RDN4

Differential pressure switch RDN-###.###/

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
Process	
Process connection	G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C
Storage temperature	-40°C +70°C
Media temperature	-15°C +150°C

Wetted parts	
Flange	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Sensing / Input	
Min. measuring range	-2.5 2.5 mbar
Max. measuring range	10 400 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	
CE conformity	Low Voltage Directive 2014/35/UE

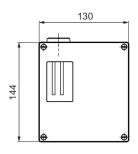
Remarks

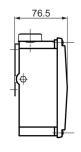
 These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

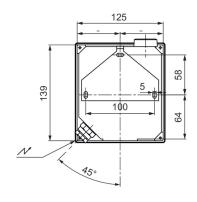
Differential pressure switch

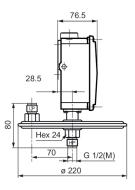
RDN-###.###/

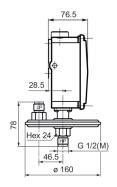
Dimensional drawings (mm)











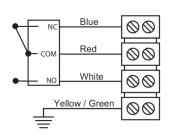
Pressure range codes: 111 - 121 - 131

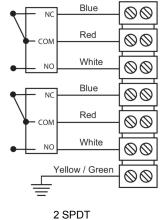
Weight: 3 kg

Pressure range codes: 156 - 157

Weight: 3 kg

Electrical connection





1 SPDT

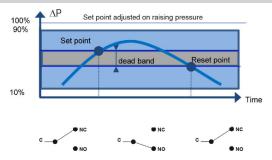


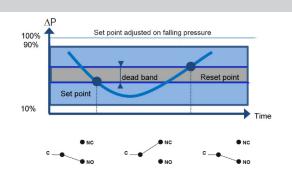
RDN4

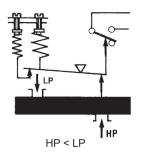
Differential pressure switch

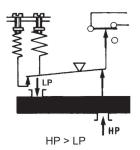
RDN-###.###/

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDN4

Differential pressure switch RDN-###.###/

Adjustable ranges

	1110000						Micro-switch	dead band "			
Scale	Max ΔP	Max P Static			Adjustable	dead band			Fixed de	ead band	
			Code	A (B*)	M (K*)	C(W*)	E(F*)	H D	(V*) J
		b		10%	90%	10%	90%	10%	90%	10%	90%
mbar	mbar	bar		mbar							
-2.5 2.5	5	0.15	110	N/A	N/A	N/A	N/A	0.3	0.4	N/A	N/A
2 10	10	0.15	111	1.2 - 10	1.6 - 10	4.5 - 10	4.5 - 10	0.3	0.4	1.5	2
2 50	50	0.15	121	1.7 - 30	2.2 - 30	5 - 30	5.5 - 30	0.4	0.5	2	3
2 100	100	0.15	131	1.7 - 40	2.5 - 40	5.5 - 40	10 - 40	0.5	0.7	2	3
10 200	200	1	156	8 - 80	10.5 - 80	25 - 80	40 - 80	2.5	3.4	10	13
10 400	400	1	157	15 - 150	20 - 150	30 - 150	45 - 150	4.5	6	18	24

- (*) 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 and 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)	н	D (V)	J
Туре	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

RDN4

Differential pressure switch

RDN-###.###/

Ordering key - Configuration possibilities see website			
	RDN - 4	# # .	##
Product			
RDN	RDN		
Measuring element			
Membran, Viton® (≤400 mbar)	4		
Type of Microswitch			
1xSPDT, Standard		Α	
simultaneous		В	
1xSPDT, hermetically		С	
simultaneous		W	
1xSPDT, ultra sensitive		E	
simultaneous		F	
1xSPDT hermetic/ultra sensit.?		D	
simultaneous		V	
1 gold contact changeover switch		М	
simultaneous		K	
1xSPDT, manually, falling		Н	
1xSPDT, manually, rising		J	
simultaneous		K	
Pneumatic type, NO		Z	
Pneumatic type, NC		Υ	
Process connection			
G 1/2		3	
1/2 NPT		6	
1/4 NPT F		8	
Pressure range			
-2.5 2.5 mbar			11
2 10 mbar			1
2 50 mbar			12
2 100 mbar			13
10 200 mbar			15
10 400 mbar			1:

Ordering example	
	RDN - 4 A 3 . 111 / 0765
Product	
RDN	RDN
Measuring element	
Membran, Viton® (≤400 mbar)	4
Type of Microswitch	
1xSPDT, Standard	A
Process connection	
G 1/2	3
Pressure range	
2 10 mbar	111
Classinas	

Cleanliness

for oxygen applications free of oil and grease

0765



RDN4

Differential pressure switch RDN-###.###/

Options	
Setpoint factory adjusted	SETP
For oxygen applications	0765
Mounting on 2 pipe	0407
stainless steel label wired*	9941
Setpoint adjust. lead sealed	8990
Souriau mobile plug	2249

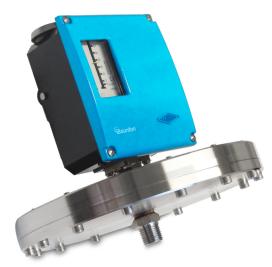
Souriau connection	2298
2.1 Certificate	Q001
2.2 Certificate	Q002
3.1 Material certificate	Q003
3.1 Certif. setpoints adjust.	Q011

RDN5

Differential pressure switch for high static pressure RDN-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- High static pressure 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
Process	
Process connection	G1/4" female, only for codes 161,162,163 G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C
Storage temperature	-40°C +70°C
Media temperature	-15°C +150°C

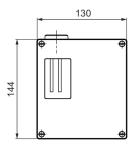
Wetted parts	
Flange	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton) Nitrile butyl rubber
Sensing / Input	
Min. measuring range	2 10 mbar
Max. measuring range	10 2000 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	

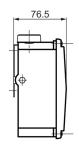
Remarks

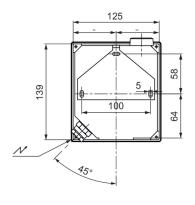
• These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

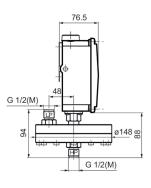
Differential pressure switch for high static pressure RDN-###.###/

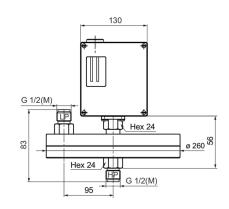
Dimensional drawings (mm)

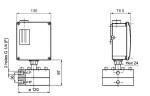












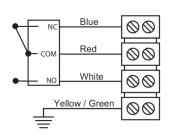
Pressure range codes: 161 - 162 - 163 Weight: 7 kg

Pressure range codes: 156 - 157 - 158

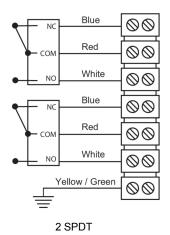
Weight: 10 kg

Pressure range codes: 111 - 112 - 121 - 131 Weight: 6.4 kg

Electrical connection

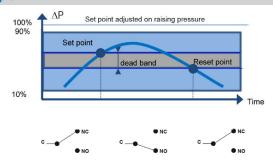


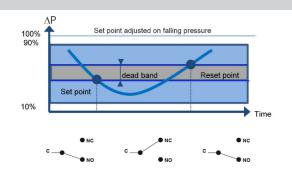
1 SPDT

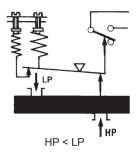


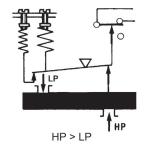
Differential pressure switch for high static pressure RDN-###.###/

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

Differential pressure switch for high static pressure RDN-###.###/

Adjustable ranges

							Micro-switch	dead band "			
Scale	Max ΔP	Max P Static			Adjustable	dead band			Fixed d	ead band	
			Code	A (B*)	M (K*)	C(W*)	E	(F*)	H D	(V*) J
		h		10%	90%	10%	90%	10%	90%	10%	90%
mbar	mbar	bar		mbar							
2 10	10	0 to 5	111	1.2 - 10	1.6 - 10	4.5 - 10	4.5 - 10	0.3	0.4	1.5	2
2 20	50	0 to 5	112	1.7 - 20	2.2 - 20	5 - 20	5.5 - 20	0.4	0.5	2	3
2 50	50	0 to 5	121	1.7 - 30	2.2 - 30	5 - 30	5.5 - 30	0.4	0.5	2	3
2 100	100	0 to 5	131	1.7 - 40	2.5 - 40	5.5 - 40	10 - 40	0.5	0.7	2	3
10 200	200	5.5 to 50	156	8 - 80	10.5 - 80	35 - 80	45 - 80	2.5	3.4	10	13
10 400	400	5.5 to 50	157	15 - 150	20 - 150	40 - 150	50 - 150	4.5	6	18	24
10 1000	1000	5.5 to 50	158	18 - 150	22 - 150	40 - 150	60 - 150	5	7	22	26.5
10 700	700	5.5 to 80	161**	20 - 200	30 - 200	60 - 350	90 - 350	6	8	24	36
10 1500	1500	5.5 to 80	162**	20 - 300	30 - 300	60 - 350	100 - 350	6	8	24	36
10 2000	2000	5.5 to 80	163**	30 - 300	60 - 300	90 - 350	200 - 350	9	12	36	72

^(*) 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)	н	D (V)	J
Туре	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

