



GP NEMA 4

Gage Pressure with NEMA 4 Enclosure

The GP-NEMA 4 Series is designed to provide excellent accuracy and reliability in commercial, industrial, and process control applications where high performance and a NEMA 4 weatherproof enclosure is required. The bulk micro-machined transducer features a stainless steel diaphragm with welded construction that contains no O-rings, which makes them compatible with any gas or liquid compatible with 304L stainless steel. Some of the compatible gases and liquids include refrigerants, glycol, motor oil, diesel, hydraulic fluid, brake fluid, water, waste water, Hydrogen, Nitrogen and air. The GP-NEMA 4 Series transducers include an optional NEMA 4 rated, weatherproof aluminum enclosure and an optional NIST Calibration Certificate. Accessory items such as pressure snubbers and pigtail syphons are available to protect the transducers from

line pressure surges and extreme operating temperatures. For more information regarding the temperature and pressure ratings of the Pigtail Syphons, please see the Pigtail Syphon data sheet.

Applications: Refrigeration, Fuel Cells, Pumps, Hydraulics, Compressors, Robotics, Pneumatics, Agriculture, Spraying Systems, Process Control, Flow, Hydrogen Storage, Chiller, Water & Boilers

The GP-NEMA 4 Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, workaci.com.

PRODUCT SPECIFICATIONS

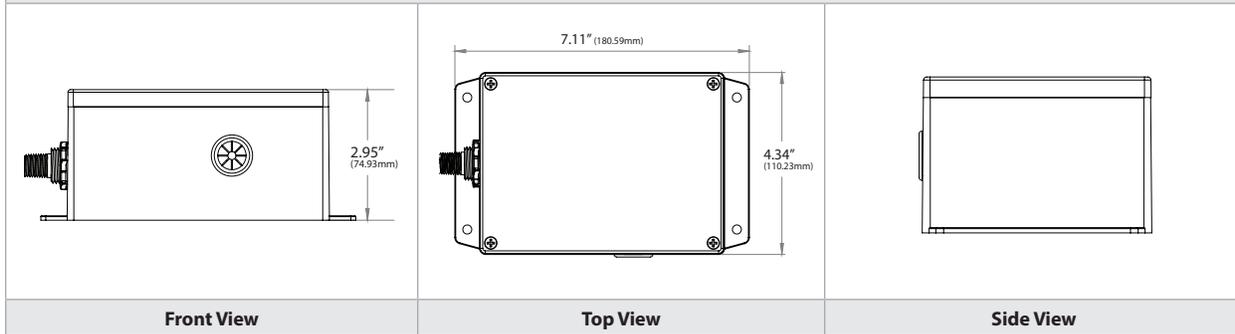
Supply Voltage:	+13 to 30 VDC (250 Ohm Load); +18 to 30 VDC (500 Ohm Load)
Reverse Polarity Protection:	+/- 16 V over 5 minutes
Maximum Load Resistance:	800 Ohms @ 24 VDC Formula: (Supply VDC - 8 VDC) / 0.020A
Supply Current:	25 mA
Output Signal:	4 to 20 mA (2-Wire, Loop Powered)
Response Time:	< 1 ms
Pressure Range:	See "Ordering Grid" on back of data sheet
Accuracy @ 22°C (71.6°F)¹:	15 to 60 psig: < +/- 1.0% FS 75 to 300 psig: < +/- 0.5% FS 500 psis: < +/- 0.5% FS
Thermal Error (-40 to 105°C)²:	15 to 60 psig: < +/- 1.0 FS 75 to 300 psig: < +/- 0.5% FS 500 psis: < +/- 0.5% FS
Stability (250 Hours @ 225°F (125°C):	+/- 0.03% FS @ 0 psig; +/- 0.12% FS @ 1000 psig
Thermal Shock:	300 Cycles 105°C to -40°C, 0.5 hr soaks @ Temperature (2s Transfer)
Proof Pressure:	15 to 300 psig: 3x Full Scale 500 psis: 3x Full Scale
Burst Pressure:	15 to 300 psig: 3x Full Scale 500 psis: 3x Full Scale
Vibration (100 to 2000 Hz, 20g Sinusoidal, 3 Axes):	144 Hours
Operating Temperature Range:	Transducer: -40 to 257°F (-40 to 125°C) NEMA Enclosure: -40 to 176°F (-40 to 80°C)
Storage Temperature Range:	-40 to 176°F (-40 to 80°C)
Operating Humidity Range:	0 to 95% RH, non-condensing
Media Types:	Any gas or liquid compatible with 304L Stainless Steel
Transducer Housing Material:	Stainless Steel
GP NEMA Enclosure Material:	Aluminum (Natural Color) with Silicone Gasket
GP NEMA 4 Enclosure Ratings:	NEMA 4, 4X, 6, 6P, 12 and 13 (Compare to IP68)
Process Fitting Material:	304L Stainless Steel
Thread Size:	1/4"-18 MNPT
Recommend Torque Specification:	150 lb-in (16.95 Nm) Nominal
Wiring Connections:	Packard Connector (Cables ordered separately per "Ordering Grid" on back of data sheet)
NIST Certificate:	Ordered Separately (See "Ordering Grid" on back of data sheet)
Approvals:	RoHS2, WEEE, ISO 9001, Made in USA
EMC Compatibility:	150 V/m
Product Dimensions:	Transducer (L x OD): 2.60" (66.60 mm) x 0.87" (22.20 mm) NEMA Enclosure (L x W x D): 7.11" (180.5 mm) x 4.34" (110.3 mm) x 2.95" (75 mm)
Product Weights:	A/GP-NEMA 4 Series: 0.34 lbs. (0.15 kg) A/GP 2' Harness: 0.06 lbs. (0.03 kg) A/GP 6' Harness: 0.20 lbs. (0.09 kg) A/GP 10' Harness: 0.32 lbs. (0.14 kg) A/GP 20' Harness: 0.62 lbs. (0.28 kg) A/GP 30' Harness: 0.92 lbs. (0.41 kg)

