flowing ideas

EZCONNECT 2.0

Connection kits
for terminal units

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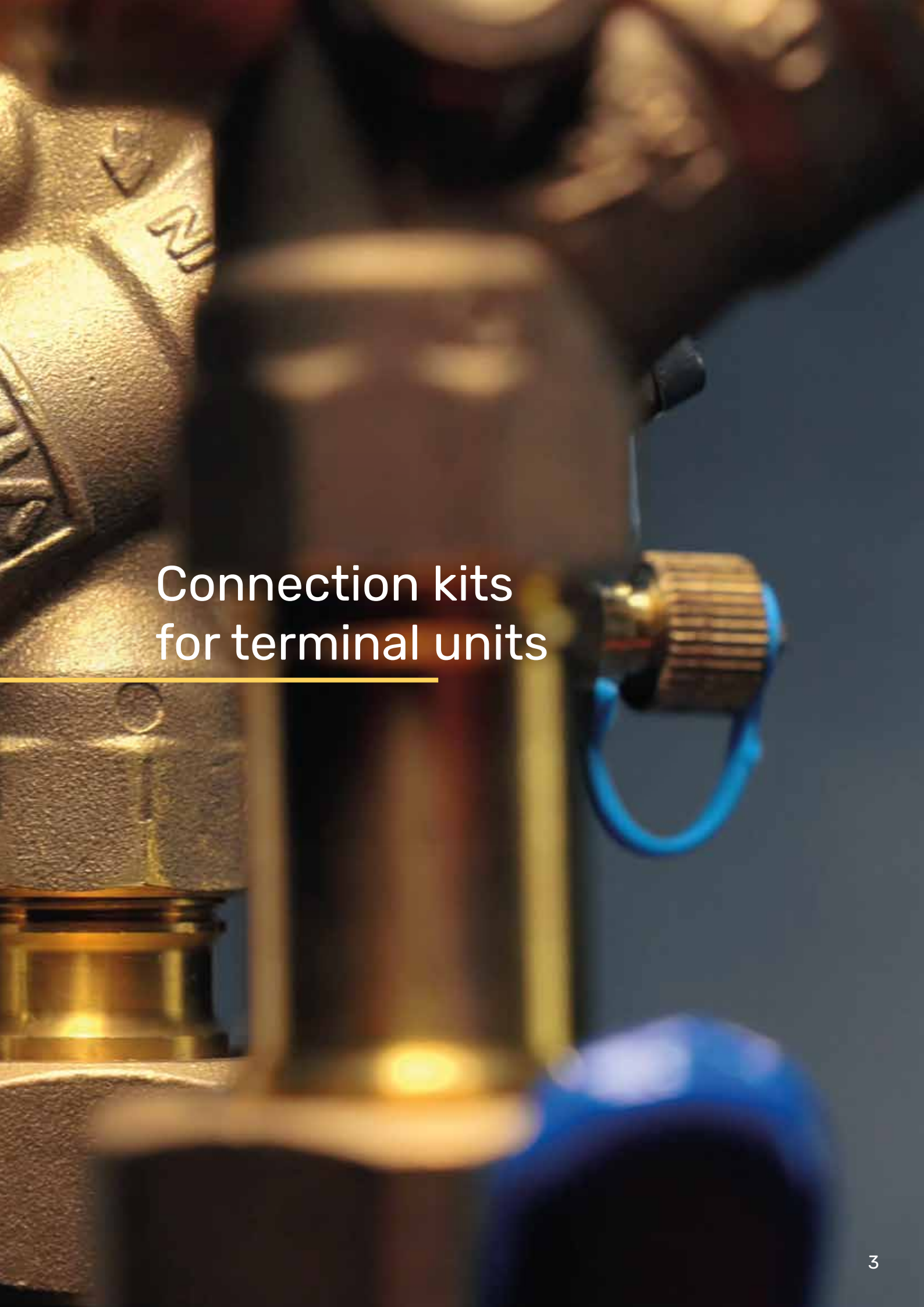
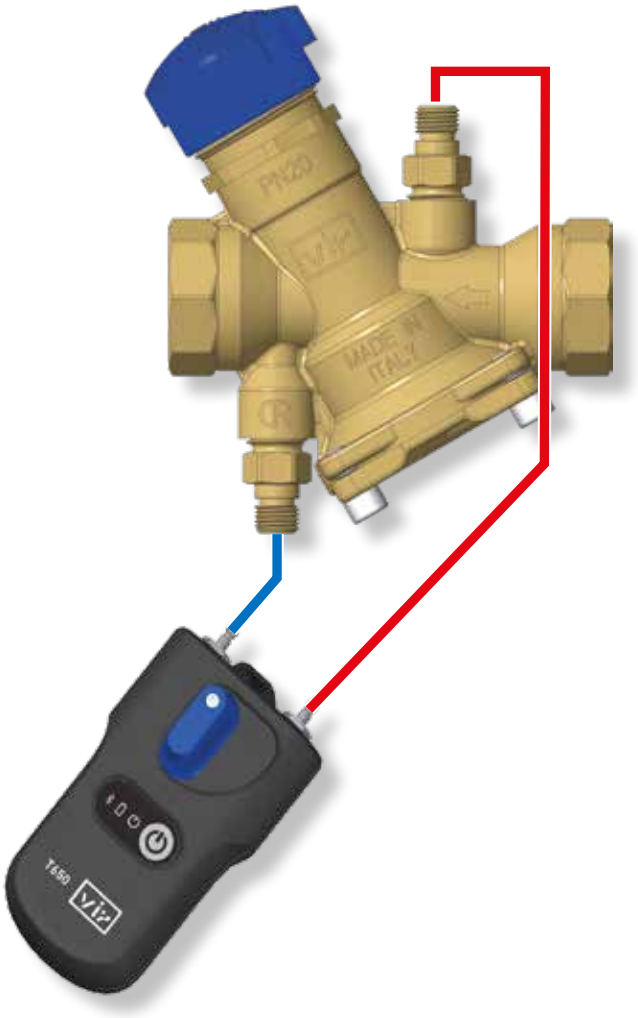