^(**) G1/4 female only

RDN5

Differential pressure switch for high static pressure RDN-###.###/

Ordering reference Ordering key - Configuration possibilities see website RDN 5 ### **Product** RDN **RDN** Measuring element Membran, Viton® od. NBR 5 Type of Microswitch 1xSPDT, Standard Α simultaneous В 1xSPDT, hermetically С simultaneous W 1xSPDT, ultra sensitive Е F simultaneous 1xSPDT hermetic/ultra sensit.? D simultaneous ٧ 1 gold contact changeover switch Μ simultaneous Κ 1xSPDT, manually, falling Н 1xSPDT, manually, rising J Pneumatic type, NO Ζ Pneumatic type, NC **Process connection** G 1/4 Internal Screw Н G 1/2 3 1/2 NPT 6 1/4 NPT F 8 Pressure range 2 ... 10 mbar 111 2 ... 20 mbar 112 2 ... 50 mbar 121 2 ... 100 mbar 131 10 ... 200 mbar 156 10 ... 400 mbar 157 10 ... 1000 mbar 158 10 ... 700 mbar 161 10 ... 1500 mbar 162 10 ... 2000 mbar 163

Ordering example	
	RDN - 5 A H . 161 / 0765
Product	
RDN	RDN
Measuring element	
Membran, Viton® od. NBR	5
Type of Microswitch	
1xSPDT, Standard	A
Process connection	
G 1/4 Internal Screw	н
Pressure range	
10 700 mbar	161



RDN5

Differential pressure switch for high static pressure RDN-###.###/

Ordering reference				
Ordering example				
			RDN - 5 A H	. 161 / 0765
Cleanliness				
for oxygen applications free of oil and grease				0765
Options				
Setpoint factory adjusted	SETP	Souriau connection		2298
For oxygen applications	0765	2.1 Certificate		Q001
Mounting on 2 pipe	0407	2.2 Certificate		Q002
stainless steel label wired*	9941	3.1 Material certificate		Q003
Setpoint adjust. lead sealed	8990	3.1 Certif. setpoints adjust.		Q011
Souriau mobile plug	2249			

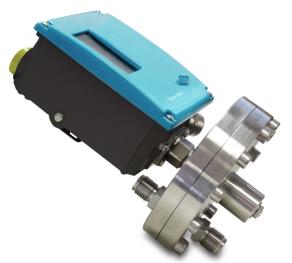
RDN6

Differential pressure switch with intrinsic safety for variable static pressure RDN-6##.##

Wetted parts

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Static pressure max. 20 bar
- No influence of the static pressure on the setpoint



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
Process	
Process connection	G1/4" female, only for codes 161,162,163 G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C
Storage temperature	-40°C +70°C
Media temperature	-15°C +150°C

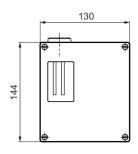
Flange	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)
Sensing / Input	
Min. measuring range	10 200 mbar
Max. measuring range	10 2000 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband The adjustment is not influenced by changes of the static pressure
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformition	
Approval / Conformities	

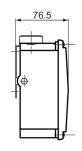
Remarks

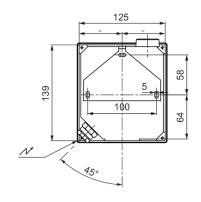
• These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

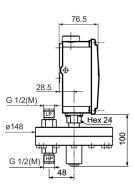
Differential pressure switch with intrinsic safety for variable static pressure RDN-6##.##

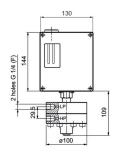
Dimensional drawings (mm)

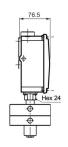








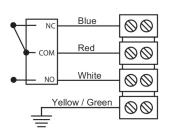




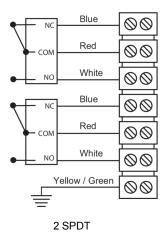
Pressure range codes: 161 - 162 - 163 Weight: 7 kg

Pressure range codes:156 - 157 - 158 Weight: 6.6 kg

Electrical connection

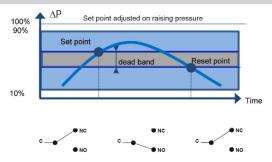


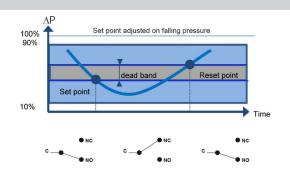
1 SPDT

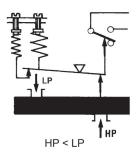


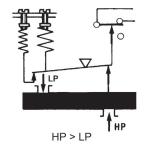
Differential pressure switch with intrinsic safety for variable static pressure RDN-6##.##

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDN6

Differential pressure switch with intrinsic safety for variable static pressure RDN-6##.##

Adjustable ranges

	2220000						Micro-switch	dead band "			
Scale	Max ΔP	Max P Static			Adjustable	dead band			Fixed de	ead band	
			Code	A (B*)	M (K*)	C(W*)	E(F*)	H D	(V*) J
				10%	90%	10%	90%	10%	90%	10%	90%
mbar	mbar	bar		mbar							
10 200	200	20	156	8 - 80	10.5 - 80	35 - 80	45 - 80	2.5	3.4	10	13
10 400	400	20	157	15 - 150	20 - 150	40 - 150	50 - 150	4.5	6	18	24
10 1000	1000	20	158	18 - 150	22 - 150	45 - 150	60 - 150	5	7	22	26.5
10 700	700	20	161**	30 - 250	45 - 250	130 - 450	150 - 450	13	15	36	54
10 1500	1500	20	162**	30 - 300	45 - 300	130 - 450	150 - 450	13	15	36	54
10 2000	2000	20	163**	45 - 300	90 - 300	180 - 450	300 - 450	18	25	54	108

(*) 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	vitch code A (B)		h code A (B)		C (W) E (F)		н	D (V)	J	
Туре	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			

RDN6

Differential pressure switch with intrinsic safety for variable static pressure RDN-6##.##

Ordering reference		
Ordering key - Configuration possibilities see website		
	RDN - 6 # # .	###
Product		
RDN	RDN	
Measuring element		
Membran, Viton® (≤ 2 bar)	6	
Type of Microswitch		
1 gold contact changeover switch	M	
1xSPDT, Standard	Α	
simultaneous	В	
1xSPDT, hermetically	C	
1xSPDT hermetic/ultra sensit.?	D	
1xSPDT, ultra sensitive	E	
simultaneous	F	
1xSPDT, manually, falling	Н	
1xSPDT, manually, rising	J	
simultaneous	K	
simultaneous	V	
simultaneous	W	
Process connection		
G 1/2	3	
1/2 NPT	6	
1/4 NPT F	8	
G 1/4 Internal Screw	Н	
Pressure range		
10 200 mbar		156
10 400 mbar		157
10 1000 mbar		158
10 700 mbar		16 ⁻
10 1500 mbar		162
10 2000 mbar		163

Ordering example						
	RDN -	6	Α	3.	161	0765
Product						
RDN	RDN					
Measuring element						
Membran, Viton® (≤ 2 bar)		6				
Type of Microswitch						
1xSPDT, Standard			Α			
Process connection						
G 1/2				3		
Pressure range						
10 700 mbar					161	
Cleanliness						

for oxygen applications free of oil and grease 0765



RDN6

Differential pressure switch with intrinsic safety for variable static pressure RDN-6##.##

Options	
Setpoint factory adjusted	SETP
For oxygen applications	0765
Mounting on 2 pipe	0407
stainless steel label wired*	9941
Setpoint adjust. lead sealed	8990
Souriau mobile plug	2249

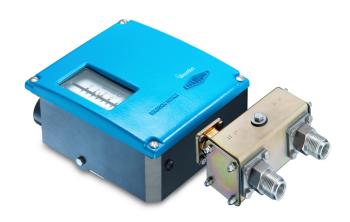
Souriau connection	2298
2.1 Certificate	Q001
2.2 Certificate	Q002
3.1 Material certificate	Q003
3.1 Certif. setpoints adjust.	Q011

RDN8

Differential pressure switch RDN-###.###/

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
Process	
Process connection	G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C
Storage temperature	-40°C +70°C
Media temperature	-50°C +200°C

Wetted parts	
Bellow	Stainless steel 1.4404 / AISI 316L
	Stainless steel 1.4432 / AISI 316L
Sensing / Input	
Min. measuring range	0.05 0.5 bar
Max. measuring range	2.5 30 bar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	

Low Voltage Directive 2014/35/UE

Remarks

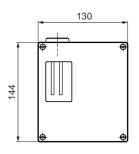
• These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

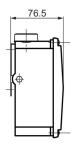
CE conformity

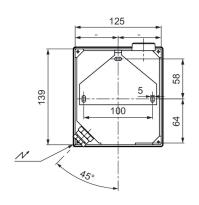
Differential pressure switch

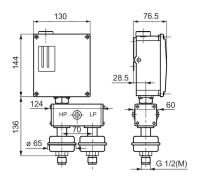
RDN-###.###/

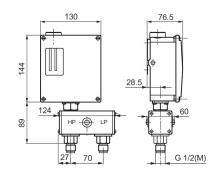
Dimensional drawings (mm)











