


# DISPLACER LEVEL INDICATOR

**EDW900** – Weather Proof Type

**EDX900** – Explosion Proof Type

The NEW-FLOW Displacer Level Indicator are made to fit wide range applications such as pump control, waste water level and deep open tank. They are designed for high corrosive resistance and long service life. 900-Series are switch setting available and provide output signals 4~20mA.

## Technical Data

- Case Material:** Aluminum alloy case with paint; SS316 available
- Body & Wetted Parts Material:** SS316/SS316L, Indication via magnetic coupling (no sealed)
- Scales Calibrated:** in % or height
- Range of Measurement:** 300mm to 5M available; option on request
- Connection Types:** Flange type, Trip Clamp & Sanitary; Thread type (others on request)
- Connection Size:** 1½"~5"
- Process Connection Rating:** Thread type: NPT, BSP; Flange type: ANSI, DIN, JIS available
- Max. Working Temperature:** -50°C to +150°C (300°C option)
- Max. Working Pressure:** up to 100Bar; option on request
- Protection Class:** IP66 or Explosion Proof, Class I, Groups B, C & D; Class II, Groups E, F & G; NEMA 4, 7, 9
- Accuracy:** ±2% F.S (±1.6% F.S option)
- Conduit Connection:** Female ½"NPT, ½"BSP, ¾"NPT, ¾"BSP; option on request
- Alarm Switch:** Micro switch, Inductive switch, Reed switch available
- LCD Display:**
  - Totalizer 10 Digital (Top) / Flow rate 8 Digital (Bottom)
  - Analog Output Available: 4~20mA (2-wires)
  - Power Supply: 24VDC
- \*HART® Communication:** available
- Two Wires Transmitter with HART® Protocol** 
  - Galvanic Isolation
  - Suitable for application in SIL2 installations

### Approvals:



TD0400TJ

### SIL2 Certified



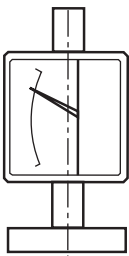
Switches with UL & CSA Recognized and File No. E41515.



## Housing Type

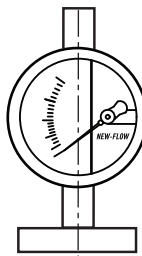
### IP66

**Case Type:** (A-1) Rectangle Bolt Right Type  
**Housing Material:** Aluminum alloy case with paint



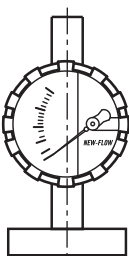
### IP66

**Case Type:** (B-1) Round Bayonet Ring Type (only for indicating)  
**Housing Material:** SS316



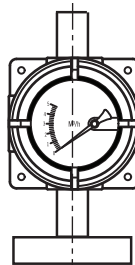
### IP66

**Case Type:** (A-2) Round Screw Tight Type  
**Housing Material:** Aluminum alloy  
**Case Type:** (B-2) Round Screw Tight Type  
**Housing Material:** SS316



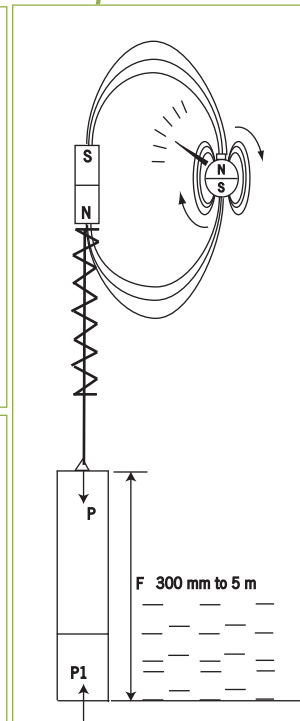
### Explosion Proof

**Housing Material:** Aluminum alloy  
**Protection Class:** Class I, Groups B, C & D; Class II, Groups E, F & G; NEMA 4, 7, 9



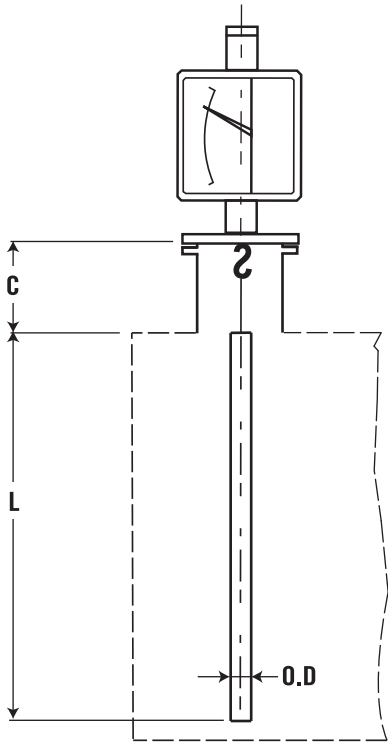
Mounting Length: 250mm standard  
Connection size bigger than 3", mounting length is 300mm.

