



All-Metal Flow Switches for Liquids



measuring
•
monitoring
•
analysing



- Measuring range:
0.05-1.0 to 10-110 L/min
water
- Accuracy:
±5 % f. s.
- p_{max} 350 bar
 t_{max} 100°C
- Connection:
G $\frac{1}{4}$ to G $1\frac{1}{4}$ female thread
- Material:
Brass or stainless steel



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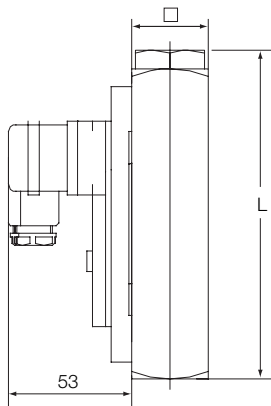
Model:
DSS



Description

The KOBOLD flow switches model DSS operate on the suspended float principle, however not with a tapering measuring tube, but with a cylindrical float and a slotted conical nozzle. This technology allows a very much more compact construction and offers considerable price advantages.

Dimensions



Model	Square [mm]	Thread G	L [mm]	Weight [kg]
DSS-..01H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..03H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..05H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..07H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..09H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..11H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..13H	30x30	1/4 (1/2)	132 (136)	0.9
DSS-..15H	40x40	3/4 (1)	156 (150)	1.7
DSS-..17H	40x40	3/4 (1)	156 (150)	1.7
DSS-..19H	50x50	1 1/4	165	2.9

Technical Details

Housing: DSS-11.. : Brass, Ms 58
 DSS-12.. : Stainless steel, 1.4301

Connections: DSS-11.. : Brass, Ms 58
 DSS-12.. : Stainless steel, 1.4301

Float: DSS-11.. : Brass, Ms 58
 DSS-1101: PP (polypropylene)
 DSS-12.. : Stainless steel, 1.4301
 DSS-1201: PVDF

Nozzle: DSS-11.. : Brass, Ms 58
 DSS-12.. : Stainless steel, 1.3955

Seals: DSS-11.. : NBR
 DSS-12.. : FPM

Max. temperature: 100 °C
 DSS-1101.., DSS-1201..: 70 °C

Max. pressure: DSS-1101.., DSS-1201..: 16 bar
 DSS-11.. : 250 bar
 DSS-12.. : 350 bar

Installation position: Vertical, upward flow

Accuracy: ±5% f. s.

Repeatability: ≤ 1%

Contact: Bistable reed contact

Electr. connection: 2 m cable (DSS-...FO...)
 For all other types:
 Connector DIN 43 650

Electrical switching values:

N/O contact (CSA)
 max. 240 V_{AC} / 100 VA / 1.5 A

Changeover contact (CSA)
 max. 240 V_{AC} / 60 VA / 1 A

N/O contact (UL)
 250 V_{AC} - 0.4 A / 200 V_{DC} - 0.25 A
 50 V_{DC} - 1.0 A

Changeover contact (UL)
 max. 250 V_{DC} / 0.136 A - 30 V_{DC} / 1 A

N/O contact Ex II 2G EEx m II T6 /
 2D IP67 T80 °C
 max. 250 V_{AC} / 100 VA / 1.5 A (I_K = 5 A)

Ex-range: ATEX zone 1 as "simple operator"
 or with N/O contact Ex

Protection: IP 65

Order Details (Example: DSS-1101H R0 R08)

Measuring range L/min water	Pressure loss Δ P [bar]	Float according to device version		Brass	Stainless steel	Contact	Connection	
		Brass	St. steel					
0.05...1	0.02	PP	PVDF	DSS-1101H...	DSS-1201H...			
0.15...1.7	0.04	Brass, nickel-pl.	St. steel	DSS-1103H...	DSS-1203H...	...R0.. = 1 N/O contact		
1...4.5	0.04	St. steel	St. steel	DSS-1105H...	DSS-1205H...	...U0.. = 1 changeover contact	..R08 = G 1/4	..N08 = 1/4 NPT
1...7	0.11	Brass, nickel-pl.	St. steel	DSS-1107H...	DSS-1207H...	...F0.. = 1 Ex N/O contact	..R15 = G 1/2	..N15 = 1/2 NPT
1...9	0.12	St. steel	St. steel	DSS-1109H...	DSS-1209H...			
2...14	0.18	St. steel	St. steel	DSS-1111H...	DSS-1211H...	...C0.. = 1 N/O contact (UL)		
2.5...20**	0.06	Brass, nickel-pl.	St. steel	DSS-1113H...	DSS-1213H...		..R20 = G 3/4	..N20 = 3/4 NPT
3...45	0.22	Brass, nickel-pl.	St. steel	DSS-1115H...	DSS-1215H...	...D0.. = 1 changeover contact (UL)	..R25 = G 1	
3.5...50	0.4	Brass, nickel-pl.	St. steel	DSS-1117H...	DSS-1217H...		..R32 = G 1 1/4	..N32 = 1 1/4 NPT
10...110	0.3	St. steel	St. steel	DSS-1119H...	DSS-1219H...			

*This instrument is also available with 2 contacts. Please specify in writing.

**DSS-...13H...R08: Measuring range 2.5... 18 L/min water.