

Pressure switch series PP

Ex-proof according UL or ATEX (EEx d)
 One or two independent setpoints
 Accuracy: ±1 %



Features

- Setpoint adjustment separated from electrical system
- Easy setpoint adjustment, with setpoint indication
- Ex II 2 GD
- Protection IP66 or NEMA 7 and 9
- Wetted parts available in several materials
- High proof pressure

Ranges

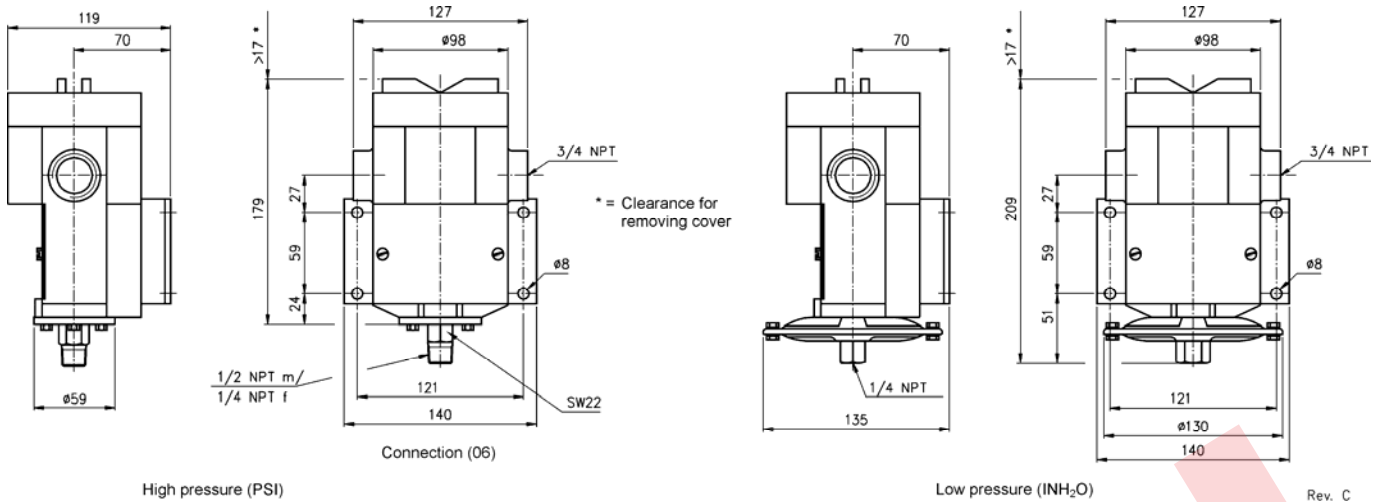
75 mbar up to 210 bar
 30 in. H₂O up to 3000 psi

Applications

Chemical and petrochemical industry
 Machine and apparatus construction
 Food and beverage industry
 Pulp and paper industry

Technical specification	PP		
	PPA	PPD	PPS
Type	Explosion proof according UL, CSA or CENELEC (ATEX)		
Construction	Separate chambers for setpoint/deadband adjustment and electrical connections, with setpoint indicators		
Switch (setpoint) functions	One single setpoint	Two setpoints independently adjustable	One single setpoint
Deadband	Adjustable over 80 %	Fixed	Fixed
Measuring principle	Diaphragm-piston-cylinder-system		
Range	75 150 250 375		
	in mbar		
	in bar		
Limits (pressure ranges)	mbar	vacuum	1 bar
Proof pressure	1,4	17	35
Burst pressure	2,4	28	69
Pressure type	Gauge, vacuum and compound		
Process connection	¼ NPT female, ½ NPT male/¼ NPT female (standard for ≥ 70 bar)		
Connection location	½ NPT female, G ½ B male, M20x1,5, others on request (metric connections with adapter)		
Material	Lower		
Pressure connection	Stainless steel 316 (1.4401), optional Monel		
Diaphragm	For mbar ranges steel epoxy coated standard, stainless steel on request		
Housing	Buna N, Viton (max. 70 bar), Teflon, stainless steel 316 (1.4401) or Monel (stainless steel and Monel only from ≥ 1 bar to ≤ 70 bar)		
Accuracy	Aluminum, epoxy coated grey		
	1 % F.S.		
Electrical specification			
Microswitch ratings	Up to max. 6 A 30 VDC respectively 22 A 250 VAC (see microswitch table)		
Ex-proof specification	UL Class 1 Div. 1 Gr. B, C and D EEx d IIB+H ₂ T6 SIRA 03 ATEX 1470		
Electrical connection	¼ NPT female, optional cable glands, ½ NPT with reducer bushing, M20x1,5, others on request		
General specification			
Permissible			
Ambient temperature	-25 ... 60 °C		
Medium temperature	Buna N and Teflon -18 ... 65 °C, Viton -7 ... 150 °C, stainless steel and Monel -18 ... 150 °C		
Storage temperature	-40 ... 60 °C		
Effect	Max. 0,4 % / 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 or 2" pipe mounting (TM)		
Weight mbar/bar in kg	3,0/3,2		
Accessories, options	Diaphragm seals, valves, adapters, NACE		

