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TRANSCOT High Pressure Pneumatic Calibrator/Hand Pump

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File Tester

Model 1099PNC

0.1% FS Accuracy From 0 to 500 psi

Totally Integrates 500 psi Hand Pump, Digital Pressure Gauge and Precision Millimeter

Simultaneous Indication of Pressure and Current

Calibrates Pressure Transmitters, Pressure Switches and Gauges

Compact, Lightweight, Fully Field Serviceable

Several Ranges Available



The 1099PNC integrates three devices (500 psi hand pump, digital pressure gauge, and precision millimeter) into a single, easy-to-use, compact calibrator.

Take the first pneumatic hand pump designed for high pressure applications. Add a totally integrated digital pressure gauge and a DC current meter, and what do you get? The Model 1099PNC - a complete, hand-held high pressure calibration system that dramatically simplifies field calibration.

The revolutionary PNC generates and measures pressures up to 500 psi. It measures DC current from 0 to 51 mA. And it operates on a standard 9-volt battery. So it replaces a toolbox full of clumsy equipment with a single, lightweight, hand-held unit. Use it as a pump, use it as a pressure gauge, use it as a millimeter, or use all of the functions together for total loop calibration.

The PNC streamlines scheduled maintenance and calibration, troubleshooting and instrument checks. And it's remarkably easy to

use, even in the most difficult field situations. Simply hook up your tubing and test leads, press the "on" button, and zero the gauge. You're ready to start your calibration.

With 0.1% of full scale accuracy over a 0 to 500 psi range, the PNC delivers the real-world accuracy you need in the field. Each sensor is individually computer-evaluated at more than 160 pressure/temperature points. A built-in microprocessor then uses these specific pressure/temperature correction values to adjust the PNC output according to ambient temperature and pressure, minimizing their effect on the measurement.

Unlike other hand-operated pneumatic pumps, the PNC utilizes unique design features that permit easy pressurization, even at 500 psi. Despite the high working range, extremely precise pressures can be obtained and manipulated with simple

adjustments of the innovative precision volume adjustment and bleed valve. And it works on air, not messy oil or bottled gas.

Although the PNC weighs less than 3 pounds, it's engineered to withstand the rigors of field use. The pump body is constructed of nylon, providing chemical inertness along with impact and corrosion resistance. The output ports and piston rod are stainless steel. Field-replaceable filters and O-rings are installed at all external ports to keep out contaminants and ensure long service life. All main components can be replaced in the field as assemblies, ensuring the PNC is always ready for service. And it faithfully maintains accurate performance over wide temperature extremes from 0° to 50°C.

The PNC combines simplicity of construction and use with unmatched reliability and accuracy.

Model 1099PNC Specifications

GENERAL	
OPERATING TEMPERATURE RANGE	0°C to 50°C (32°F to 122°F)
STORAGE TEMPERATURE LIMITS	-40°C to 83°C (-40°F to 180°F)
PRESSURE CONNECTIONS	Dual output ports with one 1/4"-18 NPTF output adapter and one plug installed Fillings optionally available (refer to Accessories below)
FILTRATION	Replaceable external port filters provided
DIMENSIONS (HWD)	Body: 125 x 75 x 75 mm (5 x 3 x 3") Overall: 313 x 113 x 75 mm (12.5 x 4.5 x 3")
WEIGHT	1.25 kg (2.8 lb.)
ELECTRICAL	
PRESSURE RANGES (Fixed, One Per Model)	0-500.0 psi 0-3500 kPa
CALIBRATED ACCURACY	0.1% of full scale pressure \pm 1 LSD
TEMPERATURE EFFECT	\pm 0.002% of full scale per °C
OVERPRESSURE RATING	2X full scale pressure
ZERO ADJUSTMENT	Via front panel pushbutton, \pm 10% of full scale
MILLIAMMETER INPUT RANGE	0 to 51 mA DC
CALIBRATED ACCURACY (mA)	0.01% of full scale current \pm 1 LSD
CURRENT INPUT PROTECTION	Protected from mA overload by replaceable fuse located on front panel
POWER REQUIREMENT	One 9V battery
BATTERY LIFE	Carbon-zinc: 20 hours typical Automatic shutoff after 20 minutes Alkaline: 75 hours typical Lithium: 150 hours typical
DISPLAY	Two 4x5 digit LCDs, one for pressure and one for current
WARM-UP TIME	10 seconds nominal
SAFETY APPROVALS	Pending
MECHANICAL	
COMPATIBLE MEDIA	Non-conductive, non-corrosive instrument grade clean air or inert gas
CONSTRUCTION	Nylon, stainless steel, anodized aluminum, brass, polyurethane and Buna-N O-rings
EACH UNIT INCLUDES ACCESSORIES	
	9V battery, carrying case, test leads, instruction manual, spare mA fuse C-Ring/Fiber Kit, P/N 100836-009 mA Input Fuse Assembly, P/N 100835-070 Output Port Filtrage 1/4"-18 NPTF, P/N 100836-231 1/8"-27 NPTF, P/N 100836-232 Port Plug, P/N 100835-233

Back to the Transmation 1099PNC Info Page

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