

Operating instructions for

Variable area flow meter

Model UTS



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Manufactured by:

Kobold-Unirota Ltd. 4400 Nyíregyháza Derkovits út 132-136. Tel.: +36-42-342-215 Fax: +36-42-500-175 E-Mail: <u>info.hu@kobold.com</u> Internet: <u>www.unirota.hu</u>

Sold by:

Kobold Messring GmbH Nordring 22-24 D-65719 Hofheim Tel.: +49(0)6192-2990 Fax: +49(0)6192-23398 E-Mail: <u>info.de@kobold.com</u> Internet: <u>www.kobold.com</u>

2. Note

Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein. The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

3. Instrument inspection

Instruments are inspected before shipping and sent out in perfect condition. Should damage to a device be visible, we recommend a thorough inspection of the delivery packaging. In case of damage, please inform your parcel service / forwarding agent immediately, since they are responsible for damages during transit.

Scope of delivery:

- The standard delivery includes:
- Variable area flow meter: UTS
- Operating instructions

4. Regulation use

Any use of the variable area flow meter, model: UTS, which exceeds the manufacturers specification, may invalidate its warranty. Therefore any resulting damage is not the responsibility of the manufacturer. The user assumes all risk for such usage.

5. Operating principle

The Kobold UTS model flowmeter/monitor works on the basis of the suspended float principle. It is used for measuring the flow rates in closed pipe line systems.

The medium flows from below through a glass measuring cone that gets wider on top. Thus, the float is raised and indicates the respective flow rate on the scale provided on the measuring cone.



Before Installation:

- Remove all transportation safety locks and ensure that no packing material remains within the unit.
- Be sure that the maximum allowable operating pressure and temperature is not exceeded (see Technical data).
- Install the flow meter in the piping system, ensure the instrument is under no mechanical stress/tension (install support bracing if necessary).
- Protect the measuring tube from external damage.
- Avoid pressure peaks in the measuring tube, e.g. from sudden surges or stoppage of flow.
- If possible, immediately after making mechanical connections, check whether the connections are properly sealed with no evidence of leakage

7. Operation

Overranging

With non-pulsating flow, the maximum flow rate can be exceeded. Only an increase in pressure loss will result (max. permissible operating pressure must not be exceeded!)

8. Maintenance

If the medium to be measured is clean, the series UTS is virtually maintenance- free. If deposits form on the inner housing or parts, periodic cleaning of the unit is recommended. Remove the units from the piping with a suitable tool; clean the flow meter with a suitable cleaning agent or make use of an ultrasonic bath.

9. Technical information

| Installation position: | vertical |
|------------------------|--|
| Accuracy class: | 4 acc. to VDI |
| Proc. temperature: | 0+65°C |
| Amb. temperature: | 0+100°C |
| Max. pressure: | 3 bar |
| Connections: | without adapter: M18x1,5 axial |
| | special connection |
| | with adapter: G"¼ (for horizontal pipes) |
| Protective category: | IP 65 |
| Materials: | |
| Fitting: | nickel plated brass |
| Measuring tube: | borosilicate glass |
| Bulb: | Polystyrene |
| Float: | stainless steel 1.4401 |
| O-ring: | NBR |
| | |

10. Order codes

Please refer to separate datasheet

11. Dimensions







12. Declaration of conformance

We, KOBOLD Unirota Kft. Nyíregyháza Hungary, declare under our sole responsibility that the product:

Flow Meter

Model: UTS-...

to which this declaration relates is in conformity with the standards noted below:

EN 61000-6-2:2006

Immunity industrial environment

EN 61000-6-3:2011 Emission residential, commercial

EN 55011:2007+A2:2011 ISM ratio-frequency equipment

EN61326-1:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements

EN 61010-1: 2011 Safety requirements for electrical measuring, control and laboratory devices

2004/108/EC Directive on the the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC

Hofheim, 17. Feb. 2016

H. Peters General Manager

M. Wenzel Proxy Holder

ppar. Willing