

519 Ecopas

differential bypass valves



519 Ecopas differential bypass valve



Application

The valve is installed in the bypass between the flow and return pipes and opens on rising differential pressure to allow flow through the bypass. This maintains the differential pressure between the flow and return pipes at the predetermined set value.

Differential bypass valves are used in systems with variable flowrates.

Radiator circuits utilising thermostatic radiator valves or heating systems incorporating 2-port control valves are typical applications.

Differential bypass valves can be used in both constant and variable volume systems to prevent the differential pressure from rising, which can seriously affect the performance of the 2-port control valves.

Design

The 519 differential bypass valves use a stainless steel compression spring to exert a pre-determined force onto the disc.

The force is adjustable by turning the control knob to set the required differential pressure between 1 to 6 m head which corresponds to 10 to 60 kPa. The setting is then locked using the locking screw on the side of the control knob to prevent unauthorised adjustment.

The 519500 and 519700 valves have a threaded female inlet and a threaded male union outlet.

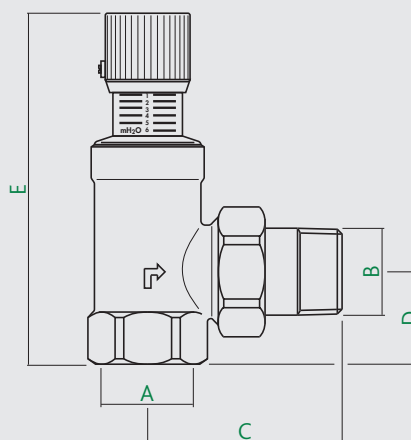
The 519002GLW valve for use with copper tube has compression ends complying with BS EN 1252-2* and has been independently tested to meet British Gas specifications.

Construction Details

Component	Material	Grade
Body	Brass	BS EN 12165 CW617N
Disc	Brass	BS EN 12164 CW614N
Disc facing	EPDM	
'O' rings	EPDM	
Union joint gasket	Asbestos free NBR	
Control knob	ABS polymer	
Spring	Stainless steel	

Product	Size	Inlet	Outlet
C-519002GLW	22	compression	compression
519500	¾"	screwed female	screwed male union
519700	1¼"	screwed female	screwed male union
519504	¾"	screwed female	screwed male union

Dimensions



Prod Code	A	B	C	D	E	kg
519002GLW	Ø22	Ø22	38	36	113	0.45
519500	G¾	G¾B	59	26	104	0.45
519700	G1¼	G1¼B	89	41	158	1.19
519504	G¾	G¾B	59	26	104	0.45

Technical Data

Medium:	water glycol solution
Max. percentage of glycol:	30%
Temperature range:	0 to 110°C
Max. working pressure:	10 bar
Setting range:	Other codes Code 519504
	1 to 6m head 10 to 60 kPa 10 to 40m head 100 to 400 kPa

WRAS approved products

Installation

The valves are very simple to install with just two joints to make.

The flow through the valves must follow the direction arrow on the valve body.

The valves can be fitted in any orientation.

* Use with R250 (half hard) copper tube

Altecnic Ltd Mustang Drive, Stafford, Staffordshire ST16 1GW

T: +44 (0)1785 218200 E: sales@altecnic.co.uk

Registered in England No: 2095101

altecnic.co.uk

AL 299 09-04-18

E & O.E

© Altecnic Limited. 2018

ALTECNIC™

altecnic
Caleffi group