# **Manifold Gauge**

### **Multi-function Digital Manifold Gauge Set**

PR117A (Digital 2-valve manifold gauge set)

PR117B (Digital 4-valve manifold gauge set)

Poly Run Multi-Function Digital Manifold Gauge Set features an easy to read digital display for 56 different types and a variety of temperature and pressure units. The gauge are pulsation proof and automatically calibrate to zero at start up at any elevation up to 16000 feet. It can accurately measure the refrigerant temperature and pressure near the outlet of the evaporator and condenser as well as the corresponding pressure conversion and temperature index of the refrigerant saturation. The unit includes 3 high pressure, color coded 72" hoses and has 2 valves.







Applied Refrigerants		All CFC, HCFC, HFC refrigerants total more than 68 types
	Pressure	Kg/cm², in.Hg, mmHg, bar, psi, kPa
Unit Measurements	Vacuum	Kg/cm², in.Hg, mmHg, bar, psi, kPa, Micron
Offic Measurements	Temperature	°C, F
	High Side	Opsi to 725psi OkPa to 5000Kpa
	Low Side	Opsi to 435psi OkPa to 3000kPa
Display Range	Vacuum	29.92in.Hg to 0in.Hg
Display Hailige	Temperature	-40°F to 203°F -40°C to 95°C
	High Side	1087.5psi / 7500kPa
Maximum Overpressure	Low Side	625.5psi / 4500kPa
	Vacuum	59.84in.Hg
	Pressure High Side	±2.175psi / ±15kPa
Tolerance	Pressure Low Side	±1.45psi / ±10kPa
Tolerance	Vacuum	±0.08859in.Hg / ±0.3kPa
	Temperature	±0.5℃
Power Supply		9 V Battery to 30 hrs. LCD flashes to indicate low battery
Auto Shut-off Time		30 min. Under no operation Extended 30 min. by any button touch except On/Off Button
Background Lamp Auto Shut-off Time		10 min.
Operating Temperature		10.4°F to 120.2°F -12°C to 49°C

### Include

1.Poly Run Digital gauge
2.180cm Charging hose,
W.P./B.P: 800psi - 4000psi
3.Vacuum sensor
4.Temperature sensor
5.Two valve or four valve
aluminum manifold for option
6.User's Manual
7.Aluminum case

# NOTE

Pressure or temperature below or above the rated ranges will cause a "FULL" to be displayed

### **Digital Manifold Gauge Set**

# PR1818B PR1818C PR1009C

2-Valve manifold with digital gauge 4-Valve manifold with digital gauge 5-Valve manifold with digital gauge

Calibrated to measure 56 different refrigerants, these accurate gauges allow you to choose the temperature ( $^{\circ}$ C or  $^{\circ}$ F) and pressure units (psi, bar, kPa and kg/cm2) your most comfortable using. The low side gauge has a pressure scale of 30 inHg VAC to 250 psi and the high side gauge has a pressure scale of 0 to 800 psi. Gauges come with a backlight to enhance the view and make the gauges easy to see in low light conditions.

- **Features**
- 1.Includes profiles for 56 common refrigerants
- 2.Detects vacuum in "Hg"
- 3. Selectable temperature and pressure units of measure
- 4.Easy to read LCD screen with large digits5.Auto Shut-off after 15 minutes of inactivity
- 6.Low battery indicator







**Digital Vacuum Gauge Set** 

### **PR116**

Poly Run Digital Vacuum gauge combined thermocouple sensor technology with advanced electronics for precise readings and repeatability not found with thermistor sensors or analog meters. The result accurate readings from atmosphere to 1 micron without recalibration on job after job. Thermocouple technology has long been proven in laboratory and precision industrial instrumentation for sensing the deep vacuum range. The thermocouple sensors are factory calibrated and exhibit few of the electronic variances of thermistor sensors tound in many other electronic



Applied Ambient	Clean, dry and non-eroded air
Measurement Range	0-15psi
Ambient Temperature	-20°C-80°C
Ambient Moisture	5%-95%
Accuracy	1‰, 0.01kPa least resolution
Permanent Stability	1%
Display Means	4 Digits LCD with hold radix point changes between inHg and micro units
Display Window	47 x 22mm
Gauge Dimension	80mm
Power Supply	9V lithium battery (9VDC), 1000-1200mAh
Battery Life	18 month
Battery Automatic Diagnosing Function	Display Flickering when battery under 6V and warning to change battery
Auto shut-off	After automatic powering off the internal digits maintaining
Temperature Compensation	Temperature influence repaired by software automatic compensation within $0^\circ\!$

