

# Accessories series

## Pressure switch series

CHELIC PNEUMATIC



- ① PS □ - 05
- ② PS □ - 10
- ③ PS □ - 30
- ④ PS □ - 40
- ⑤ PS □ - 41
- ⑥ PS □ - 42
- ⑦ PS □ - 43

Index Page

Model	Voltage	Pressure range kpa (Mpa)	Output	Response time	Port size
PS <b>N</b> - 05	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	—	—	Ø6,M5,1/8" (G , PT , NPT)
PS <b>V</b> - 05		-100 ~ 100 Kpa			
PS <b>N</b> - 10	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	NPN PNP	5 ms or less	M5 , 1/8" (G , PT , NPT)
PS <b>L</b> - 10		0 ~ 100 Kpa			
PS <b>V</b> - 10		-101 ~ 0 Kpa			
PS <b>N</b> - 30	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	NPN PNP	≤ 2.5 ms Function : 24 ms,192 ms and 768 ms (option)	M5 , 1/8" (G , PT , NPT)
PS <b>C</b> - 30		-100 ~ 100 Kpa			
PS <b>V</b> - 30		0 ~ -101 Kpa			
PS <b>N</b> - 40	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	NPN PNP	≤ 2.5 ms Function : 24 ms,192 ms and 768 ms (option)	1/8" (G , PT , NPT)
PS <b>C</b> - 40		-100 ~ 100 Kpa			
PS <b>V</b> - 40		0 ~ -101 Kpa			
PS <b>N</b> - 41	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	NPN PNP	0.05 s , 0.25 s , 0.5 s , 1 s , 2 s , 3 s (option)	—
PS <b>N</b> - 42	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	NPN PNP	≤ 2.5 ms Function : 25ms , 100ms,250ms, 500ms,1000ms,1500ms (option)	1/8" (G , PT , NPT)
PS <b>C</b> - 42		-100 ~ 100 Kpa			
PS <b>V</b> - 42		0 ~ -101 Kpa			
PS <b>N</b> - 43	12 to 24 VDC ( ±10% )	-0.1 ~ 1.0 Mpa	—	—	1/8" (G , PT , NPT)
PS <b>C</b> - 43		-100 ~ 100 Kpa			

----- P.6-3.1

----- P.6-3.4

----- P.6-3.6

----- P.6-3.8

----- P.6-3.11

----- P.6-3.13

----- P.6-3.16

**PS□-05**  
Pressure  
switch

**PS□-10**  
Pressure  
switch

**PS□-30**  
Pressure  
switch

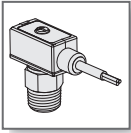
**PS□-40**  
Pressure  
switch

**PS□-41**  
Pressure  
switch

**PS□-42**  
Pressure  
switch

**PS□-43**  
Pressure  
switch



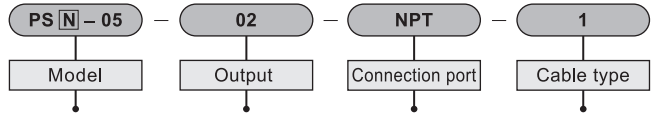


# PSN(V) - 05 series - Pressure switch

## Specification and Order expression

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### How to order



**N :**  
Positive pressure  
(-0.1~ 1 MPa)  
**V :**  
Negative pressure  
(0 ~ -101.3 KPa)

**02 :** 2 NPN output  
**04 :** 2 PNP output

**C6 :** Ø6  
**M5 :** M5x0.8p  
**PT :** 1/8"  
**NPT :** 1/8"  
**G :** 1/8"

**None :**  
Cable length is 3M  
**QD :** M8 , 3 PIN  
Male connector

### Specification

Item	Model	PSN - 05 (Positive pressure)	PSV - 05 (Negative pressure)
Set pressure range / Rated pressure range		-0.100 ~ 1.000 MPa	- 0 ~ -101.3 KPa
Withstanding pressure		1.5 MPa	0.6 MPa
Applicable fluid		Air, not corrode, Noncombustible	
Power voltage		12 to 24 VDC ±10% , ( Ripple 10% or less )	
Switch output		The max. load output for NPN or PNP: 80mA Max. load voltage: 30VDC, residual voltage: 1 V or less (with load current of 80mA)	
Current consumption		Max. 10mA	
Output specification		NPN / PNP	
Setting		Rotate button adjustable	
Reacting time		Approx 1ms	
Repeatability		± 1 % F.S.	
Accuracy		3 % F.S. max	
Indicator light		Red indicator light (light up when output is on)	
Environmental resistance	Enclosure	IP 40	
	Operating temperature range	Operating : 0~60 , Stored : -20~-70 (no freezing or condensation)	
	Operating humidity range	Operating and store : 35~85% RH (no freezing)	
	Vibration resistance	10~55 Hz at whichever is smaller of 1.5 mm amplitude , in X , Y , Z directions , for 2 hours each	
	Impact resistance	980 m/s <sup>2</sup> (100G) X,Y,Z directions, 3 times each	
Temperature characteristics		≤ ± 3 % F.S. ( 25°C ) or less ( based on 0 ~ 50°C )	
Connection port		C6 : Ø6 , M5 : M5x0.8p , PT : PT 1/8" , NPT : NPT 1/8" , G : G 1/8"	
Cable type		Out - side diam Ø2.6 , 3 cores ; oil - resistant cable (0.18 mm <sup>2</sup> )	
Weight		About 50g (include 3 m cable)	

**PS□-05**  
Pressure switch

**PS□-10**  
Pressure switch

**PS□-30**  
Pressure switch

**PS□-40**  
Pressure switch

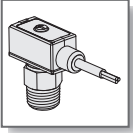
**PS□-41**  
Pressure switch

**PS□-42**  
Pressure switch

**PS□-43**  
Pressure switch

### Output specification

Internal circuit	PS □ - 05 - 02	PS □ - 05 - 04
	Characteristics	
Output	NPN open collector 30V 80 mA	PNP open collector 80 mA
Accuracy	Pressure range 1~10%	
Switch output	One	
Indicator light	Red indicator light (light up when output is on)	



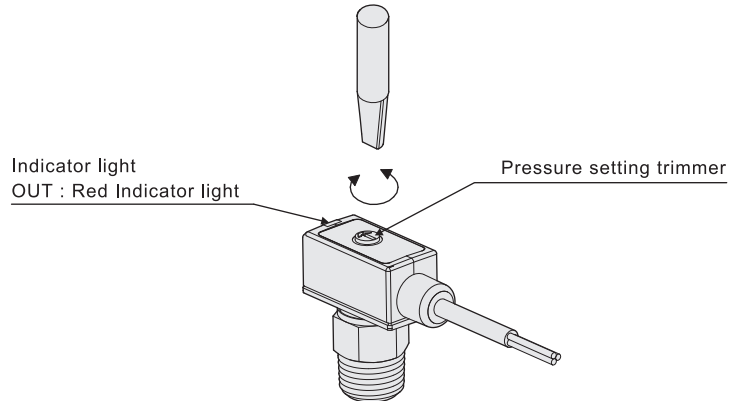
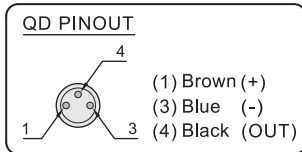
# PSN(V) - 05 series - Pressure switch

External dimension and Pressure setting

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## Pressure setting

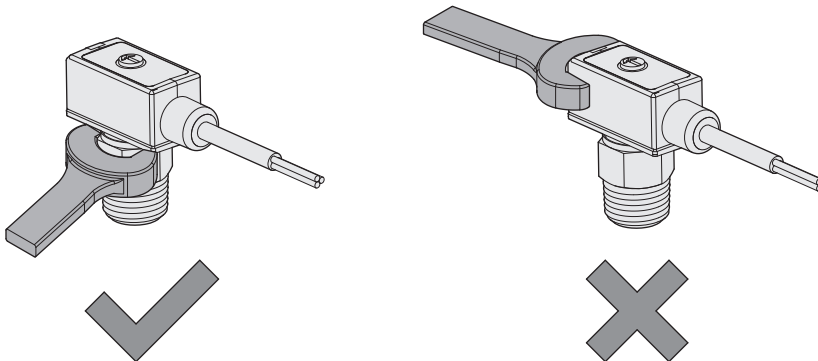
- PS □ - 05 - 02
- PS □ - 05 - 04



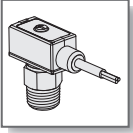
## How to set pressure :

- Lock the pressure switch to the piping and adjust the pressure.  
When the indicator light up , it means finish setting.
- Use the pressure setting trimmer to set ON pressure.  
Rotate counter - clockwise to decrease pressure set point.  
On the other hand , rotate clockwise to increase pressure set point.
- Use appropriate size screwdriver for the setting trimmers.  
Gently turn the screwdriver to make adjustments.  
To prevent damage to the pressure setting trimmer , do not force the trimmer when it comes to a stop.

