

SPECIALIZED AND GENERAL USE GAUGES





YELLOW JACKET®

Solar/Light-Powered Digital LCD Gauges

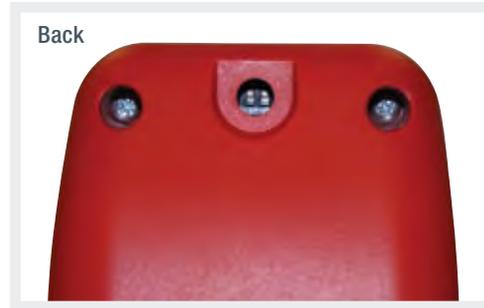
Class 1 (1% accuracy) digital refrigerant gauges measure eight commonly used refrigerants



- Light-powered pressure gauges operate continuously, even in low light conditions. Eliminate battery replacement costs and loss of power during jobs
- Automatic pressure-temperature readout for R-22, R-134a, R-404A, R-507, R-407C, R-409A, R-410A and R-438A
- Available individually or on TITAN™ 4-Valve Manifold, TITAN™ 2-Valve Manifold or Series 41 Manifold



Two selector switches on the front panel select the refrigerant type (left switch) and zero-set the gauge (right switch).



A DIP switch on the back selects the unit of measure.

- Calibrated to 1% accuracy
- 1/8" NPT Male connection
- Two second display response
- ABS plastic case
- PSI °F, PSI °C, bar °C and MPa °C
- Lo-side pressure scale of 30 inHg vacuum to 350 psi

- Hi-side pressure scale of 0 to 800 psig
- Working temperature range from 14 to 122°F (-10 to 50°C)

UPC#	Description
49041	Hi-side pressure solar gauge
49042	Lo-side compound solar gauge
49087	Hi-side (red) gauge boot
49088	Lo-side (blue) gauge boot
49089	Set of red and blue gauge boots for 49041 and 49042

YELLOW JACKET® CERTIFIED GAUGES 10-point measurement and documentation

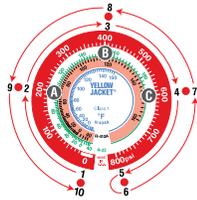


Have greater confidence in measurements and decisions with certified YELLOW JACKET Class 1 Replacement Manifold Gauges and Manifolds with Class 1 gauges.

YELLOW JACKET gauges have always been manufactured and calibrated to NIST standards. The standard Ritchie Engineering procedure has

been to measure for accuracy at five points: two times up the scale and then back down. Many manufacturers measure at only three points (A, B, C).

The Ritchie Engineering certification process documents the NIST calibration plus compliance to ANSI Z540.1 and ISO 10012 standards. The certification is good for one year; recalibration is recommended after one year.



CALIBRATION CERTIFICATE

The certificate packed with each certified gauge provides evidence of calibration standards traceable to NIST and includes a serial number that matches the serial number on the gauge. Ritchie Engineering maintains records of each certificate.



3-1/8" Manifold Gauge with Class 1 Accuracy

Repeated pressurization and recalibration.

Atmospheric pressure variations are of little importance with gauging pressures typically encountered in refrigeration and A/C service work. With a change of 2 inHg, the gauge changes by only 1 psi. It is unlikely that system pressures would cause concerns if the reading is correct within several psi.

Repeated pressurization (especially over-pressurization) of a gauge does, however, tend to change the response of the tube or diaphragm, and recalibration may be required.

The **easiest way** for a service technician to recalibrate a gauge is to connect it to a source of known, pure refrigerant, and then adjust the recalibration screw on the gauge to the appropriate pressure reading based on refrigerant temperature.

The **most accurate** way to recalibrate is to connect the gauge to a deadweight tester at a recalibration facility that has equipment traceable to NIST. This is usually cost-prohibitive for most situations, but may be warranted when total documentation is required.

Why should I zero out a manifold gauge?

As a general rule, a gauge can get off "0" due to a change in altitude or barometric pressure. It's important that you check to see that it's set back to "0" before you start charging. To reset a gauge, look for the reset screw that will be located on the front or back of the gauge. Then use a small blade screw driver to set the dial back to "0".

Using manifold gauges for evacuation?

See page 11 for important information.

Unless noted, gauges not meant to be used with liquid nitrogen. Dry nitrogen through a nitrogen regulator and coming to the manifold at less than 800 psi for calibration purposes is fine.

