

PRESS FITTINGS MADE OF BRASS FOR PEX AND MULTILAYER PIPES

The same fitting is compatible with PEX^(*) pipes (manufactured according to EN-ISO 15875-2 and ISO 4065) and Multilayer pipes (manufactured according to EN-ISO 21003) which have the following sizes:

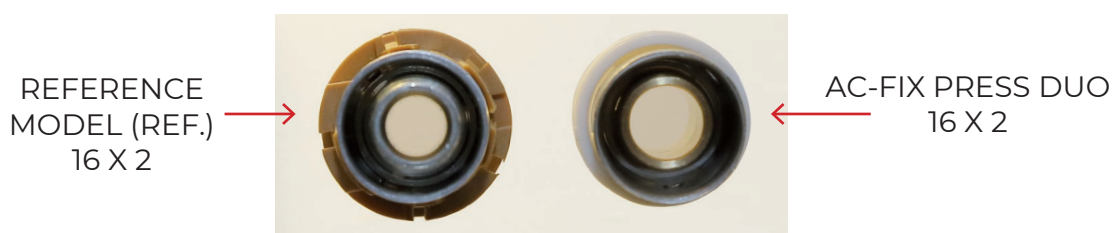
The same fitting is valid for:		
PEX		Multilayer
16x1,8 y 16x2,0	↔	16x2,0
20x1,9 y 20x2,0	↔	20x2,0
25x2,3	↔	25x2,5 y 26x3,0
32x2,9	↔	32x3,0

The fitting DN 25 and DN 26 have the same body, the only change is the stainless steel sleeve.

AC-FIX PRESS DUO fittings don't use O-Rings. This fact:

- Avoids the problems of leaks due to the damage of O-Rings that can happen when inserting the fittings into the pipes.
- Avoids the problems of leaks due to the aging of O-Rings.
- Allows a better flow of water compared to many fittings with O-Rings because the inner diameter of the AC-FIX PRESS DUO fittings is larger than in fittings with O-Rings with similar characteristics (material of the fitting, resistance to pressure, etc.).
- The function **"LBP" ("Leak Before Press")** is achieved: the fitting that has not been pressed leaks even at very low water pressures which is very useful to easily detect possible leaks due to lack of pressing when carrying out the tests. installation pressure.
- Compared to traditional Press Fittings that achieve sealing only at the points of the O-rings, the PRESS DUO system is watertight throughout the length of the insert.

COMPARISON OF CROSS-SECTIONAL INSIDE AREAS OF PRESS FITTINGS FOR MULTILAYER PIPES



Approximate areas in mm ²			
Dia. Pipe	REF.	AC-FIX PRESS DUO	AC-FIX / REF.
Brass			
			Larger area in %
16	40	60	50%
20	75	115	53%
25	150	185	23%
PPSU			
16	33	44	33%
20	67	89	33%
25	130	160	23%

(*) PEX-a, PEX-b or PEX-c

These fittings have been designed for greater safety, easiness and speed of assembly:

- Pressing with PEX pipes: RF, RFz, U, H, CO y VX.
- Pressing with MULTILAYER pipes: U, TH, RF y RFz^(*).

(*) We do not recommend pressing with Multilayer pipes with RF or RFz jaws in case of installations DN 32 with design pressure = 10 bar.

- The check holes on the sleeves (3 at 120°) allow the user to check that the fitting has been completely inserted into the pipe.
- The sleeve is pre-assembled with a plastic part; it increases the easiness and quickness of the assembly and also indicates where to put the side of the pressing jaws.
- The plastic sleeve holder has also the function of dielectric protection for multilayer pipes.
- Safety of the assembly: there is no O-ring. It is not necessary to calibrate and chamfer the pipe before inserting the fitting into. Once the assembly is finished, the sealing achieved is permanent. The fittings can be pressurized immediately after being assembled.

PRESS FITTINGS MADE OF BRASS FOR PEX AND MULTILAYER PIPES

AC-FIX PRESS DUO fittings are made of brass for machining CuZn39Pb3 (CW614N) and brass for forging CuZn40Pb2 (CW617N). The sleeve is made of stainless steel.

