Electromagnetically Actuated Lock Units

1
Product group

G HU Z 032

- To VDE 0580
- Almost horizontal magnetic force vs stroke graph
- Robust shotbolt
- Pull type (de-energise to lock) and push type (de-energise to unlock)
- Built-in spring return
- Maintenance-free bearings with long life
- Coil insulation rating F
- Electrical connection and protection if mounted properly:
  - Connection with sockets to DIN 46247
    Protection to DIN VDE 0470/EN 60529 – IP 00
  - Connection with plug connector Z KC
    Screwed cable gland (2 x 180° positions)
    Protection to DIN VDE 0470/EN 60529 – IP 40
- Mounting with centre thread
- Special designs on request
- Applications: (according to worker´s protection rules and regulations for the prevention of accidents):

  locking of protective equipment on all sorts of machines

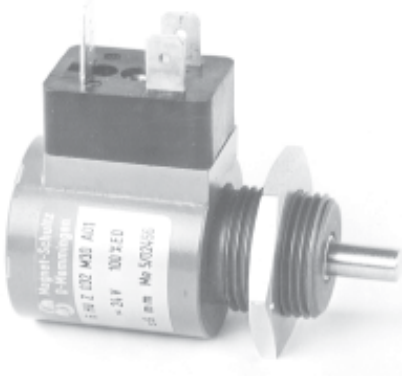


Fig. 1: Type G HU Z 032 M30 A01

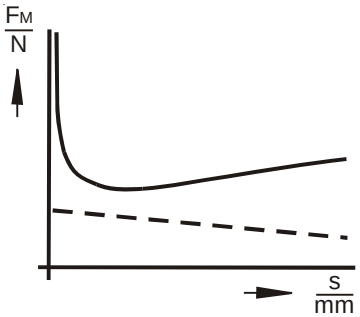


Fig. 2: Force characteristic

Technical data

G HU Z 032		
Operating mode		S1
Stroke s	(mm)	6
Work rating A_N	(Ncm)	2,85
Rated Power P_{20}	(W)	7,2
Reference temperatur υ_{11}	(°C)	35
Operating frequency S_h	(1/h)	30000
Closing time t_1	(ms)	70
Opening time t_2	(ms)	40
Armature weight m_A	(kg)	0,03
Solenoid weight m_M	(kg)	ca. 0,25
Radial bolt load (max.) allowable (approx.) static	(N)	600
stroke	(N)	4

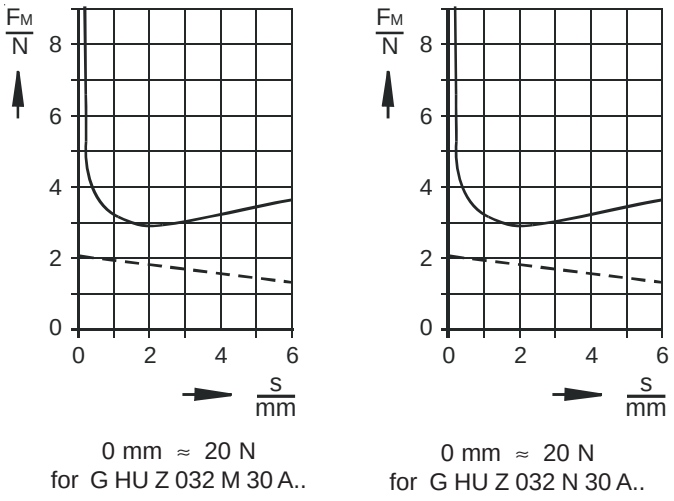


Fig. 3: Magnetic force vs stroke graph and spring return

Rated voltage ⎓ 24 V, on request the coil winding can be adjusted to a rated voltage of ⎓ 250 V maximum.

The magnetic force values mentioned in the tables refer to 90 % of the rated voltage, (U_N = ⎓ 24 V, for other voltages the magnetic force may differ) and in hot condition.

Owing to natural dispersion, the magnetic force values and the force values of the spring may deviate by 10 % from the values indicated in the tables.

Hot condition is based on:

a) mounting on poorly heat-conducting base

b) rated voltage ⎓ 24 V

c) operating mode S1

d) reference temperature 35° C

The stroking movement through electromagnetic force can be pulling or pushing depending on the design.

The built-in spring sees to return to stroke start position. Operating can be „de-energise to lock“ or „de-energise to unlock“. „De-energise to lock“ operation is preferable. Reliable flexible mounting is guaranteed through the centre thread.

Design with signal switch on request.

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.

Note on the technical harmonisation guidelines within the EU CE

Electromagnetic solenoids of this product range are subject to the low-voltage guideline 73 / 23 EWG.

To guarantee the targets of this regulation, products are manufactured and inspected to the valid edition of DIN VDE 0580. This also equals a declaration of conformity by the manufacturer.

Note on the EMC (electromagnetic compatibility) guideline 89/336 EWG

Electromagnetic solenoids are not affected by this guideline because neither do they cause electromagnetic disturbances nor can they be disturbed through electromagnetic disturbances. Therefore, the adherence to the EMC guideline has to be guaranteed by the user through appropriate circuitry wiring. Examples for protection circuits can be taken from the corresponding technical documents.

