Pressure switches

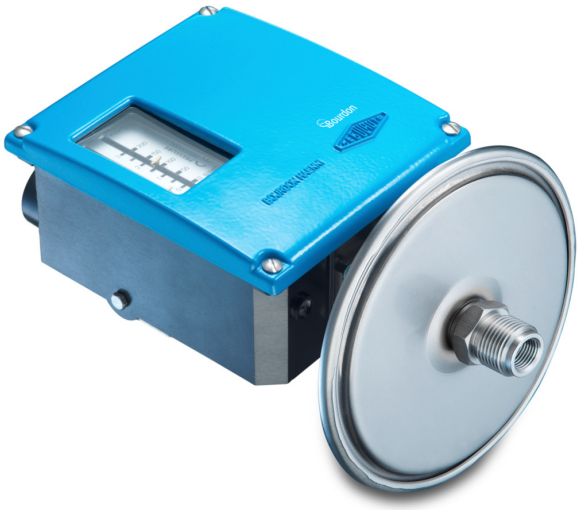
RPPN3

Industrial pressure switch

RPPN-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control



Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-200 ... 0 mbar
Max. pressure range	-25 ... 400 mbar
Repeatability	± 1 % FS
Temperature: Pressure range codes 101 to 153	
Ambient temperature	-25°C ... +70°C

Temperature: Pressure range codes 101 to 153	
Storage temperature	-40°C ... +70°C
Media temperature	-15°C ... +150°C
Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
CE conformity	Low Voltage Directive 2014/35/UE

Remarks

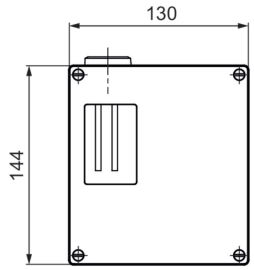
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

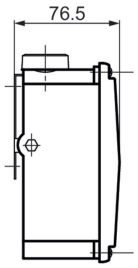
RPPN3

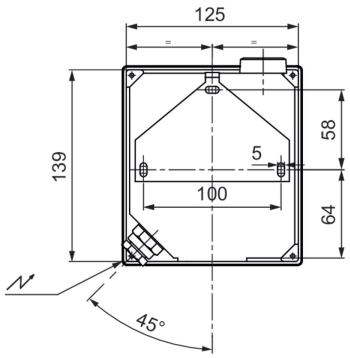
Industrial pressure switch

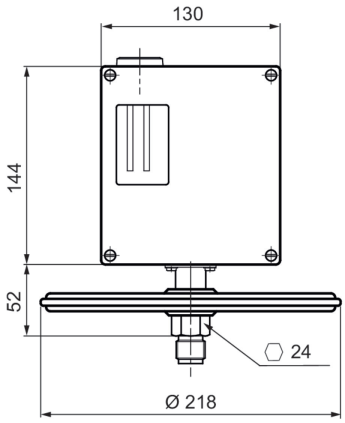
RPPN-###.###/

Dimensional drawings (mm)



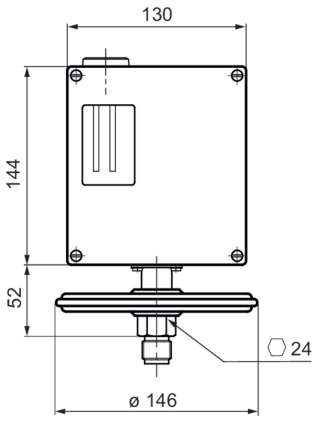






Pressure range codes: 101 - 102 - 103 - 104

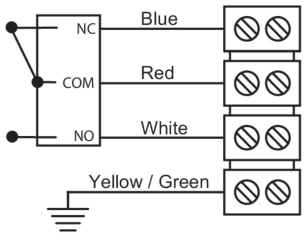
Weight: 3 kg



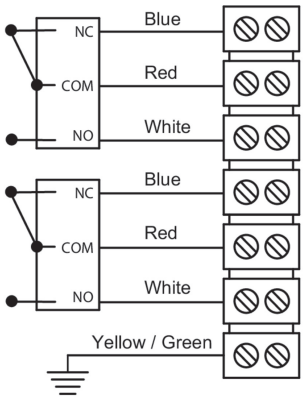
Pressure range codes: 151 - 152 - 153

Weight: 2.8 kg

Electrical connection

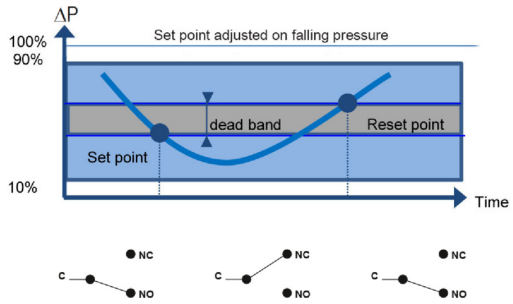


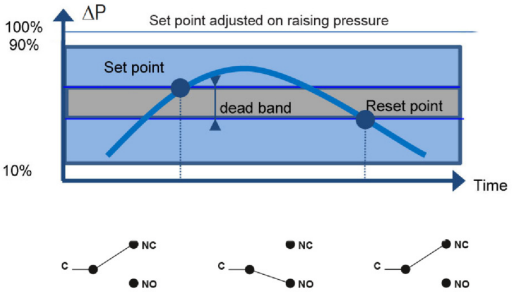
1 SPDT

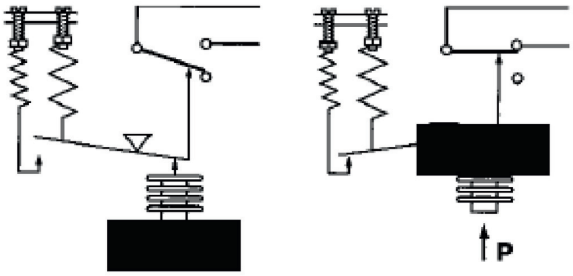


2 SPDT

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		H D (V*) J	
mbar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			mbar							
-50 ... 0	0.15	101	2 - 25	2.5 - 25	6.5 - 25	7.5 - 25	0.5	0.5	2.5	3
-2 ... 10	0.15	102	1 - 5	1.2 - 5	4.5 - 5	4.5 - 5	0.3	0.3	1.5	1.5
-5 ... 50	0.15	103	1.2 - 15	2 - 15	5 - 15	7 - 15	0.4	0.4	1.5	2.5
-8 ... 100	0.15	104	1.5 - 25	2 - 25	5 - 25	10 - 25	0.5	0.5	2	2.5
-200 ... 0	1	151	6 - 80	8 - 80	15 - 80	15 - 80	2	3	7.5	10
0 ... 200	1	152	6 - 80	8 - 80	15 - 80	15 - 80	2	3	7.5	10
0 ... 400	1	153	15 - 150	20 - 150	30 - 150	35 - 150	4	6	18	25

(*) For version with 2 microswitches lower values of the dead band must be multiplied x 1.5

1)The value of the dead band is depending on the value of the set point. This table contains the dead band values for set point adjustment at 10% and 90% of the selected scale. For adjustable dead band the lower value corresponds to the dead band spring totally released and the higher corresponds to the dead band spring fully tensed. For other set points the dead band value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	H	D (V)	J
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Manual reset	Ultra sensitive Hermetic	Manual reset
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 4 A	0.1 ... 8 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 2 A	0.1 ... 8 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	0.1 ... 10 A	N/A	0.1 ... 10 A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	0.1 ... 5 A	N/A	0.1 ... 5 A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	2000 V	1000 V	2000 V

RPPN3

Industrial pressure switch

RPPN-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPN	-	3	#	#	.	###
Product							
RPPN	RPPN						
Sensing element							
Diaphragm,Viton® (max.400mbar)			3				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, manually, falling				H			
1xSPDT, manually, rising				J			
Pneumatic type, NO				Z			
Pneumatic type, NC				Y			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-50 ... 0 mbar							101
-2 ... 10 mbar							102
-5 ... 50 mbar							103
-8 ... 100 mbar							104
-200 ... 0 mbar							151
0 ... 200 mbar							152
0 ... 400 mbar							153

Ordering example

	RPPN	-	3	A	3	.	101	/	SETP
Product									
RPPN	RPPN								
Sensing element									
Diaphragm,Viton® (max.400mbar)			3						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
-50 ... 0 mbar							101		
Adjustment									
Setpoint factory adjusted									SETP

Options			
Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

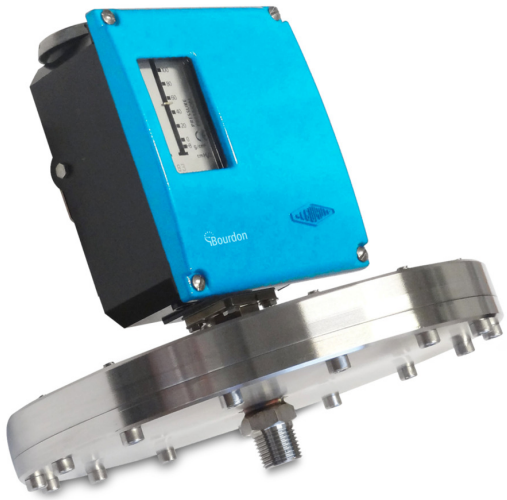
RPPN4

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- High over pressure resistant



Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, steel
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-50 ... 0 mbar
Max. pressure range	0 ... 2500 mbar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-25°C ... +70°C

Temperature	
Storage temperature	-40°C ... +70°C
Media temperature	-15°C ... +150°C
Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
CE conformity	Low Voltage Directive 2014/35/UE

Remarks

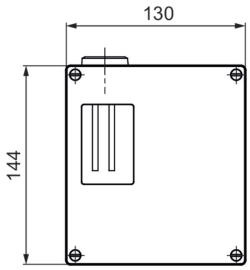
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

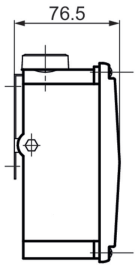
RPPN4

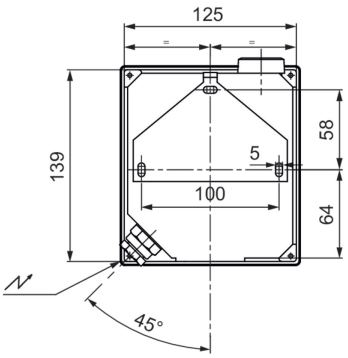
Industrial pressure switch with high overpressure resistance

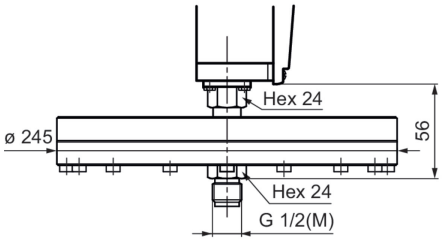
RPPN-###.###/

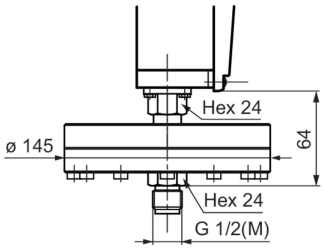
Dimensional drawings (mm)

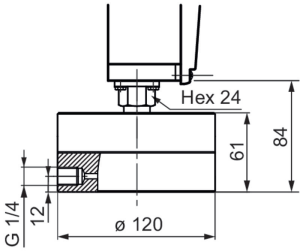












Pressure range codes: 101 - 102 - 103 - 104

Weight: 10 kg

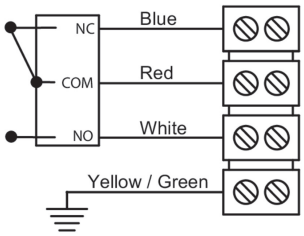
Pressure range codes: 151 - 152 - 153 - 154

Weight: 6.4 kg

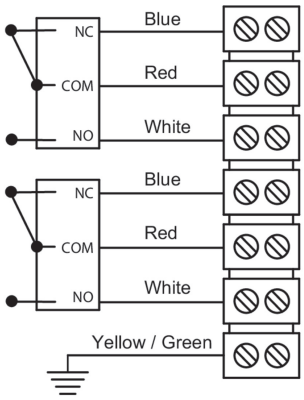
Pressure range codes: 171 - 172 - 173

Weight: 7 kg

Electrical connection



1 SPDT



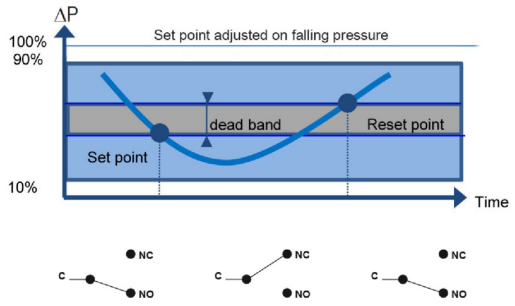
2 SPDT

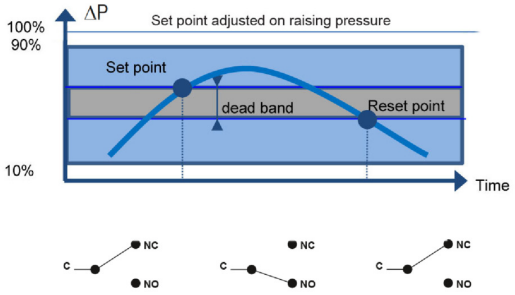
RPPN4

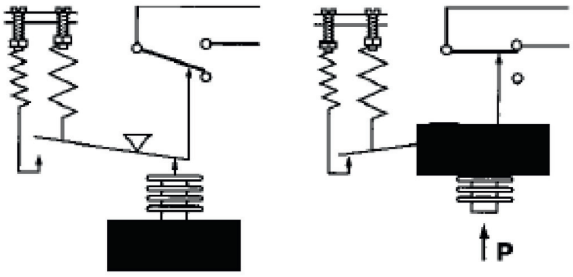
Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

