

## PRODUCT INFOMATION

## **Digital Pressure Gauge DP Gauge**



Digital pressure gauge with high-accuracy sensor that has excellent overpressure resistance

# DP Gauge

DP-340 / 340B



Wide range of pressures from 500 Pa to 50 MPa

• Two types of sensors (Differential pressure, Gauge pressure)

**DP-340B** 

With Upper/Lower Limit Setting & Auto-Zero

#### **Overview**

- Proven world-class high reliability. •
- Large LED Display, easy to read even from a distance.
- Sensor separate model is also available.
- Easy replacement for previous models.
- Comes with the Calibration Certificate of the standard used for pressure calibration.

### Application Examples

- Pressure value display in testing machine
- Test pressure monitoring of leak or flow test, etc.
- Pressure decay method
- Hole diameter & dimension test by pressure deviation
- Pressure monitoring inside of tubing or container
- Differential pressure test of orifice, pilot tube

#### Features

Features	●: Equipped ▲:	Option ×:	Not available
Item	Description	DP-340	DP-340B
Large LED Display	Maximum Display 1999 / Red 7 segment LED / Digit Height 15 mm	•	•
Zero Adjustment	Zero-point adjustment by just pushing a button.	•	•
Keyboard Lock	Keyboard lock to prevent false operation.	•	•
Analog Output *1	The analog voltage corresponding to the Pressure Range is output.	•	•
BCD Digital Output *2	With parallel BCD output, data can be transferred to external devices.	<b></b>	•
Auto-Zero *2	With the current value set to zero, pressure changes after that can be displayed.		•
Hold *2	Holds specific reading value by external signal.	<b></b>	•
Upper/Lower Limits Comparators	Upper limit (HI) and Lower limit (LO) can be set for criteria for judgment.	×	•

\*1 The analog output during Auto-Zero or Hold is not reflected.

\*2 The DP-340 operates by external operation when BCD option is selected (DP-330 compatible)

#### Model

Display only DP-340(A.BC.D) A, B, and D in the model notation are mandatory. With Upper/Lower limits DP-340B(A.BC.D) A, B, and D in the model notation are mandatory.

	Classification		Code	Description		
Α	Pressure Range			See the "Pressure Ranges" below.		Applicable
в	Sensor		Ν	Internal pressure sensor (Standard)		Selectable
		Туре	S1	External pressure sensor		
			S2	External pressure sensor with drip-proof *1	*3	
Б		Cable Length *2	L1	3 m (Standard)		The BCD
			LX5 5 m			is different
			LX10	10 m	*4	The analo
	Options	BCD Output *3 B		BCD option (DP-330 compatible)		Hold is no
		Analog Output	<b>F1</b> F.S. 5 V <sup>*4</sup>		*5	Request f
С			F2	F.S. 10 V <sup>*4</sup>		Pressure/
			Α	Analog current output 4 to 20 mA*5		models.
		Interface *6	Q1	Input of 5 V supported	*6	Standard
	Power Source	ອ Vith AC Adapter ທ (Standard)	VG	100 VAC cable 3 m	0	Stanuaru
D			VH	240 VAC cable 2 m		
			VK	240 VAC cable 2 m (Only for Chinese customers)		
		Without AC Adapter	٧J	External 24 VDC power source is required.	]	

- le only for Gauge Pressure model.
- le if the sensor type is "external".

nly for DP-340. pin assignment of the connector nt between DP-340 and DP-340B.

- og output during Auto-Zero or ot reflected.
- for quotation (RFQ) is required for Vacuum (X) and Vacuum (V)
- input is 24 V.

