## PRESSURE TRANSDUCERS

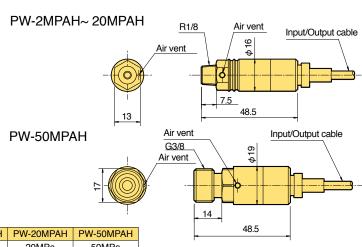
## **PW-PAH** High temperature Pressure Transducer

## 2~50MPa



The PW-PAH pressure transducer is designed to measure pressure in a high temperature with compact size. As the model equipped with a fluoroplastic Input/Output cable, a high temperature pressure measurement is available up to 170°C. These models line up five ranges of 2, 5, 10, 20 and 50MPa.

Protection ratings: IP65 equivalent



■ SPECIFICATIONS

TYPE	PW-2MPAH	PW-5MPAH	PW-10MPAH	PW-20MPAH	PW-50MPAH		48.5	-
Capacity	2MPa	5MPa	10MPa	20MPa	50MPa	]		
Rated Output		2mV/V(	4000× 10 <sup>-6</sup> strai	Gases and liquids pressure				
Non-linearity			0.3%RO					
Hysteresis			0.2%RO		rement in hig			
Repeatability			0.2%RO	ture +1	70°C at max.			
Temperature effect on zero	0.008%RO/°C						st size with	16mm_dia
Temperature effect on span			0.01%/°C			Tomm-ula.		
Compensated temperature range			-40 ~ +150°C	48.5mm	n long			
Allowable temperature range			-40 ~ +170°C	]				
Over load			150%					
Input/Output resistance	350Ω							
Recommended exciting voltage			5V or less					
Allowable exciting voltage			10V	]				
Mounting thread		R1/8 (Male) G3/8 (Male)				Supplied cab	le :	
Materials of pressure media			SUS630	1	P-STB (φ4mm 0.08m	m <sup>2</sup> 4-core shielded		
Weight	50g 70g						resin cable 5m)	

## Small High-Temperature Pressure Transducer with built-in amplifier

2~20MPa



**Excellent anti-vibration characteristics** 

Measurement possible in high temperature up to 120°C Light weight of 45 g, which is less than half of conventional products.

Overall length after installation is 32 mm, which is less than one third of conventional products

The PWFA-PA is a M8 bolt-shaped flush diaphragm pressure transducer with a built-in strain amplifier. Since the PWFA-PA is small sized and can be used for dynamic measurement in high temperature ranges, it is most suited to in-vehicle measurement of hydraulic oil pressure of engine, motor, transmission, oil pump and so on.