RPPN4

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		H D (V*) J	
mbar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			mbar							
-50 ... 0	10	101	2 - 25	2.5 - 25	6.5 - 25	7.5 - 25	0.6	0.6	2.5	3
-2 ... 10	10	102	1 - 10	1 - 10	N/A	N/A	0.4	0.4	1.5	1.5
-5 ... 50	10	103	1 - 20	2 - 20	4.5 - 20	5 - 20	0.4	0.4	1.5	2.5
-8 ... 100	10	104	1.5 - 25	2.5 - 25	5 - 25	10 - 25	0.5	0.5	2	3
-200 ... 0	50	151	12 - 80	20 - 80	25 - 80	40 - 80	3	4	14.5	25
0 ... 200	50	152	15 - 80	25 - 80	30 - 80	45 - 80	3.5	4	18	30
0 ... 400	50	153	17 - 150	30 - 150	35 - 150	50 - 150	4	5.5	20.5	35
0 ... 1000	50	154	22 - 150	35 - 150	45 - 150	60 - 150	6	7	26.5	45
0 ... 700	100	171**	20 - 350	40 - 350	40 - 350	70 - 350	7	9	24	50
0 ... 1500	100	172**	20 - 350	60 - 350	40 - 350	100 - 350	7	9	24	75
0 ... 2500	100	173**	25 - 350	90 - 350	50 - 350	160 - 350	9	11	30	110

(*) When using 2 microswitches dead band lower values should be x1.5
(**) G1/4 female only

1) The value of the dead band is depending on the value of the set point.This table contains the dead band values for set point adjustment at 10% and 90% of the selected scale. For adjustable dead band the lower value corresponds to the dead band spring totally released and the higher corresponds to the dead band spring fully tensed. For other set points the dead band value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	H	D (V)	J
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Manual reset	Ultra sensitive Hermetic	Manual reset
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 4 A	0.1 ... 8 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 2 A	0.1 ... 8 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	0.1 ... 10 A	N/A	0.1 ... 10 A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	0.1 ... 5 A	N/A	0.1 ... 5 A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	2000 V	1000 V	2000 V

RPPN4

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPN	-	4	#	#	.	###
Product							
RPPN	RPPN						
Sensing element							
Diaphragm,Viton® (max.2.5 bar)			4				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, manually, falling				H			
1xSPDT, manually, rising				J			
Pneumatic type, NC				Y			
Pneumatic type, NO				Z			
Process connection							
G 1/4 Internal Screw					H		
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-50 ... 0 mbar							101
-2 ... 10 mbar							102
-5 ... 50 mbar							103
-8 ... 100 mbar							104
-200 ... 0 mbar							151
0 ... 200 mbar							152
0 ... 400 mbar							153
0 ... 1000 mbar							154
0 ... 700 mbar							171
0 ... 1500 mbar							172
0 ... 2500 mbar							173

Ordering example

	RPPN	-	4	A	3	.	101	/	SETP
Product									
RPPN	RPPN								
Sensing element									
Diaphragm,Viton® (max.2.5 bar)			4						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
-50 ... 0 mbar							101		
Adjustment									
Setpoint factory adjusted									SETP

RPPN4

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Options			
Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

RPPN6

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Overpressure up to 80 bar

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-1 ... 2.5 bar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-25°C ... +55°C

Temperature	
Storage temperature	-40°C ... +70°C
Media temperature	-50°C ... +200°C
Wetted parts	
Diaphragm	Perbunan
Flange	Steel, galvanized, bichromate finish
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
CE conformity	Low Voltage Directive 2014/35/UE

Remarks

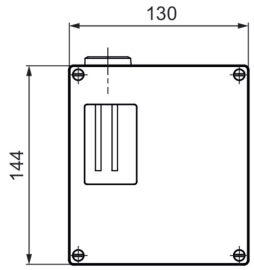
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

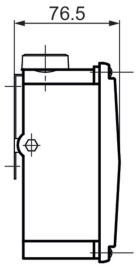
RPPN6

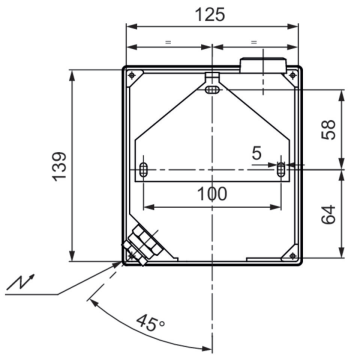
Industrial pressure switch with high overpressure resistance

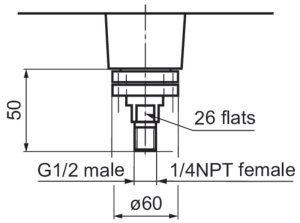
RPPN-###.###/

Dimensional drawings (mm)





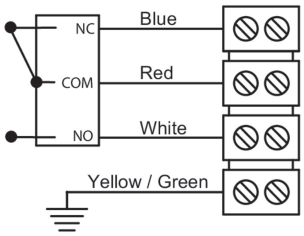




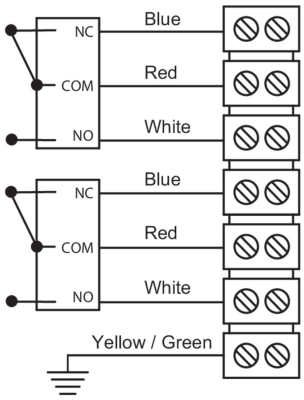
Pressure range codes: 201

Weight: 0.5 kg

Electrical connection



1 SPDT



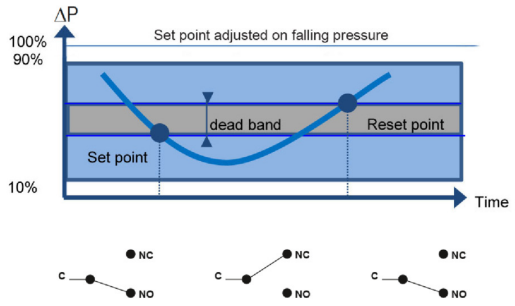
2 SPDT

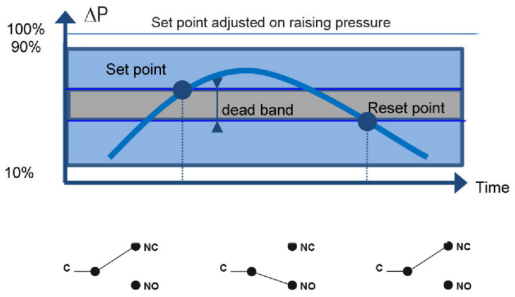
RPPN6

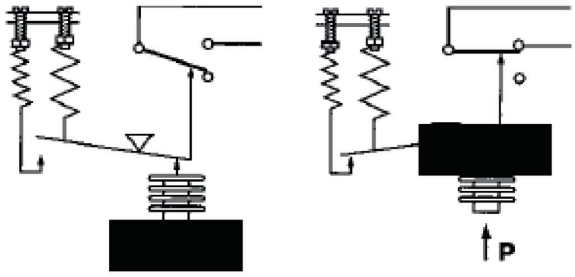
Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		H D (V*) J	
bar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			bar				mbar		bar	
-1 ... 2.5	80	201	0.25 - 2	0.3 - 2	0.8 - 2	1 - 2.5	65	75	0.3	0.35

(*) When using 2 microswitches deadband lower values should be x1.5

1) The value of the deadband is depending on the value of the set point.This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	H	D (V)	J
Type	**Standard**	**Gold contact**	**Hermetic**	**Ultra sensitive**	**Manual reset**	**Ultra sensitive Hermetic**	**Manual reset**
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 4 A	0.1 ... 8 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 2 A	0.1 ... 8 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	0.1 ... 10 A	N/A	0.1 ... 10 A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	0.1 ... 5 A	N/A	0.1 ... 5 A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	2000 V	1000 V	2000 V

RPPN6

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPN	-	6	#	#	.	201
Product							
RPPN	RPPN						
Sensing element							
Diaphragm, Perbunan®			6				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, manually, falling				H			
1xSPDT, manually, rising				J			
Pneumatic type, NC				Y			
Pneumatic type, NO				Z			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-1 ... 2.5 bar							201

Ordering example

	RPPN	-	6	A	3	.	201	/	SETP
Product									
RPPN	RPPN								
Sensing element									
Diaphragm, Perbunan®			6						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
-1 ... 2.5 bar							201		
Adjustment									
Setpoint factory adjusted									SETP

RPPN6

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Options			
Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

RPPN7

Industrial pressure switch

RPPN-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-1 ... 0 bar
Max. pressure range	60 ... 600 bar
Repeatability	± 1 % FS
Temperature: Pressure range codes 200 to 602	
Ambient temperature	-25°C ... +55°C

Temperature: Pressure range codes 200 to 602	
Storage temperature	-40°C ... +70°C
Media temperature	-50°C ... +200°C
Wetted parts	
Piston	Nickel plated steel
Bellow	Stainless steel 1.4404 / AISI 316L Stainless steel 1.4432 / AISI 316L
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
CE conformity	Low Voltage Directive 2014/35/UE

Remarks

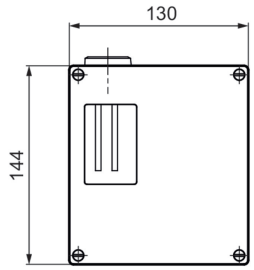
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

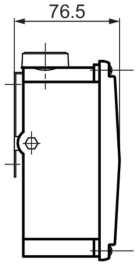
RPPN7

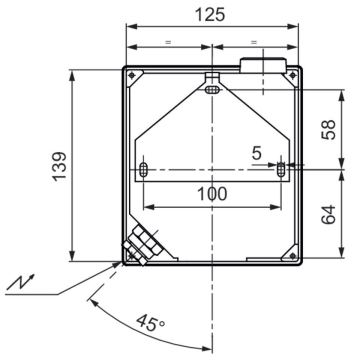
Industrial pressure switch

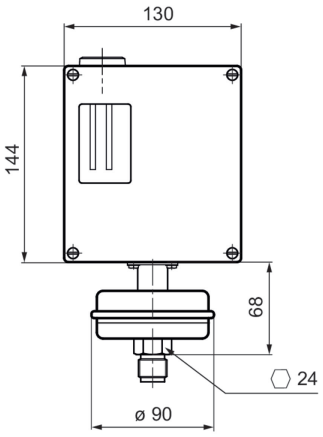
RPPN-###.###/

Dimensional drawings (mm)



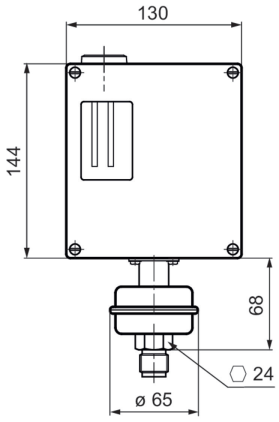






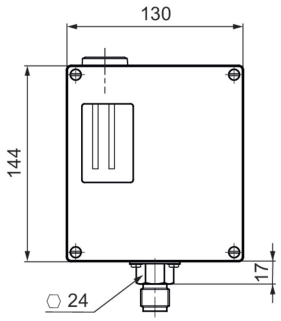
Pressure range codes: 200 - 202 - 203

Weight: 2.5 kg



Pressure range codes: 201

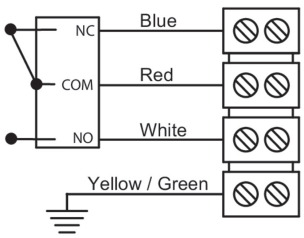
Weight: 2.5 kg



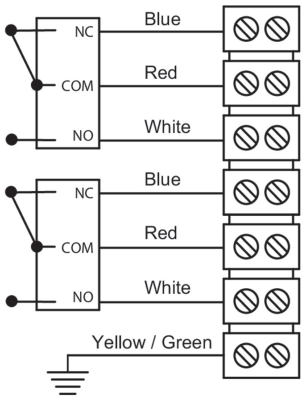
Pressure range codes: 204 - 205 - 206 - 207 - 208 - 209 - 600 - 601 - 602

