



CELLO PRODUCTS INC.



Banninger >B< Press[®] by Cello



BRASS AND COPPER PRESS FITTINGS FOR USE WITH COPPER PIPE



CELLO PRODUCTS INC.

“THINK PROPER, THINK COPPER, THINK CELLO”™



Compliments of:

CANADA

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Introduction

Cello Products was founded in 1946 in Cambridge, Ontario and is a manufacturer of wrought copper and cast brass solder fittings. Wrought copper press fittings were added to the product line in 2011. Cello is 100% Canadian owned and produces an extensive line of wrought copper and cast brass solder fittings, in sizes ranging from 1/8" to 8". Cello offers five general types of solder fittings: Wrought Copper Pressure, Cast Brass Pressure, Wrought Copper Drainage, Cast Brass Drainage, and Cast Brass Flanges. Cast brass solder fittings are made for both soft solder joining systems and silver braze joining systems. Banninger >B< Press® by Cello fittings are available in 1/2" to 4" sizes.

Our products are used in plumbing, heating and related mechanical applications. Cello produces and distributes fittings ranging in use from underground water and gas services to water distribution and air conditioning systems as well as drainage, waste and vent piping for use in residential, commercial, industrial and institutional applications.

Cello is the only full-line copper solder fittings manufacturer in Canada. Cello is the exclusive representative for Banninger >B< Press® by Cello fittings in North America.

Cello Products' fittings are made from the highest quality raw materials available. Modern production techniques are used to ensure consistency and quality in our fittings. Cello employs fully automatic computer numeric controlled (CNC) lathes in its operations, robots and a large quantity of finishing machines are controlled with programmable logic controllers. Certain pieces of equipment have been commissioned with state-of-the-art computer controlled multi-axis positional controllers. Qualified personnel inspect and test our products to ensure that only the finest quality products are shipped to our customers. Cello's care in the design and production of all our products is exemplified in both our cast brass and wrought copper fittings. Cello fittings are produced to meet requirements of all applicable standards wherever practical. Our facility is ISO 9002 certified to ISO9001:2008. All pressure fittings manufactured by Cello Products have CRNs (Canadian Registration Numbers) in accordance with CSA B51-95 Boiler, Pressure Vessel and Pressure Piping Code.

All manufacturing is done in an 85,000 sq. ft. building located in Cambridge, Ontario which is ideally situated to serve the Canadian and United States' markets. Cello's products are shipped to our customers in North America from eleven warehouse locations to better serve our customers.

WHERE TO ORDER:

Cello Products' fittings are available only through wholesalers and distributors engaged in the distribution of flow products to the plumbing and heating industry. All orders are placed through our inside sales desks at 210 Avenue Road, Cambridge, Ontario, N1R 5S4 either by mail, phone (1-519-621-9150, toll free 1-800-265-7882), fax (1-519-621-4108), or e-mail us at cello@cello.on.ca

HOW TO ORDER:

State quantity, part number and size for each fitting you wish to order. See individual catalogue pages for specific product designations. Cello's part number contains a prefix indicating the fitting type and a suffix that identifies the size. Part numbers identifying the fitting type are listed in this catalogue with the part name and description. When ordering, identify the part number and add the size code after the hyphen. Size codes are based on 1/16 inch increments. Thus, a 1/8" fitting would have a size code of 02. A 1" fitting would have a size code 16, while a 2 1/2" fitting is identified by the size code 40 (2.5 x 16).

DELAYS:

All orders are accepted under the understanding that we are not responsible for delays caused by circumstances beyond our control, such as fires, floods, accidents, strikes or delays by third party transportation.

WARRANTY:

Cello Products Inc. warrants that all fittings provided by it will be free from defects in materials and manufacture that will impair their utility, provided they are used as intended. Any fitting that proves to be defective will be replaced or a credit issued, but no labour charges, expenses or damages will be allowed.

DIMENSIONS:

We have included roughing-in dimensions in this catalogue. These dimensions are provided with the latest information available at time of publication and are for estimating purposes only.

PACKAGING:

Cello fittings are packaged in master cartons with easy to read, bar coded labels for ease of handling and identification. Box or bag quantities are shown in the catalogue next to each item.

NET WEIGHTS:

Approximate net weights in pounds are shown for each item in this catalogue to assist in estimating the weight of shipments to meet the terms for freight allowance (**freight prepaid for single shipments of 500 lbs or more**).

SIZES:

Unless otherwise specifically stated, all copper end sizes shown in this catalogue are nominal tube sizes. For those accustomed to dealing in outside diameter tube sizes, the nominal size of a fitting is always 1/8" less than the actual outside diameter size of the tub to be used with it. O.D. sizes are shown in some cases and are 1/8" larger than nominal.

RETURN GOODS:

A minimum 25% restocking charge will apply to all goods returned, not due to defects in materials, construction, or shipping errors. No returns will be accepted without prior authorization and all goods must be in resaleable condition.

Cello Products Inc. reserves the right to modify packaging and product design at any time. Information in this catalogue is correct to the best of our knowledge. Cello Products Inc. assumes no responsibility for any changes or errors. If there are any questions, please contact customer service.

**Banninger
>B< Press[®]
by Cello**



Introduction

Flame free

Flame free installation takes away risk of fire on site

Reliable simplicity

Simple, quick and reliable installation provides low installed cost

Fully certified

Extensive third party certification offers peace of mind to the client, specifier and installer

Performance and warranty

Corrosion resistant and with a design life of 50 years, >B< Press can be relied on to perform long after installation

Slimline profile

Slimline, unobtrusive design provides aesthetic finish

Electrical continuity

Maintains electrical continuity to meet requirements of national building regulations

Permanent joint

Secure, permanent joint crimped both sides of deep set 'O' ring ensures fitting cannot be tampered with

Practical by design

Lead-in edge aids installation and helps protect 'O' ring from damage or displacement

Cello Products is an international manufacturer and distributor of fittings for commercial and industrial applications.

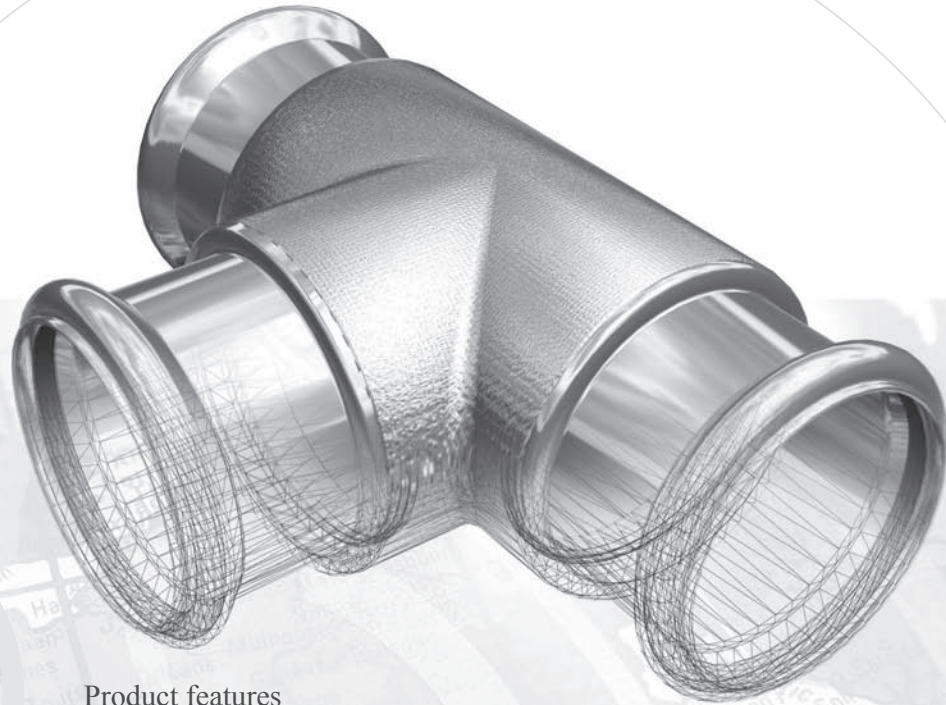
reliable
simplicity



fully
certified

practical
by
design

slimline profile



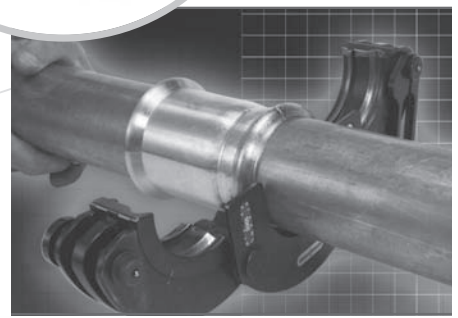
flame free

Product features

>B< Press offers a versatile press fitting system for use with hard, half-hard and soft copper tube providing a secure, long-life, leak-proof joint. >B< Press is user friendly and very quick to install, leading to savings on labour costs. It also offers the advantage of flame free installation, therefore posing no fire risk.