# Thermocouple Sensor Features

- 1.No adjustments or warm-up. Stays calibrated after ON/OFF switching and long evacuations
- 2. Automatic battery compensation
- 3. Automatic ambient temperature compensation

### LCD Gauge Features

- 1.Normal handing and jarring will not effect the LCD reading
- 2.Rugged molded case protects electronic circuitry and sensor
- 3. Precision circuitry controls sensor and translates sensor input into micro readings on the easy-to-read LCD  $\,$
- 4.CE Approved

### 4-Valve Piston Valve Manifold

### PR1005

The new Poly Run 4 Valve Test and Charging Manifold has been trimmed down for lighter weight but with the same powerful performance of the original model. This streamlined unit continues to provide the flow faster than any conventional manifold. And even though sleeker and more compact, the aluminum alloy is forged for strength and reliability with 3/8" bores through the body to speed the job.

### Features

- 1. Fourth hose enables connection to Hi/Lo side, refrigerant cylinder, and recovery unit or vacuum pump for diagnostics. Evacuation and charging without switching hoses
- -1/4"SAE Hi/Lo side with 3/8"SAE vacuum port for regular jobs
- -3/8"SAE Hi/Lo side with 1/2'SAE vacuum port for larger system
- 2. Front access for easy field recalibration
- 3. Proven double O-ring piston for reliability and long service life
- 4.Exclusive 100-mesh filter in-line on all flare fittings helps keep out particulate material and extend the life of the seat
- 5. Contoured easy-grip handles for positive control, color coded for ready identification
- 6. Sight glass to easily view refrigerant movement and condition during charging and recovery
- 7. Heavy duty hook won't pull out



Refrigerant Gauge R-410A R-22, R-404A, R-410A R--12, R-22, R-502 R-134a, R-404A, R-407C R--22, R-134a, R-404A,

68mm / 80mm Gauge optional, dry / liquid filled gauge optional, 68mm / 80mm gauge boot optional, more refrigerant gauge optional, psi / bar / kPa / °C / °F unit optional

### 2-Valve Piston Valve Manifold

### PR1003A

Include the original triple o-ring seal design valve system

### **Features**

- 1.Three super neoprene o-ring design
- 2.Back-seating o-ring seals valve nut when fully open
- 3. Floating nylon sealing disk
- 4. Valve stems retract fully to provide maximum flow
- 5. Mirror-like port finish for smooth valve movement



Refrigerant Gauge R22, R-404A, R-410A	R-12, R-22, R-502	R22, R-134a, R-404A,
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68mm Gauge, dry / liquid filled gauge optional, 68mm gauge boot optional, more refrigerant gauge optional, psi / bar / kPa / °C / °F unit optional

### 2-Valve Piston Valve Manifold

### PR1003

### **Feature**

- 1. Anodized aluminum block body
- 2.One full turn open / close valve
- 3. Oversized sight glass for easy viewing
- 4.Excellent vacuum characteristics

5.No-flutter gauge design, class 1.0, suitable for various kinds of refrigerants

6.Easy-to-grab knobs

Refrigerant Gauge	R12, R-22, R-502	R22, R-134a, R-404A,
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68mm / 80mm Gauge optional, dry / liquid filled gauge optional, 68mm / 80mm gauge boot optional, more refrigerant gauge optional, psi / bar kPa /  $^{\circ}$ C /  $^{\circ}$ F unit optional



# 2-Valve Piston Valve Manifold

### PR1010

The new Poly Run test and charging manifold is the first forged aluminum manifold in the industry. The special aluminum alloy construction of the manifold body makes this unit lightweight for handing case with the durability and reliability required for repeated, rugged use

### Feature

- 1.Large, easy to read 3-1/8" (80mm) steel case red and blue, 1% accuracy (Class 1) gauges, front access for easy field recalibration, optional protective gauge boots available
- 2.Proven, double O-ring piston for reliability and long service life 3.Exclusive 100-mesh filter in-line on all flare fittings helps keep out particulate material and extend the life of the seat
- 4. Contoured easy-grip handles for positive control, color coded for ready identification
- 5. Sight glass to easily view refrigerant movement and condition during charging and recovery
- 6.Heavy duty hook won't pull out