Pressure range codes: 211 - 221

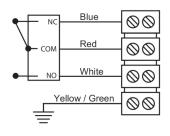
Weight: 3 kg

Pressure range codes: 214 - 224 - 234 - 235

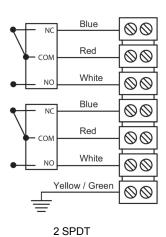
- 245 - 246 - 256 - 257 - 258

Weight: 3 kg

Electrical connection



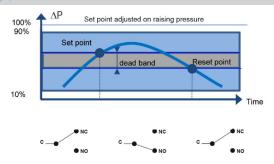
1 SPDT

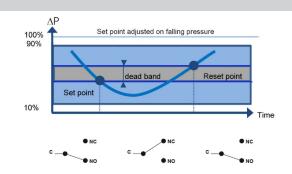


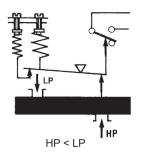
Differential pressure switch

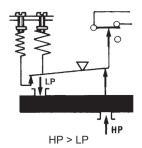
RDN-###.###/

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDN8

Differential pressure switch RDN-###.###/

Adjustable ranges

							Micro-switch	dead band "			
Scale	Max Max P	Code		Adjustable	dead band			Fixed de	ead band		
Scale	ΔΡ	Static	Code	A (B*)	M (K*)	C(W*)	Е	(F*)	H D	(V*) J
				10%	90%	10%	90%	10%	90%	10%	90%
	bar				b	ar		m	bar	b	ar
0.05 0.5	0.5	7	211	0.09 - 0.3	0.1 - 0.3	0.15 - 0.4	0.2 - 0.4	25	30	0.11	0.12
0.05 1	1	7	221	0.09 - 0.3	0.1 - 0.3	0.15 - 0.4	0.22 - 0.4	25	30	0.11	0.12
0.15 0.5	0.5	20	214	0.14 - 0.5	0.18 - 0.5	N/A	N/A	55	60	0.17	0.22
0.15 1	1	20	224	0.2 - 0.6	0.25 - 0.6	N/A	N/A	55	60	0.17	0.24
0.15 4	4	20	234	0.21 - 1.5	0.27 - 1.5	0.65 - 2	0.8 - 2	55	65	0.17	0.3
0.8 4	4	30	235	0.7 - 2.5	1.1 - 2.5	0.75 - 2.5	1.1 - 2.5	70	100	0.84	1.35
0.8 10	10	30	245	0.7 - 2.5	1.1 - 2.5	0.75 - 2.5	1.1 - 2.5	70	100	0.84	1.35
1.5 10	10	65	246	1.2 - 5	2.5 - 5	2.5 - 6	3.5 - 6	180	240	1.45	3
1.5 20	20	65	256	1.2 - 5	2.5 - 5	2.5 - 6	3.5 - 6	180	240	1.45	3
2.5 20	20	220	257	2.5 - 20	3.5 - 20	6 - 20	7 - 20	800	1000	3	4.2
2.5 30	30	220	258	3 - 30	4 - 20	6 - 20	7 - 20	850	1000	3.5	4.8

^{*)} 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)	Н	D (V)	J
Туре	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

RDN8

Differential pressure switch

RDN-###.###/

Ordering reference Ordering key - Configuration possibilities see website RDN 8 ### **Product** RDN **RDN** Measuring element Bellow or piston, st.steel 8 Type of Microswitch 1xSPDT, Standard Α simultaneous В 1xSPDT, hermetically С simultaneous W 1xSPDT, ultra sensitive Е F simultaneous 1xSPDT hermetic/ultra sensit.? D simultaneous ٧ 1 gold contact changeover switch Μ simultaneous Κ 1xSPDT, manually, falling Н 1xSPDT, manually, rising J Pneumatic type, NO Ζ Pneumatic type, NC **Process connection** 3 G 1/2 1/2 NPT 6 1/4 NPT F 8 Pressure range 0.05 ... 0.5 bar 211 0.05 ... 1 bar 221 0.15 ... 0.5 bar 214 0.15 ... 1 bar 224 0.15 ... 4 bar 234 0.8 ... 4 bar 235 0.8 ... 10 bar 245 1.5 ... 10 bar 246 1.5 ... 20 bar 256 2.5 ... 20 bar 257 2.5 ... 30 bar 258

Ordering example							
	RDN	- 8	Α	3 .	211	1	0765
Product							
RDN	RDN						
Measuring element							
Bellow or piston, st.steel		8					
Type of Microswitch							
1xSPDT, Standard			Α				
Process connection							
G 1/2				3			
Pressure range							
0.05 0.5 bar					211		



RDN8

Differential pressure switch

RDN-###.###/

Ordering reference	
Ordering example	
	RDN - 8 A 3 . 211 / 0765
Cleanliness	
for oxygen applications	0765
free of oil and grease	

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

RDE4

Differential pressure switch, explosion proof RDE-###.##

Overview

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



Picture similar



Technical data			
Housing		Sensing / Input	
Protection rating	IP66	Min. measuring range	-2.5 2.5 mbar
(EN60529)		Max. measuring range	10 400 mbar
Case material	Type RA80	Performance	
	Explosion-proof and flame-proof Epoxy painted, Aluminium	Repeatability	± 1 % FS
	Captive stainless steel screws	Adjustment	2 external adjustment screws on top of
Mounting	Wall mounting, 3 back lugs		the case for set point and deadband When set point adjustment is required it
Scale	Internal, accuracy on reading ± 5 % FS		is necessary to know the static pressure.
Process			as it has an influence on the set point.
Process connection	G1/2"	Electrical data	
	1/2" NPT	Ground connection	Via internal terminal block
Temperature	1/4" NPT female	Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Ambient temperature	-20°C +55°C (T6)	Approval / Conformities	•
Storage temperature	-40°C +70°C	ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80)
Media temperature	-15°C +150°C		IECEx LCIE 15.0061X
Wetted parts		ATEX/IECEx	Ex II 2 GD
Flange	Flange Stainless steel 1.4404 / AISI 316L		Further information can be found in the
Diaphragm	FKM (Viton)	CE conformity	ATEX approval ATEX directive 2014/34/UE
		CE conformity	ATEX directive 2014/34/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.

proint adjustment is required it by to know the static pressure, influence on the set point.

It terminal block
It terminal block with metallice of for Ø 7 to 12 mm

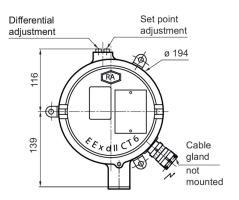
TEX 6231X (Type RA80)
E 15.0061X

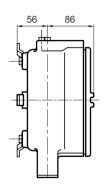
Demation can be found in the coval of t

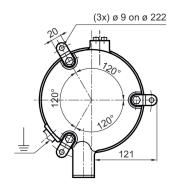
RDE4

Differential pressure switch, explosion proof RDE-###.##

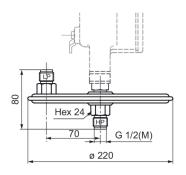
Dimensional drawings (mm)

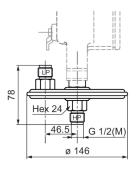






Weight: 4.4 kg Weight: 4.4 kg





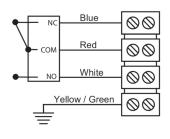
Pressure range codes: 110 - 111 - 121 - 131

Weight: 1.8 kg

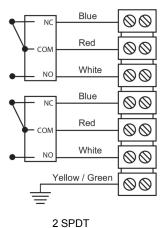
Pressure range codes: 156 - 157

Weight: 1 kg

Electrical connection



1 SPDT





RDE4

Differential pressure switch, explosion proof RDE-###.##

Electrical connection

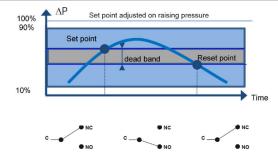
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
-20 C S 1a S +70 C	T° surface	Class
Ta =60°C	80℃	T6
Ta =70℃	95℃	T5

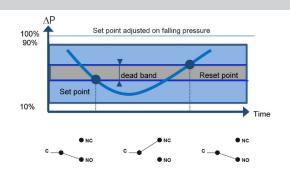
Important: Maximum power dissipation in the case must not exceed 5 W

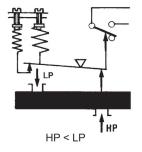
Hazardous areas: zone 1, 2, 21, 22

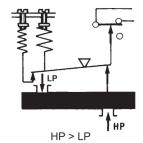
All necessary measures must be taken by the user, to avoid the calorific transfer from the fluid to the apparatus head increasing the head's temperature to such that it reaches the self-ignition temperature of the gas in which it is used.