To install >B< Press, a mechanical press tool with a compatible jaw to fit each size of fitting is required. When pressure is exerted through the press tool the joint is permanently made and the fitting cannot be disconnected or re-used. The >B< Press system eliminates the need for solder, adhesives or additional jointing materials. >B< Press has undergone extensive testing to international, national and industry standards. Fittings are manufactured in accordance with accredited EN ISO 9001:2000 Quality Management Procedures.



electrical continuity

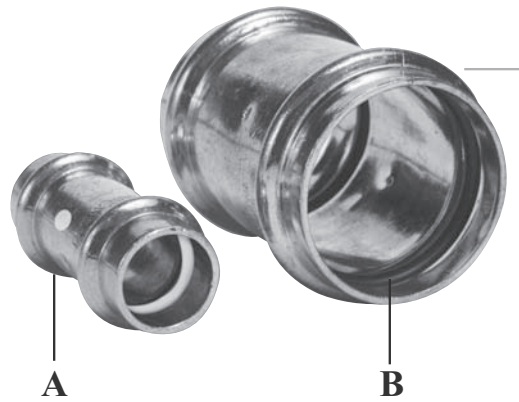
Product structure and applications

Drinking water

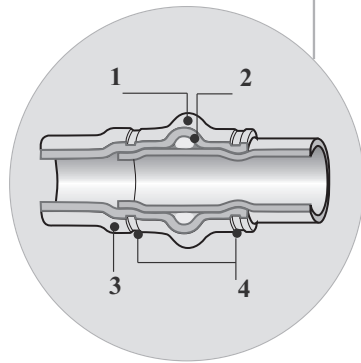
Heating

Compressed air

Domestic fire
sprinkler systems



- A. Wrot Copper, red brass or
- B. Specialist 'O' ring



Section through >B< Press fitting

- 1. Bead
- 2. 'O' ring
- 3. Cylindrical sleeve (socket)
- 4. Pressing both sides of 'O' ring

Product

The >B< Press range is available in **Wrot Copper** and **Red Brass**. Wrot Copper and Red Brass fittings are suitable for use with copper tube.

Tables 1 and 2 identify suitable applications for the range and give the minimum and maximum working pressures and temperatures.

Accelerated life tests show that >B< Press components have a life expectancy greater than 50 years.

Table 1
Drinking water, heating and air

Application	Pressure	Temperature	Medium	
Drinking water installations	150 psi 250 psi	200°F 90°F	Drinking water to DWD	
Chilled water	150 psi	40°F	Water	
Water heating	90 psi	230°F	50/50 glycol/water mix	
Solar heating	50 psi	-30°F to +270°F	50/50 glycol/water mix	
Long distance water heating	150 psi		270°F	50/50 glycol/water mix
Rainwater installations	150 psi		90°F	Rainwater
Compressed air installations (oil free)	150 psi	90°F	Compressed air to ISO 8573.1, Class 1-4 (oil free)	
Vacuum	20 psi	Ambient	-	
Domestic fire sprinkler systems	250 psi	Ambient	Water	

Table 2
Gas

Application	Pressure	Temperature	Medium
Fuel oil installations	PN5	-20°F to +105°F	-
Compressed air installations (with oil content)	10 bar	80°F	-

Standards & approvals

>B< Press Wrot Copper and Red Brass fittings have been assessed and approved by a wide number of approval bodies.

Clients, specifiers and installers can all take reassurance that >B< Press performs to the very highest standards.

Furthermore, fittings are manufactured in accordance with ANSI B16.51 Copper and Copper Alloy Press Fittings.

For each geographic market, reference should be made to national or industry standards or approvals for a full understanding of the requirements of materials, products and systems in specific applications. Appendix 1 on page 23 provides a reference guide to many of these standards and approvals, which are met by >B< Press where applicable.

IAPMO Listed & Certified

CSA Listed & Certified



Design considerations

Tube compatibility

Wrot Copper and Red Brass fittings are suitable for use with copper tube.

Table 3 identifies the range of tube diameters/wall thicknesses that have been tested with >B< Press.

Table 3
Tube sizes suitable for >B< Press

Tube Size	Tube Type
1/2"	M, L, K hard lgth
3/4"	M, L, K hard lgth
1"	M, L, K hard lgth
1-1/4"	M, L, K hard lgth
1-1/2"	M, L, K hard lgth
2"	M, L, K hard lgth

Pipework support

All pipework should be supported by the use of appropriate clips, brackets or supports.

Table 4 provides details of the maximum intervals between supports generally recommended by tube manufacturers. However, please refer to manufacturers for specific details in relation to the particular application.

Additional support may be necessary when using soft copper tubes.

Table 4
Pipework support

Tube Size	Vertical Support Distance	Horizontal Support Distance
1/2"	6'	5'
3/4"	6'	6'
1"	8'	8'
1-1/4"	8'	8'
1-1/2"	10'	10'
2"	10'	10'

Distance between fittings

Due to the reforming of the tube profile when pressed, it is advised that a minimum distance, shown as F in Table 5, is allowed between each fitting.

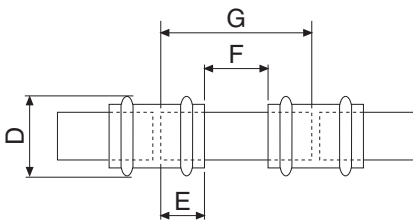


Table 5
Distance between fittings

Tube Size	F dimension	G dimension
1/2"	1/4"	1-1/2"
3/4"	1/4"	1-1/2"
1"	1/4"	1-3/4"
1-1/4"	1/2"	2-1/4"
1-1/2"	5/8"	3-5/8"
2"	3/4"	4"

Design considerations

Pipework Clearances:

The minimum distance between parallel piping runs, or between the piping and either a wall or ceiling construction, needs to be taken into consideration when planning for press installation, due to the physical constraints of the press tooling.

The following figures and tables illustrate the clearances needed when pressing in tight areas.

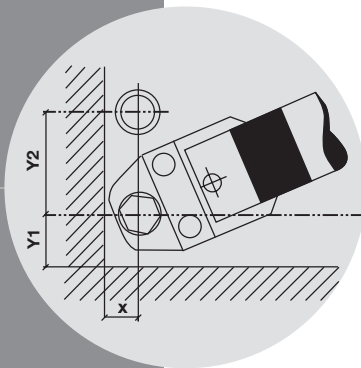


Table 6
Corner and pipe clearances

Tube Diameter	x	y1	y2
1/2"	7/8"	1-3/8"	2-1/2"
3/4"	1"	1-1/2"	2-1/2"
1"	1-1/8"	1-3/4"	3"
1-1/4"	1-1/4"	2-1/4"	3-1/8"
1-1/2"	1-7/8"	2-1/2"	3-3/4"
2"	2-1/8"	3-1/8"	5"

Earth continuity

>B< Press fittings maintain earth continuity without the need for additional continuity straps.

Pipework protection

Copper has a high resistance against corrosion. However, in some cases external protection may be necessary against fluids that may contain ammonia or its derivatives. If in doubt, please consult Cello's Technical Department.

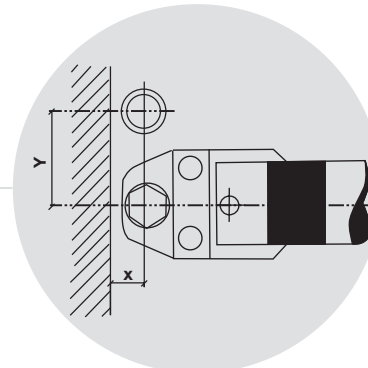


Table 7
Wall and pipe clearances

Tube Diameter	a dimension	x dimension
1/2"	3/4"	2"
3/4"	7/8"	2-3/8"
1"	7/8"	2-3/4"
1-1/4"	1-1/8"	3-3/8"
1-1/2"	1-3/4"	4"
2"	2"	4-1/2"

Localised annealing

When designing and installing pipework systems that incorporate both press fitting and brazed joints you should note that the high temperature required for brazing anneals the copper tube, rendering it too soft for >B< Press jointing within the listed limits.

