

High pressure type pressure transducer STD series

2023/03/22

Features



- High pressure measurement
- Pressure receiving part is the integration structure with thread.

* Application

High level oil pressure and hydraulic system, Hydro-forming machine, Diesel engine common rail oiltight device

Specification

Specification name	Specification contents
Rated capacity	200 MPa ~ 500 MPa
Safe overload	120 %R.C.
Ultimate overload	120 %R.C.
Rated output	STD-200MP~400MP: 1 mV/V±0.002 5 mV/V, STD-500MP: 0.75 mV/V±0.007 5 mV/V
Non-linearity	STD-200MP~400MP:0.35 %R.O., STD-500MP: 0.5 %R.O.
Hysteresis	0.1 %R.O.
Repeatability	0.05 %R.O.
Excitation, recommended	6 V or less

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Excitation, maximum	10 VDC
Zero balance	STD-200MP~400MP: ± 0.025 mV/V, STD-500MP: ± 0.019 mV/V
Input resistance	120 $\Omega \pm 2.4 \Omega$
Output resistance	118.5 $\Omega \pm 2.4 \Omega$
Insulation resistance	1 000 M Ω or more. (50 VDC) (between lead and main body.)
Temp. range, compensated	-10 $^{\circ}\text{C} \sim 75^{\circ}\text{C}$
Temp. range, safe	-20 $^{\circ}\text{C} \sim 75^{\circ}\text{C}$ (STD-500MP: -10 $^{\circ}\text{C} \sim 75^{\circ}\text{C}$)
Temp. effect on zero	0.09 %R.O./10 $^{\circ}\text{C}$
Temp. effect on output	0.09 %LOAD/10 $^{\circ}\text{C}$
Connector	PRC03-32A10-7F10.5
Cable	$\phi 6.3$, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.
Class of protection	IP64 or equivalent
Material of element	Stainless steel
Mounting screw	G1/2{PF} (STD-500MP: G3/4{PF})

Table of P/N

Parts No.	Rated capacity [Mpa]	Ultimate overload [%R.C.]	Rated output [mV/V]	Tolerance of rated output [mV/V]	Non-linearity [%R.O.]	Hysteresis [%R.O.]
STD-200MP	200	120	1	0.0025	0.35	0.1
STD-300MP	300	120	1	0.0025	0.35	0.1
STD-400MP	400	120	1	0.0025	0.35	0.1
STD-500MP	500	120	0.75	0.0075	0.5	0.1

Parts No.	Repeatability [%R.O.]	Natural frequency [KHz]	Weight(Approx.) [g]	CAD files[DXF]	3D CAD files [STEP]
STD-200MP	0.05	18	1400	std200_400mp.dxf	STD-200MP.STEP
STD-300MP	0.05	18	1400	std200_400mp.dxf	STD-300MP.STEP
STD-400MP	0.05	19	1400	std200_400mp.dxf	STD-400MP.STEP
STD-500MP	0.05	19	1400	std500mp.dxf	STD-500MP.STEP