# PGS-A

### •Compact & lightweight •1 to 50 MPa

## 2-86

## Small-sized Pressure Transducer



## **Compact & lightweight**

Not affected by atmospheric pressure change
 Strong against vibration and impact

PGS-A series pressure transducers are designed and manufactured to be especially compact and lightweight.

Performance					
Rated Capacity	See table below.				
Nonlinearity	Within ±0.2% RO				
	(20KA: Within ±0.3% RO)				
	(10KA: Within ±0.4% RO)				
Hysteresis	Within ±0.2% RO				
Repeatability	0.1% RO or less				
Rated Output	2 mV/V ±0.5%				
Environmenta	l Characteristics				
Safe Temperatu					
Compensated Temperature -10 to 60°C					
Temperature Eff					
Temperature Effect on Output Within ±0.01%/°C					
<b>Electrical Char</b>	acteristics				
Electrical Chara Safe Excitation					
	15 V AC or DC				
Safe Excitation	15 V AC or DC Excitation 1 to 10 V AC or DC				
Safe Excitation Recommended I	15 V AC or DC           Excitation         1 to 10 V AC or DC           e         600 Ω ±17.5%				
Safe Excitation Recommended I Input Resistance Output Resistan	15 V AC or DC           Excitation         1 to 10 V AC or DC           e         600 Ω ±17.5%				
Safe Excitation Recommended I Input Resistance Output Resistan	$\begin{array}{c} 15  V  AC  or  DC \\ \hline \textbf{Excitation} & 1  to  10  V  AC  or  DC \\ \hline \textbf{e} & 600  \Omega  \pm 17.5\% \\ \hline \textbf{ce} & 500  \Omega  \pm 1\% \end{array}$				
Safe Excitation Recommended I Input Resistance Output Resistan	$\begin{array}{c c} 15 \text{ VAC or DC} \\ \hline \textbf{Excitation} & 1 \text{ to } 10 \text{ VAC or DC} \\ \hline \textbf{e} & 600 \ \Omega \pm 17.5\% \\ \hline \textbf{ce} & 500 \ \Omega \pm 1\% \\ \hline \textbf{4-conductor } (0.3 \text{ mm}^2) \text{ chloroprene shielded cable,} \end{array}$				
Safe Excitation Recommended I Input Resistance Output Resistan	15 V AC or DC         Excitation       1 to 10 V AC or DC $e$ $600 \Omega \pm 17.5\%$ ce $500 \Omega \pm 1\%$ 4-conductor (0.3 mm²) chloroprene shielded cable,         4.5 mm diameter by 3 m long         Sensor side: Terminated with a connector plug R06-P5F				
Safe Excitation Recommended I Input Resistance Output Resistan	$\begin{array}{c} 15 \text{ V AC or DC} \\ \hline \textbf{Excitation} & 1 \text{ to } 10 \text{ V AC or DC} \\ \hline \textbf{e} & 600 \ \Omega \pm 17.5\% \\ \hline \textbf{ce} & 500 \ \Omega \pm 1\% \\ \hline \textbf{4-conductor (0.3 mm^2) chloroprene shielded cable,} \\ \hline \textbf{4.5 mm diameter by 3 m long} \end{array}$				
Safe Excitation Recommended I Input Resistance Output Resistan	$\begin{array}{c c} 15 \text{ V AC or DC} \\ \hline \textbf{Excitation} & 1 \text{ to } 10 \text{ V AC or DC} \\ \hline \textbf{e} & 600 \ \Omega \pm 17.5\% \\ \hline \textbf{ce} & 500 \ \Omega \pm 1\% \\ \hline \textbf{4-conductor } (0.3 \ \text{mm}^2) \text{ chloroprene shielded cable,} \\ \hline \textbf{4.5 mm diameter by 3 m long} \\ \hline \textbf{Sensor side: Terminated with a connector plug R06-P5F} \\ \hline \textbf{Measuring instrument side: Terminated with a} \end{array}$				

### **Mechanical Properties**

Safe Overloads	150%		
Natural Frequencies	See table below.		
Material	Case: Anode oxidized coated aluminum		
	Liquid-contacting part: SUS 630		
Weight	Approx. 120 g (Excluding cable)		
Degree of Protection	IP52 (IEC 60529)		
Mounting Screw	G3/8, male		

Standard Accessories Gasket (Mild copper)

Models	Rated Capacity	Natural Frequencies (Approx.)
PGS-10KA	1 MPa	11 kHz
PGS-20KA	2 MPa	17 kHz
PGS-50KA	5 MPa	27 kHz
PGS-100KA	10 MPa	35 kHz
PGS-200KA	20 MPa	52 kHz
PGS-300KA	30 MPa	64 kHz
PGS-500KA	50 MPa	85 kHz



Outline

#### General

High temp. Low temp.

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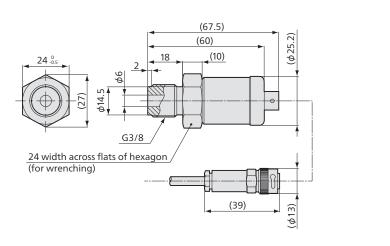
Absolute pressure High pressure

Pressure transmitter

Differential pressure

Distributed pressure





Connector plug PRC03-12A10-7M