

Discontinue

Electronic pressure switch

PPD Series

Miniature pressure switch 28mm square x 30mm



Refer to Intro 32 for details.



Overview

Pressure switch PPD Series is upgraded miniature digital display pressure switch for pneumatic and vacuum systems compared with conventional products. Newly, ISO unit display is provided as standard to shift measurement unit smoothly. Due to EEPROM data-hold, maintenance of battery is eliminated. Replacement from old type is also easy, meeting high accuracy requirement and international needs.

Features

- Two types of switch operation
2 types of a window and hysteresis operations are available to match size of set value.
- When installing in inside of machine, easily confirmed by LED display
Easy to read LED display when installed at dark place under machine or inside.
- Wide pressure range
- Compatible with CKD regulator
Compatible with analog pressure gauge port of CKD regulator
R1000/R3000/R4000/R8000 filter regulator
W1000/W3000/W4000/W8000
- 5 types of installation attitude
Five mounting types enable a variety of mounting methods.
- 0 adjust function
Simple zero set of display
- Switch operating pressure can be set easily
Easy and certain operation by up-down key.
- EEPROM data-hold
Eliminating anxiety for charging time of battery and maintenance.
- Overcurrent protection from circuit provided to switch output
Output element protection from accident by short circuit of load.

Specifications

Descriptions	PPD-P10PKN	PPD-P01AKN	PPD-V01AHN
Pressure sensitive element	Carrier diffusion type semiconductor pressure sensor		
Working fluid	Air, non-corrosive gas		
Type of pressure	Gauge pressure		
Rated pressure range	0 to 0.98MPa	0 to 98kPa	0 to -100kPa
Min. display digit	0.01MPa	1kPa	
Withstanding pressure	1.47MPa	196kPa	196kPa
Leakage amount	1cm ³ /min. (ANR) or less		
Indicator	2 1/2 digit red LED display character height 8mm		
Repeatability	1%F.S. or less		
Display precision	±2%F.S. (25°C)		
Temperature characteristics	±4%F.S. (0 to 50°C)		
Power voltage	12 to 24 VDC ±10% (ripple ratio 1% or less)		
Current consumption	50mA or less		
Switch output	Output responsiveness	Approx. 5msec	
	Output type	NPN transistor open collector output 1 point	
	Output rated	MAX 30 VDC 100mA	
	Voltage drop	1.2V or less	
Set point holding	EEPROM		
Lead wire	oil resistance vinyl code 3-conductor (0.2mm ² isolator outer diameter φ1.1) 1m		
Working temperature	0 to 50°C		
Use humidity	0 to 85%RH (no dew condensation)		
Mechanical vibration proof	10 to 55Hz compound amplitude 1.5mm 2 hours per X, Y, Z direction		
Protective structure	IP40 or equivalent		
Weight	6B: 65g, 6P: 75g, 6M: 65g, 6D: 80g, 1F: 45g, HS: 95g		

Note: CE-compatible parts are available as custom orders. Contact CKD for details.

How to order



A Pressure range and unit

B Installation attitude

C Option
Note 1

Symbol	Descriptions
A Pressure range and unit	
P10PKN	0 to 0.98MPa
P01AKN	0 to 98kPa
VO1AHN	0 to -100kPa
B Installation attitude	
6B	Rear side Rc1/8, with bracket
6P	Panel mount Rear side Rc1/8, with screw
6M	Rear side R1/8
6D	Bottom Rc1/8
1F	Direct mount O ring / with screw
HS	Panel mount installation With push-in joint 6mm
C Option	
Blank	M3 screw for mounting 2 pcs. attached
1	R1000-R2000-R1100-R2100-W1000 W1100 2 tapping screws for mounting attached
2	R3000-R4000-R6000-R8000-R3100 R4100-R6100-R8100 W3000-W4000-W8000-W3100-W4100 W8100 2 tapping screws for mounting attached

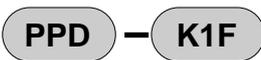
<Example of model number>

PPD-V01AHN-6B

Pressure range 0 to -100kPa,
rear pressure port Rc1/8, and a bracket is provided.

Note 1: Select an option only when installation attitude is 1F.