Connection kits for terminal units

DESCRIPTION & BENEFITS

EZCONNECT is the flexible solution developed by VIR for easy installation and maintenance of HVAC terminal units such as fan coils, heat exchangers and so on. Each kit is pre-assembled and tested by VIR in order to ensure a successful connection, reduce the on-site assembly operations and prevent potential failures. EZCONNECT is the result of VIR's experience in the designing and manufacturing of HVAC components. In order to supply the most reliable solution for HVAC applications, the components of the kits are made in DZR (dezincification resistant) materials for the prevention of stress corrosion cracking.

Main Features:

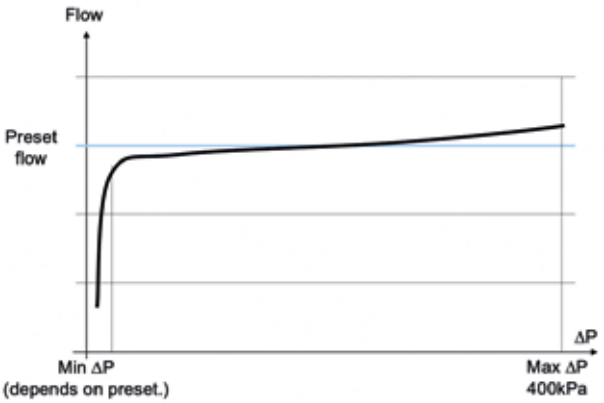


Simplified installation and maintenance of the terminal unit, allowing its cleaning and/or disassembling while the rest of the system is working.

Independent flow regulation of each terminal unit, by means of the VIR Pressure Independent Control Valve (PICV).

VIR's PICV is suitable for actuated operation, both with ON/OFF (Vaurien) and modulating (Vaurien-M) actuators.

Reliable design, material selection and certified quality control system.



