

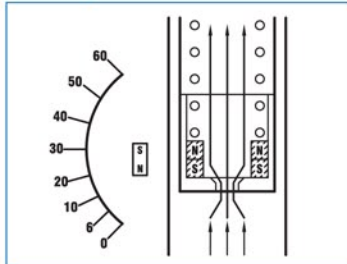
OF100

# 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 Nm<sup>3</sup>/h (at Air)  
**Accuracy:** ±3% F.S, On request: ±2.5% F.S  
**Size:** ¼" to 2½"  
**Connection Type:** NPT, Flange type on request  
**Working Limits:** Temperature: -40°C to +180°C  
**Working Pressure:** 30 kg/cm<sup>2</sup>  
 Option-100 kg/cm<sup>2</sup> for 1" or less  
 Option-200 kg/cm<sup>2</sup> 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



NS Type (Indicating only)



CS Type (With inductive switch)



ES Type (Indicating only)

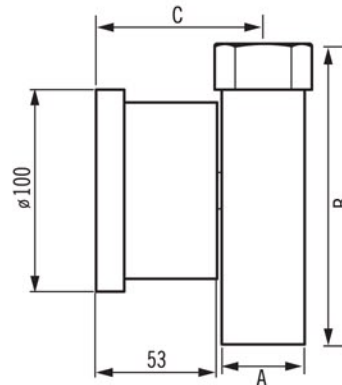
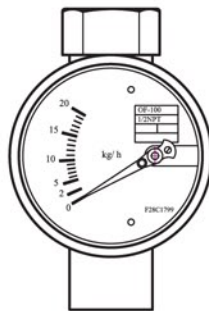


MS Type (With micro or reed switch)

## Dimensions

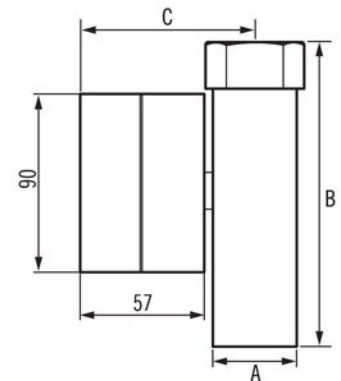
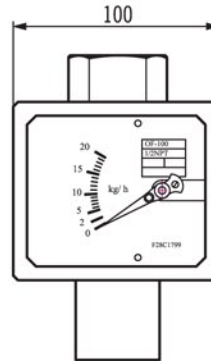
IP66

ES Type

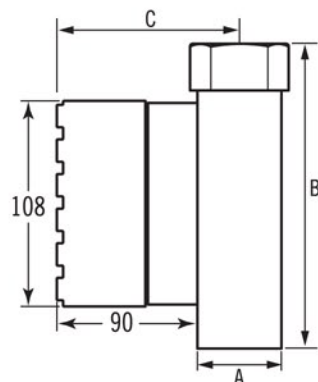
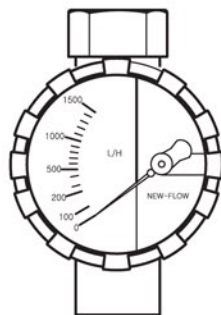


IP66

CS, NS TYPE

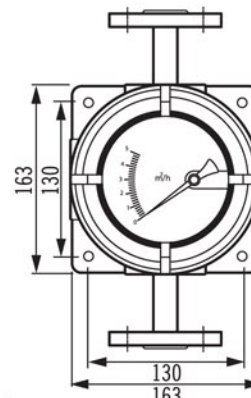


MS Type

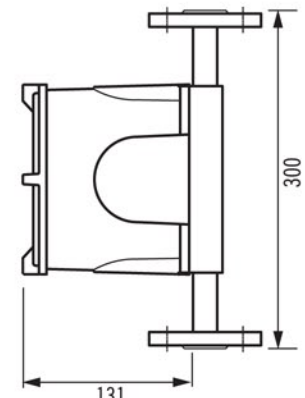


unit: mm

Explosion Proof



unit: mm

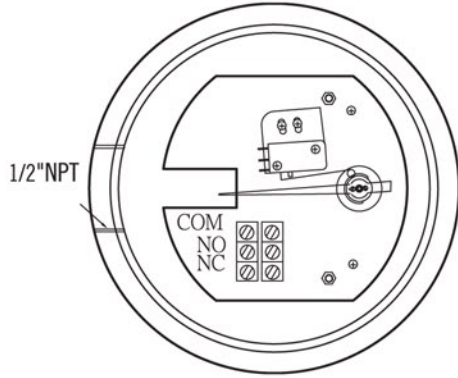


USKON AKIŞKAN KONTROL SİSTEMLERİ SANAYİ VE TİCARET LTD. ŞTİ.

