

PHF-S-S3 Series

● -40 to 150°C
● 2 to 20 MPa

Small-sized High-temperature Pressure Transducer

2
-100

TRANSDUCERS



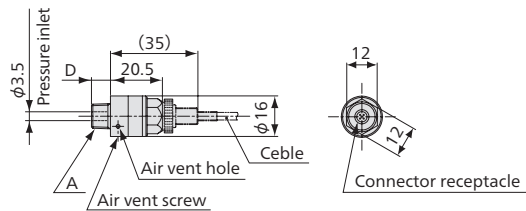
Excellent in environmental performance

- Enable to reduce weight effect on measuring objects
- After removing the connector, enables to install in a limited space by a socket wrench

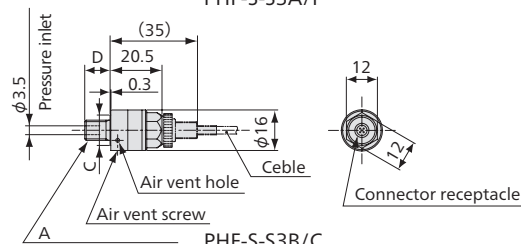
To Ensure Safe Usage

These models are designed for measuring oil pressure. It is necessary to mount protection covers around the transducer for measuring air pressure.

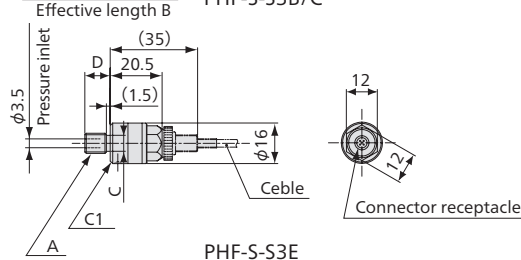
Dimensions



PHF-S-S3A/F



PHF-S-S3B/C



PHF-S-S3E

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.3% RO
Hysteresis	Within ±0.2% RO
Rated Output	Approx. 1.75 mV/V

Environmental Characteristics

Safe Temperature	-40 to 160°C (Connector plug: -25 to 85°C)
Compensated Temperature	-40 to 150°C (Connector plug: -25 to 85°C)
Temperature Effect on Zero	Within ±0.008% RO/°C
Temperature Effect on Output	Within ±0.01%/°C

Electrical Characteristics

Safe Excitation	5 V AC or DC
Recommended Excitation	1 to 2 V AC or DC
Input Resistance	350 Ω ±5%
Output Resistance	350 Ω ±5%
Insulation Resistance	500 MΩ (25 VDC) or more
Standard Cable (Optional Accessory)	4-conductor (0.09 mm ²) silicone shielded cable, 3 mm diameter by 4 m long
	Sensor side: Special connector
	Measuring instrument side: PRC03-12A10-7M (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Material	Liquid-contacting part: SUS 630
Weight	Approx. 20 g (Excluding cable)
Degree of Protection	IP45 (IEC 60529)
Mounting Screw	See table below.

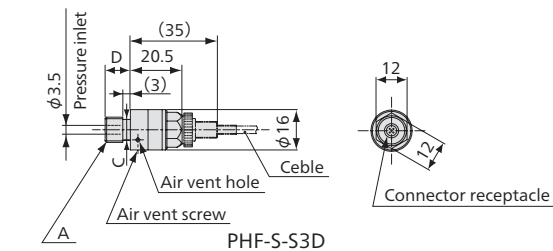
Standard Accessories Hexagon wrench for air vent screw (Excluding PHF-S-△MPS3E)
O-ring AS568-010, fluororubber x 2 (PHF-S-△MPS3E)
Optional Accessories Standard cable PHF-S-S3-J1

Models	Rated Capacity	Natural Frequencies (Approx.)
PHF-S- 2MPS3□	2 MPa	45 kHz
PHF-S- 5MPS3□	5 MPa	60 kHz
PHF-S-10MPS3□	10 MPa	70 kHz
PHF-S-20MPS3□	20 MPa	85 kHz

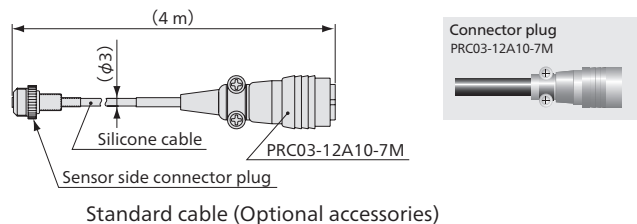
*The □ comes from A to F stands different screws.

Models	A	B	C	D
PHF-S-△MPS3A	R1/8	-	-	7.5
PHF-S-△MPS3B	M8x1.25	8	φ12	10
PHF-S-△MPS3C	M10x1.25	10	φ14	12
PHF-S-△MPS3D	M10x1.0	-	φ8.2	10
PHF-S-△MPS3E	5/16-24UNF	-	φ6.3	10
PHF-S-△MPS3F	G1/8	-	-	9

*△ means capacity of each model.



PHF-S-S3D



Standard cable (Optional accessories)