

# 1400

## COMPRESSION FITTINGS FOR "COBRA-PEX" PEX PIPE



### DESCRIPTION

Tiemme compression fittings for PEX pipe adapt to any type of heating/cooling and sanitation system, with application in residential, commercial, industrial and agricultural sectors and, in general, with any kind of non-corrosive fluid.

They are characterized by their sealing mechanism which is created by tightening the nut on the fitting body.

When the nut is tightened, the internal cut ferrule is compressed between the nut and the main body of the fitting, thus ensuring the sealing of the system hydraulic pressure.

### PRODUCTION RANGE

Compression fittings for PEX pipe are available in a wide range of sizes (from  $\varnothing$  12 to  $\varnothing$  32 mm), different shapes (straight, curved, T- shaped etc.), with different types of connections (female threaded connections, male threaded connections, intermediate compression connections etc ...), to meet all kinds of system requirement.

See the HYDRAULIC COMPONENTS catalog for the full range.

### CONSTRUCTION SPECIFICATIONS

- |                     |   |
|---------------------|---|
| ▪ (1) Fitting body: | Brass CW617N  |
| ▪ (2) Nut:          | Brass CW617N  |
| ▪ (3) Ferrule:      | Brass CW617N  |
| ▪ Threads:          | F ISO 7/1 (EN 10226) Rp cylindrical<br>M ISO 7/1 (EN 10226) R conical |

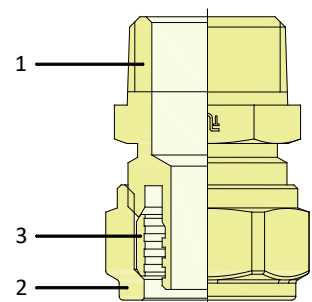
### TECHNICAL SPECIFICATIONS

- |                                |   |
|--------------------------------|---|
| ▪ Maximum working temperature: | + 95 °C   |
| ▪ Minimum working temperature: | - 20 °C (provided the fluid remains in the liquid phase)  |
| ▪ Maximum working pressure:    | 10 bar (relative to the "COBRA-PEX" PEX pipe)   |
| ▪ Fluid compatibility:         | Drinking water, water and glycol solutions (maximum percentage of glycol 30%)<br>non-corrosive fluids * |

\*To check compatibility with fluids or other substances not listed, contact Tiemme technical office.

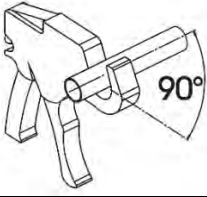
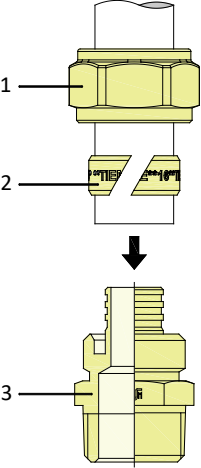
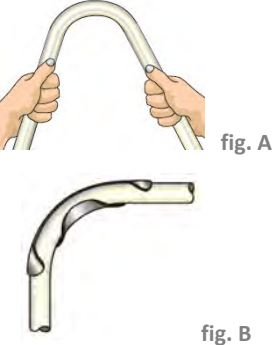
### ADVANTAGES / STRENGTHS

- Anti-slip profile: to guarantee perfect sealing.
- Brass ferrule.
- Complete system with a dedicated COBRA-PEX pipe.
- Wide range available for every installation need.



