

# NIBCO®



## PressG™ Fittings Catalog

C-PG-0320

Copper Press for Gas and  
Compressed Air Applications



## QUALITY PRODUCTS SINCE 1904

A recognized brand leader bringing flow control products and technologies to market, NIBCO has a history of success and innovation in the plumbing industry.

Headquartered in Elkhart, Indiana, we operate multiple manufacturing plants and distribution centers strategically located throughout the United States and globally, and offer more than 36,000 SKUs, including our NIBCO® family brands, Webstone®, Chemtrol® and Sure Seal®.

We have vertically integrated manufacturing, distribution and networked communications to provide a seamless source of information and service, 24/7. We place great emphasis on personal connections with our factory direct sales, live customer service and technical service support. We also offer unique programs to support our customers' success, including our NIBCO Partner program, Vendor Managed Inventory and EDI for wholesalers.

More than 90 percent of NIBCO-branded products are manufactured in the U.S. using high-quality materials and innovative processes and technologies to improve product performance and quality. For every high-quality valve or fitting made at NIBCO, each is made with pride by the hundreds of NIBCO associates who work there.

Today, NIBCO is a fifth-generation, family- and associate-owned business. Since 1904, we've pioneered many products and processes. As the flow control industry continues to become more demanding, we remain focused on what has made us successful: delivering more than a product and making business better for each of our customers.



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# NIBCO<sup>®</sup> PressG<sup>™</sup> System Table of Contents



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	Page		Page
<b>Contents</b> .....	1	<b>Engineering Data</b> .....	13-14
<b>Fittings</b> .....	3-7	Copper and Copper Alloy Fittings.....	14
Applications Chart .....	4	<b>Installation Instructions</b> .....	15-17
Adapters.....	5	1/2" - 2" Fittings .....	16-17
Caps .....	5	<b>Frequently Asked Questions</b> .....	18
Couplings .....	5	<b>Press System Fittings Warranty</b> .....	19
Elbows.....	6		
Tees.....	6		
Unions .....	7		
Accessories.....	7		
<b>Tools and Jaws</b> .....	8-12		
Standard Pressing Tool - PC-280.....	9		
Mini Pressing Tool - PC-20M.....	10		
PC-10M and PC-100 Accessories.....	11		
Approved Tool and Jaw Compatibility Matrix .....	12		

\*Weighted average lead content ≤ 0.25%

# NIBCO<sup>®</sup> PressG<sup>™</sup>

## **Quick and Easy**

NIBCO PressG is user friendly, quick and easy to install. Installation can be completed in less time than traditional solder, threaded, brazed or grooved copper systems. Significant time savings means tight budgets and deadlines are met while project delays and cost overruns are avoided.

## **Full System Product Offering**

NIBCO PressG is more than just 1/2" to 2" fittings. Our offering also includes a full line of NIBCO tools necessary to complete a total system installation.

## **Flameless**

NIBCO PressG is easier and safer to use because there is no flame, solder or flux required. Connections can even be made on a wet tube!

## **Reliable**

With NIBCO PressG, a joint is formed between the HNBR seal and the crimped fitting providing a permanent connection. Reliability you can count on ... NIBCO press fittings are backed by a 110-year-old company and a 25-year written guarantee.

## **Professional Appearance**

The NIBCO PressG System creates a clean joint without the mess of excess solder or discoloration.

## **Joint Integrity**

The NIBCO PressG System uses engineered tools, jaws and chains that are tested and approved to ensure a consistent, reliable crimp.

## **Performance**

Patented Leak detection feature ensures uncrimped connections are found during system testing.

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# **NIBCO**<sup>®</sup> PressG<sup>™</sup> Fittings



*Visit our website for the most current information.*

# Applications Chart

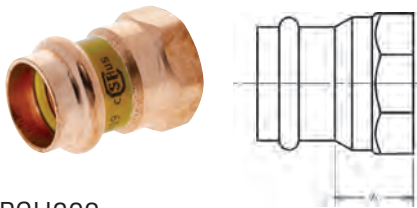
Types of Service	Comments	Pressure	Temperature	Compatible with HNBR Seal
<b>Fuel, Oil and Lubricant</b>				
Heating Fuel Oil		125 PSI	-40°F to 180°F	●
Diesel Fuel	Compliant with NFPA 30 and 30A			●
Liquid Propane Gas, Liquid Butane Gas	Compliant with CSA LC4	125 PSI	-40°F to 180°F	●
Kerosene		125 PSI	68°F	●
Lube Oil		200 PSI	-40°F to 180°F	●

<b>Gases</b>				
Compressed Air		200 PSI		●
Natural Gas	Compliant with CSA LC4	125 PSI	-40°F to 180°F	●
Oxygen - O <sub>2</sub> (non-medical)	Keep Oil and Fat Free/Non-Liquid O <sub>2</sub>	140 PSI	Up to 140°F	●
Nitrogen - N <sub>2</sub>		200 PSI		●
Carbon Dioxide - CO <sub>2</sub>	Dry	200 PSI		●
Argon		200 PSI		●
Corgon		200 PSI		●
Hydrogen - H <sub>2</sub>		125 PSI		●
Vacuum		Max 29.2 inches of Mercury - Hg		●

In compliance with National Fuel Gas Code, NFPA 54, this product is not to be used for service applications where the gas contains more than an average of 0.3 grains of hydrogen sulfide per 100 scf of gas (0.7mg/100 L).

