

RP2(E) Pressure switches explosion proof

All industrial environments

Reduced overall dimensions

Good vibration resistance

Resistant to short duration overpressure

LCIE 02 ATEX 6219X

CE 0081



II 2 G and D
EEx d IIC T6 or T5

Hazardous areas : 1, 2, 21, 22



These pressure switches maintain a constant pressure around a chosen set value: regulator action. They trigger an alarm or safety system, when the pressure reaches a critical pre-set value.

Important

Normal operation must be between 10% and 90% of the selected scale. The deadband values in the table overleaf are defined under these conditions.

Any pulsating circuit must be fitted with pulsation dampeners. Suitable separators must be used with incompatible process fluids.

Technical Data (20°C)

Fluids	All fluids compatible with the measuring element from -40...+150°C
Operating ambient temperature	From -20...+70°C
Storage temperature	From -40...+70°C
Reproducibility	±2% of F.S.
Minimum deadband	Depending on the type of microswitch used (see table overleaf)
Conform to CE	Low Voltage Directive DBT 73/23/CE Directive ATEX 94/9/CE (EN50014, EN50018, EN50281-1-1)
Degree of protection	IP 65, NF EN 60529
Weight	1.800 kg

Manufacturing

Explosion-proof housing	Epoxy painted aluminium housing
Wall mounting	2 CHC M6 x 16 screws
Earth connection	Via internal or external terminal block
Electrical connection	Via internal terminal block with P.G. certified ATEX for cable 7 to 12 mm dia
Graduated scale	Internal calibrated scale
Pressure connection	G 1/2
Measuring element	1.4404 s.s. (316 L) diaphragm

**BOURDON
HAENNI**

made to measure

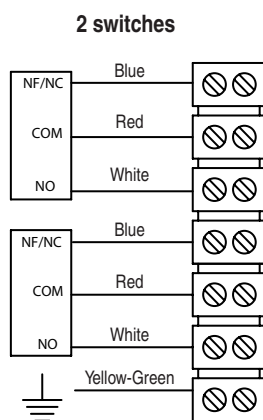
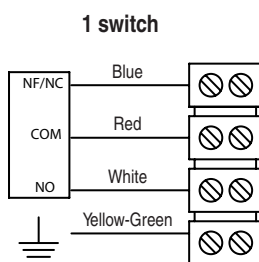


Adjustable ranges

Scale	Code	Max.P		MAXI FIXED DEADBAND						MINI-MAXI ADJUSTABLE DEADBAND		
		Permanent	Accidental	Standard (1xSPDT)		Standard (2xSPDT)		Gold contact	Tropicalised	Hermetically sealed	Adjustable	
				L to 10 % of scale	to 90 % of scale	U to 10 % of scale	to 90 % of scale	M to 10 % of scale	N to 90 % of scale	P to 10 % of scale	R to 10 % of scale	to 90 % of scale
bar		bar		mbar	mbar	mbar	mbar	mbar	mbar	mbar	mbar	
0 + 1	41	10	50	30	60	150	300	120	330	*	*	
0 + 1,6	42			35	70	175	350	150	390	100 .. 200	200 .. 550	
0 + 2,5	43			40	80	200	400	180	480	125 .. 230	250 .. 700	
0 + 4	44			45	90	225	450	210	540	150 .. 290	320 .. 900	
0 + 6	45			50	100	250	500	240	630	190 .. 350	420 .. 1200	
0 + 10	46			55	110	275	550	300	750	260 .. 500	600 .. 1800	
0 + 4	51	40	100	110	200	550	1000	600	1320	500 .. 1000	1250 .. 2000	
0 + 6	52			110	235	550	1175	750	1620	550 .. 1100	1350 .. 2200	
0 + 10	53			120	270	600	1350	840	2010	650 .. 1300	1500 .. 2600	
0 + 16	54			130	305	650	1525	960	2370	800 .. 1600	1700 .. 3100	
0 + 25	55			140	340	700	1700	1050	2730	1000 .. 2000	2000 .. 3900	
0 + 40	56			150	380	750	1900	1140	3150	1400 .. 2800	2600 .. 5200	
0 + 10	61	100	200	200	500	1000	2500	1500	3600	1000 .. 2000	3000 .. 6000	
0 + 16	62			280	700	1400	3500	2100	3960	1150 .. 2300	3500 .. 7000	
0 + 25	63			360	900	1800	4500	2700	5550	1350 .. 2700	4200 .. 8400	
0 + 40	64			440	1100	2200	5500	3300	7350	1700 .. 3400	5350 .. 10700	
0 + 60	65			520	1300	2600	6500	3900	9600	2100 .. 4200	6900 .. 13800	
0 + 100	66			600	1500	3000	7500	4500	13200	3000 .. 6000	10000 .. 20000	

Cable identification, current rating

Cable identification



Current rating

Microswitch type SPDT

L	Standard Fixed deadband	0.4 A min.; 10 A max. 250 Vac max.
P	Hermetically ultra sensitive Fixed deadband	0.4 A min.; 2 A max. 30 Vdc max.
R	Adjustable deadband	0.4 A min.; 10 A max. 250 Vac max. 220 Vdc max.
U	2 contacts Fixed deadband	0.4 A min.; 10 A max. 250 Vac max. 220 Vdc max.
M	Gold contact Fixed deadband	10 mA min.; 50 mA max. 250 Vac max. 220 Vdc max.
N	Tropicalized Fixed deadband	0,1 A min.; 10A max. 250 Vac max. or 48 Vcc max.


