

Electromagnetically actuated shotbolt lock unit

1

Product group

G HU Z 040

- According to DIN VDE 0580
- Almost linear force vs. stroke characteristic
- Solidly executed shotbolt
- Pull type (de-energized locked)
or push type (de-energized unlocked)
- Built-in return spring
- Maintenance-free bearings with long service life
- With and without signal switch
- Exciter coil corresponds to insulation class F
- Electrical connection and protection class with duly
executed installation
 - Plug connection via receptacles according to DIN 46247
Protection class according to DIN VDE / EN 60529 – IP 00
 - Plug connection via plug connector Z KC
according to DIN EN 175 301-803
Cable gland (2x 180-degree rotatable)
Protection class according to DIN VDE 0470 / EN 60529 – IP 40
 - For connection of signal switch cable gland PG 7
- Fastening with central thread
- Please contact us for modifications and special designs
- Application examples (according to health and safety at work
regulations and according accident preventing regulations):
Interlocking of protectors of machines of all sorts



Fig. 1: Type G HU Z 040 M30 A01



Fig. 2: Type G HU Z 040 M30 A02

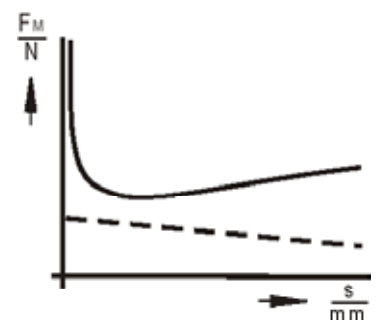
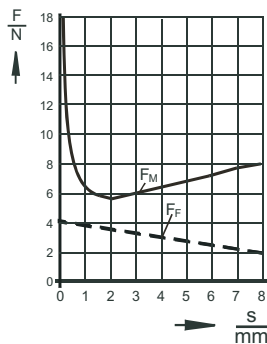


Fig. 3: Force vs. stroke characteristic

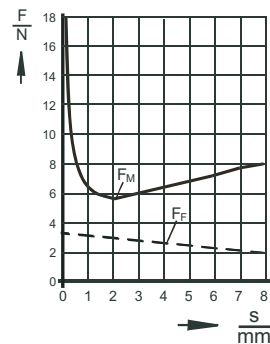


Technical data

G HU Z 040	A01	A02
Operating mode	S1 100%	
Stroke s (mm)	8	
Rated work A_N (Ncm)	6,4	
Rated power P_{20} (W)	10,6	
Reference temperature i_{11} (°C)	35	
Operating frequency S_h (1/h)	25000	
Actuation time t_1 (ms)	80	
Fall time t_2 (ms)	50	
Armature weight m_A (kg)	0,07	
Solenoid weight m_M (kg)	0,42	0,58
Maximum lateral load: Shotbolt in normal position (N) in motion (N)	1500 8	



G HU Z 040 M 30 A..
0 mm: 30 N



G HU Z 040 N 30 A..
0 mm: 30 N

Fig. 4: Force vs. stroke characteristic and characteristic of the return spring

Rated voltage ≈ 24 V, the exciter coil can be adjusted to a rated voltage of ≈ 250 V on request.

The force values shown in fig. 4 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:

- Rated voltage ≈ 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.

Shotbolt lock units with switch

The locking devices dispose additionally of a respective switch (5 A, ~ 250 V) which actuates for the type

G HU Z 040 M30 A02 approx. 2 mm

and for the type

G HU Z 040 N30 A02 approx. 3 mm

before the end of the lock distance and which shows the correct snap-in.

For connection with plug connector ZKBX or ZKGB please take into consideration the max. continuous current of the plug.

This part list is a document for technically qualified personnel. The present publication is for informational purposes only and shall not be 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 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. In case of surfaces zinc coating with yellow chromating and zinc iron with black chromating separate agreements are necessary for application according RoHS.