## Installation precautions



- When mounting , always use the wrench on the metallic area near the pressure port .  
Never apply a wrench to the plastic body , it will damage the sensor.
- Over tightening may cause damages to the port thread , mounting bracket and pressure sensor.  
Under tightening may result loosen or leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



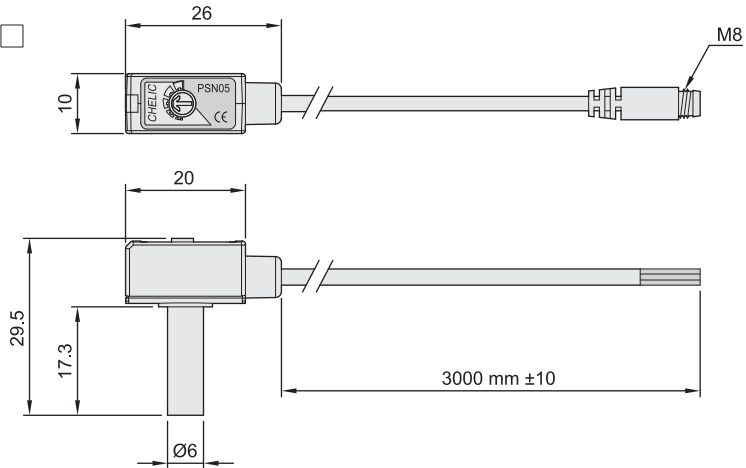
# PSN(V) - 05 series - Pressure switch

External dimension

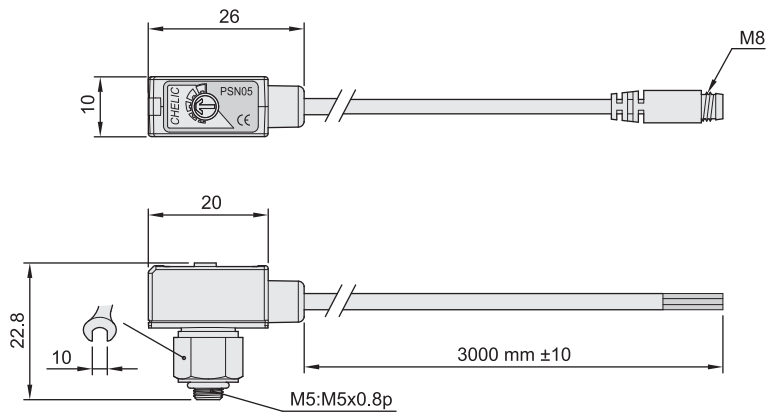
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## External dimension

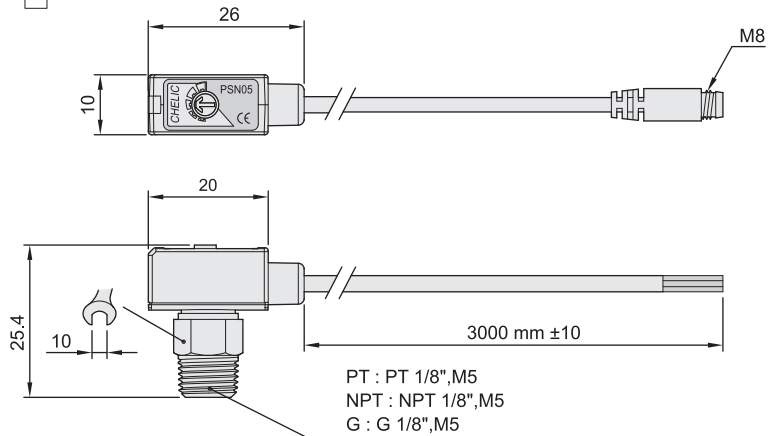
● PS □ - 05 - □ - C6 - □



● PS □ - 05 - □ - M5 - □



● PS □ - 05 - □ - □ - □



**PS □ - 05**  
Pressure switch

**PS □ - 10**  
Pressure switch

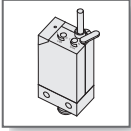
**PS □ - 30**  
Pressure switch

**PS □ - 40**  
Pressure switch

**PS □ - 41**  
Pressure switch

**PS □ - 42**  
Pressure switch

**PS □ - 43**  
Pressure switch

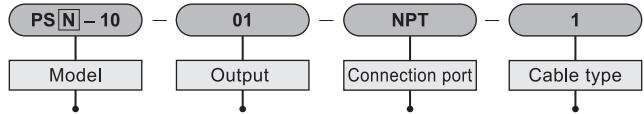


# PSN ( L , V ) - 10 series - Pressure switch

## Specification and Order expression

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### How to order



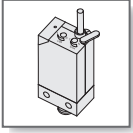
**N :** Positive pressure ( 0 ~ 1 MPa )  
**L :** Low pressure ( 0 ~ 100 KPa )  
**V :** Negative pressure ( -101 ~ 0 KPa )  
**01 :** NPN output  
**02 :** PNP output  
**03 :** 2 NPN output  
**PT :** 1/8"  
**NPT :** 1/8"  
**G :** 1/8"  
**1 :** With 1M cable  
**3 :** With 3M cable  
**C :** M8 male connector

### Specification

Item	Model	PSN - 10 (Positive pressure)	PSL - 10 (Low pressure)	PSV - 10 (Negative pressure)
Set pressure range / Rated pressure range		0 ~ 1 MPa	0 ~ 100 KPa	- 101 ~ 0 KPa
Withstanding pressure		1.5 MPa	300 KPa	
Applicable fluid		Air , not corrode , Noncombustible		
Power voltage		12 to 24 VDC ±10% , ( Ripple ±10% or less )		
Reacting time		5 ms or less		
Repeatability		± 1 % F.S. or less		
Current consumption		1 Output : NPN & PNP : 31mA MAX , 2 Output : 25mA MAX.		
Environmental resistance	Enclosure	IP 40		
	Operating temperature range	Operating : 0 ~ 50 °C , Stored : -10 ~ 60 °C (no freezing or condensation)		
	Operating humidity range	Operating and store : 35 ~ 85% RH (no freezing)		
	Withstand voltage	100 VAC 1 minute ( between case and lead wire)		
	Insulation resistance	50MΩ min (500VDC) ( between case and lead wire)		
	Vibration resistance	10~55 Hz at whichever is smaller of 1.5 mm amplitude , in X , Y , Z directions , for 2 hours each		
Impact resistance	980 m/s <sup>2</sup> (100G) , X · Y · Z directions , 3 times each			
Temperature characteristics		±3% F.S. (25 ± 3 °C) or less (based on 25 ± 3 °C )		
Connection port		PT 1/8" ; NPT 1/8" ; G 1/8"		
Weight		About 50g (include 3 m cable)		

### Output specification

Characteristics	PS □ -10-03 (Positive pressure)	PS □ -10-02 (Low pressure)	PS □ -10-01 (Negative pressure)
Internal circuit			
Output	NPN open collector 30V 80 mA	NPN open collector 30V 80 mA	PNP open collector 80 mA
Accuracy	± 3 % F.S. or less (Fixed)	± 3 % F.S. or less (Fixed)	
Switch output	Two		Two
Indicator light	OUT1 : Red indicator light, OUT2 : Green indicator light (light up when output is on)	Red indicator light (light up when output is on)	