3-1/8" (80 mm) DRY MANIFOLD GAUGES (°F and °C) RED, BLUE AND BLACK With 1% accuracy (Class 1) calibration

Large 3-1/8" gauges are housed in a red or blue steel case with front recalibrator screw. High visibility colored temperature scales are easy to read through the full view polycarbonate crystal.

- Flutterless™ technology with brass surge protector to minimize needle pulsation
- Brass gauge movement
- Copper alloy Bourdon tube
- 1/8" NPT Male connection
- Calibrated to 1% accuracy
- Color-coded red for pressure and blue for compound
- Color-coded refrigerant types



When a gauge has a **RETARD** zone, full scale is considered to be the last marked reading prior to entering the RETARD zone. For example, this gauge has a full scale reading of 120 psi. Gauge accuracy is not specified in the RETARD zone.

°F - Fahrenheit Gauges			
UPC#	Description	Pressure scale	Refrigerants
49101	3-1/8" Red pressure	0 - 500 psi	R-12/22/502
49102	3-1/8" Blue compound	30"-0-120** psi	
49103	3-1/8" Red pressure	0 - 500 psi	R-12/22/134a
49104	3-1/8" Blue compound	30"-0-120** psi	
49105	3-1/8" Red pressure	0 - 500 psi	R-22/134a/404A
49106	3-1/8" Blue compound	30"-0-120** psi	
49111	3-1/8" Red pressure	0 - 500 psi	R-417A/422A/422D
49112	3-1/8" Blue compound	30"-0-120** psi	
49133	3-1/8" Heat pump red dial	0 - 800 psi	R-22/407C/410A
49134	3-1/8" Heat pump blue dial	0 - 800 psi	
49135*	3-1/8" Red pressure	0 - 800 psi/bar	R-410A
49136*	3-1/8" Blue compound	30"-0-300*** psi/bar	
49137	3-1/8" Red pressure	0 - 800 psi	R-22/404A/410A
49138	3-1/8" Blue compound	30"-0-350*** psi	
49141*	3-1/8" Heat pump red dial	0 - 800 psi	R-410A
49142*	3-1/8" Heat pump blue dial	0 - 800 psi	
49151	3-1/8" Red pressure	0 - 500 psi	R-134a/404A/407C
49152	3-1/8" Blue compound	30"-0-120** psi	

Certified Gauges			
49201	3-1/8" Red pressure	0 - 500 psi	R-12/22/502
49202	3-1/8" Blue compound	30"-0-120** psi	
49203	3-1/8" Red pressure	0 - 500 psi	R-12/22/134a
49204	3-1/8" Blue compound	30"-0-120** psi	
49205	3-1/8" Red pressure	0 - 500 psi	R-22/134a/404A
49206	3-1/8" Blue compound	30"-0-120** psi	
49235*	3-1/8" Red pressure	0 - 800 psi/bar	R-410A
49236*	3-1/8" Blue compound	30"-0-300*** psi/bar	
49237	3-1/8" Red pressure	0 - 800 psi	R-22/404A/410A
49238	3-1/8" Blue compound	30"-0-350*** psi	
49251	3-1/8" Red pressure	0 - 500 psi	R-134a/404A/407C
49252	3-1/8" Blue compound	30"-0-120** psi	
49100	Replacement crystal		

* These gauges have °C and °F on dial. ** Features retard protection to 350 psi.
*** Features retard protection to 500 psi.