## Principle

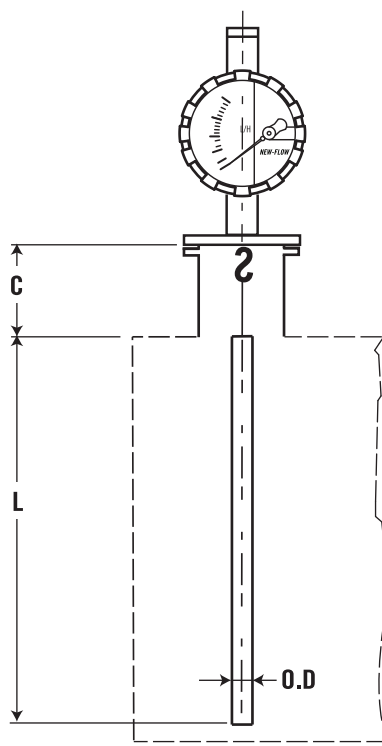


Dimension-mm

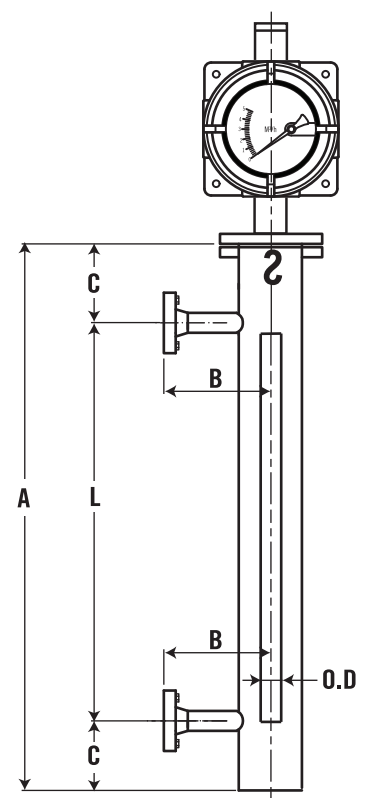
Rectangle Bolt Tight Housing



Round Screw Tight Housing



Explosion Proof Housing

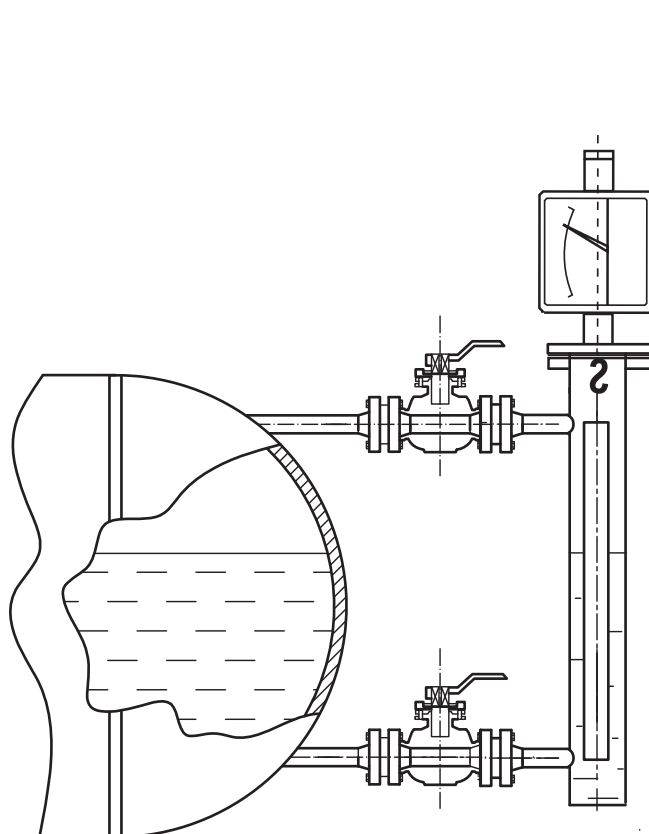
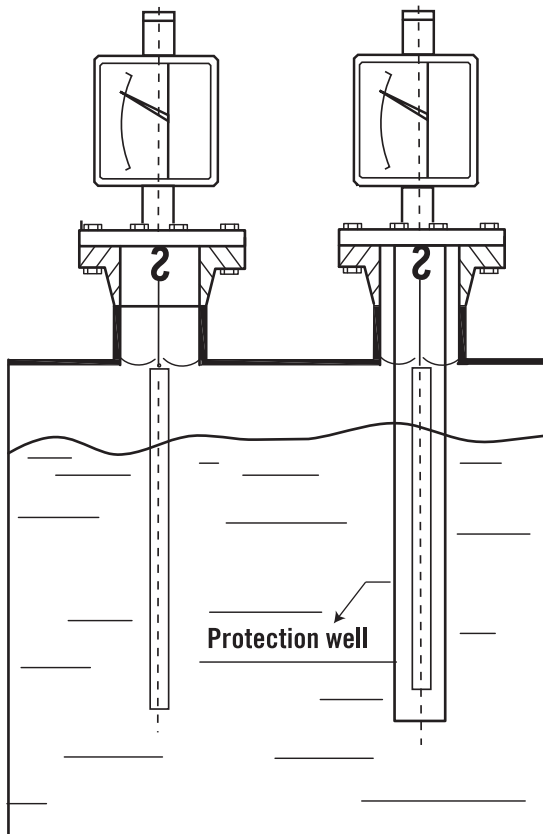


Installation Type

(1) Direct Insertion Type

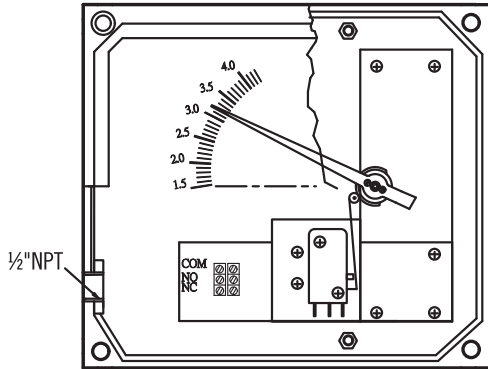
(2) Well Protection Type

(3) With Chamber Type (Side Mounting)



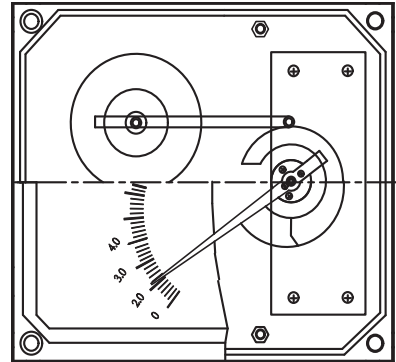
Alarm / Analog output

