C-BP/G-0221

NIBCO®

AHEAD OF THE FLOW®

NIBCO® BenchPress™ and BenchPressG™

Business-to-Business Solutions

Look to NIBCO for technology leadership.

The velocity with which e-business evolves demands that new products and services be continuously developed and introduced to keep our customers at the center of our business efforts. NIBCO provides an entire suite of business-to-business solutions that is changing the way we interact with customers.

NIBCOpartner.com℠ is an exclusive set of secure web applications that allow quick access to customer-specific information and online order processing. This self-service approach gives you 24/7 access to your order status putting you in total control of your business.

NIBCO Partner.com

Real time information includes:

- Online order entry
- Viewable invoices & reports
- Inventory availability
- Current price checks
- Order status
- Online library of price sheets, catalogs & submittals

Electronic Data Interchange (EDI) makes it possible to trade business documents at the speed of light. This technology cuts the cost of each transaction by eliminating the manual labor and paperwork involved in traditional order taking. This amounts to cost-savings, increased accuracy and better use of resources.

With EDI, you can trade:

- Purchase orders
- PO Acknowledgements
- Invoices
- Product activity data
- Advanced ship notices
- Remittance advice

Vendor Managed Inventory (VMI), a sophisticated service for automated inventory management, reduces your overhead by transferring inventory management, order entry and forecasting to NIBCO. This is an on-going, interactive partnership with NIBCO.

Through automation, VMI brings results:

- Improves customer service
- Optimum inventory efficiencies
- Better forecasting
- Cuts transaction costs
- Peace of mind
- Relief from day-to-day management

NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227
TECH SERVICES PH:1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455
www.nibco.com

NIBCO® BenchPress™ and BenchPressG™ Table of Contents

ISO 9001 BUREAU VERITAS Certification

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

NIBCO® Bench Press® and Bench PressG®

Quick and Easy

The NIBCO® Press System is user friendly, quick and easy to install. Installation can be completed in less time than traditional threaded systems. Significant time savings means tight budgets and deadlines are met while project delays and cost overruns are avoided. Fittings are approved for installations in both above and below ground applications. Per code, local inspector approval must be obtained prior to installation below ground.

Reliable

With the NIBCO Press System, a robust joint is formed between the EPDM or HNBR seal and the crimped fitting providing a permanent connection. Reliability you can count on by a company established in 1904, NIBCO press fittings are backed by a 10-year written warranty.

Professional Appearance

The NIBCO Press System creates a clean joint without the mess of threaded solutions.

BenchPress™ and BenchPressG™ Fitting Applications Chart

Types of Service	Comments	Pressure	Temperature	Compatible with EPDM Seal	Compatible with HNBR Seal
Fluids/Water					
Fire Sprinkler		175 psi	Ambient	●	
Chilled Water	Ethylene Glycol Propylene Glycol	200 psi	Down to 0°F	●	
Hydronic Heating	Ethylene Glycol Propylene Glycol	200 psi	0°F to 250°F	●	
Low Pressure Steam		Up to 15 psi	Max 248°F	●	
Oil and Lubricant					
Heating Fuel Oil		125 psi	-40°F to 180°F		●
Diesel Fuel		125 psi			●
Gear Grease		150 psi	104°F		●
Engine Oil		150 psi	Ambient		●
Hydraulic Fluid	Mineral Based	200 psi	Ambient		●
Transmission Fluid		200 psi	Ambient		●
Gases					
Natural Gas & LP Gas		125 psi Max	-40°F to 180°F		●
Compressed Air	Less than 25mg/m3 Oil Content	200 psi	Up to 140°F	●	
Compressed Air	More than 25mg/m3 Oil Content	200 psi	Up to 140°F		●
Oxygen - (non medical)	Oil and Fat Free/Non Liquid	140 psi	Up to 140°F	●	●
Nitrogen		200 psi	Up to 140°F	●	●
Carbon Dioxide		200 psi	Up to 140°F	●	●
Argon		200 psi	Up to 140°F	●	●
Vacuum		Max 29.2" of Hg	Up to 140°F	●	●

BenchPress EPDM Sealing Element
Operating Temperature: 0°F to 250°F

BenchPressG HNBR Sealing Element
Operating Temperature: -40°F to 180°F

Visit our website for the most current information.

NIBCO® Bench Press® and Bench PressG®

Fittings

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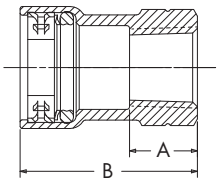
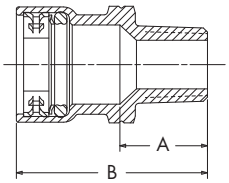
ADAPTERS

PC203
Adapter P x F – Carbon Steel

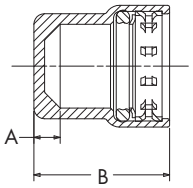
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.210	.73	1.83
3/4	.360	.83	1.97
3/4 x 1/2	.350	.83	1.97
2	1.700	2.00	4.00

PC204
Adapter P x M – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.206	.98	2.09
3/4	.338	1.06	2.20
1	.460	1.14	2.52
1 ¼	.975	2.17	4.02
1 ½	1.200	2.27	4.20
2	1.615	2.31	4.32

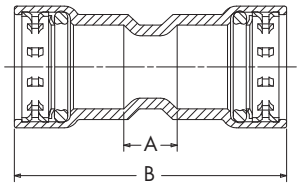
CAPS

PC217
Cap P – Carbon Steel

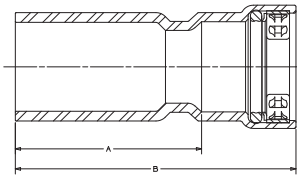
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.173	.30	1.40
3/4	.250	.36	1.50
1	.380	.33	1.71
1 ¼	.559	.73	2.58
1 ½	.780	.85	2.78
2	1.03	.81	2.81

COUPLINGS

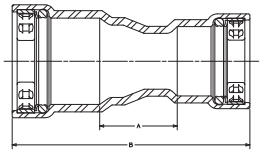
PC200
Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.274	.61	2.81
3/4	.371	.80	3.09
1	.540	.61	3.36
1 ¼	.916	.76	4.46
1 ½	1.202	.88	4.74
2	1.550	.84	4.86

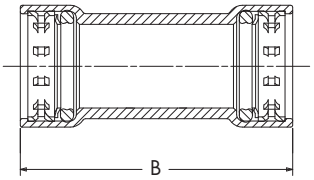
PC200-2
Coupling Ftg x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1 1/4 x 1	.660	2.66	4.04

PC200R
Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
3/4 x 1/2	.370	1.18	3.43
1 x 1/2	.490	1.34	3.82
1 x 3/4	.520	1.22	3.74
1 ¼ x 1	.800	1.16	4.39
1 ½ x 1 ¼	1.120	1.16	4.92
2 x 1 1/2	1.500	1.34	5.28

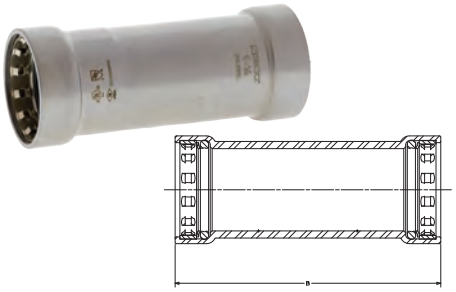



PC201 (No Stop)
Repair Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.260	2.81
3/4	.349	3.09
1	.540	3.36
1 ¼	.900	4.46
1 ½	1.190	4.74
2	1.453	4.86

Visit our website for the most current information.