Cont.

The installer should take precautions to keep the >B< Press connection cool.

These include:

Tube Diameter	Minimum distance (inch)
1/2"	1-1/2"
3/4"	2-1/4"
1"	3"
1-1/4"	3-3/4"
1-1/2"	4-1/2"
2"	6"
2-1/2"	7-1/2"
3"	9"
4"	12"

- Wrapping the connection with a cold wet rag
- Fabricating solder connections prior to installing the pressed fitting making sure the tube has cooled before installing the fitting
- Applying "spray type" spot freezing

It is particularly important to ensure the tubing inserted into the >B< Press fitting as well as the >B< Press fitting are not exposed to excessive heat.

Welding Adjacent to >B< Press Fittings

When welding adjacent to a >B< Press connection, the installer must remain 4" away from the connection to prevent damage to the sealing element. The installer should take precautions to keep the >B< Press connection cool while welding, these include:

- Wrapping the connection with a cold wet rag
- Protecting the connection with a weld blanket
- Fabricating weld connections prior to installing the pressed fitting making sure the tube has cooled before installing the fitting
- Consistently applying "spray type" spot freezing

7.6 Rotating a Pressed Fitting

Once a >B< Press fitting has been pressed it can be rotated (not by hand), but once rotated more than 5 degrees, the fitting must be re-pressed to restore the resistance to rotational movement.

>B< Press fittings are simple to install, just follow these straightforward guidelines.

Getting started

We recommend you keep the fitting in its packaging until you are ready to begin installation. This is important to keep the fitting free of any dust or dirt and to ensure the 'O' ring stays lubricated and protected from damage.

Select the correct size of tube and fitting for the job. Ensure that both are clean and free from damage and imperfections.

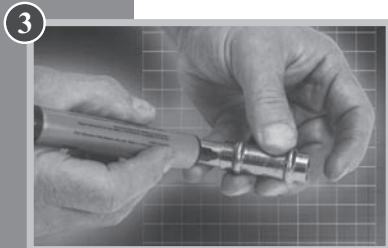
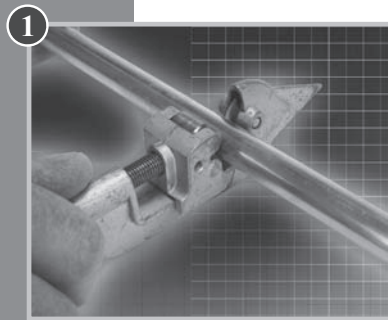
Preparation

1 We recommend you use a rotary pipe cutter to cut the tube square. If you use a hacksaw, a fine toothed blade should be used and care taken to ensure the tube is cut square. Grinding machines and wheels are not suitable. If tube ends have become distorted or damaged, the ends should be restored to the outside diameter dimensions. Tube ends should be clean and free from scratches not less than the socket length.

2 Make sure that the internal and external tube end are free from burrs or sharp edges by using a deburring tool. Then wipe the tube end clean to avoid damaging the 'O' ring on tube insertion.

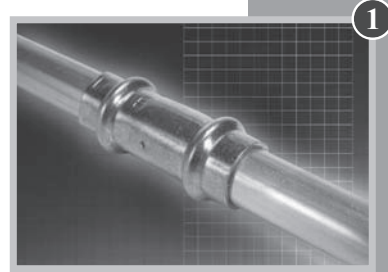
3 The tube must be fully inserted into the fitting until it reaches the tube stop in order to make a perfect joint. Use a rule to mark the socket depth of the fitting onto the tube (see Table 9). This will ensure that any tube movement is detected, which is especially important if the joints are to be pressed at a later time.

4 Visually check that the 'O' ring is seated correctly within the fitting socket.



Jointing

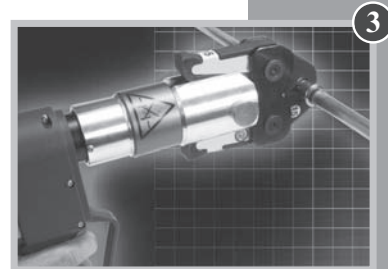
1 To assemble the joint, the tube must be inserted into the fitting up to the tube stop. (Use the mark on the tube which was made earlier as reference.) The pressing operation should only be undertaken when the tube reaches the tube stop.



2 Using the correct sized jaws in the press tool, place them over the bead at the mouth of the fitting. Maintain a 90° angle between tube and jaws to ensure a sound joint is made.



3 Depress the trigger/button to begin the compression cycle of the tool. This is complete when the mouth of the fitting is fully enclosed by the jaws. Now release the jaws from around the fitting. (For further information refer to tool manufacturer's instructions.)



Spacing

Make sure enough clearance is left around each fitting to attach the jaws without obstruction. The critical dimensions can be found in Tables 6 and 7 on page 7.

Table 9

Fitting socket depths

>B< Press Insertion Depth Chart						
Tube Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Insertion Depth	3/4"	7/8"	7/8"	1"	1-7/16"	1-9/16"

Testing and commissioning

Flushing of water installations

When the installation is complete, flushing with drinking water is essential before use to remove dust, debris and flux residues, in accordance with national regulations and guidelines.

When the piping system is not used immediately after commissioning, and has not been flushed at regular intervals (of up to thirty days, depending on the characteristics of the water), it must be disinfected before use.

Testing and commissioning drinking water installations

When the installation is complete, and after flushing, it should be slowly filled with water at ambient temperature, with the highest draw-off point open to allow air to be expelled from the system.

The installation should then be inspected for leaks and remedial action taken if necessary.

Water softening

Hard water may be softened to avoid excessive deposits of scale in hot water services. However, a degree of scale is necessary to form the protective patina on copper tube.

When a new copper tube installation has a water softener fitted from day one, it is good practice to run the system for approximately three months with the softener by-pass open to allow untreated water into the system, and allow the patina to form.

Banninger >B< Press[®] by Cello



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U.S.A. SALES OFFICE

800-265-7882
e-mail: jmfarnen@comcast.net

Banninger >B< Press[®] by Cello



PI: The Pressing Indicator (Leak Path Detector)



Features and Benefits:

- Specially designed EPDM 'O' ring, patent applied for.
- Leaks from 0.1 bar pressure when not pressed.
- Flame free installation.
- 3 point press for a secure, permanent joint.
- Lead-in edge to protect the o-ring.
- 'V' profile jaw.
- Available in sizes 1/2" – 2".
- Available in copper, suitable for use with hard, half-hard and soft copper tube.
- For hot and cold water applications.
- Designed for hydrostatic water pressure up to 250 psi.
- Fully tested to 600 psi pressure.



Cello Products Inc.



>B< Press[®] Approved Tool and Jaw Compatibility Matrix

Use of Proper Press Tools and Jaw sets dictates whether or not you will achieve a reliable and permanent connection, when using >B< Press fittings and the copper tubing component of the system. Use of tested and approved Tools and Jaw sets is required.

1/2" - 1" PRESS

- RIDGID[®] ProPress[®] compact press jaws with RIDGID[®] 100 B
- RIDGID[®] ProPress[®] compact press jaws with RIDGID[®] 210 B
- 1/2" - 11/4" RIDGID[®] ProPress[®] C1 compact kit with RIDGID[®] 100 B
- 1/2" - 11/4" RIDGID[®] ProPress[®] C1 compact kit with RIDGID[®] 210 B
- Rothenberger Compact pressing jaws with Rothenberger Compact press tool

1/2" - 2" PRESS

1/2" - 2" RIDGID[®] Standard ProPress[®] Jaws with:

- RIDGID[®] 320 E Press Tool
- RIDGID[®] 330 B Press Tool
- RIDGID[®] CT 400 Press Tool
- RIDGID[®] RP 330 C Press Tool

1/2" - 2" Rothenberger Standard Pressing Jaws with:

- Rothenberger ROMAX[®] Pressliner
- Rothenberger ROMAX[®] AC ECO Press Tool

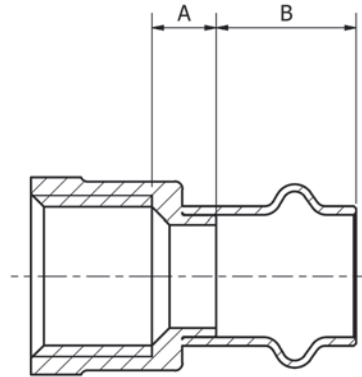
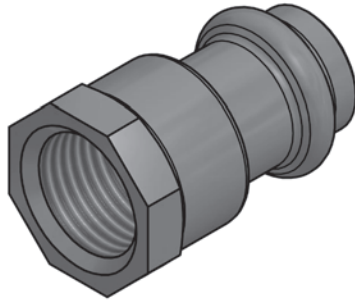
1/2" - 2" REMS Standard Pressing Jaws with:

- REMS Akku Press Tool
- REMS Power-Press Tool

1/2" - 2" Stanley[®] VIRAX[®] Pressing Jaws with Stanley[®] VIRAX[®] M20+ Compact

RIDGID[®] is a registered trademark of RIDGID, Inc.
ProPress[®] is a registered trademark of Viega NA.
ROMAX[®] is a registered trademark of ROTHENBERGER USA LLC
VIRAX[®] is a registered trademark of The Stanley Works.

