DPC Series minitype no display pressure switch
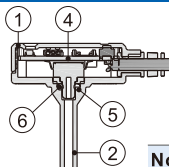
Symbol

Product feature

1. Larger measurement range. Easy to install.
2. Two lines type or three lines type(NPN/PNP output mode) to be chosen.
3. Single button to finish learning setting. Normally close and normally open can be exchanged.
4. Two kinds of setting mode(Simple mode and middle value mode) to be chosen.

Specification

Item\Model	DPC	DPCN	DPCP
Voltage	DC24V±10%	DC12~24V±10%	
Pressure range	DPC□10：–100kPa~1000kPa; DPC□01：–100kPa~100kPa		
Applied fluid	Air、Non–corrosive gas、Incombustibility gas		
Repetitive accuracy	±0.7%F.S		
Temperature accuracy	±2.5%F.S		
Hysteresis	<2%F.S		
Operating Temp. range	0~60℃		
Output style	5~40mA	30V/100mA Max.	
Voltage drop	5.5V Max.	0.7V Max.	
Method of adjusting pressure	Learning button		
Leakage current	1.0mA Max.		
Stored Temp. range	–20~75℃		
Tube O.D.	Φ4mm，Φ6mm，Φ1/4"		
Special function	Two sets model、NO/NC switch		
Production circuit	Power reverse polarity，surge suppression		
Protection	IP40		

[Note1] Two lines type be used under DC20V, leakage current might excess 1mA to lead PLC damage and error acting.
[Note2] If relay be used as joint points, capacitance(>50V/100uF) should be used to recede leakage current.

Inner structure

No.	Item	Material	No.	Item	Material
1	Up cover	PC	4	PCBA	
2	Basic seat	PC+ABS	5	Gasket	POM
3	Wire Line	PVC	6	O–ring	NBR

Ordering code

DPC □ – □ □ □
① ② ③ ④ ⑤

①Model	②Output type	③Measurement range	④Lead wire length	⑤Tube O.D.
DPC: Minitype no display pressure switch	Blank: Two-lines N: NPN P: PNP	01：-100kPa~100kPa 10：-100kPa~1000kPa	020: Length 2m 030: Length 3m 050: Length 5m	D4：Φ4mm D6：Φ6mm 08：Φ1/4"

Installation and application
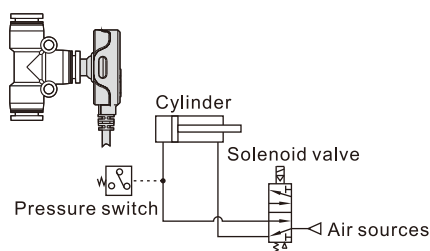
1. Connection Example：
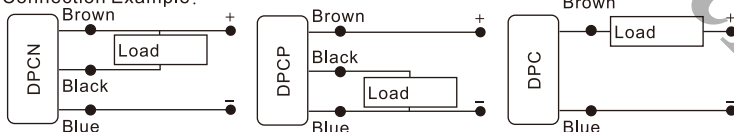
2. Function operation：
2.1) Quick setting: Press the SET button for less then two seconds to finish quick setting.
2.2) Middle value setting: Press the SET button for two to five seconds to finish setting valve A; Press the SET button again to finish setting valve B. ＊Middle valve=(A+B)/2＊
2.3) N.O./N.C. switch: Press the SET button for six to ten seconds to finish N.O./N.C. switching.
2.4) Lock/Unlock switch: Press the SET button for eleven to twenty seconds to finish Lock/Unlock switching.
2.5) Factory–fresh state: Press the SET button for over twenty seconds to return factory-fresh state.
3. Notes:
3.1) Avoid dropping, beating, impacting which might damage DPC and bring error acting.
3.2) Wire line drawing force is 30N, more then this force might damage it.
3.3) Causticity or flammability gas and liquid can't be used.
3.4) Can't binding with power wire line and higher voltage wire line when wiring.
3.5) If use DPC to drive relay, solenoid valve directly which easy create overrun voltage load, the overrun voltage absorb unit should be set.

