

Electromagnetically actuated shotbolt lock unit

1

Product group

G SC X 037

- According to DIN VDE 0580
- Almost linear force vs. stroke characteristic
- Solidly executed stainless shotbolt
- Armature space protected by o-ring
- Pull type (de-energized locked)
Push type (de-energized unlocked)
- Built-in return spring
- Maintenance-free bearings with long service life
- Exciter coil corresponds to insulation class F
- Protection type tube IP 54
- Electrical connection and protection class spool with duly executed installation
 - Plug connection via receptacles according to DIN 46247
Protection class according to DIN VDE 0470/EN 60529 – IP 00
 - Plug connection via plug connector
Z KB according to DIN 43650
Cable gland (4x 90 degree rotatable)
Protection class according to
DIN VDE 0470/EN 60529 – IP 54
- Further electrical connections on request
- Fastening with central thread
- Please contact us for modifications and special designs
- Application examples examples :
 - (according to health and safety at work regulations and according accident preventing regulations):
Interlocking of protectors of machines of all sorts
 - Locking, limiting, interlocking of mechanical equipment
of all sorts



Fig. 1: Type G SC X 037 N43 A02

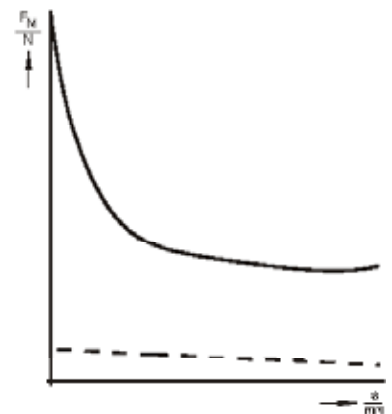


Fig. 2: Force vs. stroke characteristic



Technical data

G SC X 037	
Rated voltage U_N	24 V
Operating mode	S1 (100 %)
Reference temperature ϑ_{13}	35 °C
Rated power P_{20}	19,1 W
Stroke	8 mm
Magnetic force F_M	10,8 N
Admissible lateral force in normal position	600 N

Rated voltage \approx 24 V, the exciter coil can be adjusted to a rated voltage of \approx 60 VDC if desired. Rated voltages until \approx 250 V are possible on request.

The force values indicated in the tables refer to 90% of the rated voltage ($U_N = \approx$ 24 V, for other voltages deviations of magnetic force may occur) and to the normal operating temperature.

Due to natural dispersion the force values and the force values of the spring may deviate by \pm 10% from the values indicated in the tables.

The normal operating temperature is based on:

- Mounting on badly conductive base
- Rated voltage \approx 24 V
- Operating mode S1 100%
- Reference temperature 35 °C

The stroke movement effected by the electromagnetic force can be pulling or pushing depending on the design.

The reset in the stroke start position is effected by the built-in spring. Both operations "de-energized locked" and "de-energized unlocked" are possible. However, the operation "de-energized locked" is preferable.

The central fastening guarantees a reliable and flexible mounting.

Further sizes and designs with signal switch or manual override on request.

Information about the technical harmonisation directives within the ESM (European Single Market)

Solenoids belonging to this product range are classed in the low voltage directive 73/23 EEC. To guarantee the protection targets of this directive, products are manufactured and inspected according to the valid edition of DIN VDE 0580. This is also regarded as manufacturer's declaration of conformity.

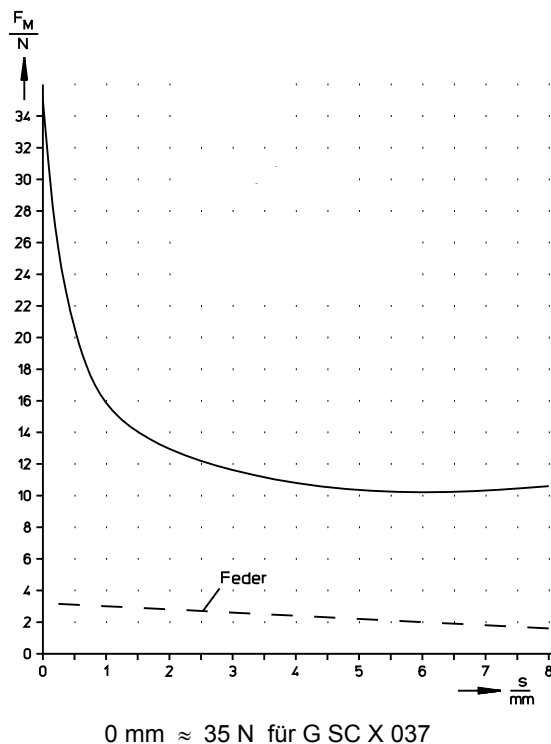



Fig. 3: force vs. stroke characteristic and return spring

Please make sure that the described devices are suitable for your application. Please find further details and definitions in our  -Technical Explanation or, respectively, in VDE 0580.