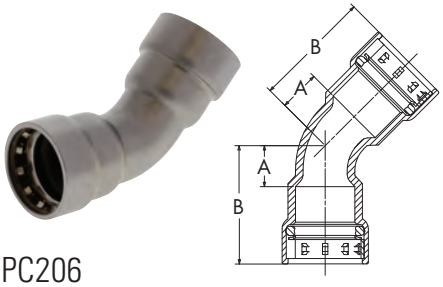
COUPLINGS *(Cont.)*



PC201-L (No Stop) Repair Coupling P x P – Carbon Steel

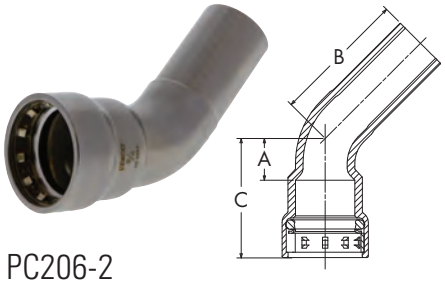
NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1 ¼	.980	5.33
1 ½	1.290	5.44

ELBOWS



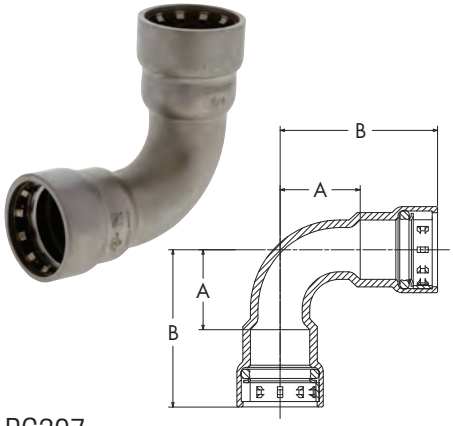
PC206 45° Elbow P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.234	.63	1.73
3/4	.427	.75	1.89
1	.669	.89	2.26
1 ¼	1.015	.99	2.84
1 ½	1.384	1.13	3.06
2	1.871	1.33	3.33



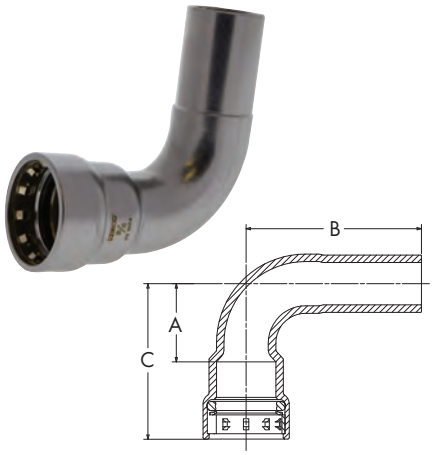
PC206-2 45° Elbow Ftg x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES	DIM. C INCHES
1/2	.270	.64	1.97	1.74
3/4	.410	.75	2.13	1.89
1	.660	.89	2.52	2.27
1 ¼	.990	.99	2.99	2.84
1 ½	1.330	1.13	3.07	3.06
2	2.009	1.33	3.62	3.33



PC207 90° Elbow P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.392	1.20	2.30
3/4	.534	1.40	2.54
1	.875	1.75	3.13
1 ¼	1.230	2.01	3.86
1 ½	1.712	2.27	4.20
2	2.436	2.81	4.81



PC207-2 90° Elbow Ftg x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIMENSIONS INCHES A	B	C
1/2	.355	1.17	2.56	2.65
3/4	.488	1.50	2.80	2.27
1	.802	1.70	3.39	3.08
1 ¼	1.216	2.04	4.04	3.89
1 ½	1.770	2.34	4.21	4.27
2	1.930	2.79	5.08	4.80

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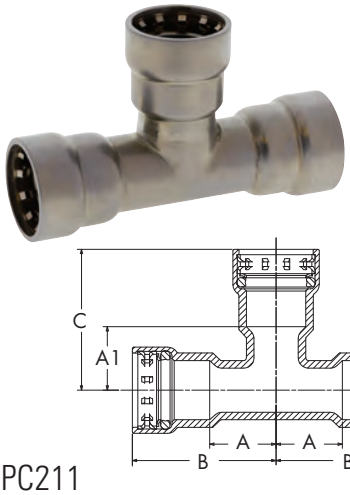
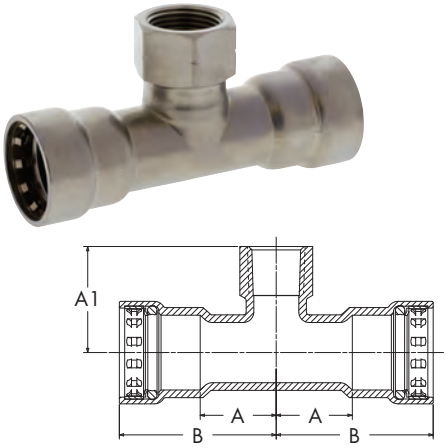
TEES



PC211
Tee P x P x P – Carbon Steel

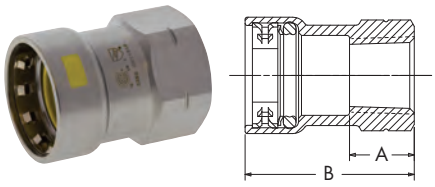
NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES A	B	C	A1
1/2	.417	1.00	2.10	2.06	.96
3/4	.416	1.15	2.29	2.27	1.13
3/4 x 3/4 x 1/2	.537	1.15	2.29	2.20	1.10
1	1.040	1.26	2.63	2.63	1.26
1 x 1x 1/2	.940	1.26	2.63	2.42	1.28
1 x 1 x 3/4	.991	1.26	2.63	2.42	1.28
1 ¼	1.600	1.42	3.27	3.24	1.39
1 ¼ x 1 ¼ x ¾	1.300	1.42	3.27	2.57	1.43
1 ¼ x 1 ¼ x 1	1.400	1.42	3.27	2.79	1.41
1 ½ x 1 ½ x ½	1.700	1.58	3.51	2.57	1.47
1 ½ x 1 ½ x 1	1.900	1.58	3.51	2.89	1.51
2	2.800	1.82	3.83	3.81	1.81
2 x 2 x 1	2.400	1.82	3.83	3.16	1.78



PC212
Tee P x P x F – Carbon Steel

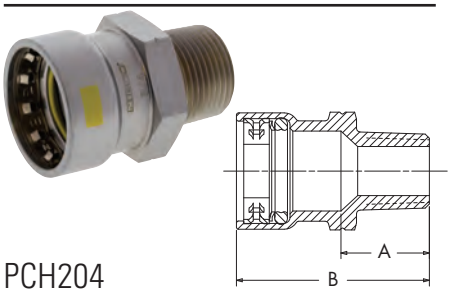
NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES A	B	A1
3/4	.720	1.15	2.29	1.58
3/4 x 3/4 x 1/2	.720	1.15	2.29	1.55
2 x 2 x 3/4	2.300	1.82	3.83	2.28
2 x 2 x 1 ¼	2.500	1.82	3.83	2.45