AC-FIX PRESS fittings have a quality certificate with n°14/16-2196 issued by the CSTB (the CSTB is the French approval body for the construction sector). They are manufactured according to UNE-ISO-15875-3/-5:2004. The manufacturing system is certified ISO 9001 by DQS of Germany (IQNet).

PRESS FITTINGS MADE OF PPSU FOR PEX AND MULTILAYER PIPES

The fittings AC-FIX PRESS DUO made of PPSU are compatible with PEX and MULTILAYER pipes with the dimensions specified before in the pipes technical information of the AC-FIX PRESS DUO fittings made of brass.

They have the same field of application as the fittings AC-FIX PRESS DUO made of brass (see the technical information of the fittings made of brass and instructions for assembly of AC-FIX PRESS DUO fittings).

The fittings AC-FIX PRESS DUO made of PPSU, have the followings advantages:

- High resistance to corrosion.
- Lower pressure drop.
- Much lighter than the brass fittings (the density of PPSU is approximately 1.300kg/m³ and the density of brass is 8.400kg/m³).
- Competitive prices due to lower cost of processing.

The fittings AC-FIX PRESS DUO made of PPSU can be used for drinking water: the PPSU is an advanced plastic totally odourless and tasteless.

Some chemicals can damage the fittings made of PPSU. Please contact our Technical Department.



**NEW DESIGN
WITH REINFORCEMENTS
AGAINST TENSIONS**

TERMAL CYCLING TEST AC-FIX PRESS DUO (PPSU) WITH MULTILAYER PIPES



TOOLS

- High level of quality and safety.
- Optimum handling.
- Systems that avoid 100% the risk of leaks.
- Wide range of spare parts in stock.

Note: Our fittings have been designed to be pressable by almost all the pressing tools in the market. Please, contact our Technical Department or check our website to get information about the compatibility of the pressing tool you intend to use to do the assembly.

IMPORTANT

We advise you to avoid the use of hemp to seal the threads. In case of using Teflon tape (PTFE), we recommend to put between 8 to 10 laps. It is preferable not to put Teflon in the first thread. When connecting water pipes, make sure that threaded connections are not subjected to excessive mechanical stress. Over time, this may result in breakage, with loss of water and damage to people and/or property. The torque settings of the threaded parts must not be more than 30 Nm.

PRESSURE TEST

The finished installation with the pipes at sight (before being hidden by masonry, filler or insulating material) must be subject to the hydrostatic pressure test of pipeline networks (pressure test) in accordance with local regulations. After the pressure test, the pipes of the drinking water installations should be thoroughly washed.

FIELD OF APPLICATION

These fittings have been designed to be used with PEX and Multilayer pipes in the following applications as defined in the EN-ISO 15875-1 and EN- ISO 21003 standards:

Application class	TD °C	Time at TD Years	Tmax °C	Time at Tmax Years	Tmal °C	Time at Tmal h	Typical field of application
1	60	49	80	1	95	100	Hot water supply (60°C)
2	70	49	80	1	95	100	Hot water supply (70°C)
4	20 Followed by 40 Followed by 60	2,5 20 25	70	2,5	100	100	Floor heating and low temperature radiators
5	20 Followed by 60 Followed by 80	14 25 10	90	1	100	100	High temperature radiators

TD: Design Temperature
Tmax: Maximal Temperature
Tmal: Malfunction Temperature

Where more than one design temperature appears for any class, the times should be aggregated (e.g. the design temperature profile for 50 years for class 5 is: 20°C for 14 years followed by 60°C for 25 years, 80°C for 10 years, 90°C for 1 year and 100°C for 100h).

The water used in the installations must come from the supplying network.

It is necessary to consider the working pressure of each class of application:

PEX
Serie 5,0: class 1 / 6 bar; class 2 / 6 bar; class 4 / 8 bar; class 5 / 6 bar.
Serie 4,0: class 1 / 8 bar; class 2 / 8 bar; class 4 / 10 bar; class 5 / 8 bar.