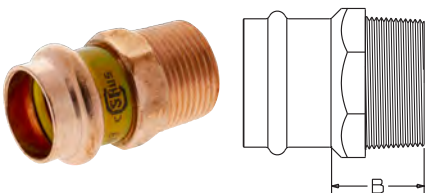
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## ADAPTERS



**PCH603**  
Adapter P x F – Wrot

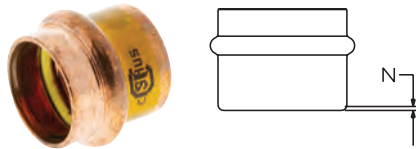
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.103	13/16
1/2 x 3/8	.081	21/32
3/4	.159	27/32
1	.237	15/16
1¼	.374	11/16
1½	.522	11/16
2	.672	1



**PCH604**  
Adapter P x M – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.104	7/8
1/2 x 3/8	.106	27/32
3/4	.180	11/16
1	.255	13/32
1¼	.467	113/32
1½	.696	11/2
2	.856	17/16

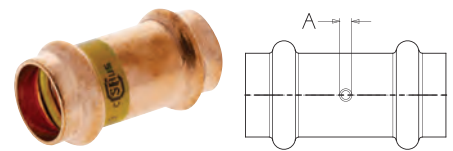
## CAPS



**PCH617**  
Cap P – Wrot

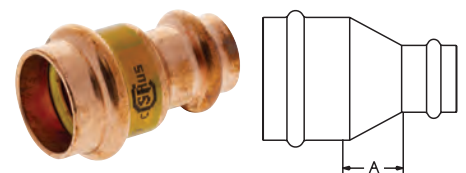
NOM. SIZE	APPROX. NET WT./LBS.	DIM. N INCHES
1/2	.046	5/32
3/4	.087	5/32
1	.124	1/8
1¼	.168	3/32
1½	.326	3/32
2	.475	3/32

## COUPLINGS



**PCH600-DS**  
Coupling P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.083	3/16
3/4	.157	5/32
1	.198	5/32
1¼	.271	5/32
1½	.530	3/16
2	.691	5/32

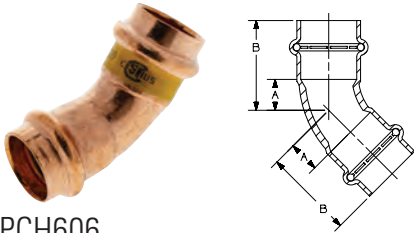


**PCH600-R**  
Reducing Coupling P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
3/4 x 1/2	.121	1/4
1 x 1/2	.142	7/16
1 x 3/4	.184	13/32
1¼ x 3/4	.248	1/2
1¼ x 1	.233	7/16
1½ x 1	.370	13/32
1½ x 1¼	.399	9/32
2 x 1	.552	11/16
2 x 1 1/2	.662	7/16

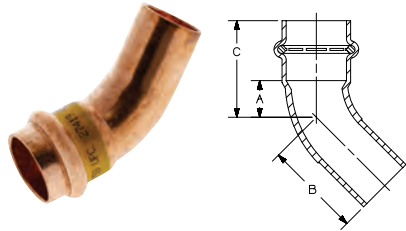
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## ELBOWS



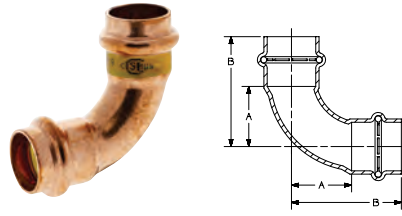
**PCH606**  
45° Elbow P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.092	13/32	1 1/8
3/4	.181	1/2	1 13/32
1	.251	5/8	1 1/2
1 1/4	.403	25/32	1 25/32
1 1/2	.723	15/16	2 5/16
2	1.063	1 3/16	2 23/32



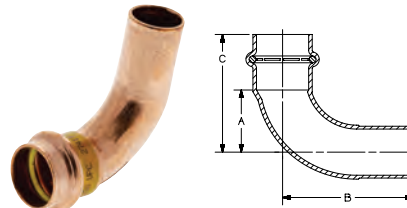
**PCH606-2**  
45° Elbow Ftg x P – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/2	.094	7/16	1 5/16	1 1/8
3/4	.171	17/32	1 13/32	1 13/32
1	.270	9/16	1 17/32	1 7/16
1 1/4	.417	1 1/16	1 3/4	1 11/16
1 1/2	.719	1 13/16	2 5/16	2 3/16
2	1.031	1	2 21/32	2 1/2