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDE4

Differential pressure switch, explosion proof RDE-###.##

Adjustable ranges

							Micro-switch	dead band "					
Scale	Max ΔP	Max P Static			Adjustable	dead band			Fixed de	ead band			
			Code	A (B*)	M (K*)	C(\	W*)	E(F*)	D (V*)		
				10%	90%	10%	90%	10%	90%	10%	90%		
mbar	mbar	bar					mb	ar			·		
-2.5 2.5	5	0.15	110	N/A	N/A	N/A	N/A	0.45	0.6	N/A	N/A		
2 10	10	0.15	111	1.8 - 15	2.4 - 15	6.7 - 15	6.7 - 15	0.45	0.6	2.25	3		
2 50	50	0.15	121	2.6 - 45	3.3 - 45	7.5 - 45	7.5 - 45	0.6	0.75	3	4.5		
2 100	100	0.15	131	2.6 - 60	3.7 - 60	8.2 - 60	15 - 60	0.75	1.05	3	4.5		
10 200	200	1	156	12 - 120	15.5 - 120	37 - 120	60 - 120	3.75	5.1	15	19.5		
10 400	400	1	157	22 - 225	30 - 225	45 - 225	67 - 225	6.75	9	27	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)	D (V) Ultra sensitive Hermetic	
Туре	Standard	Gold contact	Hermetic	Ultra sensitive		
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	

Setpoint factory adjusted For oxygen applications

stainless steel label wired*

Setpoint adjust. lead sealed

Mounting on 2 pipe

Pressure switches

RDE4

Differential pressure switch, explosion proof RDE-###.##

Ordering reference Ordering key - Configuration possibilities see website RDE ### **Product RDE RDE** Measuring element Membran, Viton® (≤400 mbar) 4 Type of Microswitch 1 gold contact changeover switch М 1xSPDT, Standard Α simultaneous В 1xSPDT, hermetically С 1xSPDT hermetic/ultra sensit.? D Ε 1xSPDT, ultra sensitive simultaneous simultaneous Κ simultaneous V simultaneous W Process connection G 1/2 3 1/2 NPT 6 1/4 NPT F 8 Pressure range -2.5 ... 2.5 mbar 110 2 ... 10 mbar 111 2 ... 50 mbar 121 2 ... 100 mbar 131 10 ... 200 mbar 156 10 ... 400 mbar 157 Ordering example RDE 110 **Product** RDE **RDE** Measuring element Membran, Viton® (≤400 mbar) 4 Type of Microswitch 1xSPDT, Standard **Process connection** G 1/2 3 Pressure range -2.5 ... 2.5 mbar 110 **Options** Q001

Q002

Q003

Q011

SETP

0765

0407

9941

8990

2.1 Certificate

2.2 Certificate

3.1 Material certificate

3.1 Certif. setpoints adjust.

RDE5

Differential pressure switch, explosion proof for high static pressure RDE-###.###/

Overview

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



Picture similar



Technical data				
Housing		Sensing / Input		
Protection rating	IP66	Min. measuring range	2 10 m	
(EN60529)		Max. measuring range	10 200	
Case material	Type RA80	Performance		
	Explosion-proof and flame-proof Epoxy painted, Aluminium	Repeatability	± 1 % FS	
	Captive stainless steel screws	Adjustment	2 externa	
Mounting	Wall mounting, 3 back lugs		the case When se	
Scale	Internal, accuracy on reading ± 5 % FS		is neces	
Process			as it has	
Process connection	G1/2"	Electrical data		
	G1/4" female, only for codes 161,162,163	Ground connection	Via inter	
	1/2" NPT 1/4" NPT female	Electrical connection	Via interi cable gla	
Temperature		Approval / Conformities		
Ambient temperature	-25°C +55°C (T6)	ATEX/IECEx Certificate	LCIE 03	
Storage temperature	-40°C +70°C		IECEx L	
Media temperature	-15°C +150°C	ATEX/IECEx	Ex II 2 G	
Wetted parts			Further i	
Flange	Stainless steel 1.4404 / AISI 316L		ATEX ap	
Diaphragm	Nitrile butyl rubber for 2 100 mbar Viton for 10 2000 mbar	CE conformity	ATEX dir	

R	0	m	2	,	b	
1	C	ш	a	ч	1/2	

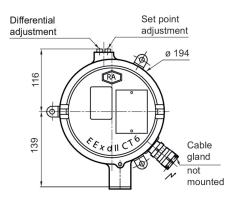
 These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

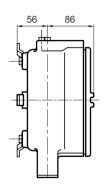
Sensing / Input	
Min. measuring range	2 10 mbar
Max. measuring range	10 2000 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	Ex II 2 GD Further information can be found in the ATEX approval
CE conformity	ATEX directive 2014/34/UE

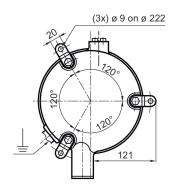
RDE5

Differential pressure switch, explosion proof for high static pressure RDE-###.###/

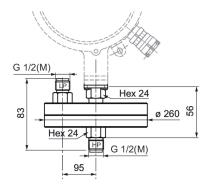
Dimensional drawings (mm)

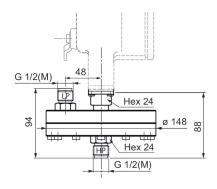


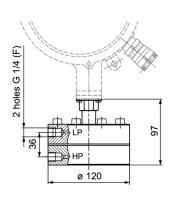




Weight: 4.4 kg Weight: 4.4 kg







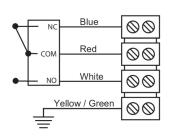
Pressure range codes: 111 - 112 - 121 - 131

Weight: 8.8 kg

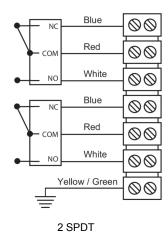
Pressure range codes: 156 - 157 - 158 Weight: 4.7 kg

Pressure range codes: 161-162-163 Weight: 5.4 kg

Electrical connection



1 SPDT





RDE5

Differential pressure switch, explosion proof for high static pressure RDE-###.###/

Electrical connection

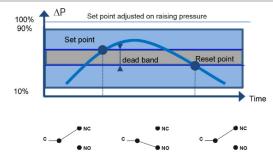
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases		
-20 C S 1a S +70 C	T° surface	Class		
Ta =60°C	80℃	T6		
Ta =70℃	95℃	T5		

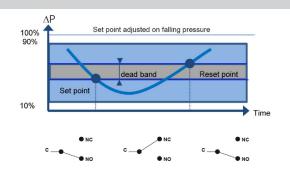
Important: Maximum power dissipation in the case must not exceed 5 W

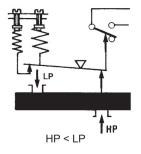
Hazardous areas: zone 1, 2, 21, 22

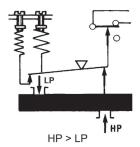
All necessary measures must be taken by the user, to avoid the calorific transfer from the fluid to the apparatus head increasing the head's temperature to such that it reaches the self-ignition temperature of the gas in which it is used.

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDE5

Differential pressure switch, explosion proof for high static pressure RDE-###.###/

Adjustable ranges

		0.000,000,000,000,000					Micro-switch	dead band "			
Scale	Max Max P ΔP Static			Adjustable dead band			Fixed dead band				
			Code	N (T*) A ((B*) M (K*)	C(W*)	Е	(F*)	D (V*)
bas		hau		10%	90%	10%	90%	10%	90%	10%	90%
mbar	mbar	bar					m	bar			
2 10	10	0 5	111	1.8 - 15	2.4 - 15	6.7 - 15	6.7 - 15	0.45	0.6	2.25	3
2 20	50	0 5	112	2.6 - 30	3.3 - 30	7.5 - 30	8 - 30	0.6	0.75	3	4.5
2 50	50	0 5	121	2.6 - 40	3.3 - 40	7.5 - 40	8 - 40	0.6	0.75	3	4.5
2 100	100	0 5	131	2.6 - 60	3.7 - 60	8.2 - 60	15 - 60	0.75	1.05	3	4.5
10 200	200	5.5 50	156	12 - 120	15.5 - 120	52 - 120	67 - 120	3.75	5.1	15	19.5
10 400	400	5.5 50	157	22 - 225	30 - 225	60 - 225	75 - 225	6.75	9	27	36
10 1000	1000	5.5 50	158	27 -225	33 - 225	67 - 225	90 - 225	7.5	10.5	33	40
10 700	700	5.5 80	161**	30 - 300	45 - 300	90 - 525	135 - 525	9	12	36	54
10 1500	1500	5.5 80	162**	30 - 450	45 - 450	90 - 525	150 - 525	9	12	36	54
10 2000	2000	5.5 80	163**	40 - 450	90 - 450	135 - 525	300 - 525	13	18	54	108

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

(**) G 1/4 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)	D (V)	
Туре	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	

for oxygen applications free of oil and grease

Pressure switches

RDE5

Differential pressure switch, explosion proof for high static pressure RDE-###.###/

Ordering key - Configuration possibilities see website	RDE - 5			##
Product	KDE - 5	*	# .	##
RDE	RDE			
Measuring element	NDL			
Membran, Viton® od. NBR	5			
Type of Microswitch				
1xSPDT, Standard		Α		
simultaneous		В		
1xSPDT, hermetically		С		
simultaneous		W		
1xSPDT, ultra sensitive		Е		
simultaneous		F		
1xSPDT hermetic/ultra sensit.?		D		
simultaneous		V		
1 gold contact changeover switch		М		
simultaneous		K		
Process connection				
G 1/4 Internal Screw			Н	
G 1/2			3	
1/2 NPT			6	
1/4 NPT F			8	
Pressure range				
2 10 mbar				1
2 20 mbar				1
2 50 mbar				1:
2 100 mbar				1
10 200 mbar				1
10 400 mbar				1
10 1000 mbar				1
10 700 mbar				1
10 1500 mbar				1
10 2000 mbar				1

Ordering example								
	R	DE -	5	Α	н.	161	1	0765
Product								
RDE	F	DE						
Measuring element								
Membran, Viton® od. NBR			5					
Type of Microswitch								
1xSPDT, Standard				Α				
Process connection								
G 1/4 Internal Screw					Н			
Pressure range								
10 700 mbar						161		
Cleanliness								

0765



RDE5

Differential pressure switch, explosion proof for high static pressure RDE-###.###/

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		

RDE6

Differential pressure switch, explosion proof for variable static pressure RDE-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Static pressure max. 20 bar
- No influence of the static pressure on the setpoint
- Explosion proof Hazardous areas 1, 2, 21, 22



