

Circulation valves



PEGLER) Circulation valves Installation and maintenance

Each Circulation Valve is delivered with a set of instructions.

- **1.** Ensure that the circulation valve is installed with regard to the flow directional arrow on the valve body.
- **2.** When using the Insulation jackets, ensure that there is enough space to allow for their fitting when the valve is in place.
- **3.** The circulation temperature is selected by turning the numbered dial in line with the pointer on the valve mechanism.
- **4.** The valve contains an isolating feature that is used when the thermal element needs to be inspected or replaced.
- **5.** A drain valve is incorporated in the isolating valve; this in turn has a hollow stem that is used to house the bi metallic thermometer for temperature measurement.

Circulation Valves are supplied without thermometers. These can be purchased separately as accessories.

When servicing is completed, ensure that the insulation box is re fitted correctly.

If there are significant pipe losses in the circuit then a valve of the next highest diameter may be used.

Thermal Disinfection

The valve mechanism is designed to allow for an increase in temperature above the maximum set position. This thermal disinfection mode permits hot water to circulate at temperatures above 70°C and may reach 75°C before re stabilizing at the pre-selected temperature. This high temperature disinfection will kill bacteria such as Legionella, but also presents a risk of scalding at the draw off outlets. It is strongly recommended that a risk assessment is carried out prior to thermal disinfection and duty of care exercised.

Valve settings

There is a choice of valves with different temperature ranges. Each one is preset at a default setting.



The valves with a 30°C to 45°C range of temperature settings are preset at approximately 43°C and those with a 50°C to 60°C range are preset at approximately 57°C. The circulation valve can be adjusted to settings within these ranges by altering the dial position on the valve headwork.

Pegler Yorkshire circulation valves incorporate a stop valve and drain valve unit. This allows for some flow adjustment via a manual control, as well as providing an isolating facility when repair or maintenance is required. The drain valve also allows for upstream pipe lengths to be drained for servicing. The hollow drain off spindle also allows for the fitment of the bi-metallic thermometer for temperature reading.

Regulating cartridges are available as spares if required.

Insulation jackets will need to be stored safely during servicing and then refitted after the valve has been adjusted and set at the correct commissioned temperature.









PEGLER) Circulation valves Introduction, features and benefits

Domestic hot and cold water systems can, if not properly monitored and regulated by a circulation valve, be a breeding ground for the legionella bacteria.

What is legionella bacteria?

Legionella bacteria – the cause of legionnaires' disease – occur naturally in the sources from which mains water is derived (namely lakes, rivers, surface and ground waters).

In the UK the problem is most often associated with hot and cold water systems in hospitals, hotels and other large



multi-outlet buildings.
But domestic systems
can also provide a
breeding ground for the
bacteria. This can then
be transmitted into

the occupants' lungs through, for example, the water spray created by a shower.

Circulation valves

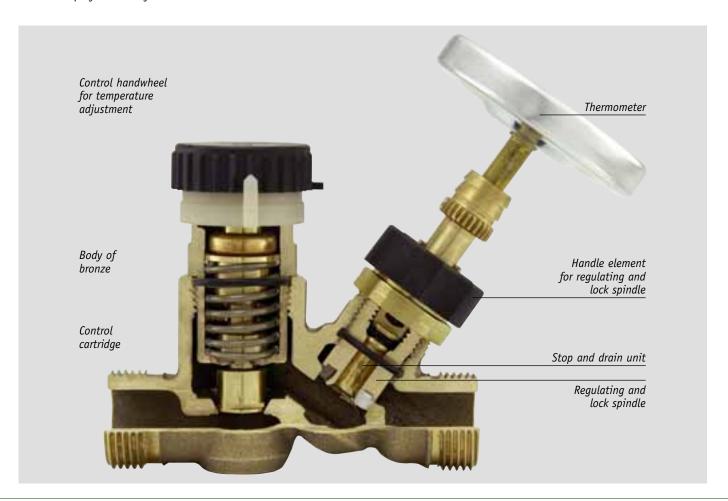
The Pegler thermostatically-controlled circulation valve is a powerful ally in the battle to defeat the health dangers posed by legionella. By automatically achieving thermal balancing and high-temperature disinfection of the hot water system, it denies the bacteria the optimum conditions for growth (between 22-43°C).

Then there are other significant benefits, including system protection against the build-up of limescale, preventing scalding, and helping to minimise both hot water costs and water consumption.

Pegler is a brand long associated with the many market-leading qualities for which the Pegler Yorkshire name and reputation are renowned throughout the world.

Features

- DIN-DVGW approved.
- For warm water circulation pipes according to DVGW norm W551, W552 and W553.
- Medium touching parts made of bronze.
- Automatic thermal disinfection in the temperature ranges above 65°C.
- Maximum flow rate over a separate valve cone adjustable and lockable.
- Range also includes thermometer and insulation jackets.



