

# NIBCO®

AHEAD OF THE FLOW®



## NIBCO® PressACR® System

# 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<sup>sm</sup> 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.



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 paper-work 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® PressACR®

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# NIBCO® PressACR®

## Quick and Easy

The NIBCO PressACR system is user friendly, quick and easy to install. Installation can be completed in less time than traditional solder, threaded, brazed or flared 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 PressACR is more than just fittings. Our offering also includes a full line of NIBCO tools necessary to complete a total system installation.

## Flameless

PressACR is easier and safer to use because there is no flame, solder or flux required.

## Reliable

With NIBCO PressACR, a robust joint is formed between the gray HNBR seal and the crimped fitting providing a permanent connection. Reliability you can count on ... NIBCO PressACR fittings are backed by a 110-year-old company and a 15-year written guarantee.

## Approvals, Standards and Performance

NIBCO PressACR has undergone extensive and rigorous internal and external testing and meets various worldwide, industry and governmental standards and codes. Compliant with the following: ISO 5149-2, ISO 14903 Helium leak test, ISO 14903 thermal cycle test, ISO 14903 Fatigue test, ISO 14903 Freeze test, ISO 14903 Vacuum test, ASME B31.5, ASHRAE 15, ASTM G85 Salt Spray and UL 109 vibration. Recognized by UL 207 to 700 PSI.

## Applications

PressACR can be used in new systems or for repair and maintenance of air conditioning and refrigeration applications.

## Professional Appearance

PressACR creates a clean joint without the mess of excess solder or brazing rod.

## Joint Integrity

PressACR uses engineered tools and jaws that are tested and approved to ensure a consistent, reliable crimp.

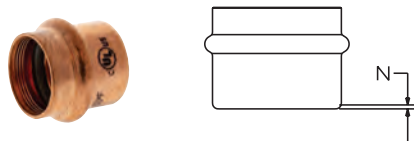
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# **NIBCO® PressACR®**

## **Fittings**

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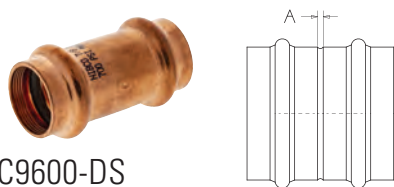
## CAPS



PC9617  
Cap P – Wrot

OD. SIZE	APPROX. NET WT./LBS.	DIM. N INCHES
1/4	.012	.06
5/16	.015	.06
3/8	.019	.06
1/2	.029	.06
5/8	.046	.08
3/4	.069	.08
7/8	.087	.08
1 1/8	.125	.08
1 3/8	.171	.08

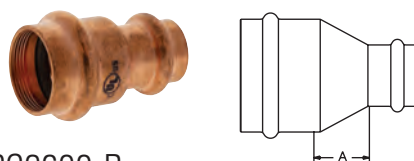
## COUPLINGS



PC9600-DS  
Coupling P x P – Wrot

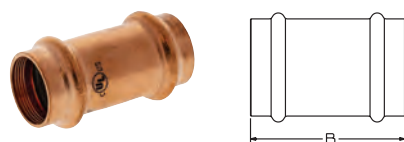
OD. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/4	.022	.12
5/16	.026	.13
3/8	.032	.14
1/2	.054	.15
5/8	.083	.16
3/4	.114	.16
7/8	.157	.16
1 1/8	.198	.16
1 3/8	.271	.16

## COUPLINGS, cont.



PC9600-R  
Reducing Coupling P x P – Wrot

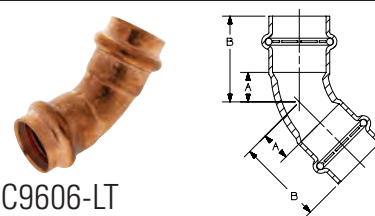
OD SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
5/16 x 1/4	.025	.14
1/2 x 1/4	.040	.14
3/8 x 1/4	.028	.11
1/2 x 3/8	.043	.11
5/8 x 1/4	.054	.17
5/8 x 3/8	.056	.14
5/8 x 1/2	.067	.18
3/4 x 5/8	.098	.15
3/4 x 1/2	.080	.18
7/8 x 1/2	.099	.24
7/8 x 5/8	.121	.22
7/8 x 3/4	.131	.17
1 1/8 x 1/2	.140	.51
1 1/8 x 5/8	.139	.44
1 1/8 x 3/4	.168	.31
1 1/8 x 7/8	.184	.40
1 3/8 x 7/8	.245	.50
1 3/8 x 1 1/8	.231	.44