Picture similar



Technical data	
Housing	
Protection rating (EN60529)	IP66
Case material	Type RA80 Explosion-proof and flame-proof Epoxy painted, Aluminium Captive stainless steel screws
Mounting	Wall mounting, 3 back lugs
Scale	Internal, accuracy on reading ± 5 % FS
Process	
Process connection	G1/2" G1/4" female, only for codes 161,162,163 1/2" NPT 1/4" NPT female
Temperature	
Ambient temperature	-20°C +55°C (T6)
Storage temperature	-40°C +70°C
Media temperature	-15°C +150°C
Wetted parts	
Flange	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)

Sensing / Input	
Min. measuring range	10 200 mbar
Max. measuring range	10 2000 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband The adjustment is not influenced by changes of the static pressure
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80) IECEx LCIE 15.0061X
ATEX/IECEx	Ex II 2 GD Further information can be found in the ATEX approval
CE conformity	ATEX directive 2014/34/UE

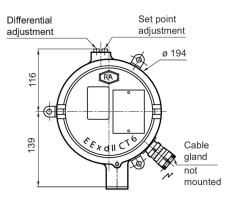
Remarks

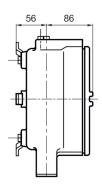
These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

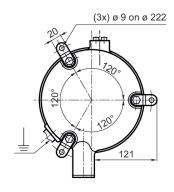
RDE6

Differential pressure switch, explosion proof for variable static pressure RDE-###.###/

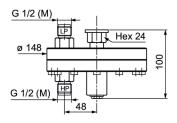
Dimensional drawings (mm)

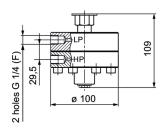






Weight: 4.4 kg Weight: 4.4 kg





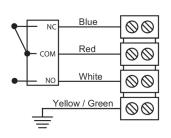
Pressure range codes: 156-157-158

Weight: 4.4 kg

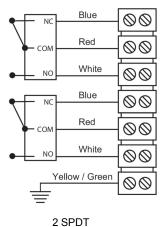
Pressure range codes: 161 - 162 - 163

Weight: 3.3 kg

Electrical connection



1 SPDT





RDE6

Differential pressure switch, explosion proof for variable static pressure RDE-###.###/

Electrical connection

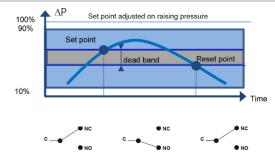
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
-20 C S 1a S +70 C	T° surface	Class
Ta =60°C	80℃	T6
Ta =70℃	95℃	T5

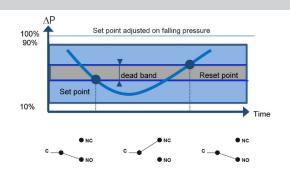
Important: Maximum power dissipation in the case must not exceed 5 W

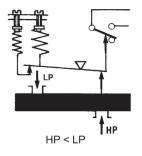
Hazardous areas: zone 1, 2, 21, 22

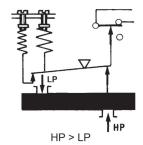
All necessary measures must be taken by the user, to avoid the calorific transfer from the fluid to the apparatus head increasing the head's temperature to such that it reaches the self-ignition temperature of the gas in which it is used.

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDE6

Differential pressure switch, explosion proof for variable static pressure RDE-###.###/

Adjustable ranges

	022000						Micro-switch	dead band "			
Scale	Max ΔP	Max P Static			Adjustable	dead band			Fixed de	ead band	
			Code	A (B*)	M (K*)	C(I	N*)	E(F*)	D (V*)
				10%	90%	10%	90%	10%	90%	10%	90%
mbar	mbar	bar					mb	ar	,		
10 200	200	20	156	12 - 120	15.5 - 120	52 - 120	67 - 120	3.75	5.1	15	19.5
10 400	400	20	157	22 - 225	30 - 225	60 - 225	75 - 225	6.75	9	27	36
10 1000	1000	20	158	27 - 225	33 - 225	67 - 225	90 - 225	7.5	10.5	33	40
10 700	700	20	161**	45 - 375	67 - 375	195 - 675	225 - 675	19.5	22.5	54	81
10 1500	1500	20	162**	45 - 450	67 - 450	195 - 675	225 - 675	19.5	22.5	54	81
10 2000	2000	20	163**	67 - 450	135 - 450	270 - 675	450 - 675	27	37.5	81	162

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

(**) G 1/4 female only

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 and 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)	D (V)		
Туре	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		

RDE6

Differential pressure switch, explosion proof for variable static pressure RDE-###.###/

Ordering reference		
Ordering key - Configuration possibilities see website		
	RDE - 6 # #	. ###
Product		
RDE	RDE	
Measuring element		
Membran, Viton® (≤ 2 bar)	6	
Type of Microswitch		
1xSPDT, Standard	Α	
simultaneous	В	
1xSPDT, hermetically	С	
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	Н	
G 1/2	3	
1/2 NPT	6	
1/4 NPT F	8	
Pressure range		
10 200 mbar		156
10 400 mbar		157
10 1000 mbar		158
10 700 mbar		161
10 1500 mbar		162
10 2000 mbar		163

Ordering example	
	RDE - 6 A H . 161 / 076
Product	
RDE	RDE
Measuring element	
Membran, Viton® (≤ 2 bar)	6
Type of Microswitch	
1xSPDT, Standard	A
Process connection	
G 1/4 Internal Screw	Н
Pressure range	
10 700 mbar	161
Cleanliness	

for oxygen applications free of oil and grease

0765



RDE6

Differential pressure switch, explosion proof for variable static pressure RDE-###.###/

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		

RDE8

Differential pressure switch, explosion proof RDE-###.###/

Overview

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



Picture similar



Technical data							
Housing		Sensing / Input					
Protection rating	IP66	Min. measuring range	0.05 0.5 bar				
(EN60529)		Max. measuring range	2.5 30 bar				
Case material	Type RA80	Performance					
	Explosion-proof and flame-proof Epoxy painted, Aluminium	Repeatability	± 1 % FS				
	Captive stainless steel screws	Adjustment	2 external adjustment screws on top of				
Mounting			the case for set point and deadband When set point adjustment is required i				
Scale			is necessary to know the static pressure,				
Process			as it has an influence on the set point.				
Process connection	G1/2"	Electrical data					
	1/2" NPT	Ground connection	Via internal terminal block				
Temperature	1/4" NPT female	Electrical connection	Via internal terminal block with metallic cable gland for Ø 7 to 12 mm				
Ambient temperature	-20°C +55°C (T6)	Approval / Conformities					
Storage temperature	-40°C +70°C	ATEX/IECEx Certificate	LCIE 03 ATEX 6231X (Type RA80)				
Media temperature	-50°C +200°C		IECEx LCIE 15.0061X				
Wetted parts		ATEX/IECEx	Ex II 2 GD				
Bellow	Stainless steel 1.4404 / AISI 316L Stainless steel 1.4432 / AISI 316L		Further information can be found in the ATEX approval				
		CE conformity	ATEX directive 2014/34/UE				

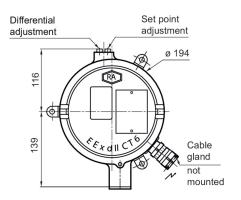
Remarks

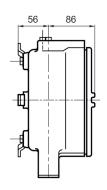
 These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

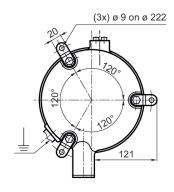
RDE8

Differential pressure switch, explosion proof RDE-###.###/

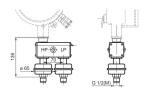
Dimensional drawings (mm)

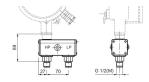






Weight: 4.4 kg





Pressure range codes: 211 - 221

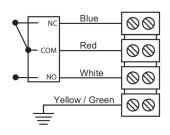
Weight: 1.6 kg

Pressure range codes: 214 - 224 - 234 - 235

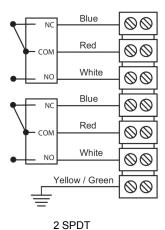
- 245 - 246 - 256 - 257 - 258

Weight: 1.2 kg

Electrical connection



1 SPDT



Design and specifications subject to change without notice

2021-11-22



RDE8

Differential pressure switch, explosion proof RDE-###.###/

Electrical connection

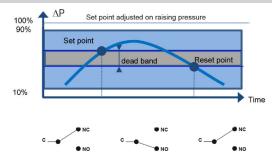
-20°C ≤ Ta ≤ +70°C	Dust IP6x	Gases
-20 C S 1a S +70 C	T° surface	Class
Ta =60°C	80℃	T6
Ta =70℃	95℃	T5

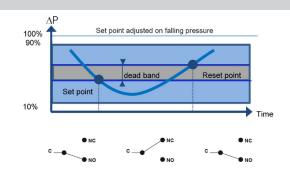
Important: Maximum power dissipation in the case must not exceed 5 W

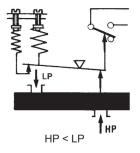
Hazardous areas: zone 1, 2, 21, 22

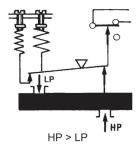
All necessary measures must be taken by the user, to avoid the calorific transfer from the fluid to the apparatus head increasing the head's temperature to such that it reaches the self-ignition temperature of the gas in which it is used.

