



Pressure switches

Standard version **RP2N**
Intrinsically safe **RP2Y**
Explosion - proof **RP2E**

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 : "safety action".

- All industrial environments
- Reduced overall dimensions
- Good vibration resistance
- Resistant to short duration overpressure
- Intrinsically safe version (RP2Y) :
EEx ia II C T6, LCIE certificate n°94.C6052 X
- Explosion - proof type (RP2E) :
EEx d II C T6,
LCIE certificate n° 93.C6145 X- 01 (CENELEC)
- Conforms to CE



Important

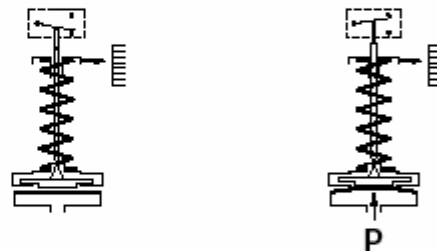
Normal operation must be between 10% and 90% of the selected scale.

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. RP2Y version to be used only with an intrinsically safe electrical installation.

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.



Specifications (20°C)

MANUFACTURING	RP2N - RP2Y
Body	Zamac plated black
Housing	Polyamide PA6, blue
Wall mounting	2 M5 screws
Earth connection	Via internal terminal block
Electrical connection	Via internal terminal block with P.G.9 for cables 5,5 to 8,5 mm dia
Graduated scale	Internal calibrated scale
Pressure connection	G 1/2
Measuring element	1.4404 s.s. (316 L) diaphragm

MANUFACTURING	RP2E
90 % housing	-
Body	-
Explosion- proof housing	Epoxy painted AS 10 G 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.E. complying with EEx d II CT6
Graduated scale	for cables 7 to 12 mm dia Internal calibrated scale
Pressure connection	G 1/2
Measuring element	1.4404 s.s. (316 L) diaphragm

Specifications (20°C)

PERFORMANCES

Fluids

All fluids compatible with the measuring element, from -40° C to +150° C.

Operating ambient temperature

From -30° C to +70° C.

Storage temperature

From -50° C to +70° C.

Reproducibility

±2% of F.S.

Minimum deadband

Depending on the type of microswitch used (see table below).

Degree of protection

IP 65 according to IEC 529 (NFC 20.010) and NF EN 60529.

Weight :

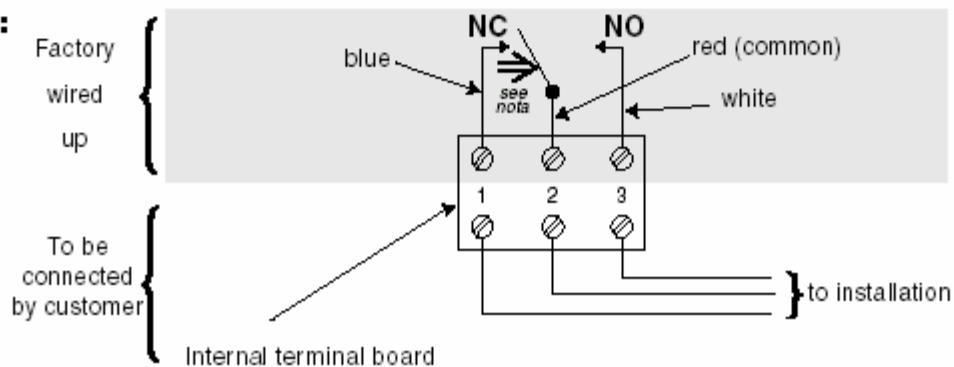
RP2N = 0.960 kg; RP2E = 1.800 kg
RP2Y = 0.960 kg

Adjustable ranges

RP2N (standard version) - RP2Y (intrinsically safe) - RP2E (explosion-proof housing)

Scale	Code	Max. P		MAXI FIXED DEADBAND						MINI-MAXI ADJUSTABLE DEADBAND		
		Permanent	Accidental	Standard (1xSPDT)		Standard (2xSPDT)		gold contact	hermetically sealed	Tropicalized	Adjustable	
				L At 10 % of scale	At 90 % of scale	U (RP2E only) At 10 % of scale	At 90 % of scale	M At 10 % of scale	P At 90 % of scale	N At 90 % of scale	R At 10 % of scale	At 90 % of scale
bar		bar		mbar	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	

Wiring :



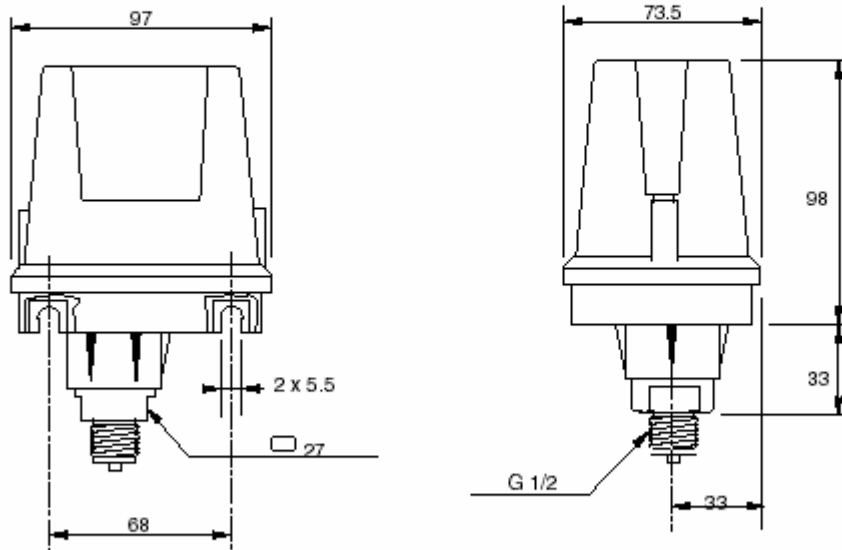
Nota : ➔ The arrow shows how the switch works when pressure or temperature rises.