	Refrigerant Gauge	R-410A	R22, R-404A, R-410A	R–12, R-22, R-502	R-134a, R-404A, R-407C	R22, R-134a, R-404A,
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68mm / 80mm Gauge optional, dry / liquid filled gauge optional, 68mm / 80mm gauge boot optional, more refrigerant gauge optional, psi / bar kPa / °C / °F unit optional





### 2-Valve Ball Valve Manifold

### PR3147

### **Features**

- 1.With brass ball and Teflon seal
- 2.Brass steam
- 3. Simple and convenient for use
- 4.Excellent vacuum characteristics

5.Full opovting for maximum refrigeration flow

6. Oversized sight glass for easy viewing

7.No-flutter gauge design, class 1.0, suitable for various kinds of refrigerants

68mm / 80mm Gauge optional, dry / liquid filled gauge optional, 68mm / 80mm gauge boot optional, more refrigerant gauge optional, psi / bar / kPa /  $^{\circ}$ C /  $^{\circ}$ F unit optional





# 2-Valve Diaphragm Manifold

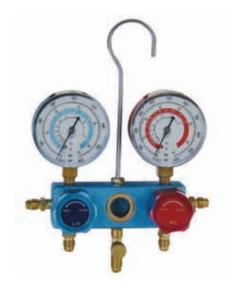
# PR1004

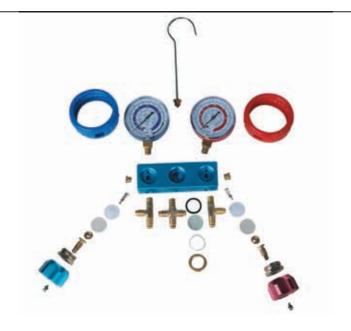
### **Features**

- 1.Unique swivel stem design reduces wear
- 2.Excellent vacuum characteristics
- 3.100% virgin teflon diaphragms

4.Full porting for maximum refrigerant flow 5.Industrial grade replaceable brass fittings

Refrigerant Gauge R-410A R-22, R-404A, R-410A R-12, R-22, R-502 R-134a, R-404A, R-407C R-22, R-134a, R-404A, R-404A, R-407C R-22, R-134a, R-404A, R-407C R-22, R-





### 2-Valve Brass Manifold

### PR1001B

### **Features**

1.Forged body is solid brass for durability. Full porting maximizes capacity. Metal valve handles are full sizes for easy operation. Hose anchors are forged into back of body at 45°

2.Surge protector and silicone dampened movement helps minimize needle pulsation for easier, more accurate readings

3.Non-rotating design reduces wear, only 1-1/2 turns give you full flow. Long-life nylon seat is also for vacuum and R134a,R404A, R507, R407C, R410A, etc.

4.Easy-to-read 2-1/2" steel case gauges

5.Limited lifetime warranty





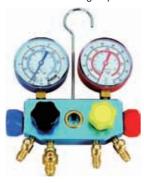
Refrigerant Gauge	R-410A	R12, R-22, R-502	R-134a, R-404A, R-507
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68mm / 80mm Gauge optional, dry / liquid filled gauge optional, 68mm / 80mm gauge boot optional, more refrigerant gauge optional, psi / bar / kPa / °C / °F unit optional

### 4-Valve Manifold

### PR1818A

Piston valve at two end Diaphragm valve in the middle 68mm / 80mm Gauge optional



# 1-Valve Diaphragm Manifold

### PR1006B PR1006C

Without sightglass With sightglass

### **Features**

- 1.Shut off ball valves
- 2.Bourdon gauges 80mm
- 3.No-flutter gauge design, class 1.6
- 4. Anodized aluminum block body
- 5.One full turn open / close valve
- 6.Super strong 100% Teflon diaphragms
- 7.Excellent vacuum characteristics
- 8.Large knobs for easy grip

# 5-Valve Diaphragm Manifold

### PR1009

68mm Gauge only



# PR1006B



PR1006C

# 1-Valve Piston Manifold

# PR3214

### **Features**

- 1.Individual manifolds for Hi/Lo sides of system
- 2.Individual valves are available in two or three poil versions
- 3. Nylon seals with double "O"-rings



PR3214

68mm / 80mm Gauge optional, dry / liquid filled gauge optional, 68mm / 80mm gauge boot optional, more refrigerant gauge optional, psi / bar / kPa /  $^{\circ}$ C /  $^{\circ}$ F unit optional