Weight: 2 kg

Electrical connection

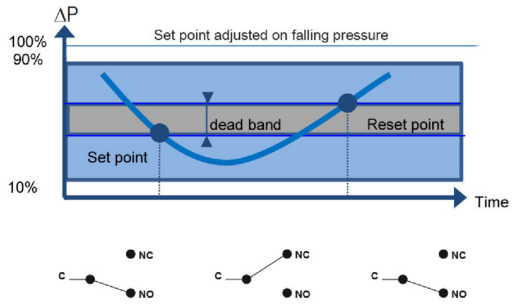


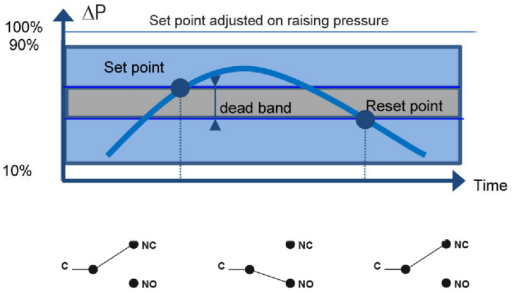
1 SPDT

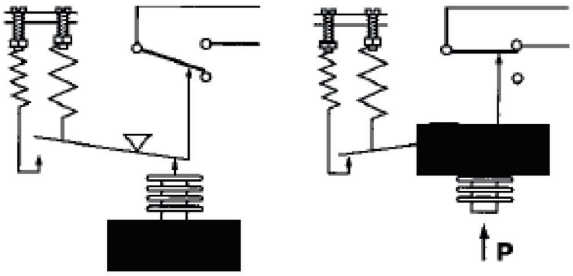


2 SPDT

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		H D (V*) J	
			10%	90%	10%	90%	10%	90%	10%	90%
bar	bar		mbar							
-1 ... 0	1.5	200	25 - 250	35 - 250	80 - 250	95 - 250	5	6	30	42
-1 ... 2.5	7	201	80 - 1200	100 - 1200	150 - 1200	200 - 1200	22	25	96	120
0 ... 0.2	1.5	202	15 - 100	20 - 100	60 - 100	65 - 100	4	5	18	24
0.05 ... 1	1.5	203	20 - 400	25 - 400	80 - 400	95 - 400	4	5	24	30
0.5 ... 10	30	204	200 - 3000	250 - 3000	650 - 3000	850 - 3000	45	50	240	300
3.5 ... 25	30	205	600 - 5000	1200 - 5000	750 - 5000	1300 - 5000	60	100	720	1440
bar	bar	Code	bar							
5 ... 50	65	206	1 - 10	2 - 10	2.5 - 10	3 - 10	0.15	0.2	1.5	2.5
5 ... 100	220	207	2.5 - 15	3 - 15	5.5 - 15	6.5 - 15	0.7	0.9	3	3.5
20 ... 150	220	208	2.5 - 15	3.5 - 15	5.5 - 15	6.5 - 15	0.7	1	3	4.5
-1 ... 3.5	30	209	0.15 - 1.5	0.2 - 1.5	0.65 - 1.5	0.85 - 1.5	0.045	0.050	0.2	0.25
25 ... 175	800	600	20 - 80	30 - 80	30 - 80	35 - 80	14	14	24	36
30 ... 350	800	601	20 - 100	30 - 100	30 - 100	35 - 100	16	16	24	36
60 ... 600	800	602	20 - 120	30 - 120	30 - 120	35 - 120	16	16	24	36

(*) For version with 2 microswitches lower values of the dead band must be multiplied x 1.5

1)The value of the dead band is depending on the value of the set point. This table contains the dead band values for set point adjustment at 10% and 90% of the selected scale. For adjustable dead band the lower value corresponds to the dead band spring totally released and the higher corresponds to the dead band spring fully tensed. For other set points the dead band value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	H	D (V)	J
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Manual reset	Ultra sensitive Hermetic	Manual reset
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 4 A	0.1 ... 8 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 2 A	0.1 ... 8 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	0.1 ... 10 A	N/A	0.1 ... 10 A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	0.1 ... 5 A	N/A	0.1 ... 5 A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	2000 V	1000 V	2000 V

RPPN7

Industrial pressure switch

RPPN-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPN	-	7	#	#	.	###
Product							
RPPN	RPPN						
Sensing element							
Bellow or Piston			7				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, manually, falling				H			
1xSPDT, manually, rising				J			
Pneumatic type, NC				Y			
Pneumatic type, NO				Z			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-1 ... 0 bar							200
-1 ... 2.5 bar							201
0 ... 0.2 bar							202
0,05 ... 1 bar							203
0,5 ... 10 bar							204
3,5 ... 25 bar							205
5 ... 50 bar							206
5 ... 100 bar							207
20 ... 150 bar							208
-1 ... 3,5 bar							209
25 ... 175 bar							600
30 ... 350 bar							601
60 ... 600 bar							602

Ordering example

	RPPN	-	7	A	3	.	200	/	SETP
Product									
RPPN	RPPN								
Sensing element									
Bellow or Piston			7						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
-1 ... 0 bar							200		

Ordering reference

Ordering example

RPPN	-	7	A	3	.	200	/	SETP

Adjustment

Setpoint factory adjusted	SETP

Options

Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

RPPN8

Industrial pressure switch with high overpressure resistance

RPPN-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Overpressure up to 100 bar

Picture similar

Technical data

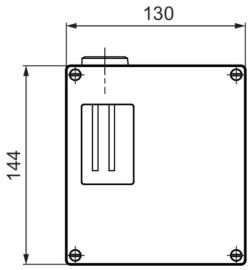
Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	0.2 ... 4 bar
Max. pressure range	5 ... 50 bar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-25°C ... +55°C

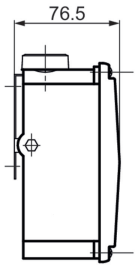
Temperature	
Storage temperature	-40°C ... +70°C
Media temperature	-50°C ... +200°C
Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	Stainless steel 1.4404 / AISI 316L
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
CE conformity	Low Voltage Directive 2014/35/UE

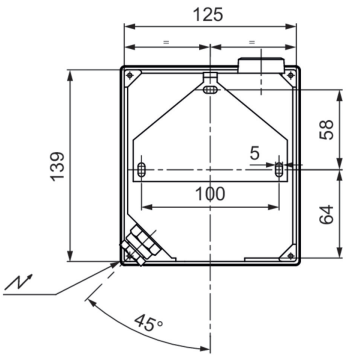
Remarks

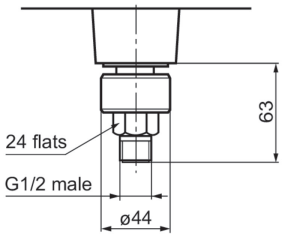
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

Dimensional drawings (mm)





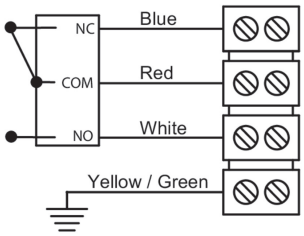




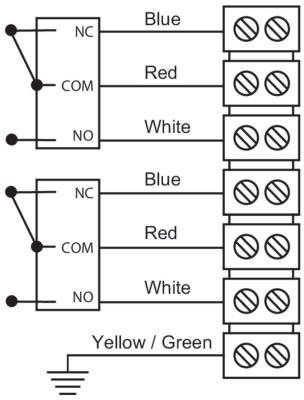
Pressure range codes: 204 - 205 - 206 - 210

Weight: 0.5 kg

Electrical connection

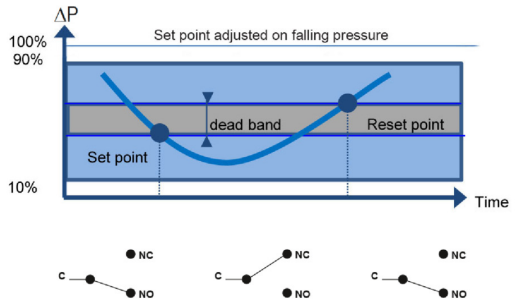


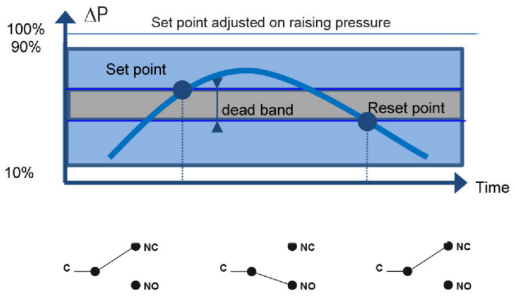
1 SPDT

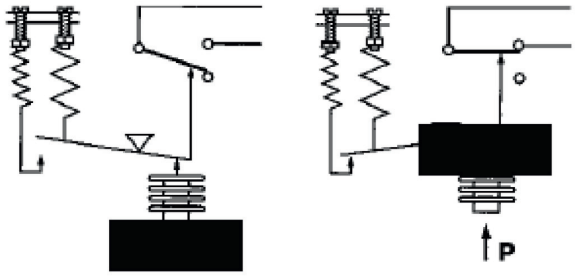


2 SPDT

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		H D (V*) J	
bar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			bar				mbar		bar	
0.5 ... 10	50	204	0.3 - 3	0.55 - 3	0.63 - 3	0.80 - 3	45	62	0.25	0.3
3.5 ... 25	100	205	0.45 - 10	0.9 - 10	1.5 - 10	3.1 - 10	150	200	0.55	1.1
5 ... 50	100	206	1 - 10	2 - 10	3.5 - 10	7 - 10	200	300	1.5	2.5
0.2 ... 4	50	210	0.1 - 3	0.18 - 3	0.35 - 3	0.63 - 3	40	50	0.15	0.25

(*) When using 2 microswitches deadband lower values should be x1.5

1) The value of the deadband is depending on the value of the set point.This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	H	D (V)	J
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Manual reset	Ultra sensitive Hermetic	Manual reset
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	N/A	0.4 ... 4 A	N/A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 4 A	0.1 ... 8 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.1 ... 8 A	0.4 ... 2 A	0.1 ... 8 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	0.1 ... 10 A	N/A	0.1 ... 10 A
250 Vac	0.4 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	0.1 ... 5 A	N/A	0.1 ... 5 A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	2000 V	1000 V	2000 V

Ordering reference

Ordering key - Configuration possibilities see website

	RPPN	-	8	#	#	.	###
Product							
RPPN	RPPN						
Sensing element							
Diaphragm:St.steel			8				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, manually, falling				H			
1xSPDT, manually, rising				J			
Pneumatic type, NC				Y			
Pneumatic type, NO				Z			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
0,5 ... 10 bar							204
3,5 ... 25 bar							205
5 ... 50 bar							206
0,2 ... 4 bar							210

Ordering example

	RPPN	-	8	A	3	.	204	/	SETP
Product									
RPPN	RPPN								
Sensing element									
Diaphragm:St.steel			8						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
0,5 ... 10 bar							204		
Adjustment									
Setpoint factory adjusted									SETP

Options			
Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

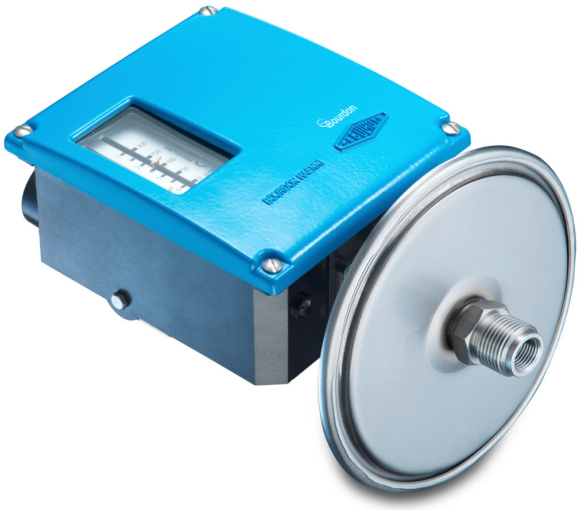
RPPY3

Industrial pressure switch with intrinsic safety

RPPY-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Intrinsic safety Hazardous area 0, 1, 2



Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-200 ... 0 mbar
Max. pressure range	0 ... 400 mbar
Repeatability	± 1 % FS
Temperature: Pressure range codes 101 to 153	
Ambient temperature	-25°C ... +70°C (T5) -25°C ... +55°C (T6)
Storage temperature	-40°C ... +70°C
Media temperature	-15°C ... +150°C

Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEx	ATEX directive 2014/34/UE Ex I M1 Ex II 1 G Further information can be found in the ATEX approval

Remarks

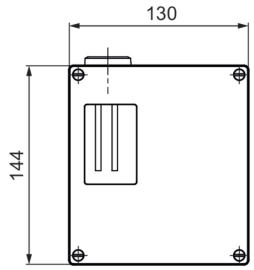
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

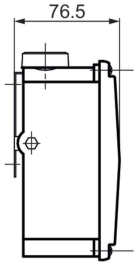
RPPY3

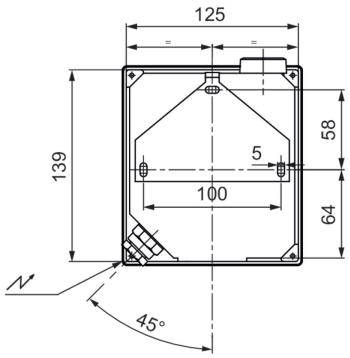
Industrial pressure switch with intrinsic safety

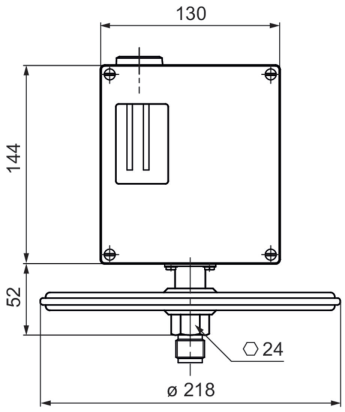
RPPY-###.###/

Dimensional drawings (mm)