PC9601 (No Stop)  
Repair Coupling P x P – Wrot

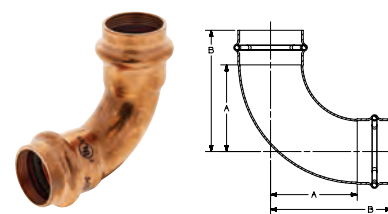
OD SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/4	.022	1.56
5/16	.026	1.56
3/8	.025	1.56
1/2	.054	1.75
5/8	.082	1.75
3/4	.114	1.88
7/8	.157	2.25
1 1/8	.190	2.25
1 3/8	.271	2.47

## ELBOWS



PC9606-LT  
45° Elbow P x P – Wrot

OD SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/4	.025	.41	1.11
5/16	.030	.41	1.11
3/8	.036	.40	1.11
1/2	.062	.41	1.11
5/8	.092	.38	1.11
3/4	.149	.51	1.24
7/8	.181	.48	1.41
1 1/8	.251	.63	1.50
1 3/8	.403	.78	1.79

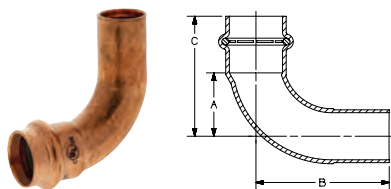


PC9607-LT  
90° Elbow P x P – Wrot

OD SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/4	.030	.66	1.38
5/16	.036	.66	1.38
3/8	.041	.72	1.44
1/2	.076	.93	1.65
5/8	.110	.72	1.44
3/4	.174	1.12	1.88
7/8	.223	1.09	1.99
1 1/8	.331	1.44	2.32
1 3/8	.528	1.85	2.89



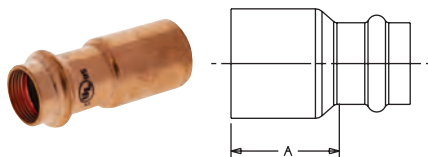
## ELBOWS, cont.



PC9607-2-LT  
90° Elbow Ftg x P – Wrot

OD SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/4	.030	.66	1.55	1.38
5/16	.036	.66	1.55	1.38
3/8	.041	.66	1.55	1.38
1/2	.079	.93	1.82	1.65
5/8	.110	.78	1.64	1.47
3/4	.166	1.12	2.01	1.88
7/8	.219	1.05	2.20	1.99
1 1/8	.262	1.50	2.60	2.40
1 3/8	.490	1.88	3.09	2.91

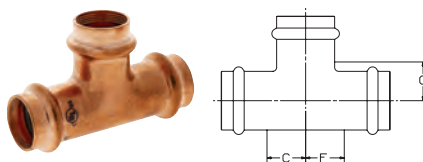
## FITTING REDUCERS



PC9600-2  
Fitting Reducer Ftg x P – Wrot

OD SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
3/8 x 1/4	.021	.86
1/2 x 3/8	.030	.92
5/8 x 3/8	.037	.99
5/8 x 1/2	.044	.92
3/4 x 5/8	.086	1.03
7/8 x 1/2	.097	1.34
7/8 x 5/8	.092	1.42
7/8 x 3/4	.112	1.20
1 1/8 x 7/8	.151	1.39
1 3/8 x 7/8	.175	1.40
1 3/8 x 1 1/8	.181	1.42

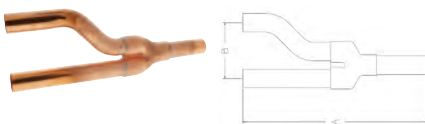
## TEES



PC9611  
Tee P x P x P – Wrot

OD SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		C	F	G
1/4	.037	.30	.30	.30
5/16	.047	.35	.35	.35
3/8	.067	.53	.53	.53
1/2	.110	.53	.53	.53
5/8	.176	.71	.71	.47
3/4	.338	1.13	1.13	.83
7/8	.320	.77	.77	.66
1 1/8	.475	.87	.87	.91
1 3/8	.759	1.00	1.00	.91