Principle









A flexible sensing element actuates a microswitch by means of a piston. 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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

RDE8

Differential pressure switch, explosion proof RDE-###.###/

Adjustable ranges

							Micro-switch o	lead band (1)			
Scale	Max ΔP	Max P Static	Code		Adjustable	dead band			Fixed de	ead band	
			Code	A (B*)	M (K*)	C(W*)	E((F*)	D (V*)
				10%	90%	10%	90%	10%	90%	10%	90%
	bar				bar				bar	b	ar
0.05 0.5	0.5	7	211	0.13 - 0.45	0.15 - 0.45	0.22 - 0.6	0.3 - 0.6	37.5	45	0.17	0.18
0.05 1	1	7	221	0.13 - 0.45	0.15 - 0.45	0.22 - 0.75	0.33 - 0.75	37.5	45	0.17	0.18
0.15 0.5	0.5	20	214	0.22 - 0.75	0.27 - 0.75	N/A	N/A	82.5	90	0.26	0.33
0.15 1	1	20	224	0.22 - 0.9	0.3 - 0.9	N/A	N/A	82.5	90	0.26	0.36
0.15 4	4	20	234	0.22 - 2.2	0.37 - 2.2	0.97 - 3	1.2 - 3	82.5	97.5	0.26	0.4
0.8 4	4	30	235	1 - 3.7	1.6 - 3.7	1.12 - 3.7	1.6 - 3.7	105	150	1.26	2.03
0.8 10	10	30	245	1 - 3.7	1.6 - 3.7	1.12 - 3.7	1.6 - 3.7	105	150	1.26	2.03
1.5 10	10	65	246	1.8 - 7.5	3.7 - 7.5	3.7 - 9	5.2 - 9	270	360	2.18	4.5
1.5 20	20	65	256	1.8 - 7.5	3.7 - 7.5	3.7 - 9	5.2 - 9	270	360	2.18	4.5
2.5 20	20	220	257	3.7 - 20	5.2 - 20	9 - 20	10 - 20	1200	1500	4.5	6.3
2.5 30	30	220	258	4.5 - 30	6 - 30	9 - 30	10 - 30	1275	1500	5.4	7.2

^{*)} 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)	D (V)		
Туре	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 10 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	10 50 mA 50 mA 3 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		

RDE8

Differential pressure switch, explosion proof RDE-###.###/

Ordering reference Ordering key - Configuration possibilities see website RDE -8 ### **Product RDE RDE** Measuring element Bellow or piston, st.steel 8 Type of Microswitch 1xSPDT, Standard Α simultaneous В 1xSPDT, hermetically С simultaneous W 1xSPDT, ultra sensitive Ε F simultaneous 1xSPDT hermetic/ultra sensit.? D ٧ simultaneous 1 gold contact changeover switch Μ simultaneous **Process connection** G 1/2 3 1/2 NPT 6 1/4 NPT F 8 Pressure range 0.05 ... 0.5 bar 211 0.05 ... 1 bar 221 0.15 ... 0.5 bar 214 0.15 ... 1 bar 224 0.15 ... 4 bar 234 0.8 ... 4 bar 235 0.8 ... 10 bar 245 1.5 ... 10 bar 246 1.5 ... 20 bar 256 2.5 ... 20 bar 257 2.5 ... 30 bar 258

Ordering example							
	RDE	- 8	Α	3.	211	1	0765
Product							
RDE	RDE						
Measuring element							
Bellow or piston, st.steel		8					
Type of Microswitch							
1xSPDT, Standard			Α				
Process connection							
G 1/2				3			
Pressure range							
0.05 0.5 bar					211		
Cleanliness							

0765

for oxygen applications free of oil and grease



RDE8

Differential pressure switch, explosion proof RDE-###.###/

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		

RDY4

Differential pressure switch with intrinsic safety RDY-4##.##

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
Process	
Process connection	G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C (T6)
Storage temperature	-40°C +70°C
Media temperature	-15°C +150°C
Wetted parts	
Flange	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton)

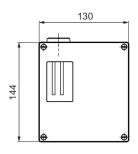
Rema	

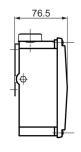
 These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

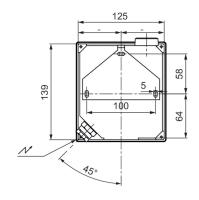
Sensing / Input	
Min. measuring range	2 10 mbar
Max. measuring range	10 400 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEx	Ex I M1 Ex II 1 G Further information can be found in the ATEX approval
CE conformity	ATEX directive 2014/34/UE

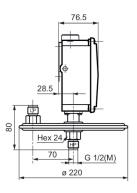
Differential pressure switch with intrinsic safety RDY-4##.##

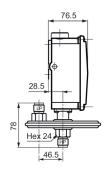
Dimensional drawings (mm)









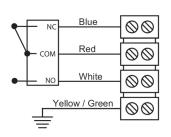


Pressure range codes: 111 - 121 - 131

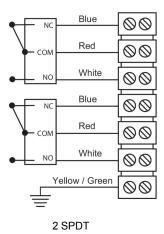
Weight: 3 kg

Pressure range codes: 156 - 157 Weight: 2.8 kg

Electrical connection

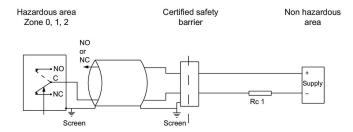


1 SPDT



Differential pressure switch with intrinsic safety RDY-4##.##

Electrical connection

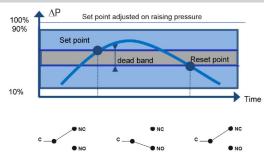


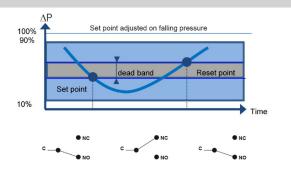
For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.

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.

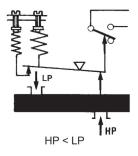
Principle

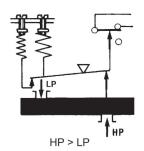




Differential pressure switch with intrinsic safety RDY-4##.##

Principle





A flexible sensing element actuates a microswitch by means of a piston.

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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

Adjustable ranges

						Micro-switch	dead band "		
Scale	Max ΔP	Max P Static			Adjustable	dead band		Fixed de	ead band
			Code	M (K*)		C(W*)		S	
				10%	90%	10%	90%	10%	90%
mbar	mbar	bar		mbar					
2 10	10	0.15	111	1.2 - 10	1.6 - 10	4.5 - 10	4.5 - 10	0.7	1.2
2 50	50	0.15	121	1.7 - 30	2.2 - 30	5 - 30	5.5 - 30	0.9	1.4
2 100	100	0.15	131	1.7 - 40	2.5 - 40	5.5 - 40	10 - 40	1.2	2
10 200	200	1	156	8 - 80	10.5 - 80	25 - 80	40 - 80	5.8	9.5
10 400	400	1	157	15 - 150	20 - 150	30 - 150	45 - 150	10.5	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 and 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%.



RDY4

Differential pressure switch with intrinsic safety RDY-4##.##

Micro switch characteristics						
Switch code	M (K)	C (W)	s			
Туре	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			

RDY4

Differential pressure switch with intrinsic safety RDY-4##.##

Ordering reference		
Ordering key - Configuration possibilities see website		
	RDY - 4 # #	. ###
Product		
RDY	RDY	
Measuring element		
Membran, Viton® (≤400 mbar)	4	
Type of Microswitch		
1 gold contact changeover switch	M	
1xSPDT, hermetically	С	
simultaneous	К	
simultaneous	W	
Process connection		
G 1/2	3	
1/2 NPT	6	
1/4 NPT F	8	
Pressure range		
2 10 mbar		111
2 50 mbar		121
2 100 mbar		131
10 200 mbar		156
10 400 mbar		157

Ordering example				
	RDY - 4	С	3.	111
Product				
RDY	RDY			
Measuring element				
Membran, Viton® (≤400 mbar)	4			
Type of Microswitch				
1xSPDT, hermetically		С		
Process connection				
G 1/2			3	
Pressure range				
2 10 mbar				111

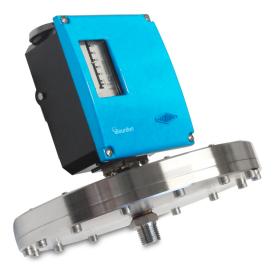
Options			
Setpoint factory adjusted	SETP	Souriau connection	2298
For oxygen applications	0765	2.1 Certificate	Q001
Mounting on 2 pipe	0407	2.2 Certificate	Q002
stainless steel label wired*	9941	3.1 Material certificate	Q003
Setpoint adjust. lead sealed	8990	3.1 Certif. setpoints adjust.	Q011
Souriau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

RDY5

Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- High static pressure up to 80 bar
- 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
Process	
Process connection	G1/4" female, only for codes 161,162,163 G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C (T6)
Storage temperature	-40°C +70°C
Media temperature	-15°C +150°C
Wetted parts	
Flange	Stainless steel 1.4404 / AISI 316L
Diaphragm	FKM (Viton) Nitrile butyl rubber

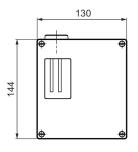
	_		_		١.,	_
- 12		m	и	п	ж.	>

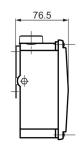
These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

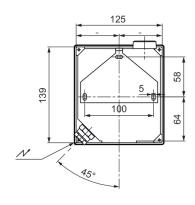
Sensing / Input	
Min. measuring range	2 10 mbar
Max. measuring range	10 2000 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEx	Ex I M1 Ex II 1 G Further information can be found in the ATEX approval
CE conformity	ATEX directive 2014/34/UE

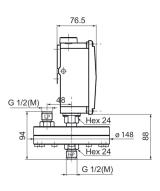
Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

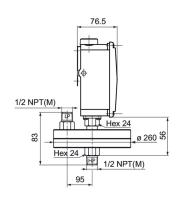
Dimensional drawings (mm)

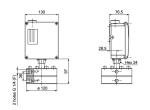












Pressure range codes: 161 - 162 - 163 Weight: 7 kg

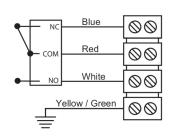
Pressure range codes: 111 - 121 - 131

Weight: 10 kg

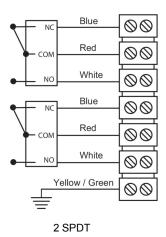
Pressure range codes: 156 - 157 - 158

Weight: 6.4 kg

Electrical connection

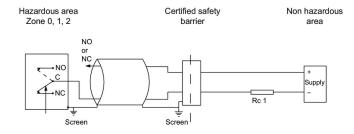


1 SPDT



Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

Electrical connection

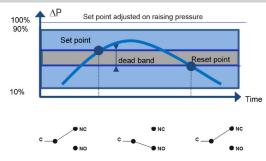


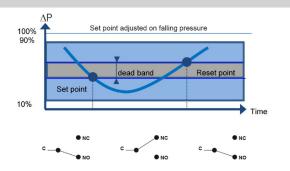
For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.

