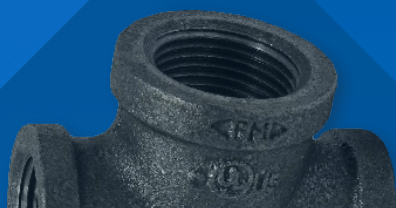




NDL Industries

Black Malleable Fittings Product Guide

High-Quality HVAC-R and Hydronic Components for
Commercial, Industrial, and Residential Applications





Black Malleable Fittings

Table of Contents

Product Information	1
Black Hex Bushings	2
Black Caps	2, 3
Black Couplings	3
Black Reducing Couplings.....	3, 4
Black Crosses	5
Black 45° Elbows	5
Black 45° Street Elbows	5
Black 90° Long Run Elbows	5, 6
Black 90° Reducing Elbows.....	6
Black 90° Street Elbows	7
Black Floor Flanges	7
Black Lock Nuts	7
Black Square Cored Plugs.....	7
Black Square Head Solid Plugs	8
Black Tees	8
Black Reducing Tees.....	8-10
Black Unions	10





Black Malleable Fittings

Cutting-Edge Black Malleable Fittings for superior HVAC-R and Plumbing Solutions

- Made of black steel and are used to connect lengths of pipe together or to change direction of pipe
- 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 pipe and the fittings helps protect them from rust and corrosion.
- Commonly used in plumbing and gas applications

Certifications and Approvals

- ASTM A197/A197M – Materials standard
- FM approved – Factory Mutual approvals
- ASME B16.39 – Union dimensions standard
- ASME B16.3, ASME B16.14 – Dimensions standard
- UL/cUL certified – Underwriter Laboratories certification
- NSF 61 - Drinking Water System Components standard / certified
- NSF 372 – Safe Water Drinking Act (SDWA) lead-free plumbing requirements

Symbols

M Male Threads





Black Hex Bushings (M x M)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF100-42	1/4" x 1/8" Black Hex Bushing	120	0.033	15.0
BPF100-62	3/8" x 1/8" Black Hex Bushing	75	0.047	21.3
BPF100-64	3/8" x 1/4" Black Hex Bushing	75	0.038	17.2
BPF100-82	1/2" x 1/8" Black Hex Bushing	150	0.086	39.0
BPF100-84	1/2" x 1/4" Black Hex Bushing	150	0.082	37.2
BPF100-86	1/2" x 3/8" Black Hex Bushing	150	0.065	29.5
BPF100-122	3/4" x 1/8" Black Hex Bushing	75	0.151	68.5
BPF100-124	3/4" x 1/4" Black Hex Bushing	75	0.144	65.3
BPF100-126	3/4" x 3/8" Black Hex Bushing	75	0.135	61.2
BPF100-128	3/4" x 1/2" Black Hex Bushing	75	0.112	50.8
BPF100-166	1" x 3/8" Black Hex Bushing	50	0.2	90.7
BPF100-168	1" x 1/2" Black Hex Bushing	50	0.223	101.2
BPF100-1612	1" x 3/4" Black Hex Bushing	50	0.183	83.0
BPF100-208	1-1/4" x 1/2" Black Hex Bushing	30	0.322	146.1
BPF100-2012	1-1/4" x 3/4" Black Hex Bushing	30	0.366	166.0
BPF100-2016	1-1/4" x 1" Black Hex Bushing	30	0.277	125.6
BPF100-246	1-1/2" x 3/8" Black Hex Bushing	25	0.352	159.7
BPF100-248	1-1/2" x 1/2" Black Hex Bushing	25	0.389	176.4
BPF100-2412	1-1/2" x 3/4" Black Hex Bushing	25	0.435	197.3
BPF100-2416	1-1/2" x 1" Black Hex Bushing	25	0.451	204.6
BPF100-2420	1-1/2" x 1-1/4" Black Hex Bushing	25	0.308	139.7
BPF100-328	2" x 1/2" Black Hex Bushing	20	0.523	237.2
BPF100-3212	2" x 3/4" Black Hex Bushing	20	0.587	266.3
BPF100-3216	2" x 1" Black Hex Bushing	20	0.616	279.4
BPF100-3220	2" x 1-1/4" Black Hex Bushing	20	0.74	335.7
BPF100-3224	2" x 1-1/2" Black Hex Bushing	20	0.616	279.4
BPF100-6432	4" x 2" Black Hex Bushing	5	2.596	1177.5



Black Caps

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF104-4	1/4" Black Cap	80	0.049	22.2