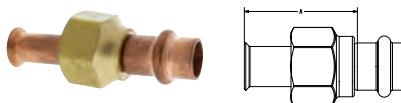
## Y-JOINTS



PC9649  
Y Joint Ftg x Ftg – Wrot

OD SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
3/8	0.200	8.27	2.76
1/2	0.310	9.45	2.76
5/8	0.510	9.84	3.15
3/4	0.670	10.63	3.15
7/8	1.020	12.60	3.15
1 1/8	1.700	13.39	3.74

## FLARES



PC9635  
SAE Flares Adapters Flare X P

OD SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/4	0.057	1.45
3/8	0.092	1.53
1/2	0.134	1.66
5/8	0.181	1.73
3/4	0.345	1.89

## ACCESSORIES



HNBR (gray) Seal

SIZE	PART No.
1/4	T048080 PP
5/16	T048081 PP
3/8	T048082 PP
1/2	T048083 PP
5/8	T048084 PP
3/4	T048085 PP
7/8	T048086 PP
1 1/8	T048087 PP
1 3/8	T048088 PP



PressACR™ Depth Gauges

SIZE	PART No.
1/4 OD – 1-1/8 OD	K700003RPC



PressACR™ Crimp Gauges

SIZE	PART No.
1/4 OD – 1-3/8 OD	K700005RPC

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# **NIBCO® PressACR®**

## **Tools and Jaws**



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[www.nibco.com](http://www.nibco.com)



# NIBCO® PressACR® Tools

## PCR-20M 19KN Tool and Jaws

1/4" through 1 1/8" OD

### MATERIAL LIST

MODEL NO.	DESCRIPTION	LBS.
PCR-20M	Mini Pressing Tool, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case (NO jaws)	10.10
PCR-14M	1/4" OD Jaw	2.80
PCR-516M	5/16" OD Jaw	2.87
PCR-38M	3/8" OD Jaw	2.87
PCR-12M	1/2" OD Jaw	2.88
PCR-1M	5/8" OD Jaw	3.13
PCR-34M	3/4" OD Jaw	3.00
PCR-2M	7/8" OD Jaw	3.70
PCR-3M	1 1/8" OD Jaw	3.80
PC-4ML	18V, 2.0Ah Lithium-ion Battery (for PCR-20M)	0.85
PC-7L	18V, 3.0Ah Lithium-ion Battery (for PC-280 or PCR-20M)	1.30
PC-8L	110V Battery Charger (for PC-4ML and PC-7L)	2.20
PC-9L	AC Adapter (for PC-280 or PCR-20M)	1.70
PC-50	1/4" - 1 1/8" OD Deburring Tool	0.42

**!** For use with NIBCO PressACR fittings only.



**PCR-20M**  
Mini Pressing Tool



**PCR-14M, PCR-516M,  
PCR-38M, PCR-12M,  
PCR-34M, PCR-1M,  
PCR-2M, PCR-3M**  
Mini Pressing Jaws



**PC-4ML**

18V, 2.0 Ah Lithium-ion Battery



**PC-8L**

110V Battery Charger



**PC-50**

PCR Deburring Tool



**PC-7L**

18V, 3.0 Ah Lithium-ion Battery



**PC-9L**

AC Adapter

## PCR-20M FEATURES

### TOOLS

#### Light weight

PCR-20M Mini: 3.7 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 &amp; faults

• WHITE illuminates the work area

#### Hydraulic Pressure Check (HPC)

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

**!** **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® PressACR® PC-280 32KN Jaws

## MATERIAL LIST

MODEL NO.	DESCRIPTION	LBS.
PCR-14S	1/4" jaw for PC-280 tool	4.29
PCR-516S	5/16" jaw for PC-280 tool	4.29
PCR-38S	3/8" jaw for PC-280 tool	4.27
PCR-12S	1/2" jaw for PC-280 tool	4.25
PCR-1S	5/8" jaw for PC-280 tool	4.20
PCR-34S	3/4" jaw for PC-280 tool	4.29
PCR-2S	7/8" jaw for PC-280 tool	4.25
PCR-3S	1 1/8" jaws for PC-280 tool	4.65
PCR-138S	1 3/8" jaw for PC-280 tool	4.40



**PCR-14S, PCR-516S, PCR-38S, PCR-12S, PCR-34S,  
PCR-1S, PCR-2S, PCR-3S, PCR-138S**

**NOTE: Only NIBCO jaws can be used to crimp NIBCO PressACR™ fittings.  
Use of any other jaw will void the product warranty**

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# **NIBCO**<sup>®</sup> **PressACR**<sup>®</sup> **Engineering Data**

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# NIBCO® PressACR® — Engineering Data

## Copper and Copper Alloy Fittings

### System Description

The PressACR system is a copper press connection system designed to meet the demands of refrigeration systems. PressACR utilizes a gray HNBR sealing element to provide permanent leak-proof connections in 1/4" through 1 1/8" OD diameters.

