

FP - Flame Proof Pressure Switch

FP Series Flame Proof Pressure Switches have been primarily designed to control the pressure in explosive and hazardous applications. The compact design helps in easy commissioning and installation. The specially designed aluminum die cast enclosure is IP66 approved. It is designed to sustain mechanical vibration and shocks. They can be used in boilers, tankers, steam lines etc.



Features

Compact type

Easy installation

Fixed / adjustable differential

Adjustable set point

Aluminum die-cast

Flame proof to Ex.d IIC, Gb, IP66

Internal locking

Scale provided

Applications

Oil and Gas, Refineries

Power plants

Steel plants

Furnace applications

Petro-chemicals and Fertilizers

Cement industry

Glass industry

Standard Specifications

Repeatability : ± 0.5 % F.S

Scale accuracy : ± 1% F.S

Measurement unit : bar, kg/cm², psi, mbar and mmWC

Range : Refer "range table"

Range adjustment : External and internal locking

Differential : Fixed and adjustable (optional)

Mounting : Bottom / panel

Enclosure material : Aluminum pressure die cast IIC, IP66

Sensing elements : SS 316 diaphragm

Switch : 1 SPDT snap action micro switch

Switch rating : 15A, 250 VAC / 0.2A, 24 VDC

Process connection : 1/4" NPT (F)

Maximum process temperature : 130 °C

Ambient temperature : -10...60 °C

Cable entry : Double compression cable gland

Set point : Between 15 to 85 % F.S

for better performance

High voltage strength : 0.6 KV between open contacts and 2 KV

between contact and body

Range Table

Code	Range
	mmWC
А	-200 + 200
В	-200 + 400
С	-400 + 200
D	-400 + 600
E	-500 + 500
	kg/cm² and bar
F	0.1 + 1
G	0.2 + 2
Н	0.3 + 3
I	0.4 + 4
J	0.5 + 5
K	0.6 + 6
L	0.7 + 7

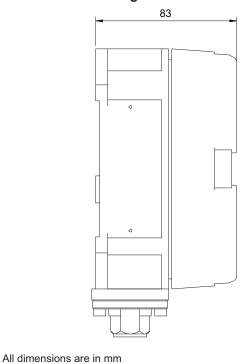
Code	Range
	kg/cm² and bar
М	1 + 10
N	1.6 + 16
0	2.5 + 25
Р	4 + 40
Q	6 + 60
R	10 + 100
S	16 + 160
Т	25 + 220
U	50 + 300
V	-1 + 1
W	-1 + 2
Χ	-1 + 3
Υ	-1 + 4

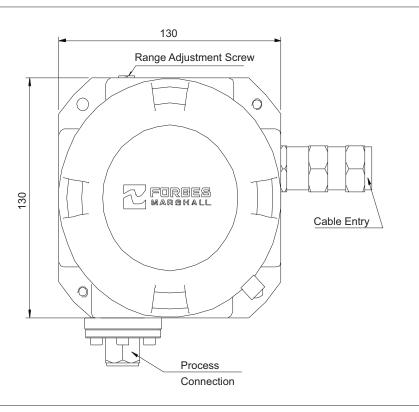
Compatible Accessories

Chemical seal Gauge saver Syphon Snubber

All type of manifolds

Dimensional Drawing





Microswitch Specifications

Description	Rating	Code 1SPDT	Code 2SPDT
General purpose	5-15A, 250 VAC	А	В
Gold contact	1A, 250 VAC	С	D
Environmentally sealed silver contact	5-15A, 250 VAC	Е	F
Environmentally sealed gold contact	1 A, 250 VAC	G	Н
Hermetically sealed silver contact	5-15A, 250 VAC	I	J
Hermetically sealed gold contact	1 A, 250 VAC	K	L

For any other requirement please contact Forbes Marshall. Other ranges can also be provided on request.

Ordering Codes		
1. Model		
FP Flame Proof Differential Pressure Switch		
2. Mounting	1	
•	-	
1 Direct bottom 2 Surface bottom		
	_	
3. Process connection size	A	
A 1/4" B 3/8" C 1/2"		
4. Process connection type	Α	
A NPT(M) D NPT(F)		
B BSP(M) E BSP(F)		
C BSPT(M) F BSPT(F)		
5. Range	М	
Please refer standard ranges table		
6. Units	1	
1 Kg/sq.cm dual scale with bar		
2 m bar dual scale with mm WC		
7. Microswitch	Α	
Refer table "Micro switch specification"		
8. Cable entry		
B 3/4 ET double comp. gland		
D 1/2" NPT double comp. gland		
G M20 X 1.5P double comp. gland		
	1	

9. Sensor moc	1
1 SS 3162 Monel3 Hastelloy C4 Teflon backup	
10. Wetted parts moc	1
1 SS 316 2 Monel 3 Hastelloy C	
11. Optionals features	XXXX
Calibration test certificate Material test certificate Enclosure protection to GR. IIA, IIB Enclosure protection to GR.IIC SS304 tag plate Wall mounting plate Pipe mounting with 2" pipe U-clamp	

Ordering code

CODE for below Pressure Switch will be FP1AAM1AE11-0000

Flame proof pressure switch, Direct bottom, 1/4"NPT(M), 1 + 10 Kg/sq.cm dual scale with bar, 1 SPDT general purpose, 5-15A, 250VAC, 3/4"ET double compression gland, SS316 sensor, SS316 wetted parts, Optional features

Notes

For any special requirements, please contact factory.

For special material such as Monel and Hastelloy C, the use of diaphragm seal pressure switch is recommended.



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