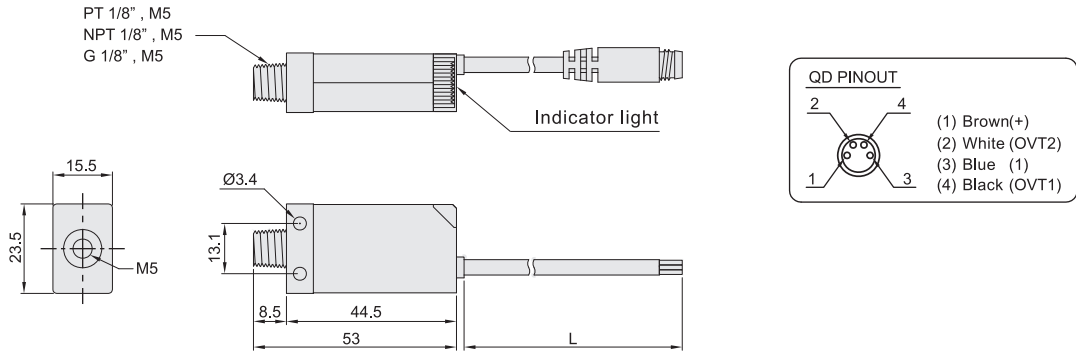


# PSN ( L , V ) - 10 series - Pressure switch

External dimension and Pressure setting

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## External dimension



## Pressure setting

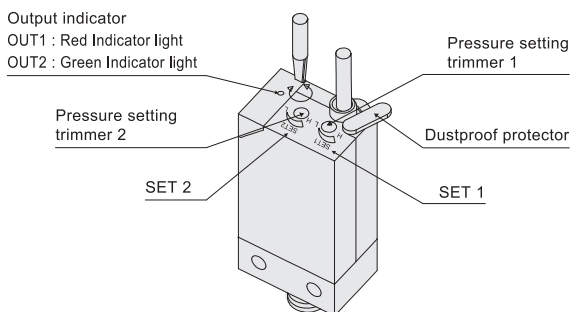
### PS □ - 10 - 03

- Remove dustproof protector to make any adjustments.  
Replace dustproof protector when finished to prevent foreign object from entering.
- Pressure setting trimmer ( SET1 , SET2 ) is for setting the output ( ON ) pressure.  
Rotate SET trimmer counter-clockwise to increase ( pressure or vacuum ) the ON point.  
Rotate clockwise will decrease will decrease the setting pressure.
- Hysteresis for models with two outputs is 3% fixed.

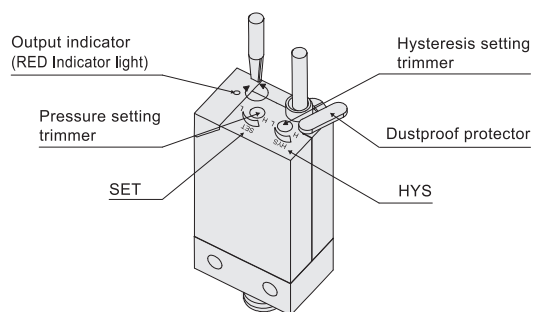
### PS □ - 10 - 01 , PS □ - 10 - 02

- Remove dustproof protector to make any adjustments.  
Replace dustproof protector when finished to prevent foreign object from entering.
- Pressure setting trimmer ( SET ) is for setting the output ( ON ) pressure.  
Rotate SET trimmer counter - clockwise to increase ( pressure or vacuum ) the ON point.  
Rotate clockwise will decrease will decrease the setting pressure.
- Hysteresis setting trimmer ( HYS ) is for changing the hysteresis.  
Rotate trimmer counter-clockwise to increase the range 1~10%.
- Use appropriate size screwdriver for the setting trimmers.  
Gently turn the screwdriver to make adjustments.  
Do not force the trimmer when it comes to a stop to prevent damage to the setting trimmer.

### PS □ - 10 - 03



### PS □ - 10 - 01 , PS □ - 10 - 02



**PS □ - 05**  
Pressure switch

**PS □ - 10**  
Pressure switch

**PS □ - 30**  
Pressure switch

**PS □ - 40**  
Pressure switch

**PS □ - 41**  
Pressure switch

**PS □ - 42**  
Pressure switch

**PS □ - 43**  
Pressure switch

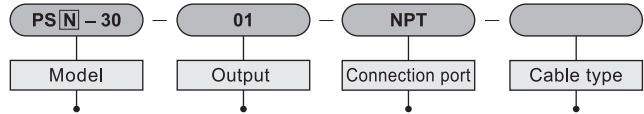


# PSN ( C , V ) - 30 series - Pressure switch

## Specification and Order expression

CHELIC PNEUMATIC

### How to order



**N :**  
Positive pressure  
(-0.1~1 MPa)

**C :**  
Compound  
(-100~100 KPa)

**V :**  
Negative pressure  
(0 ~ -101.3 KPa)

**01 :** 2 NPN output &  
1 Analog output

**02 :** NPN output

**03 :** 2 PNP output &  
1 Analog output

**04 :** 2 PNP output

**PT :** 1/8"  
**NPT :** 1/8"  
**G :** 1/8"

**None :**  
Cable length is 2M

**QD :** M8 , 4 PIN  
Male connector  
(Only type 02,04)

### Specification

Item	Model	PSN - 30 (Positive pressure)	PSC - 30 (Compound)	PSV - 30 (Negative pressure)
Rated pressure range		0.000 ~ 1.000 MPa	-100.0 ~ 100.0 KPa	0.0 ~ -101.3 KPa
Set pressure range / Rated pressure range		-0.100 ~ 1.000 MPa	-100.0 ~ 100.0 KPa	10.0 ~ - 101.3 KPa
Withstanding pressure		1.5 rated pressure range		
Applicable fluid		Air , not corrode , Noncombustible		
Set pressure resolution	KPa	—		0.1
	MPa	0.001		—
	kgf/cm <sup>2</sup>	0.01		0.001
	bar	0.01		0.001
	psi	0.1		0.01
	inHg	—		0.1
	mmHg	—		1
	mmH <sub>2</sub> O	—		0.1
Power supply voltage		12 to 24 VDC ±10% , ( Ripple ±10% or less )		
Current consumption		55 mA or less		
Switch output		The max. load output for NPN or PNP : 80mA Max. load voltage : 30VDC , residual voltage : 1 V or less (with load current of 80mA)		
Repeatability		± 0.2 % F.S. ± 1 digi or less		
Hysteresis	Hysteresis	Adjustable		
	Window comparator model	Fixed (3digit)		
Reacting time		2.5ms or less (chattering-proof function: 24ms, 192ms and 768ms selections)		
Output short circuit protection		Yes		
Display		3 ½ digit Indicator light or less ( Sampling rate : 5 time / sec.)		
Indicator accuracy		± 0.2 % F.S. ± 1 digi or less (ambient temperature: 25 ± 3 °C)		
Indicator light		Green Indicator light (OUT1) , Red Indicator light (OUT2)		
Analog output (only type 01,03)		Output voltage : 1~5V± 2.5 or less (within rated pressure range) Linearity : ± 1% F.S. or less	Output voltage : 1~5V± 5 or less (within rated pressure range) Linearity : ± 1% F.S. or less	Output voltage : 1~5V± 2.5 or less (within rated pressure range) Linearity : ± 1% F.S. or less
	Enclosure	IP 40		
	Operating temperature range	Operating : 0 ~ 50 °C , Stored : -10 ~ 60 °C ( No freezing or condensation )		
Environmental resistance	Operating humidity range	Operating and store : 35 ~ 85 % RH ( No freezing )		
	Withstand voltage	100 VAC 1 minute ( between case and lead wire )		
	Insulation resistance	50 MΩ min ( 500 VDC ) ( between case and lead wire )		
	Vibration resistance	10~55 Hz at whichever is smaller of 1.5mm amplitude , in X , Y , Z directions , for 2 hours each		
	Impact resistance	980 m/s <sup>2</sup> (100G) X , Y , Z directions , 3 times each		
Temperature characteristics		± 2 % F.S. or less ( based on 0 ~ 3 ° )		
Connection port		PT 1/8" ; NPT 1/8" ; G 1/8"		
Cable type		oil-resistant cable (0.15 mm <sup>2</sup> )		
Weight		About 67g (include 2 m cable) ; about 35g (include M8 4PIN male connector)		





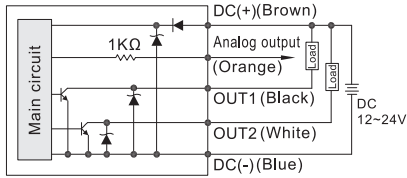
# PSN ( C , V ) - 30 series - Pressure switch

External dimension and Pressure setting

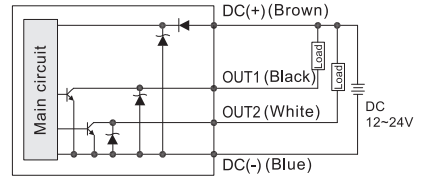
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## Output circuit wiring graph

