Pressure Transmitter for Flush type Middle High Pressure

VPRF series

1MPa–50MPa

List of digital panel meters

- Suitable for measurement of viscous media since the flush type (no feed port) wetted part is hardly clogged up.
- Wetted part constructed integral with diaphragm does not use any sealed liquid, offering durability, reliability and long life.
- Abundant analog output available.
  [4–20mA (2 wire system, 4 wire system), 1–5V, 0–5V, 0–10V]

Measured medium	Water, oil, gases or other media that will not corrode 15-5PH (precipitation-hardened stainless steel).
Pressure Type	Positive and compound pressures can be measured.
Measured Range	Can be specified within the range of 1 MPa to 50 MPa of rated capacity (Calibration: 0.5 MPa to 50 MPa).
Output type	Specify among 4 to 20 mA (2 wire system, 4 wire system), 1 to 5 V, 0 to 5 V, and 0 to 10 V.

Specifications

Non Linearity	±0.5%R.C.
Hysteresis	±0.5%R.C.
Compensated Temperature Range (Temperature of medium to be measured)	−10–50°C (No condensation or freezing)
Safe Temperature Range (Temperature of medium to be measured)	−10–75°C (No condensation or freezing)
Temperature Effect on Zero Balance	±0.8%R.C./10°C
Temperature Effect on Load	±0.8%R.C./10°C

Safe Overload Rating	150%R.C.
Ultimate Overload Rating	200%R.C.
Insulation Resistance	100MΩ or more (DC50V)
Pressure Port Material	15-5PH (Precipitation hardening stainless steels) (*1)
Connection Screw	G3/8
Recommended fastening Torque	10–20N·m
Fastening Torque;Maximum	30N·m
Power	Selectable: 4 DC24V (±10%), 5 DC12V (±10%) *Only 24V DC available when analog output is A5
Cable	4- or 2-core shielded (oilproof) cable 2m Standard φ6mm
Weight	Approx. 300g (Cable not included)
Accessories	Operating manual 1 copy (Specify English or Japanese.) Test report 1 copy Aluminum packing(×1)(Copper packing × 1 for 50 MPa model only)

Model Selection

	①Model		②Analog output		③Calibration	④Cable Connection		⑤Power	⑥Length (Cable)
Example	VPRF	—	②	—	③	④	—	⑤	⑥

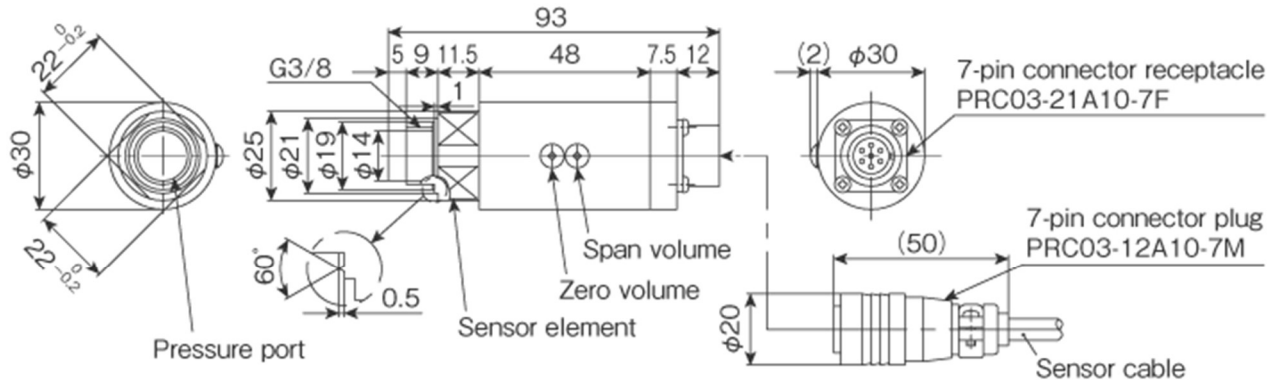
Selection	Check	Model	Specifications			
1.Model	○	VPRF	Pressure Transmitter for Flush type Middle High Pressure *Connection screw: G3/8			
2.Analog output *Only A6 available for waterproof terminal box type	-	-	Output type	Response frequency	Safe load resistance	Consumption current
		A2	1–5V	500Hz	5kΩ or more	Approx. 23mA
		A3	4–20mA (4-wire)		DC24V: 500Ω or less/ DC12V: 250Ω or less	Approx. 40mA
		A4	0–5V		5kΩ or more	Approx. 23mA
		A5	0–10V		5kΩ or more	Approx. 23mA

		A6	4–20mA (2-wire)	1kHz	DC24V: 500Ω or less/ DC12V:150Ω or less	-
3.Calibration	-	-	Rated capacity	Example of calibration range		
		See right table. Enter the range in the as it is.	1MPa	1MPa (0–1) MPa	0.5MPa (0–0.5) MPa	
			2MPa	2MPa (0–2) MPa	1.5MPa (0–1.5) MPa	
			5MPa	5MPa (0–5) MPa	3MPa (0–3) MPa	
			10MPa	10MPa (0–10) MPa	7MPa (0–7) MPa	
			20MPa	20MPa (0–20) MPa	14MPa (0–14) MPa	
			50MPa	50MPa (0–50) MPa	35MPa (0–35) MPa	
4.Cable Connection		Blank	Standard connector Equivalent to IP40			
		W	Waterproof connector Equivalent to IP56			
		S	Pigtail Equivalent to IP54			
		T	Waterproof terminal box type Equivalent to IP55 *Applicable only when analog output is A6. Cable not included			
5.Power		4	DC24V (±10%)			
		5	DC12V (±10%) *Not available when analog output is A5			
6.Length (Cable)		2m	2m Standard			
		3m	3m			
		5m	5m			
		10m	10m			

