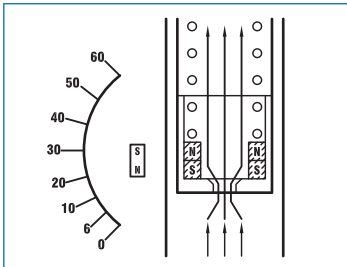


FLOW SWITCH AND INDICATOR OF100 SERIES

Technical Data

Piston type for high viscosity
Fluid: Water, oil, other liquid available; Gases
Flow Range: 15~30,000 l/h (at Water); 0.4~740 Nm³/h (at Air)
Accuracy: ±3% F.S, On request: ±2.5% F.S
Size: ¼" to 2½"
Connexion Type: NPT, Flange type on request
Working Limits: Temperature: -40°C to +180°C
Working Pressure: 30 kg/cm²
 Option-100 kg/cm² for 1" or less
 Option-200 kg/cm² for 1½" or bigger
Protection Class: IP66, Explosion proof
Housing Material: NS, CS, MS type-Aluminum Alloy
 ES type-SS316
Lens Material: Safety glass
Mounting: Vertical, Horizontal available
Material: Wetted parts SS316; Teflon lining float for Gases application
Alarm Switch: Micro switch, Inductive switch available

Principle



PATENT NO.
 Taiwan: M285697/M338982
 M332836
 China: 1187801



Ex d IIB + H₂ T6
 工電(2015)第00151號



NS Type (Indicating only)



CS Type (With inductive switch)



ES Type (Indicating only)

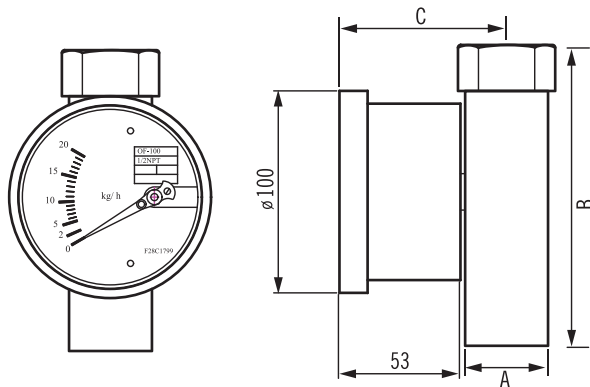


MS Type (With micro or reed switch)

