

High-accuracy, negative/absolute pressure use pressure transmitter NS100A series

2023/03/22

Features



- Highly accurate pressure transmitter 0.2%R.O. as a standard by SOS technology. (including Non-linearity, Hysteresis and Repeatability.)
0.1 %R.O. is also available as a high accurate type.
- High reliability and durability by SOS technology.
- Can correspond to the absolute pressure and compound pressure
- Small size and light weight
- Wide range pressure from 200kPa to 50MPa can be measured.

Specification

Specification name	Specification contents
Rated capacity	200 kPa ~ 50MPa
Safe overload	200 %R.C.
Ultimate overload	300 %R.C.
Accuracy	0.2 %R.O. (including non-linearity, hysteresis and repeatability)
Rated output (Current)	4 mA ~ 20 mA (2 wires method, Load resistance 500 ohm or less, at 24 V)

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Rated output (Voltage)	0 V ~ 10 V (Load resistance 5 k-ohm or more)
Response frequency	1 kHz
Power supply voltage	24 VDC (18 VDC ~ 28VDC)
Power consumption	Approx. 30 mA
Insulation resistance	1 000 MΩ or more (50 VDC)
Temp. range, compensated	-20 °C ~ 70 °C
Temp. range, safe	-30 °C ~ 80 °C
Temp. effect on zero	0.2 %R.O./10 °C
Temp. effect on output	0.2 %LOAD/10 °C
Connector	R03-RB5F(receptacle)
Cable	Optional cable with plug CAC-156-*M
Class of protection	IP44 or equivalent (Main body only)
Material of pressure hole	Stainless steel
Material of cover	Aluminium alloy (with almite processing)
Material of pressure diaphragm	Single crystal sapphire,etc.,
Mounting screw	G3/8{PF}
Tightening torque	20 N·m ~ 40 N·m {2.04kgf·m ~ 4.08 kgf·m}
Special specification	NS100A-A015: Accuracy 0.1 %R.O. (Rated capacity 200kPa~30MPa), NS100A-S70: Class of protection IP67 or equivalent with zero adjustment function, NS100A-CE: CE mark applicable product (Only voltage output)

Table of P/N

Parts No.	Rated capacity [kPa]	Rated capacity [Mpa]	Weight(Approx.) [g]	CAD files[DXF]	CAD files 2[DXF]	3D CAD files [STEP]
NS100A-200KP*-	200		200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf	NS100A-200KP*-

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*132						*132.STEP
NS100A-500KP*- *132	500	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-500KP*- *132.STEP
NS100A-1MP*- *132	1	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-1MP*- *132.STEP
NS100A-2MP*- *132	2	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-2MP*- *132.STEP
NS100A-5MP*- *132	5	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-5MP*- *132.STEP
NS100A-10MP*- *132	10	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-10MP*- *132.STEP
NS100A-20MP*- *132	20	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-20MP*- *132.STEP
NS100A-25MP*- *132	25	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-25MP*- *132.STEP
NS100A-30MP*- *132	30	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-30MP*- *132.STEP
NS100A-35MP*- *132	35	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-35MP*- *132.STEP
NS100A-50MP*- *132	50	200	ns100a_g38_connector.dxf	ns100a_r38_connector.dxf		NS100A-50MP*- *132.STEP