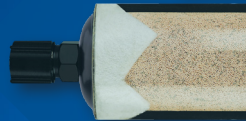
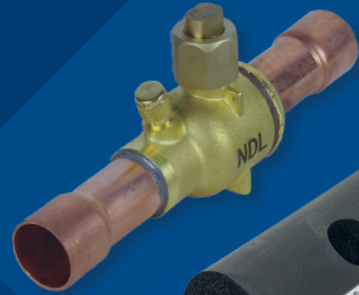
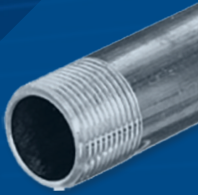




NDL Industries

# HVAC-R Product Guide

High-Quality Components for Commercial,  
Industrial, and Residential Applications





# Install with Confidence

NDL began with our flagship ACR copper fitting line, addressing a need for high-quality refrigeration fittings. Now we've expanded our HVAC-R line to include a variety of high-quality components to fit your needs.

## HVAC-R

### ACR Copper Fittings

NDL's ACR Copper Fittings are designed for demanding refrigeration applications, can withstand pressures up to 1000 PSI / 69 BAR, and feature heavier, thicker walls for added strength and durability. They have had zero reported failures since 1999 and are backed by an unparalleled 10-year warranty. Every fitting is size stamped for easy identification. Our ACR copper fittings meet or exceed ASME standards, are tested for actual burst pressure, and are TSSA approved with a 4.5 times safety margin. These fittings are available in sizes up to and including 2-5/8".



*UL Certified; ANSI/ASME B16.22; TSSA; RoHS; CRN Approved*

### PAC Copper Fittings

Consistent with NDL quality, the PAC Copper Fittings are similar to our ACR copper fittings with outstanding fit and finish. These copper sweat fittings have tight tolerances on the cup side, enabling a stronger joint with the tube and easier brazing. Each fitting is size-stamped, double-washed, and poly-bagged in contractor-friendly sized quantities.



*ANSI/ASME B16.22, B16.29, B16.18, B16.15, B16.26, B16.24, B16.23; CRN Approved*

### ACR Copper Fittings Design Pressure Table

SIZE (IN)	PSI (AT 250 °F)	BAR (121 °C)
1/4"	1000	68.9
3/8"	1000	68.9
1/2"	1000	68.9
5/8"	1000	68.9
3/4"	1000	68.9
7/8"	900	62
1-1/8"	870	60
1-3/8"	870	60
1-5/8"	773	53.3
2-1/8"	700	48.2
2-5/8"	700	48.2

**Based on UL Certification (SDTW2.SA45869)**

### Sight Glasses

NDL's full-brass body Sight Glasses use special litmus paper that returns to its original color once the system is dried, 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 contrast 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 / 41 BAR.

*UL Certified; RoHS*



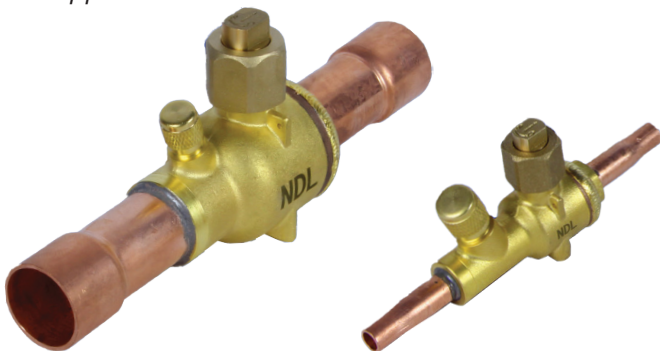


See a Full List of our HVAC-R Products at [ndlindustries.com](http://ndlindustries.com).

## Refrigeration Isolation Ball Valves

NDL's Isolation Ball Valves are built to withstand up to 900 PSI / 62 BAR on sizes up to 7/8" and are designed for refrigeration, commercial HVAC, VRV, VRF, multi-mini split, and sub critical applications. Each valve is leak tested using a 95% nitrogen and 5% hydrogen solution at 450 PSIG to identify and correct leaks before leaving the factory. The stem is engineered from the bottom up to prevent blowout in the event of accidental over pressurization, protecting the system charge. Every valve is serial number stamped, cleanly packaged in poly bags to prevent contamination, and backed by an unparalleled two-year warranty. Sizes range from 1/4" to 4-1/8".

*UL Certified; CE; RoHS; CRN Approved*



## Refrigeration Ball Valve Insulation

NDL's 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 -70.6°F to 257°F (-57°C to 125°C). Its tough skin allows for easy installation, and the insulation is 25/50 rated for flame-spread/smoke-development.



