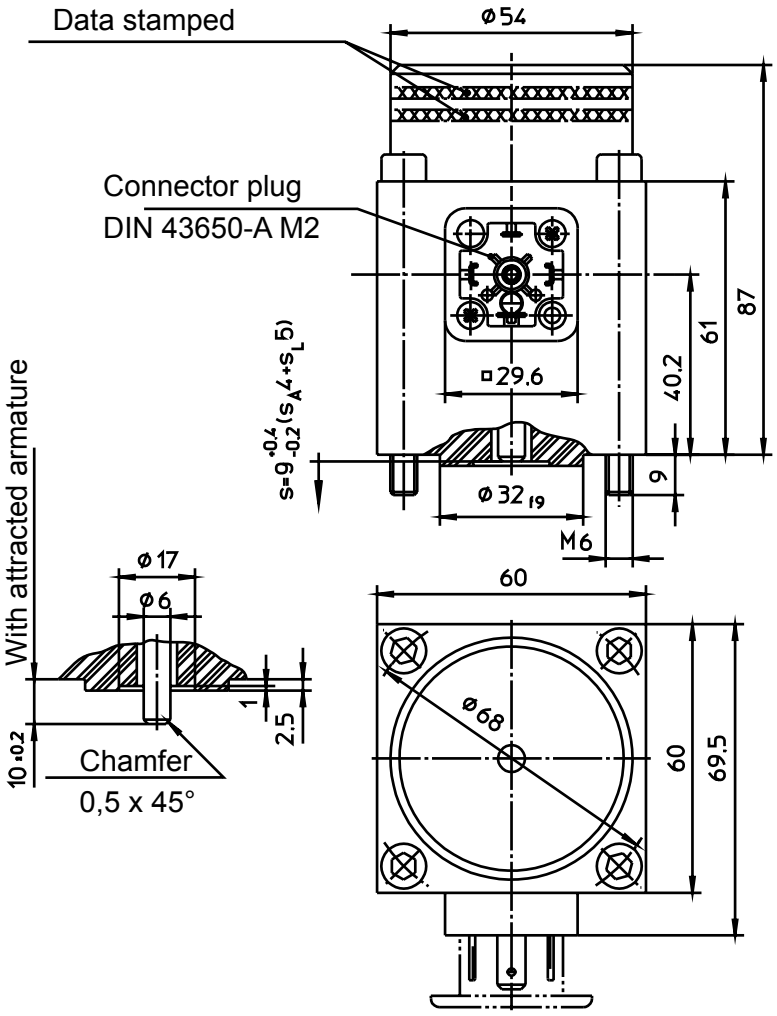
Fig. 3: Type G AA X 035 F20 D02

Connection geometry

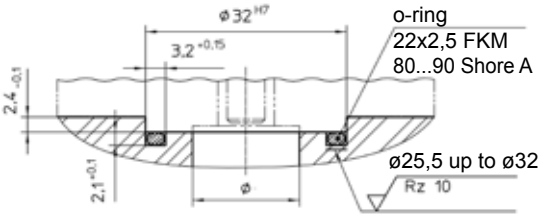


The type will be delivered without fastening screws, please provide:

Hexagon socket screws	M 4 x 65	DIN 912	60-1181
and spring washers	A4	DIN 128	63-1122



Connection geometry



Order example

Type	G AA X 035 F20 D02
Voltage	⎓ 24 V DC
Operating mode	S1 (100 %)

Special designs

Please do not hesitate to ask us for application-oriented problem solutions. In order to find rapidly a reliable solution we need complete details about your application conditions. The details should be specified as precisely as possible in accordance with the relevant - Technical Explanations.

If necessary, please request the support of our corresponding technical office.

Type code

	G	AA	X	035	F	20	D02
	G	AA	Y	060	F	43	A01
Device group							
Series							
Modifications							
Size in the series							
Execution in the series							
Protection code							
Design number							