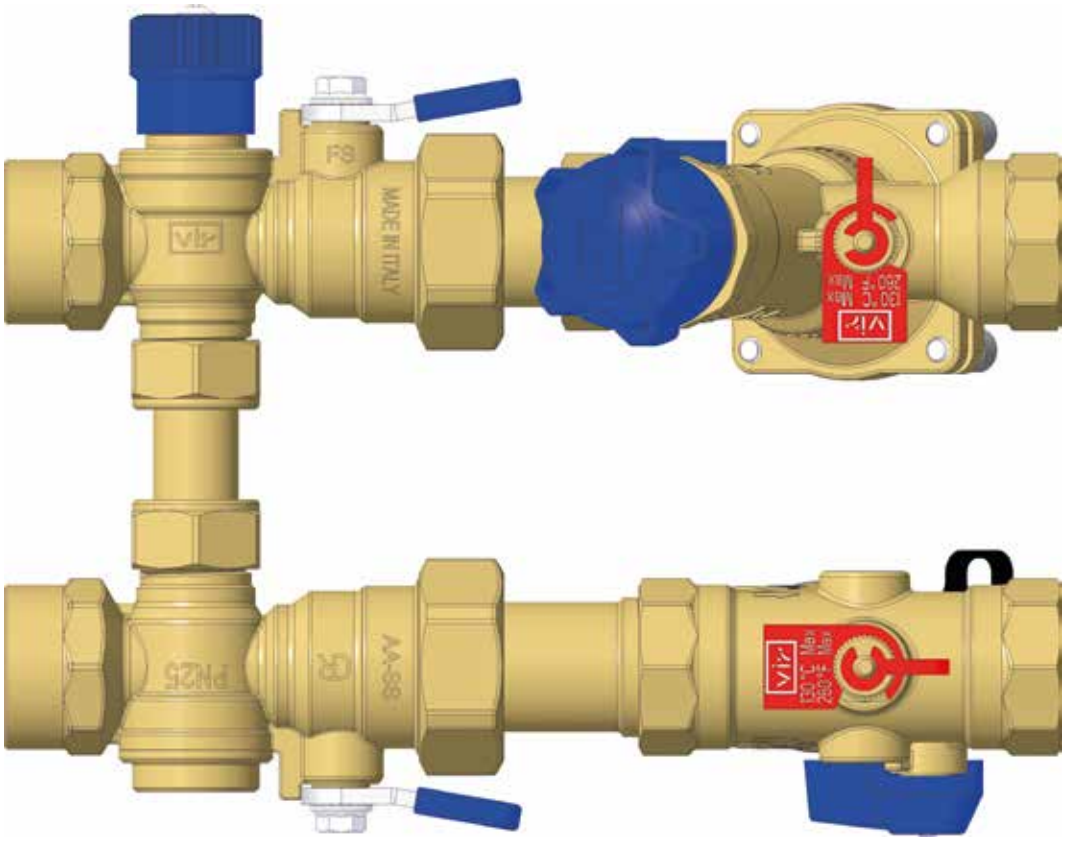
The presetting of the PICV allows to select the flow rate to be kept constant (by means of dynamic balancing) through the terminal unit.
The differential pressure on the PICV shall be within its working range and can be checked using the sensor T650, connected to the test ports on the valve.

