



General Purpose Digital Pressure Gauge

Design Features:

- Meets ASME B40.7
- Proof pressure is 120% of range
- Burst pressure is 150% of range
- CE Approvals (provide EMI and RFI protection)
- 1/2% terminal point accuracy
- Chemical resistant Noryl® casing and a protective boot that offers an IP54 weatherproof enclosure
- Standard range is 0-10,000 PSI
- Nine engineering units of measure
- Easy-to-read 5 digit display with 1/2" character size
- Back lighting for easy viewing in low light areas
- Minimum and maximum pressure indication
- Stainless steel socket and sensor suitable for a variety of applications. Welded sensor to socket for added durability
- Each gauge is serialized for accurate tracing



This versatile and economical gauge is the perfect choice for a wide variety of applications.



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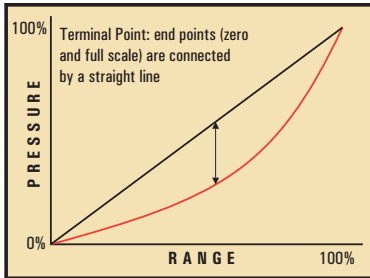
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What you should know about digital gauge accuracy... Terminal Point versus Best Fit Straight Line Accuracy.

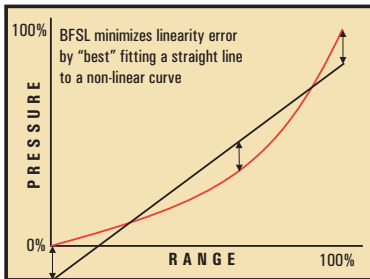
MICO Digital Gauge with Terminal Point Accuracy



BENEFIT

- All points between zero and full-scale will be within stated accuracy
- Allows zeroing of gauge at start-up to eliminate any sensor offset

Competitive Digital Gauges with Best Fit Straight Line (BFSL) Accuracy



- Linearity error minimized by "best" fitting a straight line to a non-linear curve
- BFSL gauges may have a zero offset at calibration that must be maintained to ensure accuracy throughout range

PROBLEM

- Re-zeroing gauge may invalidate published accuracy specification
- Zero offset at start-up may be the result of either:
 - BFSL Calibration
 - Zero Drift

"No Nonsense" Accuracy

- ❖ Full scale 1/2% terminal point accuracy includes linearity, hysteresis and repeatability.
- ❖ Some gauge manufacturers refer to "typical" accuracy. They may or may not indicate the maximum tolerance allowed. This is misleading in that you have no assurance the gauge you receive will be one that falls into the stated "typical" accuracy.
- ❖ Many gauge manufacturers refer to stated accuracy as being \pm the least significant digit. This could add as much as .33% error to stated accuracy. The .5" digit display on the gauge provides enhanced resolution needed to read stated accuracy.
- ❖ Terminal point accuracy allows re-zeroing to eliminate sensor offset.

MICO Digital Pressure Gauges, Kits, and Accessories

Model Number	Description
42-610-018	Gauge
42-610-019	Gauge*
12-740-013	Gauge and 12" hose
12-740-014	Gauge and 36" hose
12-740-015	Gauge, 12" hose, fitting kit, and case
12-740-016	Gauge, 36" hose, fitting kit, and case
42-590-002	12" hose only
42-590-003	36" hose only
12-700-002	Fitting kit only

* Includes certification of calibration.

Fitting Kit Specifications

1. Male Straight Thread to Female Pipe Connector, 7/16-20 O-ring x 1/4-18 NPT (Steel)
2. Male Straight Thread to Female Pipe Connector, 9/16-18 O-ring x 1/4-18 NPT (Steel)
3. Male Straight Thread to Female Pipe Connector, 3/4-16 O-ring x 1/4-18 NPT (Steel)
4. Male Straight Thread to Female Pipe Connector, 7/8-14 O-ring x 1/4-18 NPT (Steel)
5. Hex Coupling, 1/8-27 NPT x 1/8-27 NPT (Steel)
6. Hex Coupling, 1/4-18 NPT x 1/8-27 NPT (Steel)
7. Hex Nipple, 1/8-27 NPT x 1/8 NPT (Steel)
8. Hex Nipple, 1/4-18 NPT x 1/8 NPT (Steel)
9. Female Flared Tube to Male Pipe Connector, 3/16 Tube 3/8-24 x 1/8-27 NPT (Brass)
10. Female Flared Tube to Male Pipe Connector, 1/4 Tube 7/16-24 x 1/8-27 NPT (Brass)
11. Female Flared Tube to Male Pipe Connector, 5/16 Tube 1/2-20 x 1/8-18 NPT (Brass)
12. Female Flared Tube to Male Pipe Connector, 3/8 Tube 5/8-18 x 1/8-27 NPT (Brass)
13. Male Flared Tube Bulkhead to Female Pipe Connector, 1/4 Tube 7/16-20 x 1/4-18 NPT (Steel)
14. Female Pipe to Male Pipe Connector, 1/8-27 NPT x 1/4-18 NPT (Steel)

