

DP Gauge DP-340BA

High-Performance Digital Pressure Gauge for Various Applications

- Wide range of pressures (500 Pa to 50 MPa)
- Two types of sensors (Differential pressure, Gauge pressure)
- Sensors with excellent overpressure resistance (built-in and separate)
- Easy replacement for previous models with the same panel cut dimensions

Overview

Digital Output	RS-232C and parallel BCD interface for smooth data transfer to external devices
Comparators	Limits can be set in 4 levels (Upper limits (HH, HI), Lower limits (LO, LL)) for criteria for judgment.
Display Digits	Select from 3.5-digit and 4.5-digit.
Number of Channels	Easy channel switching with 10-channel function
Analog Output	The analog voltage corresponding to the Pressure Range is output. (Not reflected in Auto-Zero or Hold.)
Auto-Zero	With the current value set to zero, pressure changes after that can be displayed.
Zero Adjustment	Zero-point adjustment by just pushing a button.
Hold	Select from Display hold, Peak hold and Bottom hold.
Keyboard Lock	Prevents false operation.

Model

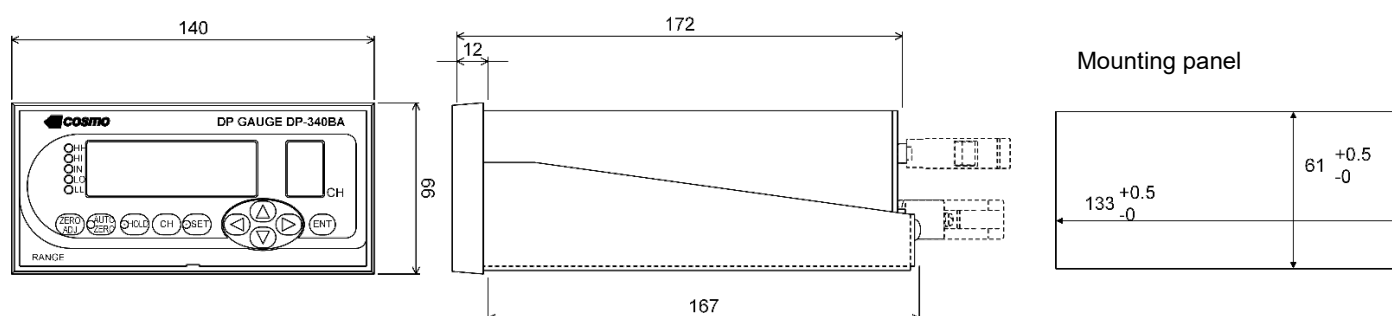
DP-340BA (A.BC.D) A, B, and D are mandatory.

	Classification	Code	Description
A	Pressure Range	---	See the "Pressure Ranges" below.
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B	Sensor	Type	N Built-in pressure sensor (Standard)
		S1	External pressure sensor
		S2	External pressure sensor with drip-proof *1
	Cable Length *2	L1	Cable length 3 m (Standard)
		LX5	Cable length 5 m
		LX10	Cable length 10 m

	Classification	Code	Description
C	Option	Analog Output	F1 Analog output F.S. 5 V *3
		F2	Analog output F.S. 10 V *3
		A	Analog current output 4 to 20 mA
D	Power Source	Interface *4	Q1 Input of 5 V supported
		With AC Adapter (Standard)	VG 100 VAC power cable 3 m
		VH	240 VAC power cable 2 m
		VK	240 VAC power cable 2 m (For Chinese customers)
		Without AC Adapter	VJ External 24 VDC power source is required.

*1 Applicable only for Gauge Pressure. *2 Select if the sensor type is "external". *3 Not reflected in Auto-Zero and Hold. *4 Standard input is 24 V.

