



## Pressure Switches

Model: D500/18D D505/18D

Pressure switch for air, gas, lubricating oil, light fuel oil etc;

D500/18D Switches is actuated by Diaphragm, it's adjustable range is from 0.02 MPa to 3Mpa;

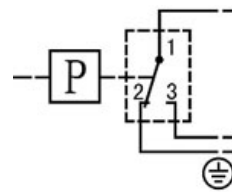
D505/18D Switches is actuated by piston sensor with soft seal, it's adjustable range is from 0.5 MPa to 40Mpa;



### □Main Technical Performance

Working viscosity:  $<1 \times 10^{-3} \text{ m}^2/\text{s}$   
 Switching element: Micro-switches  
 Protection Class: IP65  
 Ambient temperature:  $-25 \sim 55^\circ\text{C}$   
 Fluid temperature:  $-25 \sim 80^\circ\text{C}$   
 Vibrations: Max:  $100 \text{ m/s}^2$   
 Repeatability:  $\leq 1.5\%$   
 Electrical rating: AC 220V 6A

### Switching Function: Microswitch SPDT



Terminals 1-3:  
Contacts close on rising pressure

Terminals 1-2:  
Contacts open on rising pressure

### □Features

- Especially compact design
- High number of switching cycles permissible
- good performance of vibration resistance

### □Characteristic date

Model	Adjustable Range MPa	Switching pressure difference		Max. Allowable Pressure <sup>1)</sup> MPa	Pressure sensor materials			Connection Type <sup>2)</sup>	Connection (Internal thread)	Weight (kg)	Drawing No.	Cat. No.		
		Lower range MPa	Upper range MPa		Housing	Diaphragm /Piston	Seal							
D500/18D	-0.1...0	0.015	0.02	8	AI			I	G1/4"	0.2	01	0880100		
	-0.1...0	0.015	0.02	8	AI			P	-		03	0881100		
	0.02...0.2	0.02	0.04	8	AI	NBR	St. steel	I	G1/4"		01	0880200		
	0.02...0.2	0.02	0.04	8	AI			P	-		03	0881200		
	0.05...0.8	0.04	0.13	8	AI			I	G1/4"		01	0880300		
	0.05...0.8	0.04	0.13	8	AI			P	-		03	0881300		
	0.1...1.6	0.06	0.24	8	AI			I	G1/4"		02	0880400		
	0.1...1.6	0.06	0.24	8	AI			P	-		03	0881400		
D505/18D	0.5...7	0.8	2	40	AL			NBR	St. steel	I	G1/4"	0.2	04	0882100
	0.5...7	0.8	2	40	AL					P	-		03	0883100
	1...16	1.2	3.5	40	AL	I	G1/4"			04	0882200			
	1...16	1.2	3.5	40	AL	P	-			03	0883200			
	2.5...25	1.5	4	40	AL	I	G1/4"			05	0882300			
	2.5...25	1.5	4	40	AL	P	-			03	0883300			
	4...40	1.8	4.5	60	AL	I	G1/4"			05	0882400			
	4...40	1.8	4.5	60	AL	P	-			03	0883400			

Notes: <sup>1)</sup> Even shot pressure peaks must not exceed this value (=max. test pressure)

<sup>2)</sup> I-Internal thread P-Flange

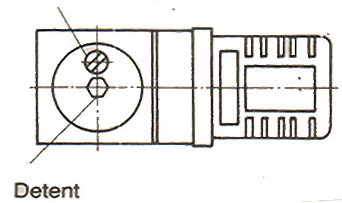


□ Setting of switching points

Adjust either the upper or the lower switching point. The opposite one is then determined by the fixed switching pressure difference. Use pressure gauge for adjustment. The switching points may be set even during operation. Proceed as follows:

1. Loosen stop screw.
2. Adjust switching points by means of a 5mm hexagon spanner.
3. Depending on the sense of rotation the switching points move upwards (clockwise rotation) or downwards (counter-clockwise rotation).
4. Retighten stop screw.

Adjustment of switching points



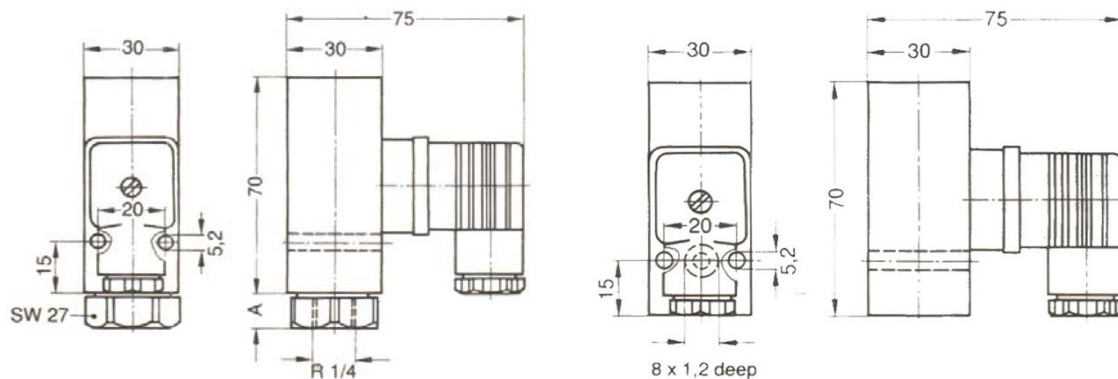
□ Switch selection and mounting instructions

The switching points should normally be in about the middle of the adjustable range. Do not exceed electrical ratings.

Electrical connection in accordance with local regulations. For outdoor installation sufficient protection has to be provided for Critical conditions are: Aggressiveness of air, high or low temperatures, drastic changes in temperature, solar radiation, penetration of water.

For liquid media with pressure peaks and /or pulsating pressure, install surge damper upstream.

□ Dimensional drawing



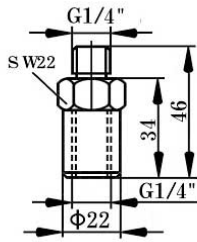
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01	15
02	9
04	6
06	7

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03

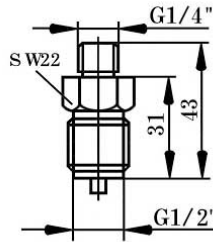


□ Accessories

Surge  
damper  
G1/4  
Cat. No.  
0574773



Reducer  
G1/2 to  
G1/4  
external  
thread  
Cat. No.  
0574767



Three-way-con  
nection  
Screw-off the  
bolt, pressure  
gauge with  
Φ60 can be  
directly  
connected  
Cat. No. SC5  
470 505