Dimensions sheet

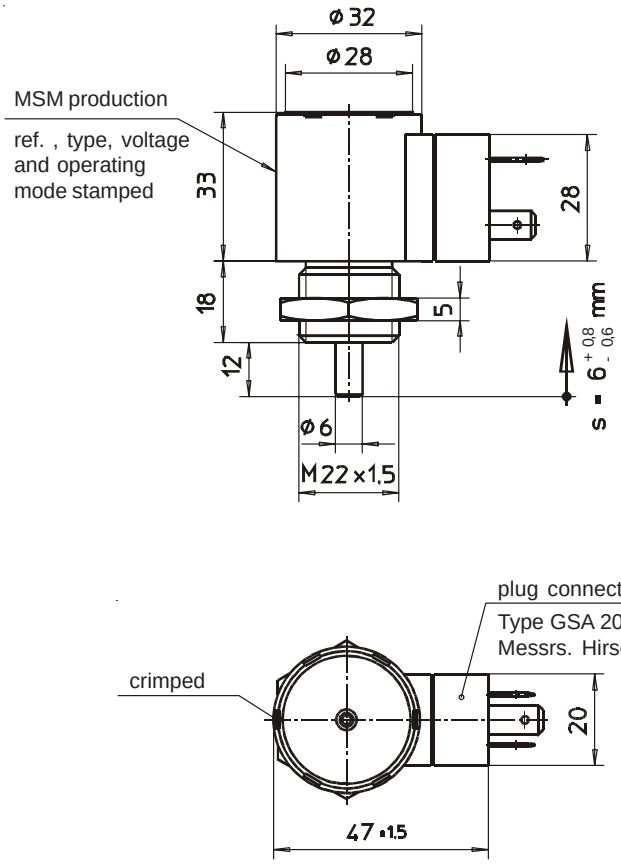


Fig. 4: Type G HU Z 032 M30 A01
pull type (de-energise to lock)

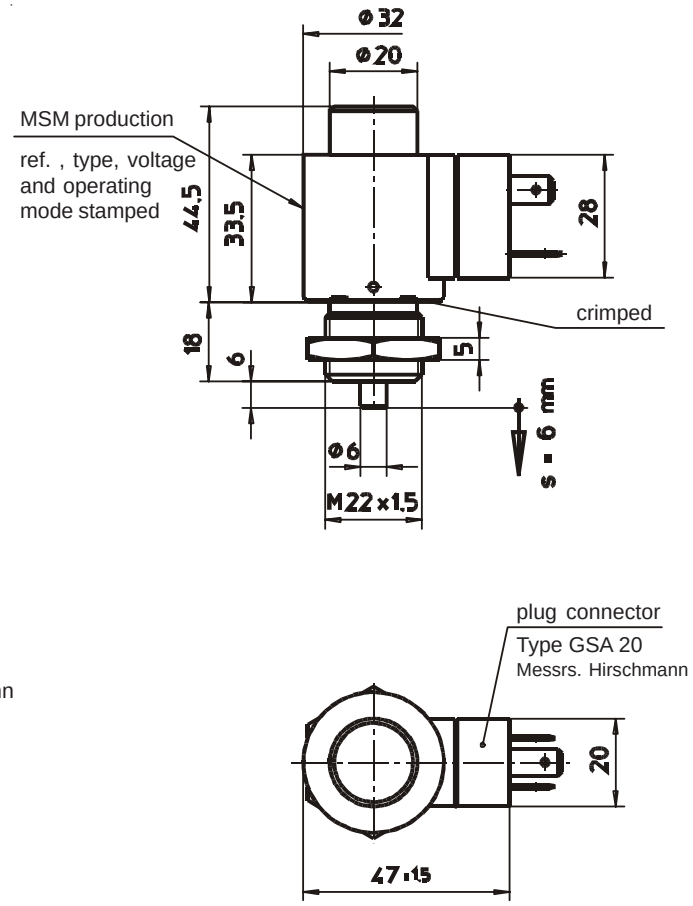
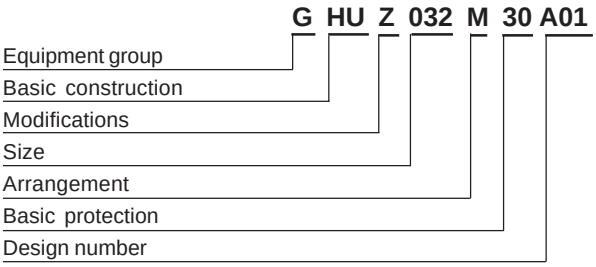


Fig. 5: Type G HU Z 032 N30 A01
push type (de-energise to unlock)

The solenoids shown are not ready-to-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 need always the written agreement of MSM.

Type code



Order Example

Type	G HU Z 032 M30 A01 (pull type)
Voltage	⎓ 24 V DC
Operating mode	S1 (100 %)

Specials

Special designs and modifications are available on request for which full application conditions should be specified in accordance withour -Technical Explanations.

In case of connection via plug connector ZKBX or ZKBG, allow for the max. constant current of the connector.