PRODUCT DESCRIPTION

Our fittings are available in the dimensional range shown below with the associated PN values. Fittings with different PN values can be supplied upon request. Threads are compliant with EN 10226, ISO 228, ANSI/ASME B1.20.1.

SIZE	PN
1/8" TO 1"	40
1"1/4 TO 2"	25
2"1/2 TO 5"	16

The fittings are produced with copper-zinc (brass) or bronze alloys, whose compliance with the relevant standards (see the table below) is verified by means of spectrometric analysis on incoming batches.

MATERIAL	FORM	ALLOY	REFERENCE STANDARD
BRASS	CASTING	CC753S – CuZn37Pb2Ni1AlFe-C CC754S – CuZn39Pb1Al-C	EN 1982
	HOT PRESSING	CW617N – CuZn40Pb2	EN 12420 EN 12165
	TURNING ROD	CW617N – CuZn40Pb2	EN 12164 EN 12168
DEZINCI-FICATION RESISTANT BRASS	CASTING	CC770S – CuZn36Pb-C	EN 1982
	HOT STAMPING	CW602N – CuZn36Pb2As	EN 12420 EN 12165
	TURNING ROD	CW602N – CuZn36Pb2As	EN 12164 EN 12168
BRONZE		CC491K – CuSn5Zn5Pb5-C CC499K – CuSn5Zn5Pb2-C	EN 1982

Customised products (special alloys and/or higher PN specifications) are available upon request.

PRESSURE/TEMPERATURE RATINGS

The fittings are suitable for fluids in the temperature range -10°C to 200°C, maximum allowable fluid pressure decreases with temperature increase, as shown below:

TEMPERATURE (°C)	MAXIMUM ALLOWABLE PRESSURE (BAR)		
	PN16	PN25	PN40
FROM -10 TO 100	16	25	40
120	13,5	21,8	36
150	9,5	16,5	30
170	7	12,8	26
180	-	11,3	26
186	-	10,5	22,8
200	-	-	20

Intermediate values may be interpolated

GENERAL INSTALLATION NOTES

It is recommended to verify that the fluid and the fittings alloy are compatible. Under some environmental conditions, the fittings are subject to corrosion processes that adversely influence their functionality and durability; it is therefore important to consider carefully the following operative conditions:

I. Underground or concealed installations
- Cover the body of the fitting to avoid contact with the soil or lime-based mortars.
- Consider the following point III for the choice of cover materials.

II. Domestic installations
- Avoid contact, even occasional and unintended, with ammonia, its solutions and compounds, as well as other corrosive chemical agents.
- If necessary, for the choice of cover materials, consider the following point III.

III. Insulation
- Do not use insulation materials containing, or that may release, ammonia or its compounds.

These prescriptions are given for exemplification purposes only, are not exhaustive of the matter, and cannot replace the designer's and installer's good professional practice; we decline any liability for damages due to missing or improper protection of our fittings against corrosion.
According to the thread pattern, the use of sealing agents may be necessary for leaktightness: WE STRONGLY RECOMMEND NOT TO USE STRAW, while PTFE or specific sealants should be used appropriately, considering the relevant prescriptions, for instance when used with drinking water.
The fittings should be installed avoiding excessive torque. The table below shows experimental torque values that accomplish leaktightness when tested at pressures up to 150% the allowable test pressure PEA (as per EN 805 standard)

SIZE	TORQUE (Nm)
1/8"	3
1/4"	9
3/8"	10
1/2"	12
3/4" - 1"1/4	16
1"1/2 – 3"	20
4" - 5"	25

Higher torque values have no significant effect on leaktightness performance of the joint, but may damage the fitting, the pipe or both, therefore are not recommended.
When installed, the fittings should not be subject to flexural stress due to the pipes' own weight or their misalignment; it is therefore recommended that the pipes are correctly aligned and the means of fixation are fit to sustain the weight.

MAINTENANCE

These products do not normally require any maintenance operation. When used with fluids expanding at lower temperatures, such as water, the usual draining operations against freezing are recommended.