°C - Celsius Gauges			
UPC#	Description	Pressure scale	Refrigerants
49107	3-1/8" Red pressure	kPa and psi	R-22/134a/404A
49108	3-1/8" Blue compound	kPa and psi	
49169	3-1/8" Red pressure	bar and psi	
49170	3-1/8" Blue compound	bar and psi	
49109	3-1/8" Red pressure	kPa and psi	R-410A
49110	3-1/8" Blue compound	kPa and psi	
49153	3-1/8" Red pressure	bar and MPa	
49154	3-1/8" Blue compound	bar and MPa	
49113	3-1/8" Red pressure	bar and psi	R-417A/422A/422D
49114	3-1/8" Blue compound	bar and psi	
49131	3-1/8" Red pressure	bar and psi	R-134a/404A/407C
49132	3-1/8" Blue compound	bar and psi	
49135*	3-1/8" Red pressure	bar and psi	R-410A
49136*	3-1/8" Blue compound	bar and psi	
49139	3-1/8" Red pressure	psi	R-22/404A/410A
49140	3-1/8" Blue compound	psi	
49141*	3-1/8" Heat pump red dial	0 - 800 psi	R-410A
49142*	3-1/8" Heat pump blue dial	0 - 800 psi	
49143	3-1/8" Red pressure	bar and MPa	R-12/22/502
49144	3-1/8" Blue compound	bar and MPa	
49145	3-1/8" Red pressure	bar and psi	R-12/22/502
49146	3-1/8" Blue compound	bar and psi	
49163	3-1/8" Red pressure	bar and MPa	R-134a/404A/407C
49164	3-1/8" Blue compound	bar and MPa	
49165	3-1/8" Red pressure	bar and psi	R-12/134a/413A
49166	3-1/8" Blue compound	bar and psi	
49167	3-1/8" Red pressure	bar and psi	R-22/134a/407C
49168	3-1/8" Blue compound	bar and psi	
Certified Gauges			
49231	3-1/8" Red pressure	bar and psi	R-134a/404A/407C
49232	3-1/8" Blue compound	bar and psi	
49235*	3-1/8" Red pressure	bar and psi	R-410A
49236*	3-1/8" Blue compound	bar and psi	
49243	3-1/8" Red pressure	bar and MPa	R-12/22/502
49244	3-1/8" Blue compound	bar and MPa	
49245	3-1/8" Red pressure	bar and psi	R-12/22/502
49246	3-1/8" Blue compound	bar and psi	
49253	3-1/8" Red pressure	bar and MPa	R-410A
49254	3-1/8" Blue compound	bar and MPa	
49263	3-1/8" Red pressure	bar and MPa	R-134a/404A/407C
49264	3-1/8" Blue compound	bar and MPa	
49265	3-1/8" Red pressure	bar and psi	R-12/134a/413A
49266	3-1/8" Blue compound	bar and psi	
49267	3-1/8" Red pressure	bar and psi	R-22/134a/407C
49268	3-1/8" Blue compound	bar and psi	
49269	3-1/8" Red pressure	bar and psi	R-22/134a/404A
49270	3-1/8" Blue compound	bar and psi	
49100	Replacement crystal		

* These gauges have °C and °F on dial.



RECOVERY MACHINES
VACUUM PUMP SYSTEMS
VACUUM AND CHARGING HOSES
HOSE ADAPTERS, VALVES AND PARTS
CHARGING SYSTEMS
GAUGES
ELECTRONIC INSTRUMENTS
HEATING INSTRUMENTS
LEAK MONITORS AND DETECTORS
SYSTEM TOOLS

LARGE 4" MANIFOLD GAUGES (°F and °C) RED AND BLUE With 1% accuracy (Class 1) calibration



Large 4" gauges are housed in a red or blue steel case with front recalibrator screw. High visibility colored temperature scales are easy-to-read through the full view polycarbonate crystal.

- Flutterless™ technology with brass surge protector minimizes needle pulsation
- Brass gauge movement
- Copper alloy Bourdon tube
- 1/8" NPT Male connection
- Calibrated to 1% accuracy
- Color-coded blue for compound and red for pressure
- °F features color-coded refrigerant types: R-22, R-134a, R-404A, R-410A
- °C features color-coded refrigerant types: R-22, R-134a, R-404A, R-407C

°F - Fahrenheit Gauges			
UPC#	Description	Pressure scale	Refrigerants
49185	4" Red pressure	0 - 800 psi	R-22/134a/404A/410A
49186	4" Blue compound	30"-0-300* psi	
°C - Celsius Gauges			
UPC#	Description	Pressure scale	Refrigerants
49183	4" Red pressure	bar/psi	R-22/134a/404A/407C
49184	4" Blue compound	bar/psi	
49189	Replacement crystal for both °C and °F		

*Features retard protection to 500 psi.

3-1/2" (90 mm) LIQUID-FILLED MANIFOLD GAUGES (°F and °C) RED AND BLUE With 1% accuracy (Class 1) calibration



Gauges are completely filled with glycerin for maximum protection from pulsation. Large 3-1/2" (90 mm) diameter gauge with refrigerants color-coded on the dials in bold numbers. Offset stem fits all major manifold brands. 🇺🇸

- Now with zero adjustment
- 1/8" NPT Male connection
- Temperature rating of 0° to 122°F (-18° to 50°C)
- Calibrated to 1% accuracy (Class 1)