## Filter Driers

NDL's premium Filter Driers are built to withstand pressures up to 653 PSI / 45 BAR, and 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 most refrigerants. The furnace-brazed pure copper ends feature greater length and thicker walls compared to those from other brands. Uses honey-comb design perforated plate to minimize pressure drops. Compatible with A1, A2, A2L, and A3 refrigerants. 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 Certified; CE; CRN Approved*



## Press Compatible Filter Driers

NDL's Press Compatible Filter Driers can withstand pressures up to 653 PSI / 45 BAR and are compatible with press and push fittings for flame free connections. They eliminate the need for brazing, reducing fire hazards and removing the need for nitrogen purging and flammable gas transport. Installation is up to 60% faster than brazing, improving efficiency while maintaining reliable performance. These filter driers are ideal for residential AC, commercial HVAC, heat pump, mini split, and refrigeration installations.

*UL Certified; CE; CRN Approved*





# Versatility at Its Best

Here at NDL, we have also built product lines that can be used for HVAC-R and Hydronic applications, which we call our universal product selection. These durable, best-in-class products are built for every connection.

## Universal

### 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 without loss of flow. 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.

### Certifications and Approvals

CONNECTORS FOR GAS APPLIANCES	ANSI Z 21.24 / CSA 6.10
MOVABLE GAS APPLIANCES	ANSI Z 21.69 / CSA 6.16
CONNECTORS FOR OUTDOOR APPLICANES AND MANUFACTURED HOMES	ANSI Z 21.75 / CSA 6.27
NATURAL GAS AND PROPANE INSTALLATION CODE (CSA GROUP) SECTION 6.21	B149.1
STATIONARY ENGINE GENERATOR ASSEMBLIES SECTION 66B VIBRATION TEST	UL2200-2015
UNIFORM MECHANICAL CODE (UMC) SECTION 1313.0 UNIFORM PLUMBING CODE (UPC) SECTION 1212.0	





See a Full List of our  
Universal Products at  
[ndlindustries.com](http://ndlindustries.com).

## Black Malleable Fittings

NDL's high-quality Class 150 Black Malleable Fittings include hex bushings, caps, couplings, crosses, elbows, floor flanges, lock nuts, plugs, tees, and unions. Designed for oil and gas fluid applications, available for servicing of 150 PSI and 300 PSI applications. Typically used in high-pressure applications such as gas lines, steam lines, and water lines. Also used in applications where pipes are exposed to corrosive elements, such as industrial settings. Often used in conjunction with black pipes, which are also made of black steel. Black coating on both the pipe and the fittings helps protect them from rust and corrosion. Fittings range in diameter from 1/8" to 4".

*ASME B16.3 and B16.14, NSF 61 and 372; Unions: UL Listed B16.39, ASME B1.20.1, ISO; cUL; FM; CRN Approved*



## Black Steel Nipples

NDL's black welded carbon steel schedule 40 nipples are also available in 15 diameters from 1/8" to 6" – in various 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.

*Schedule 40 Steel Nipples: ASME, A733; Threads: ASME B1.20.1, NSF 61 and 372, CRN Approved*



## PVC DWV Fittings

NDL's PVC DWV Fittings offer 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 help 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 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. 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".

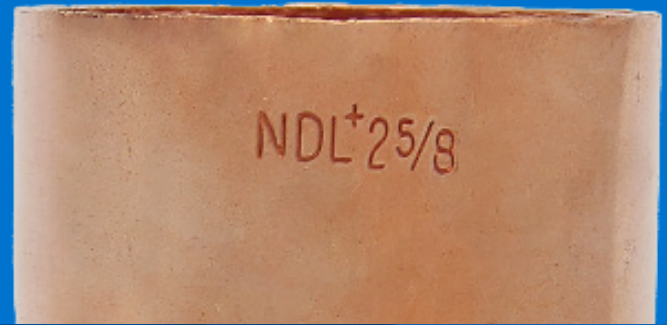
*ASTM standards D2466, D1784, F1498; NSF/ANSI standards 14 and 61*





## 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 in the field.



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

Since 1998, our mission has been to stay ahead of the curve as an industry leader in the HVAC, Refrigeration, and Hydronic markets. We have achieved this over the years by heavily emphasizing quality, 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 products that has 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



## Global Team with Fast Order Turnaround

With distribution centers strategically located worldwide, we ensure fast order fulfillment while maintaining the exceptional customer service that has earned us our trusted reputation.

*Locations:*

- Southaven, Mississippi (United States)
- Vancouver, British Columbia (Canada)
- Milton Keynes, Buckinghamshire (Europe)



Explore our full line of high-quality HVAC-R, CO<sub>2</sub> Refrigeration, and Hydronic products.

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

@ndlindustries