Dimensions

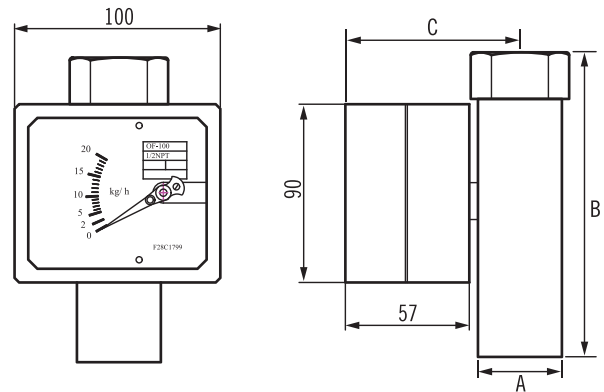
IP66

ES Type



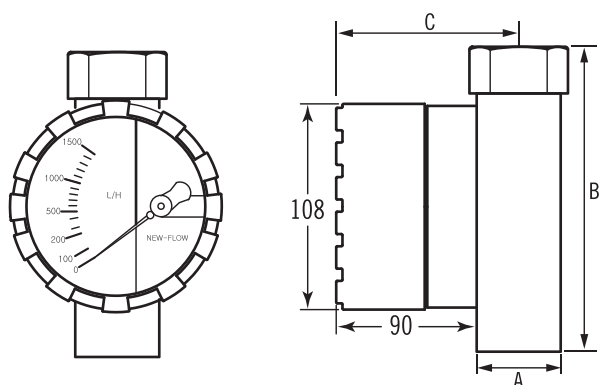
IP66

CS, NS TYPE



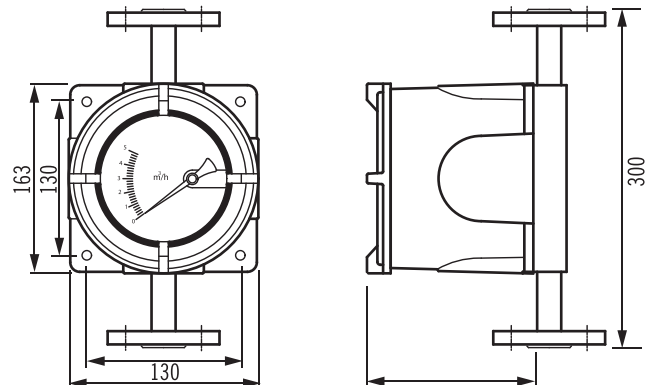
IP66

MS Type



Explosion Proof

Class I, Groups B, C & D; Class II, Groups E, F & G; **Ex** II 2 G Ex d IIB + H₂ Gb
 II 2 D Ex tb IIIC Db IP66
 NEMA 4, 7, 9

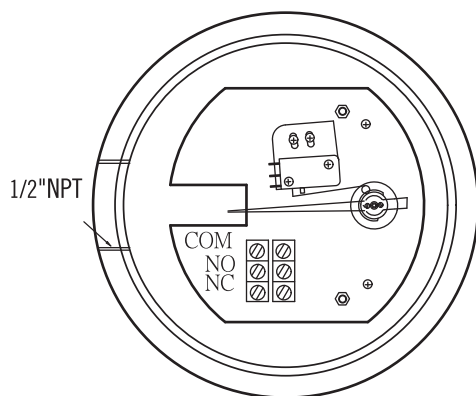


unit: mm

unit: mm

Alarm / Analog output

OF100-MS (Micro Switch)



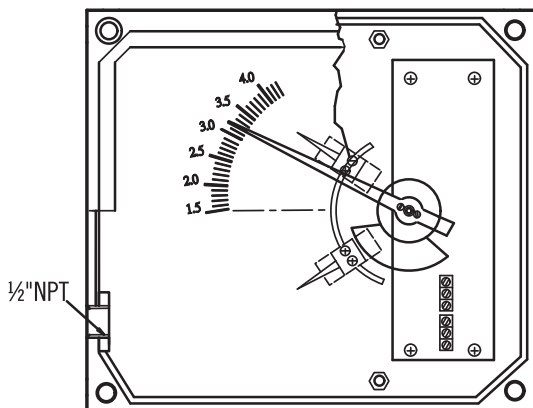
Adjustable Micro Switch, Series OF100-MS
1 adjustable alarm contact, or 2 adjustable alarm contact on request

Load: 5A/125VAC, 5A/250VAC, 2A/30VDC

Temperature: -25°C ~ +100°C (AMB)

Hysteresis: ±10% F.S (Dead Band)

OF100-CS (Inductive Switch)



Adjustable inductive alarm switch

Hysteresis: ±2% F.S (Dead Band)

Inductive sensors slotted type:

3.5mm slot switch

DC. voltage 2 wire's to DIN19234 (NAMUR) for use in hazardous areas.