Dimension table

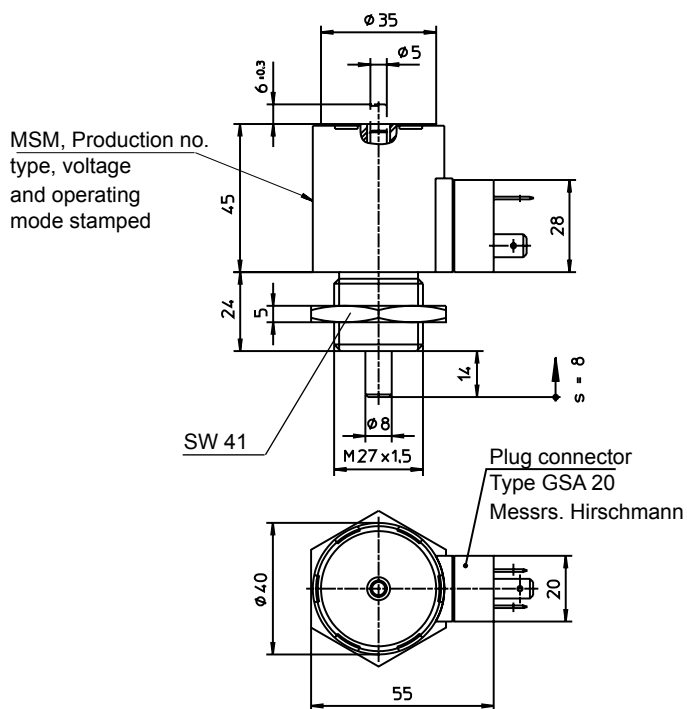


Fig. 5: Type G HU Z 040 M30 A01
Pull type (de-energized locked)

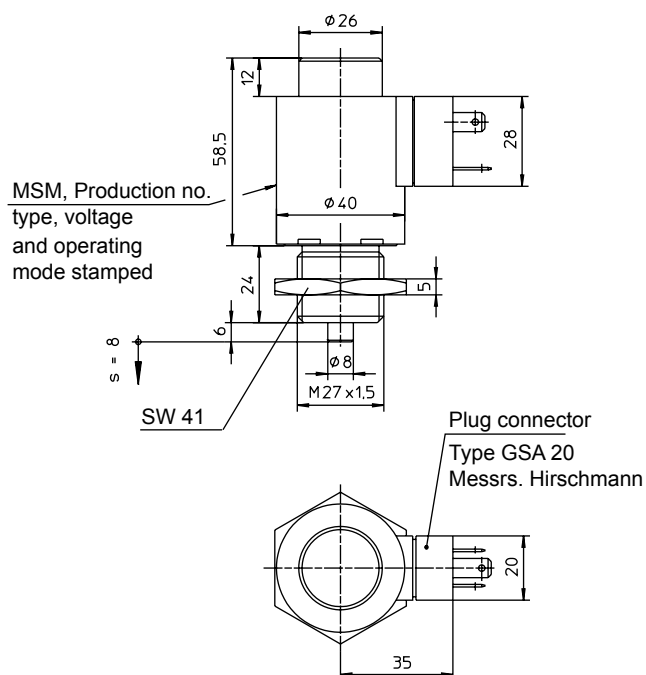


Fig. 6: Type G HU Z 040 N30 A01
Push type (de-energized unlocked)

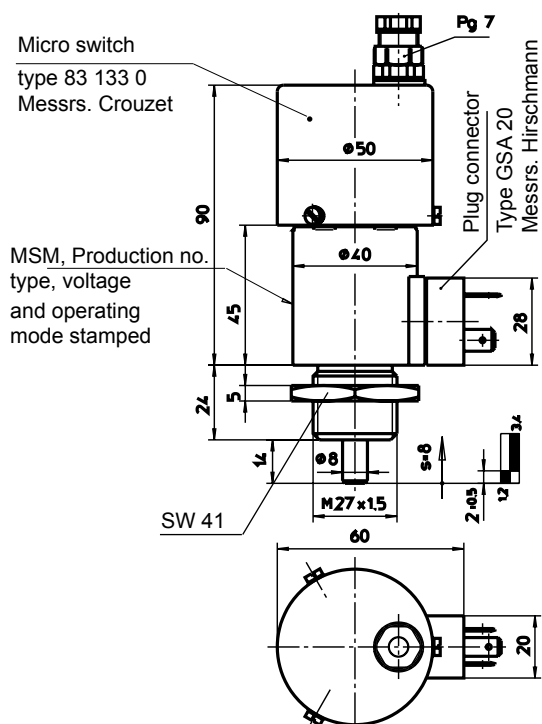


Fig. 7: Type G HU Z 040 M30 A02
Pull type (de-energized locked)

