



All Metal Flow Switches for liquids



measuring
•
monitoring
•
analysing

DSS



- Measuring range:
0.05 - 1.0 ... 10 - 110 l/min water
- Accuracy: $\pm 5\%$ of full scale
- p_{\max} : 350 bar; t_{\max} : 100 °C
- Connection: G 1/4 ... G 1 1/4 female
1/4 ... 1 1/4" NPT female
- Material: brass or stainless steel

S2



KOBOLD companies worldwide:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLOMBIA, CZECHIA, EGYPT, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, ROMANIA, SINGAPORE, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

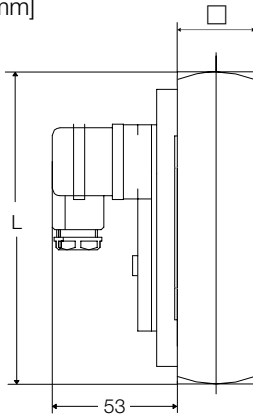
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Description

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 [mm]



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
 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 % of full scale
 Repeatability: ≤ 1 %
 Contact: bistable reed contact
 Electr. connection: 2 m cable (DSS-...F0...)
 for all other models:
 connector DIN EN 175301-803

Electrical switching values:

N/O contact
 max. 250V_{AC/DC}/1.5A/100W/100VA
 changeover contact
 max. 250V_{AC/DC}/1A/30W/60VA
 N/O contact and
 changeover contact (cCSAus)
 max. 230V_{DC}/0.26A/60W,
 60V_{DC}/1A/60W,
 max. 240V_{AC}/0.42A/100W,
 100V_{AC}/1A/100W
 N/O contact (EX):
 II 2G Ex mb IIC T6 Gb
 II 2D Ex mb IIIC T80°C Db IP67
 max. 250V_{AC}/1.5A/100VA

Ex-range:

ATEX zone 1 as »simple apparatus«
 or with N/O contact Ex

Protection:

IP65

Model	Square [mm]	Thread G	L [mm]	Weight [kg]
DSS-..01H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..03H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..05H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..07H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..09H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..11H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..13H	30 x 30	¼ (½)	132 (136)	0.9
DSS-..15H	40 x 40	¾ (1)	156 (150)	1.7
DSS-..17H	40 x 40	¾ (1)	156 (150)	1.7
DSS-..19H	50 x 50	1 ¼	165	2.9

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

Measuring range water [l/min]	Pressure loss Δ P [bar]	Float according to device version		Brass	Stainless steel	Contact ¹⁾	Connection	
		Brass	St. steel				Standard	Special
0.05...1	0.02	PP	PVDF	DSS-1101H...	DSS-1201H...	..R0.. = 1 N/O contact	..R08 = G ¾ ..R15 = G ½	..N08 = ¼" NPT ..N15 = ½" NPT
0.15...1.7	0.04	brass, nickel-pl.	St. steel	DSS-1103H...	DSS-1203H...	..U0.. = 1 changeover contact		
1...4.5	0.04	St. steel	St. steel	DSS-1105H...	DSS-1205H...	..F0.. = 1 N/O contact Ex		
1...7	0.11	brass, nickel-pl.	St. steel	DSS-1107H...	DSS-1207H...	..C0.. = 1 N/O contact (cCSAus)		
1...9	0.12	St. steel	St. steel	DSS-1109H...	DSS-1209H...	..D0.. = 1 changeover contact (cCSAus)		
2...14	0.18	St. steel	St. steel	DSS-1111H...	DSS-1211H...	..RR.. = 2 N/O contacts		
2.5...20 ²⁾	0.06	brass, nickel-pl.	St. steel	DSS-1113H...	DSS-1213H...	..UU.. = 2 changeover contacts		
3...45	0.22	brass, nickel-pl.	St. steel	DSS-1115H...	DSS-1215H...	..CC.. = 2 N/O contacts (cCSAus)		
3.5...50	0.4	brass, nickel-pl.	St. steel	DSS-1117H...	DSS-1217H...	..DD.. = 2 changeover contacts (cCSAus)		
10...110 ³⁾	0.3	St. steel	St. steel	DSS-1119H...	DSS-1219H...			
							..R32 = G 1 ¼	..N32 = 1 ¼" NPT

¹⁾ This instrument is also available with 2 contacts. Please specify in writing. ²⁾ DSS-...13H...R08: Measuring range 2.5... 18 l/min water

³⁾ Not possible with 'F0'