



RBV • RBI

Features 1.Compact 2.With adjustment function

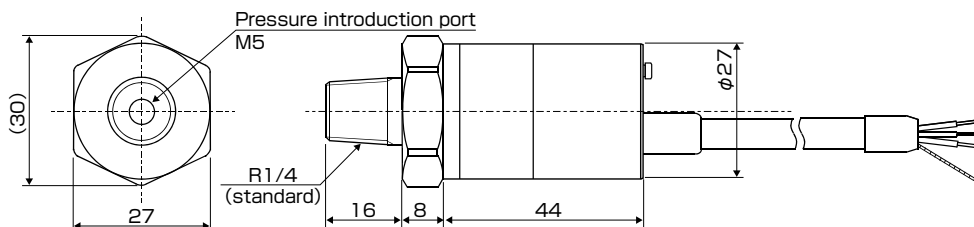
- Absolute pressure sensor with a welded structure that does not use an O-ring in the wetted part
- Capable of high-accuracy vacuum region measurement without being affected by atmospheric fluctuations
- Support of a wide range of pressure media such as gas and medicinal solution
- Output signal of 1 to 5 VDC or 4 to 20 mA DC from a built-in amplifier circuit
- With trimmer for zero and span adjustment

Specifications

Model	RBV • RBI			
	-050KP	-100KP	-300KP	-600KP
Rated pressure	0 to 50kPa abs	0 to 100kPa abs	0 to 300kPa abs	0 to 600kPa abs
Pressure type	Absolute pressure			
Overpressure	RBV : 200% of the rated pressure / RBI : 150% of the rated pressure			
Wetted part material	Diaphragm : SUS316L Pressure port : SUS316			
Sealing liquid	Silicone oil			
Applicable media	Gas and fluid (media not damaging the wetted part material)			
Power supply	12 to 28VDC			
Output	1 to 5VDC only	RBV : 1 to 5VDC / RBI : 4 to 20mA DC		
Current consumption	RBV : 6mA or less			
Load resistance	RBV : 1k Ω or more / RBI : 600 Ω or less (at power of 24 VDC)			
Responsiveness	5msec or less			
Accuracy (linearity)	± 0.5% F.S. or less * 1 (± 0.3% F.S. or less)			
Temperature characteristics	± 0.05% F.S. / °C or less (0 to 60°C)			
Compensated temperature range	0 to 60°C			
Operating temperature range (Measurement medium temperature)	- 20 to 80°C (no freezing allowed) - 20 to 100°C (no freezing allowed)			
Operating humidity range	35 to 85% RH (no dew condensation allowed)			
Pressure connection port	R1/4 (standard) • R3/8 • R1/2 • G1/4 • G3/8			
Cable	φ 6 vinyl : 500mm / 2000mm (standard) Shield cable			
Regulator	With trimmer for zero and span adjustment			
Insulation resistance	100M Ω or more / 500VDC			
Withstand voltage	500VAC, 1 minute			
Vibration resistance	98.1m / s ² , 2 hours (X, Y, and Z directions)			
Weight	Approx 200g			
Impact of mounting orientation (port orientation changed from downward to sideways)	+ 0.3% F.S.	+ 0.1% F.S.		

* 1. We also manufacture high-accuracy pressure sensors (accuracy: ± 0.25% F.S. or less).

Dimensions (Units : mm)



Cables / wires

	RBV	RBI
Red	Power supply +	Power supply +
White	Output	Power supply -
Black	Common	—

Model

R	B	V	-	1	0	0	K	P	-	0	2	-	R	3
Type				Pressure range			Unit of pressure			Cable length			Pressure connection port	
							KP : kPa			Space : 0.5m			Space : R1/4 (standard)	
							MP : MPa			02 : 2m			R3 : R3/8	
										05 : 5m			R4 : R1/2	
										10 : 10m			G2 : G1/4	
													G3 : G3/8	