

Main Specifications

▼ Pressure connection

Material ▼

SS304 (Standard)

SS316 / SS316L (option)

Thread spec.: G1/4" (F)

Other thread specification available upon request

▼ Adjustable set point range

0 to 2.5 to 2500kPa

For detail please refer to adjustable set point range

▼ Dead band

Fixed/Adjustable dead band

For detail please refer to adjustable set point range

▼ Applicable fluid

Liquid and gas that compatible with SS304

▼ Ambient temperature

-5°C to +40°C

▼ Media temperature

0°C to +90°C

▼ Media viscosity

< $1 \times 10^{-3} \text{m}^2/\text{s}$

▼ Vibration resistance

Max. 40m/s²

▼ Protection level

IP65

▼ Explosion-proof level

Exed II CT5~T6

Other Specifications

▼ Installation

Bottom mount

▼ Case material

Die casting aluminum

▼ Measuring elements

Diaphragm

Diaphragm body material ▼

NBR / SS316L

Diaphragm case material ▼

Ly12 / SS304

▼ Switch type

SPDT micro switch

▼ Switching frequency

10 times/min, 40 times/min

▼ Max operating pressure

0.05 / 1.5 / 4 / 5MPa

(Vary from set point range)

▼ Repeatability

≤1.5%

▼ Contact rating

DC250V, 0.25A

(resistive load, @60W_{max})

AC250V, 5A

(resistive load, @1250W_{max})

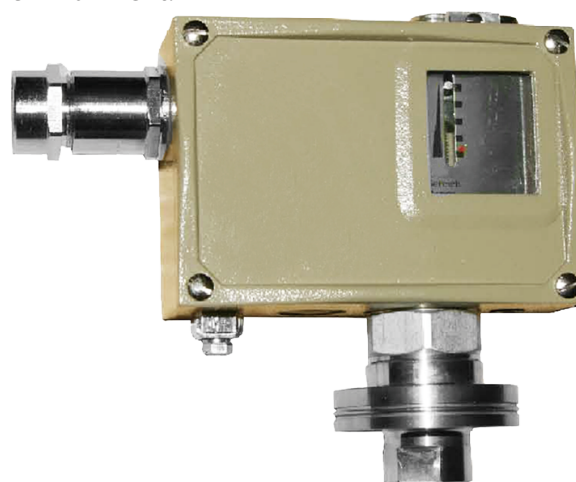
▼ Service life

2,000,000 cycles

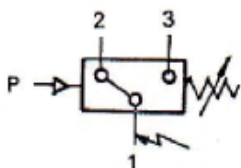
Explosion-proof Mechanical Pressure Switch (High Switching Frequency Type) Model: AT500-7DEx

Introduction

AT500-7DEx pressure switch adopt NBR or SS316L diaphragm pressure sensor. The pressure switch is suitable for neutral gas, hydraulic oil, lubricating oil and light fuel oil pressure monitor and control. With its explosion-proof design, AT500-7DEx can apply to media measurement in hazardous environment.



SPDT micro switch working principle



Terminal 1-3:

Close circuit when pressure is increased to setting pressure value

Terminal 1-2:

Open circuit when pressure is increased to setting pressure value

Due to the variety of customization, the picture is only for reference, please confirm the actual item with our sales. (If there is any change on specification, please take the latest version as standard.)

Features

- OEM service
- Explosion-proof pressure switch
- Suitable for low pressure control and monitor
- High sensitivity - switching frequency up to 40 times/sec
- Pressure sensor adopts NBR/SS316L diaphragm
- Fixed/adjustable dead band types are available for wide applications
- Adjustable set point range 0 to 2.5MPa
- Protection level IP65

Adjustable Set Point Range (Fixed Dead Band) Table

Model	Adjustable set point range (MPa)	Dead band		Maximum operating pressure* (MPa)	Switching frequency per min	Pressure sensor		Dimension No.	Weight (kg)	Order No.
		Lower limit (MPa)	Upper limit (MPa)			Case	Body			
AT500-7DEx	0...0.0025	0.0003	0.0004	0.05	10	Ly12	NBR	04	1.0	0852280
	0...0.006	0.0004	0.0006							0852580
	0...0.016	0.0004	0.0008							0852780
	0...0.025	0.0004	0.0009							0852880
	0.005...0.06	0.003	0.006	1.5	40	SS304	SS316L	05	1.15	0854180
	0.005...0.1	0.003	0.009							0854280
	0.005...0.16	0.003	0.012							0854380
	0.005...0.25	0.004	0.015							0854480
	0.03...0.4	0.02	0.04	4	40	SS304	SS316L	06	0.85	0854580
	0.03...0.6	0.03	0.05							0854680
	0.05...1	0.03	0.06							0854780
	0.1...1.6	0.04	0.12	5	40	SS304	SS316L	06	0.85	0854880
0.1...2.5	0.04	0.15	0854980							

Adjustable Set Point Range (Adjustable Dead Band) Table

Model	Adjustable set point range (MPa)	Dead band		Maximum operating pressure* (MPa)	Switching frequency per min	Pressure sensor		Dimension No.	Weight (kg)	Order No.
		Lower limit (MPa)	Upper limit (MPa)			Case	Body.			
AT500-7DEx	0...0.0025	0.0008...0.0025	0.0011...0.0025	0.05	10	Ly12	NBR	04	1.05	0842280
	0...0.006	0.0009...0.004	0.0015...0.004							0842580
	0...0.016	0.0011...0.012	0.0023...0.012							0842780
	0...0.025	0.0011...0.02	0.0028...0.02							0842880
	0.005...0.06	0.0009...0.05	0.016...0.05	1.5	40	SS304	SS316L	05	1.20	0844180
	0.005...0.1	0.011...0.08	0.018...0.08							0844280
	0.005...0.16	0.013...0.12	0.025...0.12							0844380
	0.005...0.25	0.014...0.2	0.025...0.2							0844480
	0.03...0.4	0.05...0.2	0.08...0.2	4	40	SS304	SS316L	06	0.9	0844580
	0.03...0.6	0.06...0.4	0.1...0.4							0844680
	0.05...1	0.06...0.6	0.11...0.6							0844780
	0.1...1.6	0.12...1.2	0.25...1.2	5	40	SS304	SS316L	06	0.9	0844880
0.1...2.5	0.12...2	0.33...2	0844980							

Note:

*: Operating pressure peak value cannot over maximum operating pressure value even in short-time measurement.

How to order

AT500-7DEx		Explosion-proof Mechanical Pressure Switch (High Switching Frequency Type)		
Code	Set point range and dead band			
0852280	Please refer to adjustable set point range (fixed/adjustable dead band) table and select corresponding order code			
Code	Pressure connection			
2G	G1/4" (F)			
O	Others (please specify)			
Code	Switch type			
P	Micro switch SDPT			
O	Others (please specify)			
Code	Other requests			
/A	Third party notarized document			
/B	Inspection report (issued by Re-Atlantis)			
/C	Tag			
/D	Connection material – SS316			
/E	Connection material – SS316L			
AT500-7DEx	0852280	2G	P	Order example: AT500-7DEx-0852280-G2-P