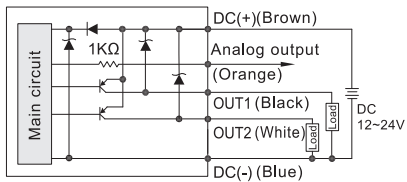
- PS □ -30-01  
NPN output



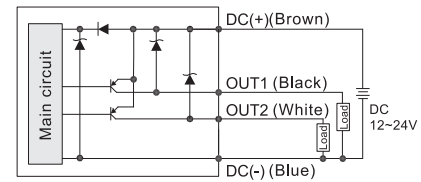
- PS □ -30-02  
NPN output



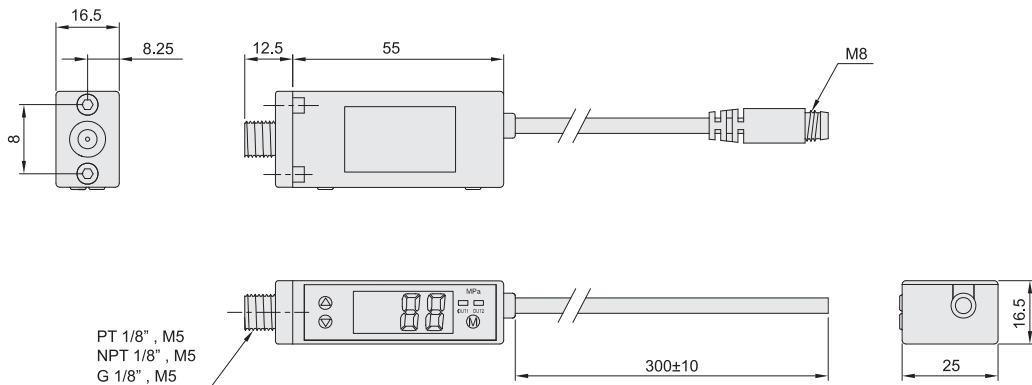
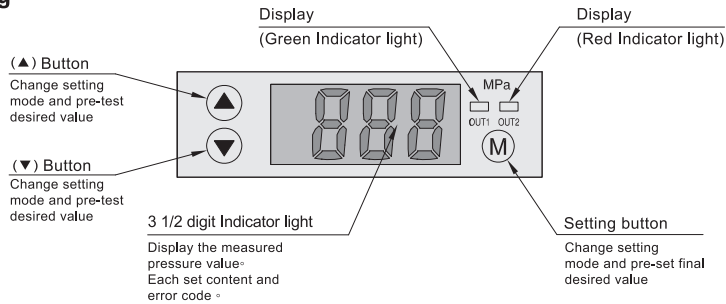
- PS □ -30-03  
PNP output



- PS □ -30-04  
PNP output



## Pressure setting



**PS □ -05**  
Pressure switch

**PS □ -10**  
Pressure switch

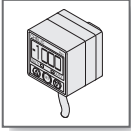
**PS □ -30**  
Pressure switch

**PS □ -40**  
Pressure switch

**PS □ -41**  
Pressure switch

**PS □ -42**  
Pressure switch

**PS □ -43**  
Pressure switch

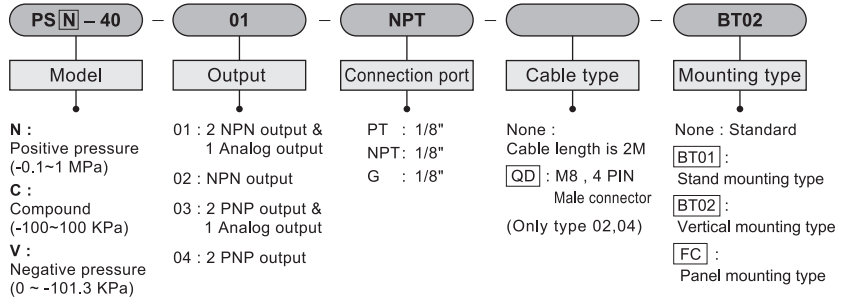


# PSN ( C , V ) - 40 series - Pressure switch (Single color)

External dimension and Pressure setting

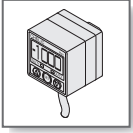
CHELIC PNEUMATIC

## How to order



## Specification

Item	Model	PSN - 40 (Positive pressure)	PSC - 40 (Compound)	PSV - 04 (Negative pressure)
Rated pressure range		0.000 ~ 1.000 MPa	-100.0 ~ 100.0 KPa	0.0 ~ -101.3 KPa
Set pressure range / Rated pressure range		-0.100 ~ 1.000 MPa	-100.0 ~ 100.0 KPa	10.0 ~ - 101.3 KPa
Withstanding pressure		1.5 rated pressure range		
Applicable fluid		Air , not corrode , Noncombustible		
Set pressure resolution	KPa	—		0.1
	MPa	0.001		—
	kgf/cm <sup>2</sup>	0.01		0.001
	bar	0.01		0.001
	psi	0.1		0.01
	inHg	—		0.1
	mmHg	—		1
	mmH <sub>2</sub> O	—		0.1
Power supply voltage		12 to 24 VDC ±10% , ( Ripple ±10% or less )		
Current consumption		55 mA or less		
Switch output		The max. load output for NPN or PNP : 80mA Max. load voltage : 30VDC , residual voltage : 1 V or less (with load current of 80mA)		
Repeatability		± 0.2 % F.S. ± 1 digi or less		
Hysteresis	Hysteresis	Adjustable		
	Window comparator model	Fixed (3digit)		
Reacting time		2.5 ms or less (chattering-proof function: 24ms, 192ms and 768ms selections)		
Output short circuit protection		Yes		
Display		3 ½ digit Indicator light or less ( Sampling rate : 5 time / sec.)		
Indicator accuracy		± 0.2 % F.S. ± 1 digi or less (ambient temperature: 25 ± 3 °C)		
Indicator light		Green Indicator light (OUT1) , Red Indicator light (OUT2)		
Analog output (only type 01,03)		Output voltage : 1~5V± 2.5 or less (within rated pressure range) Linearity : ± 1% F.S. or less	Output voltage : 1~5V± 5 or less (within rated pressure range) Linearity : ± 1% F.S. or less	Output voltage : 1~5V± 2.5 or less (within rated pressure range) Linearity : ± 1% F.S. or less
	Enclosure	IP 40		
	Operating temperature range	Operating : 0 ~ 50 °C , Stored : -10 ~ 60 °C ( No freezing or condensation )		
Environmental resistance	Operating humidity range	Operating and store : 35 ~ 85 % RH ( No freezing )		
	Withstand voltage	1000 VAC 1 minute ( between case and lead wire )		
	Insulation resistance	50 MΩ min ( 500 VDC ) ( between case and lead wire )		
	Vibration resistance	10~55 Hz at whichever is smaller of 1.5mm amplitude , in X , Y , Z directions , for 2 hours each		
	Impact resistance	980 m/s <sup>2</sup> (100G) X , Y , Z directions , 3 times each		
Temperature characteristics		± 2 % F.S. or less ( based on 0 ~ 50 ° )		
Connection port		PT 1/8" ; NPT 1/8" ; G 1/8"		
Cable type		oil-resistant cable (0.15 mm <sup>2</sup> )		
Weight		About 105g (include 2 m cable) ; about 71g (include M8 4PIN male connector)		



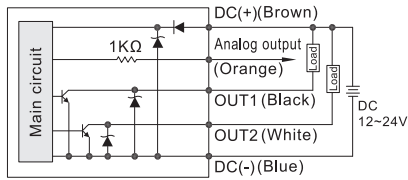
# PSN ( C , V ) - 40 series - Pressure switch

External dimension and Pressure setting

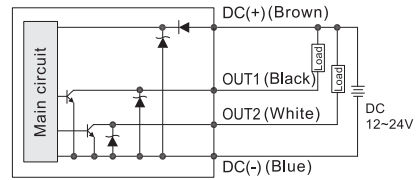
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## Output circuit wiring graph

