



NDL Industries

**APPLICATIONS**

Commercial, Industrial, and Residential HVAC and Refrigeration

# HVAC-R Product Guide

Innovative HVAC-R Products with High-Quality Performance





# Install NDL With Confidence

NDL's innovative approach to manufacturing HVAC and refrigeration components, coupled with its technical expertise and reliable customer service, makes NDL Industries the premier choice for all of your fitting needs.

## HVAC-R Products

### ACR Copper Fittings

NDL's ACR copper fittings have had zero reported failures since 1999 and carry an unparalleled 10-year warranty. Every fitting is size-stamped for easy identification and is heavier and thicker than most in the industry. Our ACR copper fittings meet or exceed ASME standards, are tested for actual burst pressure, and are approved by TSSA with a 4.5 times safety margin. The fittings that are up to and including 2-5/8" size have received UL Certification as well. Fittings that are sizes 1/4" - 3/4" reach 1000 PSI working pressure, 7/8" at 900 PSI, and 1-1/8" - 2-5/8" at 700 PSI.



*ANSI/ASME B16.22; TSSA; RoHS; CRN approved*

### PAC Copper Fittings

Staying on brand with NDL quality, the PAC copper fittings are similar to our ACR copper fittings with outstanding fit and finish. These copper sweat fittings are designed for soldering, with a zero-reported failure rate.

NDL's PAC copper fittings are of the highest quality with excellent fit and finish. Each fitting is size-stamped, double-washed, and poly-bagged in contractor-friendly sized quantities.

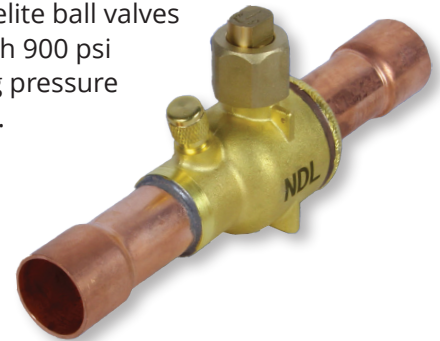


*ANSI/ASME B16.22, CRN approved*

### Isolation Refrigeration Ball Valves

NDL's isolation ball valves are designed for refrigeration, commercial HVAC, VRV, VRF, multi-mini split, and sub-critical applications. Our heavy-duty, full-port isolation ball valves use 100% virgin Teflon seals and seats, making them the best in their class. They are tested with 95% nitrogen and 5% hydrogen solution at 450 PSIG to detect and correct any leaks before leaving the factory. Our stem placement is engineered from the bottom up as well. If there is an accidental over-pressurization in the valve, it will not blow the stem out and lose the charge. Plus, using the virgin Teflon seals ensures no need for seal replacement. Our valves are also backed by an unparalleled two-year warranty. Our warranty proves our product confidence, along with stamping every valve with a serial number and clean packaging in poly-bags to prevent contamination and malfunctions. Sizes range from 1/4" to 4 1/8", and our elite ball valves are built to last with 900 psi maximum working pressure on sizes up to 7/8".

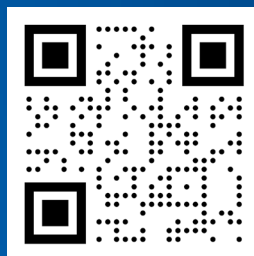
*UL listed;  
CE; RoHS;  
CRN approved*



### Refrigeration Ball Valve Insulation

The NBV-IN Insulation is an EPDM-based, closed-cell, lightweight, elastomeric thermal insulation, specifically designed for solar- and steam-heating applications with service temperatures ranging from -57°C to 125°C. Its tough skin allows for easy installation and will not melt or burn the connection.

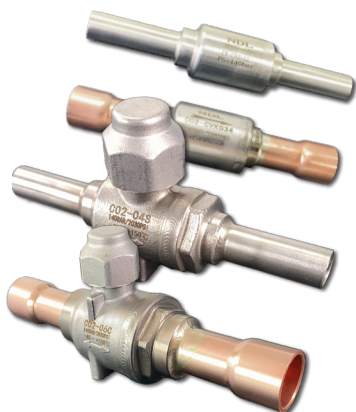




See a Full List of Our HVAC-R Products at [ndlinc.com](http://ndlinc.com).

## CO<sub>2</sub> Valves

NDL is the first manufacturer of the CRN-approved ball valves and check valves for pressures up to 140 bar. The ball valves can hold five times their maximum working pressure, netting a tremendous safety margin for any ball valve used in CO<sub>2</sub> systems. The CO<sub>2</sub> lineup includes stainless steel ball valves, stainless steel service valves, stainless steel check valves, C194 copper ball valves, and C194 copper check valves. Their robust design meets and exceeds industry standards for holding maximum working pressure, garnering reliability for transcritical CO<sub>2</sub> refrigeration applications.