GS-M (Micro Switch)



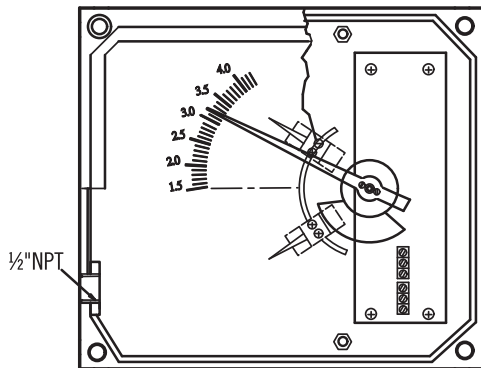
Adjustable Micro Switch, Series EDW/EDX900/GS-M  
 1 adjustable alarm contact  
 Load: 5A/125VAC, 5A/250VAC, 2A/30VDC  
 Temperature: -25°C ~ +100°C (AMB)  
 Hysteresis: ±10% F.S (Dead Band)

GT (Analog Output) / GTA (Hall Sensor)



Electric Transmitter EDW/EDX900/GT  
 Analog output available: 4~20 mA (2 wire)  
**No Alarm Switch Available**  
 Power Supplier: 24Vdc  
 Temperature: +25°C ~ +100°C (AMB)

GS-C (Inductive Switch)



