

Pressure switch series FP

Compact adjustable, for hazardous locations

Ex-proof according UL or CSA

Accuracy: $\pm 1\%$

Features

- Hermetically sealed snap action switch element
- Class 1, Div. 1, Gr. A, B, C and D according UL
- Protection IP66
- Wetted parts available in several materials
- High proof pressure

Ranges

-1/0 bar up to 280 bar

-30 in. Hg up to 4000 psi

Applications

Chemical and petrochemical industry

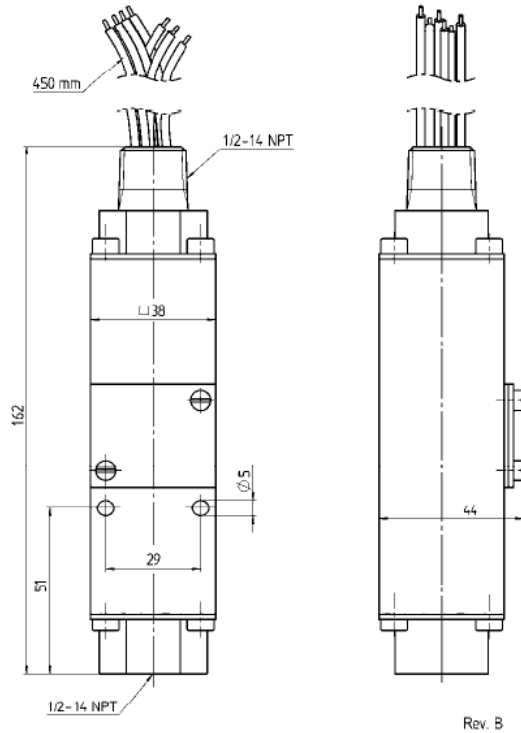
Machine and apparatus construction

Food and beverage industry

Offshore and pipelines



Technical specification	F Series
Construction	Weatherproof, Ex-proof according UL, CSA on request
Switch functions	One setpoint, single pole double throw (SPDT), or double pole double throw (DPDT)
Adjustable range	From 15 % to 100 %, below 15 % consult factory
Deadband	From 1,0 % to 15 % F.S., depending on material, range and microswitch
Measuring principle	Diaphragm-sealed piston-cylinder-system
Range in bar	2 4 7 14 28 42 70 140 ¹⁾ 210 ¹⁾ 280 ¹⁾ -1/0
Limits (pressure ranges)	vacuum to 14 bar 28 bar 42 bar 70 bar 70 to 210 bar ¹⁾ 280 bar ¹⁾
Proof pressure in bar	70 110 165 275 827 1100
	¹⁾ with Viton O-ring sealed piston actuator
Pressure type	Gauge and vacuum
Process connection	½ NPT female, ¼ NPT female, other available with adapter
Connection location	Lower
Material	
Pressure connection	Stainless steel 316 (1.4401)
Diaphragm	Buna N, Teflon and stainless steel 316 (1.4401) with O-ring, stainless steel 316 (1.4401) welded, stainless steel piston actuator with Viton O-ring
Housing	Aluminum, anodized
Accuracy	1,0 % F.S.
Electrical specification	
Microswitch ratings	From 1 A 125 VAC up to 11 A 250 VAC (see microswitch table)
Ex-proof	Class 1, Div. 1, Gr. A, B, C and D, Class 2, Div. 1, Gr. E, F and G
Electrical connection	½ NPT male conduit with wire leads # 18AWG insulated-18"
General specification	
Permissible	
Ambient temperature	-29 ... 65 °C
Medium temperature	Buna N, Teflon and stainless steel with O-ring -18 ... 65 °C, Viton -7 ... 93 °C, Stainless steel welded -18 ... 93 °C
Storage temperature	-40 ... 65 °C
Effect	Max. 0,7 % / 10 K ref. 20 °C
Protection according UL	NEMA 7 and 9
Protection according EN 60 529/IEC 529	IP66
CE-mark	Low voltage regulations EN 61 010-1, EN 60 947-1
Mounting	Standard stem, wall
Weight in kg	0,6
Accessories, options	Diaphragm seals, valves, adapters



Rev. B

Order information

Type	Body	Switch element	Actuator seal	Process connection	Range	Engineering unit	Electrical connection	Options
(FPS) Single setpoint field adjustable	(N7) Standard anodized aluminum IP66 UL approval NEMA 7 & 9	SPDT	(B) Buna N ¹⁾	(25) ¼ NPT female	-30/ 0 ²⁾	INHG	(=) Standard ½ NPT male conduit with wire leads # 18 AWG insulated-18"	(NH) Tagging wired
		(J) General purpose (11 A 125/250 VAC, 5 A 30 VDC)	(V) Viton ²⁾	(07) ½ NPT female	30 60 100 200 400 600 1000 2000 ¹⁾ 3000 ¹⁾ 4000 ¹⁾	PSI	(K3) Terminal blocks	(FS) Factory adjusted setpoint
(L) Low level (gold) contacts (1 A 125 VAC)	(T) Teflon ¹⁾	(15) G ½ A male ¹⁾	¹⁾ these ranges are supplied with Viton O-ring sealed piston actuator type H ²⁾ not available for metal diaphragms ³⁾ max. medium temperature -18 ... 93 °C	(6B) Oxygen cleaned (not for actuator or seal B and H)				
(P) Narrow deadband (5 A 125/250 VAC)	(S) 316 (1.4401) welded ³⁾	(R) Diaphragm 316 (1.4401) with Viton O-ring ¹⁾		(H) Stainless steel actuator with Viton O-ring ²⁾ (only ≥ 1000 psi)				(FP) Fungus proofing
		DPDT						(MD) Metric ranges
		(JJ) see code (J)						
		(LL) see code (L)						

Order example

Type	Body	Switch element	Actuator seal	Process connection	Range	Engineering unit	Electrical connection	Option
FPS	N7	LL	S	07	100	PSI	=	NH