Hose Specifications

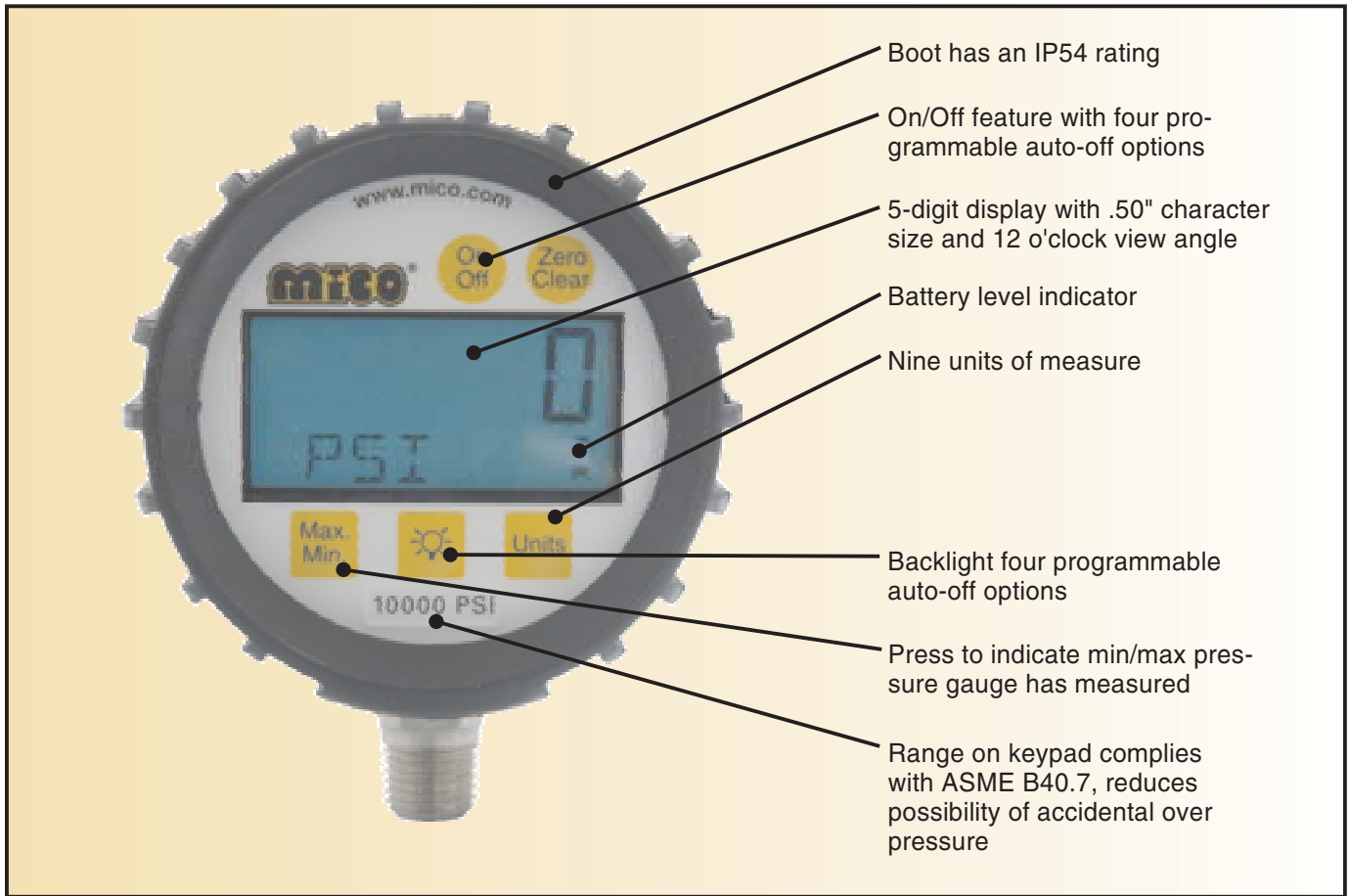


1/4 ZW MICO 12" long
1/4 male x 1/4 female NPT
with 1404-4-4 (one end)



1/4 ZW MICO 36" long
1/4 male x 1/4 female NPT
with 1404-4-4 (one end)