**PCH607**  
90° Elbow P x P – Wrot

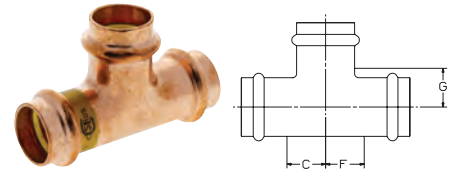
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.116	23/32	1 15/32
3/4	.223	1 3/32	2
3/4 x 1/2	.201	1 5/32	2
1	.331	1 15/32	2 11/32
1 x 3/4	.321	1 5/16	2 5/16
1 1/4	.528	1 27/32	2 29/32
1 1/2	.895	2 7/32	3 21/32
2	1.480	2 15/16	4 15/32



**PCH607-2**  
90° Elbow Ftg x P – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/2	.110	25/32	1 21/32	1 15/32
3/4	.219	1 1/16	2 7/32	1 31/32
1	.328	1 13/32	2 5/8	1 1/2
1 1/4	.490	1 7/8	3 3/32	2 29/32
1 1/2	.871	2 7/32	3 15/16	3 11/16
2	1.467	2 29/32	4 17/32	4 15/32

## TEES

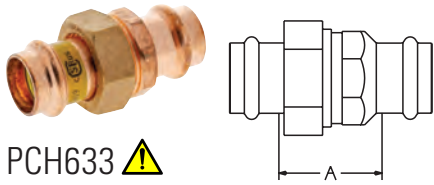


**PCH611**  
Tee P x P x P – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		C	F	G
1/2	.176	23/32	23/32	15/32
3/4	.320	25/32	25/32	21/32
3/4 x 3/4 x 1/2	.276	21/32	21/32	21/32
1	.501	7/8	7/8	29/32
1 x 3/4 x 1/2	.634	13/16	1 1/16	1 5/32
1 x 3/4 x 3/4	.460	25/32	31/32	13/16
1 x 1 x 1/2	.324	21/32	21/32	7/8
1 x 1 x 3/4	.388	3/4	3/4	27/32
1 1/4	.759	1	1	1 5/16
1 1/4 x 1 1/4 x 1	.508	7/8	7/8	31/32
1 1/2	1.179	1 5/16	1 5/16	1 19/32
1 1/2 x 1 1/2 x 3/4	.740	19/32	19/32	1 3/32
1 1/2 x 1 1/2 x 1	.785	1 5/16	1 5/16	1 3/16
1 1/2 x 1 1/2 x 1 1/4	1.262	7/8	7/8	1 19/32
2	1.789	1 13/32	1 13/32	1 13/32
2 x 2 x 3/4	1.256	3/4	3/4	1 1/2
2 x 2 x 1 1/2	1.770	1 1/8	1 1/8	1 1/2

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## UNIONS



PCH633 ⚠  
Union P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.386	1 <sup>5</sup> / <sub>16</sub>
3/4	.527	1 <sup>9</sup> / <sub>32</sub>
1	.810	1 <sup>11</sup> / <sub>32</sub>
1¼	1.093	1 <sup>19</sup> / <sub>32</sub>
1½	1.715	1 <sup>21</sup> / <sub>32</sub>
2	2.394	1 <sup>27</sup> / <sub>32</sub>

## ACCESSORIES



HNBR Seal (**leak detection**)

SIZE	PART No.	
1/2	T048353 PP	Leak Detect
3/4	T048355 PP	Leak Detect
1	T048357 PP	Leak Detect
1¼	T048359 PP	Leak Detect
1½	T048361 PP	Leak Detect
2	T048363 PP	Leak Detect

**NOTE:** Do NOT use with PC-FP600A-LF



Press Installation Gauge

SIZE	PART No.
1½ - 2	K700001PC

**⚠ WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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# **NIBCO**® PressG™ Tools, Jaws & Chains



Visit our website for the most current information.

