

# Patented Manifold Gauges

Our manifold gauges are drop forged with a high-grade aluminum alloy. This reduces the weight while maintaining a durable structure. The patented magnetic buckle provides a convenient 2-in-1 method to hang the manifold while working. For magnetic surfaces, the magnet part of the buckle can be used to quickly secure the manifold gauge. For non-magnetic surfaces, the hook part of the buckle can be used instead. The large 80mm gauges provide clear and precise readings for the technician to see. Additionally, the 4X O-Ring design creates a leak-proof seal.



YES

## Manifold Gauge | R410 | R32 |

| Model No. | Refrigerant Scale | Pressure Rating | Sight Glass | Hose Length | Gauge Fitting         | Hose Fitting       |                        |                                                         |                     |                |
|-----------|-------------------|-----------------|-------------|-------------|-----------------------|--------------------|------------------------|---------------------------------------------------------|---------------------|----------------|
| 27453     | R410A, R32        | 800/4000psi     | Yes         | 3"          | Low & High Side: 1/4" | Straight End: 1/4" |                        |                                                         |                     |                |
| 27455     |                   |                 |             | 5"          |                       |                    |                        |                                                         |                     |                |
| 27456     |                   |                 |             | 6"          |                       |                    |                        |                                                         |                     |                |
| 27463     |                   |                 | No          | 3"          |                       |                    | Service Port: 1/4"     | 45° End: Low & High Side - 5/16"<br>Service Hose - 1/4" |                     |                |
| 27465     |                   |                 |             | 5"          |                       |                    |                        |                                                         |                     |                |
| 27466     |                   |                 |             | 6"          |                       |                    |                        |                                                         |                     |                |
| 27553     |                   |                 | Yes         | 800/4000psi | Yes                   | 3"                 | Low & High Side: 5/16" | Straight End: 5/16"                                     |                     |                |
| 27555     |                   |                 |             |             |                       | 5"                 |                        |                                                         |                     |                |
| 27556     |                   |                 |             |             |                       | 6"                 |                        |                                                         |                     |                |
| 27563     |                   |                 |             |             | No                    | 3"                 |                        |                                                         | Service Port: 5/16" | 45° End: 5/16" |
| 27565     |                   |                 |             |             |                       | 5"                 |                        |                                                         |                     |                |
| 27566     |                   |                 |             |             |                       | 6"                 |                        |                                                         |                     |                |

## Manifold Gauge | R22 | R134A | R404A | R410A |

Includes 2 pcs CB-R410-V adapter (1/4" Male X 5/16" Female with auto shut-off valve) and 1 pc CB-R410-04 adapter (1/4" Male X 5/16" Female).

| Model No. | Refrigerant Scale              | Pressure Rating | Sight Glass | Hose Length | Gauge Fitting         | Hose Fitting       | Converter                                    |                    |               |
|-----------|--------------------------------|-----------------|-------------|-------------|-----------------------|--------------------|----------------------------------------------|--------------------|---------------|
| 27853     | R22<br>R134A<br>R404A<br>R410A | 800/4000psi     | Yes         | 3"          | Low & High Side: 1/4" | Straight End: 1/4" | Includes: 2 pcs CB-R410-V<br>1 pc CB-R410-04 |                    |               |
| 27855     |                                |                 |             | 5"          |                       |                    |                                              |                    |               |
| 27856     |                                |                 |             | 6"          |                       |                    |                                              |                    |               |
| 27863     |                                |                 | No          | 3"          |                       |                    |                                              | Service Port: 1/4" | 45° End: 1/4" |
| 27865     |                                |                 |             | 5"          |                       |                    |                                              |                    |               |
| 27866     |                                |                 |             | 6"          |                       |                    |                                              |                    |               |

## Manifold Gauge | R12 | R22 | R134A | R404A |

Includes 1 pc QC-MH4 and 1 pc QC-ML4 quick coupler (1/4" Male hose connection).

