

## Gold-Fix

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Data sheet LINE 3400 Gold-Fix

Axial press fittings for Pe-X and Multilayer pipes

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## GOLD-FIX (LINE 3400)

Axial press fittings for Pe-X and Multilayer pipes

# Gold-Fix











## DESCRIPTION

3400 GOLDFIX fittings are suitable for the supply of hot and cold sanitary water, heating systems with radiators and radiant panels, compressed air installations, systems for the transportation of chemical substances or crude oil derived one (upon General Fittings technical department check).

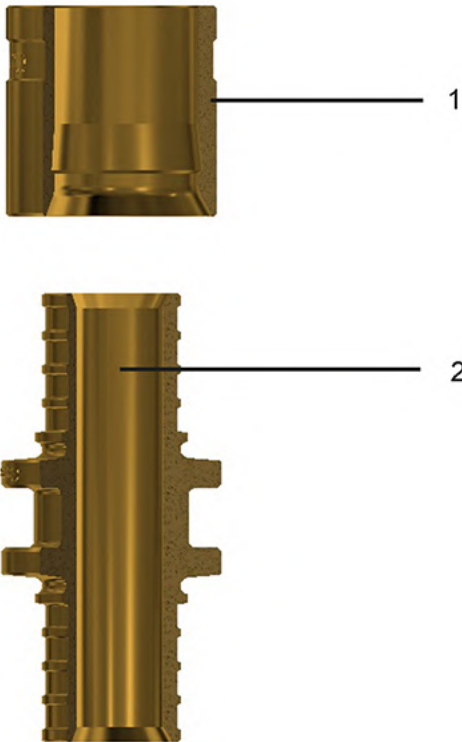
## ADVANTAGES

- Complete range
- One system both for drinking water and heating installations
- Efficient installation: double wallplate elbow allows to make installations in series or rings for a better distribution and change of water
- Quick and easy installation also with manual tools
- Safe installation: watertight connection, without stagnation points and without requiring O-rings or additional gaskets
- Greater water flow and consequently lower pressure drops
- Suitable both for PEX and multilayer (Pex/Al/Pex) pipes
- Heat treatment of the bush which guarantees greater plasticity, greater deformation capacity and less chance of breakage
- Great reliability over time
- Raw materials complying with UBA LIST

## FIELDS OF APPLICATION

| APPLICATIONS   |  | T. min. | T. max | T. of the system | Max. pressure |
|--|--|---------|--------|------------------|---------------|
|   | drinking water   | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|   | sanitary hot water   | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|   | cooling  | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|   | radiators  | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|   | floor heating  | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|   | irrigation   | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|   | compressed air   | -20°C   | +120°C | -20°C/+95°C      | 10 bar        |
|  | -20°C: with the use of glycol in a maximum percentage of 30% |         |        |                  |               |

## COMPONENTS AND MATERIALS



| LEGEND  |   | COMPONENTS | MATERIALS                          |
|---|---|------------|------------------------------------|
|  | 1 | Sleeve     | Brass CW612N - UNI EN 12164        |
|  | 2 | Body       | Brass CW617N/CW612N - UNI EN 12165 |

## SUITABLE PIPES

Fittings of line 3400 GOLDFIX are suitable for installation both with PEX pipes and multilayer (Pex/Al/Pex) pipes.

For the complete list of available pipes refer to the catalogue or visit the website [www.general fittings.it](http://www.general fittings.it)

## REGULATIONS

- UNI 21003-3

"Multilayer piping systems for hot and cold water supply installations inside building"

- UNI EN ISO 15875-3

Fittings comply with UNI EN ISO 15875-3 law: "Plastic piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 3: Fittings".

- UNI EN 1254-3

Fittings comply with UNI EN 1254-3 law: "Sanitary fittings for plastic pipes with compression ends".

- UNI EN 12226-1

Threads comply with UNI EN 10226-1 law: "Piping thread for coupling on the thread".

- D.M. 174 (06/04/2004)

Raw materials used are of high quality and comply with the Ministerial Decree N°174 dated 06/04/2004 concerning the materials and the items used in fixed installations for water collection, treatment and supply.

- Comply with 4MS, UBA List (BC group), DIN 50930/6 Dir. 2011/65/UE, 6C attachment III (RhOSII).