External Appearance



■ Pressure Ranges

Code	Differential / Gauge	Measure range	FS display digits	Code	Differential / Gauge	Measure range	FS display digits
5PD	Differential	0 to 500 Pa	500	V2KD	Vacuum, Differential	-2 to 0 kPa	-1.999
1KD	Differential	0 to 1 kPa	1000	V5KD	Vacuum, Differential	-5 to 0 kPa	-5.00
2KD	Differential	0 to 2 kPa	1.999	V10KD	Vacuum, Differential	-10 to 0 kPa	-10.00
5KD	Differential	0 to 5 kPa	5.00	V20KD	Vacuum, Differential	-20 to 0 kPa	-19.99
10KD	Differential	0 to 10 kPa	10.00	V50KD	Vacuum, Differential	-50 to 0 kPa	-50.0
20KD	Differential	0 to 20 kPa	19.99	V50KG	Vacuum, Gauge	-50 to 0 kPa	-50.0
50KD	Differential	0 to 50 kPa	50.0	V100KD	Vacuum, Differential	-100 to 0 kPa *2	-100.0
100KD	Differential	0 to 100 kPa	100.0	V100KG	Vacuum, Gauge	-100 to 0 kPa *2	-100.0
50KG	Gauge	0 to 50 kPa	50.0	X5PD	Pressure/Vacuum, Differential	±500 Pa	500
100KG	Gauge	0 to 100 kPa	100.0	X1KD	Pressure/Vacuum, Differential	±1 kPa	1000
200KG	Gauge	0 to 200 kPa	199.9	X2KD	Pressure/Vacuum, Differential	±2 kPa	1.999
500KG	Gauge	0 to 500 kPa	500	X5KD	Pressure/Vacuum, Differential	±5 kPa	5.00
1MG	Gauge	0 to 1 MPa	1.000	X10KD	Pressure/Vacuum, Differential	±10 kPa	10.00
2MG	Gauge	0 to 2 MPa	1.999	X20KD	Pressure/Vacuum, Differential	±20 kPa	19.99
5MG	Gauge	0 to 5 MPa	5.00	X50KD	Pressure/Vacuum, Differential	±50 kPa	50.0
10MG	Gauge	0 to 10 MPa	10.00	X50KG	Pressure/Vacuum, Gauge	±50 kPa	50.0
20MG	Gauge	0 to 20 MPa	19.99	X100KD	Pressure/Vacuum, Differential	±100 kPa *2	100.0
50MG	Gauge	0 to 50 MPa	50.0	X100KG	Pressure/Vacuum, Gauge	±100 kPa *2	100.0
V5PD	Vacuum, Differential	-500 Pa to 0	-500	X200KG	Pressure/Vacuum, Gauge	-100 to 200 kPa *1 *2	199.9
V1KD	Vacuum, Differential	-1 kPa to 0	-1.000	X500KG	Pressure/Vacuum, Gauge	-100 to 200 kPa *1 *2	500

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

* 2 Since the lowest calibration point for all the Cosmo products is -90 kPa, the guaranteed range is down to -90 kPa as well.

■ Specifications

	Differential Pressure		Gauge Pressure	
Measurement Range	500 Pa, 1 kPa, 2 kPa, 5 kPa, 10 kPa, 20 kPa, 50 kPa, 100 kPa, -100 kPa		50 kPa, 100 kPa, 200 kPa, 500 kPa, -100 kPa, 1 MPa, 2 MPa, 10 MPa, 20 MPa, 50 MPa	
Pressure Media	Air, non-corrosive gas		Air, non-corrosive gas, liquid (Not corrosive to wetted material)	
Sensing Element	Beryllium copper		SUS630	
Transducer Type	Inductance type		Capacitance type	
Accuracy	±0.3% of F.S. ±1 digit		±0.25% of F.S. ±1 digit	
Temp Characteristic: Zero	±0.03 % of F.S./°C			
Temperature Characteristic: Span	±0.03 % of F.S./°C			
Permissible Overpressure	Ranges 50 Pa or less	10 x F.S.	Ranges 5 MPa or less	2 x F.S.
	Range 100 kPa	5 x F.S.	Other ranges	1.5 x F.S.
Maximum Line Pressure	2 x Permissible overpressure		---	
Response Time	≤ 300 ms (99% of F.S.)		≤ 30 ms (99% of F.S.)	
Number of Display Digits	3.5 digits	000 to 1999 (Default)		
	4.5 digits	0000 to ±19999		
Number of Channels	10 channels (CH0 to CH9)			
Sampling Time	250 ms, 50 ms (switchable)			
Analog Output	The analog voltage 0.5, 1 or 2 VDC corresponding to the Pressure Range is output. (Not reflected in Auto-Zero and Hold.)			
Sensor Raw Output	5 V, 10 V supported (Option)			
BCD Output	RS-232C and parallel BCD output			
Power Source	24 VDC ±10% 0.3 A (100 to 240 VAC adapter included)			
Operating Temperature	5 to 40 °C			
Pressure Inlet Port	Rc 1/8 (NPT possible)			

*The contents of this catalog are as of December 2025. The specifications are subject to change without prior notice.

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