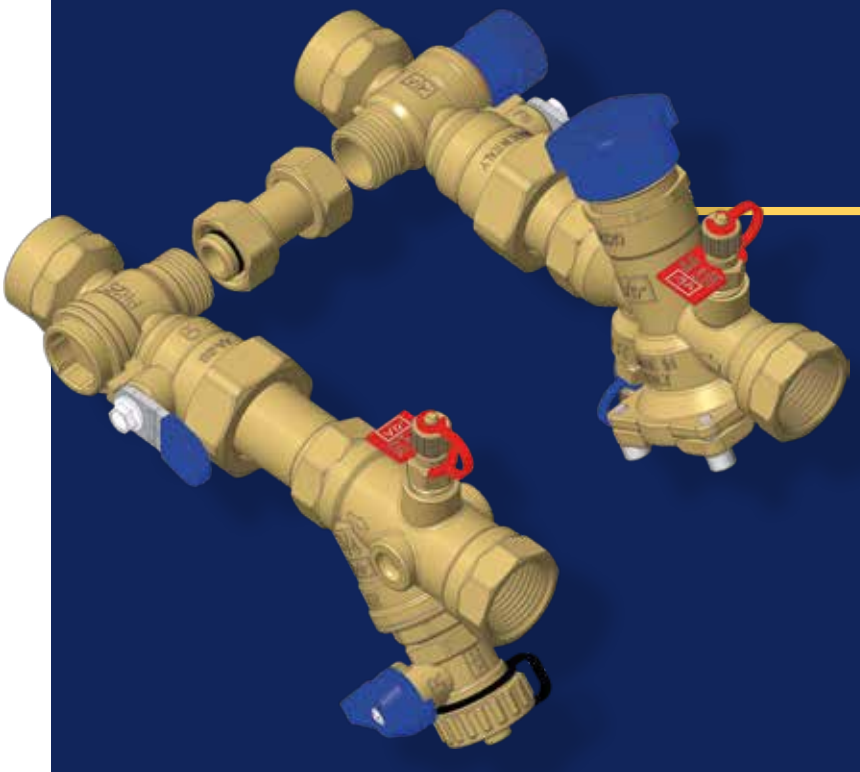
CODES & CONFIGURATIONS

EZCONNECT 2.0 is the new generation of VIR connection kits for terminal units.
New features have been developed, starting with the customizable distance between the supply and return branches, continuing with an improvement of the design in order to reduce the number of internal connections and optimize the overall dimensions, up to the strainer with drain cock and test port, which allow the kit to suit additional functions.

Code	Nominal Size	Pipe Connection	CtoC [mm]	Ball ID	FILTER	PICV[1]	Flow [l/h]	Unit Connection[2]	L[3] [mm]	H[3] [mm]
JLQ2A5030.3	1/2"	Rp 1/2"	80 mm	DN 15	1/2"	1/2"	108 ÷ 540	Rp 1/2"	179	169
JLQ2A5034.3	1/2"	Rp 3/4"	80 mm	DN 15	1/2"	1/2"	108 ÷ 540	Rp 1/2"	182	169
JLQ3A5032.3	3/4"	Rp 3/4"	80 mm	DN 15	3/4"	3/4"	224 ÷ 1120	Rp 3/4"	200	169
JLQ3B5030.3	3/4"	Rp 3/4"	80 mm	DN 20	3/4"	3/4"	224 ÷ 1120	Rp 3/4"	211	174
JLQ3B5034.3	3/4"	Rp 1"	80 mm	DN 20	3/4"	3/4"	224 ÷ 1120	Rp 3/4"	216	174
JLQ4B5032.3	1"	Rp 1"	80 mm	DN 20	1"	1"	432 ÷ 2160	Rp 1"	256	174

Note 1: ΔP_{min} on the PICV 24÷36 kPa depending on the preset.
Note 2: flexible hoses of different size can be connected using dedicated niples.
Note 3: overall dimensions refer to the assembled kit, without insulation shells.