ADAPTERS



PCH203
Adapter P x F – Carbon Steel

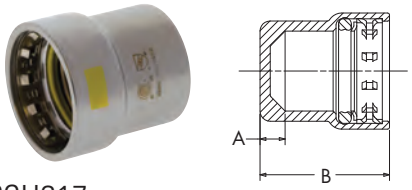
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.234	.73	1.83
3/4	.360	.83	1.97
3/4 x 1/2	.340	.83	1.97
1	.500	.91	2.28
2	1.700	2.00	3.00



PCH204
Adapter P x M – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.206	.98	2.09
3/4	.338	1.06	2.20
1	.460	1.14	2.52
1 ¼	.941	2.17	4.02
1 ½	1.167	2.27	4.20
2	1.670	2.31	4.32

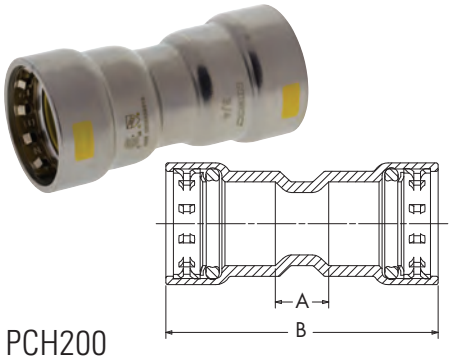
CAPS



PCH217
Cap P – Carbon Steel

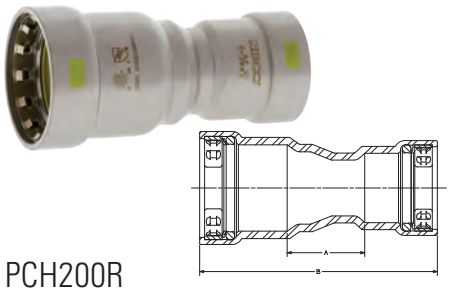
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.173	.30	1.40
3/4	.258	.36	1.50
1	.370	.33	1.71
1 ¼	.559	.73	2.58
1 ½	.729	.85	2.78
2	1.030	.81	2.81

COUPLINGS



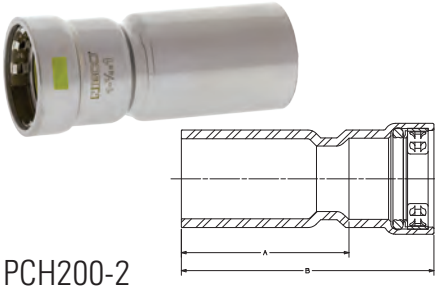
PCH200
Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.274	.61	2.81
3/4	.371	.80	3.09
1	.548	.61	3.36
1 ¼	.916	.76	4.46
1 ½	1.202	.88	4.74
2	1.550	.84	4.86



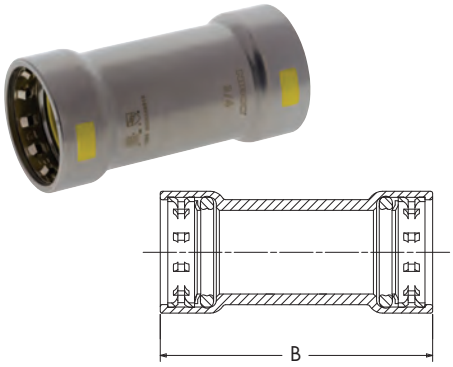
PCH200R
Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
3/4 x 1/2	.370	1.18	3.43
1 x 1/2	.490	1.34	3.82
1 x 3/4	.520	1.22	3.74
1¼ x ¾	.730	1.38	4.37
2 x 1¼	1.300	1.42	5.28



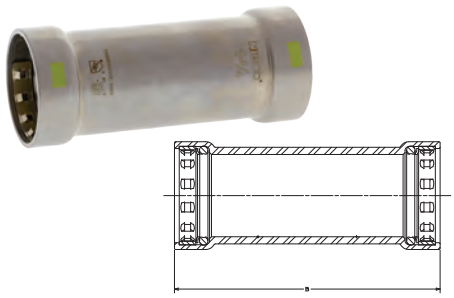
PCH200-2
Coupling Ftg x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1 ¼ x 1	.660	2.66	4.04
2 x 1	.970	3.17	4.55



PCH201 (No Stop)
Repair Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.260	2.81
3/4	.349	3.09
1	.544	3.36
1 ¼	.934	4.46
1 ½	1.180	4.74
2	1.540	4.86



PCH201L (No Stop)
Repair Coupling P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1 ¼	.980	5.33
1 ½	1.290	5.44

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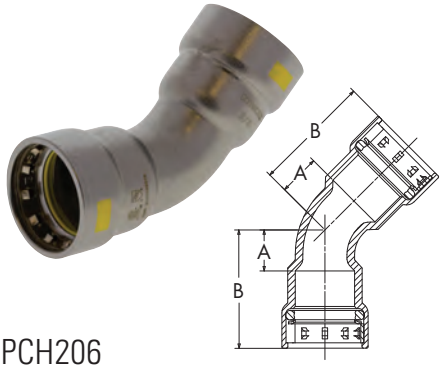
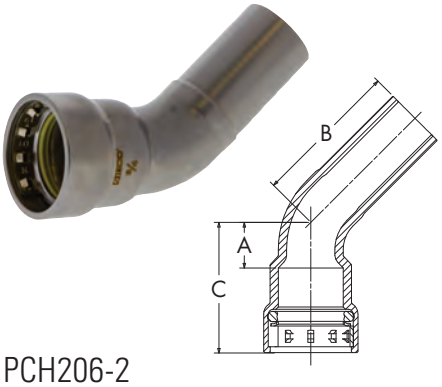
ELBOWS



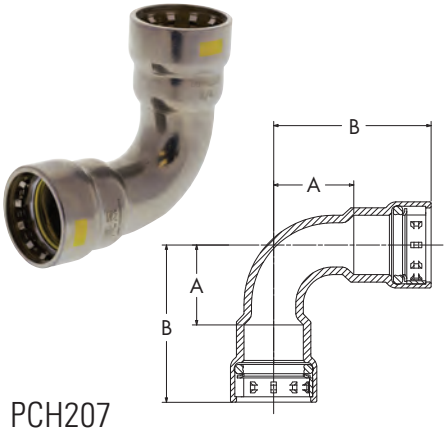
PCH206
45° Elbow P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.324	.63	1.73
3/4	.427	.75	1.89
1	.669	.89	2.26
1 ¼	1.015	.99	2.84
1 ½	1.384	1.13	3.06
2	1.990	1.33	3.33