**INSTRUCTIONS FOR CORRECT ASSEMBLY**

To obtain a perfect join between fitting/pipe, some simple but important operations must be carried out:

	<p><b>Cutting the pipe:</b>          The pipe must be cut perpendicular to its axis.          The use of hacksaws or angle grinders must be avoided as they could deform the pipe.          Recommended tools: <b>Art. 1495</b></p>																								
	<p><b>Burr-free cut and cleaning of the pipe:</b>          In the event the pipe is cut using tools other than those recommended by Tiemme, before connecting it onto the fitting, make sure that no burr is present, otherwise deburr the pipe and clean it thoroughly so to remove residual chips.</p>																								
	<p><b>Connecting the pipe to the fitting:</b>          Place all the fitting components onto the pipe in the following order:          - nut (1)          - pipe clamp ferrule (2)</p> <p>Insert the pipe onto the fitting rubber holder until it stops.          Connection will be easier if the pipe is lubricated with silicone oil or water. For domestic water distribution applications, make sure that the silicone oil used is suitable for food application.          Make sure that the oil used is compatible with the construction materials of the fitting.</p> <p><b>Tightening the nut:</b>          Tighten the nut (1) on the body (3) as far as possible by hand and then with the help of a wrench, respecting the tightening turns shown in the table:</p> <table border="1" data-bbox="440 1003 1441 1059"> <thead> <tr> <th>Ø ext. pipe (mm)</th> <th>12</th> <th>14</th> <th>15</th> <th>16</th> <th>17</th> <th>18</th> <th>20</th> <th>22</th> <th>25</th> <th>28</th> <th>32</th> </tr> </thead> <tbody> <tr> <td>no. of turns</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> </tr> </tbody> </table>	Ø ext. pipe (mm)	12	14	15	16	17	18	20	22	25	28	32	no. of turns	1	1	1	1	1	1	1	1	1	1	1
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	<p><b>Bending:</b>          The COBRA-PEX pipe bending can be carried out by hand (fig. A) or using appropriate bending supports (fig. B).</p> <p>In the case of hand bending, the minimum possible radius shall be: <math>R_{min} = 8xD</math>          where: D = outer diameter of the tube to be bent.</p> <p>For bending with a radius of less than 8D, you can use the appropriate bending straps at 90° Art. 1480P. Thanks to this accessory you can keep the desired bend avoiding the crushing of the pipe section.</p>																								

**IMPORTANT:** Carrying out the following operations incorrectly may compromise the tightness of the joint.  
 TIEMME RACCORDERIE S.p.A will accept no responsibility for breakages and/or accidents resulting from failure to comply with these indications and from improper use of the system. The information shown does not exempt the user from scrupulously following current regulations and good technical standards.

**NEVER:**

- Use incompatible or harmful substances.
  - Use these fittings for chased installation.
  - Connect the PEX pipe directly to boilers, water heaters or any other source of heat.
- We recommended using a joint with a metal pipe for a length of at least one metre to protect the PEX pipe from any malfunction of heat generators

**SOME POSSIBLE CAUSES OF LEAKS:**

- Incorrect tightening of the nut onto the fitting (comply with the indications provided by Tiemme on the number of tightening turns).
- Excessive force used when tightening the nut.
- Connection with incompatible products.
- Incompatible fluids.
- Excessive use of sealants (e.g. hemp, PTFE tape etc...) on male/female threads could generate tension in the fittings.
- Freezing of the system or excessive internal pressure.
- Storage of materials in unsuitable environments.
- Unpredictable external causes, such as accidental impacts or inappropriate movements.

**MAIN ACCESSORIES OF THE SYSTEM**



See the product catalog for order numbers / further details.

**ITEM SPECIFICATION**

**1400 Series**

Compression fitting for “COBRA-PEX” PEX pipe, made up of: CW617N brass body, CW617N brass nut, CW617N brass ferrule, F ISO 7/1 (EN 10226) Rp cylindrical thread / M ISO 7/1 (EN 10226) R conical thread.

Maximum working temperature: + 95 °C. Minimum working temperature: - 20 °C (provided that the fluid remains in liquid phase). Maximum working pressure: 10 bar (relative to the “COBRA-PEX” PEX pipe).

Fluid compatibility: drinking water, water and glycol solutions (maximum percentage of glycol 30%), non-corrosive fluids.

Production range: from Ø 12 to Ø 32 mm, different configurations (straight, curved, T-shaped etc...) and with different types of connections (female threaded connections, male threaded connections, intermediate compression connections).

**CERTIFICATIONS**



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