Adjustable inductive alarm switch  
 Hysteresis: ±1% 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 250VAC 2A SPDT 40VDC 2A

1 adjustable alarm

Contact setting point should be within 10% to 100% of F.S

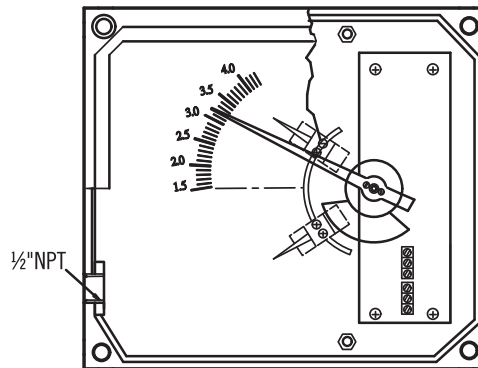
- For 24VDC: KFD2-SR2-Ex1.W
- 115VAC: KFA5-SR2-Ex1.W
- 230VAC: KFA6-SR2-Ex1.W

2 adjustable alarm

The second setting point should be a gap 65% from first setting point.

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

GS-R (Reed Switch)



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

Hysteresis:  
 ±10% F.S (Dead Band)

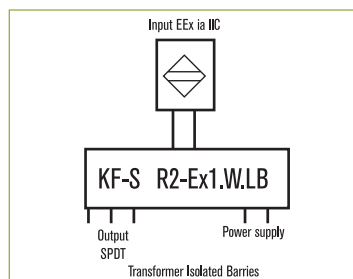
Switch Rating:  
 AC 125V 0.5A / DC 100V 10W / Max. DC 250V < 40 mA

1 adjustable alarm

Contact setting point should be within 10% to 100% of F.S.

2 adjustable alarm

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



Ordering Information

EDW900 EDX900	Code	Type	Code	Connection Size	
SIL2 Certified	G	Indicating Only	40B	1½" BSP (Male)	
	GS	Indicating + Switch	40N	1½" NPT (Male)	
	GT	Indicating + 4~20mA (no alarm switch available)	50B	2" BSP (Male)	
	GTA	Hall Sensor Type / Indicating + 4~20mA (no alarm switch available)	50N	2" NPT (Male)	
			12F	1½" Flange	
	GTH	HART Type / Indicating + HART (no alarm switch available)	20F	2" Flange	
			22F	2½" Flange	
		Code	Alarm	30F	3" Flange
		O	Without alarm switch	40F	4" Flange
		C1	One inductive alarm switch	50F	5" Flange
		C2	Two inductive alarm switches		
		M1	One micro switch	Code Transmitter Type, 4~20mA	
		R1	One reed switch	G	General Type
		R2	Two reed switches	O	Without Transmitter
		Code	Housing Protection / Case Type / Material	Code Fluid & Sp. Gr.	
	A1	IP66 / Rectangle bolt tight type / Aluminum alloy	Please directly fill out the fluid and Sp. Gr.		
	A2	IP66 / Round screw tight type / Aluminum alloy	Code Insertion Length (max. 5M)		
	B1	IP66 / Round bayonet ring type / SS316 (indicating only)	Please directly fill out the level length in the ordering code.		
	B2	IP66 / Round screw tight type / SS316	Code Installation Type		
	C	(Ex. Certificate on Housing only) / Aluminum alloy Class I, Groups B, C & D; Class II, Groups E, F & G; NEMA 4, 7, 9	1	Direct Insertion Type	
			2	Well Protection Type	
	Code	Body & Wetted Parts Material	3	With Chamber Type	
	A	SS316 / SS316L, Standard	Code LCD Display		
	O	Option	DO	With LCD Display IP66, for A1 case only	
	Code	Connection Rating	D	With LCD Display Explosion Proof, (assemble with D-1000) <b>NOTE.1</b>	
	O	Thread Connection	N	Without	
	5	JIS 5K	Code	O.D (mm)	
	10	JIS 10K	Calculation by Manufacturer.		
	20	JIS 20K	Code	Conduit	
	15	ANSI 150#	N	Without	
	30	ANSI 300#	1	½" NPT(F)	
	60	ANSI 600#	2	¾" NPT(F)	
	90	ANSI 900#			
	T	Other: _____			

**NOTE.1 LCD Display:**  
Assemble with D-1000 Series