°F - Fahrenheit and °C - Celsius Gauges			
UPC#	Description	Pressure scale	Refrigerants
49511	3-1/2" Red pressure	0-500 psi (0 to 34 bar)	R-22 only
49512	3-1/2" Blue compound	30"-0-120 psi (-1 to 8 bar)	
49519	3-1/2" Red pressure	0-800 psi (0 to 55 bar)	R-410A
49520	3-1/2" Blue compound	30"-0-300* psi (-1 to 21 bar)	
°F - Fahrenheit Gauges			
UPC#	Description	Pressure scale	Refrigerants
49513	3-1/2" Red pressure	0-500 psi	R-22/134a/404A
49514	3-1/2" Blue compound	30"-0-120 psi	
49515	3-1/2" Red pressure	0-800 psi	R-22/410A
49516	3-1/2" Blue compound	30"-0-300* psi	
49517	3-1/2" Red pressure	0-500 psi	R-134a/404A/407C
49518	3-1/2" Blue compound	30"-0-120 psi	
°C - Celsius Gauges			
UPC#	Description	Pressure scale	Refrigerants
49521	3-1/2" Red pressure	0-500 psi (0 to 35 bar)	R-134a/404A/407C
49522	3-1/2" Blue compound	30"-0-116 psi (-1 to 8 bar)	

*Features retard protection to 500 psi.



2-1/2" (68 mm) MANIFOLD GAUGES (°F and °C) RED AND BLUE Class B



°F - Fahrenheit Gauges			
UPC#	Description	Pressure scale	Refrigerants
49001	2-1/2" Red pressure	0 - 500 psi	R-12/22/502
49002	2-1/2" Blue compound	30"-0-120** psi	
49008	Set red and blue		
49013	2-1/2" Red pressure	0 - 500 psi	R-12/22/134a
49014	2-1/2" Blue compound	30"-0-120** psi	
49015	2-1/2" Red pressure	0 - 500 psi	R-22/134a/404A
49016	2-1/2" Blue compound	30"-0-120** psi	
49035*	2-1/2" Red pressure	0 - 800 psi/kg/cm ²	R-410A
49036*	2-1/2" Blue compound	30"-0-300*** psi/kg/cm ²	
49051	2-1/2" Red pressure	0 - 500 psi	R-134a/404A/507
49052	2-1/2" Blue compound	30"-0-120** psi	
49053*	2-1/2" Red pressure	bar and MPa	R-410A
49054*	2-1/2" Blue compound	bar and MPa	
49010	Replacement crystal		

* These gauges have °C and °F on dial.
 ** Features retard protection to 350 psi.
 *** Features retard protection to 500 psi.
 Note: Small screw in back is 6/32" x 5/32" Phillips pan head screw.
 Note: Gauges not meant to be used with nitrogen.

- Steel case for durability
- High-visibility dials with colored temperature scales for easy reading
- Flutterless™ technology surge protector minimizes the needle pulsation for improved accuracy
- 1/8" NPT Male connection
- 3-2-3% accuracy
- Calibration traceable to NIST standards

°C - Celsius Gauges			
UPC#	Description	Pressure scale	Refrigerants
49003	2-1/2" Red pressure	kPa and psi	R-12/22/502
49004	2-1/2" Blue compound	kPa and psi	
49005	2-1/2" Red pressure	bar and psi	R-12/22/502
49006	2-1/2" Blue compound	bar and psi	
49025	2-1/2" Red pressure	bar and MPa	R-12/22/502
49026	2-1/2" Blue compound	bar and MPa	
49027	2-1/2" Red pressure	kg/cm ² and psi	R-12/22/502
49028	2-1/2" Blue compound	kg/cm ² and psi	
49031	2-1/2" Red pressure	bar and psi	R-22/134a/407C
49032	2-1/2" Blue compound	bar and psi	
49033	2-1/2" Red pressure	bar and psi	R-22/134a/404A
49034	2-1/2" Blue compound	bar and psi	
49035*	2-1/2" Red pressure	psi/kg/cm ²	R-410A
49036*	2-1/2" Blue compound	psi/kg/cm ²	
49053*	2-1/2" Red pressure	bar and MPa	R-410A
49054*	2-1/2" Blue compound	bar and MPa	
49055	2-1/2" Red pressure	bar and psi	R-134a/404A/507
49056	2-1/2" Blue compound	bar and psi	
49057	2-1/2" Red pressure	kg/cm ² and psi	R-134a/404A/507
49058	2-1/2" Blue compound	kg/cm ² and psi	
49059	2-1/2" Red pressure	MPa	R-134a/404A/407C/507
49060	2-1/2" Blue compound	MPa	
49063	2-1/2" Red pressure	bar and psi	R-134a/404A/407C
49064	2-1/2" Blue compound	bar and psi	
49010	Replacement crystal		

* These gauges have °C and °F on dial.