Black Caps - Continued

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF104-6	3/8" Black Cap	60	0.077	34.9
BPF104-8	1/2" Black Cap	75	0.113	51.3
BPF104-12	3/4" Black Cap	40	0.183	83.0
BPF104-16	1" Black Cap	25	0.306	138.8
BPF104-20	1-1/4" Black Cap	20	0.451	204.6
BPF104-24	1-1/2" Black Cap	18	0.554	251.3
BPF104-32	2" Black Cap	12	0.878	398.3
BPF104-48	3" Black Cap	EA	2.209	1002.0



Black Couplings

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF99-2	1/8" Black Coupling	70	0.054	24.5
BPF99-4	1/4" Black Coupling	40	0.084	38.1
BPF99-6	3/8" Black Coupling	40	0.122	55.3
BPF99-8	1/2" Black Coupling	60	0.176	79.8
BPF99-12	3/4" Black Coupling	50	0.279	126.6
BPF99-16	1" Black Coupling	25	0.434	196.9
BPF99-20	1-1/4" Black Coupling	16	0.694	314.8
BPF99-24	1-1/2" Black Coupling	18	0.927	420.5
BPF99-32	2" Black Coupling	12	1.387	629.1
BPF99-40	2-1/2" Black Coupling	8	2.35	1065.9
BPF99-48	3" Black Coupling	EA	3.37	1528.6
BPF99-64	4" Black Coupling	3	5.602	2541.0



Black Reducing Couplings (M x M)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF98R-42	1/4" x 1/8" Black Reducing Coupling	50	0.068	30.8
BPF98R-62	3/8" x 1/8" Black Reducing Coupling	35	0.093	42.2
BPF98R-64	3/8" x 1/4" Black Reducing Coupling	30	0.106	48.1
BPF98R-82	1/2" x 1/8" Black Reducing Coupling	150	0.128	58.1



Black Reducing Couplings (M x M) - Continued

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF98R-84	1/2" x 1/4" Black Reducing Coupling	150	0.134	60.8
BPF98R-86	1/2" x 3/8" Black Reducing Coupling	60	0.149	67.6
BPF98R-122	3/4" x 1/8" Black Reducing Coupling	70	0.181	82.1
BPF98R-124	3/4" x 1/4" Black Reducing Coupling	45	0.204	92.5
BPF98R-126	3/4" x 3/8" Black Reducing Coupling	45	0.217	98.4
BPF98R-128	3/4" x 1/2" Black Reducing Coupling	60	0.244	110.7
BPF98R-166	1" x 3/8" Black Reducing Coupling	30	0.304	137.9
BPF98R-168	1" x 1/2" Black Reducing Coupling	30	0.349	158.3
BPF98R-1612	1" x 3/4" Black Reducing Coupling	25	0.387	175.5
BPF98R-208	1-1/4" x 1/2" Black Reducing Coupling	25	0.494	224.1
BPF98R-2012	1-1/4" x 3/4" Black Reducing Coupling	25	0.538	244.0
BPF98R-2016	1-1/4" x 1" Black Reducing Coupling	15	0.589	267.2
BPF98R-246	1-1/2" x 3/8" Black Reducing Coupling	20	0.644	292.1
BPF98R-248	1-1/2" x 1/2" Black Reducing Coupling	20	0.614	278.5
BPF98R-2412	1-1/2" x 3/4" Black Reducing Coupling	15	0.681	308.9
BPF98R-2416	1-1/2" x 1" Black Reducing Coupling	25	0.759	344.3
BPF98R-2420	1-1/2" x 1-1/4" Black Reducing Coupling	12	0.818	371.0
BPF98R-328	2" x 1/2" Black Reducing Coupling	12	0.996	451.8
BPF98R-3212	2" x 3/4" Black Reducing Coupling	12	0.974	441.8
BPF98R-3216	2" x 1" Black Reducing Coupling	12	1.033	468.6
BPF98R-3220	2" x 1-1/4" Black Reducing Coupling	9	1.129	512.1
BPF98R-3224	2" x 1-1/2" Black Reducing Coupling	9	1.242	563.4
BPF98R-4016	2-1/2" x 1" Black Reducing Coupling	10	1.77	802.9
BPF98R-4032	2-1/2" x 2" Black Reducing Coupling	7	2.119	961.2
BPF98R-4816	3" x 1" Black Reducing Coupling	6	2.49	1129.4
BPF98R-4824	3" x 1-1/2" Black Reducing Coupling	6	2.706	1227.4
BPF98R-4832	3" x 2" Black Reducing Coupling	6	2.783	1262.3
BPF98R-4840	3" x 2-1/2" Black Reducing Coupling	5	3.156	1431.5