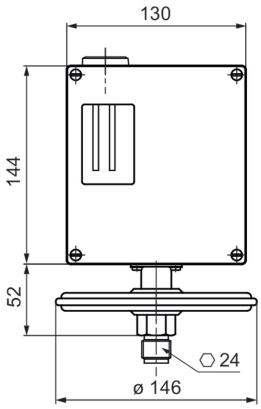






Pressure range codes: 101 - 102 - 103 - 104

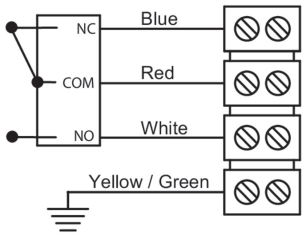
Weight: 3 kg



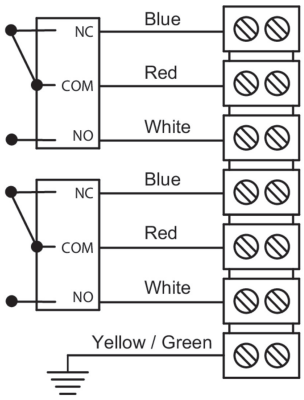
Pressure range codes: 151 - 152 - 153

Weight: 2.8 kg

Electrical connection

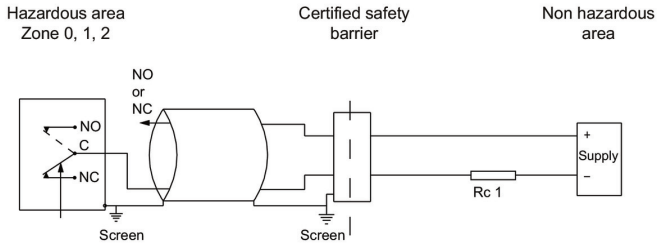


1 SPDT



2 SPDT

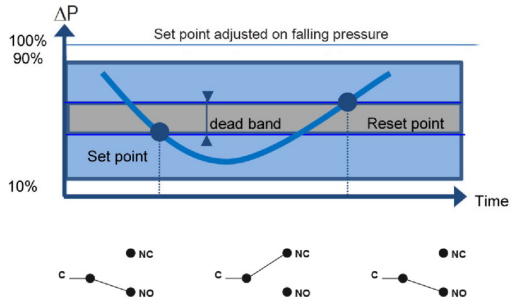
Electrical connection

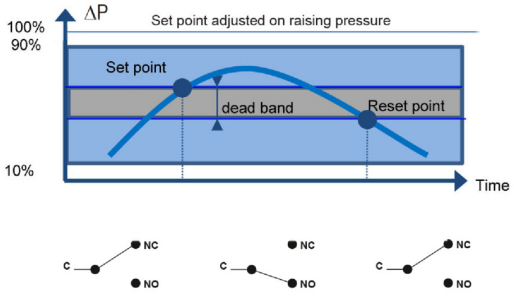


For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.
The installation must be made in an intrinsically safe circuit whose certified electrical safety parameters do not exceed any of the values Umax,Imax and Pmax given in the electrical data.

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.

Principle



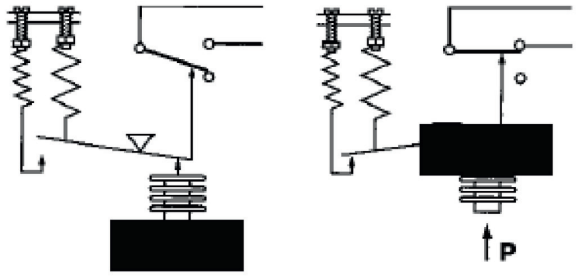


RPPY3

Industrial pressure switch with intrinsic safety

RPPY-###.###/

Principle



A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]					
			Adjustable dead band				Fixed dead band	
			M (K*)		C (W*)		S	
mbar	bar		10%	90%	10%	90%	10%	90%
			mbar					
-50 ... 0	0.15	101	2 - 25	2.5 - 25	6.5 - 25	7.5 - 25	1.2	1.4
-2 ... 10	0.15	102	1 - 5	1.2 - 5	4.5 - 5	4.5 - 5	0.7	0.8
-5 ... 50	0.15	103	1.2 - 15	2 - 15	5 - 15	7 - 15	1	11
-8 ... 100	0.15	104	1.5 - 25	2 - 25	5 - 25	10 - 25	1.2	1.4
-200 ... 0	1	151	6 - 80	8 - 80	15 - 80	15 - 80	4.6	8.4
0 ... 200	1	152	6 - 80	8 - 80	15 - 80	15 - 80	4.6	8.4
0 ... 400	1	153	15 - 150	20 - 150	30 - 150	35 - 150	9	17

(*) For version with 2 microswitches lower values of the dead band must be multiplied x 1.5

1) The value of the dead band is depending on the value of the set point.This table contains the dead band values for set point adjustment at 10% and 90% of the selected scale. For adjustable dead band the lower value corresponds to the dead band spring totally released and the higher corresponds to the dead band spring fully tensed. For other set points the dead band value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	M (K)	C (W)	S
Type	Gold contact	Hermetic	Ultrasensitive Gold contact
6 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
12 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
24 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
30 Vdc	N/A	N/A	N/A
48 Vdc	N/A	N/A	N/A
110 Vdc	N/A	N/A	N/A
220 Vdc	N/A	N/A	N/A
115 Vac	N/A	N/A	N/A
250 Vac	N/A	N/A	N/A
Dielectric rigidity between contacts and ground	2000 V	1500 V	2000 V

RPPY3

Industrial pressure switch with intrinsic safety

RPPY-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPY	-	3	#	#	.	###
Product							
RPPY	RPPY						
Sensing element							
Diaphragm,Viton® (max.400mbar)			3				
Type of Microswitch							
1xSPDT, hermetically				C			
simultaneous				W			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, gold, ultra sensitive				S			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-50 ... 0 mbar							101
-2 ... 10 mbar							102
-5 ... 50 mbar							103
-8 ... 100 mbar							104
-200 ... 0 mbar							151
0 ... 200 mbar							152
0 ... 400 mbar							153

Ordering example

	RPPY	-	3	C	3	.	101	/	SETP
Product									
RPPY	RPPY								
Sensing element									
Diaphragm,Viton® (max.400mbar)			3						
Type of Microswitch									
1xSPDT, hermetically				C					
Process connection									
G 1/2					3				
Pressure range									
-50 ... 0 mbar							101		
Adjustment									
Setpoint factory adjusted									SETP

Options

Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

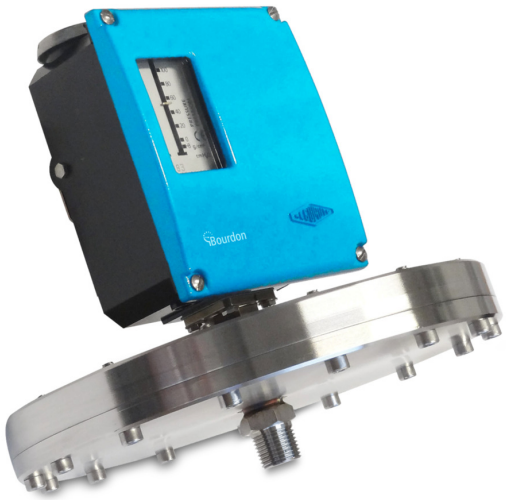
RPPY4

Industrial pressure switch with intrinsic safety and high overpressure resistance

RPPY-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- High over pressure resistant
- Intrinsic safety Hazardous area 0, 1, 2



Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Blue painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-50 ... 0 mbar
Max. pressure range	0 ... 2500 mbar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-25°C ... +70°C (T5) -25°C ... +55°C (T6)
Storage temperature	-40°C ... +70°C
Media temperature	-15°C ... +150°C

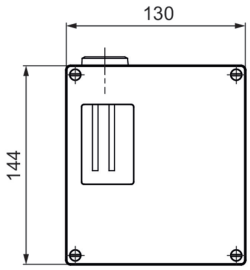
Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEx	ATEX directive 2014/34/UE Ex I M1 Ex II 1 G Further information can be found in the ATEX approval

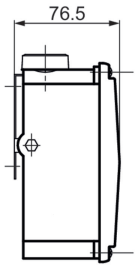
RPPY4

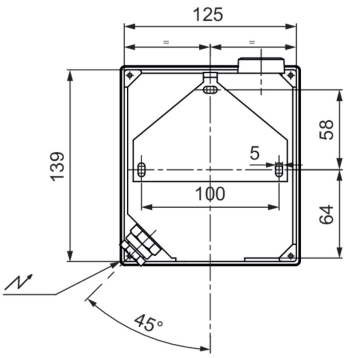
Industrial pressure switch with intrinsic safety and high overpressure resistance

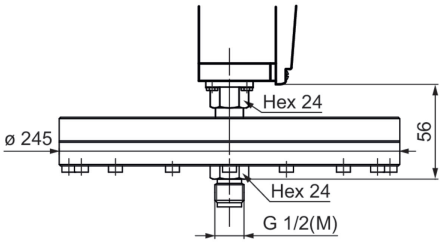
RPPY-###.###/

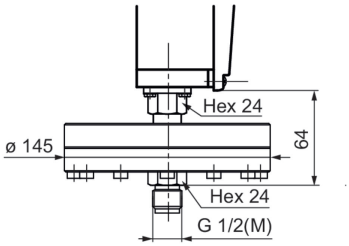
Dimensional drawings (mm)

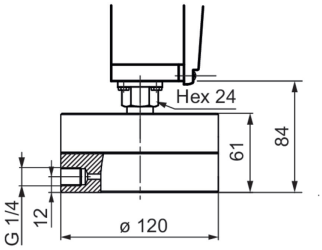












Pressure range codes: 101 - 102 - 103 - 104

Weight: 10 kg

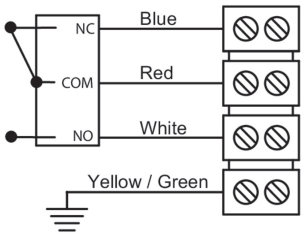
Pressure range codes: 151 - 152 - 153

Weight: 6.4 kg

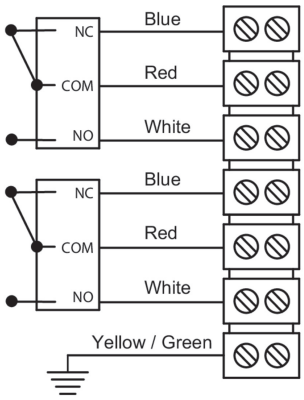
Pressure range codes: 171 - 172 - 173

Weight: 6.4 kg

Electrical connection

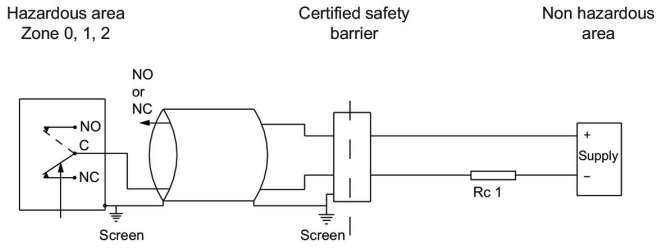


1 SPDT



2 SPDT

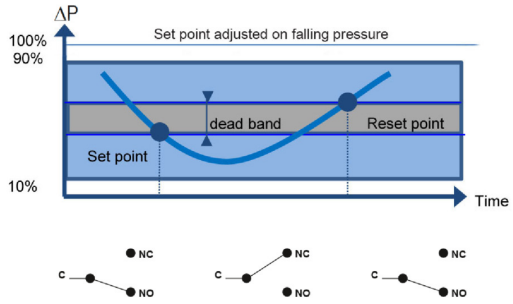
Electrical connection

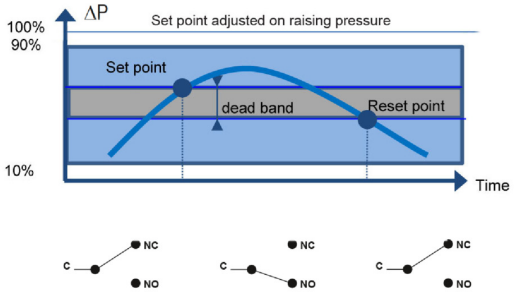


For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.
The installation must be made in an intrinsically safe circuit whose certified electrical safety parameters do not exceed any of the values Umax,Imax and Pmax given in the electrical data.

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.

Principle



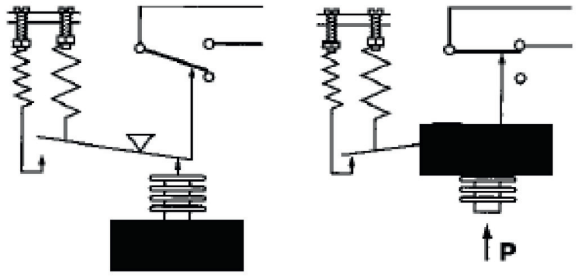


RPPY4

Industrial pressure switch with intrinsic safety and high overpressure resistance

RPPY-###.###/

Principle



A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

RPPY4

Industrial pressure switch with intrinsic safety and high overpressure resistance

RPPY-###.###/

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band 1)					
			Adjustable dead band				Fixed dead band	
			M (K*)		C (W*)		S	
mbar	bar		10%	90%	10%	90%	10%	90%
			mbar	mbar	mbar	mbar	mbar	mbar
-50 ... 0	10	**101**	2 - 25	2.5 - 25	6.5 - 25	7.5 - 25	1.4	1.7
-2 ... 10	10	**102**	1 - 10	1 - 10	N/A	N/A	1	1.1
-5 ... 50	10	**103**	1 - 20	2 - 20	4.5 - 20	5 - 20	1	1.1
-8 ... 100	10	**104**	1.5 - 25	2.5 - 25	5 - 25	10 - 25	1.2	1.4
-200 ... 0	50	**151**	12 - 80	20 - 80	25 - 80	40 - 80	7	11
0 ... 200	50	**152**	15 - 80	25 - 80	30 - 80	45 - 80	8	11
0 ... 400	50	**153**	17 - 150	30 - 150	35 - 150	50 - 150	9.2	15.4
0 ... 1000	50	**154**	22 - 150	35 - 150	45 - 150	60 - 150	14	19.5
0 ... 700	100	**171****	20 - 350	40 - 350	40 - 350	70 - 350	16	25
0 ... 1500	100	**172****	20 - 350	60 - 350	40 - 350	100 - 350	16	25
0 ... 2500	100	**173****	25 - 350	90 - 350	50 - 350	160 - 350	21	31