Female Adapter – Adapteur
 Press x Female (NPT) BP3-

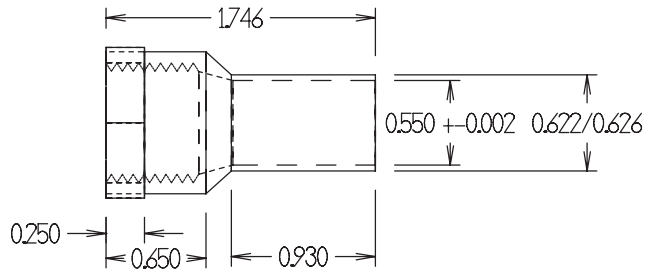
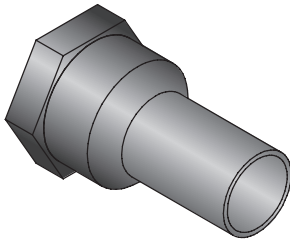


Cello Code	Size	Weight Ounces	A	B
BP3-08	1/2"	2.47	0.33"	0.74"
BP3-12	3/4"	3.88	0.41"	0.91"
BP3-16	1"	5.64	0.35"	0.91"
BP3-20	1-1/4"	8.46	0.39"	1.02"
BP3-24	1-1/2"	13.05	0.51"	1.42"
BP3-32	2"	17.99	0.51"	1.57"
BP3-08-12	1/2" X 3/4" FPT	3.52	.41"	.75"
BP3-12-08	3/4" X 1/2" FPT	2.82	.41"	.91"
BP3-16-12	1" X 3/4" FPT	4.23	.35"	.91"
BP3-20-16	1-1/4" X 1" FPT	6.00	.39"	1.02"
BP3-24-20	1-1/2" X 1-1/4" FPT	6.08	.51"	1.42"

Press Fittings System



Ftg x Female Adapter – Adapteur Swt x Female Pipe Thread (FPT) BP3-2-



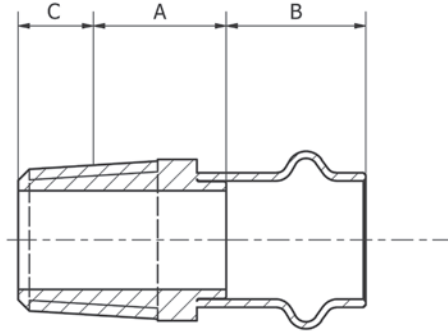
Cello Code	Size	Weight Ounces	A	B	C
BP3-2-08	1/2"	3.27	0.93"	0.28"	1.945"
BP3-2-12	3/4"	4.64	1.06"	0.23"	2.02"
BP3-2-16	1"	6.12	1.1"	0.305"	2.205"
BP3-2-20	1-1/4"	9.64	1.28"	0.42"	2.51"
BP3-2-24	1-1/2"	14.55	1.5"	0.43"	2.79"
BP3-2-32	2"	19.85	1.7"	0.737"	3.032"
BP3-2-08-12	1/2" X 3/4"	4.51	0.93"	0.19"	2.1"
BP3-2-12-08	3/4" X 1/2"	4.85	1.06"	0.28"	2.1"
BP3-2-16-12	1" X 3/4"	5.94	1.1"	0.35"	2.23"



CELLO

Press Fittings System

Male Adapter – Adapteur Press x Male (MPT) BP4-

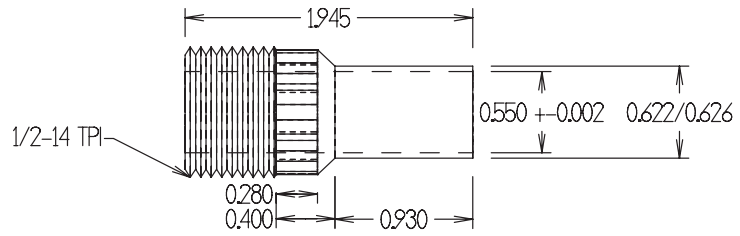
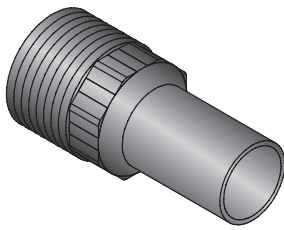


Cello Code	Size	Weight Ounces	A	B	C
BP4-08	1/2" X 1/2"	2.39	0.722"	0.748"	0.39"
BP4-12	3/4" X 3/4"	3.70	0.866"	0.905"	0.40"
BP4-16	1" X 1"	5.64	0.944"	0.905"	0.51"
BP4-20	1-1/4" X 1-1/4"	8.53	1.06"	1.417"	0.53"
BP4-24	1-1/2" X 1-1/2"	11.22	1.10"	1.417"	0.55"
BP4-32	2" X 2"	18.69	1.18"	1.57"	0.58"
BP4-08-12	1/2" X 3/4" MI	3.70	1.48"	0.905"	0.40"
BP4-12-08	3/4" X 1/2" MI	3.13	1.34"	0.748"	0.39"
BP4-16-12	1" X 3/4" MI	4.41	1.46"	0.905"	0.40"
BP4-16-20	1" X 1-1/4" MI	8.18	1.79"	1.417"	0.53"
BP4-20-16	1-1/4" X 1" MI	6.00	1.76"	0.905"	0.51"
BP4-20-24	1-1/4" X 1-1/2" MI	10.97	1.87"	1.417"	0.55"
BP4-20-24	1-1/2" X 1-1/4" MI	10.33	1.06"	1.417"	0.53"

Press Fittings System

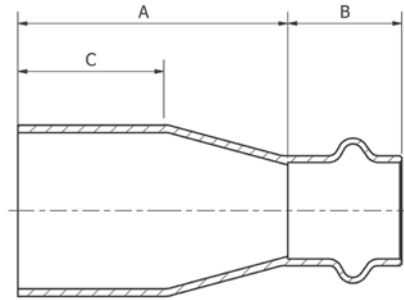


Ftg x Male Adapter – Adapteur Swg x Male Pipe Thread (MPT) BP4-2-



Cello Code	Size	Weight Ounces	A	B	C
BP4-2-08	1/2"	2.89	0.65"	0.93"	1.746"
BP4-2-12	3/4"	4.25	0.68"	1.05"	1.946"
BP4-2-16	1"	6.34	0.807"	1.1"	1.991"
BP4-2-20	1-1/4"	9.85	0.92"	1.28"	2.2"
BP4-2-24	1-1/2"	12.78	0.97"	1.5"	2.601"
BP4-2-32	2"	20.18	0.93"	1.71"	2.71"
BP4-2-08-12	1/2" X 3/4"	1.88	0.68"	0.93"	1.97"
BP4-2-12-08	3/4" X 1/2"	1.84	0.65"	1.06"	1.74"
BP4-2-16-12	1" X 3/4"	1.99	0.68"	1.1"	1.827"

Bushing - Fitting Reducers – Raccord Reduit
 Press x Copper BP02-



Cello Code	Size	Weight Ounces	A	B	C
BP02-12-08	3/4" X 1/2"	1.34	1.496"	0.866"	1.00"
BP02-16-08	1" X 1/2"	1.86	1.81"	0.866"	1.00"
BP02-16-12	1" X 3/4"	2.11	1.496"	0.866"	1.00"
BP02-20-08	1-1/4" X 1/2"	3.38	1.69"	0.868"	1.1"
BP02-20-16	1-1/4" X 1"	2.89	1.693"	0.945"	1.102"
BP02-24-08	1-1/2" X 1/2"	4.71	2.24"	0.866"	1.496"
BP02-24-12	1-1/2" X 3/4"	4.95	2.34"	0.866"	1.496"
BP02-24-16	1-1/2" X 1"	4.20	2.24"	0.945"	1.496"
BP02-32-08	2" X 1/2"	7.01	2.95"	0.866"	1.654"
BP02-32-12	2" X 3/4"	7.52	2.95"	0.868"	1.654"
BP02-32-16	2" X 1"	6.00	2.95"	0.945"	1.654"
BP02-32-20	2" X 1-1/4"	7.34	2.95"	1.371"	1.654"
BP02-32-24	2" X 1-1/2"	8.39	2.12"	1.417"	1.654"