PEGLER) Circulation valves Product range

C	Circulation valve without insulation										
P	atteri	n Description	Α	В	С	D	Ε	F	G	Order Code	Price
P	603	DN 15 fxf 30°-50°C	57	75	35.5	98	136	1/2"	-	16500	144.09
P	603	DN 20 fxf 30°-50°C	57	75	45	125	147	3/4"	-	16501	155.43
P	605	DN 15 fxf 50°-60°C	57	75	35.5	98	136	1/2"	-	16502	144.09
P	605	DN 20 fxf 50°-60°C	57	75	45	125	147	3/4"	-	16503	155.43
P	605	DN 25 fxf 50°-60°C	57	75	51.5	136	150	1"	-	16504	189.61
P	604	DN 15 mxm 30°-50°C	57	75	35.5	98	136	-	1/2"	16505	144.09
P	604	DN 20 mxm 30°-50°C	57	75	34	103	136	-	3/4"	16506	155.43
P	606	DN 15 mxm 50°-60°C	57	75	35.5	98	136	-	1/2"	16507	144.09
P	606	DN 20 mxm 50°-60°C	57	75	51.5	103	136	-	3/4"	16508	155.43
P	606	DN 25 mxm 50°-60°C	57	75	40	113	138.5	-	1"	16509	189.61

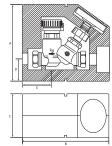


Circula	ation valve regulation cartridge		
Pattern	Description	Order Code	Price
PCV1	DN 15 30°-50°C	16510	78.28
PCV1	DN 20 30°-50°C	16511	87.97
PCV2	DN 15 50°-60°C	16512	78.28
PCV2	DN 20 50°-60°C	16513	87.97
PCV2	DN 25 50°-60°C	16514	92.81



Insulation jacket							
Description	Α	В	С	D	Ε	Order Code	Price
For circulation valve DN 15	143	162	82	41	54	16515	30.67
For circulation valve DN 20	143	162	90	41	54	16516	33.09
For circulation valve DN 25	157	162	110	55	54	16517	38.47





Accessories		
Description	Order Code	Price
Bimetallic thermometer Stop and drain unit	16518 16519	20.18 82.59





PEGLER) Circulation valves Performance and flow charts

Technical data

Maximum operating temperature: 90°C

Maximum admissible operating pressure: 16 bar

Nominal width: DN 15/DN 20/DN 25

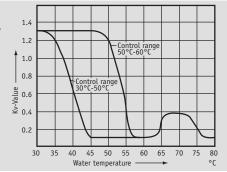
Design: sleeve/sleeve or external thread/external thread

Control range: 30°C - 50°C 50°C - 60°C Default setting: approx. 43°C approx. 57°C

Thermal disinfection: > 65°C

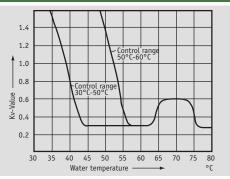
DN15 circulation valves

Kv-value is based on a working installation with water temperature between 43°C and 57°C.



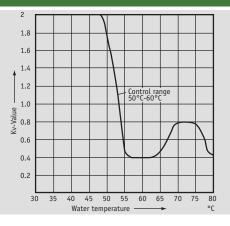
DN20 circulation valves

Kv-value is based on a working installation with water temperature between 43°C and 57°C.

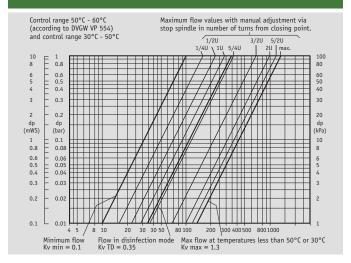


DN25 circulation valves

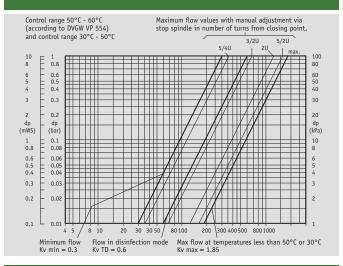
Kv-value is based on a working installation with water temperature at 57°C.



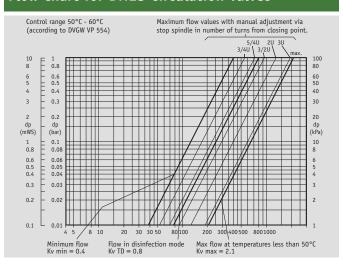
Flow chart for DN15 circulation valves



Flow chart for DN20 circulation valves



Flow chart for DN25 circulation valves





Our brands:





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