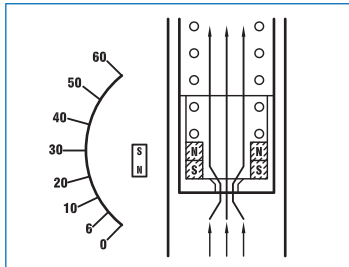


FLOW SWITCH AND INDICATOR OF100 SERIES

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



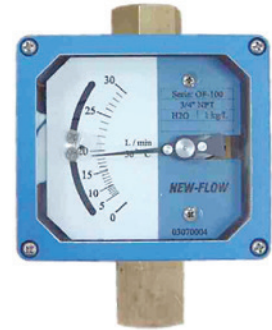
PATENT NO.
 Taiwan: M285697/M338982
 M332836
 China: 1187801



Ex d IIB + H₂ T6
 工研院字號認證審核中
 ITRI/Taiwan certificate examining



NS Type (Indicating only)



CS Type (With inductive switch)



ES Type (Indicating only)

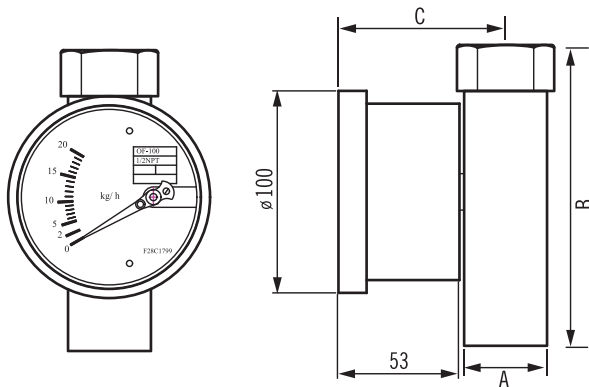


MS Type (With micro or reed switch)