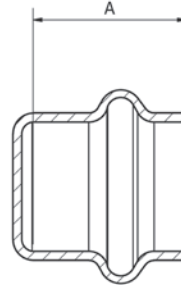
Press Fittings System



Caps – Capuchon

Press

BP17-

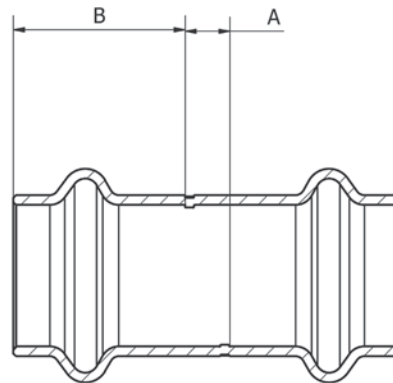


Cello Code	Size	Weight Ounces	A
BP17-08	1/2"	0.8	0.81"
BP17-12	3/4"	1.6	0.96"
BP17-16	1"	1.7	0.96"
BP17-20	1-1/4"	2.4	1.02"
BP17-24	1-1/2"	4.4	1.47"
BP17-32	2"	6.5	1.63"

Couplings – Manchon

Press x Press

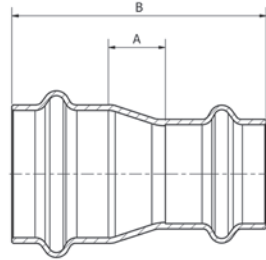
BP0-



Cello Code	Size	Weight Ounces	A	B
BP0-08	1/2"	1.18	0.24"	0.75"
BP0-12	3/4"	2.08	0.39"	0.91"
BP0-16	1"	2.68	0.39"	0.94"
BP0-20	1-1/4"	3.60	0.39"	1.02"
BP0-24	1-1/2"	6.98	0.47"	1.42"
BP0-32	2"	9.70	0.47"	1.57"

Reducer Couplings – Manchon Reducteur

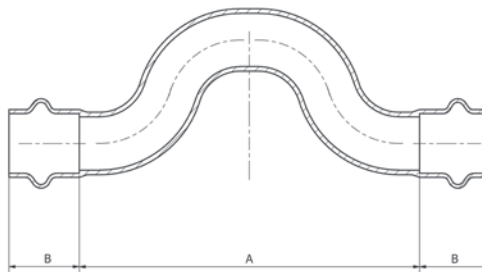
Press x Press BP0-



Cello Code	Size	Weight Ounces	A	B
BP0-12-08	3/4" X 1/2"	1.92	0.39"	2.16"
BP0-16-08	1" X 1/2"	2.98	0.43"	2.35"
BP0-16-12	1" X 3/4"	2.45	0.43"	2.28"
BP0-20-08	1-1/4" X 1/2"	3.92	0.52"	2.58"
BP0-20-12	1-1/4" X 3/4"	3.92	0.52"	2.62"
BP0-20-16	1-1/4" X 1"	3.66	0.52"	2.48"
BP0-24-08	1-1/2" X 1/2"	6.11	0.71"	3.01"
BP0-24-12	1-1/2" X 3/4"	6.21	0.71"	3.05"
BP0-24-16	1-1/2" X 1"	5.85	0.71"	3.07"
BP0-24-20	1-1/2" X 1-1/4"	6.368	0.71"	3.27"
BP0-32-08	2" X 1/2"	8.25	1.14"	3.55"
BP0-32-12	2" X 3/4"	8.29	1.1"	3.61"
BP0-32-16	2" X 1"	8.07	1.14"	3.66"
BP0-32-20	2" X 1-1/4"	8.32	1.02"	3.62"
BP0-32-24	2" X 1-1/2"	9.13	0.78"	3.77"

Coupling – Crossover – Manchon de Rasement

Press x Press BP36-



Cello Code	Size	Weight Ounces	A	B
BP36-08	1/2" X 1/2"	3.40	3.63"	0.748"
BP36-12	3/4" X 3/4"	6.50	4.56"	0.910"

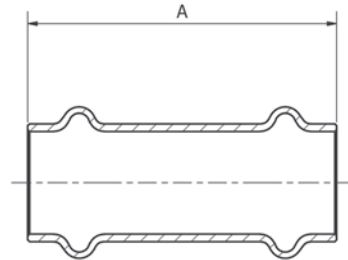
Press Fittings System



Couplings – No Stop – Manchon Reperation

Press x Press

BP0-NSTOP-

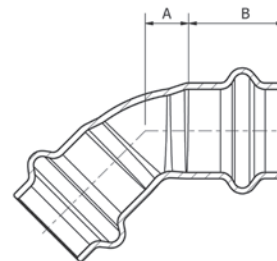


Cello Code	Size	Weight Ounces	A
BP0-NSTOP-08	1/2"	1.18	2.00"
BP0-NSTOP-12	3/4"	2.08	2.20"
BP0-NSTOP-16	1"	2.68	2.28"
BP0-NSTOP-20	1-1/4"	3.60	2.44"
BP0-NSTOP-24	1-1/2"	6.98	3.30"
BP0-NSTOP-32	2"	9.70	3.60"

45° Elbow – Coude 45

Press x Press

BP6-



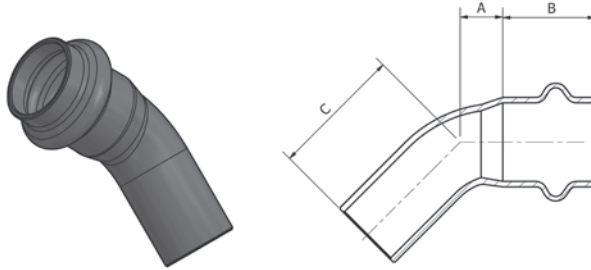
Cello Code	Size	Weight Ounces	A	B
BP6-08	1/2" X 1/2"	1.30	0.31"	0.75"
BP6-12	3/4" X 3/4"	2.25	0.43"	0.91"
BP6-16	1" X 1"	3.24	0.55"	0.91"
BP6-20	1-1/4" X 1-1/4"	4.76	0.66"	1.02"
BP6-24	1-1/2" X 1-1/2"	8.64	0.79"	1.42"
BP6-32	2" X 2"	13.05	1.06"	1.57"



CELLO

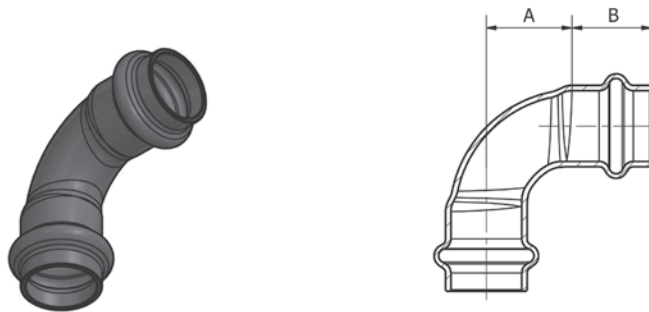
Press Fittings System

45° Elbow – Street – Coude 45 Raccord Press x Ftg Copper BP6-2-



Cello Code	Size	Weight Ounces	A	B	C
BP6-2-08	1/2" X 1/2"	1.34	0.31"	0.86"	1.25"
BP6-2-12	3/4" X 3/4"	2.15	0.430"	0.905"	1.42"
BP6-2-16	1" X 1"	3.24	0.550"	0.905"	1.57"
BP6-2-20	1-1/4" X 1-1/4"	4.97	0.71"	1.02"	1.81"
BP6-2-24	1-1/2" X 1-1/2"	8.89	0.82"	1.410"	2.32"
BP6-2-32	2" X 2"	13.02	1.06"	1.570"	2.71"