ASSEMBLY STEPS FOR PEX PIPES



1. Cut the pipe as clean and perpendicular as possible to its axis.



2. Insert the fitting into the pipe. The pipe must be seen through the check holes of the sleeve.

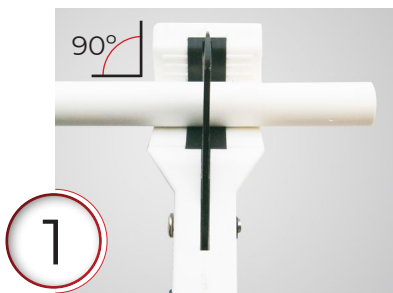


3. Place the side of the jaw beside the plastic ring and press with U, RF or RFz jaw. The plastic ring should not be pressed.

Remark:

- The assembly of the fittings AC-FIX PRESS DUO made of PPSU is done in the same way as the assembly of the fittings AC-FIX PRESS DUO made of brass.
- Study our list of compatible tools to press AC-FIX PRESS fittings.

ASSEMBLY STEPS FOR MULTILAYER PIPES



1
Cut the pipe as clean and perpendicular as possible to its axis. If the pipe is from a coil, straighten its end as much as possible.



2
Separate the stainless steel sleeve from the body of the fitting. Leave the plastic ring (black or white) on the body of the fitting.



3
Put the stainless steel sleeve on the pipe until reaching the end and the pipe can be seen through the check holes and the check holes are completely covered by the pipe.



4
Using the special pipe expander^(*) recommended for this application, expand the pipe **until it meets the resistance of the stainless steel sleeve. DON'T APPLY TOO MUCH FORCE** because excessive force could cause an expansion of the sleeve.



5
Insert the fitting completely. The pipe must be seen through the check holes of the stainless steel sleeve. The end of the stainless steel sleeve must reach the plastic ring (black or white). Don't leave more than 1,5 mm between the end of the stainless steel sleeve and the plastic ring.



6
Press with U or TH jaws. If TH jaws are used, the side of the jaw must be placed on the plastic ring.

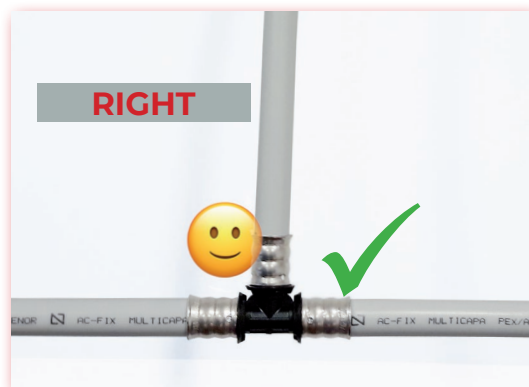
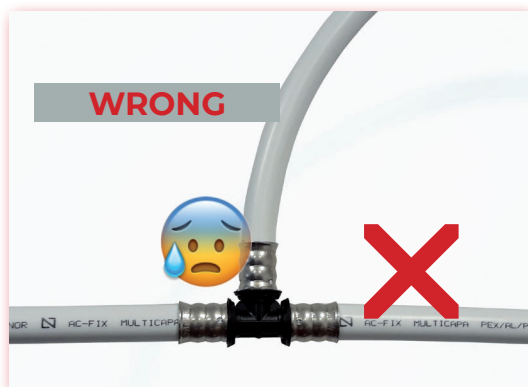
(*) Expander codes 100.0005.91 or 100.0005.54.



In the event of a pinch of the sleeve, this pressing is not valid, please **DISCARD**



ASSEMBLY WITHOUT TENSIONS



When a section of pipe near a joint has to be bent or straightened, the pipe should be clamped in the area close to the joint so as not to transmit stress to the fitting. This is applicable to all fittings but more especially to those of PPSU. Therefore, it is best to straighten the coil pipes before connecting them to the fittings.