# NIBCO® Press System Tools

## PC-280

1/2" through 4"



### MATERIAL LIST

MODEL NO.	DESCRIPTION	LBS.
PC-280	Pressing Tool with 2 - 18V, 3.0 Ah Lithium-ion batteries, 110V battery charger & case	25.40
PC-10S	1/2" Standard Pressing Jaw (for PC-100 or PC-280)	4.14
PC-11S	3/4" Standard Pressing Jaw (for PC-100 or PC-280)	4.18
PC-12S	1" Standard Pressing Jaw (for PC-100 or PC-280)	4.52
PC-13S	1 1/4" Standard Pressing Jaw (for PC-100 or PC-280)	4.30
PC-14S	1 1/2" Standard Pressing Jaw (for PC-100 or PC-280)	9.61
PC-15S	2" Standard Pressing Jaw (for PC-100 or PC-280)	9.26
PC-16S	1/2"-1 1/4" (4 jaws) Standard Press Jaw Kit w/Case (for PC-100 or PC-280)	25.25
PC-17S	1 1/2"-2" (2 jaws) Standard Press Jaw Kit w/Case (for PC-100 or PC-280)	23.76
PC-7L	18V, 3.0Ah Lithium-ion Battery (for PC-280 or PC-20M)	1.30
PC-8L	110V Battery Charger (for PC-4ML or PC-7L)	2.20
PC-9L	AC Adapter (for PC-280 or PC-20M)	1.70
PC-280C	Plastic Replacement Case for PC-280 Tool	7.50
PC-16SC	Metal Replacement Case for PC-16S (1/2" - 1 1/4" Jaws)	8.10
PC-17SC	Metal Replacement Case for PC-17S (1 1/2" - 2" Jaws)	4.40
PC-51	1/2" - 2" Deburring Tool	0.92



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**PC-10S thru PC-15S**  
Standard Pressing Jaws

**PC-280**  
Pressing Tool



**PC-7L**  
18V, 3.0 Ah  
Lithium-ion Battery



**PC-8L**  
110V Battery Charger



**PC-51**  
1/2" - 2" Deburring Tool



**PC-9L**  
AC Adapter

Visit our website for the most current information.

# NIBCO® Press System Tools

## PC-20M

1/2" through 1"

### MATERIAL LIST

MODEL NO.	DESCRIPTION	LBS.
PC-20M	Mini Pressing Tool, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case (NO jaws)	10.10
PC-200M	Mini Pressing Tool, 3 Jaws, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case	17.20
PC-1M	1/2" Jaw (for Mini Pressing Tool - PC-10M or PC-20M)	2.09
PC-2M	3/4" Jaw (for Mini Pressing Tool - PC-10M or PC-20M)	2.05
PC-3M	1" Jaw (for Mini Pressing Tool - PC-10M or PC-20M)	2.07
PC-4ML	18V, 2.0Ah Lithium-ion Battery (for PC-20M)	0.85
PC-7L	18V, 3.0Ah Lithium-ion Battery (for PC-280 or PC-20M)	1.30
PC-8L	110V Battery Charger (for PC-4ML and PC-7L)	2.20
PC-9L	AC Adapter (for PC-280 or PC-20M)	1.70
PC-20MC	Plastic Replacement Case for PC-10M & PC-20M)	4.00
PC-50	1/2" - 1" Deburring Tool	0.42



**PC-20M**

Mini Pressing Tool



**PC-200M**

Mini Pressing Tool with  
1/2", 3/4" and 1" Jaws



**PC-1M, 2M, 3M**

Mini Pressing Jaws



**PC-4ML**

18V, 2.0 Ah  
Lithium-ion Battery



**PC-8L**

110V Battery Charger



**PC-50**

1/2" - 1" Deburring Tool



**PC-7L**

18V, 3.0 Ah  
Lithium-ion Battery



**PC-9L**

AC Adapter

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# NIBCO® Press System Tools

## PC-280 & PC-20M FEATURES

### TOOLS

#### Light weight

PC-20M Mini: 3.7 lbs. (without jaw)  
PC-280: 9.4 lbs. (without jaw)

#### Easy to handle / simple design

Jaws rotate 350°  
No calibration necessary  
No complicated switches or controls  
Mini: Ergonomic compact design is easy to use in tight spaces

#### Interruptible crimp cycle

Safety feature prevents injuries  
Can begin crimp, stop to align and level fitting / tube, and complete crimp

#### Battery

Can be changed during crimp cycle  
Lithium-ion has short charging cycle and larger capacity

- PC-4ML: 15 minute recharge time
- PC-7L: 22 minute recharge time

#### AC Power Adapter

Converts the tool to electric power  
Allows continuous use

#### Service light

Illuminates at 10,000 cycles  
Tool will not stop operating when light illuminates

- RED indicates battery charge status, service intervals, tool functions & faults
- WHITE illuminates the work area

#### Hydraulic Pressure Check (HPC)

An audible warning signal sounds if adequate working pressure is not achieved

## PRESSING CHAINS (2 1/2" to 4" ONLY)

#### Uniform crimp

Maintains proper pipe alignment

#### Easy to install and remove

Once secured to fitting, chain cannot fall off prior to crimp  
Chain easily removed post crimp

