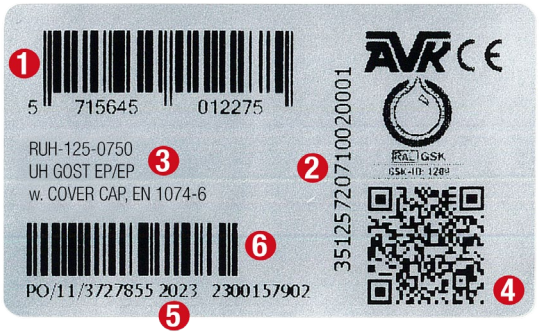
AVK UNDERGROUND HYDRANTS

SERIES 35-72 – Model GOST

1. FIELDS OF APPLICATION AND PROPER USE

The underground hydrant installed in the water supplying pipe system can be used for fire fighting, operations of water supplying companies and other applications as water supply for construction work or road cleaning. Furthermore, the hydrant must not be operated with more than 16 bar at a maximum operation temperature of 60 °C.
Every other use exceeding these limits is considered to be an improper use. The hydrant producer is not liable for damages resulting from an improper use. The risk is on the user only.

2. PRODUCT MARKING



- *1.* Code EAN / GTIN
- *2.* Internal production number
- *3.* Model name, short
- *4.* QR-Code
- *5.* Date of manufacture, Fa number, ongoing serial no.
- *6.* Barcode, ongoing serial number

Casting:

- *AVK-Logo*
- *Nominal size DN 125*
- *Nominal pressure PN 16*

3. WORK SAFETY

The underground hydrant has a state-of-the-art technology and is safe in operation. However, this armature can imply risks, when operated by untrained staff or when applied for improper use. In order to guarantee proper use observe the installation and maintenance instructions. Unauthorized re-engineering and adaption, that have influence on safe and proper operation of the hydrant, are prohibited.
Paying attention to the installation and maintenance instructions serves the security of the operating personnel and helps avoiding damages and accidents.

4. INSTALLATION

Before installation, make sure the hydrant is clean. Otherwise the hydrant has to be cleaned or disinfected. Installation onto the pipe has to be done without causing any tension.
A proper hydrant drainage has to be guaranteed by state of the art drain stones or packaging. After installation the hydrant must be thoroughly rinsed.

5. OPERATION

Operation:
- Open hydrant cap.
- Connecting standpipe.
- If necessary, hose attached to the standpipe.
- Open hydrant by means of standpipe operation part, max. 200 Nm.
- Hand valves carefully open; it is still air in the hydrant and/or hose!

Deactivation: in reverse order.
The underground hydrant is equipped with a radially working piston lining,
therefore, the closing forces do not have any influence on the leak tightness.
Therefore, the hydrant a half turn open in order to relieve the disc assembly.
Leakages, by contaminant causes, are to be eliminated by repeated rinsing.

When using the hydrant at temperatures below the freezing point, certain precautions should be taken to ensure that the media will not freeze inside the hydrant barrel.
Sufficient flow through the hydrant shall be maintained to avoid the media to freeze.
Immediately after use, the hydrant shall be fully closed to open the drainage ports, allowing the media to escape in due time before freezing.
If the automatic drainage, for some reason should fail, the trapped water shall immediately be pumped out from above.

6. MAINTENANCE

The hydrant is virtually maintenance free. However, it should be examined yearly.
Therefore it is sufficient to open and close the hydrant once fully (test of function); conduct as described in section 5.

For generally belongs the examination to the maintenance:
- The efficiency of hatch and cover in the water pipeline pit, the cover und thread of the connection part, the upper square and the hydrants body.
- The presence of water into the hydrants body and into the pit.;
- The tightness of the valve;
- The function of the hydrant with attached fire fighting water column and the determination of the passage ability of the hydrant. (water throughput)
- Easy opening and closing of the valve.

The attention of these references serves the personal security of the operating personnel and help to avoid damages and accidents.

GOST- examined and certified

Hydrants of series 35-72 GOST are nearly free of maintenance. Installation and maintenance of hydrants in a waterline network has to take place after the demands of the GOST standards 12.3.006-75 und 12.4.009-83.The underground hydrant is equipped with a radially working piston lining. Leakages, causes by contamination are to be eliminated by repeated rinsing. The closing forces do not have influence on the tightness and may not exceed 150Nm (GOST 8220-85-2,4), since otherwise damage to individual construction units can occur. To operate the hydrant, will made by hand with help of the key of the fire fighting water column according to GOST 8220-85.

7. REPAIRS:

Damages to the disc core through contaminant require replacement of the bottom of the disc with disc core.
If this should be necessary, then proceeded as follows:

1. *Piping, leads to the hydrant, make free of pressure.*
2. *Open hydrant cap. (Fif.1)*
3. *Close the Hydrant fully.*
4. *Remove the four upper hexagonal screws on the top flange and take of the thread outlet.*
5. *Turn the spindle guide out of its locking position by 45° (Fig.2) and turn the spindle counterclockwise until it has moved up a few millimeters above the flange.*
6. *Now adjust the spindle guide so that the lower edge of the spindle guide is supported in the middle on the wide contact surfaces on the flange (Fig.3). Then turn the spindle clockwise until it stops. This causes the valve cone to be completely pulled out of the valve seat.*
7. *Now pull the operation rod straight up under the stop. Then turn the spindle nut holder of the rod approx. 45° counterclockwise out of its guide and pull the rod out of the hydrant (Fig.4)*
8. *Remove Disc core completely and replace if necessary.*

Installation in reverse order, it is to be considered:

9. *That the stem nut carrier has two noses with different width. During assembly the noses must be inserted in their corresponding grooves (broad nose towards drain nipple).*
10. *That the position for pressing the valve cone back into the valve seat using an assembly tool corresponds to (Fif.2)*
11. *Take care that the rod is pressed down exactly until the two grooves in the spindle bearing can be turned back into the locking position, in the middle of the two short webs.*
12. *The thread outlet can now be reinstalled.*

Subsequently, rinses the hydrant and examined it for tightness.

