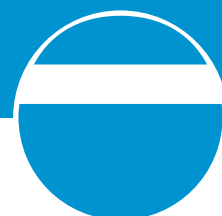


# TECHNICAL DATA SHEET

**VALSIR® SUPPLY SYSTEMS**

## PEXAL CONNEX-T



***valsir***®  
QUALITY FOR PLUMBING

# PEXALCONNEX-T

## The product

Connex-T is a revolution in the installation of multi-layer systems. It was developed by Valsir in order to **realize derivations of new or existing large diameter multilayer pipes systems**; this substantially reduces both times and costs of installation and facilitates maintenance. The solutions adopted have been studied to minimize the margin of mistake and facilitate the installation as much as possible.



PATENTED

The detail of insert profile on the pipes has been designed and engineered to minimize pressure losses. Tested in agreement to the most severe international standards on multilayer systems and in the Valsir high tech quality laboratories, Connex-T has a durability of at least 50 years as per the European Standards; in that period it can be used up to a temperature of 95° and a pressure of 10 bar.

## Features

### Money saving

On already installed Valsir multilayer pipes, Connex-T allows to realize a derivation with an important reduction of costs related both to the material and the workforce. In order to achieve a derivation on existing pipes with traditional systems it is necessary to cut a rather long portion of the pipe in order to insert two fittings. Connex-T can be installed without cutting the pipe and installing additional fittings.

### Mechanical resistance

The new Pexal Connex-T fitting for multilayer system is made up of PA-M, a polymeric material with excellent resistance to temperatures and pressures, which guarantees a great resistance to chemicals and corrosion.

### Reliability

The nut threaded insert is designed for an easy and safe installation. It is equipped with a limit system avoiding that a too high force of clamping cause damage of the multilayer pipe.



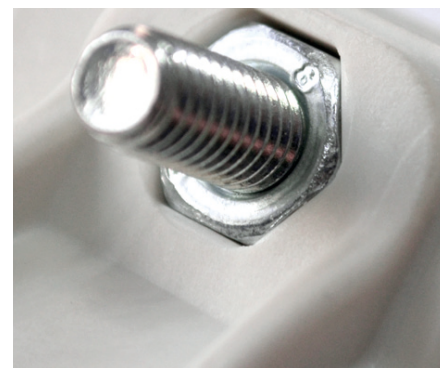
## Easy of installation

The special buckles on the half-shells allow to lock the two parts of the Connex-T before the end lock with locking screws, preventing the two pieces from falling to the ground.



Inside the back cover nuts are integrated that guarantee greater tightening of the closing screws.

The seat where they are inserted is designed to prevent it from slipping off during laying ensuring also a higher closing resistance.



Inside the holes for the locking screws profiles, were created which avoid slippage during laying. The head of the screw allows the use of both pipe wrench or screwdriver for tightening.



## Performance

Tested in accordance with the most severe international standards on multilayer systems (DVGW W542, W534 DVGW, EN ISO 21003 -2 -3 and -5), Connex-T has a guaranteed durability of at least 50 years in full compliance with standards; in this period it is allowed to be used at pressures up to 10 bar and at temperatures up to 95° C.

## Chemical resistance

The total resistance to corrosion to the main chemical compounds materials allows their use for various applications also of industrial type.

## Hygiene

The system is composed of completely non-toxic materials and certificated for the transport of drinking water. The Connex-T system is produced with fully recyclable materials and in the end of its life cycle can be sent to recycling. The manufacturing processes used are energy-efficient and have a low impact on the environment. Valsir adopts the principles of Green Building, in the interests of environmental protection and resource conservation.

## Technical data

**Table** Characteristics of Pexal Connex-T

Body raw material	PA-M
Insert raw material	Brass
Locking ring raw material	Brass
Seal raw material	EPDM
Screws and nuts	4 (for diameters 50÷63 mm) / 6 (for diameters 75÷90 mm); galvanized steel
Chemical uncoupling	The seal made of EPDM prevents the contact of the aluminum layer of the pipe with the metal body of the fitting and with the fluid.
Range	50÷90 mm (pipes) 1/2", 3/4", 1" (connections)
Pipe	Pexal®
Required tools	Screwdriver with end stop, tip for a 6 mm metal, kit mill Connex-T complete with fine sandpaper, lubricant, screwdriver, pliers.

## Range

**Table** Range of Pexal Connex-T

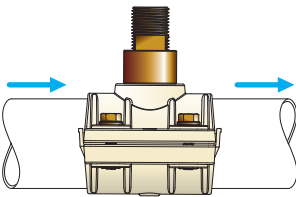
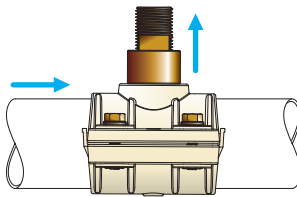
Pipe diameter	Outlet diameter	Kind of mill
50	1/2" M	1/2"
63	3/4" M	3/4"
75	3/4" M	3/4"
75	1" M	1"
90	1" M	1"

## Approvals:

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

## Pressure losses of Pexal® Connex-T

**Table** Equivalent lengths  $L_{eq}$  for water supply systems.

Dimention of Pexal Connex-T	Flow direction									
										
	Water speed [m/s]									
	0,3	0,5	0,8	2	4	0,3	0,5	0,8	2	4
	Equivalent lenghts L <sub>eq</sub>									
50x1/2"	0,3	0,3	0,4	0,4	0,5	1,9	2,1	2,3	2,7	3,0
63x3/4"	0,3	0,4	0,4	0,5	0,6	2,3	2,6	2,8	3,2	3,6
75x3/4"	0,3	0,4	0,4	0,5	0,6	2,5	2,8	3,0	3,5	3,9
75x1"	0,3	0,4	0,4	0,5	0,6	2,6	2,8	3,1	3,6	3,9
90x1"	0,4	0,4	0,5	0,6	0,6	2,9	3,2	3,5	4,1	4,5

Note. In heating and conditioning systems the maximum velocity recommended is 0.3 m/s for the connections to the terminal units, 0.5 m/s for the horizontal manifolds and 0.8 m/s for the common pipes. In water supply systems the maximum velocity recommended is 2 m/s for the supply manifolds, the risers and the branch lines to the floors, and 4 m/s for the end sections that connect to the individual points of use.

## PLUMBING

WASTE SYSTEMS



SUPPLY SYSTEMS



GAS SYSTEMS



FLUSH SYSTEMS



BATHROOM SYSTEMS



TRAPS



RADIANT SYSTEMS



DRAINAGE SYSTEMS



HRV SYSTEM



ACADEMY



SEWER SYSTEMS



WATER TREATMENT



## BUILDING

**valsir**<sup>®</sup>  
QUALITY FOR PLUMBING

**VALSIR S.p.A.**  
Località Merlaro, 2  
25078 Vestone (BS) - Italy  
Tel. +39 0365 877.011  
Fax +39 0365 81.268  
e-mail: valsir@valsir.it

**www.valsir.com**

Soggetta all'attività di direzione e coordinamento ex art. 2497 bis C.C.  
da parte di Fondital Group S.p.A. - Codice Fiscale 02075160172