## PIPE DIAMETERS - REAMERS AND JAWS

| Pe-X     |        |       |  |
|----------|--------|-------|--|
| Ø pipe   | Reamer | Jaw   |  |
| 16 x 2.2 | RH-HIS | RE 16 |  |
| 20 x 2.8 | RH-HIS | RE 20 |  |
| 25 x 3.5 | RH-HIS | RE 25 |  |
| 32 x 4.4 | RH-HIS | RE 32 |  |

| Multilayer Pe-X/Al/Pex |        |       |  |
|------------------------|--------|-------|--|
| Ø pipe                 | Reamer | Jaw   |  |
| 16.2 x 2.6             | RH-MKV | RE 16 |  |
| 20 x 2.9               | RH-MKV | RE 20 |  |
| 25 x 3.7               | RH-MKV | RE 25 |  |
| 32 x 4.7               | RH-MKV | RE 32 |  |

## CERTIFICATIONS

| COUNTRY   | CERTIFICATION   | COUNTRY   | CERTIFICATION   | COUNTRY   | CERTIFICATION   |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |   |   |   |   |

## INSTRUCTIONS



The following instructions have to be applied to systems defined for GOLD-FIX fittings and PE-Xa pipe with oxygen barrier (dimensions 16-20-25-32) or PE-X/Al/PE-X multilayer systems (dimensions 16-20-25-32).

Always use machines and equipments defined in General Fittings catalogue.

The direction of the sleeve is NOT reversible. The marking of the sleeve must always be opposite to the direction of pipe insertion.

General Fittings PE-Xa pipe is equipped with an oxygen barrier. The oxygen barrier is not flexible like the polyethylene pipe and could tear in the expansion phase of the pipe, especially at low temperatures. However, this does not affect safety and guarantee of the tightness.

If the expansion phase is made too quickly and at temperatures below 0°C, even the layer of PE-Xa pipe can be damaged, beside the oxygen barrier. In this case the damaged part of the pipe must be removed and repeated the operation.

General Fittings Multilayer PE-Xc / Al / PE-Xc pipe is equipped with a guaranteed oxygen intrusion barrier from the internal aluminum layer. If the expansion phase is carried out too quickly and at temperatures below zero, the layer of the PE-Xc pipe and aluminum could be damaged and lacerated. In this case the damaged part of the pipe must be removed and repeated the operation.

Manual machine and electrically operated machine: the manual machine is suitable for systems with PE-Xa pipe in sizes 16-20-25-32 and PE-Xc / Al / PE-Xc pipes in sizes 16-20. The electrically operated machine it is suitable for PE-Xa pipes in sizes 16-20-25-32 and PE-Xc / Al / PE-Xc pipes in sizes 16-20-25-32.

Fittings and sleeves must be protected before putting in contact with masonry from fluids and other aggressive substances by a suitable coating.

For any technical product information please contact directly the Technical Department of General Fittings Spa.



## ASSEMBLY INSTRUCTIONS

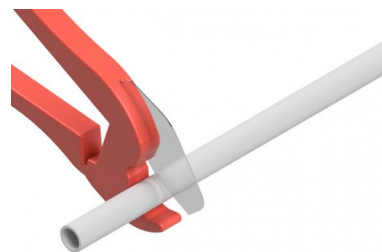
Before cutting the pipe, check that the pipe has no surface defects and that the marking is readable and complete in all its parts



Always check that the shear blade is perfectly sharp, without dents or damaged parts

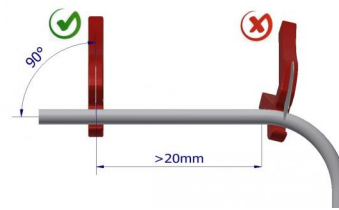


Cut the pipe perpendicularly to its axis using an appropriate pipe-cutting tool [code TT500.00].

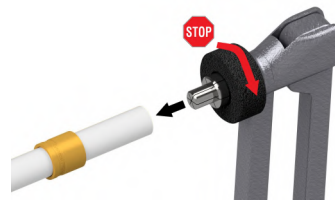


The cut must always be made on the straight part of the pipe at a minimum distance of 150mm from the closest fitting or at a minimum distance of 20mm from the pipe's bend ending.

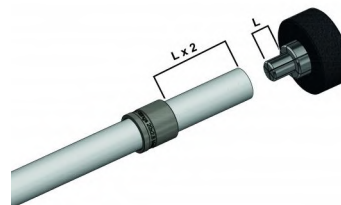
The cut must be clean, without pipe internal or external burs.



Check that the expander is not damaged and it is screwed up to the end. Once screwed the expander shouldn't unscrew during the rotation of the pipe on the expander. Verify that the tool we are going to use is correct and studied for the pipe we are going to assemble. Insert the expander without forcing and parallel to the axis of the pipe.

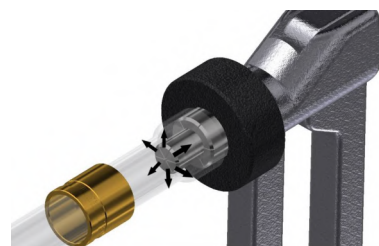


Insert the sleeve into the pipe, making sure that the marked strip is opposite to the cut of the pipe and that there is double distance compared to the sleeve between the end of the pipe and the sleeve itself.