(*) For version with 2 microswitches lower values of the dead band must be multiplied x 1.5
(**) G1/4 female only

1) The value of the dead band is depending on the value of the set point. This table contains the dead band values for set point adjustment at 10% and 90% of the selected scale. For adjustable dead band the lower value corresponds to the dead band spring totally released and the higher corresponds to the dead band spring fully tensed. For other set points the dead band value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	M (K)	C (W)	S
Type	**Gold contact**	**Hermetic**	**Ultrasensitive Gold contact**
6 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
12 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
24 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
30 Vdc	N/A	N/A	N/A
48 Vdc	N/A	N/A	N/A
110 Vdc	N/A	N/A	N/A
220 Vdc	N/A	N/A	N/A
115 Vac	N/A	N/A	N/A
250 Vac	N/A	N/A	N/A
Dielectric rigidity between contacts and ground	2000 V	1500 V	2000 V

RPPY4

Industrial pressure switch with intrinsic safety and high overpressure resistance

RPPY-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPY	-	4	#	#	.	###
Product							
RPPY	RPPY						
Sensing element							
Diaphragm,Viton® (max.2.5 bar)			4				
Type of Microswitch							
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, gold, ultra sensitive				S			
1 gold contact changeover switch				M			
simultaneous				K			
Process connection							
G 1/2					3		
G 1/4 Internal Screw					H		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-50 ... 0 mbar							101
-5 ... 50 mbar							103
-8 ... 100 mbar							104
-200 ... 0 mbar							151
0 ... 200 mbar							152
0 ... 400 mbar							153
0 ... 1000 mbar							154
0 ... 700 mbar							171
0 ... 1500 mbar							172
0 ... 2500 mbar							173

Ordering example

	RPPY	-	4	C	3	.	101	/	SETP
Product									
RPPY	RPPY								
Sensing element									
Diaphragm,Viton® (max.2.5 bar)			4						
Type of Microswitch									
1xSPDT, hermetically				C					
Process connection									
G 1/2					3				
Pressure range									
-50 ... 0 mbar							101		
Adjustment									
Setpoint factory adjusted									SETP

Options			
Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

RPPY7

Industrial pressure switch with intrinsic safety

RPPY-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Intrinsic safety Hazardous area 0, 1, 2

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Cover	Black painted, zamak Captive stainless steel screws
Case material	Black painted, zamak
Mounting	Wall mounting bracket
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-1 ... 0 bar
Max. pressure range	60 ... 600 bar
Repeatability	± 1 % FS
Temperature: Pressure range codes 200 to 602	
Ambient temperature	-25°C ... +55°C (T6)
Storage temperature	-40°C ... +70°C
Media temperature	-50°C ... +200°C

Wetted parts	
Piston	Nickel plated steel
Bellow	Stainless steel 1.4404 / AISI 316L Stainless steel 1.4432 / AISI 316L
Electrical data	
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEx	ATEX directive 2014/34/UE Ex I M1 Ex II 1 G Further information can be found in the ATEX approval

Remarks

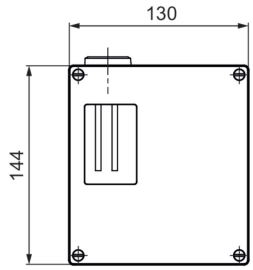
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

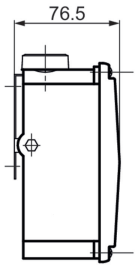
RPPY7

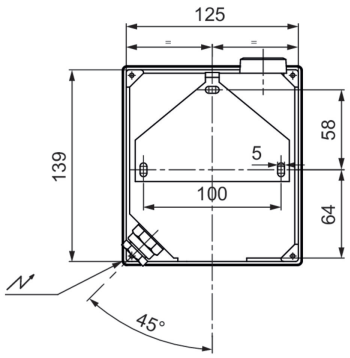
Industrial pressure switch with intrinsic safety

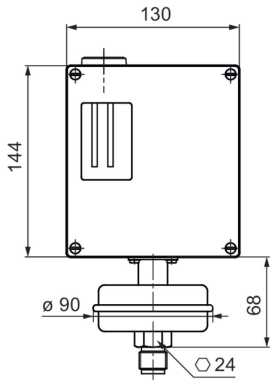
RPPY-###.###/

Dimensional drawings (mm)



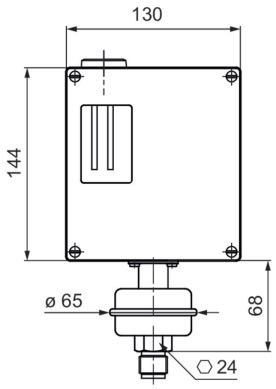






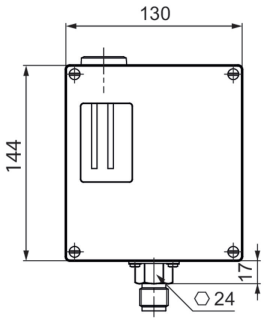
Pressure range codes: 200 - 202 - 203

Weight: 2.5 kg



Pressure range codes: 201

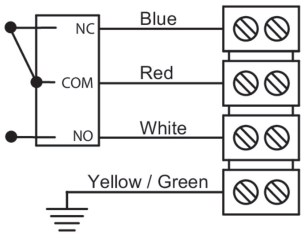
Weight: 2.5 kg



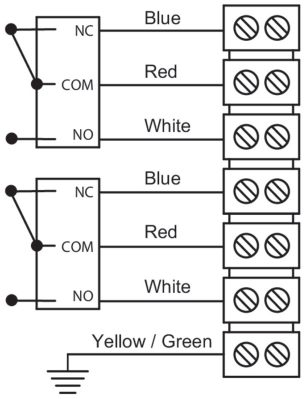
Pressure range codes: 204 - 205 - 206 - 207 - 208 - 209 - 600 - 601 - 602

Weight: 2 kg

Electrical connection

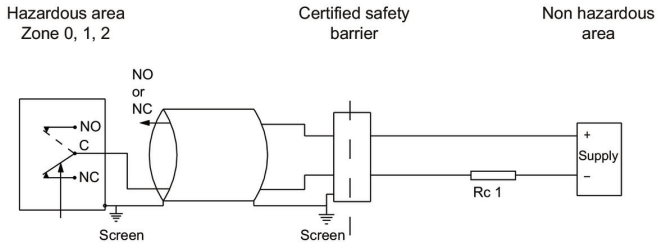


1 SPDT



2 SPDT

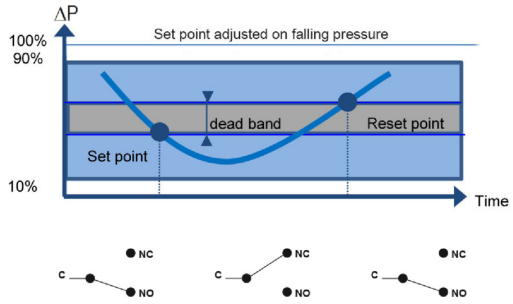
Electrical connection

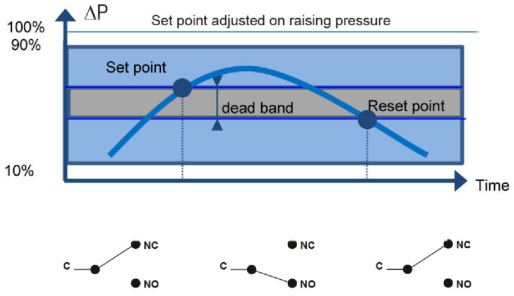


For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.
The installation must be made in an intrinsically safe circuit whose certified electrical safety parameters do not exceed any of the values Umax,Imax and Pmax given in the electrical data.

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.

Principle



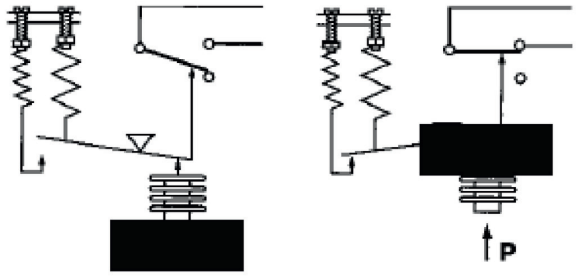


RPPY7

Industrial pressure switch with intrinsic safety

RPPY-###.###/

Principle



A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]					
			Adjustable dead band				Fixed dead band	
			M (K*)		C (W*)		S	
			10%	90%	10%	90%	10%	90%
bar	bar	Code	mbar					
-1 ... 0	1.5	200	25 - 250	35 - 250	80 - 250	95 - 250	12	17
-1 ... 2.5	7	201	80 - 1200	100 - 1200	150 - 1200	200 - 1200	50	70
0 ... 0.2	1.5	202	15 - 100	20 - 100	60 - 100	65 - 100	10	14
0.05 ... 1	1.5	203	20 - 400	25 - 400	80 - 400	95 - 400	10	14
0.5 ... 10	30	204	200 - 3000	250 - 3000	650 - 3000	850 - 3000	105	140
3.5 ... 25	30	205	600 - 5000	1200 - 5000	750 - 5000	1300 - 5000	140	280
bar	bar	Code	bar					
5 ... 50	65	206	1 - 10	2 - 10	2.5 - 10	3 - 10	0.345	0.560
5 ... 100	220	207	2.5 - 15	3 - 15	5.5 - 15	6.5 - 15	1.2	1.6
20 ... 150	220	208	2.5 - 15	3.5 - 15	5.5 - 15	6.5 - 15	1.2	1.7
-1 ... 3.5	30	209	0.15 - 1.5	0.2 - 1.5	0.65 - 1.5	0.85 - 1.5	0.105	0.140
25 ... 175	800	600	20 - 80	30 - 80	30 - 80	35 - 80	23	40
30 ... 350	800	601	20 - 100	30 - 100	30 - 100	35 - 100	26	50
60 ... 600	800	602	20 - 120	30 - 120	30 - 120	35 - 120	26	60

Micro switch characteristics

Switch code	M (K)	C (W)	S
Type	**Gold contact**	**Hermetic**	**Ultrasensitive Gold contact**
6 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
12 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
24 Vdc	10 ... 50 mA	5 ... 120 mA	10 ... 50 mA
30 Vdc	N/A	N/A	N/A
48 Vdc	N/A	N/A	N/A
110 Vdc	N/A	N/A	N/A
220 Vdc	N/A	N/A	N/A
115 Vac	N/A	N/A	N/A
250 Vac	N/A	N/A	N/A
Dielectric rigidity between contacts and ground	2000 V	1500 V	2000 V

RPPY7

Industrial pressure switch with intrinsic safety

RPPY-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPY	-	7	#	#	.	###
Product							
RPPY	RPPY						
Sensing element							
Bellow or Piston			7				
Type of Microswitch							
1xSPDT, hermetically				C			
simultaneous				W			
1 gold contact changeover switch				M			
simultaneous				K			
1xSPDT, gold, ultra sensitive				S			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-1 ... 0 bar							200
-1 ... 2.5 bar							201
0 ... 0.2 bar							202
0,05 ... 1 bar							203
0,5 ... 10 bar							204
3,5 ... 25 bar							205
5 ... 50 bar							206
5 ... 100 bar							207
20 ... 150 bar							208
-1 ... 3,5 bar							209
25 ... 175 bar							600
30 ... 350 bar							601
60 ... 600 bar							602

Ordering example

	RPPY	-	7	C	3	.	200	/	SETP
Product									
RPPY	RPPY								
Sensing element									
Bellow or Piston			7						
Type of Microswitch									
1xSPDT, hermetically				C					
Process connection									
G 1/2					3				
Pressure range									
-1 ... 0 bar							200		
Adjustment									
Setpoint factory adjusted									SETP

Options			
Setpoint factory adjusted	SETP	Setpoint adjust. lead sealed	8990
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
Souriau connection	2298	3.1 Material certificate	Q003
Souriau mobile plug	2249	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

RPPE3

Industrial pressure switch explosion proof

RPPE-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Explosion proof Hazardous area 0, 1, 2

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Case material	Epoxy painted, Aluminium Captive stainless steel screws Type RA80 Explosion-proof and flame-proof
Mounting	Wall mounting, 3 back lugs
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-50 ... 0 mbar
Max. pressure range	0 ... 400 mbar
Repeatability	± 1 % FS
Temperature: Pressure range codes 101 to 153	
Ambient temperature	-20°C ... +70°C (T5) -20°C ... +60°C (T6)
Storage temperature	-40°C ... +40°C ,Code 40
Media temperature	-15°C ... +150°C

Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Electrical data	
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	ATEX directive 2014/34/UE Ex II 2 GD Ex d IIC T6 or T5 Gb Ex tb IIIC T80°C or T95°C Db Further information can be found in the ATEX approval

Remarks

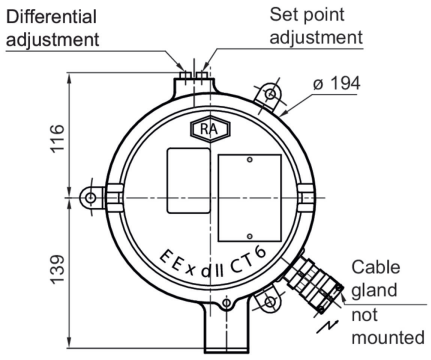
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

