

## Main Specifications

## ▼Type

AT500-7D (Normal)

AT500-7DK (Narrow dead band)

## ▼Pressure connection

## Material ▼

SS304 (standard)

SS316 / SS316L (option)

Thread spec.: G1/4" (F)

Other thread specification available upon request

## ▼Adjustable set point range

0...2.5 to 2500 kPa

For detail please refer to adjustable set point range table

## ▼Dead band

Fixed/Adjustable/Narrow fixed dead band

For detail please refer to adjustable set point range table

## ▼Applicable fluid

Liquid and gas that compatible with SS304

## ▼Ambient temperature

-5°C to +40°C

## ▼Media temperature

0°C to +90°C

## ▼Operating viscosity

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

## ▼Vibration resistance

AT500-7D: Max.  $40 \text{m}/\text{s}^2$ AT500-7DK: Max.  $20 \text{m}/\text{s}^2$ 

## ▼Protection level

IP65

## ▼Explosion-proof level (option)

Exed II CT5~T6

## Other Specifications

## ▼Installation

Bottom mount

## ▼Case

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

 $\leq 1.5\%$ 

## ▼Contact rating

AC220V, 6A (resistive load)

## ▼Service life

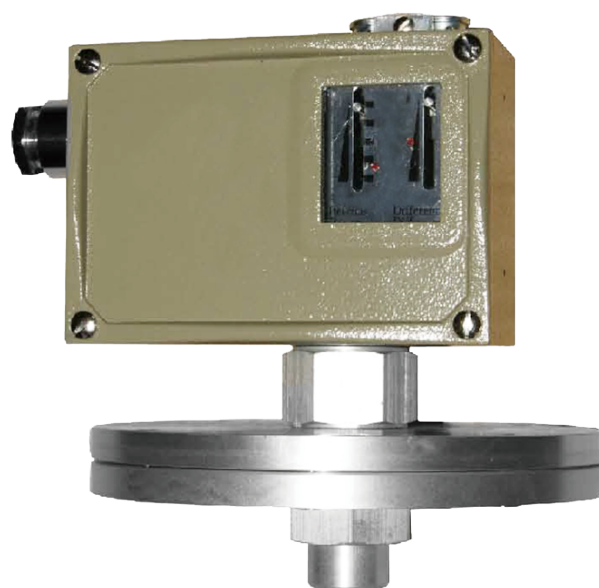
2,000,000 cycles

## Mechanical Pressure Switch (High Switching Frequency Type)

### Model: AT500-7 Series

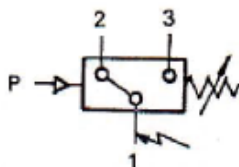
### Introduction

AT500-7D/7DK pressure switch adopt NBR or SS316L diaphragm pressure sensor. This pressure switch is suitable for neutral gas, hydraulic oil, lubricating oil and light fuel oil pressure monitor and control.



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.)

### 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

### Features

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

**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			
AT500-7D	0...0.0025	0.0003	0.0004	0.05	10	Ly12	NBR	01	1.0	0812200
	0...0.006	0.0004	0.0006							0812500
	0...0.016	0.0004	0.0008							0812700
	0...0.025	0.0004	0.0009							0812800
	0.005...0.06	0.003	0.006	1.5	40	SS304	SS316L	02	1.15	0814100
	0.005...0.1	0.003	0.009							0814200
	0.005...0.16	0.003	0.012							0814300
	0.005...0.25	0.004	0.015							0814400
	0.03...0.4	0.02	0.04	4	40	SS304	SS316L	03	0.85	0814500
	0.03...0.6	0.03	0.05							0814600
	0.05...1	0.03	0.06							0814700
	0.1...1.6	0.04	0.12	5	40	SS304	SS316L	03	0.85	0814800
0.1...2.5	0.04	0.15	0814900							

**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			
AT500-7D	0...0.0025	0.0008...0.0025	0.0011...0.0025	0.05	10	Ly12	NBR	01	1.05	0802200
	0...0.006	0.0009...0.004	0.0015...0.004							0802500
	0...0.016	0.0011...0.012	0.0023...0.012							0802700
	0...0.025	0.0011...0.02	0.0028...0.02							0802800
	0.005...0.06	0.0009...0.05	0.016...0.05	1.5	40	SS304	SS316L	02	1.20	0804100
	0.005...0.1	0.011...0.08	0.018...0.08							0804200
	0.005...0.16	0.013...0.12	0.025...0.12							0804300
	0.005...0.25	0.014...0.2	0.025...0.2							0804400
	0.03...0.4	0.05...0.2	0.08...0.2	4	40	SS304	SS316L	03	0.9	0804500
	0.03...0.6	0.06...0.4	0.1...0.4							0804600
	0.05...1	0.06...0.6	0.11...0.6							0804700
	0.1...1.6	0.12...1.2	0.25...1.2	5	40	SS304	SS316L	03	0.9	0804800
0.1...2.5	0.12...2	0.33...2	0804900							

**Adjustable Set Point Range (Fixed, Narrow 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			
AT500-7DK	0...0.0025	0.00015	0.0002	0.05	10	Ly12	NBR	01	1.0	0812207
	0...0.006	0.00018	0.00045							0812507
	0...0.016	0.0002	0.0005							0812707
	0...0.025	0.00025	0.0006							0812807
	0.005...0.06	0.002	0.004	1.5	40	SS304	SS316L	02	1.15	0814107
	0.005...0.1	0.002	0.006							0814207
	0.005...0.16	0.0025	0.0075							0814307
	0.005...0.25	0.0025	0.01							0814407
	0.03...0.4	0.015	0.02	4	40	SS304	SS316L	03	0.85	0814507
	0.03...0.6	0.015	0.02							0814607
	0.05...1	0.018	0.038							0814707
	0.1...1.6	0.02	0.08	5	40	SS304	SS316L	03	0.85	0814807
0.1...2.5	0.02	0.1	0814907							

**Note:**

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

## How to order

AT500-7		Mechanical Pressure Switch (High Switching Frequency Type)			
Code	Type				
D	AT500-7D (Normal)				
DK	AT500-7DK (Narrow dead band)				
Code	Set point range and dead band				
0812200	Please refer to adjustable set point range (fixed/adjustable/narrow 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				
/Ex	Pressure switch with explosion-proof function				
AT500-7	D	0812200	2G	P	Order example: AT500-7-D-0811200-2G-P