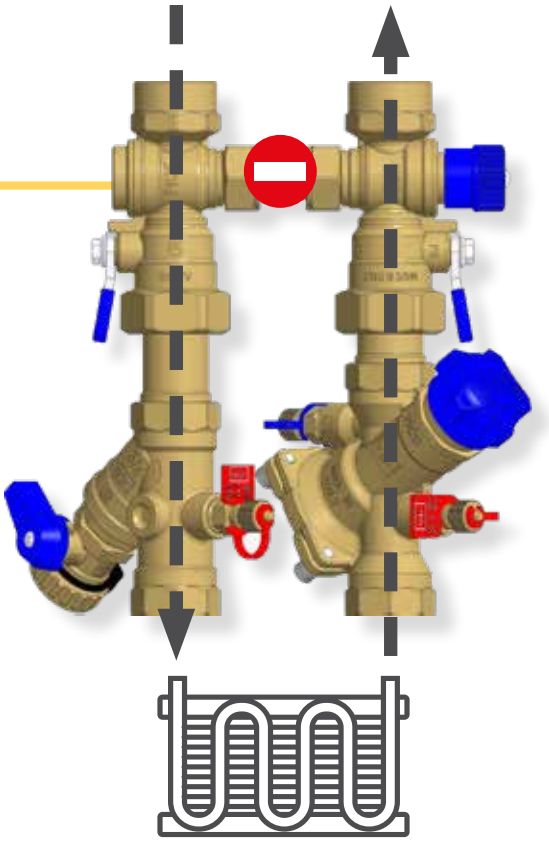


The **“Center to Center” distance** between the supply and return branches for standard configurations is 80 mm but it can be easily customized, upon contractor request, by replacing the by-pass pipe.

FUNCTIONAL SCHEMES

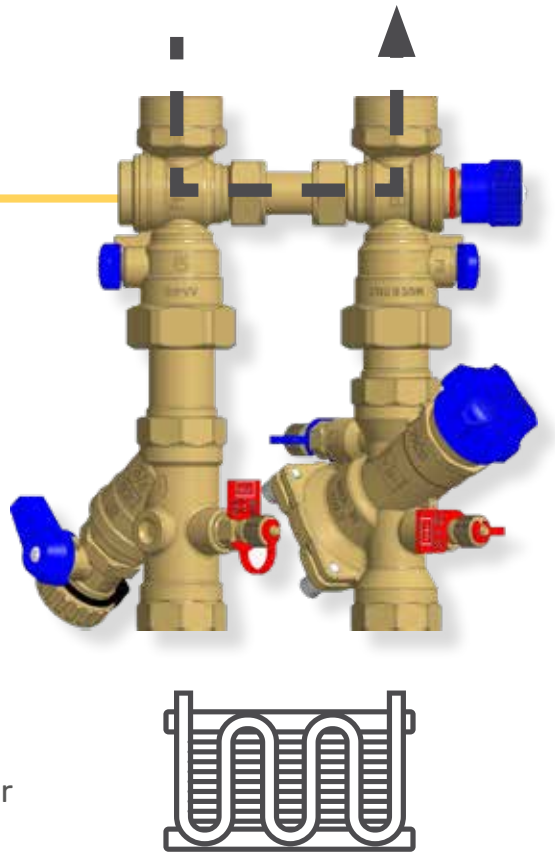
1 NORMAL OPERATION

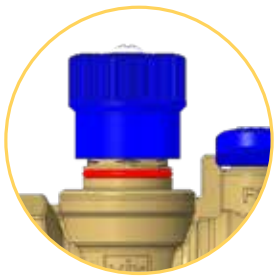
In the terminal unit's normal operating conditions, the by-pass is closed and both the isolating ball valves are open. A strainer is placed on the supply branch in order to protect the unit from residual debris, and a PICV is placed on the return branch in order to regulate the flow though the hydraulic circuit.



2 SYSTEM FLUSHING UNIT MAINTENANCE

Before starting the terminal unit, it is advisable to flush the system in order to remove impurities and debris which could affect the correct functioning of the unit.