#### Crimp Identification

Easy to identify crimp has been made from a distance

## PC-100 and PC-10M Accessories

### MATERIAL LIST

MODEL NO.	DESCRIPTION	LBS.
PC-7	12V, NiMH Battery - 3.0Ah for PC-100	1.57
PC-8	120V Standard Battery Charger for PC-6 or PC-7	1.10
PC-4M	1.3 Ah NiCd 9.6V Battery for Mini Pressing Tool	0.85
PC-5M	120V Charger for Mini Pressing Tool	1.13
PC-100C	Metal Case for PC-100 Tool	14.30



**PC-4M**

9.6V, 1.3 Ah  
NiCd Battery



**PC-7**

12V, 3.0 Ah  
NiMH Battery



**PC-8**

120V Battery Charger

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# NIBCO® Press System Approved Tool and Jaw Compatibility Matrix

Pressing tool, jaw and chain sets are an integral part of ensuring a reliable, permanent connection between NIBCO Press System fittings, valves and copper piping. **Only use pressing tools, jaws and chain sets that have been tested and approved for use with NIBCO Press System fittings and valves.**

The following table details compatibility of **approved** pressing tools, chains and jaws with the NIBCO Press System fittings and valves:

PRESSING TOOLS	SIZE	1/2" - 1/4"						1/2" - 2"							
		1/2" - 1" NIBCO® Press System Mini Pressing Jaws (PC-1M, PC-2M, PC-3M)	1/2" - 1" RIDGID® ProPress® Compact Pressing Jaws	1/2" - 1-1/4" RIDGID® ProPress® C1 Compact Kit (C1 Actuator & Press Rings)	Rothenberger Compact Pressing Jaws	Stanley® VIRAX® Press Inserts	1/2" - 1/4" Milwaukee® M12™ Pressing Jaws	1/2" & 3/4" RIDGID® ProPress® Compact Pressing Jaws	1/2" - 2" NIBCO® Press System Standard Pressing Jaws (PC-10S, PC-11S, PC-12S, PC-13S, PC-14S, PC-15S)	1/2" - 2" RIDGID® ProPress® Standard Pressing Jaws	1/2" - 1-1/4" RIDGID® ProPress® V1 Kit (V1 Actuator & Press Rings)	1/2" - 2" Rothenberger Standard Pressing Jaws	1/2" 2" REMS Standard Pressing Jaws	Stanley® VIRAX® Pressing Jaws	1/2" - 2" Milwaukee® M18™ Pressing Jaws
NIBCO® PC-280	—	—	—	—	—	—	—	YES	YES	YES	YES	YES	YES	—	—
NIBCO® PC-100	—	—	—	—	—	—	—	YES	YES	YES	YES	YES	YES	—	—
RIDGID® 320-E	—	—	—	—	—	—	—	YES	YES	YES	—	—	—	—	—
RIDGID® RP 330-B	—	—	—	—	—	—	—	YES	YES	YES	—	—	—	—	—
RIDGID® CT400	—	—	—	—	—	—	—	YES	YES	YES	—	—	—	—	—
RIDGID® RP 330-C	—	—	—	—	—	—	—	YES	YES	YES	—	—	—	—	—
RIDGID® RP 340	—	—	—	—	—	—	—	—	YES	—	—	—	—	—	—
Rothenberger ROMAX® Pressliner	—	—	—	—	—	—	—	—	—	—	YES	—	—	—	—
Rothenberger ROMAX® AC ECO	—	—	—	—	—	—	—	—	—	—	YES	—	—	—	—
REMS Akku-Press	—	—	—	—	—	—	—	—	—	—	—	YES	—	—	—
REMS Power-Press	—	—	—	—	—	—	—	—	—	—	—	YES	—	—	—
Stanley® VIRAX® P20+	—	—	—	—	—	—	—	—	—	—	—	—	YES	—	—
DEWALT DCE200	—	—	—	—	—	—	—	YES	—	—	—	—	—	—	YES
NIBCO® PC-20M Mini	YES	—	—	YES	—	—	—	—	—	—	—	—	—	—	—
NIBCO® PC-10M Mini	YES	—	—	YES	—	—	—	—	—	—	—	—	—	—	—
RIDGID® RP 115	—	—	—	—	—	—	YES	—	—	—	—	—	—	—	—
RIDGID® 100-B Compact	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	—
RIDGID® RP 210-B Compact	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	—
RIGID® RP 200-B	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	—
Rothenberger Compact	YES	—	—	YES	—	—	—	—	—	—	—	—	—	—	—
Stanley® VIRAX® M20+ Compact	—	—	—	—	YES	—	—	—	—	—	—	—	—	—	—
Milwaukee® M12™ Force Logic™	—	—	—	—	—	YES	—	—	—	—	—	—	—	—	—
Milwaukee® M18™ Force Logic™	—	—	—	—	—	—	—	—	—	—	—	—	—	YES	—

For the latest listing of approved pressing tool, jaw and chain combinations, visit [nibco.com](http://nibco.com). NIBCO recommends minor tool service performed once per year and major service every three years. For technical or service assistance, contact NIBCO Technical Services 1-888-446-4226.