Dimensions

Tube O.D.：
D4：Φ4mm
D6：Φ6mm
08：Φ1/4"

Use example

Check cylinder pressure — Cylinder, Solenoid valve, Pressure switch, Air sources

Conform air sources pressure — Pressure switch, F.R.L Combination
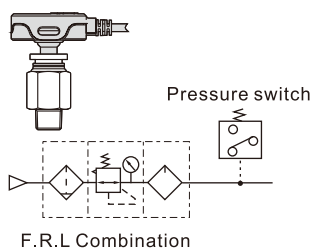
Conform cupula whether sucked — Vacuum sources, Vacuum support valve, Vacuum release valve, Vacuum pressure switch, Cupula
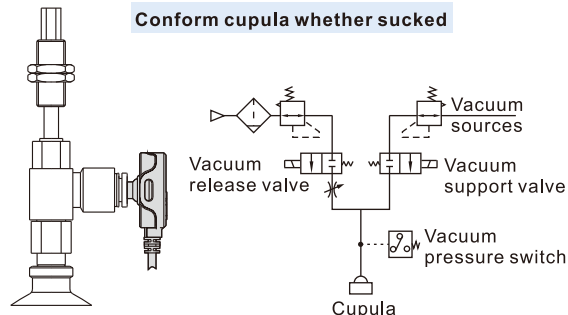
DPC Series minitype no display pressure switch

Cresset explanation

● Invariance light　☀ Coruscate quickly(Per 0.1 sec.)　◉ Coruscate(Per 1 sec.)　◔ Slowness coruscate(Per 3 sec.)

Simple mode			Middle value mode		
Light station	DPC station		Light station	DPC station	
☀	Red(continuance 1 sec.)：N.O. mode	Finished setting action	☀	Red(continuance 1 sec.)：N.O. mode	Finished setting air pressure value
	Green(continuance 1 sec.)：N.C.mode			Green(continuance 1 sec.)：N.C.mode	
●	Red N.O. mode，Sense value>Setting value		☀	Red N.O. mode	Wait to press
	Green N.C. mode，Sense value<Setting value			Green N.C. mode	
◔	Red N.O. mode，Sense value<Setting value		●	Red N.O. mode，Sense value>Setting value	
	Green N.C. mode，Sense value>Setting value			Green N.C. mode，Sense value<Setting value	
			◔	Red N.O. mode，Sense value<Setting value	
				Green N.C. mode，Sense value>Setting value	

To be continued mode		Overrun caution	
Light station	DPC station	Light station	DPC station
☀	Red and green counterchange: DPC wait to set	☀	Red and green alternating coruscate: Overrun caution

Operation explanation

Simple mode setting

Current air pressure → Press the SET button less then two seconds → N.O Mode ☀ Red(Incessancy one second) / N.C Mode ☀ Green(Incessancy one second) → Finished setting air pressure= current air pressure

Middle value mode setting

Current air pressure PI → Press the SET button two to five seconds → N.O Mode ☀ Red(Incessancy one second) / N.C Mode ☀ Green(Incessancy one second) → Self-recording air pressure A=current air pressure PI → Wait for recording air pressure B: N.O Mode ☀ Red / N.C Mode ● Green → Current air pressure PII → Press the SET button → N.O Mode ☀ Red(Incessancy one second) / N.C Mode ☀ Green(Incessancy one second) → Self-recording air pressure B=current air pressure PII → Finished setting air pressure=(A+B)/2

N.O./N.C. Mode switch

Press the SET button six to ten seconds

Reset(Return to normal station)

Press the SET button more than ten seconds

	Normal value
Setting value	0kPa
N.O./N.C. Mode	N.O.
Lock/Unlock	Unlock

Lock/Unlock Mode

1. Lock: To be continued more then 120 seconds，self-lock
2. Unlock: Press the SET button two seconds，self-unlock

＊ Differentiate the button whether "Lock" station quickly

Press the SET button less than two seconds → ● Whether red and green light simultaneity bright → Yes: Lock / No: Unlock

N.O. Mode: Sense value>Setting value → ● Red; Sense value<Setting value → ◔ Red

N.C. Mode: Sense value<Setting value → ● Green; Sense value>Setting value → ◔ Green

[Note] Overrun caution
(1) −100kPa~100kPa：
When air pressure lower or higher than measurement range, the red light and green light will alternating coruscate quickly, please resume to measurement range.
(2) −100kPa~1000kPa：
When air pressure lower or higher than measurement range, the red light and green light will alternating coruscate quickly, please resume to measurement range.