

# RP2N-RP2Y Pressure switches

All industrial environments

Reduced overall dimensions

Good vibration resistance

Resistant to short duration overpressure

Intrinsically safe version (RP2Y) :

Ex ia II C T6, LCIE certificate n°94.C6052 X  
(valid until 30 June 2003)

New ATEX/94/CE certification (in progress)

Conforms to CE (Low voltage Directive N° 73/23/  
EEC modified by N° 93/68/EEC)

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".

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.



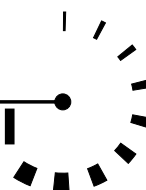
## Technical Data (20°C)

Fluids	All fluids compatible with the measuring element from -40...+150°C
Operating ambient temperature	From -30...+70°C
Storage temperature	From -50...+70°C
Reproducibility	±2% of F.S.
Minimum deadband	Depending on the type of microswitch used (see table overleaf)
Degree of protection	IP 65 according to IEC 529 (NFC 20.010) and NF EN 60529
Weight	RP2N = 0.960 kg RP2Y = 0.960 kg

MANUFACTURING	RP2N - RP2Y
Body	Zamac plated black
Housing	Polyamide PA6, blue
Wall mounting	2 M5 screws
Earth connection	Vial 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

**BOURDON  
HAENNI**

made to measure

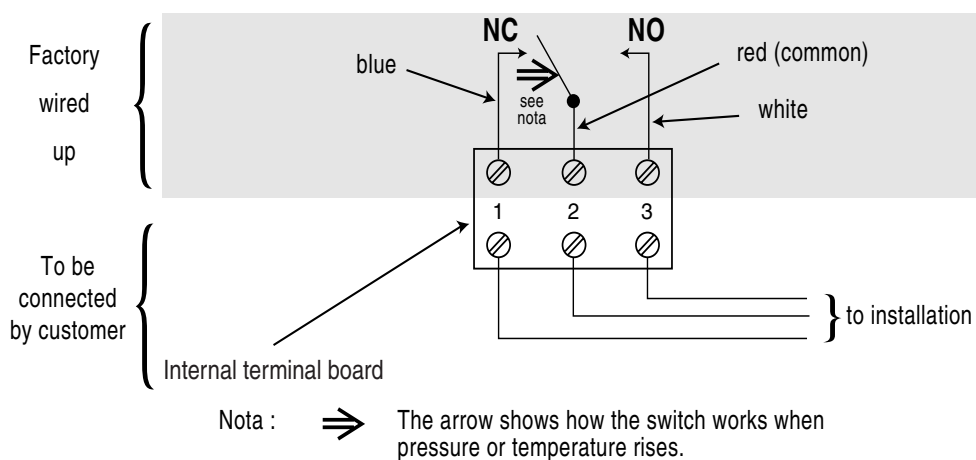


## Adjustable ranges

RP2N (standard version) - RP2Y (intrinsically safe)