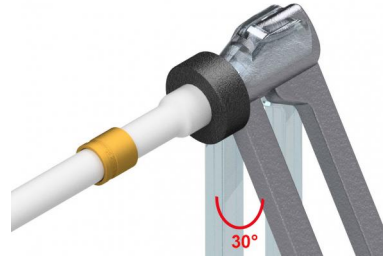


Gradually and homogeneously widen the pipe without heating the deforming parts. Temperatures recommended during this flaring phase go from  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .

NB: according to the different pipes, use the appropriate reamer.



The expansion operation must be repeated at least a second time by turning the equipment by 30 °. If the internal part of the pipe is not perfectly cylindrical, repeat the described operations again.



Cut pipes which are not circular adjust after expansion and waste the piece of non-conformed pipe. Replace expanders which are damaged or do not allow perfect circularity of the enlarged pipe. The defective expander can cause sealing problems over time.

Grease the expander cone if the actuation of the tool is difficult.

If, after the expansion, there are cracks or slots on the pipe, remove the damaged tube and repeat the expansion operation.



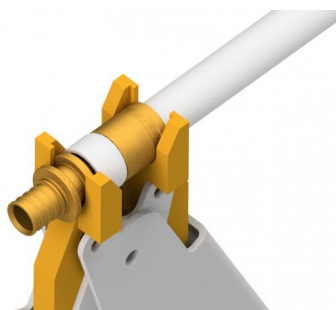
If all recommended procedures for the expansion of the pipe have been adopted, the pipe will slide onto the fitting without forcing. If the insertion of the pipe is difficult, repeat the above mentioned expansion operations.



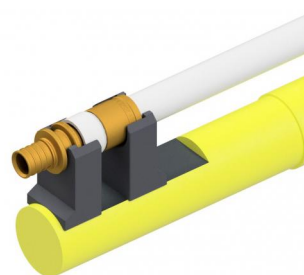
The pipe has a natural return effect (memory effect). Pipe and fitting assembly operations must therefore be carried out quickly. All sealing ribs of the fitting must be covered by the pipe inserted manually.



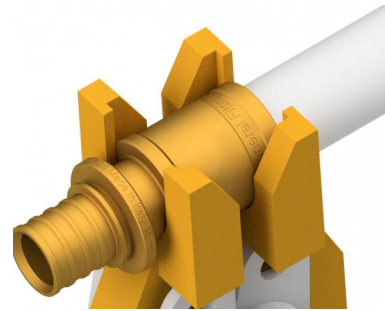
MANUAL: Push the sleeve towards the fitting. Put the elements in the jaws of the pressing machine, making sure that the sleeve and the fitting collar are inserted properly.



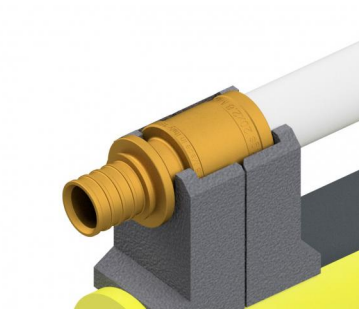
AUTOMATIC: Push the sleeve towards the fitting. Put the elements in the jaws of the pressing machine, making sure that sleeve and fitting collar are inserted properly.



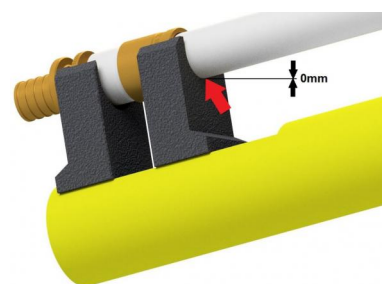
Start the pressing machine.



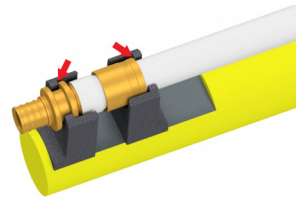
Make sure that the assembled sleeve is up the stroke of the fitting's body.



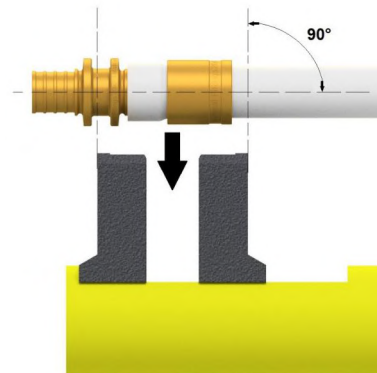
Put pipe and sleeve in abutment.



Check that sleeve and fitting are always inserted in the correct position.



The perpendicular positioning allows a coaxial assembly of the sleeve.





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