

# Compact size & High-accuracy type pressure transmitter NS320 series New Model

2023/03/22

## Features



- Adopts the pressure sensor with high-performance sensing part (SOS element), and achieves the measurement error 0.1%F.S.
- Achieves the high accurate pressure measuring by 0.5%F.S. including all error in the temperature compensation range from -30°C to 125°C.
- High accurate model (-A01) achieves the error of 0.2%F.S. by improving the performance in the temperature compensation range from 0°C to 50°C based on the standard model.
- The signal response performance is 2kHz.

## Specification

Specification name	Specification contents
Rated capacity	200 kPa ~ 30MPa
Safe overload	200 %R.C.
System accuracy	±0.5 %F.S./-30°C ~ 125°C, (including accuracy, temperature effect and output effect under electromagnetic environment.), (High accurate model (-A01): ±0.2 %F.S./0°C ~ 50°C)
Accuracy	±0.1 %F.S. at 25°C (including non-linearity, hysteresis and repeatability)
Rated output	0 V ~ 10 V (Load resistance 10 kΩ or more).
Power supply voltage	11.5 VDC ~ 17.5 VDC

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Insulation resistance	1 000 MΩ or more (50 VDC)
Response frequency	2 kHz
Current consumption	10 mA or less
CE standard conformity product	Standard: EN61326-1 (2013), EN61000-6-1 (2007), EN61000-6-2 (2005), EN61000-6-3 (2007/A1: 2010), EN61000-6-4 (2007/A1: 2011)
Temp. range, compensated	-30 °C ~ 125 °C
Temp. range, safe	-40 °C ~ 135 °C
Temp. effect	0.4 %F.S./-30°C~125°C
Class of protection	IP44 or equivalent (Main body only)
Material of pressure inlet hole	Stainless alloy
Material of cover	Stainless alloy
Material of pressure diaphragm	Single crystal sapphire
Mounting screw	G 3/8
Connector	OT series (made by LEMO.)
Optional cable	NS700-CAC-043-**M
Tightening torque	20 N·m ~ 40 N·m

## Table of P/N

Parts No.	Rated capacity [kPa]	Rated capacity [Mpa]	Weight(Approx.) [g]	CAD files[DXF]	3D CAD files [STEP]
NS320-200KP	200		200	<a href="#">ns320.dxf</a>	<a href="#">NS320-200KP.STEP</a>
NS320-500KP	500		200	<a href="#">ns320.dxf</a>	<a href="#">NS320-500KP.STEP</a>
NS320-1MP		1	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-1MP.STEP</a>
NS320-2MP		2	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-2MP.STEP</a>
NS320-3MP		3	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-3MP.STEP</a>
NS320-5MP		5	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-5MP.STEP</a>
NS320-10MP		10	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-10MP.STEP</a>
NS320-20MP		20	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-20MP.STEP</a>
NS320-30MP		30	200	<a href="#">ns320.dxf</a>	<a href="#">NS320-30MP.STEP</a>