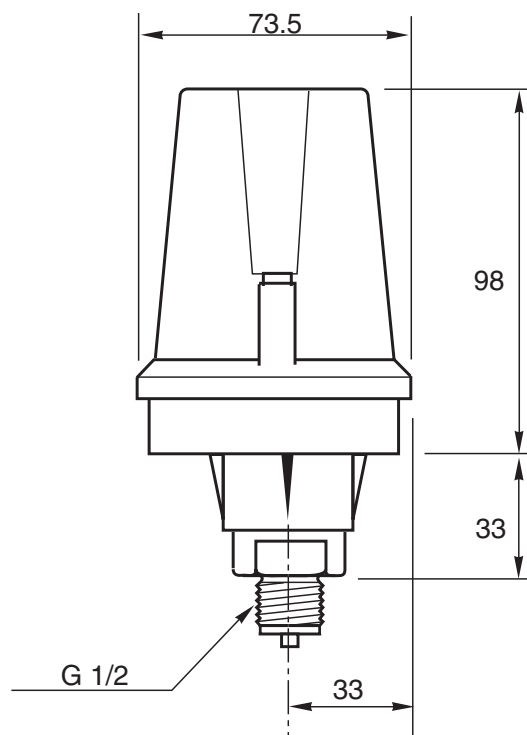
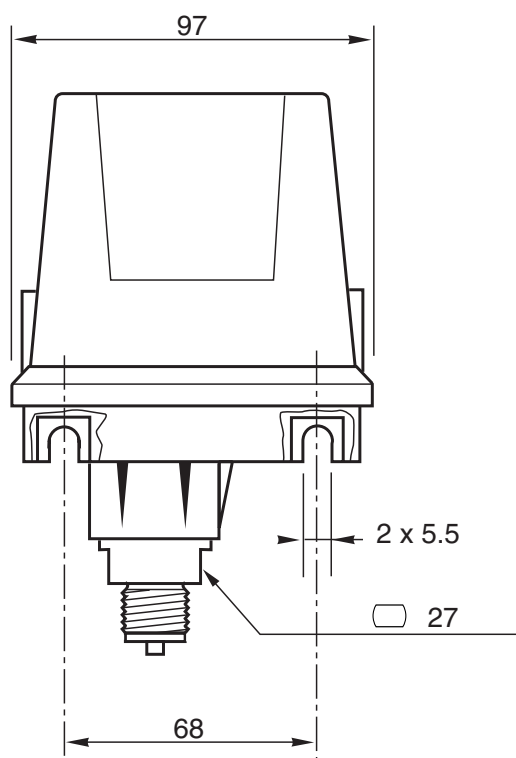
Scale	Code	Max. P		MAXI FIXED DEADBAND				MINI-MAXI ADJUSTABLE DEADBAND	
		Permanent	Accidental	Standard (1xSPDT)		gold contact	Hermetically sealed	Tropicalized	Adjustable
				L		M	P	N	
				At 10 % of scale	At 90 % of scale	At 10 % of scale	At 90 % of scale	R	
bar		bar		mbar	mbar	mbar	mbar	mbar	mbar
0 + 1	41	10	50	30	60	120	330	*	*
0 + 1.6	42			35	70	150	390	100 .. 200	200 .. 550
0 + 2.5	43			40	80	180	480	125 .. 230	250 .. 700
0 + 4	44			45	90	210	540	150 .. 290	320 .. 900
0 + 6	45			50	100	240	630	190 .. 350	420 .. 1200
0 + 10	46			55	110	300	750	260 .. 500	600 .. 1800
0 + 4	51	40	100	110	200	600	1320	500 .. 1000	1250 .. 2000
0 + 6	52			110	235	750	1620	550 .. 1100	1350 .. 2200
0 + 10	53			120	270	840	2010	650 .. 1300	1500 .. 2600
0 + 16	54			130	305	960	2370	800 .. 1600	1700 .. 3100
0 + 25	55			140	340	1050	2730	1000 .. 2000	2000 .. 3900
0 + 40	56			150	380	1140	3150	1400 .. 2800	2600 .. 5200
0 + 10	61	100	200	200	500	1500	3600	1000 .. 2000	3000 .. 6000
0 + 16	62			280	700	2100	3960	1150 .. 2300	3500 .. 7000
0 + 25	63			360	900	2700	5550	1350 .. 2700	4200 .. 8400
0 + 40	64			440	1100	3300	7350	1700 .. 3400	5350 .. 10700
0 + 60	65			520	1300	3900	9600	2100 .. 4200	6900 .. 13800
0 + 100	66			600	1500	4500	13200	3000 .. 6000	10000 .. 20000

## Wiring



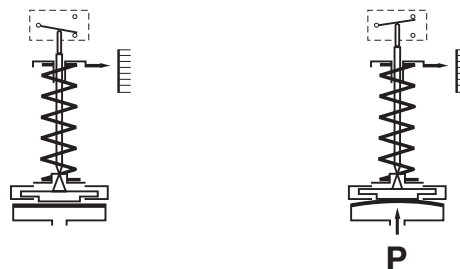
## Dimensions (mm)

RP2N - RP2Y with fixed or adjustable deadband microswitch



## 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

### 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.

### Coded options

Hydraulic connection  
1/2 NPT male  
1/2 NPT female  
1/4 NPT female

## Ordering Details - RP2

		RP2x x0x xx			
Model	1' digit				
Pressure switch		R			
Type	2'...3' digit				
P2		P2			
Type of protection	4' digit				
Standard		N			
Intrinsically safe		Y			
Type of microswitch	5' digit				
Fixed deadband, 10A/250V standard~ (1xSPDT)		L			
Fixed deadband, gold contact 50 mA/250V~		M			
Fixed deadband, hermetically sealed ultra sensitive 2A/30 Vcc		P			
Fixed deadband tropicalized 5 A/250V~		N			
Adjustable deadband 10A/250 V~		R			
Hydraulic connection	6'...7' digit				
G 1/2 male (standard version)			03		
1/2 NPT male			06		
1/4 NPT female			08		
1/2 NPT female			0N		
Pressure range	8'...9' digit				
See codes in table				xx	

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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