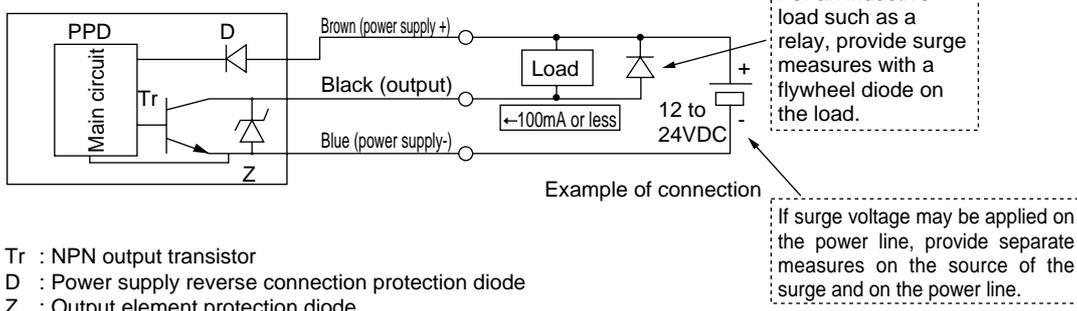
PPD option kit model no.



A Option kit

Symbol	Descriptions	
A Option kit		
K1F	Key (2 pcs.)	1F
	O ring	(Repair parts for position / direction change)
	Installation screw (2 pcs.)	
K1F-1	Key (2 pcs.)	1F-1
	O ring	(Repair parts for position / direction change)
	Installation screw (2 pcs.)	
K1F-2	Key (2 pcs.)	1F-2
	O ring	(Repair parts for position / direction change)
	Installation screw (2 pcs.)	

(Internal circuit and connection method)



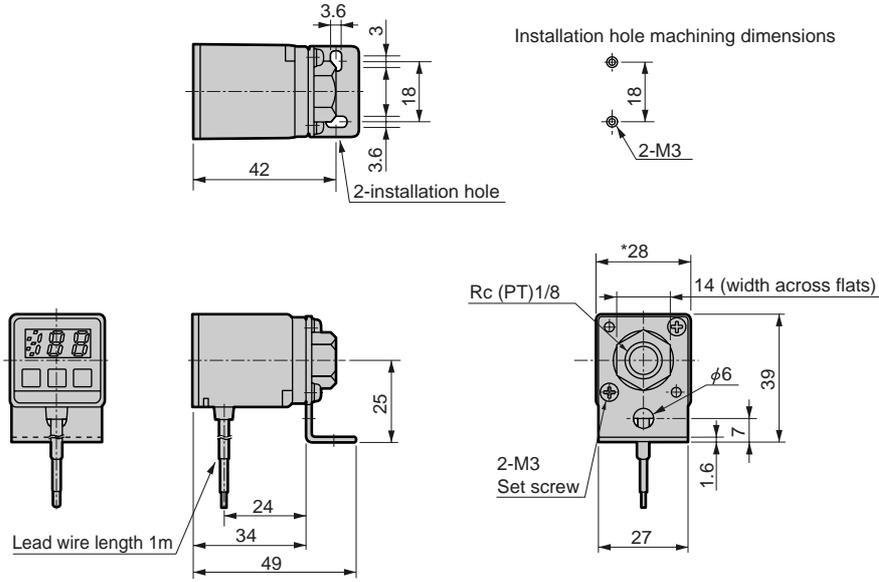
- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter
- Vacuum regulator
- Suction plate
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact cont. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)

