



Variable Area Flowmeter/monitor

Glass cone with fixed or loose flange



measuring
•
monitoring
•
analysing

URK



- Measuring range:
water: 1...10 – 15 000 ... 50 000 l/h
air: 0.02 ... 0.2 – 50 ... 500 Nm³/h
- Accuracy class: 4 according to VDI
- p_{\max} : 16 bar; t_{\max} : 100 °C (65 °C for PVC)
- Connection: flange DIN 2526, Form C, ANSI, DN 15 – DN 80
- Material: cast iron, stainless steel 1.4301, 1.4404

S2



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KOBOLD Messring GmbH
Nordring 22-24
D-65719 Hofheim/Ts.
☎ Head Office:
+49(0)6192 299-0
+49(0)6192 23398
info.de@kobold.com
www.kobold.com



Applications

- Domestic engineering
- Cooling circuits
- Plant engineering
- Water treatment
- Heating
- Machine tools
- Solar systems
- Welding machines
- Paper machines
- Glass melting pots
- Extrusion machines
- Induction furnaces

Technical Data

Installation position: vertical
 Accuracy class: 4 according to VDI
 Max. temperature: 100 °C (65 °C for PVC)
 Max. pressure: 03H... 23H 16 bar (with PN 16 flange)
 25H... 33H 12 bar (with PN 16 flange)
 35H... 41H 8 bar (with PN 16 flange)
 01L... 23L 16 bar (with PN 16 flange)
 25L... 33L 10 bar (with PN 16 flange)
 in all other cases 6 bar
 Calibration conditions: water: 20 °C, air: 20 °C, air pressure: 1.013 bar abs.

Contact (optional)

Proximity switch: PNP open collector, n. o. contact (monostable)
 Ambient temperature: -25 ... +70 °C
 Supply voltage: 12 ... 24 V_{DC}
 Current consumption: max. 10 mA
 Cable: 2 m, PVC
 Protective category: IP67

Description

The Kobold URK 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. To monitor flow rate limits, the URK meters can be optionally furnished with "open collector" proximity switches.

By its special design, this model is particularly suitable for applications where only very small operating pressures are available. Another advantage is offered by the very large sight glass which optically allows direct flow observation.

Materials

Material combination URK

| Ordering code | Connection | Float | Seal | Centering ring | Flange (fixed or loose)* | Cover plate* | Sight glass* | Measuring tube |
|---------------|-------------------------------|--|----------------------------|-----------------------|--------------------------|---------------------------|--------------|--------------------|
| 73 | cast iron | 1.4301 | NBR | PVC | cast iron | stainless steel 1.4301 | plexiglass | borosilicate glass |
| 33 | 1.4301 | 1.4301 | FPM | PTFE | 1.4301 | | | |
| 55 | 1.4404 | 1.4404 | FPM | PTFE | | | | |
| 99** | cast iron 1.4301 1.4404 | 1.4301 1.4404 aluminium PTFE PVC PP | NBR EPDM FPM PTFE | PVC PTFE 1.4301 | | | | |

* Not wetted part

** Customer specification on request



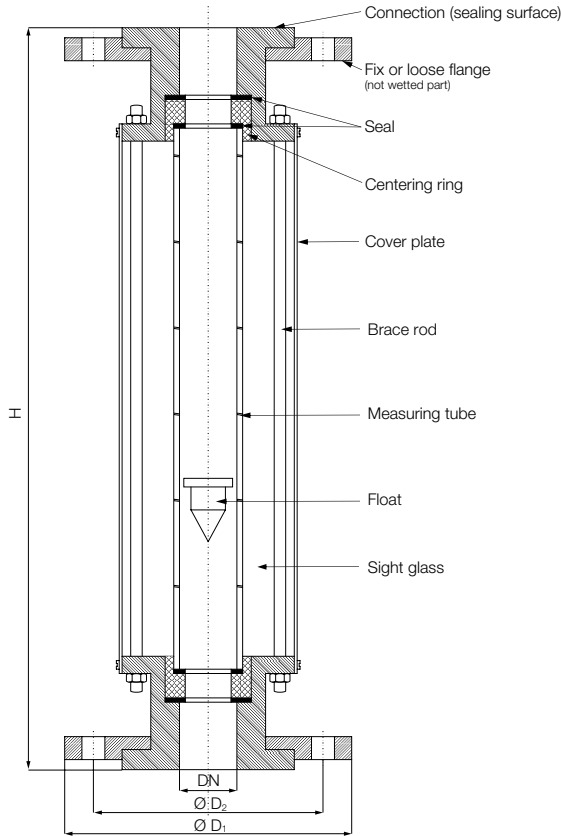
Order Details (Example: **URK-73 03H F F4 0**)