### Applications

Tubing: PressACR is approved for use with K, L & M hard copper tubing and soft copper tubing in 1/4" through 7/8" OD diameters. PressACR is only approved for use with K, L & M hard copper tubing for sizes 1 1/8" and above. All tubing must comply with ASTM B280 ACR tube, ASTM B88 tube or ASTM B-1003 tube. PressACR fittings are approved for air conditioning and refrigeration applications using A class refrigerants.

### Operating Parameters

- Operating Pressure: 700 psi max
- Vacuum: 150 microns
- Operating Temperature: -40°F to 250°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 gray in color.



### Approved Refrigerants

R1234yf, R1234ze, R125, R134a, R143a, R404A, R407A, R407C, R407F, R410A, R417A, R422D, R447A, R448A, R449A, R450A, R452A, R452B, R507, R513A, R718, R32, R290, R600, R600a, R407B, R407G, R407H, R421A, R422A, R422B, R422C, R427A, R434A, R446A, R449B, R449C, R451A, R451B, R452C, R454A, R454B, R454C, R456A, R513B

### Approved Oils

POE, PAG, MO, PAO, PVE and AB

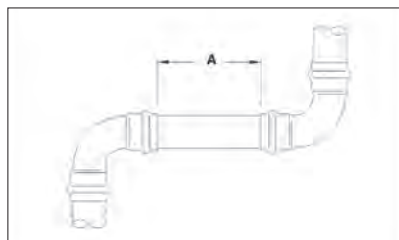
### Listing and Certificates

- UL 207
- ICC-ES PMG 1580

Compliant with:

- ISO 5149-2
- ISO 14903 Helium leak test
- ISO 14903 Thermal cycle test
- ISO 14903 Fatigue test
- ISO 14903 Freeze test
- UL 109 vibration
- ASHRAE 15
- ASME B31.5
- International Residential Code®: IRC
- International Mechanical Code®: IMC
- Uniform Mechanical Code\*: UMC

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



### Brazing Chart

#### Minimum Distance Between Joints

To prevent distortion of the tubing, certain fitting sizes require a minimum distance between crimp joints (refer to Chart 1 below). Failure to provide this minimum distance may result in an improper seal.

Size	Insertion Depth	Minimum Distance Between Two Pressed Connections	Distance to Press Fittings From Existing Braze Fittings	Distance to Braze from Existing Press Fitting
		A (inches)		
1/4	11/16	1/4	3	16
5/16	11/16	1/4	3	16
3/8	11/16	1/4	3	16
1/2	11/16	1/4	3	16
5/8	11/16	1/4	5	22
3/4	7/8	3/8	5	22
7/8	7/8	3/8	5	22
1 1/8	7/8	3/8	6	24
1 3/8	1	1/2	8	26

### Elbows

Elbows cause a pressure drop due to changing direction of the internal fluid. This results in a pressure drop slightly higher than a straight length of ACR tubing. When calculating the total line length for pressure drop, the below chart can be used to account for elbows.

Pressure Drop: Equivalent Lengths of ACR Tube (ft)	
Line Size (OD)	NIBCO Press Long Radius Elbow
1/4	0.48
5/16	0.50
3/8	0.65
1/2	0.93
5/8	1.04
3/4	1.39
7/8	1.40
1 1/8	1.88
1 3/8	2.95

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# NIBCO® PressACR® — Engineering Data Tools