General dimensions in mm



Order information

single	dual	Switch element Description	Actuator seal	Range	Engineering unit	Protection	Process connection	Electrical connection	Options
PPA			(B) Buna N ¹⁾	-30/ 0	INHG/PSI	(N7) UL NEMA 7 and 9	(25) 1/4 NPT female	(=) Standard	(NH) Tagging wired
(H)		General purpose (10 A 250 VAC, 6 A 30 VDC)	(V) Viton ²⁾	-30/ 15					
(J)		Hermetically sealed (11 A 250 VAC, 5 A 28 VDC)	(T) Teflon ¹⁾	30	INH2O	(CEN3) ATEX EEx d with cable gland EEx d PG13,5	(06) 1/4 NPT female/ 1/2 NPT male ¹⁾	(JL) 3/4 to 1/2 NPT female reducing bushing	(FS) Factory adjusted setpoint
PPS	PPD		(S) 316 (1.4401) ³⁾	60					
(C)		Heavy duty AC (22 A 250 VAC)	(P) Monel ³⁾	100					
(F)	(FF)	Sealed environment sealed (15 A 250 VAC)		150	PSI	(CEN4) ATEX EEx d 3/4 NPT thread female	(07) 1/2 NPT female	(JM) 3/4 NPT to M20x1,5 female reducing bushing	(6B) Oxygen cleaned (not for Buna N diaphragm; in. H ₂ O ranges only with option TA)
(G)	(GG)	General purpose ¹⁾ (15 A 250 VAC, 6 A 30 VDC)		15					
(J)	(JJ)	Hermetically sealed general purpose ¹⁾ (11 A 250 VAC, 5 A 28 VDC)		30					
(K)	(KK)	Narrow deadband (15 A 250 VAC)		60					
(L)	(LL)	Hermetically sealed gold contacts (1 A 125 VAC) (for use in intrinsically safe circuits)		100					
(M)	(MM)	Low level (gold) contacts (1 A 125 VAC)		200					
(P)	(PP)	Hermetically sealed, narrow deadband (5 A 250 VAC)		400					
(S)		Heavy duty DC (10 A 125 VAC, 10 A 125 VDC) (not for protection CEN3 and CEN4)		600					
(W)	(WW)	Ammonia service (5A 250 VAC, 6 A 30 VDC)		1000					
(Y)	(YY)	High temp. (max. 150 °C) (15 A 250 VAC)		2000					
				3000					
							(15) G 1/2 B male ²⁾		(TM) 2" pipe mounting bracket
							(16) M20x1,5 male ²⁾		(TA) 316 (1.4401) pressure connection for in. H ₂ O ranges
									(MD) Metric ranges
									(CH) Chained cover
1) VDC rating not UL listed			1) max. medium temperature -18 ... 65 °C		note the range can also be specified in mbar or bar		1) standard for ranges ≥ 70 bar		
			2) max. medium temperature -7 ... 150 °C max. range 1000 psi				2) with Adapter		
			3) max. medium temperature -18 ... 150 °C only ranges from 15 to 1000 psi						

How to order

Type	Switch element	Actuator seal	Range	Engineering unit	Protection	Process connection	Electrical connection	Option
PPD	GG	B	100	PSI	N7	25	JL	NH

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