RIDGID® is a registered trademark of RIDGID, Inc.

ProPress® is a registered trademark of Viega GmbH & Co

ROMAX® is a registered trademark of ROTHENBERGER

VIRAX® is a registered trademark of Stanley Works

Milwaukee® is a registered trademark of Milwaukee Electric Tool Corporation

FORCE LOGIC™ is a registered trademark of Milwaukee Electric Tool Corporation

DEWALT® is a registered trademark of The Black & Decker Corporation

**CAUTION:**

NIBCO press fittings and valves (2½", 3", 4" ends) to be installed **ONLY** with NIBCO pressing tools & chains.

Visit our website for the most current information.

# **NIBCO**<sup>®</sup> **PressG**<sup>™</sup>

## **Engineering Data**

*Visit our website for the most current information.*

# NIBCO® PressG™ — Engineering Data

## Copper and Copper Alloy Fittings

### System Description

The PressG system is a copper press connection system designed to meet the demands of natural gas and liquid propane gas in the vapor state as well as fuel oil systems. PressG utilizes an HNBR sealing element to provide permanent leak-proof connections in dimensions from ½" to 2".

### Applications

Tubing: PressG fittings are approved for use with ASTM B88 Type K & L, ASTM B280, and ASTM B837 Type G hard drawn tubing in 1/2" to 2" sizes. In addition, ½" and ¾" sizes are approved for use with annealed tubing in compliance with ASTM B88, ASTM B280, and ASTM B837. When annealed tube is used, rounding and sizing of the tube ends must be performed where needed. PressG fittings are approved for above and below-ground applications (Consult with the local Authority Having Jurisdiction prior to installation).

### Operating Parameters

- Operating Pressure: Ranges from 125 to 200 psi max, depending on the application. See NIBCO application chart.
- Operating Temperature: -40°F to 180°F

### System Benefits

- Fast and Easy to use
- Permanent Connections
- Professional Appearance
- Flame Free
- Environmentally Friendly

### Fittings

Fittings are provided with a factory-installed HNBR sealing element which is yellow in color. This sealing element features a patented leak detect design that provides quick and easy identification of connections that have not been pressed prior to putting the system into operation.



### Listing and Certifications

- ANSI LC4/CSA 6.32
- ICC-ES PMG 1502
- IAPMO/UPC LC-4

### Compliant with

- IFGC International Fuel Gas Code
- NFPA 54/Z223.1 National Fuel Gas Code
- NFPA 58 Liquefied Petroleum Gas Code
- UPC Chapter 12 Fuel Piping
- NFPA 30 Flammable and Combustible Liquids Code
- NFPA 30A Code for Motor Fuel Dispensing Facilities and Repair Garages
- NFPA 31 Standard for the Installation of Oil Burning Equipment (supply line only)

### Thermal Expansion and Contraction

Thermal expansion and contraction should be accounted for in all system designs. Further guidance on how to account for these stresses can be found in The Copper Development Association's Copper Tube Handbook, Section 3.

Visit our website for the most current information.

# **NIBCO**<sup>®</sup> **PressG**<sup>™</sup>

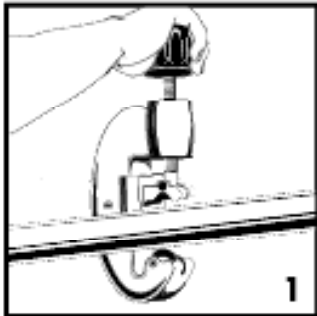
## **Installation Instructions**

*Visit our website for the most current information.*

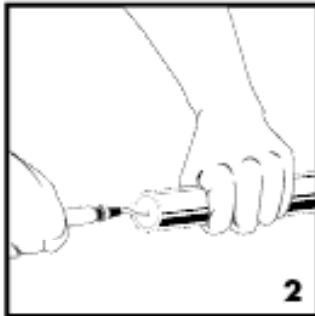
# NIBCO PressG

## 1/2" - 2" Fittings Installation Instructions

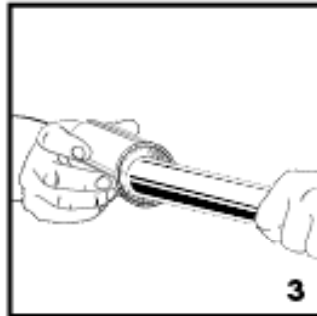
For Types K & L hard copper tubing in 1/2" to 2" sizes and annealed copper tubing in 1/2" & 3/4" sizes



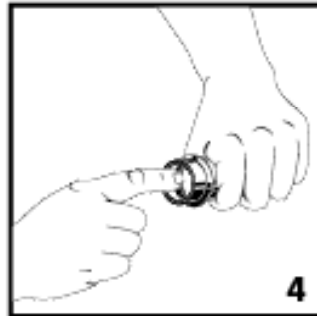
**1.** Select clean, undamaged copper tube and cut to desired length. Cut tube end square using a pipe cutter or fine-toothed steel saw.