Tool & Jaws Compatibility Matrix			
Manufacturer	Model(s)	Size Range	NIBCO Jaws
NIBCO®	PCR-20M (19 KN)	1/4" to 1 1/8"	PCR-14M 1/4 Jaw, PCR-516M 5/16 Jaw, PCR-38M 3/8 Jaw, PCR-12M 1/2 Jaw, PCR-1M 5/8 Jaw, PCR-34M 3/4 Jaw, PCR-2M 7/8 Jaw and PCR-3M 11/8 Jaw
Klauke®	MAP2L19 (19 KN)	1/4" to 1 1/8"	
NIBCO®	PC-280 (32 KN)	1/4" to 1 3/8"	PCR-14S 1/4 Jaw, PCR-516S 5/16 Jaw, PCR-38S 3/8 Jaw, PCR-12S 1/2 Jaw, PCR-1S 5/8 Jaw, PCR-34S 3/4 Jaw, PCR-2S 7/8 Jaw, PCR-3S 11/8 Jaw and PCR-138S 13/8 Jaw
RIDGID®	RP 350 (32 KN)	1/4" to 1 1/8"	
	RP 351 (32 KN)	1/4" to 1 1/8"	
	RP 342-XL Long Reach (32 KN)	1/4" to 1 1/8"	
	RP 340-B	1/4" to 1 1/8"	
Milwaukee®	M18™ Force Logic (32 KN)	1/4" to 1 1/8"	
	M18™ Long Throw Force Logic (32 KN)	1/4" to 1 1/8"	
DeWalt®	DCE200 (32 KN)	1/4" to 1 1/8"	

**NOTE: Only NIBCO jaws can be used to crimp NIBCO PressACR™ fittings. Use of any other jaw will void the product warranty**

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# **NIBCO® PressACR®**

## **Installation Instructions**

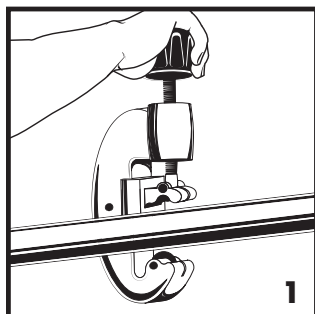
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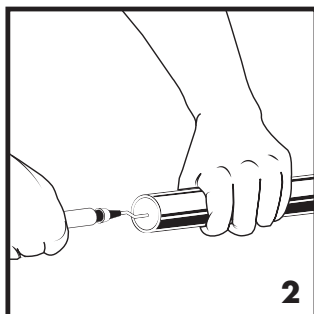
# NIBCO® PressACR®

## Fittings Installation Instructions

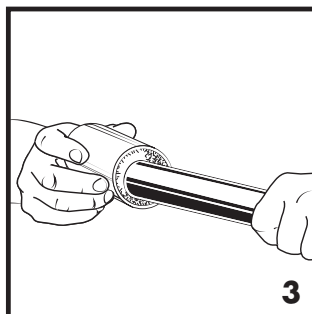
For hard or annealed ACR copper tubing



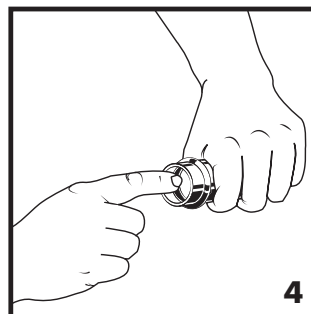
**1.** Select clean, undamaged copper tube and cut to desired length. Cut tube end square using a pipe cutter or fine-toothed steel saw. Do not crimp over etched print on tube.



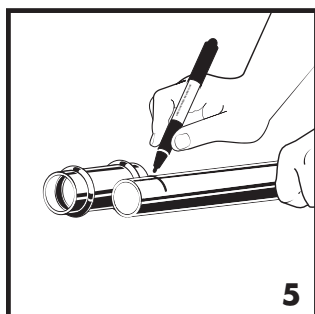
**2.** Deburr the tube inside diameter using a rounded file or a deburring tool.



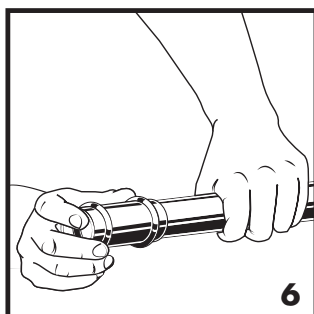
**3.** Deburr the tube outside diameter using a rounded file or a deburring tool. Radially sand the end of the tube with a very fine grit abrasive hand pad. Clean the tube end of all dirt, oil and grease as well as copper dust and chips from sawing.



