

SPECIFICATIONS

Item	Model No.	Type	Vacuum pressure				Positive pressure					
			- 101kPa type				100kPa type			1MPa type		
			Standard	Light weight	Flat	IP67	Standard	Flat	IP67	Standard	Flat	IP67
	Asian		DP2-20	DP2-80	—	DP2-60	DP2-21	DP2-41	DP2-61	DP2-22	DP2-42	DP2-62
	North American (Note)		DP2-20F(-P)	—	DP2-40N	DP2-60N	DP2-21F(-P)	DP2-41N	DP2-61N	DP2-22F(-P)	DP2-42N	DP2-62N
	European		—	—	DP2-40E	DP2-60E	—	DP2-41E	DP2-61E	—	DP2-42E	DP2-62E
Type of pressure			Gauge pressure									
Rated pressure range			0 to - 101.3 kPa				0 to 100.0 kPa			0 to 1.000 MPa		
Set pressure range			$\left\{ \begin{array}{l} 5.1 \text{ to } -101.3 \text{ kPa} \\ 0.052 \text{ to } -1.033 \text{ kgf/cm}^2, 0.051 \text{ to } -1.013 \text{ bar} \\ 0.74 \text{ to } -14.70 \text{ psi}, 38 \text{ to } -760 \text{ mmHg} \\ 1.5 \text{ to } -29.9 \text{ inHg} \end{array} \right\}$				$\left\{ \begin{array}{l} -5.0 \text{ to } 100.0 \text{ kPa} \\ -0.051 \text{ to } 1.020 \text{ kgf/cm}^2 \\ -0.050 \text{ to } 1.000 \text{ bar} \\ -0.72 \text{ to } 14.50 \text{ psi} \end{array} \right\}$			$\left\{ \begin{array}{l} -0.050 \text{ to } 1.000 \text{ MPa} \\ -0.51 \text{ to } 10.20 \text{ kgf/cm}^2 \\ -0.50 \text{ to } 10.00 \text{ bar} \\ -7.2 \text{ to } 145.0 \text{ psi} \end{array} \right\}$		
Pressure withstandability			490 kPa							1.47 MPa		
Applicable fluid			Non-corrosive gas									
Selectable units			kPa, kgf/cm ² , bar, psi, mmHg, inHg				kPa, kgf/cm ² , bar, psi			MPa, kgf/cm ² , bar, psi		
Supply voltage			12 to 24 V DC $\pm 10\%$ Ripple P-P 10% or less									
Current consumption			50 mA or less									
Comparative outputs (Comparative Output 1) (Comparative Output 2)			<Asian, North American (Standard NPN output, flat and IP67 types)> NPN open-collector transistor • Maximum sink current: 100 mA • Applied voltage: 30 V DC or less (between comparative output and 0 V) • Residual voltage: 1 V or less (at 100 mA sink current) 0.4 V or less (at 16 mA sink current)				<North American (Standard PNP output type), European> PNP open-collector transistor • Maximum source current: 100 mA • Applied voltage: 30 V DC or less (between comparative output and + V) • Residual voltage: 2 V or less (at 100 mA source current)					
Utilization category			DC-12 or DC-13									
Output modes			Equipped with 4 types of modes: hysteresis mode, window comparator mode, dual output mode, automatic sensitivity setting mode (selectable by key operation)									
Hysteresis			1 digit (however, variable in hysteresis mode and 2 digits when using psi unit)									
Repeatability			Within $\pm 0.2\%$ F.S. ± 1 digit									
Response time			2.5 ms or less									
Short-circuit protection			Incorporated									
Analog voltage output			Output voltage: 1 to 5 V (over rated pressure range) Zero-point: within $1 \text{ V} \pm 5\%$ F.S. Span: within $4 \text{ V} \pm 5\%$ F.S. Linearity: within $\pm 1\%$ F.S. Output impedance: 1 k Ω approx.									
Display			3 1/2 digit red LED display (Sampling rate: 4 times/sec. approx.)									
