Low Pressure Transmitter (Wetted Part: SUS316L)

VPNPR(G) series

100kPa-1700kPa 100kPa-1700kPa abs



List of digital panel meters

- Diaphragm structure enables high accuracy measurement even in lower pressure range. (Non Linearity: ±0.25%R.C.)
- Highly leak-proof and can be used even at high vacuum.
- Gauge pressure reference and absolute pressure reference available.

Measured medium	Water, oil, gases or other media that will not corrode SUS316L.
Pressure Type	Positive, compound, negative and absolute pressures can be measured.
Measured Range	Can be specified within the range of 100 kPa to 1700 kPa of rated capacity (Calibration: 50 kPa to 1700 kPa). Specify more than 50% of rated capacity as the calibration range.
Output type	4–20mA (2 wire system, 4 wire system), Specify among 4 to 20 mA (2-wire, 4-wire), 1 to 5 V, 0 to 5 V, and 0 to 10 V.

Specifications

Non Linearity	±0.25%R.C.
Hysteresis	±0.25%R.C.
Compensated Temperature Range (Temperature of medium to be measured)	0–70°C (No condensation or freezing)

Safe Temperature Range (Temperature of medium to be measured)	-20-80°C (No condensation or freezing)			
Temperature Effect on Zero Balance	$\pm 1\%$ R.C./0–70°C (At room temperature of 25°C)			
Temperature Effect on Load	$\pm 1\%$ R.C./0–70°C (At room temperature of 25°C)			
Safe Overload Rating	200%R.C.			
Ultimate Overload Rating	300%R.C.			
Insulation Resistance	$100 \mathrm{M}\Omega$ or more (DC50V)			
Pressure Port Material	SUS316L			
Connection Screw	Selectable: R3/8 and G3/8			
Fastening Torque;Recommended	20N·m			
Fastening Torque;Maximum	30N·m			
Power	Selectable: $\boxed{4}$ DC24V ($\pm 10\%$), $\boxed{5}$ DC12V ($\pm 10\%$) *Only 24V DC available when analog output is $\boxed{A5}$			
Cable	44- or 2-core shielded (oilproof) cable 2m(Standard) φ6mm Cable in tube is used for the waterproof connector and pigtail types of output range 500 kPa or below.(Gauge pressure only)			
Weight	Approx. 200g (Cable not included)			
Accessories	Operating manual 1 copy (Specify English or Japanese.) Test report 1 copy P-20 4D(×1)(G screw only)			

Model Selection



Selection	Check	Model		Spo	ecifications	
1.Model		VPNPR	Low Pressure Transmitter (Wetted Part: SUS316L) *Connection screw: R3/8			
		VPNPG	Low Pressure Transmitter (Wetted Part: SUS316L) *Connection screw: G3/8			
2.Analog output	-	-	Output type	Response frequency	Safe load resistance	Consumption current
*Only		A2	1-5V	200Hz	$5k\Omega$ or more	Approx. 23mA

A6 available for waterproof terminal box type		A3	4–20mA (4-wire)		DC24V: 500Ω or less/DC12V: 250Ω or less	Approx. 40mA
		A4	0-5V		$5k\Omega$ or more	Approx. 23mA
		A5	0–10V		$5k\Omega$ or more	Approx. 23mA
		A6	4–20mA (2-wire)		DC24V: 500Ω or less/ DC12V 150Ω or less	-
	-	-	Rated capacity	Example of calibration range		
3.Calibration		See right table. Enter the range _ in the	100kPa	100kPa (0–100)kPa	±50kPa (-50–50) kPa ±100kPa (-100–100) kPa	100kPa (abs) (0–100) kPa abs
			200kPa	200kPa (0–200) kPa	-100- 200kPa (-100-200) kPa	200kPa (abs) (0–200) kPa abs
		as it is.	700kPa	700kPa (0–700) kPa	-100- 350kPa (-100- 350kPa) kPa	700kPa (abs) (0–700) kPa abs
		1700kPa	1700kPa (0–1700) kPa	-100- 1000kPa (-100-1000) kPa	1700kPa (abs) (0–1700) kPa abs	
		N	Sta	indard conne	ctor Equivale	nt to IP40
4.Cable Connection		W	Waterproof connector Equivalent to IP56			
		S	Pigtail Equivalent to IP54			
		Т	Waterproof terminal box type Equivalent to IP55 *Applicable only when analog output is A6. Cable not included			

5.Power	4	DC24V (±10%)
	5	DC12 V ($\pm 10\%$)*Not available when analog output is $\boxed{\textbf{A5}}$
6.Length (Cable)	2m	2m Standard
	3m	3m
	5m	5m
	10m	10m
	□□m	Other length *Contact our sales office for other cable lengths.

External dimensions (Unit: mm)

Standard connector type 119 15 10 74.5 7.512 (2) φ30 HEX.27 7-pin connector receptacle PRC03-21A10-7F 3 31 7-pin connector plug PRC03-12A10-7M ϕ 8 pressure port Span volume Sensor element Zero volume R3/8 or G3/8 Sensor cable

Pigtail cable type