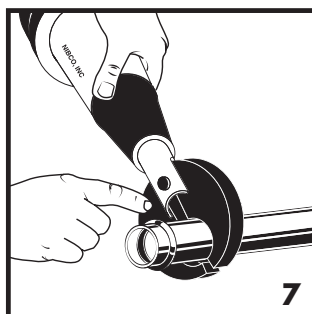
**4.** Check the fitting to make sure that the seal is in place, clean and free of contaminants. Only original NIBCO gray HNBR seals are to be used. Use only approved lubricants.



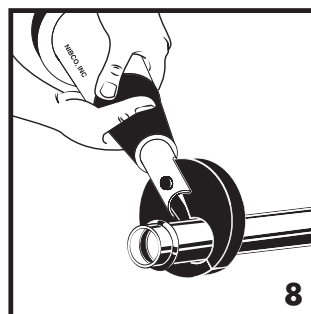
**5.** Mark the tube with the proper insertion depth using a permanent marker as indicated by the Insertion Depth Chart. Improper insertion depth may result in an improper seal.



**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. For sizes 1-1/8" OD and above, the jaw has a pipe side and bead side orientation.



**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. OD)	Insertion Depth (In.)
1/4 – 3/4	1 1/16
7/8 – 1-1/8	7/8
1-3/8	1

#### WARNING

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.

#### MISE EN GARDE !

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.

#### ADVERTENCIA

Antes de usar, lea el Manual del Operario de esta herramienta de presión y las instrucciones de instalación del acoplamiento 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.

NOTE: PressACR fittings can only be installed with NIBCO PressACR jaws. Use of any other jaw will void the product warranty

Not suitable for use with ammonia (R717)

Visit [www.NIBCO.com](http://www.NIBCO.com) for approved list of refrigerants

Leak Testing: Once all fittings are installed and pressed, the system may be tested for leaks. Testing for leaks should consist of pressurizing the system with nitrogen and using soapy water or tracer gas to detect leaks. Pressurize system to a minimum of 50% of the maximum rated pressure of the system, but no more than 700 PSI. Check the system for leaks and make repairs/replacements where necessary, and verify.

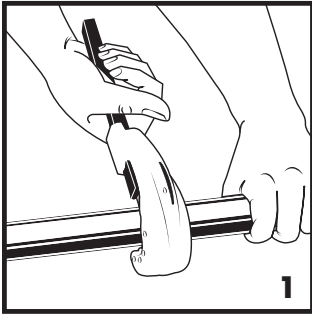
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# NIBCO® PressACR®

## Fittings Installation Instructions - Tube Prep

For hard or annealed ACR copper tubing

### Preparing the Copper Tube

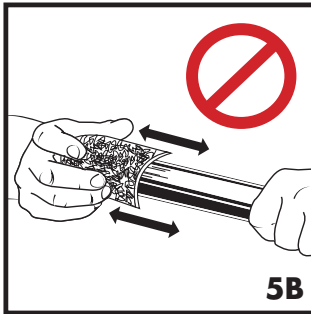
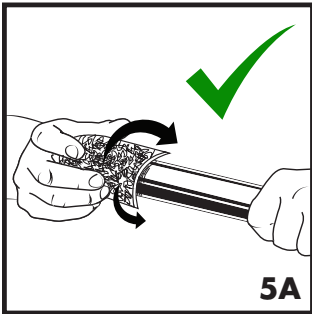


**1.** Select clean, undamaged copper tube and cut to desired length. Cut tube end square using a tube cutter or fine-toothed saw. Do not crimp over damaged, scratched, gouged, or otherwise damaged tubing ends. Do not crimp over etch print streams on tubing.

**2.** When using annealed ACR tube, ensure roundness meets the requirements of ASTM B280. Use a re-rounding tool if necessary.

**3.** Deburr the tube inside and outside diameter using a half-round file or a deburring tool.

**4.** Clean the tube end of all dirt, oil and grease.



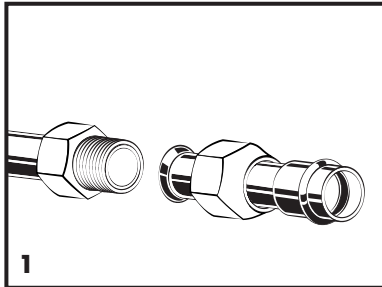
**5.** Very fine grit emery cloth should be used to radially sand the end of the tube.