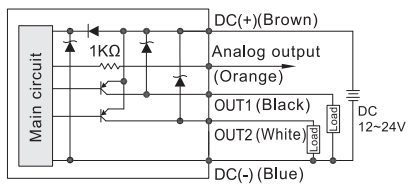
### PS □ - 40-01 NPN output



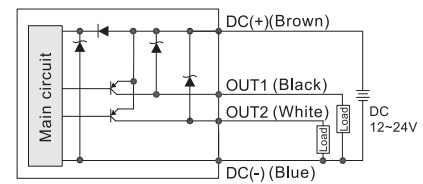
### PS □ - 40-02 NPN output



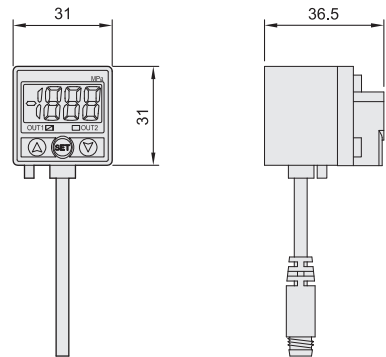
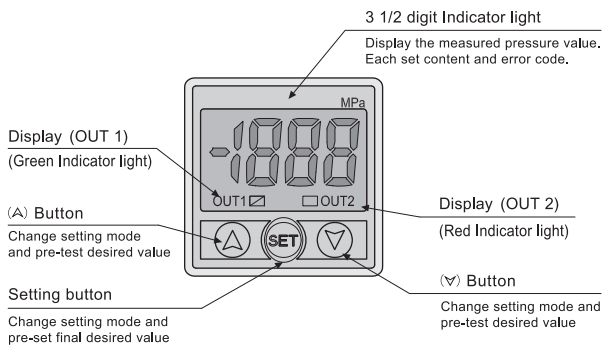
### PS □ - 40-03 PNP output



### PS □ - 40-04 PNP output



## External dimension and Panel instructions



**PS□-05**  
Pressure switch

**PS□-10**  
Pressure switch

**PS□-30**  
Pressure switch

**PS□-40**  
Pressure switch

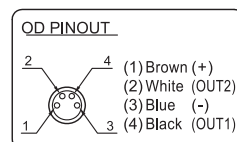
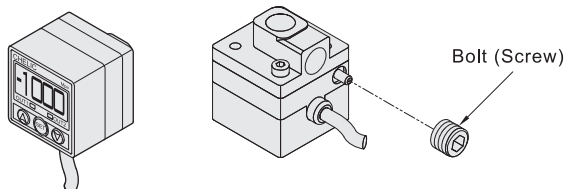
**PS□-41**  
Pressure switch

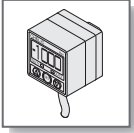
**PS□-42**  
Pressure switch

**PS□-43**  
Pressure switch

## Installation

1. This product has two inlet pressure ports.  
Select the one most convenient for installation.
2. Please plug the unused inlet port with supplied port plug.  
Use seal tape to prevent pressure leak.





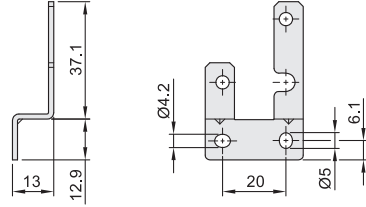
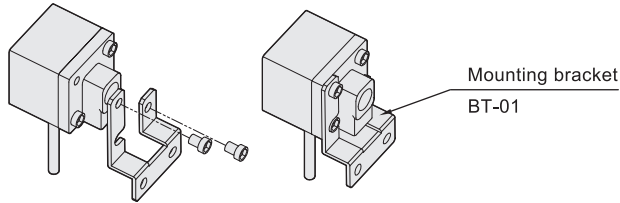
# PSN ( C , V ) - 40 series - Pressure switch

## Accessories dimension graph

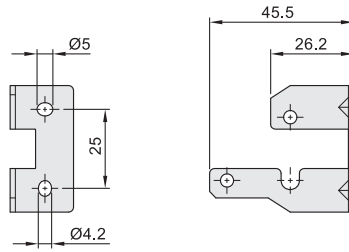
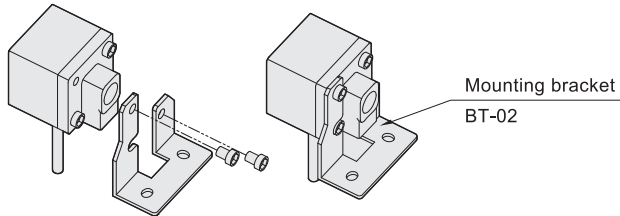
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### Mounting bracket

#### BT - 01 Stand mounting type

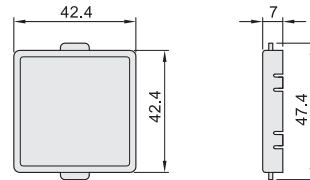
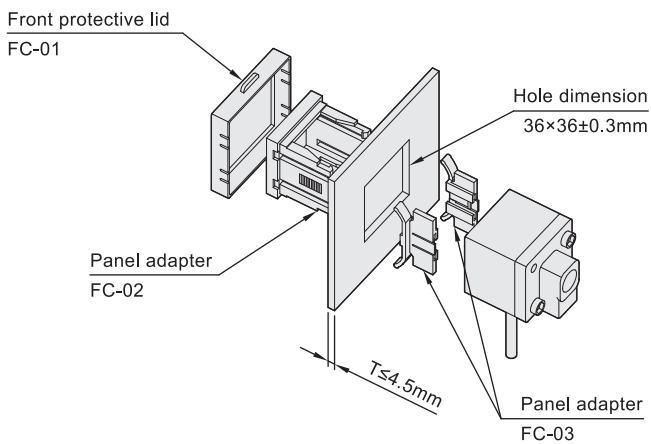


#### BT - 02 Vertical mounting type

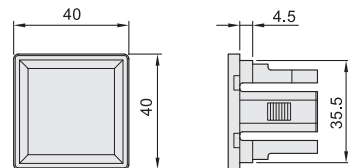


### Panel mounting type - FC

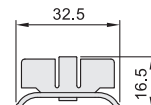
#### FC- 01 Front protective lid

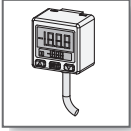


#### FC- 02 Mounting holder



#### FC- 03 Mounting slice





# PSN - 41 series - Pressure switch

## Operating specification

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### ○ Specification

Item	Model	PSN - 41 (Positive pressure)	
Rated pressure range		0 ~ 1 MPa	
Pressure range		- 0.100 ~ 1.000 MPa	
Proof pressure		1.5 MPa	
Applicable fluid		Air; non-corrosive gas; non-flammable gas	
Set pressure resolution	kPa	—	
	MPa	0.001	
	kgf / cm <sup>2</sup>	0.01	
	bar	0.01	
	psi	0.1	
Power supply voltage		12 to 24VDC ±10%, Ripple (P-P) 10% or less	
Current consumption		≤ 40 mA ( Under 40mA )	
Switch output		NPN Open Collector Maximum load current:125mA Maximum load voltage:30VDC; residual voltage: 1.5V or less (with load current of 125mA)	PNP Open Collector Maximum load current:125mA Maximum load voltage:30VDC; residual voltage: ≤1.5V or less (with load current of 125mA)
	Repeatability	± 0.2 % F.S. ± 1 digit	
Hysteresis	Hysteresis mode	Adjustable	
	Window comparator mode		
Response time		0.05s , 0.25s , 0.5s , 1s , 2s , 3s for choice	
Short circuit protection		YES	
Display		3 ½ digit LED two color (red/green) display (sampling frequency : 5 time/sec)	
Indicator accuracy		≤ ±2% F.S. ±1 digit (ambient temperature: 25 ±3°C)	
Indicator		Red Indicator light (OUT1) : lights up when turned on	
Environmental	Enclosure	IP 40	
	Ambient temp. range	Operation : 0 ~ 50°C , storage : -10 ~ 60°C ( No condensation or freezing)	
	Ambient humidity range	Operation / Storage : 35 ~ 85% RH ( No condensation)	
	Withstand Voltage	1000VAC in 1-min (between case and lead wire)	
	Insulation resistance	50Mohm min. (at 500VDC M, between case and lead wire)	
	Vibration	Total amplitude 1.5mm or 10G ,10Hz-55Hz-10Hz scan for 2 hours each direction of X,Y and Z	
Shock	100 m / s <sup>2</sup> (10G) , 3 times each in direction of X,Y and Z		
Temperature characteristics		≤ ± 2% F.S. of detected pressure 25 °C (at temp. Range of 0 ~ 50 °C)	
Cable specification		Oil - resistance cable ( 0.15 mm <sup>2</sup> )	
Weight		About 30 g ( include M8 , 4 PIN male connector)	

