



ISO 9001  
REGISTERED

# NEW-FLOW

MANUFACTURE OF FLOW SWITCH  
FS20 SERIES  
AND CONTROL INSTRUMENTS

流動開關操作說明書

## *Instruction Manual*



**FS-20R**



**FS-20 DIN**



**FS-20X**

**Patent No.**

M290238

**Approvals:**



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Instruction No.: 20180530-fs20-01



# 1.0 DESCRIPTION

## Technical Data 規範

**Size:** From ½" to 1"

**Service:** For "Non-corrosive" liquid fluid available

\*In general, We DON't recommend using FS20 for the seawater application! But, if it is necessary, please let us know, we can customize the special magnet with lining to match up!

**Material:** Wetted parts 316 stainless steel

**Temperature Limit:** -20 to 150°C

**Pressure Limit:** 7.0 MPa (70 kg/cm²)

**Enclosure Housing:** FS20R- Weather proof  
FS20 Din- Weather proof  
FS20X- Explosion proof

**Switch Function:** SPDT micro switch

**Switch Rating:** 3A/250VAC, 3A/30VDC, 0.4A/125VDC

**Conduit Connection:** Female ½", ¾" G, NPT, and M20xP1.5 or M25xP1.5 available

### CAUTION.

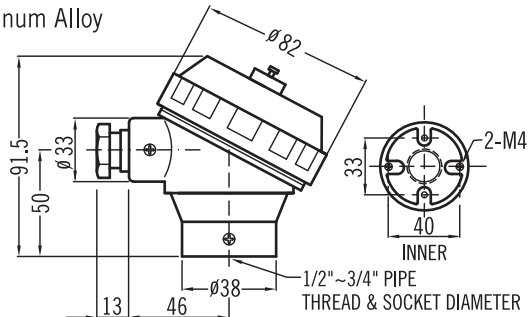
If using the FS20 for the Emergency Shower, please contact with the manufacturer at the first!!

# 2.0 HEAD TYPE / DIMENSIONS

## Head Type 接線盒型式

### FS20R- Weather Proof IP68

**Material:** Aluminum Alloy



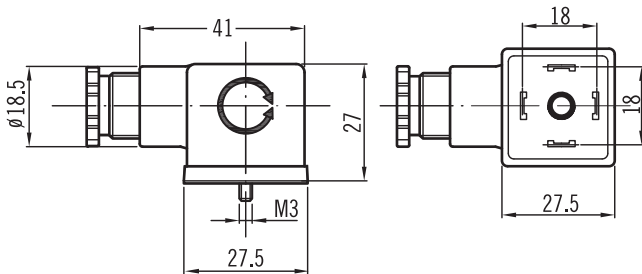
unit=mm

### FS20 Din- Weather Proof IP65

**Material:** Thermoplastic Rubber

**Cable Gland:** PG9

**Connector:** DIN43650



unit=mm

### FS20X- Explosion Proof

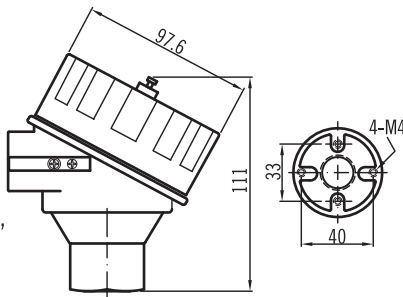
**Material:** Aluminum Alloy- standard;  
SS316 available

**ATEX directive code:** II 2 G D

**Standard code:** Ex d IIC T6,

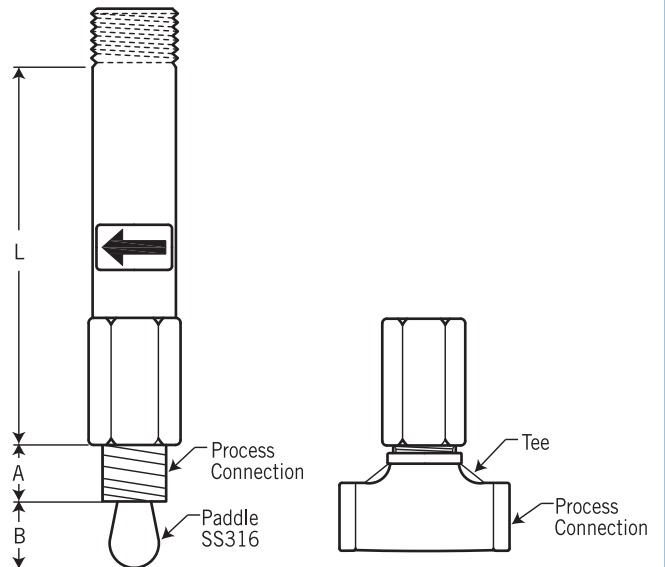
Ex tD A21 T100°C IP68

**FM Approvals:** XP/II/1/ABCD/T6;  
DIP/II, III/1/EFG/T6; Type 4X,  
Explosion proof for Class I,  
Division 1, Groups A,B,C and D;  
and dust-ignition proof for class II,  
III, Division 1, Groups E,F and G,  
hazardous (classified) locations;  
indoor/outdoor (NEMA Type 4X).



unit=mm

## Dimensions 尺寸



unit=mm

Size	L	A	B
½"	90	19	27
¾"	90	20	32
1"	90	21	42

## 3.0 FLOW RATE TABLE

### Flow Rate Table 流量作動參考表格

Process Connection (Female with Tee Fitting)	Flow Rates Required Water at 25°C		Dimensions for Tee		
	Acuate (on) ℓ/hour	Deacuate (off) ℓ/hour	A (mm)	B (mm)	REMARK
½"NPT	380,...460	150,...210	52	45	---
¾"NPT 1"NPT	550,...610	140,...240	64	47	¾" Paddle & ¾" Tee
			67	49	¾" Paddle & 1" Tee
1"NPT	930,...1010	750,...780	72	49	---

**NOTE.**

The Flow Rate Table is only for reference.

Please consult with manufacturer for the accurate flow rate if without tee fitting.

•左圖的流量作動表格僅供參考用。如若沒有三通接口，請聯絡原廠以知準確的流量。

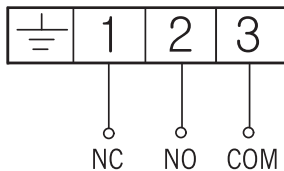
## 4.0 WIRE DRAWING

### Connection Diagram 接線方式

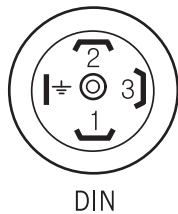
Switch Function: SPDT Micro Switch

Switch Rating: 3A/250VAC, 3A/30VDC, 0.4A/125VDC

3-Wire



•(For Model: FS20R and FS20X)•



•(For Model: FS20 Din)•

## 5.0 INSTALLATION INSTRUCTION

### Installation Instruction 安裝方式