Dimensions

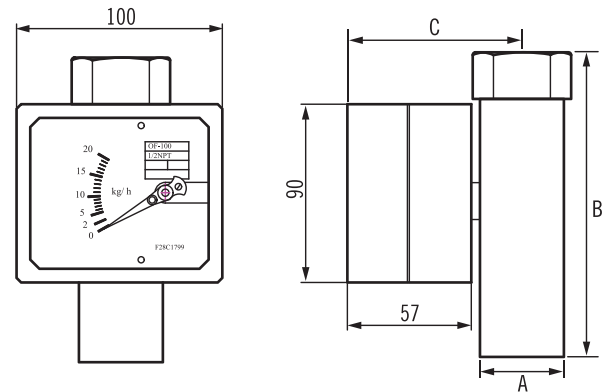
IP66

ES Type



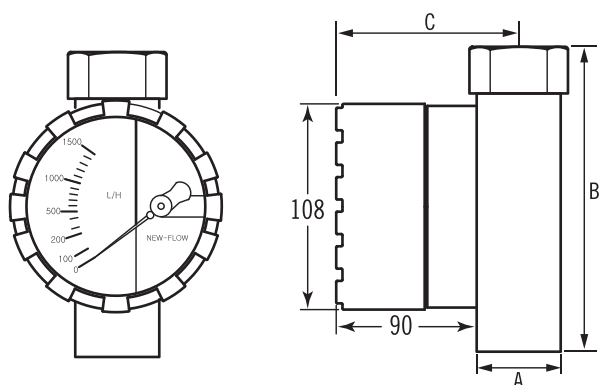
IP66

CS, NS TYPE



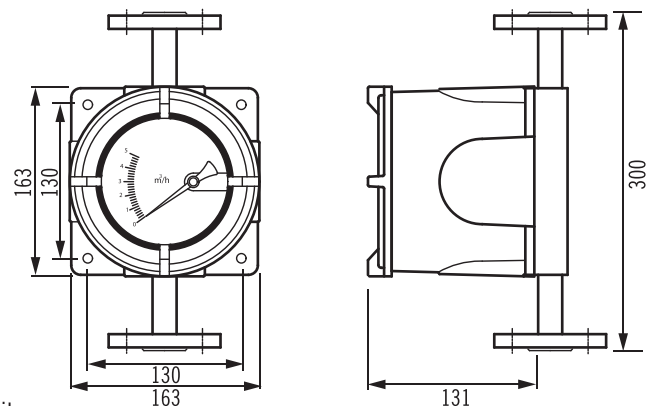
IP66

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

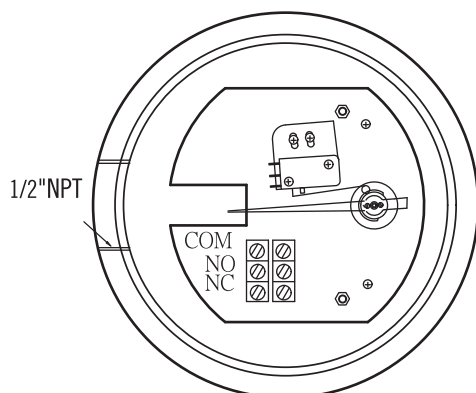


unit: mm

unit: mm

Alarm / Analog output

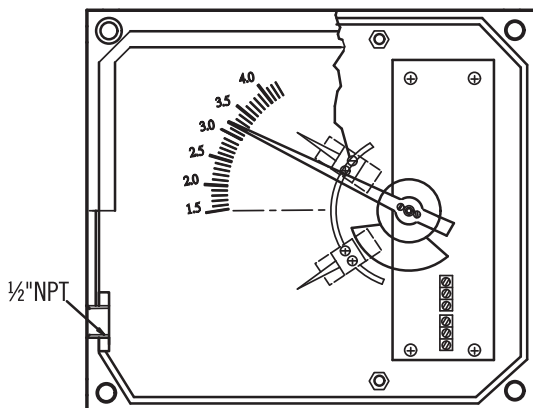
OF100-MS (Micro Switch)



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

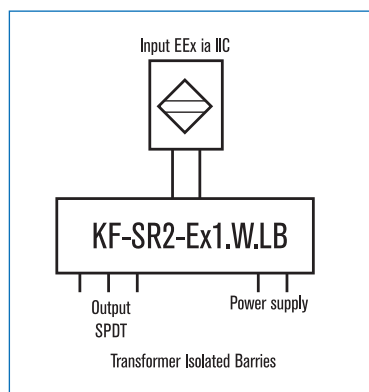
Contact setting point should be within 20% to 100% of F.S

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

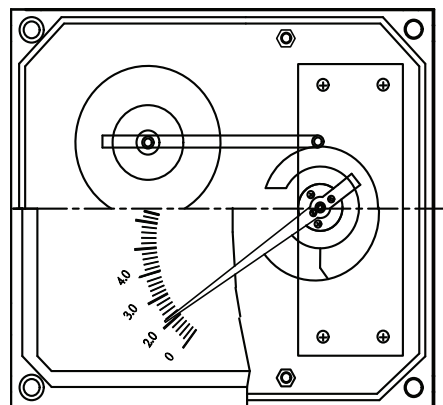
2 adjustable alarm

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)

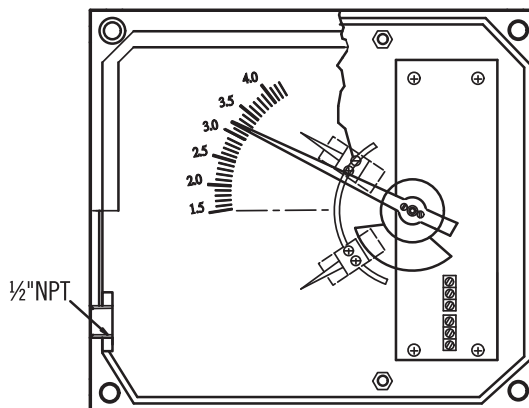
No Alarm Switch Available

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 < 1mA

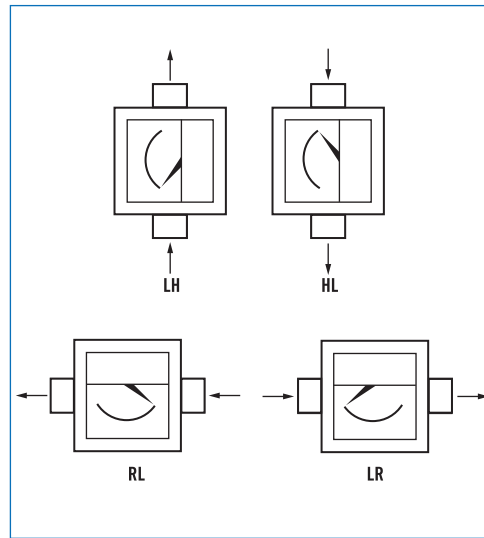
1 adjustable alarm

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 | Connection size |
|-------|------|---|----------|-----------------|
| | NS | Indicating only (Housing—Aluminum Alloy) | 1 | 1/4" |
| | ES | Indicating only (Housing—SS316) | 2 | 1/2" |
| | CS | With inductive switch | 3 | 3/4" |
| | MS | With Micro switch | 4 | 1" |
| | RS | With Reed switch | 5 | 1-1/2" |
| | GT | Indicating + 4~20mA (no alarm switch available) | 6 | 2" |
| | | Code Switch | 7 | 2-1/2" |
| | | 0 Without alarm switch | | |
| | | C1 One inductive alarm switch | | |
| | | C2 Two inductive alarm switches | | |
| | | M1 One Micro alarm switch | | |
| | | M2 Two Micro alarm switch | | |
| | | 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 Protection Class | | |
| | | A IP66 | | |
| | | C Explosion Proof: CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F, & G; NEMA 4, 7, 9 | | |
| | | Code Flow direction | | |
| | | 0 LH 10 RL | | |
| | | 5 HL 20 LR | | |
| | | Code Fluid | | |
| | | G Gas | | |
| | | O Oil | | |
| | | L Liquid | | |
| | | Code Range | | |
| | | S Standard range | | |
| | | Code Conduit | | |
| | | 1 1/2"NPT(F) | | |
| | | 2 Option | | |