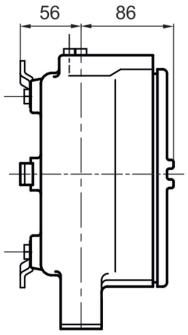
RPPE3

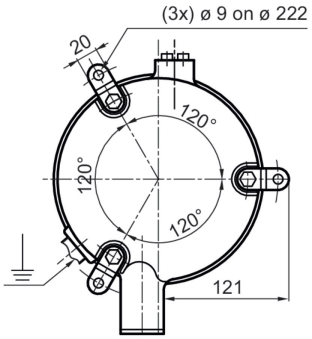
Industrial pressure switch explosion proof

RPPE-###.###/

Dimensional drawings (mm)

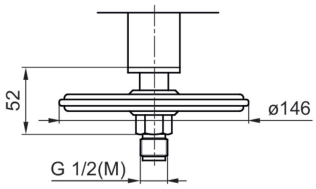


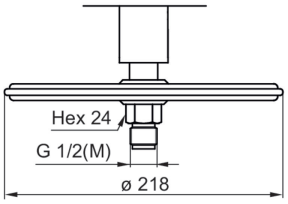




Weight: 4.4 kg

Weight: 4.4 kg





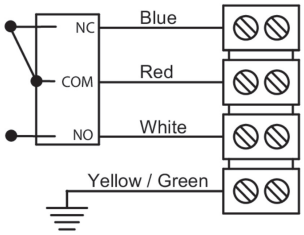
Pressure range codes: 151 - 152 - 153

Weight: 1 kg

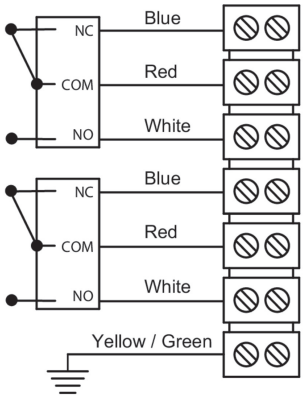
Pressure range codes: 101 - 102 - 103 - 104

Weight: 1.8 kg

Electrical connection



1 SPDT



2 SPDT

Electrical connection

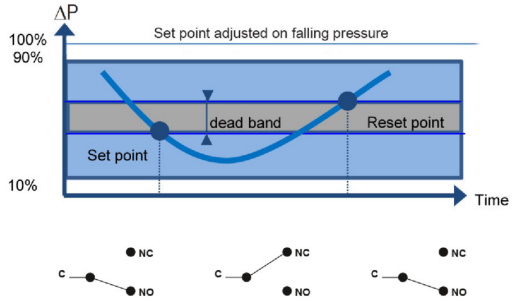
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
	T° surface	Class
Ta = 60°C	80°C	T6
Ta = 70°C	95°C	T5

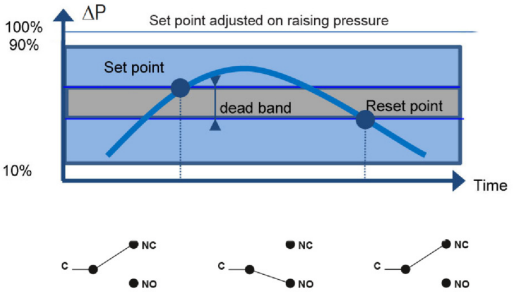
Important : Maximum power dissipation in the case must not exceed 5 W

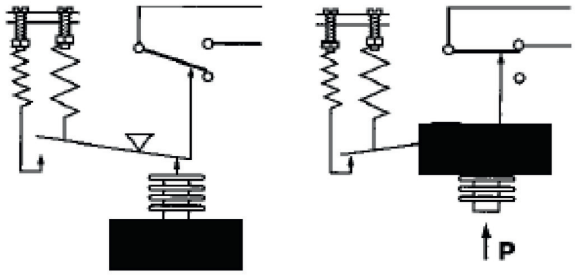
Hazardous areas: zone 1, 2, 21, 22

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.

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band [1]							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		D (V*)	
mbar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			mbar							
-50 ... 0	0.15	101	3 - 37	3.8 - 37	9.8 - 37	11.3 - 37	0.75	0.75	3.8	4.5
-2 ... 10	0.15	102	1.5 - 8	1.8 - 8	6.8 - 8	6.8 - 8	0.45	0.45	2.3	2.3
-5 ... 50	0.15	103	1.8 - 22	3 - 22	7.5 - 22	11 - 22	0.6	0.6	2.3	3.8
-8 ... 100	0.15	104	2.3 - 37	3 - 37	7.5 - 37	15 - 37	0.75	0.75	3	3.8
-200 ... 0	1	151	9 - 120	12 - 120	23 - 120	23 - 120	3	4.5	11.3	15
0 ... 200	1	152	9 - 120	12 - 120	23 - 120	23 - 120	3	4.5	11.3	15
0 ... 400	1	153	23 - 220	30 - 220	45 - 220	53 - 220	6	9	27	37

(*) When using 2 microswitches deadband lower values should be x1.5

1) The value of the deadband is depending on the value of the set point.This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	D (V)
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Ultra sensitive Hermetic
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.4 ... 2 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	N/A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	N/A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	1000 V

RPPE3

Industrial pressure switch explosion proof

RPPE-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPE	-	3	#	#	.	###	/
Product								
RPPE	RPPE							
Sensing element								
Diaphragm,Viton® (max.400mbar)			3					
Type of Microswitch								
1xSPDT, Standard				A				
simultaneous				B				
1xSPDT, hermetically				C				
simultaneous				W				
1xSPDT, ultra sensitive				E				
simultaneous				F				
1xSPDT hermetic/ultra sensit.?				D				
simultaneous				V				
1 gold contact changeover switch				M				
simultaneous				K				
Process connection								
G 1/2					3			
1/2 NPT					6			
1/4 NPT F					8			
Pressure range								
-50 ... 0 mbar							101	
-2 ... 10 mbar							102	
-5 ... 50 mbar							103	
-8 ... 100 mbar							104	
-200 ... 0 mbar							151	
0 ... 200 mbar							152	
0 ... 400 mbar							153	
0 ... 1000 mbar							154	

Ordering example

	RPPE	-	3	A	3	.	101
Product							
RPPE	RPPE						
Sensing element							
Diaphragm,Viton® (max.400mbar)			3				
Type of Microswitch							
1xSPDT, Standard				A			
Process connection							
G 1/2					3		
Pressure range							
-50 ... 0 mbar							101

Options			
Setpoint factory adjusted	SETP	2.1 Certificate	Q001
For oxygen applications	0765	2.2 Certificate	Q002
Mounting on 2 pipe	0407	3.1 Material certificate	Q003
stainless steel label wired*	9941	3.1 Certif. setpoints adjust.	Q011
Setpoint adjust. lead sealed	8990		

Pressure switches

RPPE4

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Overpressure up to 100 bar
- Explosion proof Hazardous area 0, 1, 2

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Case material	Epoxy painted, Aluminium Captive stainless steel screws Type RA80 Explosion-proof and flame-proof
Mounting	Wall mounting, 3 back lugs
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-50 ... 0 mbar
Max. pressure range	0 ... 2500 mbar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-20°C ... +70°C (T5) -20°C ... +60°C (T6)
Storage temperature	-40°C ... +40°C ,Code 40
Media temperature	-15°C ... +150°C

Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Electrical data	
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	ATEX directive 2014/34/UE Ex II 2 GD Ex d IIC T6 or T5 Gb Ex tb IIIC T80°C or T95°C Db Further information can be found in the ATEX approval

Remarks

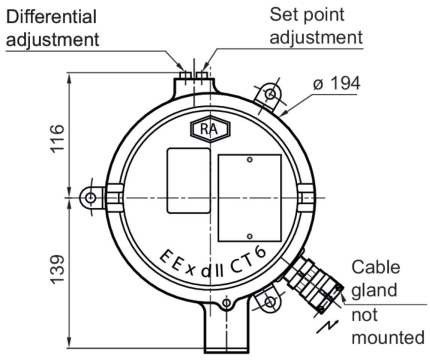
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

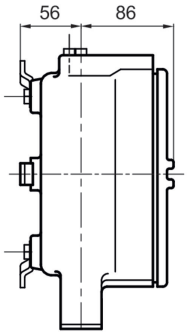
RPPE4

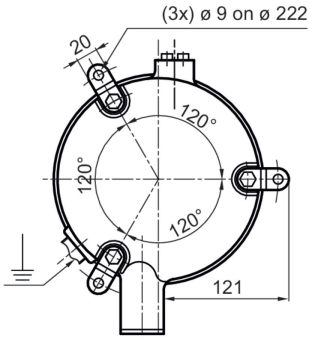
Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Dimensional drawings (mm)

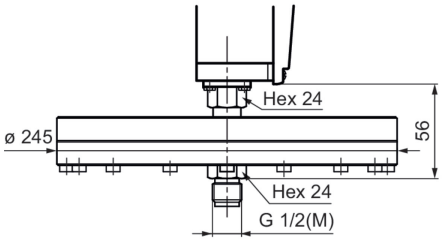


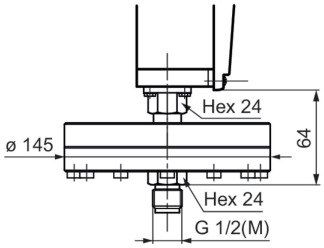


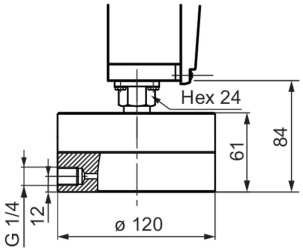


Weight: 4.4 kg

Weight: 4.4 kg







Pressure range codes: 101 - 102 - 103 - 104

Weight: 8.8 kg

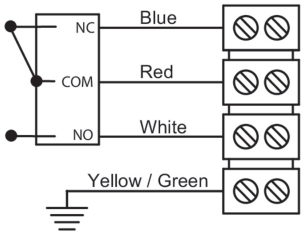
Pressure range codes: 151 - 152 - 153 - 154

Weight: 4.7 kg

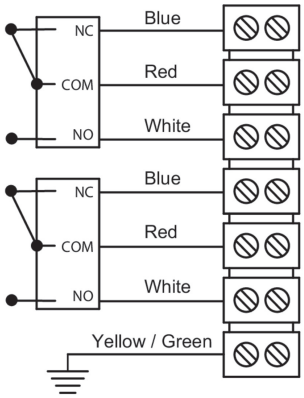
Pressure range codes: 171 - 172 - 173

Weight: 5.4 kg

Electrical connection



1 SPDT



2 SPDT

Electrical connection

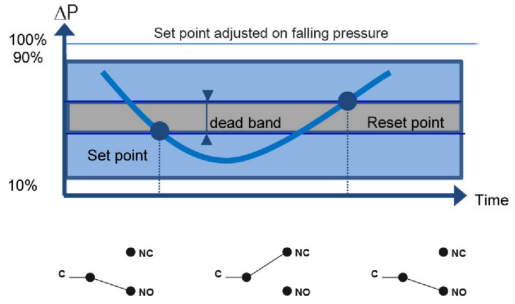
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
	T° surface	Class
Ta = 60°C	80°C	T6
Ta = 70°C	95°C	T5

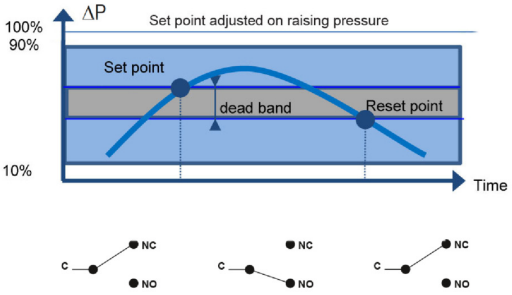
Important : Maximum power dissipation in the case must not exceed 5 W

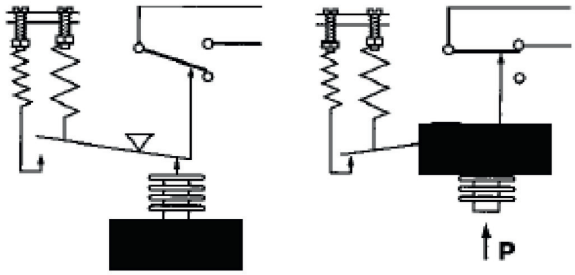
Hazardous areas: zone 1, 2, 21, 22

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.