Information about EMC directive 89/336 EEC

Solenoids do not come within the scope of the EMC directive because they don't emit electromagnetic disturbances in the sense of the directive and because their operation is not disturbed by electromagnetic disturbances. The user has to secure the compliance with the EMC directive by appropriate wiring.

Examples for protection circuits can be taken from the corresponding technical documents.

Note on the RoHS guideline 2002/95/EC

The devices presented in this document do not fall into the scope of regulation 2002/95/EC (RoHS) and do not become part of products which fall into the scope according to our state of information.

Dimension table

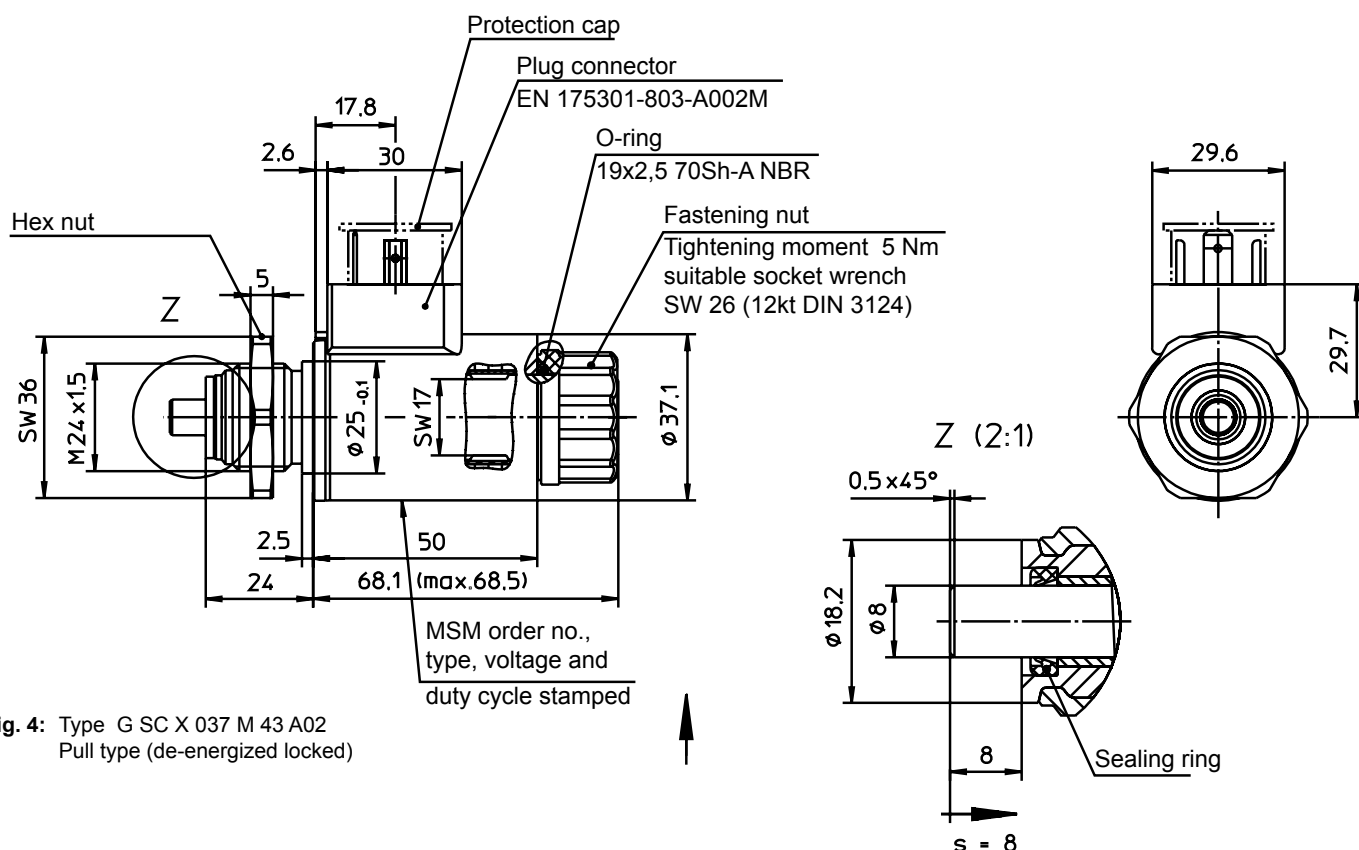


Fig. 4: Type G SC X 037 M 43 A02
Pull type (de-energized locked)

The here shown solenoids are no ready for use devices in the sense of DIN VDE 0580. The general requirements and protective measures to be taken by the user are included in DIN VDE 0580. The use of the shown devices in safety relevant applications requires always the written agreement of MSM.