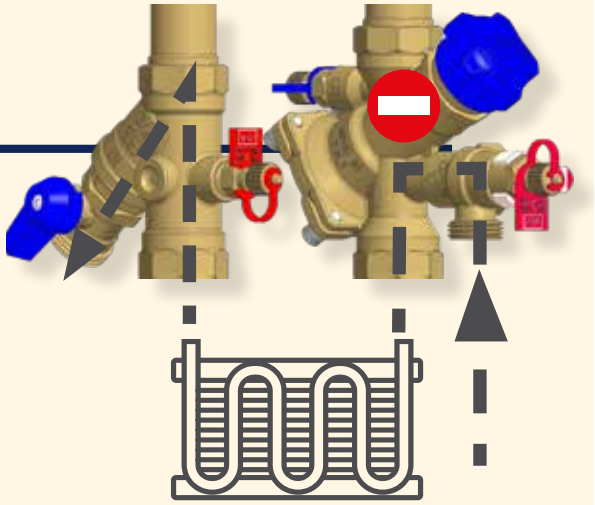




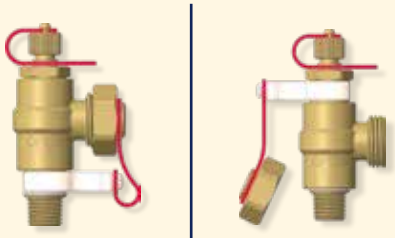
EZCONNECT allows to easily perform this function by opening the by-pass and closing both of the isolating valves. The same configuration can be used for the unit's maintenance.

3 UNIT FLUSHING

By installing a VIR test port with drain 9315 on the balancing valve, with the by-pass open and both the isolating ball valves closed, it is possible to clean the terminal unit without disconnecting it from the line.