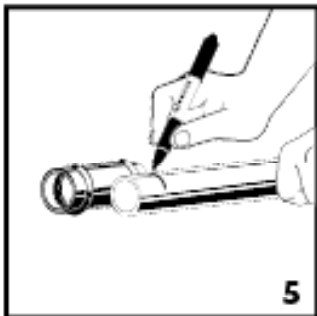
**2.** Deburr the tube inside diameter using a rounded file or a deburring tool.



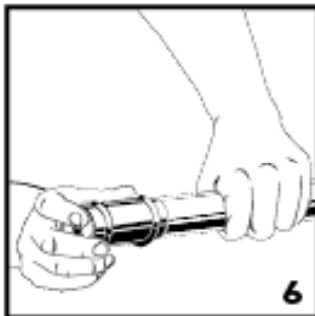
**3.** Deburr the tube outside diameter using a rounded file or a deburring tool. Clean the tube end of all dirt, oil and grease as well as copper dust and chips from sawing.



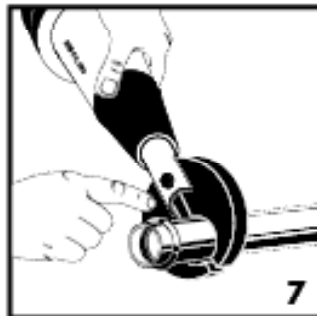
**4.** Check the fitting to make sure that the seal is in place, clean and free of contaminants. Only original NIBCO yellow HNBR seals are to be used. Do not use oils or lubricants.



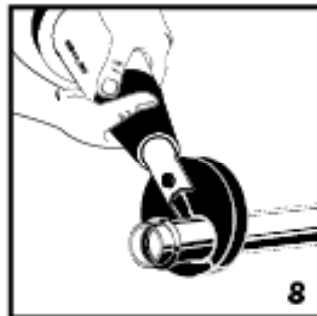
**5.** Mark the tube with the proper insertion depth using a permanent marker as indicated by the Insertion Depth Chart or NIBCO Insertion Depth Tool. Improper insertion depth may result in an improper seal.



**6.** Insert the tube into the fitting using a twisting motion to the marked depth. **NOTE:** End of tubing must contact stop.



**7.** Ensure that the proper pressing jaws are installed in the pressing tool and squeeze jaw arms to open jaw set. Place open jaws around the fitting end and ensure that the jaw is properly aligned with the contour of the fitting.



**8.** Make sure the tube is inserted to the proper depth in fitting and with the tool at a right angle to the tube, start pressing procedure.

### Tube Insertion Depth Chart

Tube Size (In.)	Insertion Depth (In.)
1/2	11/16
3/4	7/8
1	7/8
1-1/4	1
1-1/2	1-3/8
2	1-1/2

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.	Parlez-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 ces consignes a risque de dégrader sérieusement votre matériel et de causer des blessures corporelles. Veuillez consulter toutes questions éventuelles au service de mode d'emploi de la NIBCO au numéro de 1.888.446.4226.	Antes de usar, lee el Manual del Operario de esta herramienta de presión y las instrucciones de instalación del fabricante. Puede ocurrir daño material o de gran severidad 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.

**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 PressG fittings for fuel gas:

- The installation of the fuel gas system shall be 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.
- Copper tubing shall comply with one of the following standards: Type K or L ASTM B88, ASTM B280, or Type G ASTM B837. When annealed tube is used, rounding and stizing of the tube ends must be performed where needed.
- Undue stress or strain on the fittings and the tubing is to be avoided.
- Concealed tubing 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/tubing 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 gases in the vapor state, not in the liquid state.
- The fitting/tubing system shall not be used as a means of support.

Visit our website for the most current information.

# NIBCO® PressG™ — Crimp Integrity Testing Instructions for Fittings

## **PRESSURE TESTING:**

NIBCO recommends the following leak testing procedures when installing NIBCO PressG with the leak detection feature. These test procedures allow the installer to find un-pressed connections while the system is being tested under pressure. The uniquely designed HNBR o-ring allows fluids or gases to flow past the seal and leak when the fitting has not yet been pressed. When the fitting has been pressed, the o-ring will create a leak-tight seal around the tube.

## **AIR LEAK TESTING:**

1. Pressurize system up to 15 psi maximum using dry, oil free compressed air, carbon dioxide, or nitrogen.
2. Allow system pressure to stabilize for a minimum of 2 hours.
3. If system pressure has dropped, add more air to bring entire system up to 15 psi maximum. If system pressure increases above 15 psi, bleed off excess pressure to ensure system is at a maximum pressure of 15 psi.
4. If the system pressure continues to drop, inspect all joints for un-pressed fittings. The NIBCO PressG with the leak detection feature are designed to leak in an un-pressed condition.
5. Check all press joints for air leaks using a commercially available leak test solution or a soap and water mixture.
6. Once the system has been confirmed to be leak free, pressure can be increased to the recommended working pressure to verify system integrity.