Black Crosses

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF314-8	1/2" Black Cross	30	0.377	171.0
BPF314-12	3/4" Black Cross	20	0.606	274.9
BPF314-32	2" Black Cross	5	2.937	1332.2



Black 45° Elbows

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF309-45-4	1/4" Black 45° Elbow	30	0.098	44.5
BPF309-45-6	3/8" Black 45° Elbow	75	0.148	67.1
BPF309-45-8	1/2" Black 45° Elbow	50	0.201	91.2
BPF309-45-12	3/4" Black 45° Elbow	40	0.329	149.2
BPF309-45-16	1" Black 45° Elbow	20	0.521	236.3
BPF309-45-20	1-1/4" Black 45° Elbow	20	0.777	352.4
BPF309-45-24	1-1/2" Black 45° Elbow	10	1.01	458.1
BPF309-45-32	2" Black 45° Elbow	12	1.639	743.4



Black 45° Street Elbows

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF310-45-8	1/2" Black 45° Street Elbow	75	0.173	78.5
BPF310-45-12	3/4" Black 45° Street Elbow	40	0.282	127.9
BPF310-45-16	1" Black 45° Street Elbow	25	0.452	205.0
BPF310-45-20	1-1/4" Black 45° Street Elbow	10	0.711	322.5
BPF310-45-32	2" Black 45° Street Elbow	12	1.507	683.6
BPF310-45-40	2-1/2" Black 45° Street Elbow	6	2.632	1193.9



Black 90° Long Run Elbows

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF309-2	1/8" Black 90° LR Elbow	50	0.064	29.0
BPF309-4	1/4" Black 90° LR Elbow	35	0.102	46.3
BPF309-6	3/8" Black 90° LR Elbow	90	0.151	68.5



Black 90° Long Run Elbows - *Continued*

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF309-8	1/2" Black 90° LR Elbow	50	0.224	101.6
BPF309-12	3/4" Black 90° LR Elbow	35	0.359	162.8
BPF309-16	1" Black 90° LR Elbow	20	0.572	259.5
BPF309-20	1-1/4" Black 90° LR Elbow	20	0.901	408.7
BPF309-24	1-1/2" Black 90° LR Elbow	15	1.238	561.5
BPF309-32	2" Black 90° LR Elbow	8	1.866	846.4
BPF309-40	2-1/2" Black 90° LR Elbow	EA	3.369	1528.2
BPF309-48	3" Black 90° LR Elbow	EA	5.225	2370.0



Black 90° Reducing Elbows

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF309R-62	3/8" x 1/8" Black 90° Reducing Elbow	105	0.107	48.5
BPF309R-64	3/8" x 1/4" Black 90° Reducing Elbow	90	0.127	57.6
BPF309R-82	1/2" x 1/8" Black 90° Reducing Elbow	60	0.142	64.4
BPF309R-86	1/2" x 3/8" Black 90° Reducing Elbow	60	0.184	83.5
BPF309R-124	3/4" x 1/4" Black 90° Reducing Elbow	40	0.22	99.8
BPF309R-128	3/4" x 1/2" Black 90° Reducing Elbow	40	0.305	138.3
BPF309R-168	1" x 1/2" Black 90° Reducing Elbow	25	0.415	188.2
BPF309R-1612	1" x 3/4" Black 90° Reducing Elbow	50	0.494	224.1
BPF309R-208	1-1/4" x 1/2" Black 90° Reducing Elbow	20	0.559	253.6
BPF309R-2012	1-1/4" x 3/4" Black 90° Reducing Elbow	10	0.647	293.5
BPF309R-2016	1-1/4" x 1" Black 90° Reducing Elbow	15	0.757	343.4
BPF309R-248	1-1/2" x 1/2" Black 90° Reducing Elbow	25	0.655	297.1
BPF309R-2416	1-1/2" x 1" Black 90° Reducing Elbow	20	0.902	409.1
BPF309R-2420	1-1/2" x 1-1/4" Black 90° Reducing Elbow	15	1.032	468.1
BPF309R-328	2" x 1/2" Black 90° Reducing Elbow	10	0.953	432.3
BPF309R-3212	2" x 3/4" Black 90° Reducing Elbow	9	1.073	486.7
BPF309R-3216	2" x 1" Black 90° Reducing Elbow	14	1.252	567.9
BPF309R-3220	2" x 1-1/4" Black 90° Reducing Elbow	10	1.363	618.2
BPF309R-3224	2" x 1-1/2" Black 90° Reducing Elbow	10	1.56	707.6
BPF309R-4016	2-1/2" x 1" Black 90° Reducing Elbow	15	1.877	851.4