**PS□-05**  
Pressure switch

**PS□-10**  
Pressure switch

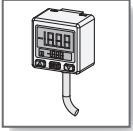
**PS□-30**  
Pressure switch

**PS□-40**  
Pressure switch

**PS□-41**  
Pressure switch

**PS□-42**  
Pressure switch

**PS□-43**  
Pressure switch

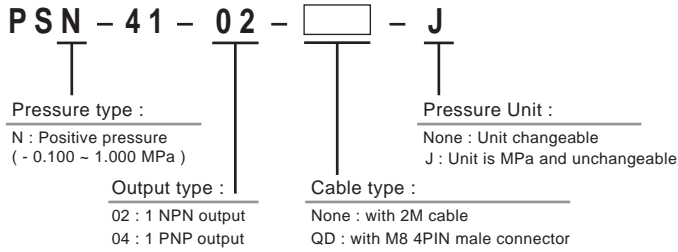


# PSN - 41 series - Pressure switch

External dimension and Pressure setting

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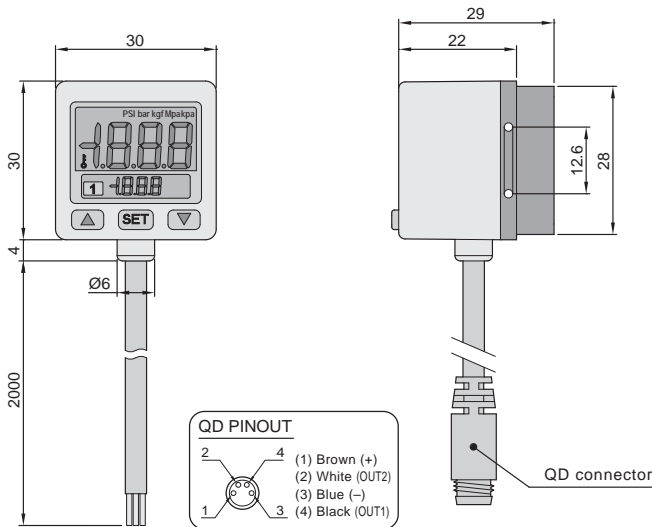
## How to order



## Suitable series

Model	Model series
NC	N200,N300,N400, N450,N500
NFC	
NFR	
NR	

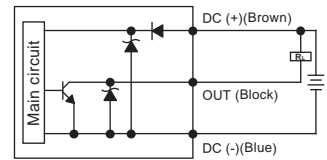
## External dimension



## Panel instructions

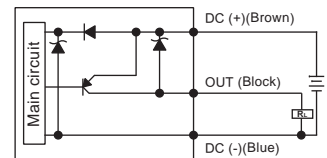
### PSN - 41 - 02

NPN output

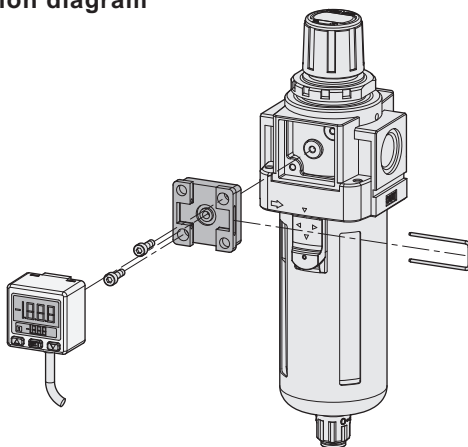


### PSN - 41 - 04

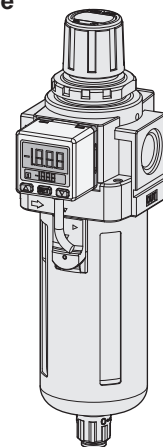
PNP output

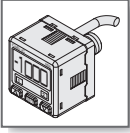


## Installation diagram



## Complete



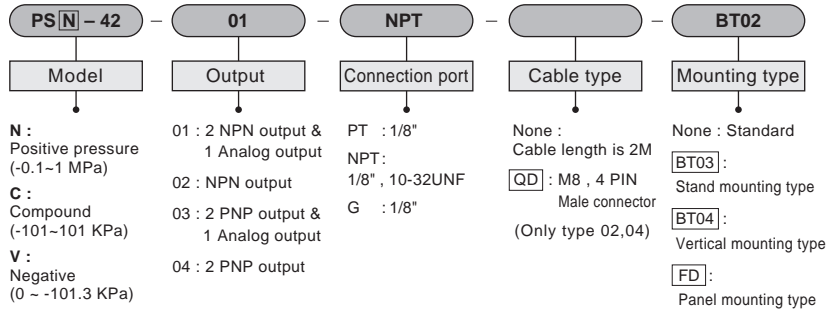


# PSN ( C , V ) - 42 series - Pressure switch (three colors)

## Specification and Order expression

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### How to order



### Specification

Item	Model	PSN - 42 (Positive pressure)	PSC - 42 (Compound)	PSV - 42 (Negative)
Rated pressure range		0.000 ~ 1.000 MPa	-100.0 ~ 100.0 KPa	0,0 ~ -101.3 KPa
Set pressure range / Rated pressure range		-0.100 ~ 1.000 MPa	-101.0 ~ 101.0 KPa	10.0 ~ -101.3 KPa
Withstanding pressure		1.5 rated pressure range		
Applicable fluid		Air , not corrode , Noncombustible		
Set pressure resolution	KPa	—		0.1
	MPa	0.001		—
	kgf/cm <sup>2</sup>	0.01		0.001
	bar	0.01		0.001
	psi	0.1		0.01
	inHg	—		0.1
	mmHg	—		1
Power supply voltage		12 to 24 VDC ±10% , ( Ripple ±10% or less )		
Current consumption		40 mA or less		
Switch output		The max. load output for NPN or PNP : 125 mA Max. load voltage : 30VDC , residual voltage : 1 V or less (with load current of 125 mA)		
Repeatability		± 0.2 % F.S. ± 1 digi or less		
Hysteresis	Hysteresis	Adjustable * 1		
	Window comparator model			
	Single point comparable model			
Reacting time		2.5 ms or less (chattering-proof function : 25ms,100ms,250ms,500ms,1000ms and 15000ms selections)		
Output short circuit protection		Yes		
Display		3 colors display ( Red, Green, Orange) ( Sampling rate : 5 time / sec.)		
Indicator accuracy		± 0.2 % F.S. ± 1 digi or less (ambient temperature: 25 ± 3 °C)		
Indicator light		Orange Indicator light 1 & 2 (OUT1 , OUT2)		
Analog output (only type 01,03)		Output voltage : 1-5V± 2.5 or less (within rated pressure range) Linearity : ± 1% F.S. or less	Output voltage : 1-5V± 5 or less (within rated pressure range) Linearity : ± 1% F.S. or less	Output voltage : 1-5V± 2.5 or less (within rated pressure range) Linearity : ± 1% F.S. or less
Environmental resistance	Enclosure	IP 40		
	Operating temperature range	Operating : 0 ~ 50 °C , Stored : -10 ~ 60 °C ( No freezing or condensation )		
	Operating humidity range	Operating and store : 35 ~ 85 % RH ( No freezing )		
	Withstand voltage	1000 VAC 1 minute ( between case and lead wire )		
	Insulation resistance	50 MΩ min ( 500 VDC ) ( between case and lead wire )		
	Vibration resistance	10~55 Hz at whichever is smaller of 1.5mm amplitude , in X , Y , Z directions , for 2 hours each		
Impact resistance	100 m/s <sup>2</sup> (100G) X , Y , Z directions , 3 times each			
Temperature characteristics		± 2 % F.S. or less ( based on 0 ~ 50 ° )		
Connection port		PT : PT 1/8" ; NPT : NPT 1/8" ; 10-32UNF ; G : G 1/8"		
Cable type		oil-resistant cable (0.15 mm <sup>2</sup> )		
Weight		About 80 g (include 2 m cable) ; about 45 g (include M8 4PIN male connector)		

**PS□-05**  
Pressure switch

**PS□-10**  
Pressure switch

**PS□-30**  
Pressure switch

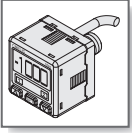
**PS□-40**  
Pressure switch

**PS□-41**  
Pressure switch

**PS□-42**  
Pressure switch

**PS□-43**  
Pressure switch

Note : Single point comparable model and Window comparator model can adjust 1~8 digits hysteresis.