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PO Box 3557, Bothwell, G71 8EN

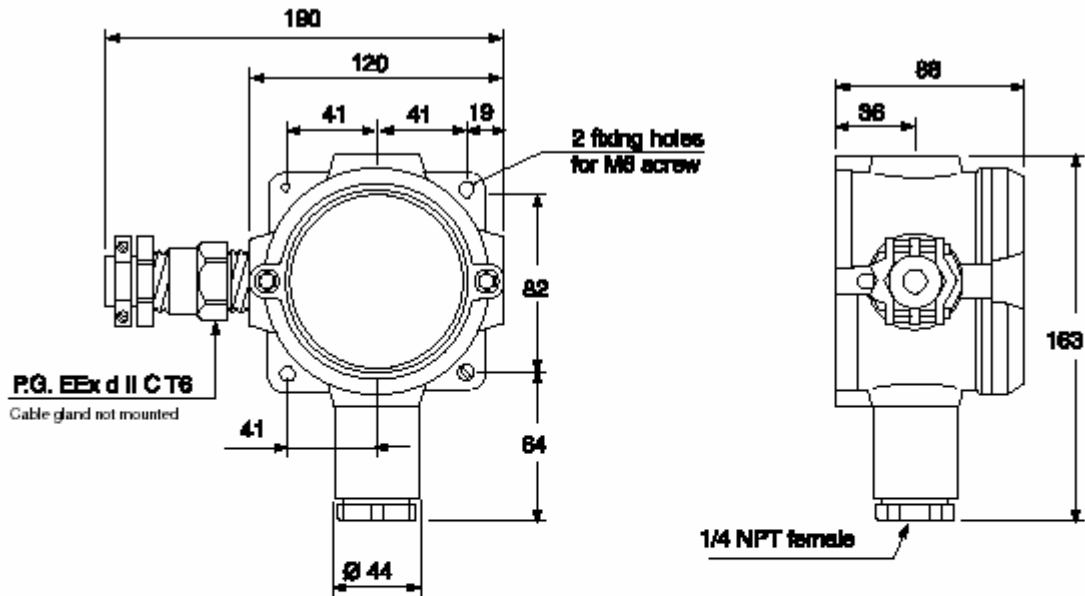
Tel: +44 (0) 1698 852695 Fax: +44 (0) 1698 853332 email: rg.ifi@btopenworld.com

Dimensions (mm)

RP2N - RP2Y with fixed or adjustable deadband microswitch



RP2E with explosion-proof housing shown with the 1/4 NPT female option



Options

Coded options :

- 1/2 NPT male
- 1/2 NPT female
- 1/4 NPT female

Uncoded options (have to be listed after the code number) :

- Stainless steel label
- Cleanliness for oxygen service
- Adjustment of the set point
- Connection on pipe 2" dia.
- Metallic pipe inlet (RP2E only) : 1/2 NPT female, M20 x 1.5 female, 3/4 NPT female



Codification

	R	P	2			0				*																																						
Family :									Unit of measurement and range :																																							
Pressure switch	R																																															
Type :									<table border="1"> <thead> <tr> <th>code</th> <th>range in bar</th> </tr> </thead> <tbody> <tr><td>41</td><td>0 + 1</td></tr> <tr><td>42</td><td>0 + 1,6</td></tr> <tr><td>43</td><td>0 + 2,5</td></tr> <tr><td>44</td><td>0 + 4</td></tr> <tr><td>45</td><td>0 + 6</td></tr> <tr><td>46</td><td>0 + 10</td></tr> <tr><td>51</td><td>0 + 4</td></tr> <tr><td>52</td><td>0 + 6</td></tr> <tr><td>53</td><td>0 + 10</td></tr> <tr><td>54</td><td>0 + 16</td></tr> <tr><td>55</td><td>0 + 25</td></tr> <tr><td>56</td><td>0 + 40</td></tr> <tr><td>61</td><td>0 + 10</td></tr> <tr><td>62</td><td>0 + 16</td></tr> <tr><td>63</td><td>0 + 25</td></tr> <tr><td>64</td><td>0 + 40</td></tr> <tr><td>65</td><td>0 + 60</td></tr> <tr><td>66</td><td>0 + 100</td></tr> </tbody> </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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Adjustable deadband 10A/250 V~ _____										R																																						
Hydraulic connection :																																																
G 1/2 male (standard version) _____										3																																						
1/2 NPT male _____										6																																						
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