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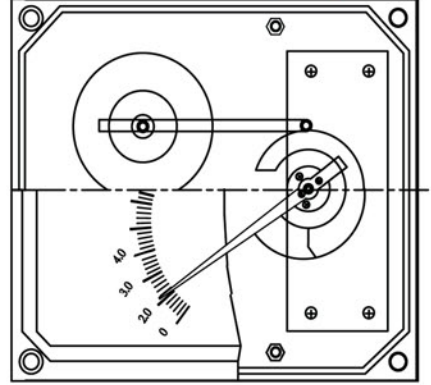
## Alarm / Analog output

### OF100-MS (Micro Switch)



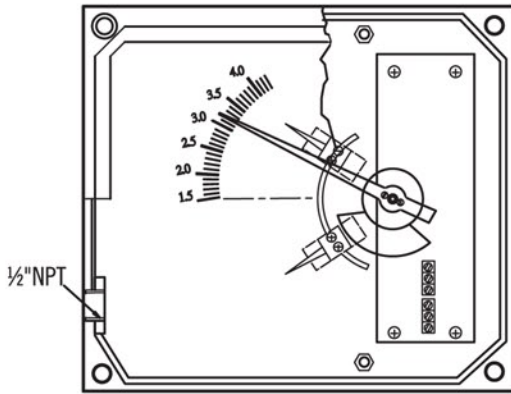
**Adjustable Micro Switch, Series OF100-MS**  
 1 adjustable alarm contact, or 2 adjustable alarm contact on request  
**Load:** 5A/125VAC, 5A/250VAC, 2A/30VDC  
**Temperature:** -25°C ~ +100°C (AMB)  
**Hysteresis:** ±10% F.S (Dead Band)

### OF100/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-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

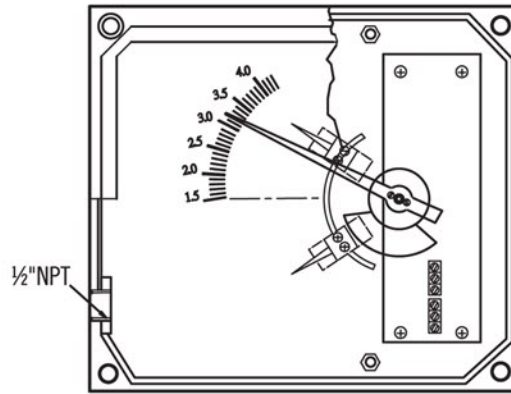
For 24VDC: KFD2-SR2-Ex1.W  
 115VAC: KFA5-SR2-Ex1.W  
 230VAC: KFA6-SR2-Ex1.W

#### 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-RS (Reed Switch)

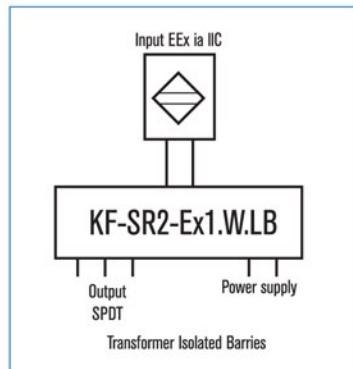


**Alarm Switch:**  
 one or two setting points, form A bistable type (N.O. type)  
**Hysteresis:**  
 ±15% of full scale (Dead Band)

**Switch Rating:**  
 AC 125V 0.5A / DC 100V 10W / Max. DC 250V < 1mA

#### 1 adjustable alarm

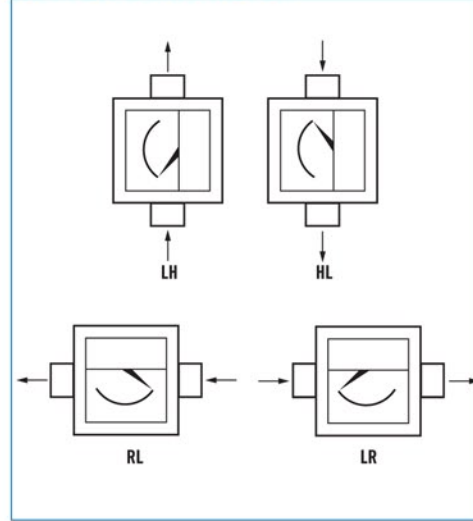
Contact setting point should be within 20% to 100% of F.S.



## Standard Scales

Tube	L/H Water 20°C	NM <sup>3</sup> /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"
		<b>Code</b> <b>Switch</b>	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		
	<b>Code</b>	<b>Body Material</b>		<b>Code</b> <b>Protection Class</b>
	A	SS316	B	Option
	<b>Code</b>	<b>Connection Type</b>		
		(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: _____		
				<b>Code</b> <b>Fluid</b>
				G Gas
				O Oil
				L Liquid
				<b>Code</b> <b>Range</b>
				S Standard range
				<b>Code</b> <b>Flow direction</b>
			0	LH 10 RL
			5	HL 20 LR
<b>OF100</b>				<b>+</b>