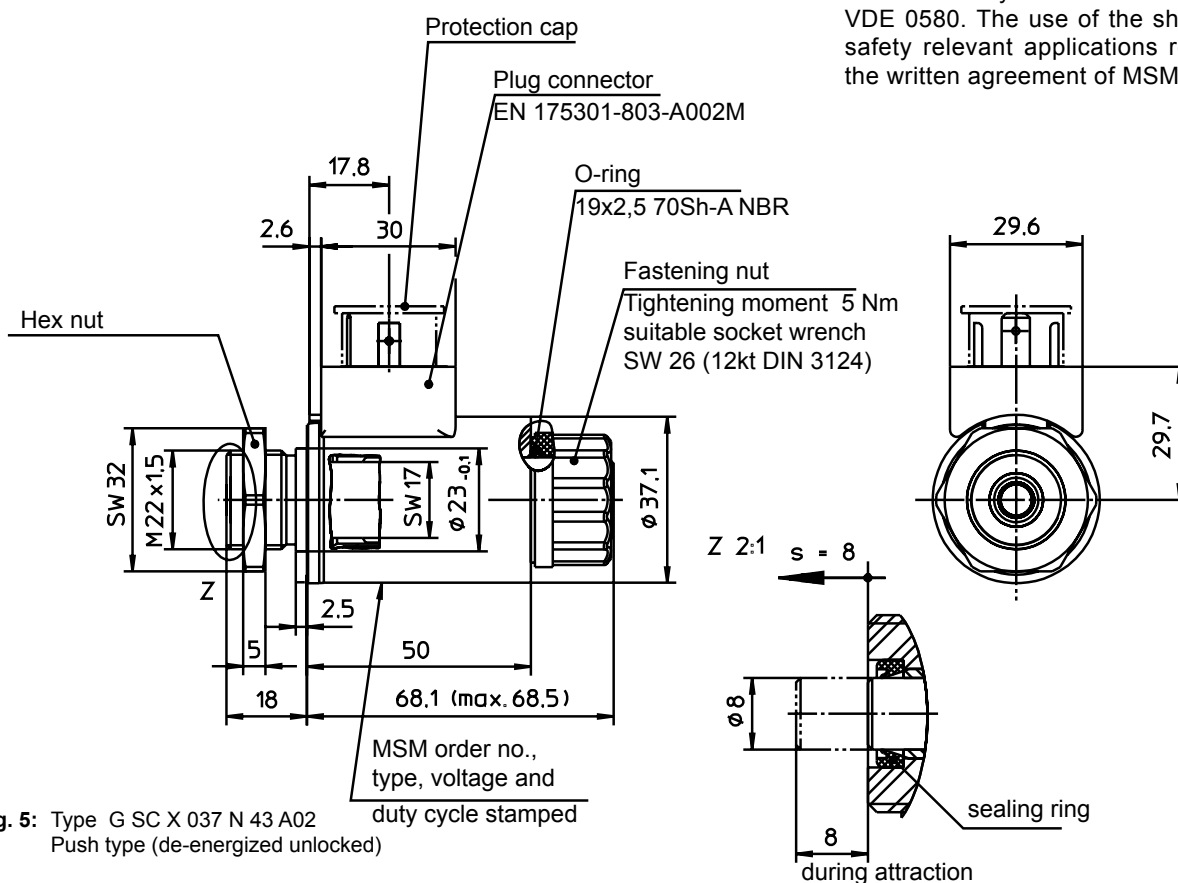
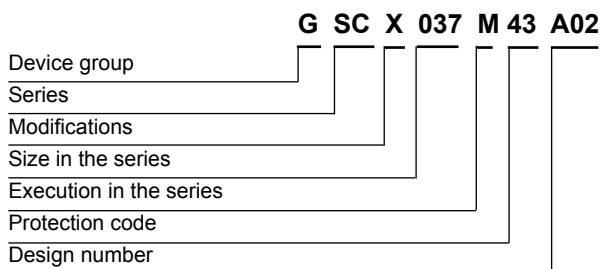


Fig. 5: Type G SC X 037 N 43 A02
Push type (de-energized unlocked)



Type code



Order example

Type	G SC X 037 M43 A02
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.