| Model | Material combination | Measuring range | | Pressure loss [mbar] | Flange | | | Contacts | |
|---------------------|------------------------|---------------------|--------------------------|----------------------|----------------------------------|--------------------------|-------------------------|------------------------|--|
| | | water [l/h] | air [Nm ³ /h] | | type | DIN 2526, Form C, PN 6 | DIN 2526, Form C, PN 16 | | ANSI 150 lbs |
| URK- | 73 33 55 99** | | 01L = 0.02...0.2 | 10 | F=fixed flange L=loose flange | F4 = DN 15 F5 = DN 20 | B4 = DN 15 | A4 = 1/2" A5 = 3/4" | 0 = no contact P* = 1 PNP normally open R* = 2 PNP normally open |
| | | 03H = 1...10 | 03L = 0.032...0.32 | 10 | | | | | |
| | | 05H = 1.6...16 | 05L = 0.05...0.5 | 10 | | | | | |
| | | 07H = 2.5...25 | 07L = 0.08...0.8 | 12 | | | | | |
| | | 09H = 4.0...40 | 09L = 0.13...1.3 | 9 | | | | | |
| | | 11H = 6.3...63 | 11L = 0.2...2.0 | 17 | | | | | |
| | | 13H = 10...100 | 13L = 0.32...3.2 | 24 | | | | | |
| | | 15H = 16...160 | 15L = 0.5...5 | 28 | | | | | |
| | | 17H = 25...250 | 17L = 0.8...8 | 28 | | | | | |
| | | 19H = 40...400 | 19L = 1.3...13 | 36 | | | | | |
| | | 21H = 63...630 | 21L = 2.0...20 | 34 | | | | | |
| | | 23H = 100...1000 | 23L = 3.2...32 | 43 | | | | | |
| | | 25H = 160...1600 | 25L = 5...50 | 48 | | | | | |
| | | 27H = 250...2500 | 27L = 8...80 | 48 | | | | | |
| | | 29H = 400...4000 | 29L = 13...130 | 51 | | | | | |
| | | 31H = 630...6300 | 31L = 20...200 | 57 | | | | | |
| | | 33H = 1000...10000 | 33L = 25...250 | 70 | | | | | |
| | | 35H = 1600...16000 | 35L = 32...320 | 93 | | | | | |
| | | 37H = 2500...25000 | 37L = 40...400 | 102 | | F7 = DN 32 | B7 = DN 32 | A8 = 1 1/2" | |
| | | 39H = 10000...40000 | 39L = 50...500 | 95 | | | | | |
| 41H = 15000...50000 | | 102 | | | | | | | |
| YYY = others | | | on request | | | | | | |

* Monostable switch. Other switching functions on request

** Customer specification on request

Dimensions



| DN | DIN | | | | | | | | ANSI | | | | |
|----|----------|---------------------|---------------------|--------|----------|---------------------|--------|------|---------------------|----------|---------------------|---------------------|--------|
| | Model | PN6 | | H [mm] | PN16 | | H [mm] | Size | Class 150 RF | | | | |
| | | D ₁ [mm] | D ₂ [mm] | | Model | D ₁ [mm] | | | D ₂ [mm] | Model | D ₁ [mm] | D ₂ [mm] | H [mm] |
| 15 | URK-..F4 | 80 | 55 | 380 | URK-..B4 | 95 | 65 | 380 | ½" | URK-..A4 | 88,9 | 60,5 | 380 |
| 20 | URK-..F5 | 90 | 65 | | URK-..B5 | 105 | 75 | 390 | ¾" | URK-..A5 | 98,6 | 69,9 | |
| 25 | URK-..F6 | 100 | 75 | 390 | URK-..B6 | 115 | 85 | | 400 | 1" | URK-..A6 | 108,0 | 79,2 |
| 32 | URK-..F7 | 120 | 90 | 400 | URK-..B7 | 140 | 100 | 400 | | 1¼" | URK-..A7 | 117,3 | 88,9 |
| 40 | URK-..F8 | 130 | 100 | 410 | URK-..B8 | 150 | 110 | 410 | 1½" | URK-..A8 | 127,0 | 98,6 | 400 |
| 50 | URK-..F9 | 140 | 110 | | URK-..B9 | 165 | 125 | | 410 | 2" | URK-..A9 | 152,0 | 120,7 |
| 65 | URK-..FA | 160 | 130 | 550 | URK-..BA | 185 | 145 | 550 | 2½" | URK-..AA | 177,8 | 139,7 | 550 |
| 80 | URK-..FB | 190 | 150 | 560 | URK-..BB | 200 | 160 | 560 | 3" | URK-..AB | 190,5 | 152,4 | |