Displayable pressure range			$\left\{ \begin{array}{l} 5.1 \text{ to } -101.3 \text{ kPa} \\ 0.052 \text{ to } -1.033 \text{ kgf/cm}^2, 0.051 \text{ to } -1.013 \text{ bar} \\ 0.74 \text{ to } -14.70 \text{ psi}, 38 \text{ to } -760 \text{ mmHg} \\ 1.5 \text{ to } -29.9 \text{ inHg} \end{array} \right\}$				$\left\{ \begin{array}{l} -5.0 \text{ to } 100.0 \text{ kPa} \\ -0.051 \text{ to } 1.020 \text{ kgf/cm}^2 \\ -0.050 \text{ to } 1.000 \text{ bar} \\ -0.72 \text{ to } 14.50 \text{ psi} \end{array} \right\}$			$\left\{ \begin{array}{l} -0.050 \text{ to } 1.000 \text{ MPa} \\ -0.51 \text{ to } 10.20 \text{ kgf/cm}^2 \\ -0.50 \text{ to } 10.00 \text{ bar} \\ -7.2 \text{ to } 145.0 \text{ psi} \end{array} \right\}$		
Analog bar display			LED bar display in steps of 10% F.S. approx.									
Operation indicators		Comparative Output 1	Orange LED (lights up when Comparative Output 1 is ON)									
		Comparative Output 2	Green LED (lights up when Comparative Output 2 is ON)									
Pollution degree			3 (Industrial environment)									
Protection			Standard, Flat and Light weight types: IP40 (IEC), IP67 type: IP67 (IEC)									
Ambient temperature			- 10 to + 50 °C + 14 to + 122 °F (No dew condensation or icing allowed), Storage: - 10 to + 60 °C + 14 to + 140 °F									
Ambient humidity			35 to 85 % RH, Storage: 35 to 85 % RH									
EMC			EN 50081-2, EN 50082-2, EN 61000-6-2									
Voltage withstandability			1,000 V AC for one min. between all supply terminals connected together and enclosure									
Insulation resistance			50 M Ω , or more, with 500 V DC megger between all supply terminals connected together and enclosure									
Vibration resistance			10 to 150 Hz frequency, 0.75 mm 0.030 in amplitude in X, Y and Z directions for two hours each									
Shock resistance			100 m/s ² acceleration (10 G approx.) in X, Y and Z directions for three times each									
Temperature characteristics			Over ambient temperature range - 10 to + 50 °C + 14 to + 122 °F : within $\pm 1\%$ F.S. of detected pressure at + 20 °C + 68 °F									
Pressure port		Asian	Standard, Flat and IP67 types: Rc (PT) 1/8 female thread, Light weight type: M5 female thread									
		North American	Standard type: NPTF 1/8 female thread, Flat and IP67 types: NPT 1/8 female thread									
		European	Flat and IP67 types: G (PF) 1/8 female thread									
Material			Front case: ABS, Rear case: PPS (glass fiber reinforced), Display surface: Acrylic Pressure port attachment: Die-cast zinc alloy [Light weight type: POM (glass fiber reinforced), pressure port is brass (nickel plated)] Front cover (IP67 type only): Polycarbonate									
Cable			0.15 mm ² 5-core oil resistant cabtyre cable, 2 m 6.562 ft long (IP67 type: 5 m 16.404 ft long)									
Cable extension			Extension up to total 100 m 328.084 ft (less than 10 m 32.808 ft when conforming to CE marking) is possible with 0.3 mm ² , or more, cable.									
Weight			Standard type: 95 g approx., Flat type: 120 g approx., IP67 type: 370 g approx., Light weight type: 70 g approx.									
Accessories			Hexagon-socket-head plug for pressure port: 1 pc. (Standard type only), Pressure unit label: 1 pc.									

Note: Model Nos. of North American standard type having the suffix '-P' are PNP output type.

Head-separated DP5/DPH

DP4

Digital Display DP2

DP3

DP-M

LED Bar Display PE