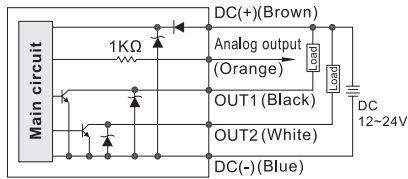
# PSN ( C , V ) - 42 series - Pressure switch

External dimension and Pressure setting

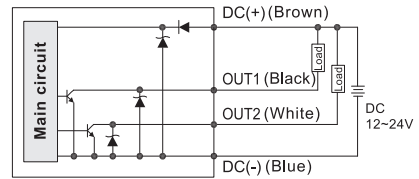
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## Output circuit wiring graph

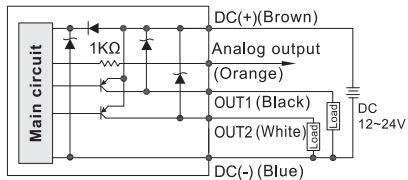
- PS □ - 42-01  
NPN output



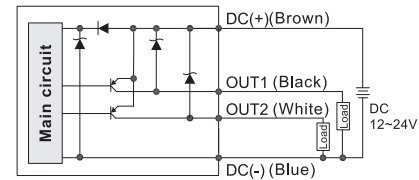
- PS □ - 42-02  
NPN output



- PS □ - 42-03  
PNP output

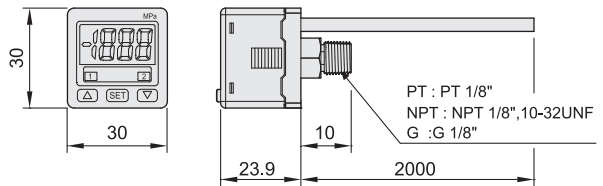
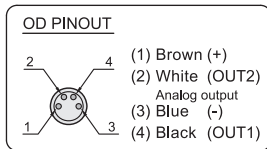
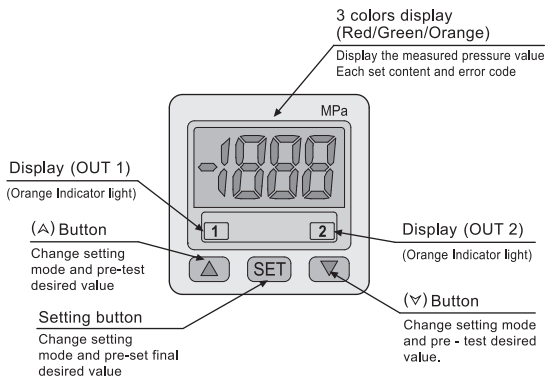


- PS □ - 42-04  
PNP output

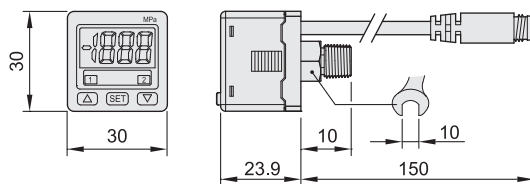


## External dimension and panel instructions

- PS □ - 42 - □ - □

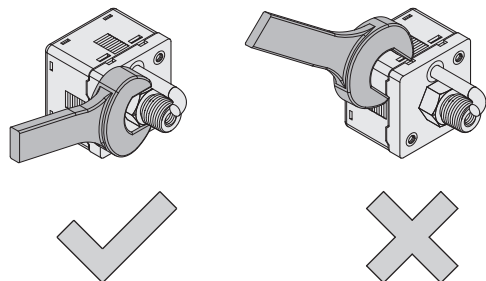


- PS □ - 42 - □ - □ - QD

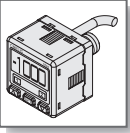


## Installation

- When installing pressure switch, please use wrench to effort force and mount in metal section. Please do not use wrench to effort force and mount in plastic section to avoid damaged pressure switch.
- When metal section lock tightly, screws mounting bracket and pressure switch may damage. If metal section lock slackly, pressure switch may slide or leakage.
- After installation, it will put in fluid and electric to test operating and leakage to check installation is correct or not.





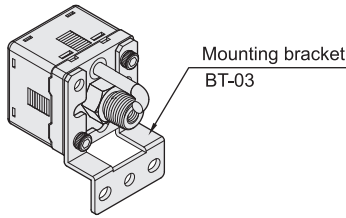
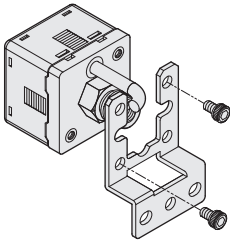


# PSN ( C , V ) 42 series - Pressure switch

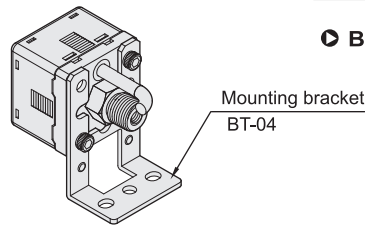
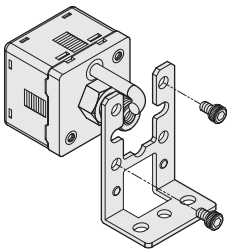
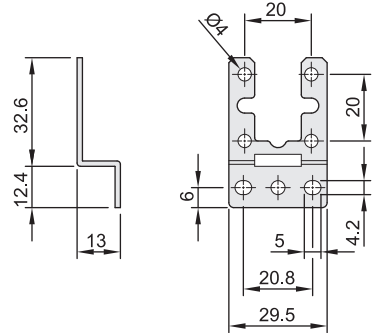
## Accessories dimension graph

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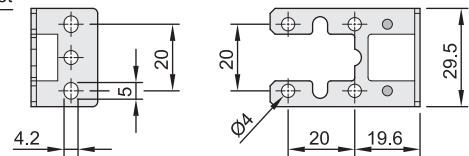
### Mounting bracket



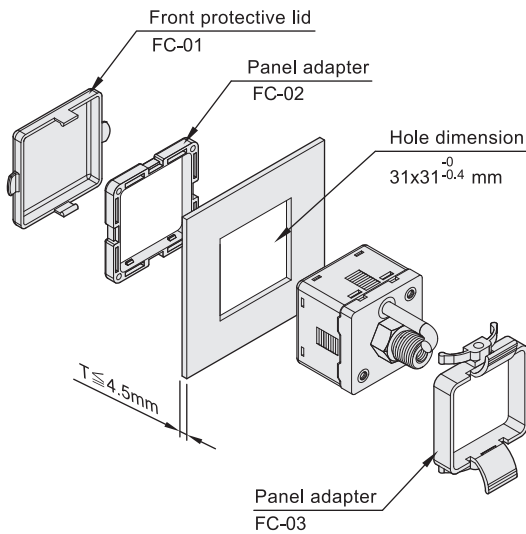
### BT - 03 Stand mounting type



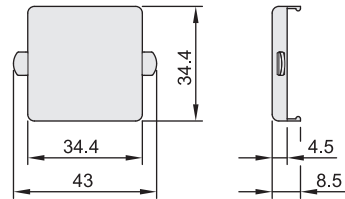
### BT - 04 Vertical mounting type



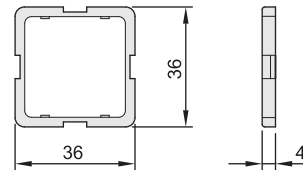
### Panel mounting type - FC



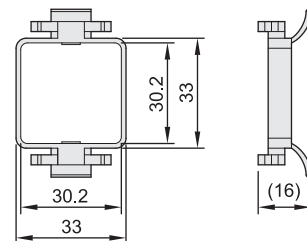
### FC-01 Front protective lid



### FC-02 Mounting holder



### FC-03 Mounting slice



**PS□-05**  
Pressure switch

**PS□-10**  
Pressure switch

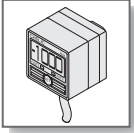
**PS□-30**  
Pressure switch

**PS□-40**  
Pressure switch

**PS□-41**  
Pressure switch

**PS□-42**  
Pressure switch

**PS□-43**  
Pressure switch

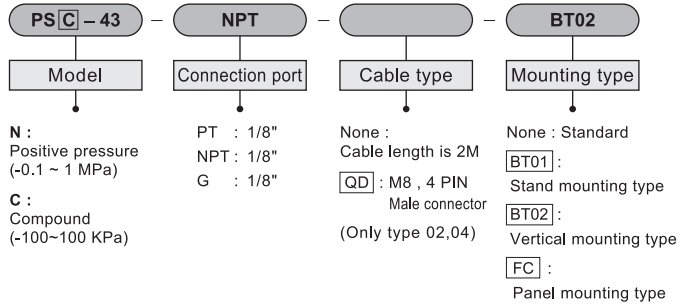
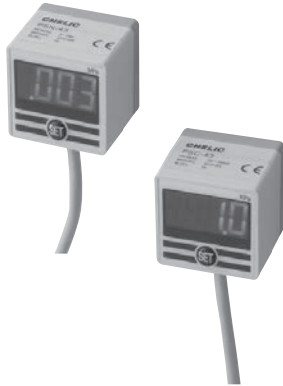