Note¹: Accuracy includes Hysteresis, Repeatability, Temperature Effect and Non-linearity (BFSL) | **Note²:** Additional error over temperature range | **Note³:** Sealed Gage pressure transducers are not vented to atmosphere, but are calibrated to have 4 mA at 14.5 PSIG to resemble a standard gauge pressure transducer output





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: A/GP(0-15G)-20-P-N4 -OR- 142607

Model #	Item #	Description	Gage	Sealed Gage	Packard Connector	Harness Required
A/GP(0-15G)-20-P-N4 ***	142607	Gage Pressure, 0-15 psig (103 kPa), NEMA 4	•		•	•
A/GP(0-30G)-20-P-N4 ***	142608	Gage Pressure, 0-30 psig (207 kPa), NEMA 4	•		•	•
A/GP(0-50G)-20-P-N4 ***	142609	Gage Pressure, 0-50 psig (345 kPa), NEMA 4	•		•	•
A/GP(0-100G)-20-P-N4 ***	142610	Gage Pressure, 0-100 psig (689 kPa), NEMA 4	•		•	•
A/GP(0-200G)-20-P-N4 ***	142611	Gage Pressure, 0-200 psig (1379 kPa), NEMA 4	•		•	•
A/GP(0-300G)-20-P-N4 ***	142612	Gage Pressure, 0-300 psig (2069 kPa), NEMA 4	•		•	•
A/GP(0-500S)-20-P-N4 ***	142613	Gage Pressure, 0-500 psis (3447 kPa), NEMA 4		•	•	•

ACCESSORIES ORDERING

Model # Example: A/GP 30' HARNESS -OR- 135703

Model #	Item #	Description
A/GP 2'HARNESS	142606	A/GP 2' (.61m) Packard Wire Harness, Plenum Rated
A/GP 6'HARNESS	135614	A/GP 6' (1.83m) Packard Wire Harness, Plenum Rated
A/GP 10'HARNESS	116601	A/GP 10' (3.05m) Packard Wire Harness, Plenum Rated
A/GP 20'HARNESS	135613	A/GP 20' (6.10m) Packard Wire Harness, Plenum Rated
A/GP 30'HARNESS	135703	A/GP 30' (9.14m) Packard Wire Harness, Plenum Rated
A/GP 40'HARNESS	136995	A/GP 40' (12.19m) Packard Wire Harness, Plenum Rated
A/0.25"SNUB A/G	137105	¼" NPT Stainless Steel Snubber for Air/Gas
A/0.25"SNUB WTR	137104	¼" NPT Stainless Steel Snubber for Water/Light Oils
GP NIST*	142927	GP NIST Calibration Certificate

Note*: The A/GP Harness and GP NIST must be ordered separately when ordering transducers with Packard Connector or any of the Gage Pressure transmitters with a NIST Calibration Certificate

