

COMMISSIONING

To check whether the valve is operating correctly, carry out the following checks after the system is filled and vented. Ensure that the override lever is in the Auto position and the insert guide is removed.

FOR GRAVITY SYSTEM:

HOT WATER ONLY.

Set the room thermostat to minimum or turn the CH off at the programmer.
Set the cylinder thermostat to maximum and turn the HW on at the programmer.
The valve should be open and the boiler only should fire.

CENTRAL HEATING ONLY.

Set the cylinder thermostat to minimum or turn the HW off at the programmer.
Set the room thermostat to maximum and turn the CH on at the programmer.
The valve should remain closed but the boiler should fire and the pump should run.

HOT WATER AND CENTRAL HEATING.

Set the room and cylinder thermostat to maximum and turn the HW and CH on at the programmer.
The valve should be open. The boiler should fire, pump run and the pipes on the Port B should get hot.

FOR A FULLY PUMPED SYSTEM:

If the valve is fitted on a HW circuit.

Set the cylinder thermostat to maximum or turn the HW on at the programmer. The valve should open. The boiler should fire, the pump run and the pipe on the Port B side should get hot.

If the valve is fitted on a CH circuit.

Set the room thermostat to maximum or turn the CH on at the programmer. The valve should open. The boiler should fire, the pump run and the pipe on the Port B side should get hot.

Reset both thermostats and the programmer to their normal settings.

Please note the above assumes that both programmer and thermostats are being used. If this is not the case, ignore the action described for the item not fitted.

SPARES

The actuator and body for the Z228XL zone valve (with changeover auxiliary switch) can be purchased separately as spares or as replacement parts (see page 1).

HORSTMANN RESERVE THE RIGHT AT ANY TIME AND WITHOUT NOTICE TO CHANGE ANY PRODUCT OR INFORMATION CONTAINED WITHIN THIS LEAFLET.

Email: sales@horstmann.co.uk
Website: www.horstmann.co.uk

Horstmann Controls Limited
Bristol
BS4 1UP

t:0117 9788 773 - f:0117 9788 701



LEAFLET No P80957
ISSUE 2

ZONEPLUS Z228XL
INSTALLATION AND
COMMISSIONING INSTRUCTIONS



HORSTMANN

APPLICATION

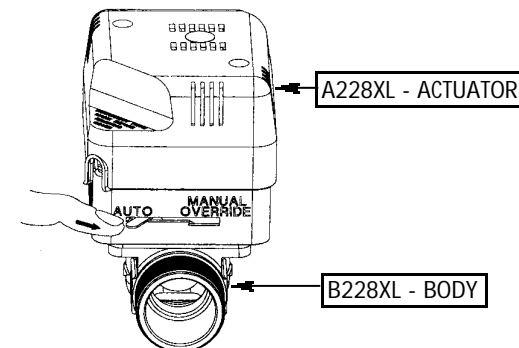
The Z228XL valve with changeover auxiliary switch has been designed to control the water circulation in both gravity HW systems and larger fully pumped systems, which employ a single pump, by allowing the flow to either or both HW and CH circuits using either a single or separate valves.

INSTALLATION AND CONNECTION SHOULD ONLY BE CARRIED OUT BY A SUITABLY QUALIFIED PERSON AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE IEE WIRING REGULATIONS. A CLASS 'A' SWITCH (HAVING CONTACT SEPARATION OF AT LEAST 3MM IN ALL POLES) MUST BE INCORPORATED IN THE FIXED WIRING AS A MEANS OF DISCONNECTING THE SUPPLY, NORMALLY AT THE CONSUMER UNIT. THE SYSTEM MUST BE APPROPRIATELY FUSED.