Black 90° Street Elbows

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF310-2	1/8" Black 90° Street Elbow	60	0.053	24.0
BPF310-4	1/4" Black 90° Street Elbow	35	0.097	44.0
BPF310-6	3/8" Black 90° Street Elbow	60	0.15	68.0
BPF310-8	1/2" Black 90° Street Elbow	60	0.208	94.3
BPF310-12	3/4" Black 90° Street Elbow	35	0.346	156.9
BPF310-16	1" Black 90° Street Elbow	45	0.54	244.9
BPF310-20	1-1/4" Black 90° Street Elbow	25	0.813	368.8
BPF310-24	1-1/2" Black 90° Street Elbow	9	1.18	535.2
BPF310-32	2" Black 90° Street Elbow	8	1.844	836.4



Black Floor Flanges

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF321-8	1/2" Black Floor Flange	25	0.355	161
BPF321-12	3/4" Black Floor Flange	15	0.494	224.1
BPF321-16	1" Black Floor Flange	15	0.637	288.9
BPF321-20	1-1/4" Black Floor Flange	10	0.834	378.3
BPF321-24	1-1/2" Black Floor Flange	8	1.114	505.3
BPF321-11	2" Black Floor Flange	8	1.549	702.6



Black Lock Nuts

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF319-6	3/8" Black Lock Nut	125	0.045	20.4
BPF319-8	1/2" Black Lock Nut	150	0.056	25.4



Black Square Cored Plugs

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF102-8	1/2" Black Square Cored Plug	50	0.081	36.7
BPF102-12	3/4" Black Square Cored Plug	30	0.131	59.4
BPF102-24	1-1/2" Black Square Cored Plug	EA	0.416	188.7



Black Square Head Solid Plugs

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF101-2	1/8" Black Square Head Solid Plug	400	0.016	7.3
BPF101-4	1/4" Black Square Head Solid Plug	150	0.033	15.0
BPF101-6	3/8" Black Square Head Solid Plug	120	0.048	21.8
BPF101-8	1/2" Black Square Head Solid Plug	50	0.081	36.7
BPF101-12	3/4" Black Square Head Solid Plug	35	0.131	59.4
BPF101-16	1" Black Square Head Solid Plug	20	0.192	87.1
BPF101-20	1-1/4" Black Square Head Solid Plug	30	0.314	142.4
BPF101-24	1-1/2" Black Square Head Solid Plug	30	0.416	188.7
BPF101-32	2" Black Square Head Solid Plug	20	0.644	292.1
BPF101-48	3" Black Square Head Solid Plug	20	1.592	722.1



Black Tees

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF311-2	1/8" Black Tee	120	0.093	42.2
BPF311-4	1/4" Black Tee	75	0.145	65.8
BPF311-6	3/8" Black Tee	45	0.215	97.5
BPF311-8	1/2" Black Tee	40	0.317	143.8
BPF311-12	3/4" Black Tee	35	0.515	233.6
BPF311-16	1" Black Tee	20	0.831	376.9
BPF311-20	1-1/4" Black Tee	14	1.219	552.9
BPF311-24	1-1/2" Black Tee	12	1.678	761.1
BPF311-32	2" Black Tee	8	2.454	1113.1
BPF311-48	3" Black Tee	EA	6.546	2969.2



Black Reducing Tees (M x M)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF311R-884	1/2" x 1/2" x 1/4" Black Reducing Tee	40	0.245	111.1
BPF311R-12124	3/4" x 3/4" x 1/4" Black Reducing Tee	25	0.364	165.1
BPF311R-12128	3/4" x 3/4" x 1/2" Black Reducing Tee	20	0.451	204.6
BPF311R-16164	1" x 1" x 1/4" Black Reducing Tee	20	0.551	249.9



