

Pressure switch series F

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 inHg/0 up to 4000 psi

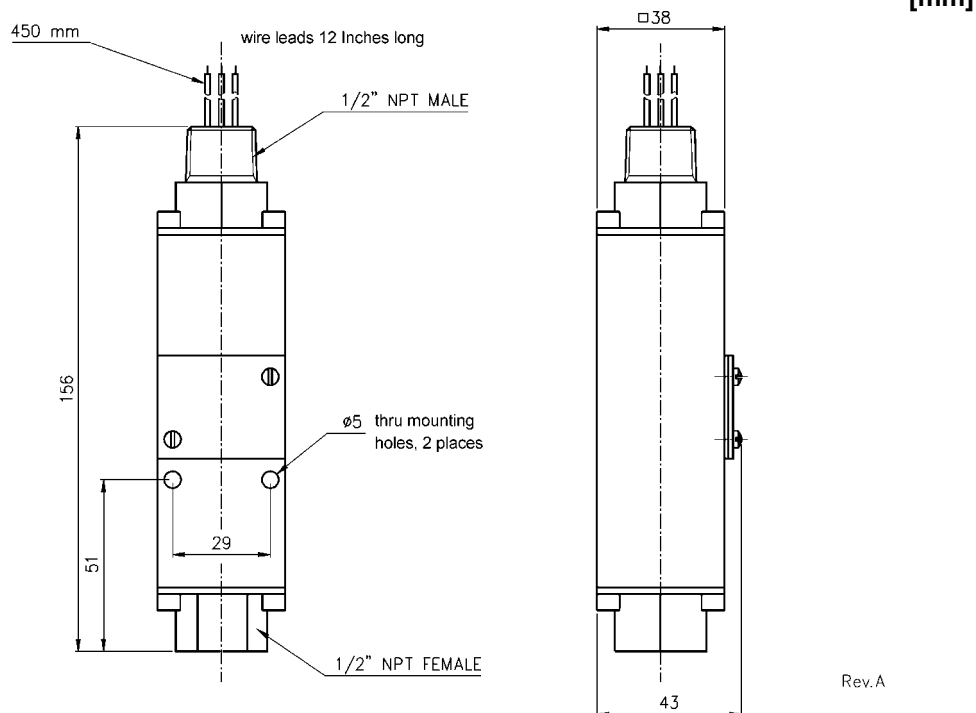
Applications

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 [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 ¹⁾
Proof pressure [bar]	70 110 165 275 827 1100
	¹⁾ with Viton O-ring sealed piston actuator
Pressure type	Gauge and vacuum
Process connection	½" NPT male, ½" NPT female, ¼" NPT female, other available with adapter
Connection location	Lower
Material	
Pressure connection	Stainless steel AISI 316 (1.4401), optional Monel
Diaphragm	Buna N, Viton, Teflon, AISI 316 stainless steel with O-ring, AISI 316 stainless steel welded, Monel (max. 70 bar); stainless steel piston actuator with Viton O-ring
Housing	Aluminum, anodized; optional aluminum, anodized and epoxy coated, or stainless steel
Accuracy	1,0% F.S.
Electrical specification	
Microswitch ratings	From 5 A 30 VDC 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 # 18 AWG insulated -18"
General specification	
Permissible	
Ambient temperature	-29 ... 65°C
Medium temperature	Buna N, Teflon and stainless steel with O-ring -18°C ... 65°C, Viton -7°C ... 93°C, Stainless steel and Monel welded -18°C ... 93°C
Storage temperature	-40°C ... 65°C
Effect	max. 2% / 10 K ref. 20°C
Protection according UL	NEMA 4, 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 [kg]	0,6
Accessories, options	Diaphragm seals, valves, adapters

General dimensions



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 (N9) Stainless steel IP66 UL approval NEMA 7&9	(SPDT)	(B) Buna N ¹⁾ (V) Viton ²⁾ (T) Teflon ¹⁾	(25) 1/4" NPT female (06) 1/2" NPT male and 1/4" NPT female (07) 1/2" NPT female (15) G 1/2 A male ¹⁾	-30/ 0 ²⁾ 30 60 100 200 400 600 1000 2000 ¹⁾ 3000 ¹⁾ 4000 ¹⁾	INHG PSI	(=) Standard 1/2" NPT male conduit with wire leads # 18 AWG insulated-18"	(NH) Tagging wired (FS) Factory adjusted setpoint (6B) Oxygen cleaned (not for Buna N diaphragm) (EC) Epoxy coating for N7 body (FP) Fungus proofing (K3) Terminal blocks (MD) Metric ranges
		(L) Low level (gold) contacts (1 A 250 VAC, (P) Narrow deadband (5 A 125/250 VAC)	(S) AISI 316 (1.4401) welded ³⁾ (R) AISI 316 (1.4401) with Viton O-ring ¹⁾ (P) Monel, welded ³⁾ (H) Piston actuator with Viton O-ring ²⁾ (only ≥ 1000 psi)	1) max. operation temperature -18°C ... 65°C 2) max. operation temperature -7°C ... 93°C 3) max. operation temperature -18°C ... 93°C				1) with adapter
		(JJ) see code (J) (LL) see code (L)						

How to order

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