| Model No. | Refrigerant Scale            | Pressure Rating | Sight Glass | Hose Length | Gauge Fitting         | Hose Fitting       | Quick Coupler                        |                    |               |
|-----------|------------------------------|-----------------|-------------|-------------|-----------------------|--------------------|--------------------------------------|--------------------|---------------|
| 27953     | R12<br>R22<br>R134A<br>R404A | 600/3000psi     | Yes         | 3"          | Low & High Side: 1/4" | Straight End: 1/4" | Includes: 1 pc QC-MH4<br>1 pc QC-ML4 |                    |               |
| 27955     |                              |                 |             | 5"          |                       |                    |                                      |                    |               |
| 27956     |                              |                 |             | 6"          |                       |                    |                                      |                    |               |
| 27963     |                              |                 | No          | 3"          |                       |                    |                                      | Service Port: 1/4" | 45° End: 1/4" |
| 27965     |                              |                 |             | 5"          |                       |                    |                                      |                    |               |
| 27966     |                              |                 |             | 6"          |                       |                    |                                      |                    |               |

# Patented | Manifold Gauges



## Ball Valve Manifold Gauge | 90mm | R410A | R32 |

Ball valve design with compact 50 mm gauges. Manifold body is 90 mm long.

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting             | Hose Fitting                                               |
|-----------|-------------------|-----------------|-------------|---------------------------|------------------------------------------------------------|
| 29473     | R410A<br>R32      | 800/4000psi     | 3"          | Low & High Side:<br>1/4"  | Straight End: 1/4"                                         |
| 29475     |                   |                 | 5"          | Service Port:<br>1/4"     | 45° End:<br>Low & High Side - 5/16"<br>Service Hose - 1/4" |
| 29476     |                   |                 | 6"          |                           |                                                            |
| 29573     |                   |                 | 3"          | Low & High Side:<br>5/16" | Straight End:<br>5/16"                                     |
| 29575     |                   |                 | 5"          | Service Port:<br>5/16"    | 45° End:<br>5/16"                                          |
| 29576     |                   |                 | 6"          | 5/16"                     | 5/16"                                                      |

## Ball Valve Manifold Gauge | 120mm | R410A | R32 |

Ball valve design with large 80 mm gauges. Manifold body is 120 mm long.

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting             | Hose Fitting                                               |
|-----------|-------------------|-----------------|-------------|---------------------------|------------------------------------------------------------|
| 29483     | R410A<br>R32      | 800/4000psi     | 3"          | Low & High Side:<br>1/4"  | Straight End: 1/4"                                         |
| 29485     |                   |                 | 5"          | Service Port:<br>1/4"     | 45° End:<br>Low & High Side - 5/16"<br>Service Hose - 1/4" |
| 29486     |                   |                 | 6"          |                           |                                                            |
| 29583     |                   |                 | 3"          | Low & High Side:<br>5/16" | Straight End:<br>5/16"                                     |
| 29585     |                   |                 | 5"          | Service Port:<br>5/16"    | 45° End:<br>5/16"                                          |
| 29586     |                   |                 | 6"          | 5/16"                     | 5/16"                                                      |

## Ball Valve Manifold Gauge | 120mm | R22 | R134A | R404A | R410A |

Includes 2 pcs CB-R410-V adapter (1/4" Male X 5/16" Female with auto shut-off valve) and 1 pc CB-R410-04 adapter (1/4" Male X 5/16" Female).

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting            | Hose Fitting          | Converter                                       |
|-----------|-------------------|-----------------|-------------|--------------------------|-----------------------|-------------------------------------------------|
| 29883     | R22               | 800/4000psi     | 3"          | Low & High Side:<br>1/4" | Straight End:<br>1/4" | Includes:<br>2 pcs CB-R410-V<br>1 pc CB-R410-04 |
| 29885     | R134A             |                 | 5"          | Service Port:<br>1/4"    | 45° End:<br>1/4"      |                                                 |
| 29886     | R404A             |                 | 6"          | 1/4"                     | 1/4"                  |                                                 |
|           | R410A             |                 |             |                          |                       |                                                 |

## Ball Valve Manifold Gauge | 120mm | R12 | R22 | R134A | R404A |

Includes 1 pc QC-MH4 and 1 pc QC-ML4 quick coupler (1/4" Male hose connection).