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## **SYSTEM INTEGRITY TESTING\*:**

**Once a system has been confirmed to be properly installed and no press connections have been left uncrimped**, the system is recommended for testing up to the maximum non-shock working pressure of 200 psi hydrostatic.

NOTE: While NIBCO PressG products are tested to pressures as high as 600 psi, the product system rating limitation of 200 psi is in place to ensure a safety factor of three-times proof-testing according to ASME B16.51 Copper and Copper Alloy Press-Connect Pressure Fittings.

## **SYSTEM INTEGRITY TESTING AT HIGHER PRESSURES\*:**

NIBCO PressG products can be tested at hydrostatic pressures higher than 200 CWP, not exceeding a maximum pressure of 300 psi hydrostatic for a maximum test duration of 24 hours, when assembled and tested according to the methods prescribed above.

**CAUTION:** These testing parameters and protocols apply only to NIBCO products as detailed above: NIBCO accepts no responsibility or liability for any other manufacturer's products that may be damaged as a result of such testing.

\*System integrity testing applies to leak detect and non-leak detect fittings and valves.

Visit our website for the most current information.

# NIBCO® PressG™ — Frequently Asked Questions

## **What is the NIBCO product offering?**

NIBCO PressG features a full range of copper and copper alloy fittings, commercial valves, accessories and pressing tools, jaws and chains for use with K and L copper water tube.

## **What is the system temperature rating?**

NIBCO PressG is rated over a temperature range of -40°F to 180°F.

## **What are the approved system applications?**

See page 4 for a complete listing of approved applications.

## **How does the patented leak detection system work?**

The HNBR seal has tabs that allow an uncrimped connection to leak during system testing.

## **What was the testing protocol for NIBCO PressG fittings and valves?**

NIBCO PressG fittings and valves were subjected to a wide range of performance tests including dimensional verification, thread end specification, hydrostatic burst strength, unrestrained pressure, static torque, bending, vacuum pressure, cyclic pressure, vibration, thermo-cycling and dynamic torque.

## **Can other available pressing tools and jaws be used on the NIBCO PressG?**

See page 12 for a complete listing of approved tools and jaws.

## **Can NIBCO PressG connection be re-crimped?**

If for any reason the press cycle is interrupted, it is possible to re-crimp a NIBCO PressG connection. However, when re-crimping the connection, the jaws must be properly aligned so that the crimp is performed in the same location as the original.

## **Are NIBCO PressG fittings available with solder or threaded by Press System connection?**

NIBCO offers many PressG fitting combinations by soldered or threaded connection. Please note, always solder the standard wrought connection first when possible. Prior to soldering, remove the press end HNBR o-ring, solder, allow the fitting to cool, insert the HNBR O-ring, and then press the connection.

## **Can a fitting be soldered close to a PressG connection?**

NIBCO recommends soldering at least 12 inches away from the Press System connection. If this length is not possible, either solder the joint prior to connecting the press fitting or wrap the connection with a cold wet cloth.

## **Is NIBCO PressG approved for underground use?**

In accordance with local plumbing codes, NIBCO PressG can be installed underground.

## **Is NIBCO PressG compatible with standard disinfectant cleaning agents?**

Yes, NIBCO PressG is typically compatible. For specific cleaning agent compatibility, contact NIBCO Technical Services at the below noted number.

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# NIBCO® PressG™ Limited Warranty

## NIBCO INC. LIMITED WARRANTY

Applicable to NIBCO PressG

NIBCO INC. warrants each NIBCO PressG System fitting 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 twenty-five (25) years from the Warranty Commencement Date. The Warranty Commencement Date shall be the date of installation.

NIBCO Press System tools to be free from defects in materials and workmanship under normal use, service, and maintenance in accordance with the product specifications for a period of two (2) years from the date of purchase.

NIBCO PressG System fittings and tools are referred to herein as "NIBCO Products."

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.

# 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

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# NIBCO®

## Global Locations

### MANUFACTURING PLANTS

#### **Metal Fittings & Valves**

Blytheville, Arkansas

McAllen, Texas

Nacogdoches, Texas

Stuarts Draft, Virginia

Worcester, Massachusetts

#### **Plastic Pipe, Valves, & Fittings**

Goshen, Indiana

Greensboro, Georgia

#### **International**

Lodz, Poland

Reynosa, Mexico



### INTERNATIONAL OFFICES

#### **World Headquarters**

Elkhart, Indiana

#### **European Office**

Lodz, Poland



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