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.

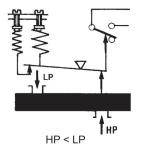
Principle

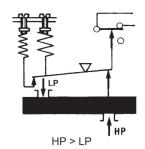




Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

Principle





A flexible sensing element actuates a microswitch by means of a piston.

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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

Adjustable ranges

Scale	Max ΔP	Max P Static		Adjustable dead band					Fixed dead band		
			Code	М (K*)	C(W*)	;	S		
	hau		10%	90%	10%	90%	10%	90%			
mbar	mbar	bar		mbar							
2 10	10	0 5	111	1.2 - 10	1.6 - 10	4.5 - 10	4.5 - 10	0.7	1.2		
2 20	50	0 5	112	1.7 - 20	2.2 - 20	5 - 20	5.5 - 20	0.9	1.4		
2 50	50	0 5	121	1.7 - 30	2.2 - 30	5 - 30	5.5 - 30	0.9	1.4		
2 100	100	0 5	131	1.7 - 40	2.5 - 40	5.5 - 40	10 - 40	1.2	2		
10 200	200	5.5 50	156	8 - 80	10.5 - 80	35 - 80	45 - 80	5.8	9.5		
10 400	400	5.5 50	157	15 - 150	20 - 150	40 - 150	50 - 150	10.5	17		
10 1000	1000	5.5 50	158	18 - 150	22 - 150	45 - 150	60 - 150	11.5	19.6		
10 700	700	5.5 80	161**	20 - 200	30 - 200	60 - 350	90 - 350	18.5	22.5		
10 1500	1500	5.5 80	162**	20 - 300	30 - 300	60 - 350	100 - 350	18.5	22.5		
10 2000	2000	5.5 80	163**	30 - 300	60 - 300	90 - 350	200 - 350	20.7	33.6		

^(*) 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%.

^(**) G1/4 female only



RDY5

Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

Micro switch characteristics			
Switch code	M (K)	C (W)	s
Туре	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



RDY5

Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

Ordering reference			
Ordering key - Configuration possibilities see website			
	RDY - 5	# #	. ###
Product			
RDY	RDY		
Measuring element			
Membran, Viton® od. NBR	5		
Type of Microswitch			
1 gold contact changeover switch		М	
1xSPDT, hermetically		С	
simultaneous		K	
simultaneous		W	
Process connection			
G 1/2		3	
1/2 NPT		6	
1/4 NPT F		8	
G 1/4 Internal Screw		Н	
Pressure range			
2 10 mbar			111
2 20 mbar			112
2 50 mbar			121
2 100 mbar			131
10 200 mbar			156
10 400 mbar			157
10 1000 mbar			158
10 700 mbar			161
10 1500 mbar			162
10 2000 mbar			163

Ordering example					
	RDY -	5 C	н.	161	0765
Product					
RDY	RDY				
Measuring element					
Membran, Viton® od. NBR		5			
Type of Microswitch					
1xSPDT, hermetically		С			
Process connection					
G 1/4 Internal Screw			Н		
Pressure range					
10 700 mbar				161	

Cleanliness

for oxygen applications free of oil and grease

0765



RDY5

Differential pressure switch with intrinsic safety for high static pressure RDY-5##.##

Options	
Setpoint factory adjusted	SETP
For oxygen applications	0765
Mounting on 2 pipe	0407
stainless steel label wired*	9941
Setpoint adjust. lead sealed	8990
Souriau mobile plug	2249

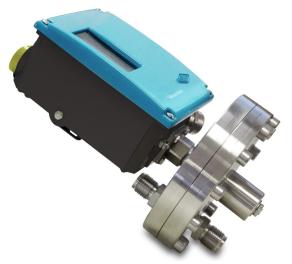
Souriau connection	2298
2.1 Certificate	Q001
2.2 Certificate	Q002
3.1 Material certificate	Q003
3.1 Certif. setpoints adjust.	Q011

RDY6

Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/

Overview

- Excellent repeatability
- Dead band adjustment for regulation
- Fix dead band for control
- Intrinsic safety Hazardous area 0, 1, 2
- Static pressure max. 20 bar
- No influence of the static pressure on the setpoint



Picture similar



Technical data		
Housing		Se
Protection rating (EN60529)	IP66	Mi Ma
Cover	Blue painted, zamak Captive stainless steel screws	Pe
Case material	Black painted, zamak	Ac
Mounting	Wall mounting bracket	Α.
Scale	Internal, accuracy on reading ± 5 % FS	
Process		
Process connection	G1/4" female, only for codes 161,162,163 G1/2" 1/4" NPT female 1/2" NPT	Gr Ele
Process connection material	Stainless steel 1.4404 / AISI 316L	A p
Temperature		Λı
Ambient temperature	-25°C +55°C (T6)	AT
Storage temperature	-40°C +70°C	
Media temperature	-15°C +150°C	
Wetted parts		
Flange	Stainless steel 1.4404 / AISI 316L	CE
Diaphragm	FKM (Viton)	

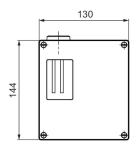
Remarks

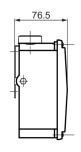
• These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

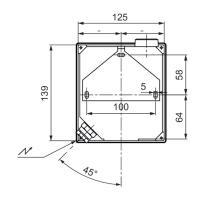
Sensing / Input	
Min. measuring range	10 200 mbar
Max. measuring range	10 2000 mbar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband The adjustment is not influenced by changes of the static pressure
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEx	Ex I M1 Ex II 1 G Further information can be found in the ATEX approval
CE conformity	ATEX directive 2014/34/UE

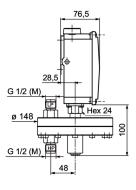
Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/

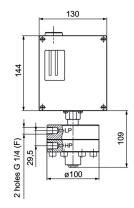
Dimensional drawings (mm)











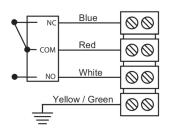
Pressure range codes: 156 - 157 - 158

Weight: 6.6 kg

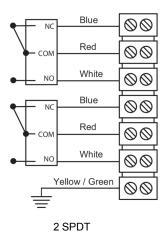
Pressure range codes: 161 - 162 - 163

Weight: 7 kg

Electrical connection

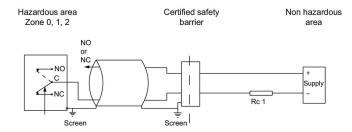


1 SPDT



Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/

Electrical connection

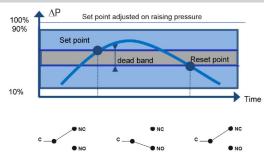


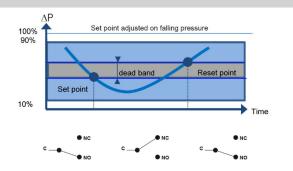
For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.

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.

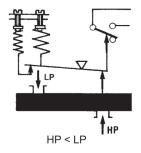
Principle

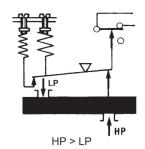




Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/

Principle





A flexible sensing element actuates a microswitch by means of a piston.

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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band switch

Adjustable ranges

				Micro-switch dead band "						
Scale	Max ΔP	Max P Static		Adjustable dead band			Fixed de	ead band		
			Code	M (I	M (K*)		C(W*)		S	
				10%	90%	10%	90%	10%	90%	
mbar	mbar	bar		mbar						
10 200	200	20	156	8 - 80	10.5 - 80	35 - 80	45 - 80	5.8	9.5	
10 400	400	20	157	15 - 150	20 - 150	40 - 150	50 - 150	10.5	17	
10 1000	1000	20	158	18 - 150 22 - 150		45 - 150 60 - 150		11.5	19.6	
10 700	700	20	161**	30 - 250	45 - 250	130 - 450 150 - 450		27.5	34	
10 1500	1500	20	162**	30 - 300	45 - 300	130 - 450	150 - 450	27.5 34		
10 2000	2000	20	163**	45 - 300	90 - 300	180 - 450	300 - 450	31 50		

^(*) 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%.

