



Features

- **Reliability** – “direct drive” bourdon tube technology featuring only one moving part ensures conformance to accuracy specification for a period exceeding 6 years....even in vibration and pulsation applications – **no need for liquid filling of case, ever!!**
- **Performance** – protection from pressure spikes up to 150% of full scale
- **Safe Design** – a robust Inconel X-750 capillary, one moving part bourdon tube system and rear blow-out protection provide for an inherently safer product design in high vibration/pulsation applications
- **Rugged Product Packaging** – ABS or electropolished watertight 300 Series Stainless Steel case suitable for washdown applications. Corrosion resistant materials utilized throughout
- **Accurate Measurements** – 0.5% full scale @ midscale; 1% full scale overall
- **Various Sizes** – ABS case – 2.5“, 4.5” and 6”; SS case – 2.5” and 4.5”
- **Options** – chemical seals, custom logos and Valox case material



Product Description

The Accu-Drive family of refrigeration pressure gauges from 3D Instruments offers a new performance standard for pressure measurement in a refrigerant application. The Accu-Drive pressure gauges are designed to provide “maintenance-free” quality pressure measurements in refrigerant service...even in the most severe pulsation and/or vibration based applications! Outfitted with either an ABS or 300 series stainless steel cases, the revolutionary “direct drive” bourdon technology provides for outstanding long-term operation with no periodic maintenance requirements in challenging refrigerant applications...like discharge pumps!

Utilizing the unique 3D Instruments helical bourdon “direct drive” pressure measurement technology, the antiquated C-bourdon tube utilized in most conventional pressure gauges is eliminated. Additionally, the gearing, linkages, levers and springs required to generate pointer movement in the conventional pressure gauge, which are highly prone to wear and premature failure in high vibration and pulsation applications, are also eliminated!!

The Accu-Drive refrigeration gauges are designed to provide superior performance in the harshest and most severe of process environments! The highest quality corrosion-resistant materials are featured throughout - a robust ABS or weather-resistant 300 series stainless steel case and Inconel X-750 helical bourdon tube. To ensure long-term accuracy and linearity, the SS pointer shaft is supported by two synthetic sapphire bearings.

The Accu-Drive refrigeration pressure gauges incorporate some very revolutionary design concepts...a unique maintenance-free “direct drive” measuring technology, a “dry case” vibration dampening system, whereby the Accu-Drive refrigeration gauge does not require liquid filling of the case for severe service applications, and an external zero adjustment to minimize maintenance.

The combination of sophisticated pressure measurement technology, robust design and high quality materials makes the Accu-Drive family of gauges from 3D Instruments the ideal choice for your demanding refrigeration applications.

AIR CONDITIONING / REFRIGERATION

SERIES 2510X GAUGES

- Accuracy: 0.5% of span @ Midscale, 1% Overall (Pressure readings)
1% of span from 0 to 20" Hg, 2% from 21" to 30" Hg (Vacuum readings)
- Size: 2 1/2", 4 1/2" and 6" Dial Sizes
- Case: ABS Cycolac
SSTL available on 2 1/2" and 4 1/2"
- Fitting: 316 SSTL 1/4" or 1/2" NPT Male
- Helical Bourdon Tube: Inconel X-750
- Connecting Material: Nickel Braze. Suitable for Ammonia use.

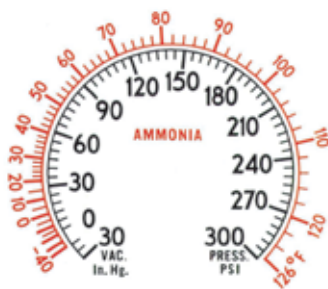
Ammonia Refrigerant Gauge for service such as Ammonia Compressors.
Gauges have Temperature Equivalent scales in Red.
Provides easy analysis of refrigeration systems.
All 3D Direct Drive Pressure Gauges are suitable for Ammonia use.

Refrigerant Gauge for equipment utilizing R-12, R-22 or R-502 refrigerants.
Gauges have Temperature Equivalent scales in Red.
Provides easy analysis of refrigeration systems.

30" Hg Vacuum to 0 to 150 PSI
Part Number Example: 25104-24B11DRA



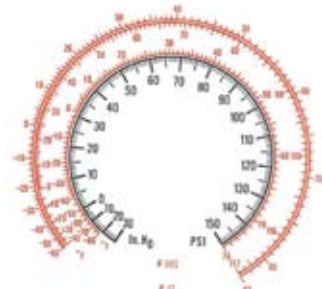
30" Hg Vacuum to 0 to 300 PSI
Part Number Example: 25104-26B11DRB



30" Hg Vacuum to 0 to 300 PSI
Part Number Example: 25104-26B11DRB



30" Hg Vacuum to 0 to 150 PSI
Part Number Example: 25104-24B11DRB



ORDERING INFORMATION

PART NUMBER: 2510 ¹X - ²XX ³X ⁴X ⁵X ⁶XXX

Example: 25104-24B11 DRA GAD

4.5" Accu-Drive Refrigeration Gauge with dual scale 30" Hg-0-150 PSI range and -40-0-84 deg F temperature scale, Black ABS case with front flange, bottom 1/4" NPT male process connection with vibration dampening

Product Description: Accu-Drive Refrigeration Pressure Gauge – ABS case with accuracy: 0.5% of span @ midscale, 1% overall

1 Size of Gauge:
²: 2.5" dial size ⁴: 4.5" dial size ⁵: 6" dial size (Note: no 6" SS version available)

2 Pressures Codes:
²⁴: 30" Hg vacuum-0-150 PSI
²⁶: 30" Hg vacuum-0-300 PSI

3 Process Connection:
^B: 1/4" NPT male ^C: 1/2" NPT male

4 Process Fitting Location and Flange Configuration:
¹: Front Flange/Bottom Fitting ²: Front Flange/Back Fitting
³: Back Flange/Bottom Fitting* ⁴: Back Flange/Back Fitting*
⁵: No Flange/Bottom Fitting* ⁶: No Flange/Back Fitting*
 *- not available on 2.5" ABS case

5 Case Material/Color: (Note: Optional Valox case for 2.5" and 4.5" dial size is available – consult factory for details)
¹: Black ABS case
⁴: Yellow ABS case (4.5" and 6" dial size only)
⁵: Stainless Steel (2.5" and 4.5" dial size only)

6 Option Codes:
^{GAD}: Vibration Dampening ^{GBT}: Laminated Safety Glass (4.5" stainless steel case only)
^{DRA}: Refrigerant Ammonia – dual scale: 30" Hg vacuum to 0 to 150 PSI or 300 PSI and equivalent temp scale in red (Note: red temp scale on outer ring)
^{DRB}: Refrigerant Freon – four scale: 30" Hg vacuum to 0 to 150 PSI or 300 PSI and equivalent temp scales in red (Note: red temp scales on outer rings)

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