90° Elbow – Coude 90 Press x Press BP7-

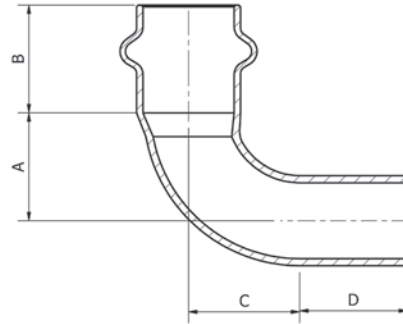
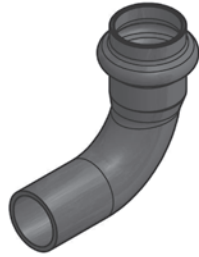


Cello Code	Size	Weight Ounces	A	B
BP7-08	1/2"	1.76	0.72"	0.76"
BP7-12	3/4"	3.35	1.04"	0.91"
BP7-16	1"	4.3	1.32"	0.91"
BP7-20	1-1/4"	6.45	1.65"	1.02"
BP7-24	1-1/2"	11.21	2.00"	1.42"
BP7-32	2"	17.63	2.62"	1.57"

Press Fittings System

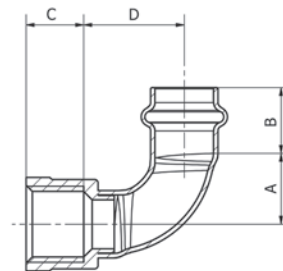


90° Elbow – Street – Coude 90 Raccord Press x Ftg Copper BP7-2-



Cello Code	Size	Weight Ounces	A	B	C	D
BP7-2-08	1/2" X 1/2"	1.83	0.75"	0.75"	0.82"	0.75"
BP7-2-12	3/4" X 3/4"	3.35	1.04"	0.90"	1.14"	0.90"
BP7-2-16	1" X 1"	4.58	1.29"	0.90"	1.34"	0.90"
BP7-2-20	1-1/4" X 1-1/4"	6.49	1.65"	1.023"	1.73"	1.023"
BP7-2-24	1-1/2" X 1-1/2"	11.71	2.00"	1.42"	2.08"	1.42"
BP7-2-32	2"	18.05	2.56"	1.57"	2.56"	1.57"

90° Elbow – Coude 90 Press x Female Thread (FPT) BP73-



Cello Code	Size	Weight Ounces	A	B	C	D
BP73-08	1/2" X 1/2"	2.82	0.755"	0.721"	0.629"	1.08"
BP73-12	3/4" X 3/4"	4.93	1.043"	0.905"	0.688"	1.476"
BP73-16	1" X 1"	6.42	1.307"	0.905"	0.846"	1.700"
BP73-20	1-1/4" X 1-1/4"	10.93	1.65"	1.023"	0.866"	2.15"
BP73-24	1-1/2" X 1-1/2"	15.52	2.55"	1.405"	0.866"	2.55"
BP73-32	2"	26.10	2.614"	1.574"	0.866"	3.129"



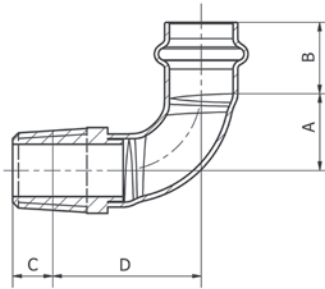
CELLO

Press Fittings System

90° Elbow – Coude 90

Press x Male Thread (MPT)

BP74-

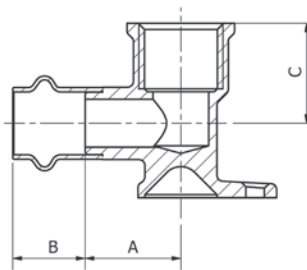


Cello Code	Size	Weight Ounces	A	B	C	D
BP74-08	1/2" X 1/2"	2.82	1.5"	0.75"	0.39"	1.51"
BP74-12	3/4" X 3/4"	4.94	1.94"	0.9"	0.39"	1.93"
BP74-16	1" X 1"	6.7	2.21"	0.9"	0.51"	2.29"
BP74-20	1-1/4" X 1-1/4"	11.64	2.67"	1.023"	0.51"	2.79"
BP74-24	1-1/2" X 1-1/2"	18.69	3.41"	1.42"	0.55"	3.15"
BP74-32	2"	29.27	4.18"	1.57"	0.59"	3.79"

90° Elbow Drop Ear – Coude de fixation 90

Press x Female Thread (FPT)

BP735-



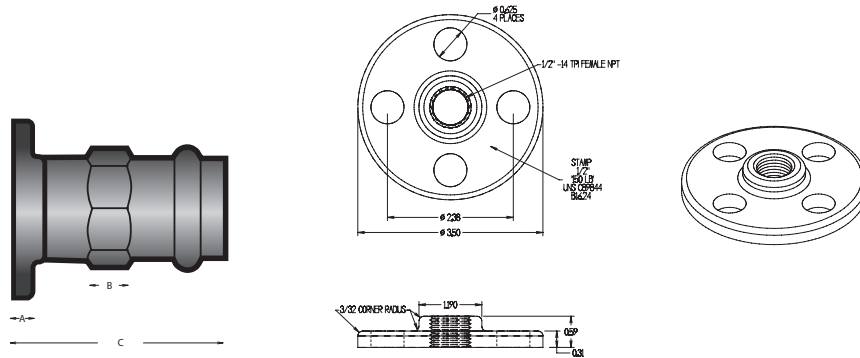
Cello Code	Size	A	B	C
BP735-08	1/2" X 1/2"	.944"	.944"	1.00"
BP735-12	3/4" X 3/4"	1.12"	.905"	1.26"

Press Fittings System



Flange 150 Lb – Collerette

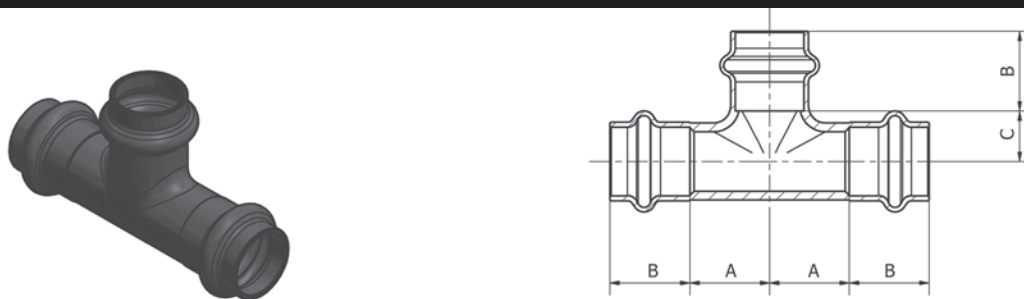
Press x Flanged connection BP41-



Cello Code	Size	Weight Ounces	A	B	C
BP41-16	1"	33.59	0.38"	0.944"	2.22"
BP41-20	1-1/4"	46.15	0.41"	1.06"	2.887"
BP41-24	1-1/2"	52.02	0.44"	1.1"	2.957"
BP41-32	2	77.09	0.5"	1.18"	3.25"

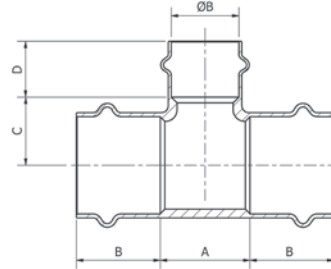
Tee – Straight Non Reducing – Te

Press x Press x Press BPT-



Cello Code	Size	Weight Ounces	A	B	C
BPT-08	1/2" X 1/2" X 1/2"	3.06	0.75"	0.866"	0.472"
BPT-12	3/4" X 3/4" X 3/4"	5.04	0.866"	0.905"	0.629"
BPT-16	1" X 1" X 1"	7.58	0.944"	0.944"	0.787"
BPT-20	1-1/4" X 1-1/4" X 1-1/4"	10.33	1.024"	1.024"	0.866"
BPT-24	1-1/2" X 1-1/2" X 1-1/2"	15.80	1.141"	1.417"	1.141"
BPT-32	2" X 2" X 2"	24.9	1.377"	1.575"	1.377"