HEAVY DUTY 2-1/2" BRASS MANIFOLD GAUGES (°F) With 1% accuracy (Class 1) calibration



Solid brass case and premium movements. Heavy duty phosphor bronze and stainless steel internal components for longer service life under severe use.

- Flutterless™ technology with brass surge protector to minimize needle pulsation

- 1/8" NPT Male connection
- Calibrated to 1% accuracy
- Full view glass crystal

UPC#	Description	Pressure scale	Refrigerants
49047	2-1/2" Brass pressure	0 - 500 psi	R-12/22/502
49048	2-1/2" Brass compound	30"-0-120* psi	
49067	2-1/2" Brass pressure	0 - 500 psi	R-22/134a/404A
49068	2-1/2" Brass compound	30"-0-120* psi	
49049	Set of 49047, 49048		
49069	Set of 49067, 49068		
Certified Gauges			
49197	2-1/2" Brass pressure	0 - 500 psi	R-12/22/502
49198	2-1/2" Brass compound	30"-0-120* psi	
49199	2-1/2" Brass pressure	0 - 500 psi	R-22/134a/404A
49200	2-1/2" Brass compound	30"-0-120* psi	
49010	Replacement crystal (polycarbonate) for old 49011, 49012		
49039	Glass crystal for brass gauge		
49040	Brass gauge ring		

*Features retard protection to 350 psi.
 Note: Gauges are not meant to be used with nitrogen.

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 SYSTEM TOOLS

PROTECTIVE GAUGE BOOTS

For 2-1/2" and 3-1/8" gauges



- Rubber boots slip easily around gauges to cushion and protect them from impact
- Fit 2-1/2" or 3-1/8" gauges without covering easy access recalibration screw
- Color-coded red or blue to match gauge

UPC#	Description
49090	2-1/2" Set of gauge boots
49091	2-1/2" Red protective gauge boot
49092	2-1/2" Blue protective gauge boot
49190	3-1/8" Set of gauge boots
49191	3-1/8" Red protective gauge boot
49192	3-1/8" Blue protective gauge boot
49087	Red solar gauge boot
49088	Blue solar gauge boot
49089	Set red and blue solar gauge boots

LOW PRESSURE DIAPHRAGM 2-1/2" GAUGES



- The bronze diaphragm is designed for better protection on incidental overpressure
- Intended for low pressure applications only
- Black steel case
- Cannot be recalibrated

UPC#	Description	Range
78056	2-1/2" Barb type connection	0-10" W.C.
78061	2-1/2" Barb type connection	0-35" W.C.
78057	2-1/2" 1/4" NPT Male connection	0-10" W.C.
78066	2-1/2" 1/4" NPT Male connection	0-35" W.C.

3-1/8" MECHANICAL VACUUM GAUGES



Full range mechanical Bourdon tube steel gauges for determining system vacuum is more accurate than a compound gauge. All gauges are 1/8" NPT Male bottom connection.

- Larger to show vacuum more accurately in inches of mercury and Torr (or millibar)

CAUTION: Vacuum gauges must be handled carefully. Dropping, pressurizing and rough handling reduce their life.

UPC#	Size	Scale	Connection	Case
69044	3-1/8"	0-30" Hg & 760-0 Torr	1/8" NPT Male lower	Green
69045	3-1/8"	1000-0 millibar & 30-0" (Euro)	1/8" NPT Male lower	Green

2-1/2" AMMONIA GAUGES

With dual scale



Ammonia gauges are designed for use on manifolds and as permanent gauges on any system or equipment charged with ammonia. The Bourdon tube is made of 316 stainless. The dials show dual temperature and pressure scales. All gauges are equipped with restrictors to protect the gauges against pulsating pressure.

- 1/4" NPT Male connection
- Black steel gauges
- Steel sockets
- Calibrated to 3-2-3% accuracy

UPC #	Description	Range
40201	2-1/2" Gauge with twist on polycarbonate crystal	30" - 0 - 400 psi °F and 76-0-28 bar °C
40202	2-1/2" Gauge with twist on polycarbonate crystal	30" - 0 - 150 psi °F and 76-0-10 bar °C
49010	2-1/2" Replacement crystal	