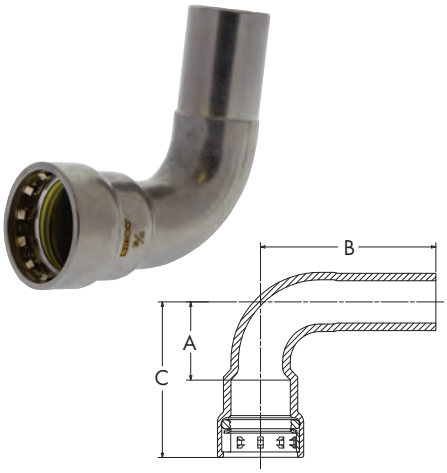
PCH206-2
45° Elbow Ftg x P – Carbon Steel

NOM. SIZE	APPROX. NET WT./LBS.	DIMENSIONS INCHES A	B	C
1/2	.270	.64	1.97	1.74
3/4	.410	.75	2.13	1.89
1	.660	.89	2.52	2.27
1 ¼	.990	.99	2.99	2.84
1 ½	1.330	1.13	3.07	3.06
2	2.009	1.33	3.62	3.33



PCH207
90° Elbow P x P – Carbon Steel

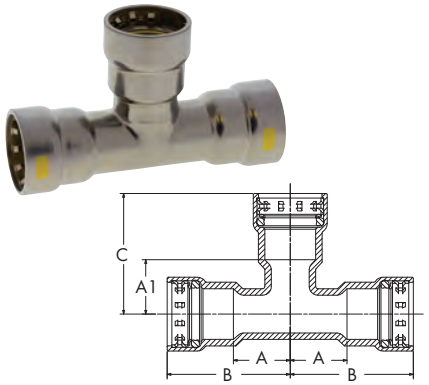
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.392	1.20	2.30
3/4	.534	1.40	2.54
1	1.307	1.75	3.13
1 ¼	1.230	2.01	3.86
1 ½	1.712	2.27	4.20
2	2.500	2.81	4.81



PCH207-2
90° Elbow Ftg x P – Carbon Steel

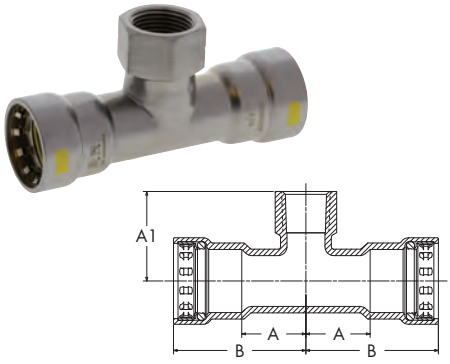
NOM. SIZE	APPROX. NET WT./LBS.	DIMENSIONS INCHES A	B	C
1/2	.360	1.17	2.56	2.65
3/4	.430	1.50	2.80	2.27
1	.810	1.70	3.39	3.08
1 ¼	1.230	2.04	4.04	3.89
1 ½	1.770	2.34	4.21	4.27
2	1.930	2.79	5.08	4.80

TEES



PCH211
Tee P x P x P – Carbon Steel

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES A	B	C	A1
1/2	.417	1.00	2.10	2.06	.96
3/4	.416	1.15	2.29	2.27	1.13
3/4 x 3/4 x 1/2	.537	1.15	2.29	2.20	1.10
1	1.040	1.26	2.63	2.63	1.26
1 x 1 x 1/2	.940	1.26	2.63	2.33	1.23
1 x 1 x 3/4	.991	1.26	2.63	2.42	1.28
1 ¼	1.600	1.42	3.27	3.24	1.39
1 ½ x 1 ½ x ½	1.700	1.58	3.51	2.57	1.47
1 ½ x 1 ½ x 1	1.900	1.58	3.51	2.89	1.51



PCH212
Tee P x P x F – Carbon Steel

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES A	B	A1
3/4	.740	1.15	2.29	1.58
3/4 x 3/4 x 1/2	.681	1.15	2.29	1.55
1 ½ x 1 ½ x 1	2.000	1.58	3.51	2.24
1 ½ x 1 ½ x 1 ¼	2.000	1.58	3.51	2.15

NIBCO® Bench Press® and Bench PressG®

Engineering Data

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NIBCO® BenchPress™ – Engineering Data
Carbon Steel Fittings

System Description

NIBCO BenchPress carbon steel fittings are available in ½" to 2" sizes and designed for use with Schedule 10 to 40 carbon steel pipe as defined by ASTM A53, A106, A135 and A795. NIBCO BenchPress fittings allow fast and economical installation of residential, commercial, and industrial carbon steel piping systems.

A permanent and secure connection is provided by the stainless steel grip ring housed inside a corrosion resistant zinc-nickel coated carbon steel fitting. The black EPDM sealing element provides a permanent leak-proof connection. NIBCO's leak detect design provides quick and easy identification of unpressed connections.

Primary Applications

NIBCO BenchPress fittings may be used in the following applications:

- Chilled Water
- Hydronic Heating
- Wet and Dry Fire Sprinkler Systems

For additional applications, see the NIBCO BenchPress Approved Applications Chart.

System Benefits

- Fast and Easy to Use
- Permanent Connection
- Leak Detection of Unpressed Fittings

Approvals and Certifications

- IAPMO PS-117
- UL/ULC
- FM

Codes

- NFPA 13, 13D and 13R
- IRC International Residential Code (ICC PMG)
- IMC International Mechanical Code (ICC PMG)
- UPC Uniform Plumbing Code
- UMC Uniform Mechanical Code
- ASME B31 Code for Pressure Pipe

NIBCO® BenchPressG™ – Engineering Data
Carbon Steel Fittings

System Description

NIBCO BenchPressG carbon steel fittings are available in ½" to 1-1/2" sizes and designed for use with Schedule 10 to 40 steel pipe as defined by ASTM A53, A106, A135 and A795. NIBCO BenchPressG fittings allow fast and economical installation of residential, commercial, and industrial carbon steel piping systems. NIBCO BenchPressG fittings are certified by CSA for use with Schedule 40 fuel gas piping systems.

A permanent and secure connection is provided by the stainless steel grip ring housed inside a corrosion resistant zinc-nickel coated carbon steel fitting. The yellow HNBR sealing element provides a permanent leak-proof connection. NIBCO's leak detect design provides quick and easy identification of unpressed connections.

Primary Applications

NIBCO BenchPressG fittings may be used in the following applications:

- Natural Gas
- Liquefied Petroleum
- Compressed Air

For additional applications, see the NIBCO BenchPressG Approved Applications Chart.