Protection ratings: IP65 equivalent

49 17 6 26 Input/Output cable

SPECIFICATIONS

Output voltage $0.5 \sim 5V$ Non-linearity $0.5\%RO$ Hysteresis $0.3\%RO$ Temperature effect on zero $0.1\%RO/°C$ Temperature effect on span $0.03\%/°C$ Compensated temperature range $-20 \sim +120°C$ Allowable temperature range $-20 \sim +120°C$ Allowable temperature range $-20 \sim +120°C$ SN ratio $50dB \text{ or more}$ Load resistance $5k\Omega \text{ or more}$ Frequency response of amplifier $DC \sim 1kHz$ Over load $150\%$ Mounting threadM8	SPECIFICATIONS			- 14 -		<b>4</b>
Output voltage $0.5 \sim 5V$ Non-linearity $0.5\% RO$ Hysteresis $0.3\% RO$ Temperature effect on zero $0.1\% RO/°C$ Temperature effect on span $0.03\% /°C$ Compensated temperature range $-20 \sim +120°C$ Allowable temperature range $-20 \sim +120°C$ Allowable temperature range $-20 \sim +120°C$ SN ratio50dB or moreLoad resistance $5k\Omega$ or moreFrequency response of amplifier $DC \sim 1kHz$ Over load $150\%$ Mounting threadM8Materials of pressure mediaSUS630	TYPE	PWFA-2MPA	PWFA-5MPA	PWFA-10MPA	PWFA-20MPA	
Non-linearity0.5%ROHysteresis $0.3\%RO$ Temperature effect on zero $0.1\%RO/°C$ Temperature effect on span $0.03\%/°C$ Compensated temperature range $-20 \sim +120°C$ Allowable temperature range $-20 \sim +120°C$ Allowable temperature range $-20 \sim +120°C$ SN ratio50dB or moreLoad resistance $5k\Omega$ or moreFrequency response of amplifier $DC \sim 1kHz$ Over load $150\%$ Mounting threadM8Materials of pressure mediaSUS630	Capacity	2MPa	5MPa	10MPa	20MPa	
Hysteresis   0.3%RO     Temperature effect on zero   0.1%RO/°C     Temperature effect on span   0.03%/°C     Compensated temperature range   -20 ~ +120°C     Allowable temperature range   -20 ~ +120°C     SN ratio   50dB or more     Load resistance   5kΩ or more     Frequency response of amplifier   DC ~ 1kHz     Over load   150%     Mounting thread   M8     Materials of pressure media   SUS630	Output voltage		0.5	~ 5V		
Temperature effect on zero   0.1%RO/°C     Temperature effect on span   0.03%/°C     Compensated temperature range   -20 ~ +120°C     Allowable temperature range   -20 ~ +120°C     SN ratio   50dB or more     Load resistance   5kΩ or more     Frequency response of amplifier   DC ~ 1kHz     Over load   150%     Mounting thread   M8     Materials of pressure media   SUS630	Non-linearity		0.59	%RO		
Temperature effect on span   0.03%/°C     Compensated temperature range   -20 ~ +120°C     Allowable temperature range   -20 ~ +120°C     SN ratio   50dB or more     Load resistance   5kΩ or more     Frequency response of amplifier   DC ~ 1kHz     Over load   150%     Mounting thread   M8     Materials of pressure media   SUS630	Hysteresis		0.39	%RO		
Compensated temperature range   -20 ~ +120°C     Allowable temperature range   -20 ~ +120°C     SN ratio   50dB or more     Load resistance   5kΩ or more     Frequency response of amplifier   DC ~ 1kHz     Over load   150%     Mounting thread   M8     Materials of pressure media   SUS630	Temperature effect on zero		0.1%	RO/°C		
Allowable temperature range   -20 ~ +120°C     SN ratio   50dB or more     Load resistance   5kΩ or more     Frequency response of amplifier   DC ~ 1kHz     Over load   150%     Mounting thread   M8     Materials of pressure media   SUS630	Temperature effect on span		0.03	%/°C		
SN ratio 50dB or more   Load resistance 5kΩ or more   Frequency response of amplifier DC ~ 1kHz   Over load 150%   Mounting thread M8   Materials of pressure media SUS630	Compensated temperature range		<b>-</b> 20 ~ ·	+120°C		
Load resistance 5kΩ or more   Frequency response of amplifier DC ~ 1kHz   Over load 150%   Mounting thread M8   Materials of pressure media SUS630	Allowable temperature range		<b>-</b> 20 ~ ·	+120°C		
Frequency response of amplifier DC ~ 1kHz Input/Output cable :   Over load 150% \$	SN ratio		50dB (	or more		
Frequency response of amplifier DC ~ 1kHz   Over load 150%   Mounting thread M8   Materials of pressure media SUS630	Load resistance		5kΩ (	or more	Input/Output cable :	
Over load     150%     5m)       Mounting thread     M8     Materials of pressure media     NB: A zero point may drift for a long term con-tinuous	Frequency response of amplifier		DC ~	- 1kHz		
Mounting thread     M8       Materials of pressure media     SUS630       NB: A zero point may drift for a long term con-tinuous	Over load		15	0%	_ ·	
	Mounting thread		N	//8		
Weight     45g     use in high temperature.	Materials of pressure media		SUS	S630	NB: A zero point may drift for a long term con-tinuous	
	Weight		4	5g	use in high temperature.	