– Power supply: 8 Vdc (Ri.approx. 1kΩ)

– Current consumption: Active face uncovered 3mA
 Active face covered 1mA

– Ambient temp: -25°C ~ +100°C

Isolated barriers output relay for inductive sensor:

- Rail mounting
- Control circuit EEx ia IIC
- EMC acc to NAMUR NE21
- Contact loading 250 VAC 2A SPDT 40 VDC 2A

1 adjustable alarm

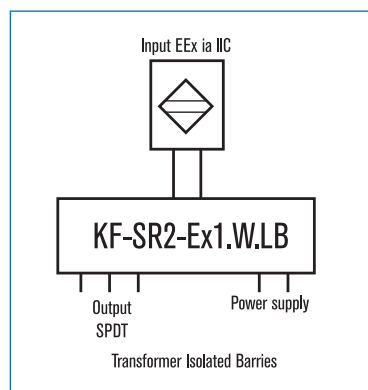
Contact setting point should be within 20% to 100% of F.S

For 24VDC: KFD2-SR2-Ex1.W
 115VAC: KFA5-SR2-Ex1.W
 230VAC: KFA6-SR2-Ex1.W

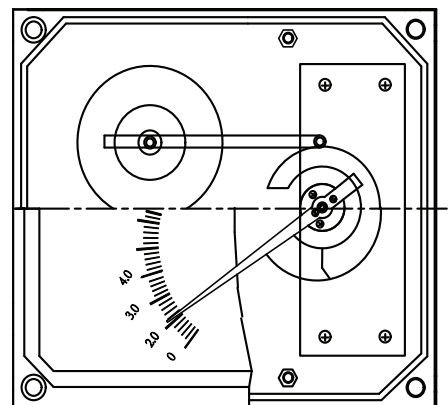
2 adjustable alarm

The second setting point should be a gap 40% from first setting point.

For 24VDC: KFD2-SR2-Ex2.W
 115VAC: KFA5-SR2-Ex2.W
 230VAC: KFA6-SR2-Ex2.W



OF100/GT (Analog Output)



Electric Transmitter OF100/GT

Analog output available: 4~20mA (2 wire)

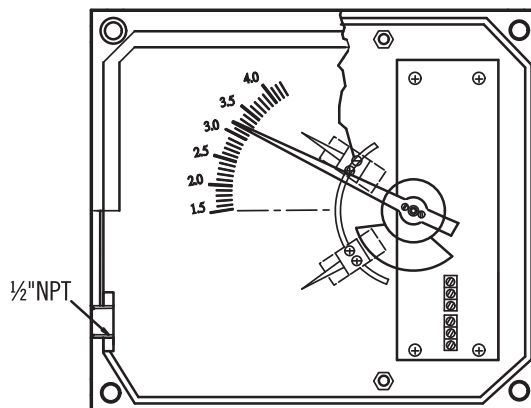
No Alarm Switch Available

Effective range within 20% to 100%

Power supplier: 24V dc

Temperature: +25°C ~ +100°C (AMB)

OF100-RS (Reed Switch)



Alarm Switch:

one or two setting points, form A bistable type (N.O. type)

Hysteresis:

±15% of full scale (Dead Band)

Switch Rating:

AC 125V 0.5A / DC 100V 10W / Max. DC 250V < 40 mA

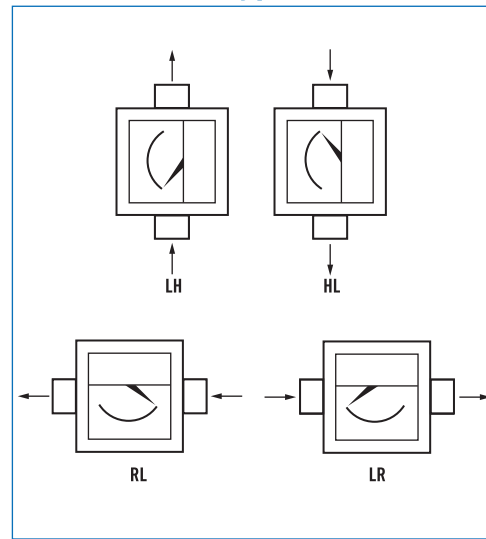
1 adjustable alarm

Contact setting point should be within 20% to 100% of F.S.