### R-134a 2-Valve Piston Manifold

### PR4442

### Features

- 1.Solid Aluminum Bar Long-lasting and durable with proven face seal valves
- 2.New Universal Gauges-Easy to read dial faces show R-134a temperatures in degrees Fahrenheit, plus pressures in psi and kPa
- 3. Gauge Boots-Protects your manifolds during use and storage
- 4. Sight Glass-Shows movement of refrigerant through the manifold
- 5.Include-R134a Low permeation hoses with field service couplers on the high and low side hoses; yellow hose is 1/2"ACME x 1/2"ACME with quick seal fitting



# R-134a 2-Valve Diapgragm Manifolds

### PR4441

Suitable for CO2, 1/4"SAE fittings



1/2"ACME Fittings



PR4441



### R-134a 2-Valve Brass Manifold

# PR4447

### Features

- 1 Sight Glass-Confirms movement and condition of refrigerant passing through the manifold
- 2.Gauge Boots-Provides protection against the bumps and knocks of every day use
- 3. Pressure Temperature Chart-Stores in a slot on the back of the manifold,

gives you multiple refrigerant capability

4.face Seal Valves-Give a tight seal, less wear and improved flow





### R-134a 2-Valve Brass Manifold

# PR4452

# **Features**

- 1. Poly Run's popular brass manifold is easy to use and designed for accuracy
- 2.Bar-Solid forged brass for long life, hand wheels are durable, color coded
- 3. Universal Gauges-Clearly marked so they are easy to read protected with Poly Run lenses
- 4.Field Proven Face Seal Valve-Prevents leakage past the stem



# **Refrigerant Gauge**

1/8" NPT Male connection

These gauges have °C and °F on dial











# Refrigerant Gauge 2-1/2" (68mm)

Class B, 3%-2%-3% Accuracy

RG4007		psi	RG4034A	R-22, R-134a, R-407C	bar, psi	RG4041	R-134a, R-404A, R-407C	bar, psi
RG4030		kPa, psi	RG4036		kg/cm <sup>2</sup> , psi			
RG4031	R-12, R-22, R-502	bar, psi	RG4037	R-410A	Bar, MPa	RG4040	R-134a, R-404A, R-407C R-507	MPa
RG4032		bar, MPa	RG4011		psi		1010 1007	
RG4033			RG4038	R-134a, R-404A, R-507	bar, psi	RG4009	D 22 D1240 D 4044	psi
RG4008	R-12, R-22, R-134	psi	RG4039		kg/cm <sup>2</sup> , psi	RG4035	R-22, R134a, R-404A	bar, psi

# Refrigerant Gauge 3-1/8" (80mm)

Class 1, 1% Accuracy

RG4001		psi	RG4003	D 00 D 404 D 4044	psi	RG4006		psi
RG4022	R-12, R-22, R-502	bar, MPa	RG4028	R-22, R-134a, R-404A	bar, psi	RG4020	R-134a, R-404A, R-407C	bar, psi
RG4023		bar, psi	RG4004	D 4404	bar, psi	RG4025		bar,MPa
RG4002	R-12, R-22, R-134	psi	RG4024	R-410A	bar, MPa		D 00 D404 D 4404	h :
RG4005	R-12, R-404, R-410A	psi	RG4027	R-22, R-134a, R-407C	bar, psi	R-22, R134a, R-413A	bar, psi	

# Liquid-filled Refrigerant Gauge 2-1/2" (68mm)

Class B, 3%-2%-3% Accuracy

RG4014	R-134a, R-404A, R-407C	psi
RG4015	R-22, R134a, R-404A	psi
RG4016	R-12, R-22, R-502	psi
RG4017	R-12, R-22, R-134	psi
RG4018	R-410A	bar, psi
RG4019	R-22, R-404A, R-410A	psi

# Liquid-filled Refrigerant Gauge 3-1/8" (80mm)

Class B, 3%-2%-3% Accuracy

RG4042	R-12, R-22, R-502	bar, MPa
RG4043	R-134a, R-404A, R-407C	bar, MPa
RG4044	R-410A	bar, MPa
RG4045	R-410A	bar, psi

# Mechanical Vacuum Gauges 3-1/8"

**RG4029** 

1/8" NPT Male connection Scale 0-30inHg &1000-0mbar

Full range mechanical bourdon tube gauges for determining system vacuum. Much more accurate than a compound gauge



**RG4012 68mm** 







**RG4013 80mm**