*CE; RoHS; CRN Approved*

## Sight Glass

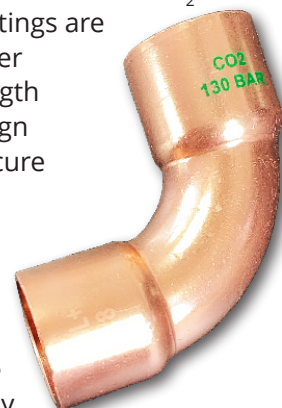
NDL's full-brass body sight glasses use special litmus paper that returns to its original color once the system is cleaned, eliminating the need to change the eye. Tube ends are oven brazed onto the body and a replaceable eye is available via special order. There is a positive color contract with yellow meaning wet and green meaning dry. Available in both sweat (ODF) sizes 1/4" - 7/8" and flare (SAE) sizes 1/4" - 3/4". The maximum working pressure is 600 PSI.

*UL listed;  
RoHS*



## CO<sub>2</sub> Fittings

The NDL CO<sub>2</sub> copper fittings (C19400 high-pressure copper) are specifically designed for use in CO<sub>2</sub> refrigeration systems. These fittings are made from a high-quality copper alloy that provides added strength and durability. The unique design of these fittings allows for a secure and long-lasting connection, making them ideal for use in high-pressure applications. Some properties of the NDL CO<sub>2</sub> fittings are thicker walls, higher weight, tight fit, and size stamped on each fitting for easy identification.



## Copper Tee for Service Valve

When working with CO<sub>2</sub> refrigeration systems, it's important to consider the high-pressure levels involved. Access ports commonly used in regular refrigeration systems may not be suitable for use with CO<sub>2</sub> systems, as the Schrader valve seal can break under pressure, necessitating the venting of the entire line. To avoid this issue, it is recommended to use a service valve that can be closed, enabling workers to easily connect and disconnect equipment as needed. While installing a service valve may require more time upfront, it is generally preferred by workers who regularly service equipment. NDL tee fittings are designed specifically for the installation of service valves, streamlining the process, and ensuring a secure, leak-free seal. By using a service valve and the NDL specialized fitting, you can prevent high-pressure problems and make your work more efficient.





## NDL QUALITY STAMP

Only after our products pass strict and rigorous quality tests will the NDL name be stamped on them. The NDL Quality Stamp is our seal of approval that our products can be trusted



## Lead-Free Brass Fittings and Nipples

NDL's brass fittings and nipples are manufactured for longevity and superior corrosion resistance and are engineered with Class 125 lead-free cast bronze threaded fittings to create a tight seal for an easy installation. Our lead-free brass fittings and nipples are pressure rated at 125 psi and have sizes available from 1/8" to 2".

*Fittings: AMSE B16.15; Flanges: ASME B16.24 MSS SP-106; Unions: A-A 059617; Threads: ANSI/NSF Standard 61-Annex G; NSF/ANSI Standard 372, ISO9001, CRN approved*



## Gas Ball Valves

NDL's gas ball valves are engineered with a quarter-turn handle and a compact forged brass body design that allows for quick and easy residential or commercial installations. Our gas ball valves feature PTFE seats and NBR O-rings to reduce contamination buildup and have a working pressure of 0.5 psi.

*ASME Z21.15 and CSA 9.1 approved at 0.5 psi; ASME B16.44 and CR 91-002 approved at 5 psi; ASME B16.33 and CGA 3.16 approved, and CSA 175 at 175 psi; UL at 250 psi*



## Filter Driers

NDL's premium filter driers are uniquely designed for the complete protection of refrigeration systems, our premium filter driers use XH11 desiccant with activated alumina and charcoal and are suitable for all refrigerants, including R410A. Available as liquid line, biflow, suction line, shells, and replaceable cores with sweat, flare, and press-fit ends. In addition, sight glass options are available.

*UL listed; CE; CRN approved*



## TW Filter Driers with Spectroline AR-GLO®

A patented solution to reduce warranty repair costs and reduce service callbacks. TW filter driers with spectroline AR-GLO uses fluorescent dye trace wafer to pinpoint the exact location of leaks. It is approved by all leading compressor and refrigeration equipment manufacturers. The dye is compatible with all refrigerants to provide complete protection for 6-ton\* air conditioning systems. Inspections can be completed with the system running, eliminating downtime.