# PSN ( C ) - 43 series - Pressure switch

## Specification and Order expression

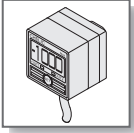
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### How to order



### Specification

Item		Model	PSN - 43 (Positive pressure)	PSC - 43 (Compound)
Rated pressure range			-0.100 ~ 1.000 MPa	-100.0 ~ 100.0 KPa
Withstanding pressure			1.5 rated pressure range	3 rated pressure range
Applicable fluid			Air , not corrode , Noncombustible	
Power voltage			12 to 24 VDC ±10% , ( Ripple ±10% or less )	
Current consumption			55 mA or less	
Display			3 ½ digit Indicator light display (sampling frequency : 5 time/sec)	
Indicator accuracy			±0.2% F.S. ±1 digit or less (ambient temperature : 25 ±3°C)	
Environmental resistance	Enclosure		IP 40	
	Operating temperature range		Operating : 0 ~ 50 °C , Stored : -10 ~ 60 °C (no freezing or condensation)	
	Operating humidity range		Operating and store : 35 ~ 85% RH (no freezing)	
	Withstand voltage		1000 VAC 1 minute ( between case and lead wire)	
	Insulation resistance		50MΩ min (500VDC) ( between case and lead wire)	
	Vibration resistance		10~55 Hz at whichever is smaller of 1.5 mm amplitude , in X , Y , Z directions , for 2 hours each	
	Impact resistance		980 m/s <sup>2</sup> (100G) , X - Y - Z directions , 3 times each	
Temperature characteristics			± 2% F.S. or less (at temp. Range of 0 ~ 50 °C)	
Connection port			PT 1/8" ; NPT 1/8" ; G 1/8"	
Cable specification			Oil - resistance cable ( 0.15 mm <sup>2</sup> )	
Weight			About 105 g (include 2 m cable) ; about 71 g (include M8 4PIN male connector)	

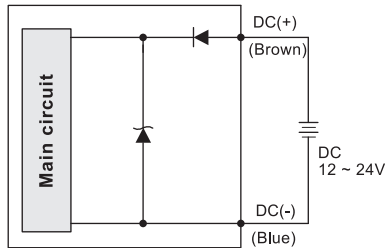


# PSN ( C ) 43 series - Pressure switch

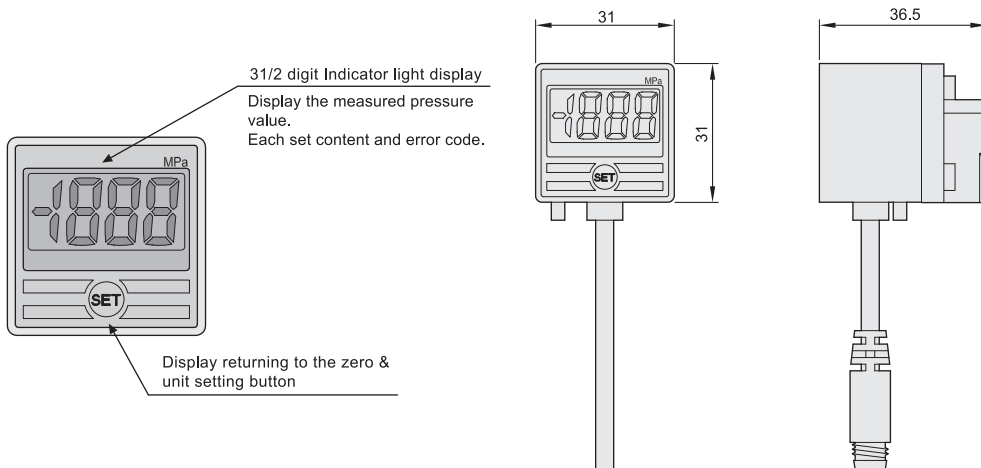
External dimension and Pressure setting

CHELIC PNEUMATIC

## Output circuit wiring graph

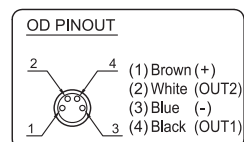
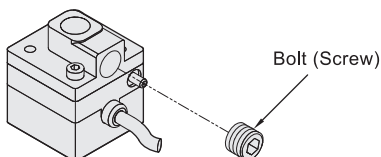
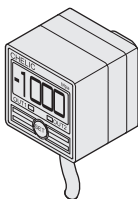


## External dimension and Panel instructions



## Installation

1. This product has two inlet pressure ports.  
Select the one most convenient for installation.
2. Please plug the unused inlet port with supplied port plug.  
Use seal tape to prevent pressure leak.



**PS□-05**  
Pressure switch

**PS□-10**  
Pressure switch

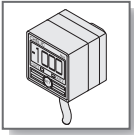
**PS□-30**  
Pressure switch

**PS□-40**  
Pressure switch

**PS□-41**  
Pressure switch

**PS□-42**  
Pressure switch

**PS□-43**  
Pressure switch



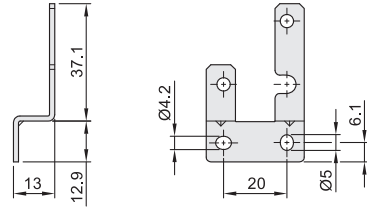
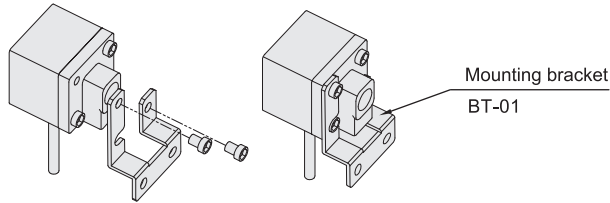
# PSN ( C ) 43 series - Pressure switch

## Accessories dimension graph

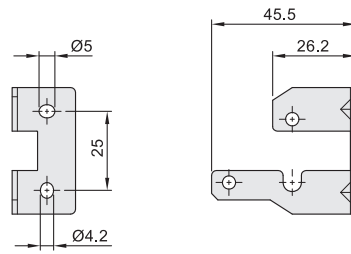
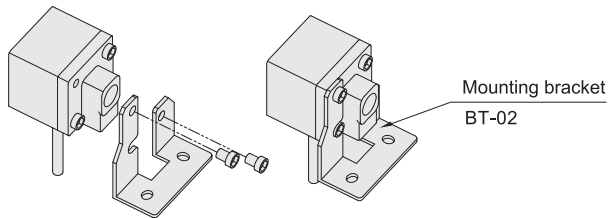
CHELIC PNEUMATIC

### Mounting bracket

#### BT - 01 Stand mounting type

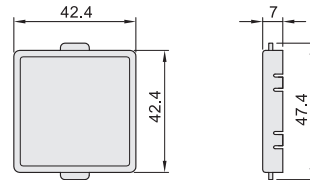
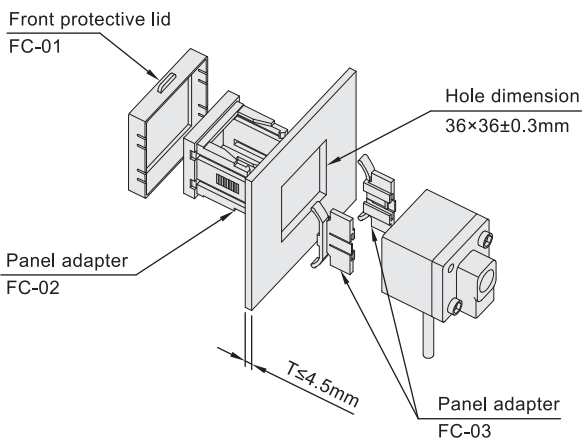


#### BT - 02 Vertical mounting type

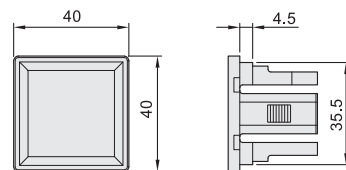


### Panel mounting type - FC

#### FC-01 Front protective lid



#### FC-02 Mounting holder



#### FC-03 Mounting slice