Important : Maximum power dissipation in the case must not exceed 5 W

Regulation

Pressure of regulator type RP2(E)

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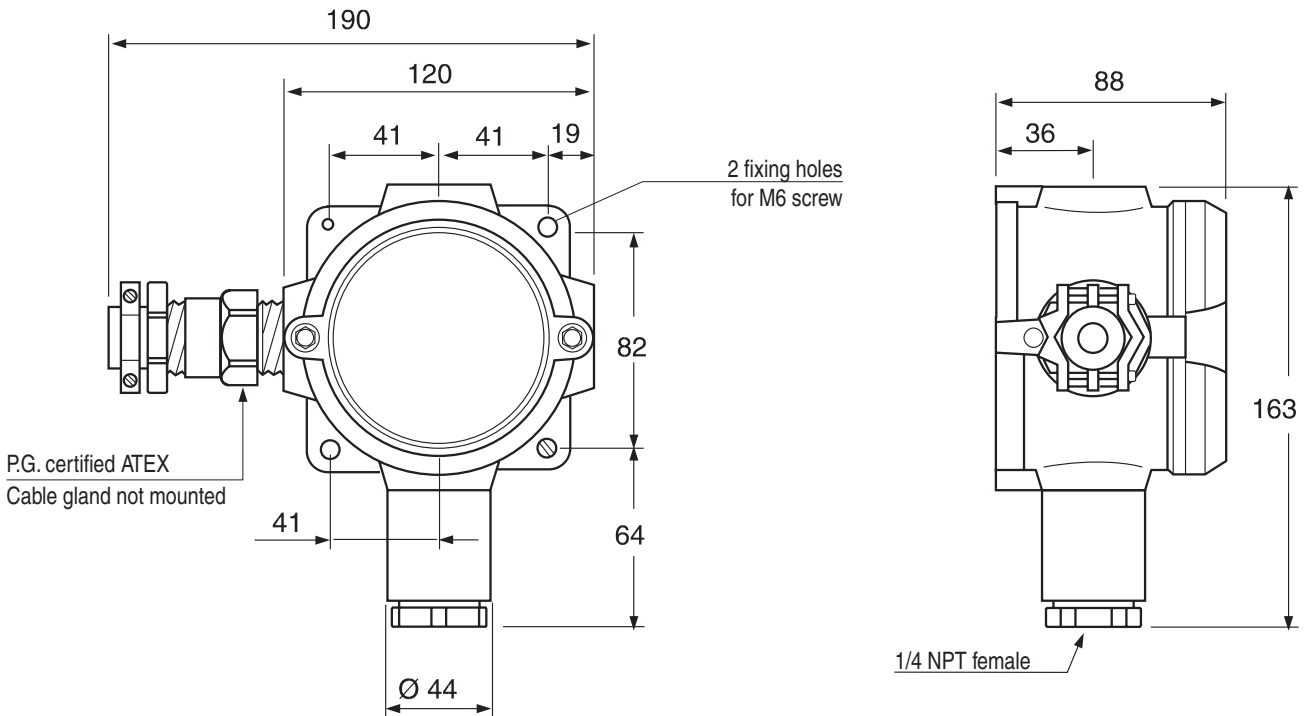
 II 2 G and D
EEx d IIC T6 or T5

-20°C ≤ Ta ≤ +70°C	Dust IP65	Gases
	T° surface	Class
Ta = 60°C	80°C	T6
Ta = 70°C	95°C	T5

DO NOT OPEN - LIVE VOLTAGE

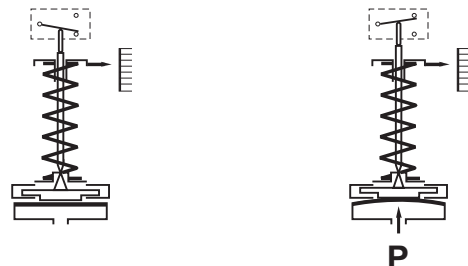
All necessary measures must be taken by the user, to avoid the calorific transfer from the fluid to the apparatus head increasing the head's temperature to such that it reaches the self-ignition temperature of the gas in which it is used.

Dimensions (mm)



Operating principle

A flexible diaphragm actuates a microswitch by means of a piston. The set point is adjusted by means of a compressible spring installed in opposition.



Options

Cleanliness for oxygen service **Code 0765**
 Stainless steel tag plate and wire **Code 9941**
 Connection on pipe 2 " dia. **Code 0407**
 Adjustment of the set point **Code SETP**

Éxecution tout inox pour ambiance agressive (visserie, capteur)
 French electricity (EDF) version (consult SEPTEN ZP, ZPH leaflet)

Ordering Details - RP2(E)

		RP2Exxxx			
Model	1' digit	R			
Pressure switch					
Type	2'...3' digit	P2			
P2					
Type of protection	4' digit	E			
Explosion-proof					
Type of microswitch	5' digit	L			
1 SPDT standard changeover switch					
2 SPDT changeover switches		U			
1 gold contact changeover switch		M			
1 hermetically ultra sensitive changeover switch		P			
1 adjustable changeover switch		R			
1 Tropicalized changeover switch		N			
Hydraulic connection	6' digit	3			
G 1/2 male (standard version)					
1/2 NPT male		6			
1/4 NPT female		8			
1/2 NPT female		N			
Pressure range	7'...8' digit	XX			
See codes in table					

code	range in bar		
41	0	+	1
42	0	+	1.6
43	0	+	2.5
44	0	+	4
45	0	+	6
46	0	+	10
51	0	+	4
52	0	+	6
53	0	+	10
54	0	+	16
55	0	+	25
56	0	+	40
61	0	+	10
62	0	+	16
63	0	+	25
64	0	+	40
65	0	+	60
66	0	+	100

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