

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: $\pm 3\%$ F.S, On request: $\pm 2.5\%$ F.S

Size: 1/4" to 2 1/2"

Connection 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 1 1/2" or bigger

Protection Class: IP66, Explosion proof

Housing Material: NS, CS, MS type—Aluminum Alloy

ES type—SS316

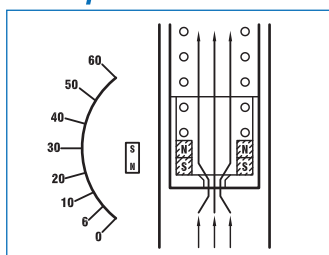
Lens Material: Safety glass

Mounting: Vertical, Horizontal available

Material: Wetted parts SS316; Teflon lining float for Gases application

Alarm Switch: Micro switch, Inductive switch available

Principle



Approvals:



Switches with UL & CSA
Recognized and File No.
E41515.



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GYB19.1793X
SIL2 Certified

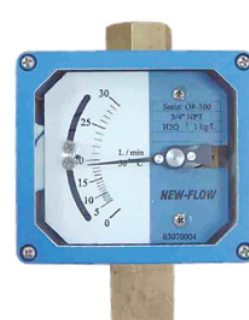
CE 2810
(PED: 2014/68/EU)

Patent No.

Taiwan: M285697 / M338982 / M332836
China: 1187801



NS Type (Indicating only)



CS Type (With inductive switch)



ES Type (Indicating only)



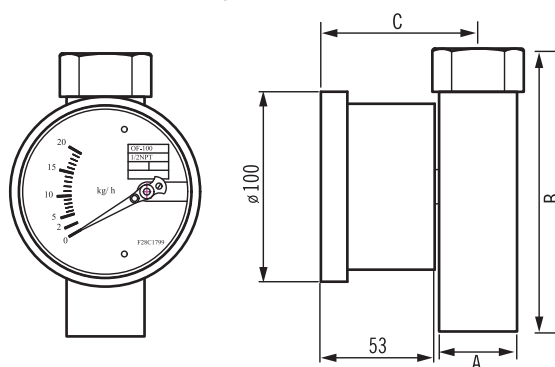
MS Type (With micro or reed switch)

Dimensions

IP68

ES Type

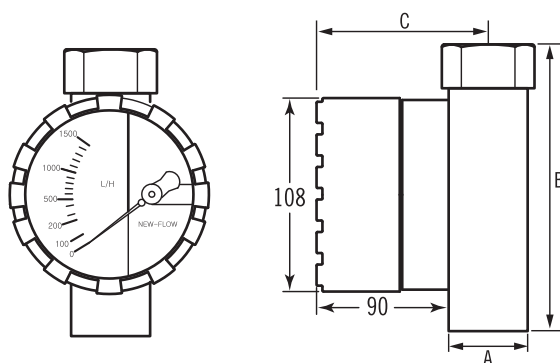
Housing Material: SS316



IP66

MS Type

Housing Material: Aluminum alloy

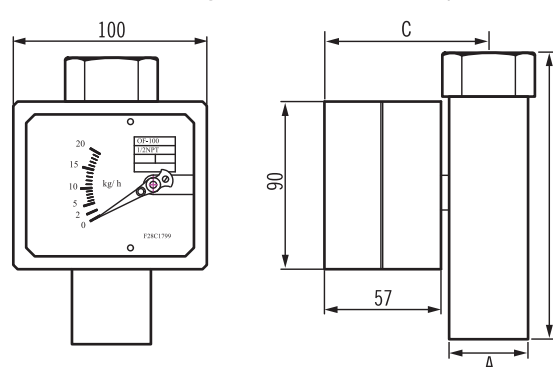


unit=mm

IP66

CS, NS Type

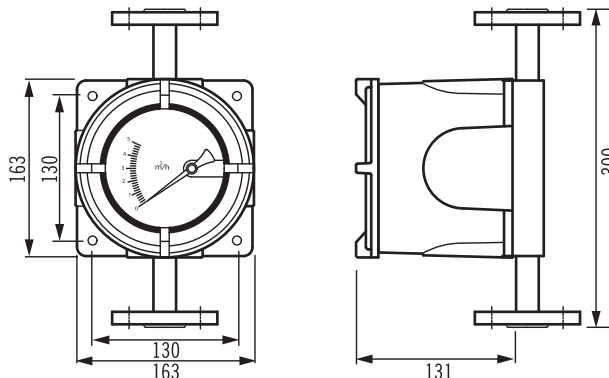
Housing Material: Aluminum alloy



Explosion Proof

Housing Material: Aluminum alloy, SS316 available

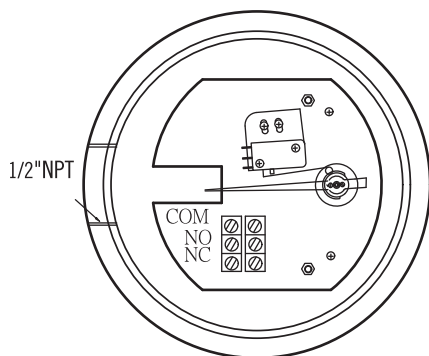
- Explosion Proof Certificate on Housing Only
- Taiwan Explosion Proof Certification



unit=mm

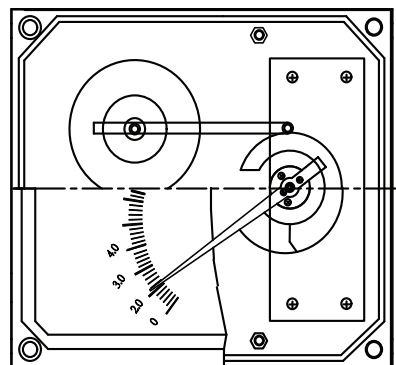
Alarm / Analog output

OF100-MS (Micro Switch)