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

RPPE4

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch deadband [1]							
			Adjustable deadband				Fixed deadband			
			A (B*) M (K*)		C (W*)		E (F*)		D (V*)	
mbar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			mbar	mbar	mbar	mbar	mbar	mbar	mbar	mbar
-50 ... 0	10	101	3 - 37	3.8 - 37	9.8 - 37	11.3 - 37	0.9	0.9	3.8	4.5
-2 ... 10	10	102	1.5 - 10	1.5 - 10	N/A	N/A	0.6	0.6	2.3	2.3
-5 ... 50	10	103	1.5 - 30	3 - 30	6.8 - 30	7.5 - 30	0.6	0.6	2.3	3.8
-8 ... 100	10	104	2.3 - 37	3.8 - 37	7.5 - 37	15 - 37	0.75	0.75	3	4.5
-200 ... 0	50	151	18 - 120	30 - 120	37 - 120	60 - 120	4.5	6	21.8	37
0 ... 200	50	152	23 - 120	37 - 120	45 - 120	67 - 120	5.3	6	27	45
0 ... 400	50	153	26 - 220	45 - 220	53 - 220	75 - 220	6	8.3	31	53
0 ... 1000	50	154	33 - 220	53 - 220	67 - 220	90 - 220	9	10.5	40	67
0 ... 700	100	171**	30 - 525	60 - 525	60 - 525	105 - 525	10.5	13.5	36	75
0 ... 1500	100	172**	30 - 525	90 - 525	60 - 525	150 - 525	10.5	13.5	36	112
0 ... 2500	100	173**	37 - 525	135 - 525	75 - 525	240 - 525	13.5	16.5	45	165

(*) When using 2 microswitches deadband lower values should be x1.5
(**) G1/4 female only

1) The value of the deadband is depending on the value of the set point. This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	D (V)
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Ultra sensitive Hermetic
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.4 ... 2 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	N/A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	N/A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	1000 V

RPPE4

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPE	-	4	#	#	.	###
Product							
RPPE	RPPE						
Sensing element							
Diaphragm,Viton® (max.2.5 bar)			4				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
Process connection							
G 1/4 Internal Screw					H		
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-50 ... 0 mbar							101
-2 ... 10 mbar							102
-5 ... 50 mbar							103
-8 ... 100 mbar							104
-200 ... 0 mbar							151
0 ... 200 mbar							152
0 ... 400 mbar							153
0 ... 1000 mbar							154
0 ... 700 mbar							171
0 ... 1500 mbar							172
0 ... 2500 mbar							173

Ordering example

	RPPE	-	4	A	3	.	101
Product							
RPPE	RPPE						
Sensing element							
Diaphragm,Viton® (max.2.5 bar)			4				
Type of Microswitch							
1xSPDT, Standard				A			
Process connection							
G 1/2					3		
Pressure range							
-50 ... 0 mbar							101

RPPE4

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Options			
Setpoint factory adjusted	SETP	2.1 Certificate	Q001
For oxygen applications	0765	2.2 Certificate	Q002
Setpoint adjust. lead sealed	8990	3.1 Material certificate	Q003
Mounting on 2 pipe	0407	3.1 Certif. setpoints adjust.	Q011
stainless steel label wired*	9941		

Pressure switches

RPPE6

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Overpressure up to 80 bar
- Explosion proof Hazardous areas 1, 2, 21, 22

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Case material	Epoxy painted, Aluminium Captive stainless steel screws Type RA80 Explosion-proof and flame-proof
Mounting	Wall mounting, 3 back lugs
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-1 ... 2.5 bar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-20°C ... +55°C (T6)
Storage temperature	-40°C ... +40°C ,Code 40
Media temperature	-50°C ... +200°C

Wetted parts	
Diaphragm	Perbunan
Flange	Steel, galvanized, bichromate finish
Electrical data	
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	ATEX directive 2014/34/UE Ex II 2 GD Ex d IIC T6 or T5 Gb Ex tb IIIC T80°C or T95°C Db Further information can be found in the ATEX approval

Remarks

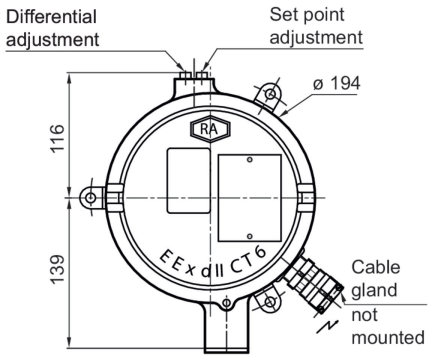
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

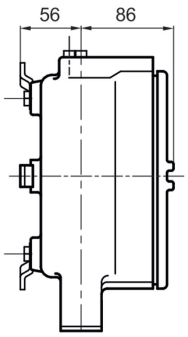
RPPE6

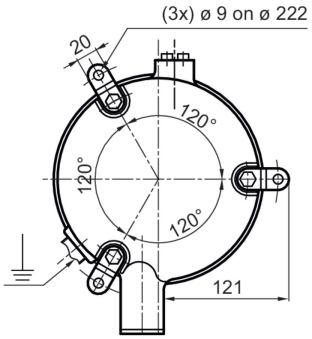
Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Dimensional drawings (mm)

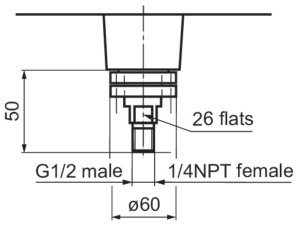






Weight: 4.4 kg

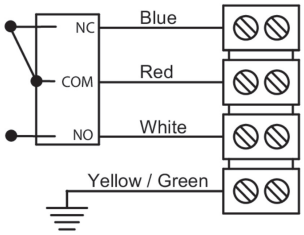
Weight: 4.4 kg



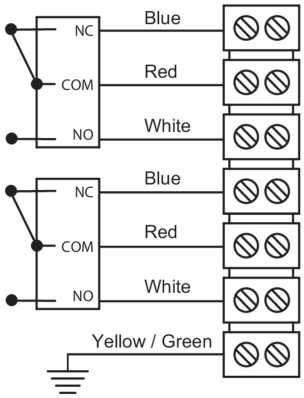
Pressure range codes: 201

Weight: 0.5 kg

Electrical connection



1 SPDT



2 SPDT

RPPE6

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Electrical connection

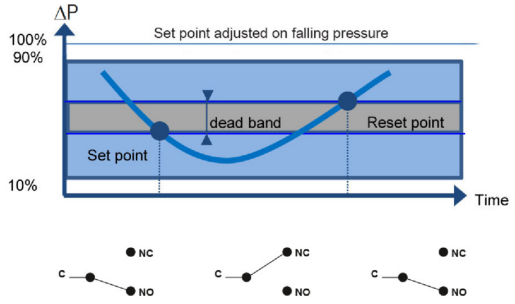
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
	T° surface	Class
Ta = 60°C	80°C	T6
Ta = 70°C	95°C	T5

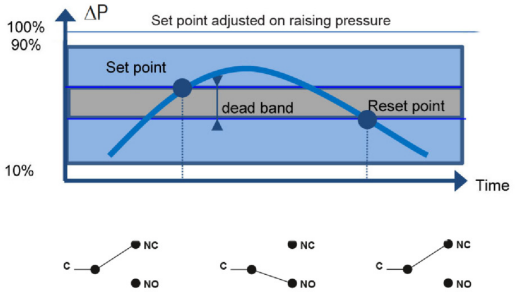
<u>Important</u> : Maximum power dissipation in the case must not exceed 5 W

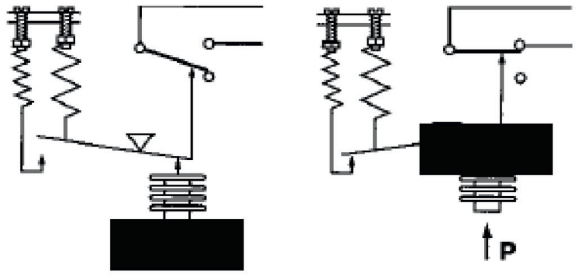
Hazardous areas: zone 1, 2, 21, 22

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.

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

RPPE6

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch deadband [1]							
			Adjustable deadband				Fixed deadband			
			A (B*) M (K*)		C (W*)		E (F*)		D (V*)	
bar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			bar	bar	bar	bar	mbar	mbar	bar	bar
-1 ... 2.5	80	201	0.37 - 3	0.45 - 3	1.2 - 3	1.5 - 3	97	112	0.45	0.52

(*) When using 2 microswitches deadband lower values should be x1.5

1) The value of the deadband is depending on the value of the set point. This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	D (V)
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Ultra sensitive Hermetic
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.4 ... 2 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	N/A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	N/A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	1000 V

RPPE6

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPE	-	6	#	#	.	201
Product							
RPPE	RPPE						
Sensing element							
Diaphragm, Perbunan®			6				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-1 ... 2.5 bar							201

Ordering example

	RPPE	-	6	A	3	.	201
Product							
RPPE	RPPE						
Sensing element							
Diaphragm, Perbunan®			6				
Type of Microswitch							
1xSPDT, Standard				A			
Process connection							
G 1/2					3		
Pressure range							
-1 ... 2.5 bar							201

Options

Setpoint factory adjusted	SETP	2.1 Certificate	Q001
For oxygen applications	0765	2.2 Certificate	Q002
Mounting on 2 pipe	0407	3.1 Material certificate	Q003
stainless steel label wired*	9941	3.1 Certif. setpoints adjust.	Q011
Setpoint adjust. lead sealed	8990		

Pressure switches

RPPE7

Industrial pressure switch explosion proof

RPPE-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Explosion proof Hazardous area 0, 1, 2

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Case material	Epoxy painted, Aluminium Captive stainless steel screws Type RA80 Explosion-proof and flame-proof
Mounting	Wall mounting, 3 back lugs
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	-1 ... 0 bar
Max. pressure range	60 ... 600 bar
Repeatability	± 1 % FS
Temperature: Pressure range codes 200 to 602	
Ambient temperature	-20°C ... +55°C (T6)
Storage temperature	-40°C ... +40°C ,Code 40
Media temperature	-50°C ... +200°C

Wetted parts	
Piston	Nickel plated steel
Bellow	Stainless steel 1.4404 / AISI 316L Stainless steel 1.4432 / AISI 316L
Electrical data	
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	ATEX directive 2014/34/UE Ex II 2 GD Ex d IIC T6 or T5 Gb Ex tb IIIC T80°C or T95°C Db Further information can be found in the ATEX approval

Remarks

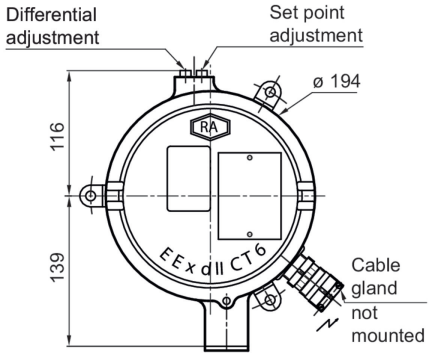
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

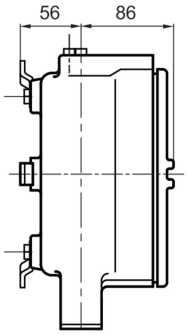
RPPE7

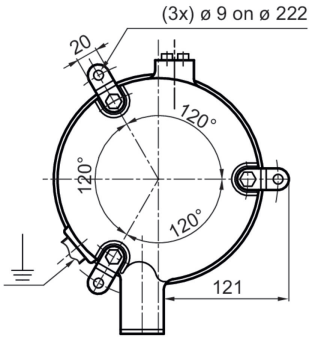
Industrial pressure switch explosion proof

RPPE-###.###/

Dimensional drawings (mm)

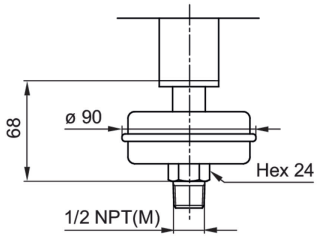


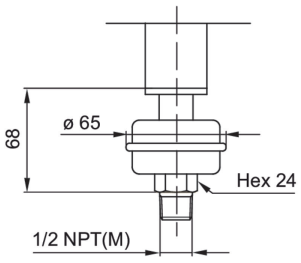


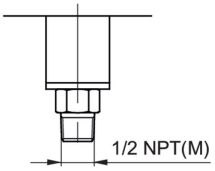


Weight: 4.4 kg

Weight: 4.4 kg







Pressure range codes: 200 - 202 - 203

Weight: 0.5 kg

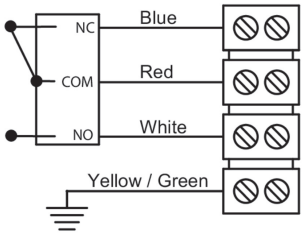
Pressure range codes: 201

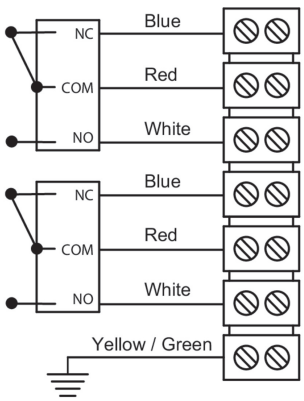
Weight: 0.4 kg

Pressure range codes: 204 - 205 - 206 - 207 - 208 - 209 - 600 - 601 - 602

Weight: 0.2 kg

Electrical connection





1 SPDT

2 SPDT

Electrical connection

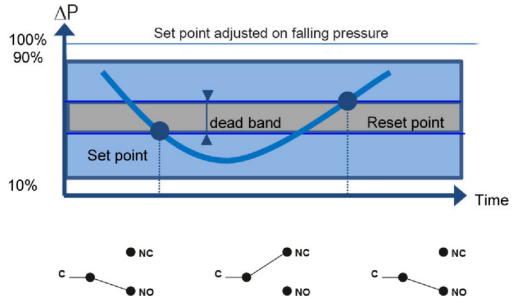
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
	T° surface	Class
Ta = 60°C	80°C	T6
Ta = 70°C	95°C	T5

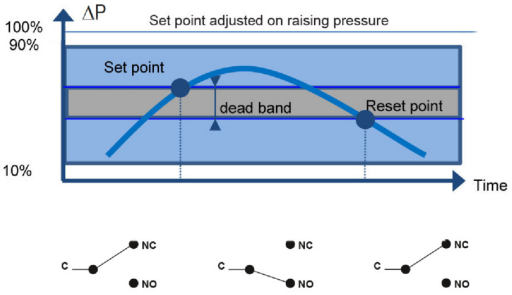
Important : Maximum power dissipation in the case must not exceed 5 W

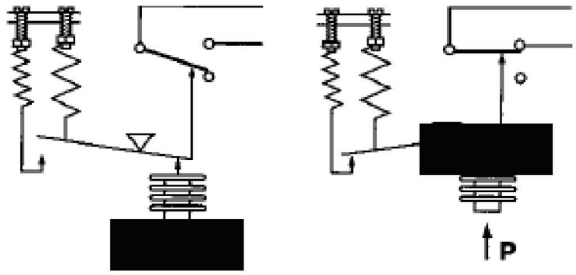
Hazardous areas: zone 1, 2, 21, 22

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.