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting            | Hose Fitting          | Converter                               |
|-----------|-------------------|-----------------|-------------|--------------------------|-----------------------|-----------------------------------------|
| 29983     | R12               | 600/3000psi     | 3"          | Low & High Side:<br>1/4" | Straight End:<br>1/4" | Includes:<br>1 pc QC-MH4<br>1 pc QC-ML4 |
| 29985     | R22               |                 | 5"          | Service Port:<br>1/4"    | 45° End:<br>1/4"      |                                         |
| 29986     | R134A             |                 | 6"          | 1/4"                     | 1/4"                  |                                         |



## Single Gauge Manifold | Low Pressure | R410A | R32 |

Single gauge design with a large 80mm vibration free gauge. Gauge boots included.

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting       | Hose Fitting                                        |
|-----------|-------------------|-----------------|-------------|---------------------|-----------------------------------------------------|
| 20413     | R410A<br>R32      | 800/4000psi     | 3"          | Low Side: 1/4"      | Straight End: 1/4"                                  |
| 20415     |                   |                 | 5"          | Service Port: 1/4"  | 45° End:<br>Low Side - 5/16"<br>Service Hose - 1/4" |
| 20416     |                   |                 | 6"          |                     |                                                     |
| 20513     |                   |                 | 3"          | Low Side: 5/16"     | Straight End: 5/16"                                 |
| 20515     |                   |                 | 5"          | Service Port: 5/16" | 45° End: 5/16"                                      |
| 20516     |                   |                 | 6"          |                     |                                                     |

## Single Gauge Manifold | Low Pressure | R22 | R134A | R404A | R410A |

Includes 1 pc CB-R410-V adapter (1/4" Male X 5/16" Female with auto shut-off valve) and 1 pc CB-R410-04 adapter (1/4" Male X 5/16" Female).

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting         | Hose Fitting          | Converter                                      |
|-----------|-------------------|-----------------|-------------|-----------------------|-----------------------|------------------------------------------------|
| 20813     | R22               | 800/4000psi     | 3"          | Low Side:<br>1/4"     | Straight End:<br>1/4" | Includes:<br>1 pc CB-R410-V<br>1 pc CB-R410-04 |
| 20815     | R134A             |                 | 5"          | Service Port:<br>1/4" | 45° End:<br>1/4"      |                                                |
| 20816     | R404A<br>R410A    |                 | 6"          | 1/4"                  | 1/4"                  |                                                |

## Single Gauge Manifold | High Pressure | R410 | R32 |

Single gauge design with a large 80mm vibration free gauge. Gauge boots included.

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting       | Hose Fitting                                         |
|-----------|-------------------|-----------------|-------------|---------------------|------------------------------------------------------|
| 20423     | R410A<br>R32      | 800/4000psi     | 3"          | High Side: 1/4"     | Straight End: 1/4"                                   |
| 20425     |                   |                 | 5"          | Service Port: 1/4"  | 45° End:<br>High Side - 5/16"<br>Service Hose - 1/4" |
| 20426     |                   |                 | 6"          |                     |                                                      |
| 20523     |                   |                 | 3"          | High Side: 5/16"    | Straight End: 5/16"                                  |
| 20525     |                   |                 | 5"          | Service Port: 5/16" | 45° End: 5/16"                                       |
| 20526     |                   |                 | 6"          |                     |                                                      |

## Single Gauge Manifold | High Pressure | R22 | R134A | R404A | R410A |

Includes 1 pc CB-R410-V adapter (1/4" Male X 5/16" Female with auto shut-off valve) and 1 pc CB-R410-04 adapter (1/4" Male X 5/16" Female).

| Model No. | Refrigerant Scale | Pressure Rating | Hose Length | Gauge Fitting         | Hose Fitting          | Converter                                      |
|-----------|-------------------|-----------------|-------------|-----------------------|-----------------------|------------------------------------------------|
| 20823     | R22               | 800/4000psi     | 3"          | High Side:<br>1/4"    | Straight End:<br>1/4" | Includes:<br>1 pc CB-R410-V<br>1 pc CB-R410-04 |
| 20825     | R134A             |                 | 5"          | Service Port:<br>1/4" | 45° End:<br>1/4"      |                                                |
| 20826     | R404A<br>R410A    |                 | 6"          | 1/4"                  | 1/4"                  |                                                |