WARNING : ISOLATE MAINS SUPPLY BEFORE COMMENCING INSTALLATION

SPECIFICATION

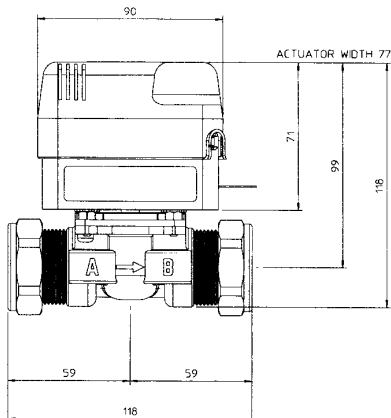
Motor supply voltage: 230V AC, 50Hz
Power consumption: <6W
Lead supplied: 1 meter 5 core cable. Industry standard colours used
No earth connection required as unit is double insulated
Operating flow temperature: -5°C to 88°C
Switch rating: 3Amps
Switch type: SPDT
Maximum ambient temperature: 50°C
Maximum static pressure: 8.6 Bar
Maximum differential pressure: 0.5 Bar
Pipe fitting size: 22mm compression
Actuator: Maximum time to power open - 20 seconds
Maximum time to spring close - 10 seconds
Override lever: For manual operating to open valve for system draining or filling. During normal operation, the lever must be in the auto position.
(See diagram opposite).



The Z228XL consists of a 2 port valve body (Ref.B228XL) to which a self-contained actuator (Ref.A228XL) is attached.

OPERATION

Valve position - In the event that mains power is disconnected the valve automatically spring-returns to the closed position (Port A).



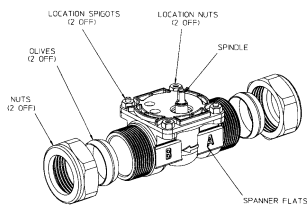
INSTALLATION

POSITIONING OF VALVE

On new installations fit the Z228XL valve ensuring that the actuator head is NOT below the horizontal level of the pipework and that flow is in the direction of the arrow. Also check that neither the open vent or the cold feed are isolated. This will ensure system and product safety at all times. Remember to make allowances for working, maintenance and replacement.

FITTING OF VALVE BODY TO PIPEWORK

Fit the valve body using the 28mm compression fittings provided. Tighten the compression nuts sufficiently to make a watertight seal, only gripping the valve by its body. Take care not to over tighten.

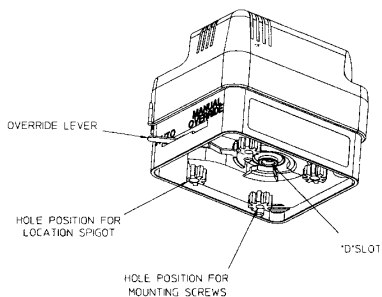


FIT ACTUATOR TO VALVE BODY

Position the actuator on the valve body lining up the valve spindle with the 'D' shape slot. A yellow guide strip has been inserted behind the Override lever to assist installation, please remove the guide once the actuator installation is complete and before the system is used. The actuator guide holes should line up with the spigots on the valve body.

Fix with the screws provided and tighten lightly. The override lever should now be on the Port B side.

Set the override lever to manual. Fill, test and thoroughly flush the system (see diagram and instruction under the Specification section located on page 4 of this guide).



WIRING CONNECTIONS

The 5 core cable fitted to the actuator can now be connected to the system following the simple colour-coded guide below.

FOR A GRAVITY HW SYSTEM:	
Wire Colour	System Connection
Blue	Any Neutral supply.
Brown	'Call' terminal of cylinder stat if fitted, otherwise the HW on terminal of the programmer.
White	Live terminal on pump and 'Call' terminal of room stat if fitted, otherwise the CH on terminal of the programmer.
Orange	Live terminal on boiler
Grey	Any permanent live supply.

FOR A FULLY PUMPED SYSTEM AND FITTED TO THE HW CIRCUIT:	
Wire Colour	System Connection
Blue	Any Neutral supply.
Brown	'Call' terminal of cylinder stat if fitted, otherwise the HW on terminal of the programmer.
White	Not used. Make electrically safe.
Orange	Live terminal of pump and boiler
Grey	Any permanent live supply.

FOR A FULLY PUMPED SYSTEM AND FITTED TO THE CH CIRCUIT:	
Wire Colour	System Connection
Blue	Any Neutral supply.
Brown	'Call' terminal of room stat if fitted, otherwise the CH on terminal of the programmer.
White	Not used. Make electrically safe.
Orange	Live terminal of pump and boiler
Grey	Any permanent live supply.

No earth connection is required. Ensure all connections are good and the screw secure. A torque of 0.75Nm is recommended for fixing the wires in place.

NOTE: In the event that the Z228XL is being used in an unconventional system, the above connections may be incorrect. In this case, please seek advice.