Tee – Reducing Branch – Tee
 Press x Press x Press BPT-

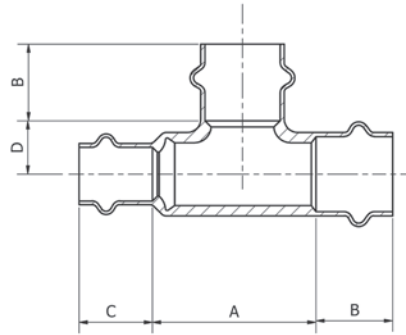


Cello Code	Size	Weight Ounces	A	B	C	D
BPT-12-12-08	3/4" X 3/4" X 1/2"	4.33	1.37"	0.91"	0.62"	0.75"
BPT-16-16-08	1" X 1" X 1/2"	5.85	1.73"	0.94"	0.78"	0.91"
BPT-16-16-12	1" X 1" X 3/4"	7.55	1.73"	0.94"	0.78"	0.91"
BPT-20-20-08	1-1/4" X 1-1/4" X 1/2"	11.95	1.73"	1.02"	0.86"	0.75"
BPT-20-20-12	1-1/4" X 1-1/4" X 3/4"	12.27	1.73"	1.02"	0.86"	0.91"
BPT-20-20-16	1-1/4" X 1-1/4" X 1"	8.53	1.73"	1.02"	0.86"	0.94"
BPT-24-24-08	1-1/2" X 1-1/2" X 1/2"	11.46	0.94"	1.41"	1.14"	0.86"
BPT-24-24-12	1-1/2" X 1-1/2" X 3/4"	12.66	1.18"	1.41"	1.02"	0.91"
BPT-24-24-16	1-1/2" X 1-1/2" X 1"	13.22	1.53"	1.41"	1.15"	0.94"
BPT-24-24-20	1-1/2" X 1-1/2" X 1-1/4"	18.65	1.53"	1.41"	1.15"	0.94"
BPT-32-32-08	2" X 2" X 1/2"	25.09	1.53"	1.57"	1.37"	3.66"
BPT-32-32-12	2" X 2" X 3/4"	25.16	1.53"	1.57"	1.37"	0.94"
BPT-32-32-16	2" X 2" X 1"	17.77	1.5"	1.57"	1.37"	0.94"
BPT-32-32-20	2" X 2" X 1-1/4"	25.21	1.53"	1.57"	1.37"	1.85"
BPT-32-32-24	2" X 2" X 1-1/2"	21.65	2.28"	1.57"	1.37"	1.41"

Press Fittings System

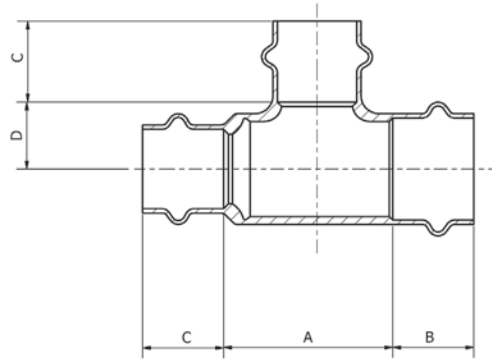


Tee – Reducing Run – Tee Press x Press x Press BPT-



Cello Code	Size	Weight Ounces	A	B	C	D
BPT-12-08-12	3/4" X 1/2" X 3/4"	4.23	1.93"	0.91"	0.87"	0.63"
BPT-16-08-16	1" X 1/2" X 1"	8.21	1.88"	0.944"	2.61"	0.787"
BPT-16-12-16	1" X 3/4" X 1"	8.33	1.88"	0.944"	0.941"	0.787"
BPT-20-16-20	1-1/4" X 1" X 1-1/4"	11.92	1.73"	1.02"	0.94"	0.86"
BPT-24-08-24	1-1/2" X 1/2" X 1-1/2"	19.63	2.28"	1.417"	0.866"	1.14"
BPT-24-12-24	1-1/2" X 3/4" X 1-1/2"	17.61	2.28"	1.417"	3.09"	1.14"
BPT-24-16-24	1-1/2" X 1" X 1-1/2"	18.33	2.28"	1.417"	3.12"	1.14"
BPT-32-08-32	2" X 1/2" X 2"	26.56	2.74"	1.575"	5.49"	1.377"
BPT-32-16-32	2" X 1" X 2"	25.02	2.74"	1.575"	3.81"	1.377"
BPT-32-24-32	2" X 1-1/2" X 2"	25.44	2.74"	1.575"	3.45"	1.377"

Tee – Double Reducing – Tee
 Press x Press x Press BPT-



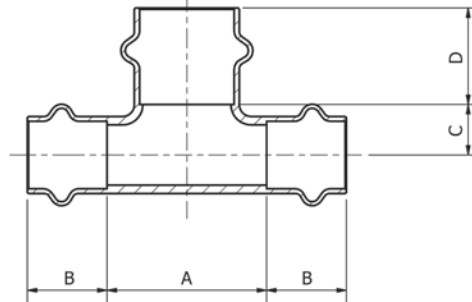
Cello Code	Size	Weight Ounces	A	B	C	D
BPT-12-12-08	3/4" X 1/2" X 1/2"	4.47	2.30"	0.87"	0.91"	0.63"
BPT-16-12-08	1" X 3/4" X 1/2"	5.89	1.89"	0.944"	2.27"	0.75"
BPT-16-12-12	1" X 3/4" X 3/4"	6.77	1.89"	0.91"	0.91"	0.75"
BPT-20-16-12	1-1/4" X 1" X 3/4"	12.05	1.73"	1.024"	0.866"	0.866"
BPT-20-16-16	1-1/4" X 1" X 1"	11.6	1.73"	1.024"	0.945"	0.866"
BPT-24-16-12	1-1/2" X 1" X 3/4"	17.6	2.36"	1.417"	2.3"	1.14"
BPT-24-16-16	1-1/2" X 1" X 1"	17.6	1.53"	1.417"	2.3"	1.14"
BPT-24-20-12	1-1/2" X 1-1/4" X 3/4"	17.12	1.53"	1.417"	2.62"	1.14"
BPT-24-20-16	1-1/2" X 1-1/4" X 1"	17.68	1.53"	1.417"	2.62"	1.14"
BPT-24-20-20	1-1/2" X 1-1/4" X 1-1/4"	18.56	2.36"	1.417"	0.945"	1.14"
BPT-32-16-16	2" X 1" X 1"	23.58	2.74"	1.575"	0.945"	1.37"
BPT-32-20-20	2" X 1-1/4" X 1-1/4"	23.52	2.28"	1.575"	3.61"	1.37"
BPT-32-24-12	2" X 1-1/2" X 3/4"	24.67	2.92"	1.575"	1.417"	1.37"
BPT-32-24-16	2" X 1-1/2" X 1"	24.73	2.92"	1.575"	1.417"	1.37"
BPT-32-24-20	2" X 1-1/2" X 1-1/4"	20.05	2.28"	1.575"	3.28"	1.37"
BPT-32-24-24	2" X 1-1/2" X 1-1/2"	26.72	2.28"	1.575"	3.28"	1.37"

Press Fittings System



Tee – Bullhead – Tee

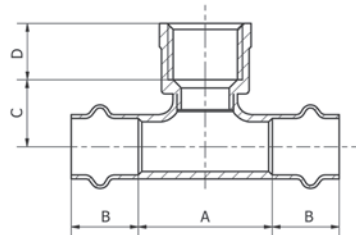
Press x Press x Press BPT-



Cello Code	Size	Weight Ounces	A	B	C	D
BPT-08-08-12	1/2" X 1/2" X 3/4"	3.77	1.81"	0.86"	0.47"	0.91"
BPT-08-08-16	1/2" X 1/2" X 1"	7.85				
BPT-12-12-16	3/4" X 3/4" X 1"	5.54	2.00"	0.91"	0.63"	0.95"
BPT-16-16-20	1" X 1" X 1-1/4"	11.53				

Tee – Female Thread Branch – Tee

Press x Press x Female Thread (FPT) BP12-



Cello Code	Size	Weight Ounces	A	B	C	D
BP12-080808	1/2" X 1/2" X 1/2" FI	4.23	1.50"	0.75"	0.75"	0.63"
BP12-12	3/4"	5.85"	1.72"	0.905"	1"	0.63"
BP12-121208	3/4" X 3/4" X 1/2" FI	5.64	1.37"	0.91"	1.00"	0.63"
BP12-16	1"	7.55	1.88"	0.944"	1.14"	0.63"
BP12-161608	1" X 1" X 1/2" FI	7.05	1.50"	0.91"	1.14"	0.63"
BP12-20	1-1/4"	10.89	2.04"	1.024"	1.28"	0.63"
BP12-24	1-1/2"	13.48	2.28"	1.417"	1.53"	0.63"
BP12-242408	1-1/2" X 1-1/2" X 1/2" FI	12.69	1.26"	1.30"	1.53"	0.63"
BP12-32	2"	23.16	2.74"	1.575"	1.75"	0.63"
BP12-323208	2" X 2" X 1/2" FI	21.16	1.50"	1.57"	1.75"	0.63"