Gauge Keypad

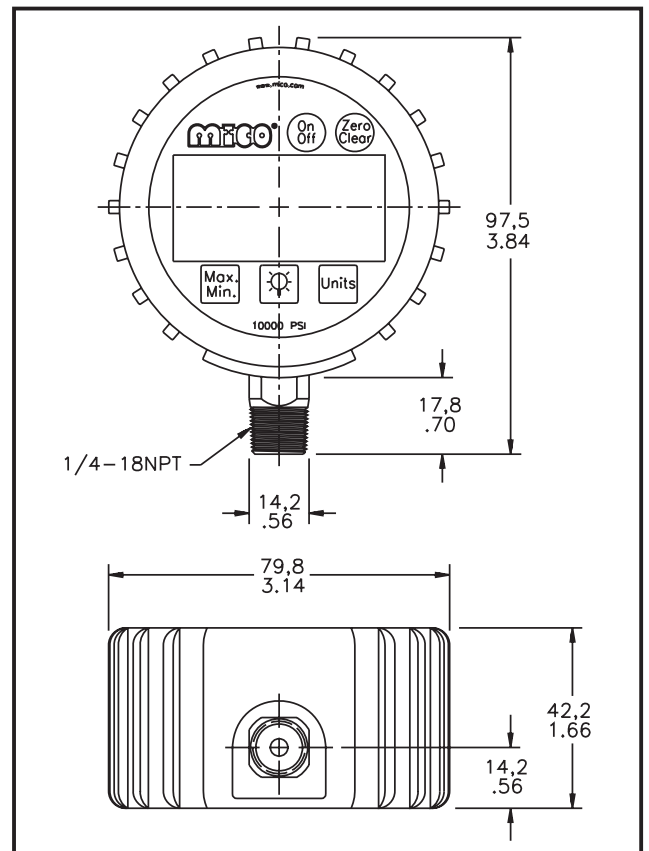


Digital Pressure Gauge Package

The Digital Pressure Gauge Package includes a gauge with hose, 14 piece fitting kit, and padded storage case.



(Model 12-740-016 shown)



MICO Digital Pressure Gauge



Product Specifications

Type:	MICO digital pressure gauge
Accuracy:	1/2% F.S.
Case Size:	2 1/2"
Case Material:	Noryl®
Wetted Parts:	17-4 PH stainless steel sensor; 316 stainless steel socket
Socket Size:	1/4 NPT
Connection:	Lower
Ranges:	0-10,000 PSI
Battery:	Two AAA alkaline batteries
Battery Life:	1000 hours
Overpressure:	<u>0/10,000</u>
	Proof: 120% F.S.
	Burst: 150% F.S.
Cycle Life:	10 ⁸ cycles 20/80% F.S. with negligible performance loss
Vibration:	Less than ± 0.1% F.S. effect for 0/2000 Hz at 20 g's in any axis
Shock:	Less than ± 0.05% F.S. effect for 100 g's, 20 msec shock in any axis
Operating Temp.:	-10°C to 60°C (14°F to 140°F)
Storage Temp.:	-20°C to 70°C (-4°F to 158°F) (maximum temperature shift is .028% per °F from -20°F to 180°F starting at 68°F.)
Leak Integrity:	1 x 10 ⁻³ std. cc/sec
Update Rate:	100ms
Agency Approvals:	CE EN 61326 (1998); CD EN 61326 Annex A (heavy industrial)
Packaging:	Individual carton - kits are in impact resistant cases

Display

Type:	LCD	
Display Digits:	5	
Display Resolution:	Full Scale	
	<u>Numerical Value</u>	<u>Display Resolution</u>
	10,000	XXXXX
Character Height:	0.5"	
Backlite:	OFF by default	
Battery:	Four-level battery indication	

Keypad Functions

On/Off:	Manually turns unit on and off (four options: never, 5 min., 10 min., 20 min.)
Backlight:	Manually turns backlite on and off (four programmable auto on/off options)
Max. (Peak Hold):	Displays min./max. value when activated
Zero/Clear:	Zeros display or clears max. value when activated
Engineering Units:	psi, in.Hg, cmHg, mmHg, kPa, mPa, Bar, kg/cm ² , ftH ₂ O
Field Calibration:	Zero and span

Standard Ranges

Vacuum

in.Hg	kPa	cmHg	Bar	kg/cm ²	mmHg
-30/0	-100/0	-76/0	-1/0	-1/0	-760/0

Pressure

PSI	kPa	mPa	Bar	kg/cm ²	ft H ₂ O
0/10,000	-	0/70	0/700	0/700	-

Competitive Evaluation

Mfg.	Model #	Diameter	Matl.	# Digits	Accuracy	Light	Select Units	Auto Off	Low Bat.	Max.	Tare	Rs-232	Switch	Notes
MICO	42-610-018	3.14"	Noryl® casing with Buna N Boot	4	1/2% Terminal Point	X	X	Default: Never; Program: 5 min, 10 min, 20 min	X	X				11 Ranges
Psi-Tronix	PG-10000	4.5"	Phenol	4	1/4% BFSL (Best Fit Straight Line); +/- 1 digit					X			X	6 Ranges Graph
CE-Comp	DPG1000B	3.38"	Aluminum	3.5	1/4%; +/- 1 digit; Typical			5 min						
Parker	SCM-050-03-4MP	2.77"	Plastic	4	1/2% Full Scale Typical	X		20 min						2 Ranges