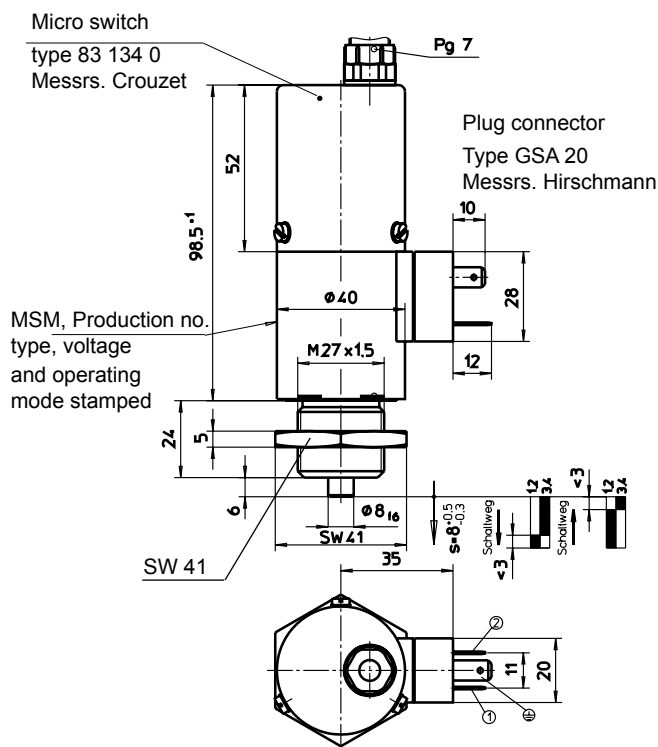


Fig. 8: Type G HU Z 040 N30 A02
push type (de-energized unlocked)

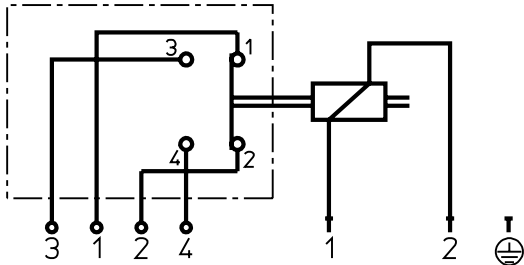


Fig. 9: Circuit diagram for G HU Z 040 M30 A02

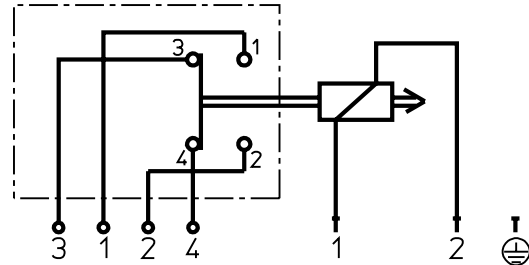
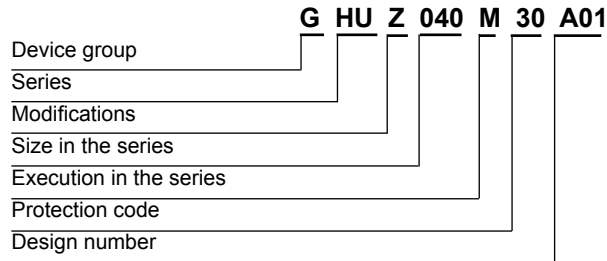


Fig. 10: Circuit diagram for G HU Z 040 N30 A02

Type code



Order Example

Type	G HU Z 040 M30 A01
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.