*UL listed; CE; CRN approved*



## Black Malleable Fittings, Iron Pipe, and Steel Nipples

NDL's high-quality Class 150 black malleable fittings include elbows, tees, crosses, plugs, unions, caps, couplings, hex bushings, and floor flanges, ranging in diameter from 1/8" to 4". Black welded carbon steel schedule 40 nipples are also available ranging in 15 diameters from 1/8" to 6" - all different lengths ranging from close up to 72". Our ready-cut (pre-cut) nipples are available in black welded carbon steel schedule 40 pipes ranging from 1/2" to 2" diameter and in lengths from 18" to 72".

Both our fittings and nipples are produced to meet or exceed all specifications and undergo rigorous testing and quality inspections before being sent out.

*Fittings: AMSE B16.3, B16.14; Unions: B16.39, ASME B1.20.1, ISO, UL, cUL, FM CRN; Schedule 40 Steel Nipples: AMSE, A733; Threads: ASME B1.20.1, NSF 61 and 372, CRN approved*

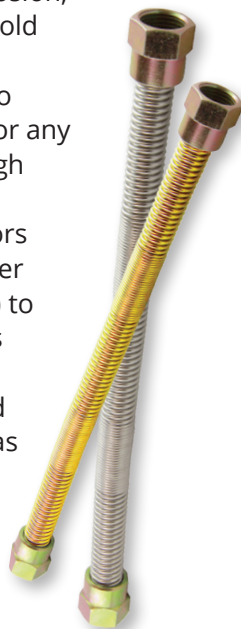


## Flexible Gas Connectors

NDL's flexible gas connectors are engineered with corrosion-resistant stainless steel 304 tubing and zinc-plated steel fittings that provide 100% quality you can trust. The gas connector's safeguard yellow epoxy coating protects from corrosion, and chemical stains from household products, and plumbing repair products. Our gas connectors also feature interchangeable fittings for any application and are flexible enough to withstand 90-degree twists.

Applications for our gas connectors are gas appliances (furnaces, water heaters, stoves, ovens, fireplaces) to the gas sources. Available in sizes from ID 1/4" to 3/4" with lengths from 12" to 72", FPT, FIP, MPT, and MIP end connections. Optional gas valve available

*ANSI Z21.24, Z21.69, and Z21.75; CSA 6.10, 6.16, and 6.27*



## PVC DWV Fittings

Our line of PVC DWV fitting offers outstanding rigidity with excellent resistance to chemicals and corrosion. Our fittings have smooth interior walls to prevent scaling and ensure free flow. Consistent quality and dimensional integrity helps to ensure a perfect fit with every single piece. Packaged in standard quantities. Available in diameters from 1-1/4" - 6".

*ASTM standards D2665, D3311, F1498, D1784; NSF and IAPMO Approved*



## PVC SCH40 Fittings

At NDL all of our Schedule 40 PVC plastic fittings are designed for most industrial and residential needs. Renowned for strength and superior enhanced performance, our pressure plastic fittings are tested under real-world "cyclic" pressure conditions. This allows our plastic fittings to excel in extreme applications where lesser products often fail. In addition to our superior strength, our pressure plastic fittings offer smoother inner walls for low-pressure drops and excellent resistance to chemicals and corrosion. Available in diameters from 1/2" - 6".

*ASTM standards D2466, D1784, F1498; NSF/ANSI*







## FAST ORDER TURNAROUND

Our Operations Center is strategically located in the Memphis, Tennessee metro area to streamline delivery and bolster the customer service that NDL is known for throughout the industry.



## We Focus on Quality and Service So You Can Install with Confidence.

Since 1998, it has been our mission to stay ahead of the curve as an industry leader in the HVAC, Refrigeration, and Plumbing markets. We have achieved this over the years by placing a heavy emphasis on quality, and innovation, and maintaining a global team of experienced professionals to deliver top-notch service. We continue to hold ourselves to the highest standards, never sacrificing our commitment to our customers or our product that has what made us the company we are today.

*What you can expect from us:*

- Fast order turnaround
- Real-time order communications
- Field-experienced sales and technical support
- Parts packaged in contractor-friendly sized bags
- High-quality control standards for superior fit and finish



## Offering the Same High-Quality Standards with our Plumbing Products.

Building on our success gained from our HVAC-R products, we have grown our offerings to include plumbing products as well which include PAC Fittings that are ASME approved. Consider NDL for copper press fittings, plumbing (WOG) valves, PEX, PPSU PEX, PVC, water hose connectors and more!

See all of our plumbing products at [ndlinc.com](https://www.ndlinc.com).



Explore our full line of high-quality HVAC-R and plumbing products.

[ndlinc.com](https://www.ndlinc.com) | 1-866-635-6888 | [sales@ndlinc.com](mailto:sales@ndlinc.com)

@ndlindustries