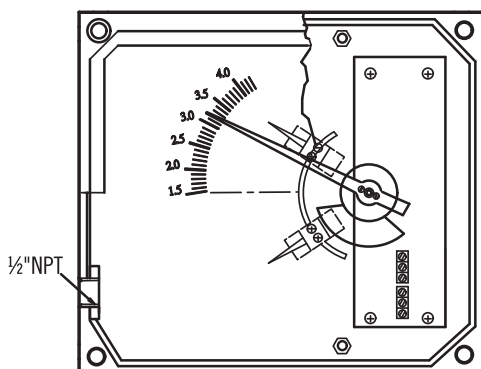
Adjustable Micro Switch, Series OF100-MS
1 adjustable alarm contact, or 2 adjustable alarm contact on request
Load: 5A/125VAC, 5A/250VAC, 2A/30VDC
Temperature: -25°C ~ +70°C (AMB)
Hysteresis: ±10% F.S (Dead Band)

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 ~ +70°C (AMB)

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 ~ +70°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

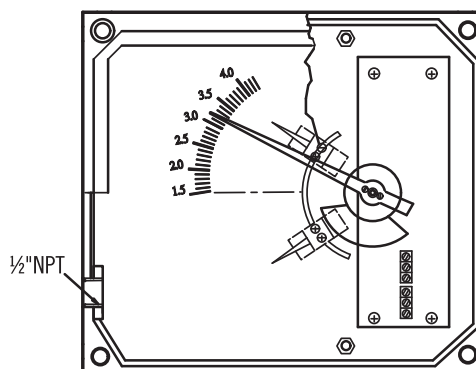
For 24VDC: KFD2-SR2-Ex1.W
 115VAC: KFA5-SR2-Ex1.W
 230VAC: KFA6-SR2-Ex1.W

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

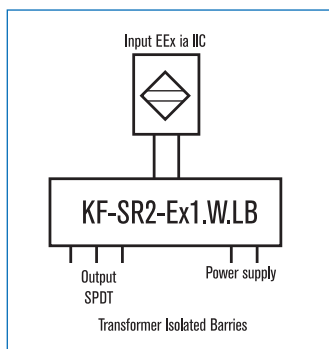
OF100-RS (Reed Switch)



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

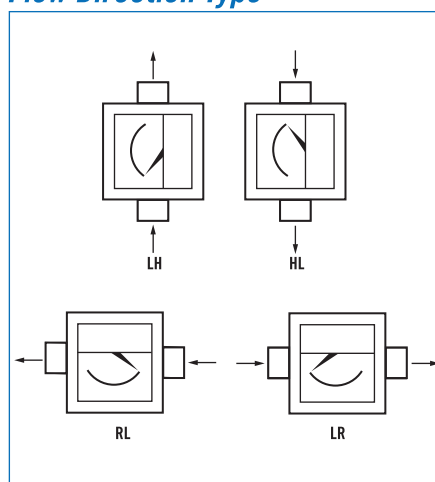
Contact setting point should be within 20% to 100% of F.S.



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	1200 ~ 6000	20 ~ 150		150		1"
OF118	1000 ~ 5000	20 ~ 150		160		1 1/2"
OF119	2000 ~ 10000	23 ~ 175		160		1 1/2"
OF120	3000 ~ 15000	70 ~ 350		160		1 1/2"
OF121	3200 ~ 16000	100 ~ 500		160		2"
OF122	3200 ~ 16000	50 ~ 400		160		2 1/2"
OF123	6000 ~ 30000	140 ~ 740		160		2 1/2"

Flow Direction Type



Ordering Information

OF100	Code	Type	Code	Housing Protection / Material
	NS	Indicating only (Aluminum alloy)	A	Weather proof type, IP66 / IP68
	ES	Indicating only (SS316)	C	(Ex. Certificate on Housing only) / Aluminum alloy Class I, Groups B, C & D; Class II, Groups E, F & G; NEMA 4, 7, 9
	CS	With Inductive Switch	D	(Taiwan Explosion Proof Certification) / Aluminum alloy Ex d IIB + H2 T6 Gb
	GS	MS With Micro Switch	D1	(Taiwan Explosion Proof Certification) / SS316 Ex d IIB + H2 T6 Gb
	RS	With Reed Switch	X	(Europe Union ATEX Certification) / Aluminum alloy II 2 G Ex db IIB + H2 T6 Gb Ta -20°C to +60°C
	GT	Indicating+4~20mA (no alarm switch available)	G	(China Explosion Proof Certification) / Aluminum alloy Ex d IIB + H2 T6 Gb
	GTA	Hall Sensor Type / Indicating + 4~20mA (no alarm switch available)		
	GTH	HART Type / Indicating + HART (no alarm switch available)		
	Code	Switch		
	O	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		
		(O) 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) 1/4" (2) 1/2" (3) 3/4" (4) 1"		
		(5) 1 1/2" (6) 2" (7) 2 1/2"		
	Code	Flow Direction		
		(O) LH (5) HL (10) RL (20) LR		
	Code	Fluid		
		(G) Gas (O) Oil (L) Liquid		
	Code	Range		
	S	Standard Range		
	Code	Conduit		
		(N) Without		
		(1) 1/2"NPT(F) (2) 3/4"NPT(F)		

CE Mark Request :
If stamp the CE2810 mark is necessary,
please consult with the manufacturer.