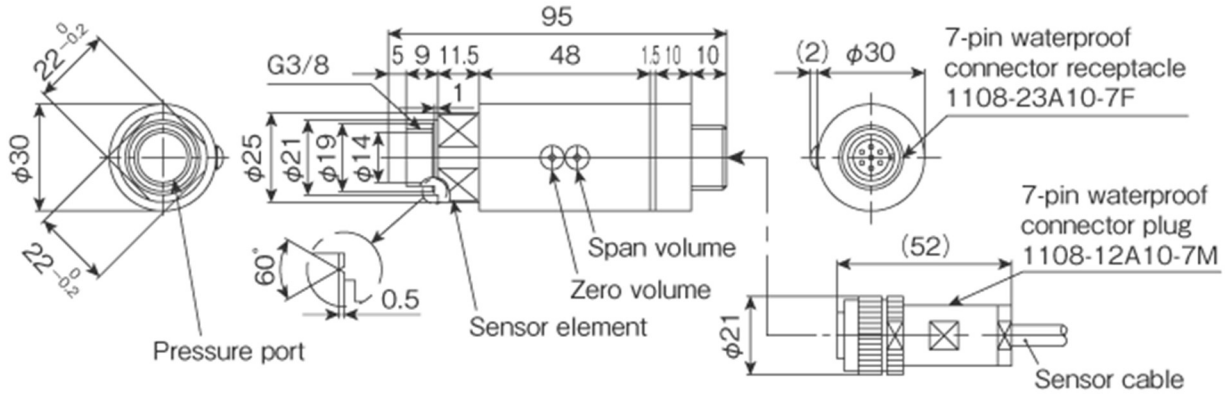
		□□m	Other length *Contact our sales office for other cable lengths.

External dimensions (Unit: mm)

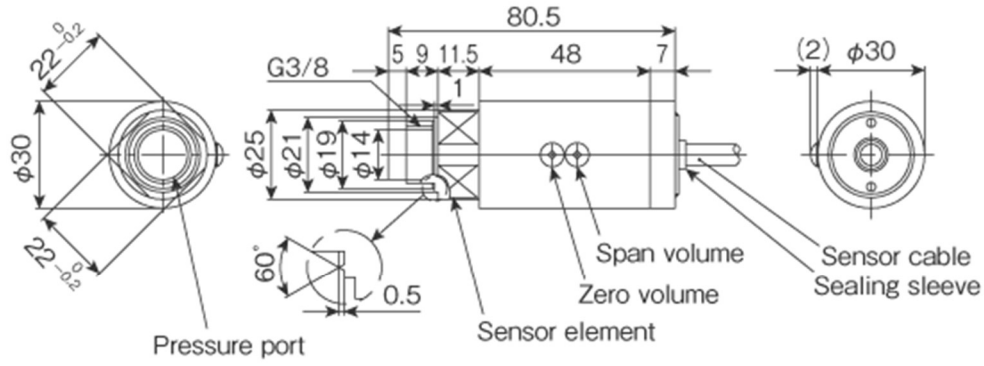
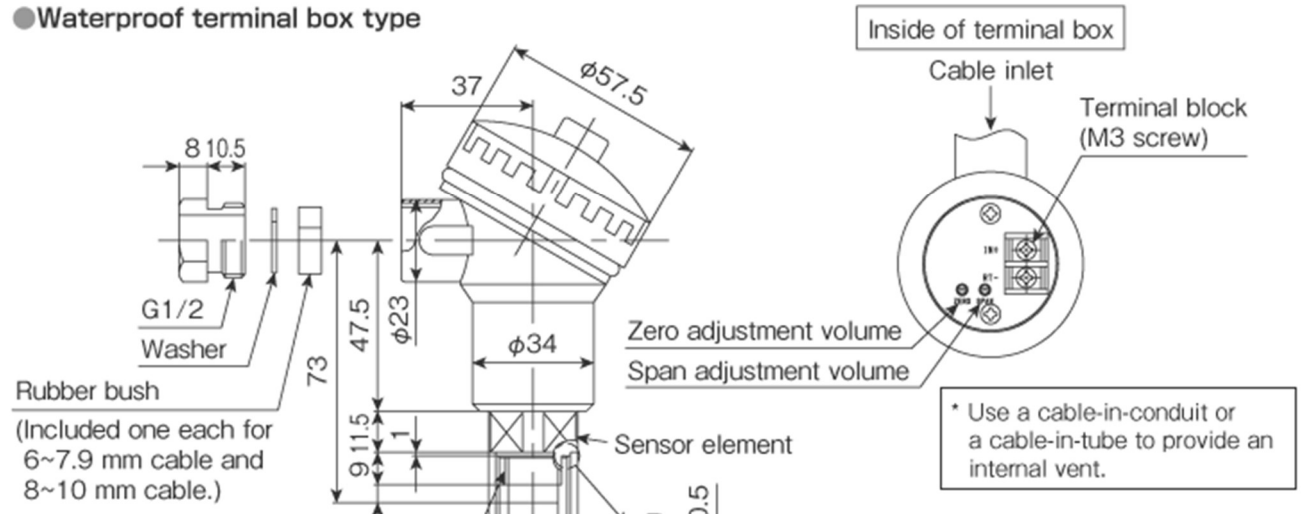
●Standard connector type



●Waterproof connector type



●Pigtail cable type



●Waterproof terminal box type