Black Reducing Tees (M x M) - Continued

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF311R-16168	1" x 1" x 1/2" Black Reducing Tee	15	0.639	289.8
BPF311R-161620	1" x 1" x 1-1/4" Black Reducing Tee	11	0.984	446.3
BPF311R-32328	2" x 2" x 1/2" Black Reducing Tee	10	1.546	701.3
BPF311R-323212	2" x 2" x 3/4" Black Reducing Tee	10	1.67	757.5
BPF311R-323216	2" x 2" x 1" Black Reducing Tee	10	1.799	816.0
BPF311R-323220	2" x 2" x 1-1/4" Black Reducing Tee	8	1.993	904.0
BPF311R-323224	2" x 2" x 1-1/2" Black Reducing Tee	8	2.14	970.7
BPF311R-40408	2-1/2" x 2-1/2" x 1/2" Black Reducing Tee	6	2.625	1190.7
BPF311R-484812	3" x 3" x 3/4" Black Reducing Tee	3	3.811	1728.6
BPF311R-484832	3" x 3" x 2" Black Reducing Tee	3	5.019	2276.6



Black Reducing Tees (M x M)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF311R-1288	3/4" x 1/2" x 1/2" Black Reducing Tee	25	0.394	178.7
BPF311R-12812	3/4" x 1/2" x 3/4" Black Reducing Tee	20	0.459	208.2
BPF311R-1688	1" x 1/2" x 1/2" Black Reducing Tee	20	0.51	231.3
BPF311R-168128	1" x 3/4" x 1/2" Black Reducing Tee	20	0.563	255.4
BPF311R-16812	1" x 1/2" x 3/4" Black Reducing Tee	20	0.591	268.1
BPF311R-161212	1" x 3/4" x 3/4" Black Reducing Tee	15	0.628	284.9
BPF311R-16816	1" x 1/2" x 1" Black Reducing Tee	15	0.689	312.5
BPF311R-161216	1" x 3/4" x 1" Black Reducing Tee	12	0.742	336.6
BPF311R-201212	1-1/4" x 3/4" x 3/4" Black Reducing Tee	10	0.746	338.4
BPF311R-21612	1-1/4" x 1" x 3/4" Black Reducing Tee	20	0.858	389.2
BPF311R-201216	1-1/4" x 3/4" x 1" Black Reducing Tee	10	0.875	396.9
BPF311R-20820	1-1/4" x 1/2" x 1-1/4" Black Reducing Tee	20	0.951	431.4
BPF311R-201220	1-1/4" x 3/4" x 1-1/4" Black Reducing Tee	20	1	453.6
BPF311R-201620	1-1/4" x 1" x 1-1/4" Black Reducing Tee	15	1.101	499.4
BPF311R-201616	1-1/4" x 1" x 1" Black Reducing Tee	20	1.119	507.6
BPF311R-24824	1-1/2" x 1/2" x 1-1/2" Black Reducing Tee	12	1.242	563.4
BPF311R-321616	2" x 1" x 1" Black Reducing Tee	12	1.401	635.5





Black Reducing Tees (M x M)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF311R-8812	1/2" x 1/2" x 3/4" Black Reducing Tee	30	0.392	177.8
BPF311R-121216	3/4" x 3/4" x 1" Black Reducing Tee	40	0.635	288
BPF311R-161620	1" x 1" x 1-1/4" Black Reducing Tee	11	0.984	446.3
BPF311R-161624	1" x 1" x 1-1/2" Black Reducing Tee	9	1.123	509.4



Black Unions

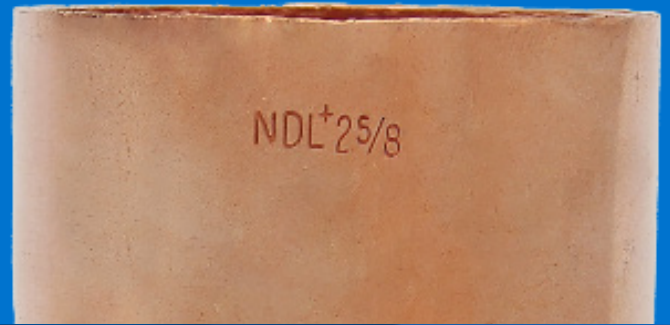
PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
BPF107-2	1/8" Black Union	60	0.163	73.8
BPF107-4	1/4" Black Union	20	0.224	101.4
BPF107-6	3/8" Black Union	40	0.328	148.7
BPF107-8	1/2" Black Union	50	0.395	179.0
BPF107-12	3/4" Black Union	35	0.581	263.4
BPF107-16	1" Black Union	20	0.842	381.7
BPF107-20	1-1/4" Black Union	15	1.191	540.3
BPF107-24	1-1/2" Black Union	10	1.716	778.4
BPF107-32	2" Black Union	6	2.160	979.8
BPF107-40	2-1/2" Black Union	4	3.745	1698.7





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 the quality of our products or the commitment to our customers 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, CO₂ Refrigeration, and Hydronic products.

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