Fig. 1

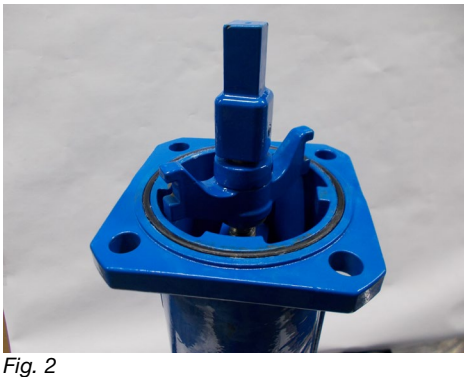


Fig. 2

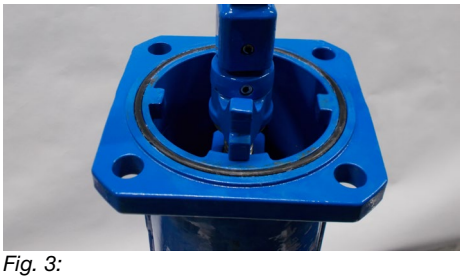


Fig. 3:

Fig.4

GENERAL NOTES

For damages resulting from a disregard of this operation manual, we do not take any liability.
The design and specifications shown in this operation manual are subject to change without notice due to our continuing program of product development.

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SERIES 35-72 – Model GOST

8. TECHNICAL DATA

Model GOST – Underground hydrant
GOST 8220-85, DN125, Ductile cast iron GJS,
with single closing and operation rod blow out protection

Max. operating pressure (PFA): 16 bar
Max. operating temperature: 60 °C

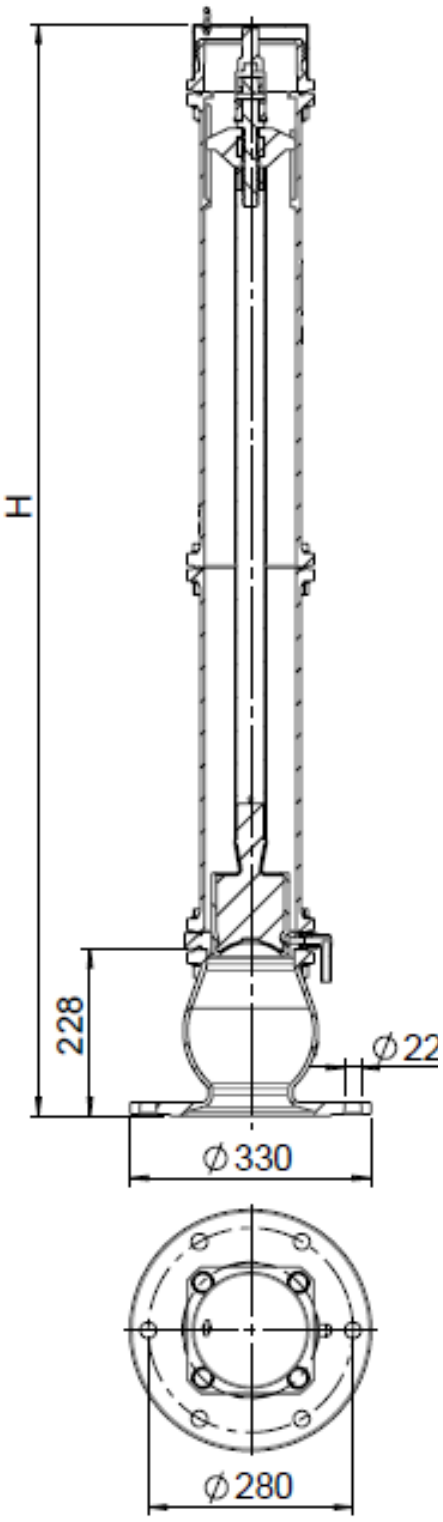

Table 1

AVK Reference No.	DN	PN	Length H mm	Weight kg
35-125-72-07100X0001	125	16	0750	39
35-125-72-08100X0001	125	16	1000	47
35-125-72-09100X0001	125	16	1250	51
35-125-72-10100X0001	125	16	1500	57
35-125-72-11100X0001	125	16	1750	65
35-125-72-12100X0001	125	16	2000	70
35-125-72-13100X0001	125	16	2250	75
35-125-72-14100X0001	125	16	2500	82
35-125-72-15100X0001	125	16	2750	89
35-125-72-16100X0001	125	16	3000	97
35-125-72-17100X0001	125	16	3250	102
35-125-72-18100X0001	125	16	3500	109
35-125-72-19100X0001	125	16	3750	115
35-125-72-20100X0001	125	16	4000	122

Standards and und further regulations:

- *GOST 8220-85*
- *GOST 800-78*
- *GOST 12.2.037-78*