System Benefits

- Fast and Easy to Use
- Permanent Connection
- Leak Detection of Unpressed Fittings

Approvals and Certifications

- CSA (CSA ANSI LC 4 / CSA 6.32)
- IAPMO (CSA ANSI LC 4 / CSA 6.32)

Codes

- NFPA 54 National Fuel Gas Code
- NFPA 58 Liquefied Petroleum Gas Code
- NFPA 30 Flammable and Combustible Liquids Code
- NFPA 30A Code for Motor Fuel and Dispensing Facilities and Repair Facilities
- NFPA 31 Standard for the Installation of Oil-Burning Equipment
- ASME B31 Code for Pressure Pipe
- Uniform Plumbing Code (UPC)*
- National Plumbing Code of Canada
- International Mechanical Code

**Uniform Plumbing Code is a copyrighted publications of the International Association of Plumbing and Mechanical Officials*

BenchPress and BenchPressG Tool Compatibility Matrix

Size	Tool			
1/2" through 2"	NIBCO PC-280			RIDGID MegaPress® jaws and rings Milwaukee® Black Iron Press jaws and rings DEWALT Standard IPS Press jaws and rings
	RIDGID RP 241 (up to 3/4") RP 240 (up to 3/4") CT400	RP 320-E RP 330-B RP 330-C RP 340-B	RP 350 RP 351 RP 342-XL	RIDGID MegaPress® jaws and rings
	Milwaukee model M12 FORCE LOGIC (up to 3/4") Milwaukee model M18 FORCE LOGIC Milwaukee model M18 FORCE LOGIC long throw			Milwaukee® Black Iron Press jaws and rings
	DEWALT DCE200			DEWALT Standard IPS Press jaws and rings

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NIBCO® Bench Press® and Bench PressG®

Installation Instructions

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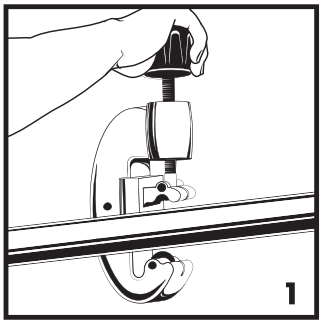
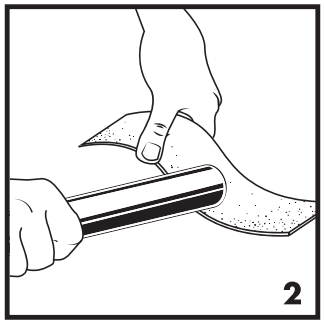
NIBCO® Bench Press®

1/2" - 2" Fitting Installation Instructions

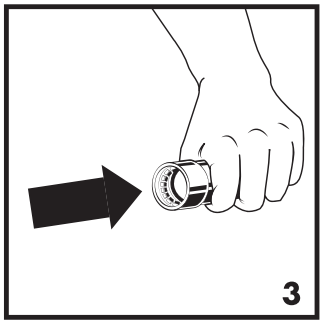
For ASTM A53, A106, A135, A795 (schedule 10 to 40) carbon steel pipe in 1/2" to 2" sizes



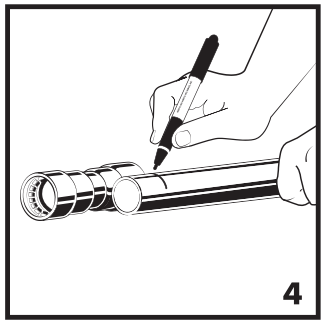
1. Select clean, undamaged pipe and cut to desired length. Cut tube end square using a pipe cutter or fine-toothed steel saw. If using a vise or other method to hold the pipe, do not damage the pipe section which is inserted into the fitting. Scratches or deformed pipe may result in an improper seal.



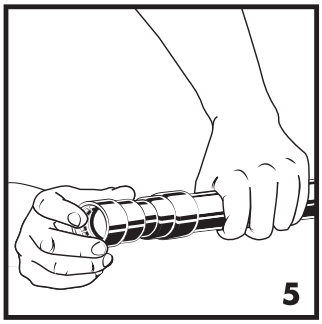
2. Prep pipe to a smooth and even surface with a fine grit sandpaper. The surface should be free of indentations, oil, and debris. Do not use engraved or stamped pipe. Indentations in the pipe may result in an improper seal. To avoid damage to the O-ring, the pipe must be free of burrs and sharp edges.



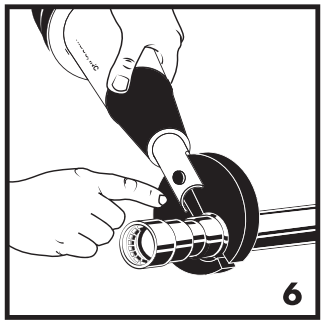
3. Visually inspect the fitting to ensure the grip ring, separator ring, and seal are in place, clean and, free of contaminants. Only original NIBCO black EPDM Bench Press™ seals are to be used.



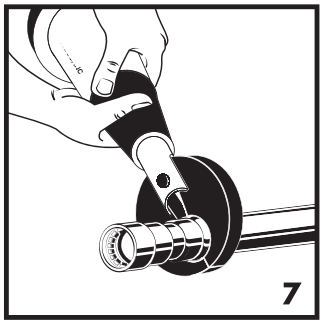
4. Mark the pipe to the proper insertion depth as indicated by the Insertion Depth Chart. Improper insertion depth may result in an improper seal.



5. Fully insert the pipe into the fitting. For fittings with stops, insert the pipe to make contact with the fitting stop. For fittings without a stop, insert the pipe to a depth no less than the specified insertion depth. Improper insertion depth may result in an improper seal. If necessary, the O-ring may be lubricated with water. Never use oils or lubricants as these can degrade or damage the sealing element.



6. Ensure the proper press jaw is installed in the pressing tool. Squeeze the jaw arms to open the jaw set. Place open jaws around the fitting end and ensure the jaw is properly aligned with the contour of the fitting. When using the ring and actuator instead of jaws, use the correct size ring an appropriate actuator. See NIBCO Tool and Jaw Compatibility Matrix for approved tools and jaws.



7. Make sure the pipe is inserted to the proper depth. With the tool square to the axis of the pipe, start pressing procedure. After the press is complete, remove the jaw from the fitting.

Pipe Insertion Depth Chart

Tube Size (In.)	Insertion Depth (In.)
1/2	1-1/16
3/4	1-1/16
1	1-5/16
1-1/4	1-3/4
1-1/2	1-13/16
2	1-7/8

WARNING	MISE EN GARDE !	ADVERTENCIA
Read press tool operator's manual and fitting manufacturer's installation instructions before using. Failure to follow all instructions may result in extensive property damage and/or serious personal injury. Call the NIBCO Technical Service Department at 1.888.446.4226 if you have any questions or need assistance.	Familiarisez-vous avec le mode d'emploi de la presse et les instructions du fabricant des raccords avant d'utiliser l'appareil. Le non-respect de leurs consignes risquerait d'augmenter les risques de dégâts matériels importants et/ou de graves blessures corporelles. Veuillez adresser toutes questions éventuelles ou demandes de mode d'emploi à la NIBCO en composant le 1.888.446.4226.	Antes de usar, lea el Manual del Operario de esta herramienta de presión y las instrucciones de instalación del acopliamiento proporcionadas por su fabricante. Pueden ocurrir daños materiales de gran envergadura y lesiones corporales de gravedad si no se respetan todas las instrucciones. Si tiene alguna pregunta o desea pedir un manual, llame al Departamento de Servicio Técnico de NIBCO al 1.888.446.4226.

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1/2" - 2" Fitting Installation Instructions, continued...

For ASTM A53, A106, A135, A795 (Schedule 10 to 40) carbon steel pipe in 1/2" to 2" sizes

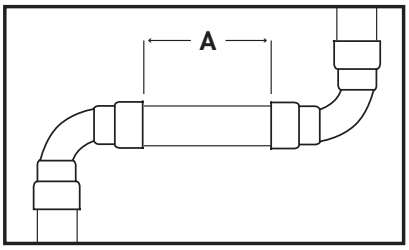
Notes:

1. To ensure a proper press, maintain the specified minimum distance between fittings. The pressing jaw must have clearance to the adjacent fitting. Failure to maintain the minimum specified distance may result in an improper seal.
2. A minimum distance to welds must always be maintained.