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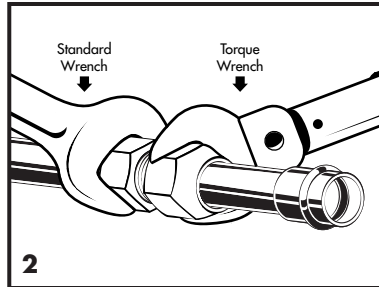
# NIBCO® PressACR®

## SAE Flare Fittings Installation Instructions

Install PressACR® Female Flare Connector to a Male Flare Connector by making the flare connection prior to pressing the joint.



**1.** Apply compatible refrigerant lubricating oil to inner and outer surface of flare. To avoid overtightening, do not apply oil to the threads. Hand-tighten nut onto flare.



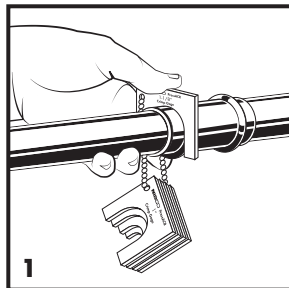
**2.** Complete joint by applying the specified torque to the nut and flare fittings, as shown in the table below. Always use an open ended wrench and a torque wrench to ensure integrity of fittings. Do not use a pipe wrench. Do not exceed the maximum torque listed below.

### Flares Tightening Torque (DO NOT OVERTIGHTEN)

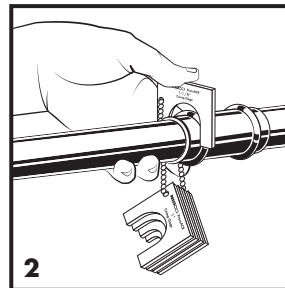
Tube Diameter	Recommended Torque	Maximum Torque
1/4"	12,2 Nm (9 ft. lbs.)	13,5 Nm (10 ft. lbs.)
3/8"	27,0 Nm (20 ft. lbs.)	33,7 Nm (25 ft. lbs.)
1/2"	40,5 Nm (30 ft. lbs.)	47,2 Nm (35 ft. lbs.)
5/8"	60,8 Nm (45 ft. lbs.)	74,2 Nm (55 ft. lbs.)
3/4"	107,0 Nm (79 ft. lbs.)	119,0 Nm (88 ft. lbs.)

\*See warning at bottom of page

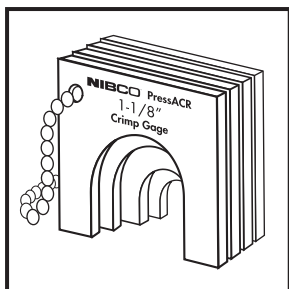
## Crimp Gauge Instructions



**1.** After crimping the PressACR fitting, place the Crimp Gauge adjacent to the outside of the bead (copper tube side) where the jaws close. There should be a slight copper deformation in that location. If the gauge is in complete contact with the copper fitting, the crimp has been successful. Each pressed connection on the fitting should be gauged.



**2.** If you are unable to obtain complete contact with the copper fitting or see any kind of gap between the gauge and the fitting at the top of the gauge (arch), the crimp has not been successful.



NIBCO provides the PressACR Crimp Gauge to ensure quality installations.

### WARNING

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.

### MISE EN GARDE !

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.

### ADVERTENCIA

Antes de usar, lea el Manual del Operario de esta herramienta de presión y las instrucciones de instalación del acoplamiento 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.

Visit our website for the most current information.

# Frequently Asked Questions

**Q: Can you re-crimp PressACR fittings and do you have to align it like press for water service?**

A: Yes, you can re-crimp and it still needs to be aligned with the bead. When doing a second crimp, it is recommended to rotate the head between 30°-90° from the original crimp.

**Q: What is the testing protocol?**

A: Test with nitrogen and use soapy water or a tracer gas with a detector. Test with at least 50% of maximum design pressure but no more than 700 psi. Refer to the installation guide for more details.

**Q: Can you press both ways?**

A: On sizes 7/8" and below you can press both ways. You cannot on the 1-1/8"; the jaw has a gauge that will not allow you to orient them incorrectly.