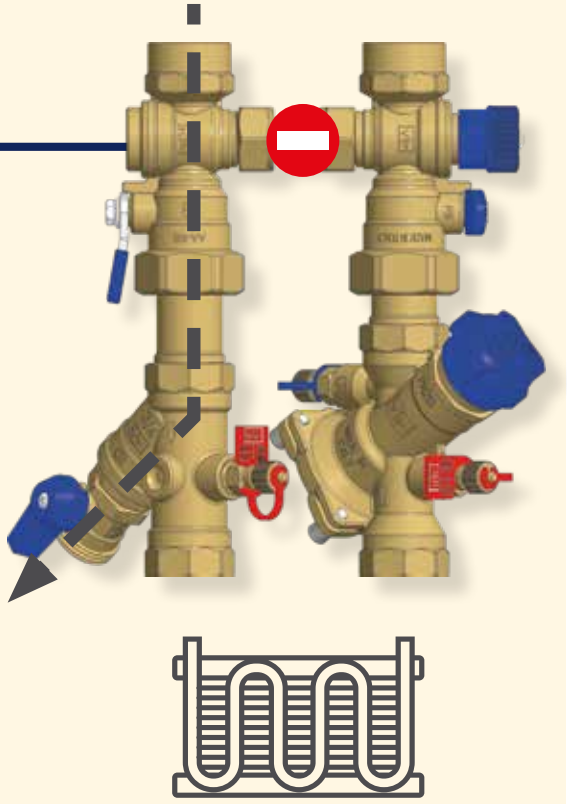
9315 - Test Port with Drain



CLOSED **OPEN**

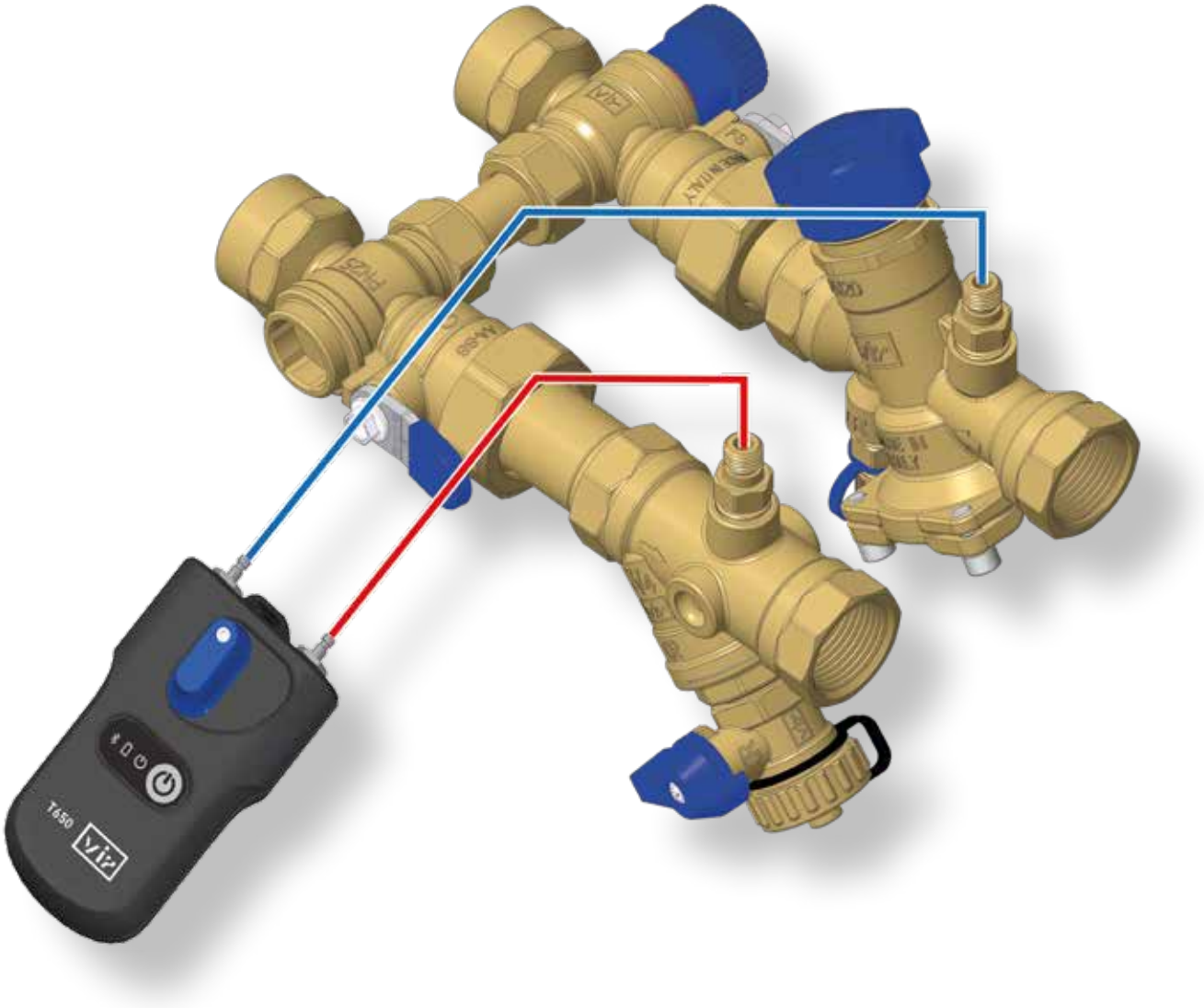
4 DIRECT FLUSHING

By closing the by-pass and the outlet valve and opening the inlet valve, it is possible to perform the flushing of the inlet piping and the strainer, draining the water into the atmosphere.



ADDITIONAL FEATURES

The test port installed on the strainer can be used, in combination with the inlet test port of the PICV, in order to check the **pressure drop on the terminal unit**, by means of the sensor T650, even when it is working in normal operation.



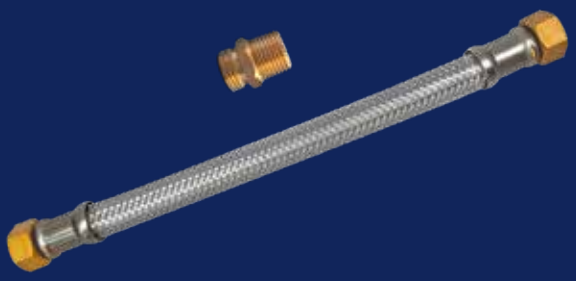
The strainer placed on the supply branch can also be used for flushing the system, by means of the drain valve mounted it the valve's lower part.

The cap of the strainer can be unscrewed and the filter, made of stainless steel, can be washed and replaced before reusing.
The seat between the strainer body and cap is made by a P.T.F.E. gasket.

An air vent valve can be placed, as an option, on the supply branch, providing the point of installation allows to purge the air from the system in that position.