   A minimum of 4 inches must be maintained when welding adjacent to a BenchPress fitting and a minimum of 3 feet must be maintained when welding in-line. The following precautions should be used to protect the BenchPress fitting:

   - Wrap the press fitting connection with a cold wet rag
   - Protect the press fitting connection with a weld blanket
   - Fabricate weld connections prior to installing the press fitting

Pipe Diameter (in)	Distance Between Fittings A (in)
1/2	0.20
3/4	0.20
1	0.20
1-1/4	0.59
1-1/2	0.59
2	0.59



Leak Testing: Unpressed connections are located by pressurizing the system with air or water. When testing with compressed air, the proper maximum pressure is 15 psi; when testing with water, the maximum pressure is 45 psi. Following a successful leak test, the system may be pressure tested up to 200 psi if required by local code requirements or project specifications. Leak testing with air can be dangerous at high pressures.

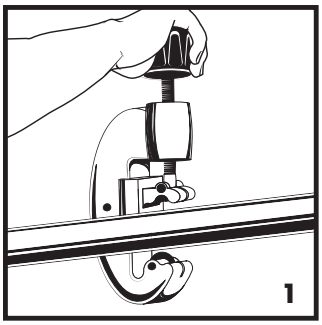
The following standards, codes, and instructions should be followed when installing NIBCO® BenchPress™ fittings:

- The installation shall be made in accordance with local codes.
- For use with ASTM A53, A106, A795 and A135 carbon steel pipe.
- Undue stress or strain on the fittings and the tubing is to be avoided.
- Concealed pipe and fittings shall be protected from puncture threats.
- If the installation requires components in addition to those supplied by the fitting manufacturer, those components shall be specified. The instructions shall state that only the components provided or specified by the manufacturer are to be used in the installation.
- The fitting/pipe system shall not be used as a grounding electrode for an electrical system.
- The inspection, testing, and purging of the installation shall be performed in accordance with the requirements of the applicable local codes.
- The fitting/pipe system shall not be used as a means of support.

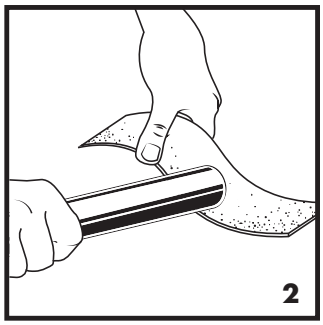
NIBCO® BenchPressG®

½" - 2" Fitting Installation Instructions

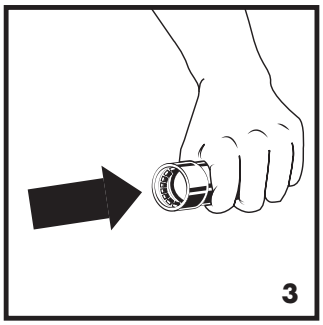
For ASTM A53, A106, A135, A795 (Schedule 10 to 40) carbon steel pipe in 1/2" to 2" sizes



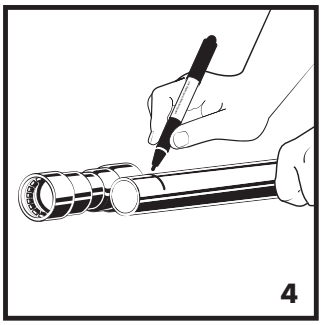
1. Select clean, undamaged pipe and cut to desired length. Cut tube end square using a pipe cutter or fine-toothed steel saw. If using a vise or other method to hold the pipe, do not damage the pipe section which is inserted into the fitting. Scratches or deformed pipe may result in an improper seal.



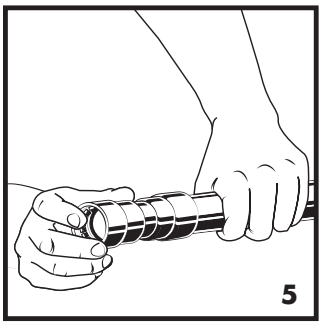
2. Prep pipe to a smooth and even surface with a fine grit sandpaper. The surface should be free of indentations, oil, and debris. Do not use engraved or stamped pipe. Indentations in the pipe may result in an improper seal. To avoid damage to the O-ring, the pipe must be free of burrs and sharp edges.



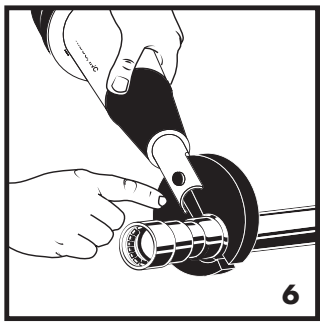
3. Visually inspect the fitting to ensure the grip ring, separator ring, and seal are in place, clean and free of contaminants. Only original NIBCO® yellow HNBR BenchPressG™ seals are to be used.



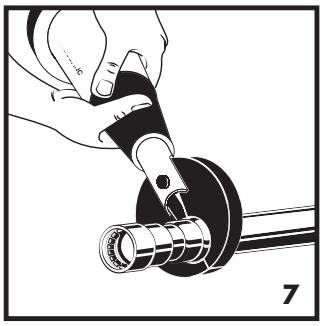
4. Mark the pipe to the proper insertion depth as indicated by the Insertion Depth Chart. Improper insertion depth may result in an improper seal.



5. Fully insert the pipe into the fitting. For fittings with stops, insert the pipe to make contact with the fitting stop. For fittings without a stop, insert the pipe to a depth no less than the specified insertion depth. Improper insertion depth may result in an improper seal. If necessary, the O-ring may be lubricated with water. Never use oils or lubricants as these can degrade or damage the sealing element.



6. Ensure the proper press jaw is installed in the pressing tool. Squeeze the jaw arms to open the jaw set. Place open jaws around the fitting end and ensure the jaw is properly aligned with the contour of the fitting. When using the ring and actuator instead of jaws, use the correct size ring an appropriate actuator. See NIBCO Tool and Jaw Compatibility Matrix for approved tools and jaws.



7. Make sure the pipe is inserted to the proper depth. With the tool square to the axis of the pipe, start pressing procedure. After the press is complete, remove the jaw from the fitting.

Pipe Insertion Depth Chart

Tube Size (In.)	Minimum Insertion Depth (In.)
1/2	1-1/16
3/4	1-1/16
1	1-5/16
1-1/4	1-3/4
1-1/2	1-13/16
2	1-7/8

WARNING	MISE EN GARDE !	ADVERTENCIA
Read press tool operator's manual and fitting manufacturer's installation instructions before using. Failure to follow all instructions may result in extensive property damage and/or serious personal injury. Call the NIBCO Technical Service Department at 1.888.446.4226 if you have any questions or need assistance.	Familiarisez-vous avec le mode d'emploi de la presse et les instructions du fabricant des raccords avant d'utiliser l'appareil. Le non-respect de leurs consignes risquerait d'augmenter les risques de dégâts matériels importants et/ou de graves blessures corporelles. Veuillez adresser toutes questions éventuelles ou demandes de mode d'emploi à la NIBCO en composant le 1.888.446.4226.	Antes de usar, lea el Manual del Operario de esta herramienta de presión y las instrucciones de instalación del acopliamiento proporcionadas por su fabricante. Pueden ocurrir daños materiales de gran envergadura y lesiones corporales de gravedad si no se respetan todas las instrucciones. Si tiene alguna pregunta o desea pedir un manual, llame al Departamento de Servicio Técnico de NIBCO al 1.888.446.4226.