^(**) G1/4 female only



RDY6

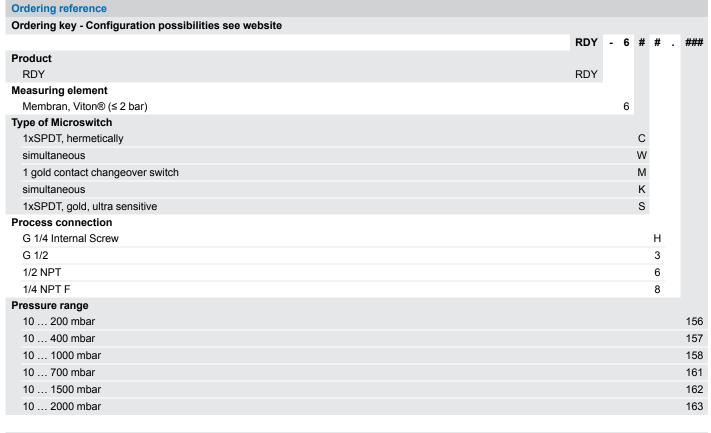
Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/

Micro switch characteristics			
Switch code	M (K)	C (W)	s
Туре	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



RDY6

Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/



Ordering example								
	RDY	-	6	С	н.	161	1	0765
Product								
RDY	RDY							
Measuring element								
Membran, Viton® (≤ 2 bar)			6					
Type of Microswitch								
1xSPDT, hermetically				С				
Process connection								
G 1/4 Internal Screw					Н			
Pressure range								
10 700 mbar						161		

Cleanliness

for oxygen applications 0765 free of oil and grease



RDY6

Differential pressure switch with intrinsic safety for variable static pressure RDY-###.###/

Options	
Setpoint factory adjusted	SETP
For oxygen applications	0765
Mounting on 2 pipe	0407
stainless steel label wired*	9941
Setpoint adjust. lead sealed	8990
Souriau mobile plug	2249

Souriau connection	2298
2.1 Certificate	Q001
2.2 Certificate	Q002
3.1 Material certificate	Q003
3.1 Certif. setpoints adjust.	Q011

Differential pressure switch with intrinsic safety RDY-###.###/

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
Process	
Process connection	G1/2" 1/4" NPT female 1/2" NPT
Process connection material	Stainless steel 1.4404 / AISI 316L
Temperature	
Ambient temperature	-25°C +55°C (T6)
Storage temperature	-40°C +70°C
Media temperature	-50°C +200°C
Wetted parts	
Bellow	Stainless steel 1.4404 / AISI 316L Stainless steel 1.4432 / AISI 316L

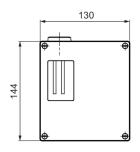
Remarks

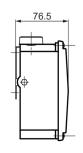
 These devices must be used as instruments that provide electrical information according to the value of the input variable. They are not intended to be used as a safety accessory. It is the responsibility of the user to check the compatibility of the device with its intended use.

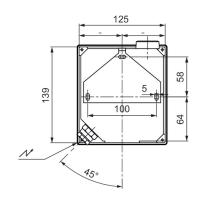
Sensing / Input	
Min. measuring range	0.05 0.5 bar
Max. measuring range	2.5 30 bar
Performance	
Repeatability	± 1 % FS
Adjustment	2 external adjustment screws on top of the case for set point and deadband When set point adjustment is required it is necessary to know the static pressure, as it has an influence on the set point.
Electrical data	
Ground connection	Via internal terminal block
Electrical connection	Via internal terminal block with plastic cable gland for Ø 7 to 10.5 mm
Approval / Conformities	
ATEX/IECEx Certificate	LCIE 03 ATEX 6123X IECEx LCIE 15.0060X
ATEX/IECEX	Ex I M1 Ex II 1 G Further information can be found in the ATEX approval
CE conformity	ATEX directive 2014/34/UE

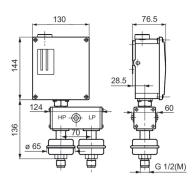
Differential pressure switch with intrinsic safety RDY-###.###/

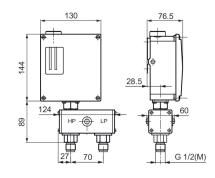
Dimensional drawings (mm)











Pressure range codes: 211 - 221

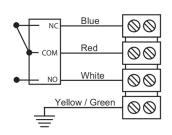
Weight: 3 kg

Pressure range codes: 214 - 224 - 234 - 235

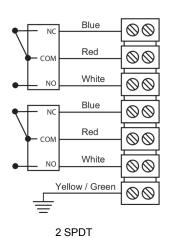
- 245 - 246 - 256 - 257 - 258

Weight: 3 kg

Electrical connection

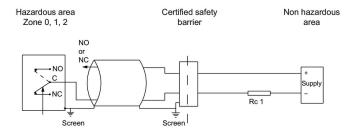


1 SPDT



Differential pressure switch with intrinsic safety RDY-###.###/

Electrical connection

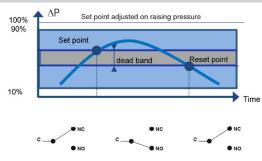


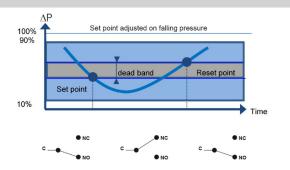
For max. ambient temperature according to temperature classes T5 and T6 refer to technical data.

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



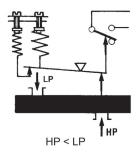


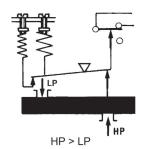


RDY8

Differential pressure switch with intrinsic safety RDY-###.###/

Principle





A flexible sensing element actuates a microswitch by means of a piston.

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
- Static pressure (except RDx6)
- Dead band value (as needed) when using an adjustable dead band

Adjustable ranges

				Micro-switch dead band "					
Scale		Max P Static		Adjustable dead band				Fixed dead band	
		Code	Code M	M (K*) C(V		W*)	;	S	
			10%	90%	10%	90%	10%	90%	
bar	bar	bar	Code		bar				
0.05 0.5	0.5	7	211	0.09 - 0.3	0.1 - 0.3	0.15 - 0.4	0.2 - 0.4	0.06	0.09
0.05 1	1	7	221	0.09 - 0.3	0.1 - 0.3	0.15 - 0.4	0.22 - 0.4	0.06	0.09
0.15 0.5	0.5	20	214	0.14 - 0.5	0.18 - 0.5	N/A	N/A	0.12	0.18
0.15 1	1	20	224	0.2 - 0.6	0.25 - 0.6	N/A	N/A	0.12	0.18
0.15 4	4	20	234	0.21 - 1.5	0.27 - 1.5	0.65 - 2	0.8 - 2	0.12	0.18
0.8 4	4	30	235	0.7 - 2.5	1.1 - 2.5	0.75 - 2.5	1.1 - 2.5	0.16	0.28
0.8 10	10	30	245	0.7 - 2.5	1.1 - 2.5	0.75 - 2.5	1.1 - 2.5	0.16	0.28
1.5 10	10	65	246	1.2 - 5	2.5 - 5	2.5 - 6	3.5 - 6	0.42	0.68
1.5 20	20	65	256	1.2 - 5	2.5 - 5	2.5 - 6	3.5 - 6	0.42	0.68
2.5 20	20	220	257	2.5 - 20	3.5 - 20	6 - 20	7 - 20	1.85	2.8
2.5 30	30	220	258	3 - 30	4 - 20	6 - 20	7 - 20	1.95	2.8

^(*) 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 and 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%.



RDY8

Differential pressure switch with intrinsic safety RDY-###.###/

Micro switch characteristics C (W) Switch code M (K) 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 10 ... 50 mA 5 ... 120 mA 10 ... 50 mA 24 Vdc 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 N/A 250 Vac N/A N/A Dielectric rigidity between contacts and ground 2000 V 1500 V 2000 V



RDY8

Differential pressure switch with intrinsic safety

RDY-###.###/

Ordering reference Ordering key - Configuration possibilities see website RDY 8 ### **Product RDY RDY** Measuring element Bellow or piston, st.steel 8 Type of Microswitch С 1xSPDT, hermetically simultaneous W 1 gold contact changeover switch Μ Κ simultaneous 1xSPDT, gold, ultra sensitive S **Process connection** 3 G 1/2 1/2 NPT 6 1/4 NPT F 8 Pressure range 0.05 ... 0.5 bar 211 0.05 ... 1 bar 221 0.15 ... 0.5 bar 214 0.15 ... 1 bar 224 0.15 ... 4 bar 234 0.8 ... 4 bar 235 0.8 ... 10 bar 245 1.5 ... 10 bar 246 1.5 ... 20 bar 256 2.5 ... 20 bar 257 2.5 ... 30 bar 258

Ordering example	
	RDY - 8 C 3 . 211 / 0765
Product	
RDY	RDY
Measuring element	
Bellow or piston, st.steel	8
Type of Microswitch	
1xSPDT, hermetically	С
Process connection	
G 1/2	3
Pressure range	
0.05 0.5 bar	211

Cleanliness

for oxygen applications free of oil and grease

0765



RDY8

Differential pressure switch with intrinsic safety RDY-###.###/

Options	
Setpoint factory adjusted	SETP
For oxygen applications	0765
Mounting on 2 pipe	0407
stainless steel label wired*	9941
Setpoint adjust. lead sealed	8990
Souriau mobile plug	2249

Souriau connection	2298
2.1 Certificate	Q001
2.2 Certificate	Q002
3.1 Material certificate	Q003
3.1 Certif. setpoints adjust.	Q011