ACCESSORIES

92HS
EPDM Perox hoses with stainless steel braided sleeve and brass fittings



VAURIEN
Linear Thermoelectric Actuator

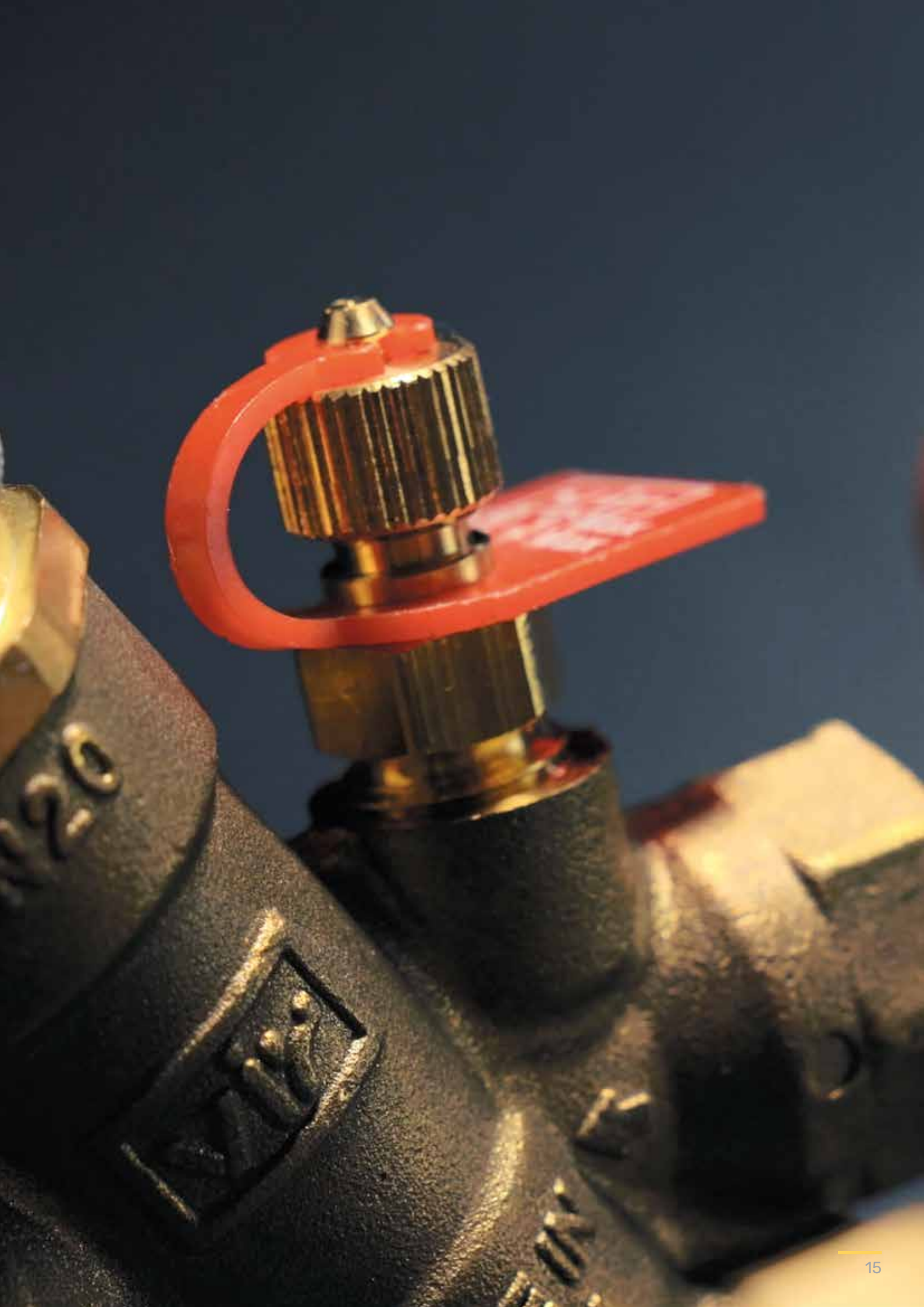
VAURIEN-M
Modulating Electric Actuator

9400
DZR Brass Metering Station

INSULATING SHELLS
made in crosslinked expanded polyethylene (PE) with closed cells are available for both heating and cooling applications

Shrink wrapped packaging
is available upon request.

YOUR PROJECT



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