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½" - 2" Fitting Installation Instructions, continued...

For ASTM A53, A106, A135, A795 (Schedule 10 to 40) carbon steel pipe in 1/2" to 2" sizes

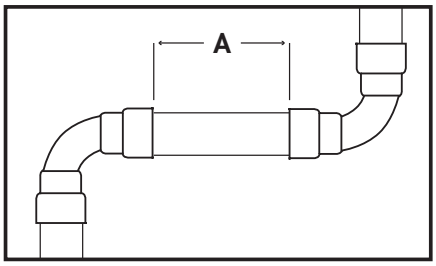
Notes:

1. To ensure a proper press, maintain the specified minimum distance between fittings. The pressing jaw must have clearance to the adjacent fitting. Failure to maintain the minimum specified distance may result in an improper seal.
2. A minimum distance to welds must always be maintained.

   A minimum of 4 inches must be maintained when welding adjacent to a BenchPressG fitting and a minimum of 3 feet must be maintained when welding in-line. The following precautions should be used to protect the BenchPress fitting:

   - Wrap the press fitting connection with a cold wet rag
   - Protect the press fitting connection with a weld blanket
   - Fabricate weld connections prior to installing the press fitting

Pipe Diameter (in)	Distance Between Fittings A (in)
1/2	0.20
3/4	0.20
1	0.20
1-1/4	0.59
1-1/2	0.59
2	0.59



Leak Testing: Unpressed connections are located by pressurizing the system with air. When testing with compressed air, the proper maximum pressure is 15 psi. Following a successful leak test, the system may be pressure tested up to 200 psi if required by local code requirements or project specifications. Leak testing with air can be dangerous at high pressures.

The following standards, codes, and instructions should be followed when installing NIBCO® BenchPressG™ fittings for fuel gas:

- The installation of the fuel gas system shall be made in accordance with local codes, or in the absence of local codes, in accordance with the National Fuel Gas Code NFPA 54, the LP-Gas Code NFPA 58 as applicable.
- For use with ASTM A53, A106, A795 and A135 carbon steel pipe.
- Undue stress or strain on the fittings and the tubing is to be avoided.
- Concealed pipe and fittings shall be protected from puncture threats.
- If the installation requires components in addition to those supplied by the fitting manufacturer, those components shall be specified. The instructions shall state that only the components provided or specified by the manufacturer are to be used in the installation.
- The fitting/pipe system shall not be used as a grounding electrode for an electrical system.
- The inspection, testing and purging of the installation shall be performed using procedures specified in Part 4 of the National Fuel Gas Code NFPA 54, ANSI Z223.1, the LP-Gas Code NFPA 58 section 3.2-10 as applicable or in accordance with the requirements of the applicable local codes.
- For use with natural, propane, mixed, and manufactured gasses in the vapor state, not in the liquid state.
- The fitting/pipe system shall not be used as a means of support.

Notes

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www.nibco.com

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NIBCO BenchPress™ and BenchPressG™ Limited Warranty

NIBCO INC. LIMITED WARRANTY

Applicable to NIBCO BenchPress & BenchPressG

NIBCO INC. warrants each NIBCO BenchPress & BenchPressG fitting and flange (together, the "NIBCO Products") to be free from defects in materials and workmanship under normal use, service, and maintenance in accordance with the product specifications (including, but not limited to installation recommendations) for a period of ten (10) years from the Warranty Commencement Date. The Warranty Commencement Date shall be the date upon which the NIBCO Products are installed.

NIBCO will repair or replace – at its option and at no charge –NIBCO Products that have been determined by NIBCO, or an authorized representative or agent thereof, to have failed solely because of a defect in materials or workmanship under normal use, service, and maintenance during the warranty period. Replacements shall be shipped free of charge to the owner.

This limited warranty applies to all NIBCO Products installed, tested, applied, and used in accordance with NIBCO's approved and published recommendations and instructions.

This warranty does not cover any failure or damage for or caused by:

1. any product, parts, or systems which are not manufactured or sold by NIBCO;
2. any NIBCO Product which is used for purposes other than a purpose authorized by NIBCO;
3. any NIBCO Product not installed, tested, applied, used, or maintained in accordance with NIBCO's recommended installation guidelines and instructions;
4. any NIBCO Product not installed or used in accordance with applicable codes;
5. any damage caused by, contributed in whole or in part by, or resulting from, any of the following:
   a. abuse, misuse, mishandling, alteration, tampering, neglect, or accidental damage such as, without limitation, vandalism;
   b. natural disasters, such as, without limitation, flooding, windstorm, and lightning;
   c. attachments or modifications not authorized by NIBCO;
   d. external, physical or chemical qualities, or an unsuitable or hostile environment;
   e. any defects other than those in material or workmanship; or
   f. any other cause beyond the control of NIBCO.

NIBCO DISCLAIMS ANY AND ALL LIABILITY FOR ANY OTHER DIRECT OR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, ECONOMIC LOSS, LOSS OF BUSINESS, LOST PROFITS, PUNITIVE DAMAGES, MOLD INTRUSION, WATER DAMAGE, ETC.

Some states do not allow the exclusion or limitation of damages, so the above limitation or exclusion may not apply to you.

THIS WARRANTY IS THE ONLY WARRANTY FOR THE NIBCO PRODUCTS PROVIDED BY NIBCO, AND IS AND SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, AN IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND FOR ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF A MANUFACTURER. NO EMPLOYEE OF NIBCO, OR ANY OTHER DISTRIBUTOR, AGENT, OR OTHER PERSON OR BUSINESS, IS AUTHORIZED TO MAKE ANY OTHER WARRANTY ON BEHALF OF NIBCO.

Some states do not allow limitations on implied warranties, so the above limitation may not apply to you.

In the event any defect occurs which is believed to be covered by this warranty, NIBCO Technical Services must immediately be contacted by calling 888.446.4226 or emailing CS-TechnicalServices@nibco.com. NIBCO Technical Services after being contacted will make further arrangements for the product's return to NIBCO at the customer's expense for review and evaluation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Visit our website for the most current information.

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How to Order

State quantity, figure number and size for each valve you wish to order. See individual valve catalog pages for specific or special product designations.

HOW MANY TO ORDER

NIBCO valves are decimal packed for your convenience in handling, shipping and stock-keeping. Number in master carton varies with item.

POLICY ON RETURNS TO FACTORY

NO NIBCO valves are to be returned without prior written agreement. Transportation must be prepaid. A 20% charge will be made to cover cost of rehandling and reinspection.