#### Pressure Ranges

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Code	Diff. pressure / Gauge pressure	Measurement Range	Display Digits at F.S.	Code	Diff. pressure / Gauge pressure	Measurement Range	Display Digits at F.S.
5PD	Diff.	0 to 500 Pa	500	V2KD	Vacuum, Diff.	-2 kPa to 0	-1.999
1KD	Diff.	0 to 1 kPa	1.000	V5KD	Vacuum, Diff.	-5 kPa to 0	-5.00
2KD	Diff.	0 to 2 kPa	1.999	V10KD	Vacuum, Diff.	-10 kPa to 0	-10.00
5KD	Diff.	0 to 5 kPa	5.00	V20KD	Vacuum, Diff.	-20 kPa to 0	-19.99
10KD	Diff.	0 to 10 kPa	10.00	V50KD	Vacuum, Diff.	-50 kPa to 0	-50.0
20KD	Diff.	0 to 20 kPa	19.99	V50KG	Vacuum, Gauge	-50 kPa to 0	-50.0
50KD	Diff.	0 to 50 kPa	50.0	V100KD	Vacuum, Diff.	-100 kPa to 0	-100.0
100KD	Diff.	0 to 100 kPa	100.0	V100KG	Vacuum, Gauge	-100 kPa to 0	-100.0
50KG	Gauge	0 to 50 kPa	50.0	X5PD	Vacuum/Pressure, Diff.	±500 Pa	500
100KG	Gauge	0 to 100 kPa	100.0	X1KD	Vacuum/Pressure, Diff.	±1 kPa	1.000
200KG	Gauge	0 to 200 kPa	199.9	X2KD	Vacuum/Pressure, Diff.	±2 kPa	1.999
500KG	Gauge	0 to 500 kPa	500	X5KD	Vacuum/Pressure, Diff.	±5 kPa	5.00
1MG	Gauge	0 to 1 MPa	1.000	X10KD	Vacuum/Pressure, Diff.	±10 kPa	10.00
2MG	Gauge	0 to 2 MPa	1.999	X20KD	Vacuum/Pressure, Diff.	±20 kPa	19.99
5MG	Gauge	0 to 5 MPa	5.00	X50KD	Vacuum/Pressure, Diff.	±50 kPa	50.0
10MG	Gauge	0 to 10 MPa	10.00	X50KG	Vacuum/Pressure, Gauge	±50 kPa	50.0
20MG	Gauge	0 to 20 MPa	19.99	X100KD	Vacuum/Pressure, Diff.	±100 kPa	100.0
50MG	Gauge	0 to 50 MPa	50.0	X100KG	Vacuum/Pressure, Gauge	±100 kPa*1	100.0
V5PD	Vacuum, Diff.	-500 Pa to 0	-500	X200KG	Vacuum/Pressure, Gauge	±200 kPa*1	199.9
V1KD	Vacuum, Diff.	-1 kPa to 0	-1.000	X500KG	Vacuum/Pressure, Gauge	±500 kPa	500

Range of the negative side is down to -100 kPa. \*1

### **Specifications**

•			_			
		Differential Pressure Gauge Pressure			ssure	
Measuren	nent Range	500 Pa, 1 kPa, 2 kPa, 5 l		50 kPa, 100 kPa, 200 kPa, 50		
		50 kPa, 100 kPa, -100 kF	Pa	1 MPa, 2 MPa, 5 MPa, 10 MPa, 20 MPa, 50 MPa		
Pressu	re Media	Air, Noncorr	osive das	Air, Noncorrosive gas/liquid		
110000			5	(Not corrosive to wetted material)		
Sensing	g Element	Beryllium	copper	SUS630		
Transdu	icer Type	Inductan	ce type	Capacitance	e type	
Acc	uracy	±0.3% of F.	S. ±1 digit	±0.25% of F.S	. ±1 digit	
Temp. Chara	acteristic: Zero		±0.03	% of FS/°C		
Temp. Chara	cteristic: Span		±0.03	% of FS/°C		
Droof	Pressure	Ranges 50 kPa or less	10 x F.S.	Ranges 5 MPa or less	2 x F.S.	
PIOOLE	ressure	Range 100 kPa	5 x F.S.	Others ranges	1.5 x F.S.	
Maximum L	ine Pressure	2 x Proof pressure				
Respor	nse Time	≤ 300 ms (99% of F.S.)		≤ 30 ms (99% of F.S.)		
Number of digi	tal display digits		3.5-digits 000 to ±1999			
Sampli	ing Time		250 ms, 50	50 ms (Togglable)		
Analog	Output *1	The analog vol	tage 0.5, 1 or 2 VDC co	rresponding to the Pressure Ra	nge is output.	
Sensor R	aw Output		5 V, 10 V a	vailable (Option)		
	DP-340	Option				
BCD Output	DP-340B	Equipped as standard				
Power Source		24 VDC 0.2A (100 to 240 VAC adapter included)				
Operating	Temperature	5 to 40 °C				
Pressure	e Inlet Port	Rc1/8				

The analog output during Auto-Zero or Hold is not reflected. \*1

#### External Appearance



Since the lowest calibration point for all the Cosmo products is -90 kPa, the guaranteed range is down to -90 kPa as well. \* The contents in this Product Information are as of January 2024. The specifications are subject to change without notice.

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