Standard Scales

Tube	L/H Water 20°C	NM ³ /H Air 0°C 1.013bar	A	B	C	BSP/ NPT
OF101	15 ~ 70	—		150		1/4"
OF102	18 ~ 80	0.4 ~ 2		150		1/4"
OF103	20 ~ 100	0.5 ~ 2.5		150		1/4"
OF104	25 ~ 125	0.6 ~ 3.2		150		1/4"
OF105	30 ~ 150	0.75 ~ 3.8		150		1/4"
OF106	40 ~ 210	1 ~ 5		150		1/2"
OF107	60 ~ 330	1.5 ~ 7.5		150		1/2"
OF108	70 ~ 400	1.6 ~ 8		150		1/2"
OF109	120 ~ 650	3 ~ 15		150		1/2"
OF110	160 ~ 800	4 ~ 20		150		1/2"
OF111	190 ~ 950	4.8 ~ 24		150		1/2"
OF112	300~1500	6.4 ~ 32		150		1/2"
OF113	200~1000	8 ~ 40		150		3/4"
OF114	350 ~ 1900	10 ~ 50		150		3/4"
OF115	500 ~ 2700	13 ~ 65		150		3/4"
OF116	700 ~ 3500	18 ~ 90		150		1"
OF117	800 ~ 6000	20 ~ 150		150		1"
OF118	800 ~ 6000	20 ~ 150		160		1 1/2"
OF119	900 ~ 7000	23 ~ 175		160		1 1/2"
OF120	2000~ 14000	70~ 350		160		1 1/2"
OF121	1500 ~ 20000	100 ~ 500		160		2"
OF122	2000 ~ 16200	50 ~ 400		160		2 1/2"
OF123	3000 ~ 30000	140 ~ 740		160		2 1/2"

Flow Direction Type



Ordering Information

OF100	Code	Type	Code	Protection Class & Explosion Type
	NS	Indicating only (Housing – Aluminum Alloy)	A	IP66
	ES	Indicating only (Housing – SS316)	C	Explosion proof / Aluminum alloy / (Certificate on Housing only) Class I, Groups B, C & D; Class II, Groups E, F & G; NEMA 4, 7, 9
	CS	With Inductive Switch	D	Explosion proof / Aluminum alloy / (EC-Type Examination) ITRI/TAIWAN – Ex d IIB + H2 T6
	MS	With Micro Switch	D1	Explosion proof / SS316 / (EC-Type Examination) ITRI/TAIWAN – Ex d IIB + H2 T6
	RS	With Reed Switch	F1	Explosion proof / Aluminum alloy / (IECEx Certificate on Housing only) Ex d IIB + H2 Gb T6 / Ex tb IIIC Db T85°C
	GT	Indicating + 4~20mA (no alarm switch available)	F2	Explosion proof / SS316 / (IECEx Certificate on Housing only) Ex d IIB + H2 Gb T6 / Ex tb IIIC Db T85°C
	GTA	Hall Sensor Type / Indicating + 4~20mA (no alarm switch available)		
		Code Switch		
		0 Without alarm switch		
		C1 One inductive alarm switch C2 Two inductive alarm switches		
		M1 One micro alarm switch M2 Two micro alarm switches		
		R1 One reed switch		
		Code Body Material		
		A SS316 B Option		
		Code Connection Type		
		(0) Thread Connection		
		(5) JIS 5K (10) JIS 10K (20) JIS 20K		
		(15) ANSI 150# (30) ANSI 300#		
		(40) ANSI 400# (60) ANSI 600#		
		(T) Other: _____		
		Code Connection Size		
		(1) ¼" (2) ½" (3) ¾" (4) 1"		
		(5) 1½" (6) 2" (7) 2½"		
		Code Flow Direction		
		0 LH 5 HL		
		10 RL 20 LR		
		Code Fluid		
		G Gas		
		O Oil		
		L Liquid		
		Code Range		
		S Standard Range		
		Code Conduit		
		1 ½"NPT(F)		
		2 Option		