

Pexal® XL is the modular fitting system made of technopolymer (PPSU), a plastic material featuring outstanding mechanical strength and resistance to corrosion, ideal for construction of water supply, heating and cooling systems and industrial plants.

The fitting modules are connected to each other with PPS collars that ensure their resistance against loosening, while water tightness is ensured by a double EPDM O-ring.

Using a portable pressing machine, equipped with the relevant jaw, the pipe is shaped around the hose barb of the fitting. The joint, even in the presence of thermal variations, is perfectly watertight and prevents loosening thanks to the stainless-steel bushing that covers the portion of the pipe in contact with the hose barb.

Moreover, the bushing has inspection holes to check that the pipe is inserted correctly into the fitting.

### Features

- **Hygiene**

Pexal® XL press fittings are certified for drinking water supply, therefore they can be used for domestic hot and cold water distribution systems. The material of these fittings ensures an outstanding level of hygiene, as well as an excellent resistance to the treatments against legionella.

- **Chemical resistance**

The material used to make these fittings, polyphenylsulfone (PPSU), is a polymer characterized by an exceptional resistance to oxidation and corrosion, to the main chemical compounds dissolved in water, and to cement and lime.

The mechanical properties of this material such as the tensile strength, modulus of elasticity and aging resistance far exceeds those of normal polymers.

- **Safety**

The Pexal® XL fittings are made with a special hose barb using a profile with two seals to ensure maximum safety and reliability over time. The system is completed by PPS collars, ensuring mechanical strength and system uniformity.

- **Ease of use**

Pexal® XL is a simple and user- friendly system. The assembly of modules requires no special equipment, as sealing collars are closed manually. Moreover, the technopolymer lightweight is a further advantage.

- **Modularity**

The modular philosophy that characterises the Pexal® XL range ensures extreme installation flexibility while using just a few items. The assembly versatility allows wide system design freedom, and easily remedying the unforeseen events at the site.

**Table. Pexal® XL fittings features.**

<b>Body</b>	Polyphenylsulfone (PPSU), characterized by extreme hygiene, chemical resistance and high mechanical characteristics
<b>Sleeve</b>	AISI 304 stainless steel with inspection holes to check the correct insertion of the pipe
<b>Seals</b>	2 made of EPDM
<b>Sealing collar</b>	PPS
<b>Chemical/physical detachment</b>	Polyphenylsulphone is a plastic material not subject to corrosion and oxidation and eliminates the problem of stray currents
<b>Dimensional range</b>	40÷110 mm
<b>Suitable pipes</b>	Pexal®
<b>Equipment required</b>	Pipe cutter, calibrator, lubricant, pressing machine










**Table. Pressing profiles for Pexal® XL fittings.**

<b>Diameter</b>	<b>Pressing profile</b>
40x3,5	TH,U
50x4	TH,U
63x4,5	TH,U
75x5	U
90x7	U
110x10	U

Note: during installations, always check the suitable pressing profiles for the fitting in question.

## Range

Table. Pexal® XL fittings and accessories.

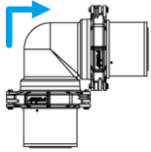
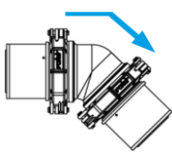
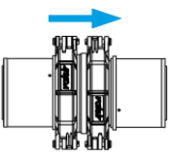
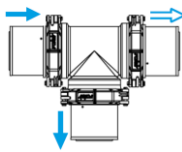
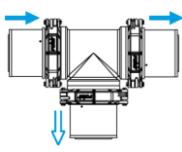
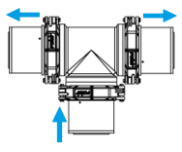
Description	Design	Description	Design
Intermediate coupling		Elbow 45°	
Elbow 90°		Tee	
Reducing		Hose barb	
Threaded elbow (male)		Threaded coupling (female)	
Reducing union tee			

## Approvals

The approvals of Valsir® supply systems are available on the website [www.valsir.com](http://www.valsir.com)

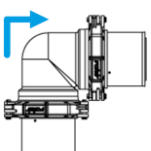
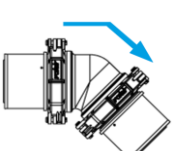
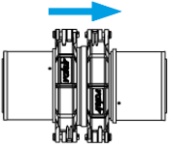
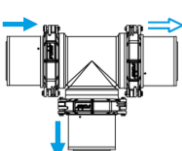
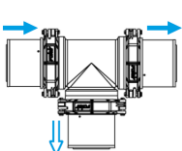
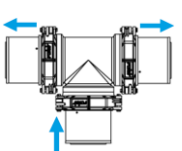
## Localized pressure losses for the Pexal® XL range

Equivalent length:

Pipe	Fitting					
						
	Equivalent length $L_{eq}$					
<b>90x7</b>	15,7	3,0	2,2	15,7	2,2	9,2
<b>110x10</b>	16,7	3,5	4,0	16,7	2,3	9,3

Note. The velocity considered is 2 m/s

K loss factor:

Pipe	Fitting					
						
	K loss factor					
<b>90x7</b>	3,6	0,7	0,5	3,6	0,5	2,1
<b>110x10</b>	3,0	0,6	0,7	3,0	0,4	1,8