**Q: What is reasoning behind the gauge on the 1-1/8" jaw and putting it on one way?**

A: For the 1-1/8", the crimp is deeper on the outboard side of the bead than the inboard side of the bead. That orientation allows the larger diameter fittings to survive the pressure cycle requirements in a high-pressure system.

**Q: Is the gauge heavier on one side?**

A: Yes, on the 1-1/8".

**Q: Is the pressure to crimp adjustable?**

A: No, the pressure to crimp is controlled by the tool and cannot be adjusted.

**Q: Will our packaging be in plastic?**

A: Yes. All PressACR fittings will be in a gray plastic bag.

**Q: Do the jaws have a witness mark?**

A: No. The smaller sizes did not have room for the witness mark. We wanted to have consistency between all sizes.

**Q: Can you tell it has been crimped?**

A: Yes, you can visibly see it.

**Q: Is using a polishing cloth a new step?**

A: Yes, the competitor requires polishing too. We are not contradicting ourselves because water service is completely different than HVACR. Keep in mind, it is only recommended to polish in a radial direction and with a very fine grit polishing cloth.

**Q: Why do we use Scotch Brite®?**

A: There are 2 reasons: The first reason we do it is to provide a smooth and uniform surface for the seal. The second reason is to allow for a nice clean surface for grooves to bite into.

**Q: Are the PressG seals and the PressACR seals the same material?**

A: The grey seal in PressACR is HNBR. This seal is not the same as the PressG HNBR yellow seal. The seals are different formulations and dimensionally distinct. They are not interchangeable.

**Q: Can PressACR be used with R-22 refrigerants?**

A: No, R-22 refrigerants are being phased out.

**Q: What is the tool calibration requirement?**

A: Same as our current tool - 10,000 cycles. Please note, there is a sticker on the jaws suggesting that they are calibrated once a year. We also recommend the jaws are kept clean of any debris and copper shards.

**Q: How far do we have to be away from brazed joints?**

A: Depending upon existing joints you are crimping, you must be mindful of brazed joints. 16-22" depending upon the application. It's 12" on water service side.

**Q: Can you crimp PressACR fittings directly on a service valve?**

A: We do not have a solution for crimping directly to the service valve at this time. NIBCO PressACR fittings require a minimum of 3" from an existing brazed connection.

## Notes

*Visit our website for the most current information.*

# Notes

*Visit our website for the most current information.*



# Notes

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# NIBCO® PressACR® Limited Warranty

## NIBCO INC. LIMITED WARRANTY

Applicable to NIBCO PressACR

NIBCO INC. warrants each that the NIBCO PressACR fitting ("Fittings") shall 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) and maintenance in accordance with the product specifications for a period of fifteen (15) years from the Warranty Commencement Date. The Warranty Commencement Date for Fittings shall be the date upon which the Fitting is installed.

NIBCO warrants that the PressACR tools ("Tools") shall 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 date of purchase by the contractor.

NIBCO will repair or replace – at its option and at no charge – Fittings or Tools 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.

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

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 Fitting or Tool which is used for purposes other than a purpose authorized by NIBCO;
3. any Fitting not installed, tested, applied, used, or maintained in accordance with NIBCO's recommended installation guidelines and instructions using NIBCO Tools;
4. any Tool not applied, used, or maintained in accordance with NIBCO's recommended installation guidelines and instructions;
5. any Fitting not installed or used in accordance with applicable codes;
6. 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, such as, without limitation, any refrigerant or lubricant not cited in NIBCO product literature as compatible, 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 FITTINGS AND TOOLS 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.

To the best of our knowledge, the information contained in this publication is accurate. However, NIBCO does not assume any liability, whatsoever for the accuracy or completeness of such information. Final determination of the suitability of any information or product for the use to be contemplated is the sole responsibility of the user. The manner of that use, and whether there is any infringement of patents, is also the sole responsibility of the user.



# 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

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## VALVES

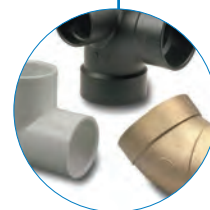


Pressure-rated bronze, iron and alloy-iron gate, globe and check valves • Pressure-rated bronze ball valves • Boiler specialty valves • Commercial and industrial butterfly valves • Lined butterfly valves • Circuit balancing valves and kits • Carbon and stainless steel ball valves • ANSI flanged steel 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  $\leq 0.25\%$



## 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

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