

Variable Area Flowmeter/monitor

glass cone with fixed or loose flange

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



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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.

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

Materials

Material combination URK

Ordering code	Connection	Float	Seal	Centring 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 00)

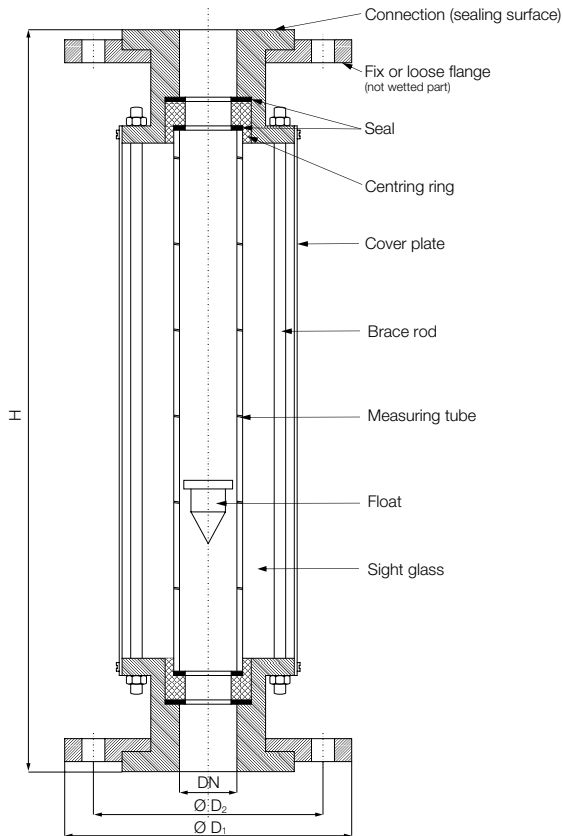
Model	Material combi- nation	Measuring range		Pressure loss [mbar]	type	Flange			Contacts ³⁾	
		water [l/h]	air [Nm³/h]			DIN 2526, form C, PN6	DIN 2526, form C, PN 16	ANSI 150 lbs		
URK-	73 33 55 99 ²⁾		01L = 0.02...0.2	10	F=fixed flange L=loose flange	F4 = DN 15 F5 = DN 20	B4 = DN 15	A4 = ½" A5 = ¾"	00 = none 1A = 1x N/O, PNP 2A = 2x N/O, PNP	
		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		F6 = DN 25	B5 = DN 20 B6 = DN 25	A6 = 1" A7 = 1 ¼"	00 = none 1B = 1x N/O, PNP 2B = 2x N/O, PNP	
		21H = 63...630	21L = 2.0...20	34						
		23H = 100...1 000	23L = 3.2...32	43		F7 = DN 32	B7 = DN 32	A8 = 1 ½"	00 = none 1C ¹⁾ = 1x N/O, PNP 2C ¹⁾ = 2x N/O, PNP	
		25H = 160...1 600	25L = 5...50	48						
		27H = 250...2 500	27L = 8...80	48		F8 = DN 40	B8 = DN 40	A9 = 2"		
		29H = 400...4 000	29L = 13...130	51						
		31H = 630...6 300	31L = 20...200	57		F9 = DN 50	B9 = DN 50	AA = 2 ½" AB = 3"		
		33H = 1 000...10 000	33L = 25...250	70						
		35H = 1 600...16 000	35L = 32...320	93		FA = DN 65	BA = DN 65	AA = 2 ½" AB = 3"		
		37H = 2 500...25 000	37L = 40...400	102						
		39H = 10 000...40 000	39L = 50...500	95		FB = DN 80	BB = DN 80	–		
		41H = 15 000...50 000		102						
		YYY = others				on request				

¹⁾ For URK range 39H(L)...41H the limit switch is only available as a min. contact.

²⁾ Customer specification on request

³⁾ Monostable switch. Other switching functions on request

Dimensions



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