

DP2 SERIES

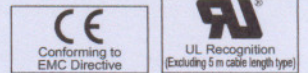
High-performance Digital Pressure Sensor



* UL 61010C-1 compatible, Passed the UL 991 Environment Test based on SEMI S2-0200.
[Category applicable for semiconductor manufacturing: TWW2, Process Equipment]
[Applicable standards: UL 61010C-1]
[Additional test / evaluation standards as per intended use: UL991, SEMI S2-0200]

Complete functionality! Selection from a wide lineup

* Passed the UL 991 Environment Test



High accuracy • high resolution • high speed

It achieves a 2.5 ms, or less, response time at a high resolution of 1/1,000. It enables highly accurate sensing with its excellent repeatability and temperature characteristics.

Response time
2.5 ms or less

Repeatability
Within ± 0.2 % F.S. ± 1 digit

Temperature characteristics
Within ± 1 % F.S.

Clearly visible LED display with 3 1/2 digits

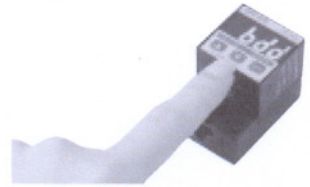
Bright red LED 7-segment display having 3 1/2 digits, 10 mm 0.394 in high. The displayed figures are remarkably noticeable not only in a dark area, but also in a well-lit place.



Incorporates minus sign indication

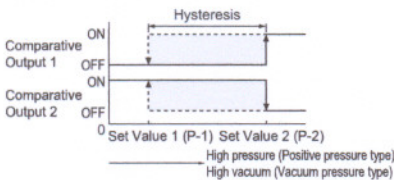
Setting with easy key operation

Initialization and threshold value settings are easily done by key operation while seeing the values on the display.



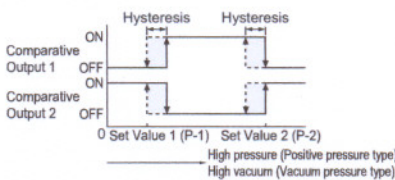
Four output modes enable versatile pressure level control

1 Hysteresis mode



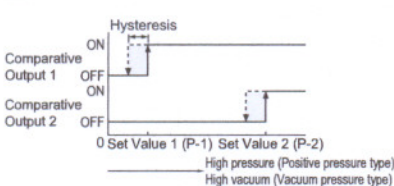
The common hysteresis of the comparative outputs can be set, as desired, with the set values.

2 Window comparator mode



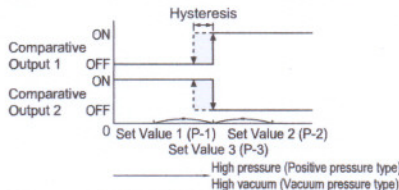
The comparative outputs can be turned ON or OFF by a pressure which is within the pressure range set by Set Value 1 and Set Value 2.

3 Dual output mode



The outputs can be put to different use, such as, detection of different kinds of objects, control function, alarm function etc.

4 Automatic sensitivity setting mode

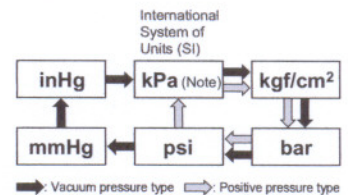


Using actual objects, if the pressure values for OK objects and NG objects are input, then the sensor is automatically set to the optimum pressure value (mid-value).

Selection from six pressure units

The pressure unit can be selected from six different systems to suit your requirement.


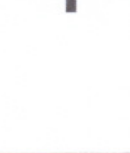






(The selectable pressure units differ with the sensor type. When the pressure unit is changed, the measured pressure value and the set values are automatically converted.)



Note: 'MPa' in case of DP2-22□, DP2-42□ and DP2-62□.

DP2

ORDER GUIDE

Type			Appearance	Rated pressure range	Model No.	Pressure port	Comparative output			
Standard	Vacuum pressure — 101 kPa type	North American		0 to — 101.3 kPa	DP2-20	Rc (PT) 1/8 female thread	NPN open-collector transistor			
		Asian			DP2-20F	NPTF 1/8 female thread	PNP open-collector transistor			
		North American			DP2-20F-P					
		Asian			DP2-21	Rc (PT) 1/8 female thread	NPN open-collector transistor			
		North American			DP2-21F	NPTF 1/8 female thread	PNP open-collector transistor			
		Asian			DP2-21F-P					
	Positive pressure 100 kPa type	North American		0 to 1.000 MPa	DP2-22	Rc (PT) 1/8 female thread	NPN open-collector transistor			
		Asian			DP2-22F	NPTF 1/8 female thread	PNP open-collector transistor			
		North American			DP2-22F-P					
		Asian				0 to — 101.3 kPa	DP2-80	M5 female thread	NPN open-collector transistor	
		North American					DP2-40N	NPT 1/8 female thread	PNP open-collector transistor	
		European					DP2-40E	G (PF) 1/8 female thread		
Flat	Vacuum pressure — 101 kPa type	North American		0 to 100.0 kPa	DP2-41	Rc (PT) 1/8 female thread	NPN open-collector transistor			
		Asian			DP2-41N	NPT 1/8 female thread	PNP open-collector transistor			
		North American			DP2-41E	G (PF) 1/8 female thread				
		Asian				0 to 1.000 MPa	DP2-42	Rc (PT) 1/8 female thread	NPN open-collector transistor	
		North American					DP2-42N	NPT 1/8 female thread	PNP open-collector transistor	
		European					DP2-42E	G (PF) 1/8 female thread		
	IP67	Vacuum pressure — 101 kPa type	North American		0 to — 101.3 kPa	DP2-60	Rc (PT) 1/8 female thread	NPN open-collector transistor		
			Asian			DP2-60N	NPT 1/8 female thread	PNP open-collector transistor		
			North American			DP2-60E	G (PF) 1/8 female thread			
			Asian				0 to 100.0 kPa	DP2-61	Rc (PT) 1/8 female thread	NPN open-collector transistor
			North American					DP2-61N	NPT 1/8 female thread	PNP open-collector transistor
			European					DP2-61E	G (PF) 1/8 female thread	
Positive pressure 1 MPa type		North American		0 to 1.000 MPa	DP2-62	Rc (PT) 1/8 female thread	NPN open-collector transistor			
		Asian			DP2-62N	NPT 1/8 female thread	PNP open-collector transistor			
		European			DP2-62E	G (PF) 1/8 female thread				