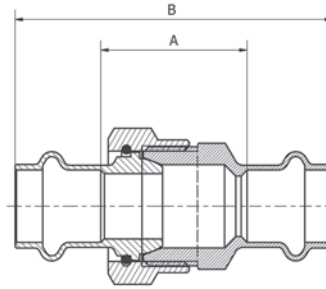
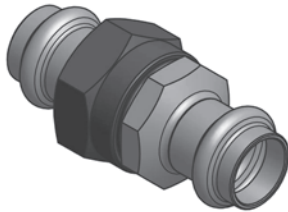


CELLO

Press Fittings System

Union – Union

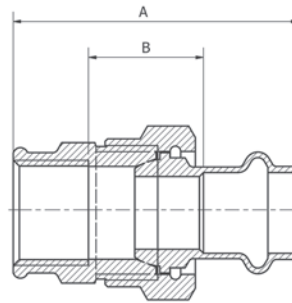
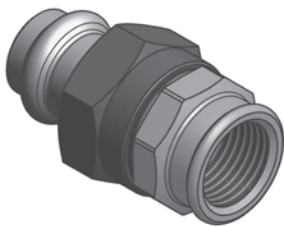
Press x Press BP33-



Cello Code	Size	Weight Ounces	A	B
BP33-08	1/2" X 1/2"	4.88	1.25"	2.75"
BP33-12	3/4" X 3/4"	10.12	1.30"	3.12"
BP33-16	1" X 1"	15.16	1.75"	3.60"
BP33-20	1-1/4" X 1-1/4"	19.05	1.75"	3.80"
BP33-24	1-1/2" X 1-1/2"	30.7	2.40"	5.00"
BP33-32	2" X 2"	78.3	2.16"	5.31"

Union – Female Thread (FPT) – Union

Press x Female Thread (FPT) BP33-3-

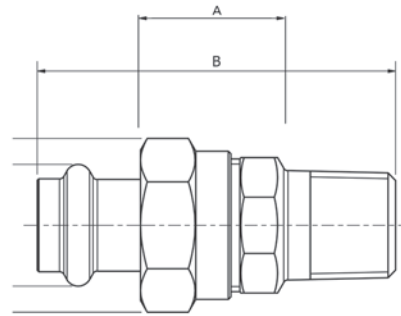
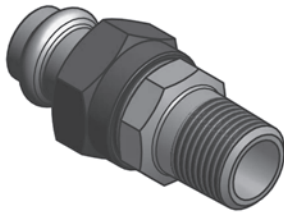


Cello Code	Size	Weight Ounces	A	B	G FPT
BP33-3-08	1/2" X 1/2" FI	4.85	1.25	2.68	1/2"
BP33-3-12	3/4" X 3/4" FI	7.48	1.30	2.98	3/4"
BP33-3-16	1" X 1" FI	16.22	1.75	3.42	1"
BP33-3-20	1-1/4" X 1-1/4" FI	17.59	1.75	3.65	1-1/4"
BP33-3-24	1-1/2" X 1-1/2" FI	30.01	2.40	4.72	1-1/2"
BP33-3-32	2" X 2" FI	75.48	2.16	5.01	2"

Press Fittings System



Union – Male Thread (MPT) – Union
 Press x Male Thread (MPT) BP33-4-



Cello Code	Size	Weight Ounces	A	B	G NPT
BP33-4-08	1/2" X 1/2" MI	5.63	1.25	2.75	1/2"
BP33-4-12	3/4" X 3/4" MI	10.58	1.30	3.18	3/4"
BP33-4-16	1" X 1" MI	18.47	1.75	3.74	1"
BP33-4-20	1-1/4" X 1-1/4" MI	20.45	1.75	3.92	1-1/4"
BP33-4-24	1-1/2" X 1-1/2" MI	32.1	2.40	5.18	1-1/2"
BP33-4-32	2" X 2" MI	85.0	2.16	5.60	2"



Copper Water Tube Standard Dimensions and Weights (inches & pounds)

Nominal Tube Sizes Inches	Outside Dia., In. Types K-L-M- DWV	Inside Diameter, Inches				Wall Thickness, Inches				Pounds Per Linear Foot			
		Type K	Type L	Type M	Type DWV	Type K	Type L	Type M	Type DWV	Type K	Type L	Type M	Type DWV
1/4	.375	.305	.315	-	-	.035	.030	-	-	.145	.126	-	-
3/8	.500	.402	.440	.450	-	.049	.035	.025	-	.269	.198	.145	-
1/2	.625	.527	.545	.569	-	.049	.040	.028	-	.344	.285	.204	-
5/8	.750	.652	.666	-	-	.049	.042	-	-	.418	.362	-	-
3/4	.875	.745	.811	-	-	.065	.045	.032	-	.641	.455	.328	-
1	1.125	.995	1.025	1.055	-	.065	.050	.035	-	.839	.655	.465	-
1 1/4	1.375	1.245	1.265	1.291	1.295	.065	.055	.042	.040	1.04	.884	.682	.650
1 1/2	1.625	1.481	1.505	1.527	1.541	.072	.060	.049	.042	1.36	1.14	.940	.809
2	2.125	1.959	1.985	2.009	2.041	.083	.070	.058	.042	2.06	1.75	1.46	1.07
2 1/2	2.625	2.435	2.465	2.495	-	.095	.080	.065	-	2.93	2.48	2.03	-
3	3.125	2.907	2.945	2.981	3.035	.109	.090	.072	.045	4.00	3.33	2.68	1.69
3 1/2	3.625	3.385	3.425	3.459	-	.120	.100	.083	-	5.12	4.29	3.58	-
4	4.125	3.857	3.905	3.935	4.009	.134	.110	.095	.058	6.51	5.38	4.66	2.87
5	5.125	4.805	4.875	4.907	4.981	.160	.125	.109	.072	9.67	7.61	6.66	4.43
6	6.125	5.741	5.845	5.881	5.959	.192	.140	.122	.083	13.9	10.2	8.92	6.10
8	8.125	7.583	7.725	7.785	7.907	.271	.200	.170	.109	25.9	19.3	16.5	10.6

>B< Press® Warranty



CELLO PRODUCTS INC., LIMITED WARRANTY >B< PRESS® FITTINGS

Subject to the conditions and limitations in this Limited Warranty, Cello Products warrants to wholesalers and licensed plumbing and mechanical contractors in the United States and Canada that its >B< PRESS fittings, when properly installed in non industrial and non marine applications and under normal conditions of use, will be free of failure from manufacturing defects for a period of fifty (50) years from date of installation.

In the event of a failure of the parts covered by this warranty, it is the responsibility of the property owner to obtain and pay for repairs. Only if the warranty applies will Cello be responsible for the remedy under this warranty. The part or parts which you claim failed should be kept and Cello contacted by writing to the address below or telephoning 1-800-265-7882 within thirty (30) days after the leak or other failure and identifying yourself as having a warranty claim. You should be prepared to ship, at your expense, the product which you claim failed due to a manufacturing defect and document the date of the installation. Within a reasonable time after receiving the product, Cello will investigate the reasons for failure, which includes the right to inspect the product at Cello Products plant facility. Cello Products will notify you in writing of the results of its investigation.

In the event that Cello determines that the failure was the result of a manufacturing defect in the part covered by this warranty and that this warranty applies, the EXCLUSIVE AND ONLY REMEDY under this warranty shall be the reimbursement for repair and/or replacement of the part.

THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. If a limited warranty shall be found to apply, such warranty is limited to four years. Cello Products does not authorize any person or firm to create for it any other obligation or liability in connection with its products.

This Limited Warranty gives you specific legal rights and you also may have other rights which may vary from state to state. This warranty shall be interpreted and applied under the law of the state in which the product is installed and is intended as a Commercial Warranty.

CELLO PRODUCTS INC.

1-800-265-7882



***Available from
CELLO PRODUCTS***

- ⇒ *Press Fittings*
- ⇒ *Brass Fittings*
- ⇒ *Brass Nipples*
- ⇒ *Brass Flanges*
- ⇒ *Solder Fittings - cast, wrot & no lead cast*
- ⇒ *Solder Flanges*
- ⇒ *Brass Bar Stock Fittings*
- ⇒ *PEX Fittings (Brass & Plastic)*
- ⇒ *Silver Braze Fittings*
- ⇒ *Dielectric Unions*
- ⇒ *Gas Valves*
- ⇒ *Push Fittings*
- ⇒ *Frost Free Hydrants*
- ⇒ *Rough Brass Valves*