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

RPPE7

Industrial pressure switch explosion proof

RPPE-###.###/

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch dead band 1)							
			Adjustable dead band				Fixed dead band			
			A (B*) M (K*)		C (W*)		E (F*)		D (V*)	
			10%	90%	10%	90%	10%	90%	10%	90%
bar	bar	Code	mbar							
-1 ... 0	1.5	200	37 - 375	53 - 375	120 - 375	142 - 375	7.5	9	45	63
-1 ... 2.5	7	201	120 - 1800	150 - 1800	225 - 1800	300 - 1800	33	37	144	180
0 ... 0.2	1.5	202	22 - 150	30 - 150	90 - 150	97 - 100	6	7.5	27	36
0.05 ... 1	1.5	203	30 - 600	37 - 600	120 - 600	142 - 600	6	7.5	36	45
0.5 ... 10	30	204	300 - 4500	375 - 4500	975 - 4500	1275 - 4500	67	75	360	450
3.5 ... 25	30	205	900 - 7500	1800 - 7500	1125 - 7500	1950 - 7500	90	150	1080	2160
bar	bar	Code	bar							
5 ... 50	65	206	1.5 - 15	3 - 15	3.7 - 15	4.5 - 15	0.225	0.3	2.2	3.7
5 ... 100	220	207	3.7 - 22	4.5 - 22	8.2 - 22	9.7 - 22	1.050	1.350	4.5	5.2
20 ... 150	220	208	3.7 - 22	5.2 - 22	8.2 - 22	9.7 - 22	1.050	1.500	4.5	6.7
-1 ... 3.5	30	209	0.22 - 2.2	0.3 - 2.2	0.97 - 2.2	1.27 - 2.2	0.067	0.075	0.3	0.37
25 ... 175	800	600	30 - 120	45 - 120	45 - 120	47 - 120	22	22	36	54
30 ... 350	800	601	30 - 150	45 - 150	45 - 150	47 - 150	24	24	36	54
60 ... 600	800	602	30 - 180	45 - 180	45 - 180	47 - 180	24	24	36	54

(*) When using 2 microswitches deadband lower values should be x1.5

1) The value of the deadband is depending on the value of the set point.This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	D (V)
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Ultra sensitive Hermetic
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.4 ... 2 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	N/A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	N/A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	1000 V

RPPE7

Industrial pressure switch explosion proof

RPPE-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPE	-	7	#	#	.	###
Product							
RPPE	RPPE						
Sensing element							
Bellow or Piston			7				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
-1 ... 0 bar							200
-1 ... 2.5 bar							201
0 ... 0.2 bar							202
0,05 ... 1 bar							203
0,5 ... 10 bar							204
3,5 ... 25 bar							205
5 ... 50 bar							206
5 ... 100 bar							207
20 ... 150 bar							208
-1 ... 3,5 bar							209
0,2 ... 4 bar							210
25 ... 175 bar							600
30 ... 350 bar							601
60 ... 600 bar							602

Ordering example

	RPPE	-	7	A	3	.	200	/	SETP
Product									
RPPE	RPPE								
Sensing element									
Bellow or Piston			7						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
-1 ... 0 bar							200		
Adjustment									
Setpoint factory adjusted									SETP

Options			
Setpoint factory adjusted	SETP	2.1 Certificate	Q001
For oxygen applications	0765	2.2 Certificate	Q002
Mounting on 2 pipe	0407	3.1 Material certificate	Q003
stainless steel label wired*	9941	3.1 Certif. setpoints adjust.	Q011
Setpoint adjust. lead sealed	8990		

Pressure switches

RPPE8

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Overpressure up to 100 bar
- Explosion proof Hazardous areas 1, 2, 21, 22

Picture similar

Technical data

Housing	
Protection rating (EN60529)	IP66
Case material	Epoxy painted, Aluminium Captive stainless steel screws Type RA80 Explosion-proof and flame-proof
Mounting	Wall mounting, 3 back lugs
Scale	Internal, accuracy on reading ± 5 % FS
Performance	
Min. pressure range	0.2 ... 4 bar
Max. pressure range	5 ... 50 bar
Repeatability	± 1 % FS
Temperature	
Ambient temperature	-20°C ... +55°C (T6)
Storage temperature	-40°C ... +40°C ,Code 40
Media temperature	-50°C ... +200°C

Wetted parts	
Process connection material	Stainless steel 1.4404 / AISI 316L
Diaphragm	Stainless steel 1.4404 / AISI 316L
Electrical data	
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Ground connection	Via internal terminal block
Adjustment	2 external adjustment screws on top of the case for set point and deadband
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	ATEX directive 2014/34/UE Ex II 2 GD Ex d IIC T6 or T5 Gb Ex tb IIIC T80°C or T95°C Db Further information can be found in the ATEX approval

Remarks

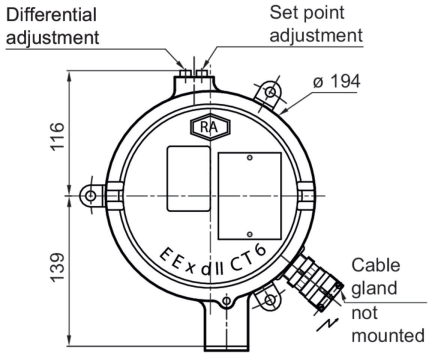
- These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

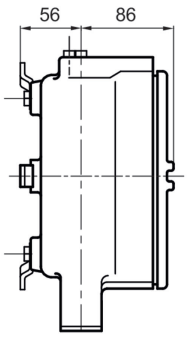
RPPE8

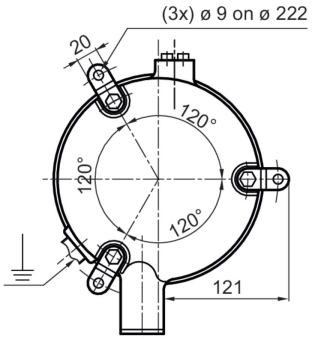
Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Dimensional drawings (mm)

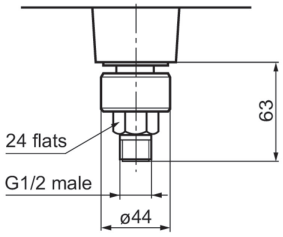






Weight: 4.4 kg

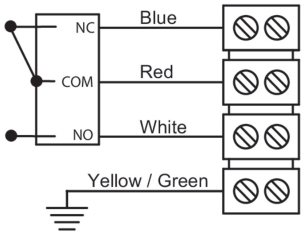
Weight: 4.4 kg



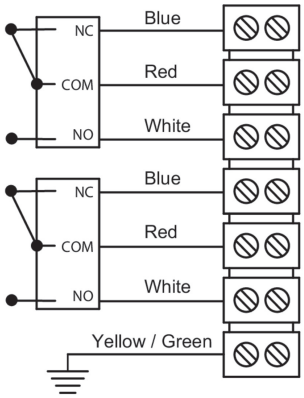
Pressure range codes: 204 - 205 - 206 - 210

Weight: 0.5 kg

Electrical connection



1 SPDT



2 SPDT

RPPE8

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Electrical connection

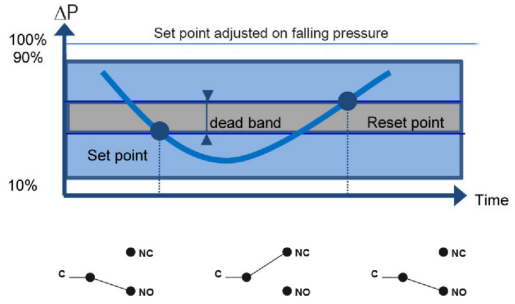
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
	T° surface	Class
Ta = 60°C	80°C	T6
Ta = 70°C	95°C	T5

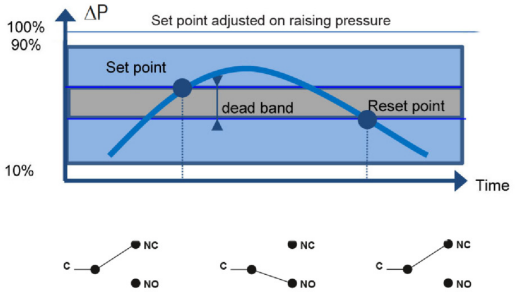
<u>Important</u> : Maximum power dissipation in the case must not exceed 5 W

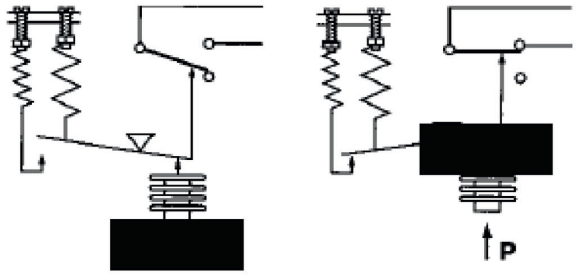
Hazardous areas: zone 1, 2, 21, 22

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.

Principle







A flexible sensing element actuates a microswitch by means of a lever. The set point is adjusted by means of a compressible spring installed in opposition.
Set point and reset point must be between 10% and 90% of the selected scale.

Standard factory adjustment
Setpoint at 50% of the scale on falling pressure.

Customer specific factory adjustment (option SETP)
The following specifications have to be given with the order:
• Setpoint value
• Adjustment on falling or raising pressure
• Deadband value (as needed) when using an adjustable dead band switch

RPPE8

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Adjustable ranges

Scale	P. Max accidental	Code	Micro-switch deadband [1]							
			Adjustable deadband				Fixed deadband			
			A (B*) M (K*)		C (W*)		E (F*)		D (V*)	
bar	bar		10%	90%	10%	90%	10%	90%	10%	90%
			bar	bar	bar	bar	mbar	mbar	bar	bar
0.5 ... 10	50	204	0.45 - 4.5	0.82 - 4.5	0.94 - 4.5	1.2 - 4.5	67	93	0.37	0.45
3.5 ... 25	100	205	0.67 - 15	1.3 - 15	2.2 - 15	4.6 - 15	225	300	0.82	1.6
5 ... 50	100	206	1.5 - 15	3 - 15	5.2 - 15	10 - 15	300	450	2.25	3.7
0.2 ... 4	50	210	0.15 - 4.5	0.27 - 4.5	0.52 - 4.5	0.94 - 4.5	60	75	0.22	0.37

(*) When using 2 microswitches deadband lower values should be x1.5

1) The value of the deadband is depending on the value of the set point. This table contains the deadband values for set point adjustment at 10% and 90% of the selected scale. For adjustable deadband the lower value corresponds to the deadband spring totally released and the higher corresponds to the deadband spring fully tensed. For other set points the deadband value can be calculated by linear interpolation between the values at 10% and 90%.

Micro switch characteristics

Switch code	A (B)	M (K)	C (W)	E (F)	D (V)
Type	Standard	Gold contact	Hermetic	Ultra sensitive	Ultra sensitive Hermetic
6 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
12 Vdc	0.4 ... 10 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
24 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 4 A	0.4 ... 1 A	0.4 ... 4 A
30 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	0.4 ... 1 A	0.4 ... 2 A
48 Vdc	0.4 ... 6 A	10 ... 50 mA	5 mA ... 3 A	N/A	N/A
110 Vdc	0.1 ... 0.5 A	10 ... 50 mA	5 mA ... 1 A	N/A	N/A
220 Vdc	0.1 ... 0.25 A	10 ... 50 mA	5 mA ... 0.5 A	N/A	N/A
115 Vac	0.4 ... 10 A	10 ... 50 mA	50 mA ... 3 A	0.4 ... 10 A	N/A
250 Vac	0.2 ... 10 A	N/A	50 mA ... 2.5 A	0.2 ... 10 A	N/A
Dielectric rigidity between contacts and ground	2000 V	2000 V	1500 V	2000 V	1000 V

RPPE8

Industrial pressure switch, explosion proof with high overpressure resistance

RPPE-###.###/

Ordering reference

Ordering key - Configuration possibilities see website

	RPPE	-	8	#	#	.	###
Product							
RPPE	RPPE						
Sensing element							
Diaphragm:St.steel			8				
Type of Microswitch							
1xSPDT, Standard				A			
simultaneous				B			
1xSPDT, hermetically				C			
simultaneous				W			
1xSPDT, ultra sensitive				E			
simultaneous				F			
1xSPDT hermetic/ultra sensit.?				D			
simultaneous				V			
1 gold contact changeover switch				M			
simultaneous				K			
Process connection							
G 1/2					3		
1/2 NPT					6		
1/4 NPT F					8		
Pressure range							
0,5 ... 10 bar							204
3,5 ... 25 bar							205
5 ... 50 bar							206
0,2 ... 4 bar							210

Ordering example

	RPPE	-	8	A	3	.	204	/	SETP
Product									
RPPE	RPPE								
Sensing element									
Diaphragm:St.steel			8						
Type of Microswitch									
1xSPDT, Standard				A					
Process connection									
G 1/2					3				
Pressure range									
0,5 ... 10 bar							204		
Adjustment									
Setpoint factory adjusted									SETP

Options

Setpoint factory adjusted	SETP	2.1 Certificate	Q001
For oxygen applications	0765	2.2 Certificate	Q002
Mounting on 2 pipe	0407	3.1 Material certificate	Q003
stainless steel label wired*	9941	3.1 Certif. setpoints adjust.	Q011
Setpoint adjust. lead sealed	8990		