## Patented Hoses and Accessories

## Patented Refrigerant Leak Detector



### Refrigerant Hoses | 600/3000psi |

All Black Diamond hoses have a patented Bearing Lock Fitting design. This design prevents the hose fittings from coming loose when the hoses are turned, preventing an accidental leak.

| Model No. | Pressure Rating | Hose Length | Hose Fitting       |
|-----------|-----------------|-------------|--------------------|
| 23333     | 600/3000psi     | 3"          | Straight End: 1/4" |
| 23335     |                 | 5"          |                    |
| 23336     |                 | 6"          | 45° End: 1/4"      |

### Refrigerant Hoses | 800/4000psi |

All Black Diamond hoses have a patented Bearing Lock Fitting design. This design prevents the hose fittings from coming loose when the hoses are turned, preventing an accidental leak.

| Model No. | Pressure Rating | Hose Length | Hose Fitting                                               |
|-----------|-----------------|-------------|------------------------------------------------------------|
| 23433     | 800/4000psi     | 3"          | Straight End: 1/4"                                         |
| 23435     |                 | 5"          |                                                            |
| 23436     |                 | 6"          | 45° End:<br>Low & High Side - 5/16"<br>Service Hose - 1/4" |
| 23533     |                 | 3"          | Straight End: 5/16"                                        |
| 23535     |                 | 5"          |                                                            |
| 23536     |                 | 6"          |                                                            |

### Conversion Adapters

#### QC-MH4 Quick Coupler

Quick coupler for automotive A/C high pressure port. 1/4" male fitting for hose connection.



#### QC-ML4 Quick Coupler

Quick coupler for automotive A/C low pressure port. 1/4" male fitting for hose connection.



#### CB-R410-V

1/4" Male X 5/16" Female fitting with auto shut-off valve.



#### CB-R410-04

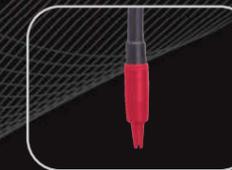
1/4" Male X 5/16" Female fitting.



Our Refrigerant Leak Detector uses state-of-the-art technology to quickly and accurately detect leak points in a system. The microprocessor is outfitted with an advanced signal processing unit. The infrared gas sensor has three sensitivity levels and an ambient concentration reset function that the user can adjust with to fit any working condition.



**Advanced Digital Processing Unit**  
Advanced microprocessor provides quick and accurate readings.



**Infrared Sensor**  
Accurate sensor with three sensitivity levels.



**Stainless Steel Probe**  
15.5" (40cm) flexible probe allows the user to detect leaks in hard to reach areas or tight spaces.

| Model No. | Probe Length | Operating Temperature | Dimensions       | Weight |
|-----------|--------------|-----------------------|------------------|--------|
| 26388     | 40cm (15.5") | 0-40°C (32-104°F)     | 254 X 71 X 54 mm | 420g   |

- Detects all current refrigerants
- Advanced Digital Signal Processing (DSP) Microprocessor
- Infrared Gas Sensor
- Multi-Color Display Interface

- Ambient Concentration Reset Function
- Three Sensitivity Levels: High-Med-Low
- 15.5" (40cm) Flexible Stainless Steel Probe
- Carrying Case Included





## WORLDSKILLS SÃO PAULO 2015

Asian First Refrigeration Corporation is the Proud Sponsor of:  
Gold Medal Winner, Refrigeration and A/C Division -  
Pei-Hao Juan of Taipei, Taiwan.

The WorldSkills event is a challenge that is held every two years and gathers young talents in various professions to compete in a skills test. In the WorldSkills São Paulo 2015 event, Pei-Hao Juan of Taiwan is the gold medal winner in the refrigeration and air conditioning competition. He is Taiwan's first ever gold medal winner in the HVAC division.

We at Asian First Refrigeration Corporation are proud to have sponsored Pei-Hao Juan his entire lineup of HVAC tubing tools and testing equipment. Our Black Diamond® Series products, with its cutting-edge features, helped Pei-Hao Juan and Taiwan secure a first place victory.