Electronic pressure switch
Pressure sensor

Dimensions

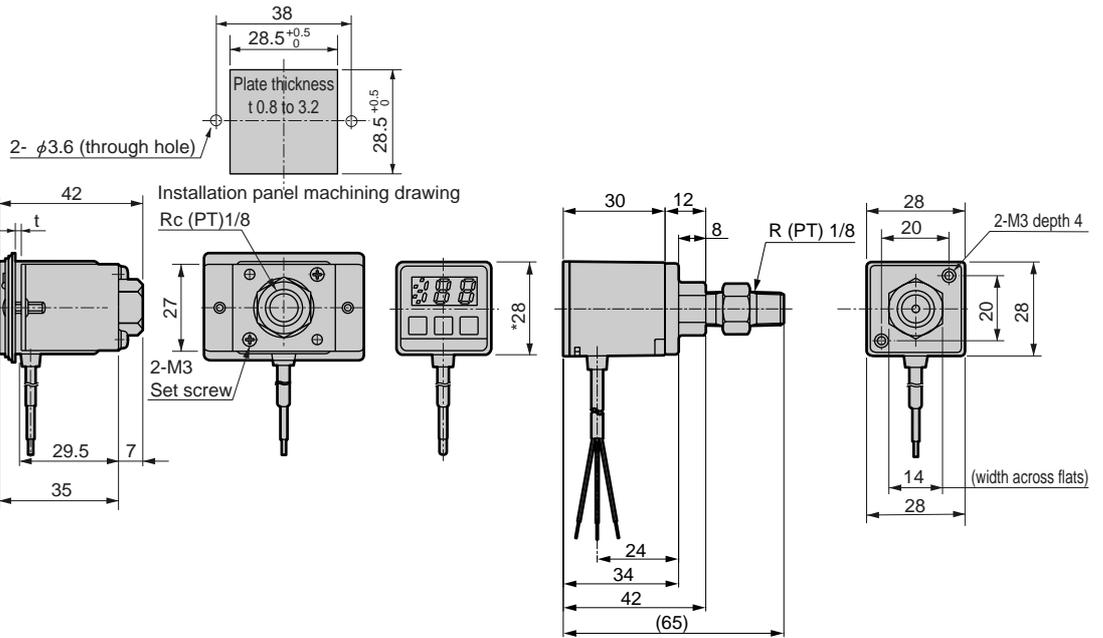
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Precise regulator
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Clean F.R.
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Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact conf. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending

● PPD-*****-6B

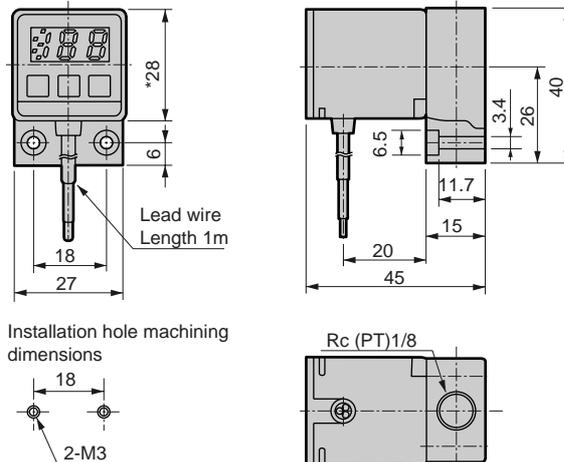


● PPD-*****-6P

● PPD-*****-6M



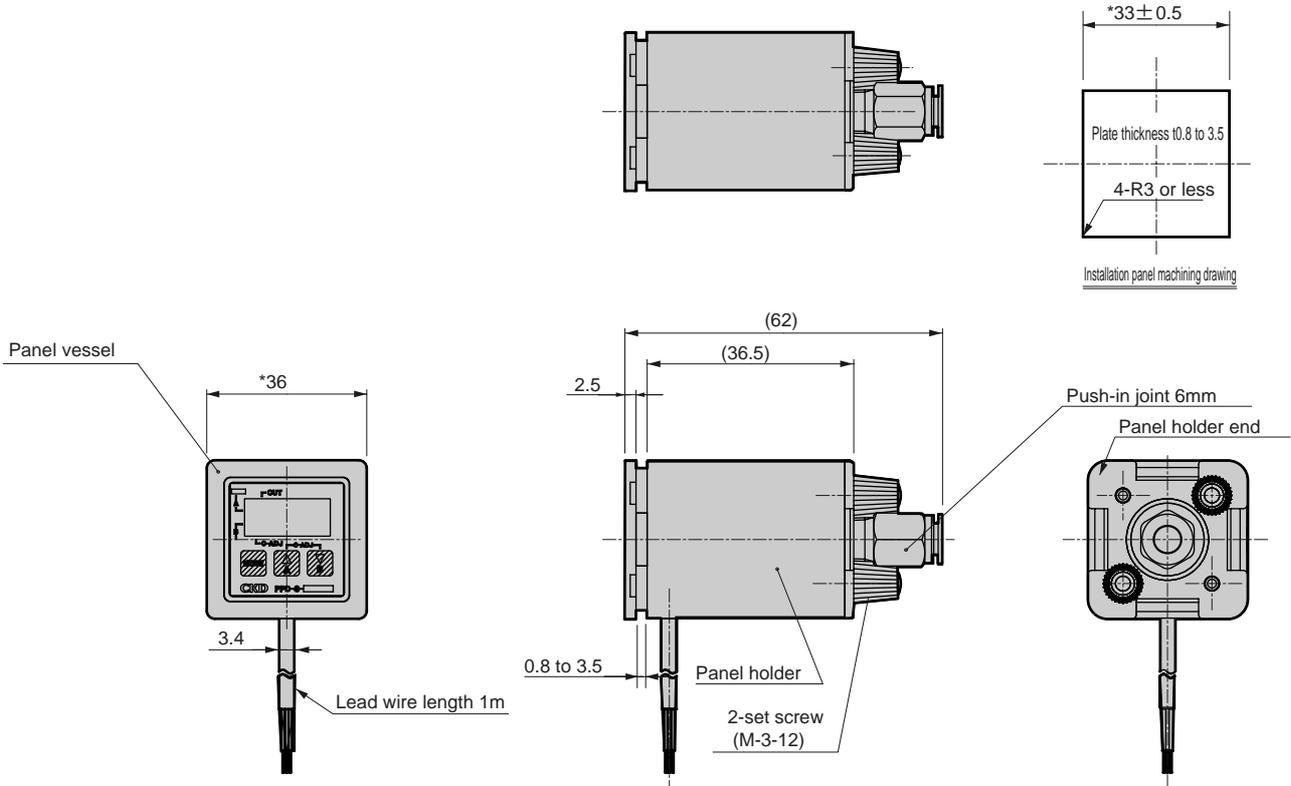
● PPD-*****-6D



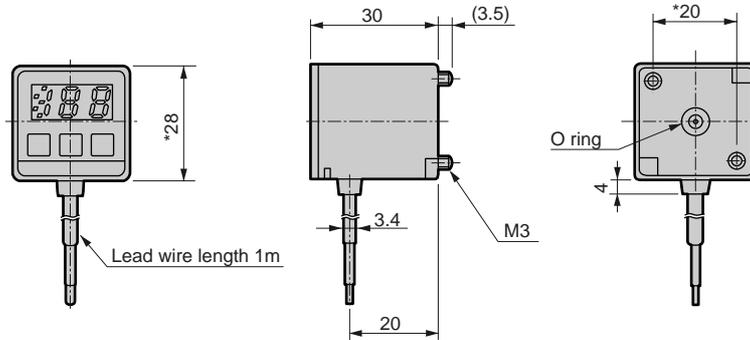
Refer to Safety precautions of PPD Series on pages 1089 to 1091 for wiring method and precautions.

Dimensions

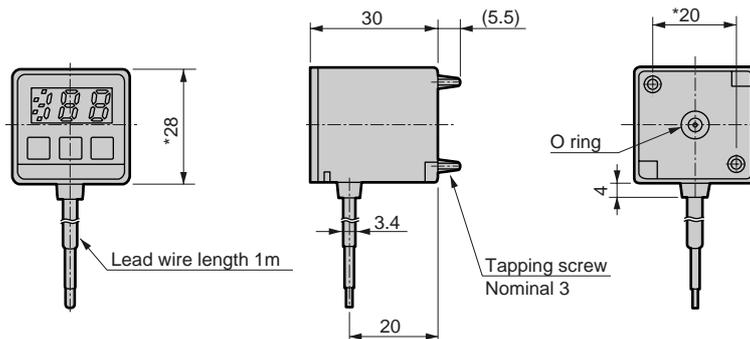
● PPD-**-HS



● PPD-**-1F



● PPD-**-1F-1/-1F-2



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Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

Ending

Electronic pressure switch
Pressure sensor

Refer to Safety precautions of PPD Series on pages 1089 to 1091 for precautions.