TECHNICAL ASSISTANCE

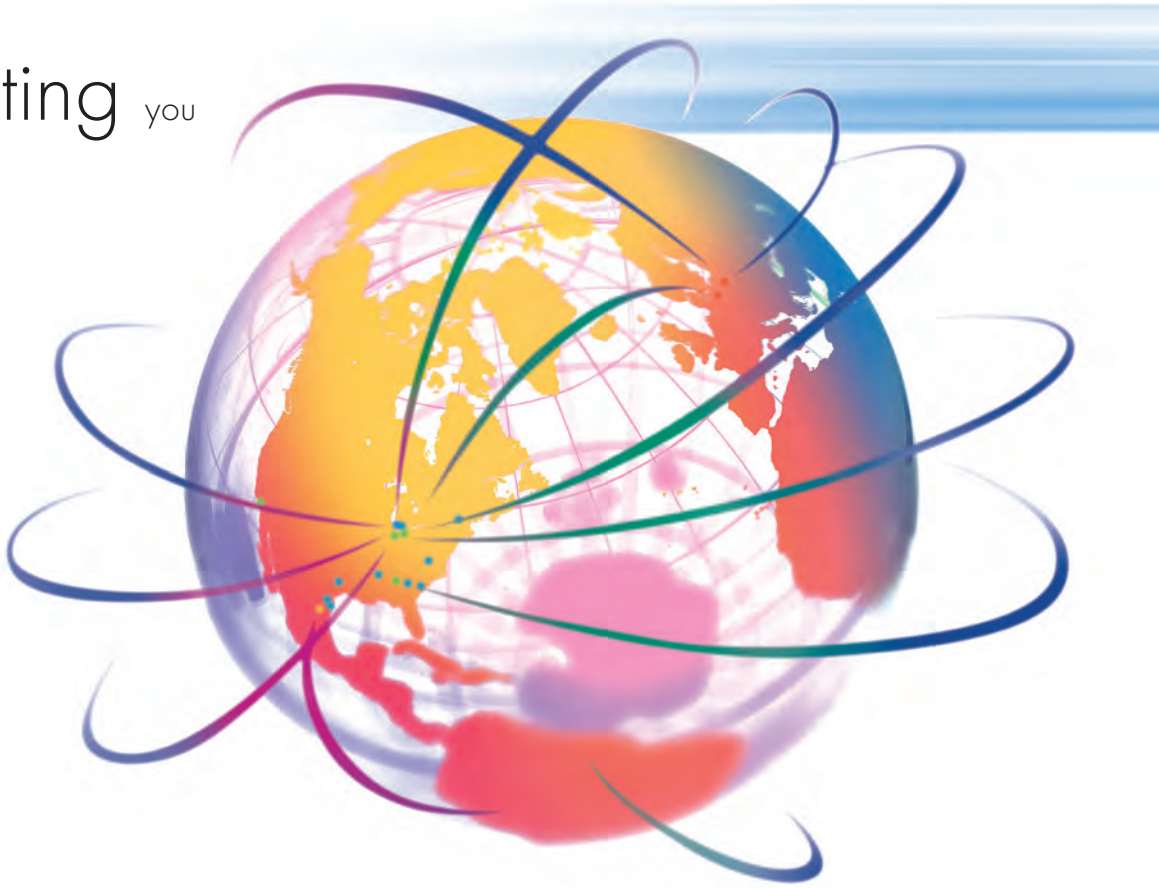
Engineers, contractors, wholesalers or manufacturers may obtain special or technical assistance from any factory representative of NIBCO. Write, fax or phone.

NIBCO INC.
World Headquarters
1516 Middlebury Street
Elkhart, IN 46516-4740
USA

Phone: 1.574.295.3000
Fax: 1.574.295.3307
Technical Service Phone: 1.888.446.4226
Fax: 1.888.336.4226

globally connecting you at all levels

It's a new age of business, and a new way at NIBCO. From Elkhart, Indiana to Lodz, Poland, and points beyond, our company has integrated manufacturing, distribution, and networked communications to provide a seamless source of information and service, 24 hours a day, 7 days a week. But this integration hasn't happened overnight. It's been part of a long-term strategic process that has pushed us to reconsider every aspect of our business. The result? We're a vertically integrated manufacturer with the products and systems in place to deliver low cost and high quality. NIBCO products are manufactured under a Quality Management System conforming to the current revision of ISO-9001 International Standards. We know the flow control industry is only going to get more demanding, and we are more than ready. We will continue to lead. That's what NIBCO is all about.



World Headquarters
Elkhart, Indiana

MANUFACTURING				DISTRIBUTION	INTERNATIONAL
Metal Valves and Fittings	Plastic Pipe, Valves, and Fittings	Industrial Plastics	International	U.S. Distribution Centers	Global Offices
* Blytheville, Arkansas	* Greensboro, Georgia	* Charlestown, Indiana	Reynosa, Mexico	Elkhart, Indiana	Elkhart, Indiana
McAllen, Texas	* Goshen, Indiana		* Lodz, Poland		Lodz, Poland
Nacogdoches, Texas					
* Stuarts Draft, Virginia					
Worcester, Massachusetts					

*Denotes U.S. and International Direct Shipping Locations

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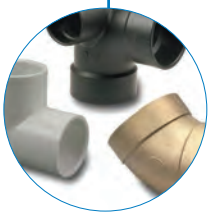
VALVES

Pressure-rated bronze, iron and alloy-iron gate, globe and check valves • Pressure-rated bronze ball valves • Boiler specialty valves • Commercial and industrial butterfly valves • Lined butterfly valves • Circuit balancing valves and kits • Carbon and stainless steel ball valves • ANSI flanged steel ball valves • Lined ball valves • Pneumatic and electric actuators and controls • Grooved ball and butterfly valves • High performance butterfly valves • UL/FM fire protection valves • MSS specification valves • Bronze specialty valves • Low pressure gate, globe, check and ball valves • Frostproof sillcocks • Quarter-turn supply stops • Quarter-turn low pressure valves • PVC and CPVC plumbing and industrial ball valves • Bronze and iron y-strainers • Sample valves • Sanitary valves • Lead-free valves • Hydronic valves • Labor saving valves • Manifold systems • Water temperature control valves • System quality valves • Press x PEX transition valves

FITTINGS



Wrot and cast copper pressure and drainage fittings • Cast copper alloy flanges • Powder coated steel companion flanges • Wrot and cast press fittings • ABS and PVC DWV fittings • Schedule 40 PVC pressure fittings • CPVC CTS fittings • CPVC CTS-to-metal transition fittings • Schedule 80 PVC and CPVC systems • Lead-free fittings • Press x PEX transition fittings • Cast bronze push fittings

LEAD-FREE: Weighted average lead content ≤0.25%

INDUSTRIAL PLASTICS

PVC and Corzan® CPVC schedule 80 fittings, true union ball and ball check valves, butterfly valves, and specialty valves • Polypropylene and Kynar® PVDF schedule 80 pipe, fittings, and true union ball and ball check valves • Pneumatic and electric actuation systems

Corzan® are registered trademarks of the Lubrizol Corporation
Kynar® is a registered trademark of Arkema Inc.

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AHEAD OF THE FLOW®

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