

ESBE Rotary Valves for Heat Pumps

High Flow and low Pressure Drop Diverter Valves



Rotary diverting valves from ESBE are perfectly suited to domestic heat pump systems due to their high flow capability and low pressure drops.

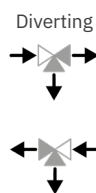


VRG Valve Features

- DZR Brass construction
- Up to 10 bar (PN10) operating pressure
- Wide range of sizes from DN15 to DN50
- Connections to suit most pipe dimensions
- Compact, flexible and easy to install
- Perfect match with ESBE series ARA600 actuators

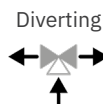
L-Pattern - Diverting Internal Thread + Compression

ARTICLE NO.	SIDE ENTRY	KVS	CONNECTION
11600900	VRG131 20	6.3	RP ¾"
11601000	VRG131 25	6.3	RP 1"
11601100	VRG131 25	10	RP 1"
11601200	VRG131 32	16	RP 1 ¼"
11603000	VRG133 20	6.3	CPF 22 MM (compression)
11603100	VRG133 25	10	CPF 28 MM (compression)
11603400	VRG131 40	25	RP 1 ½"
11603600	ESBE VRG131 50	40	RP 2"



T-Pattern - Diverting Internal Thread

ARTICLE NO.	BOTTOM ENTRY	KVS	CONNECTION
11620100	VRG231 20	6.3	RP ¾"
11620200	VRG231 25	10	RP 1"
11620300	VRG231 32	16	RP 1 ¼"
11621400	VRG231 40	30	RP 1 ½"
11621600	VRG231 50	40	RP 2"



Rotary Actuators to Suit VRG Valves

ARTICLE NO.	2-POINT (ON/OFF) / SWITCH LIVE SIGNAL ONLY / DIVERTING ONLY
12121200	ESBE ARA656 2-P SPST 230VAC 6NM 60S AUX SWITCH
12120900	ESBE ARA655 2-P SPST 230VAC 6NM 60S ← Best Match for heat pumps
12120800	ESBE ARA645 2-POINT SPST 230VAC 6NM 30S
12121100	ESBE ARA646 2-P SPST 230VAC 6NM 30S AUX SWITCH



Our ARA 2-point actuators are controlled via a permanent live and switch live (on/off) signal.

Perfect for Higher Flow Rate Systems

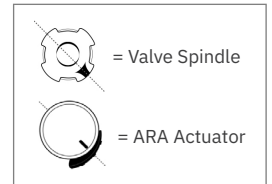
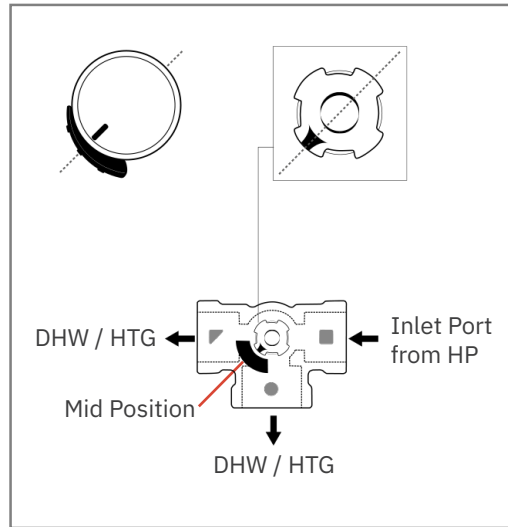
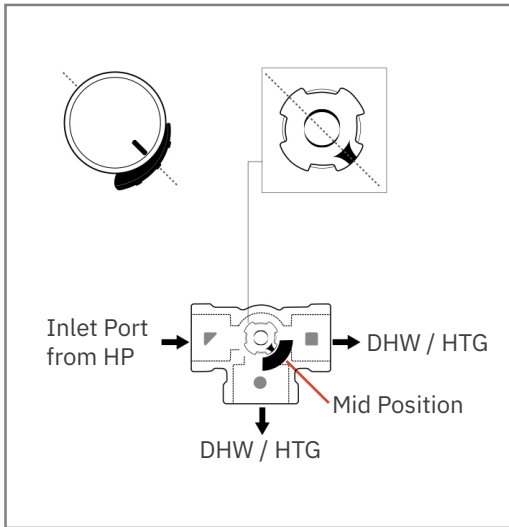
Spring return valves are often used in central heating systems with a boiler as they are designed for lower flow rates, but these are not suitable for higher flow rate heat pump systems as they create a high pressure drop within the system.

To effectively divert flow from the heat pump to heating or hot water with low pressure drops, a higher KVS (flow rate) valve is required. ESBE diverter valves are designed for managing high flow rates with low delta T to maximise the efficiency of the system, reduce water hammer and avoid breakdowns.

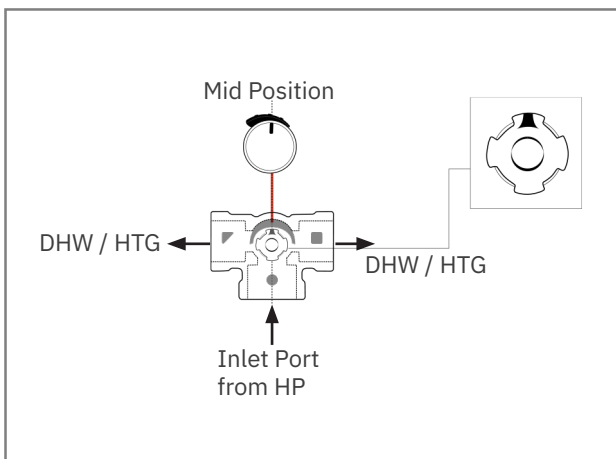


Typical Application Schematics

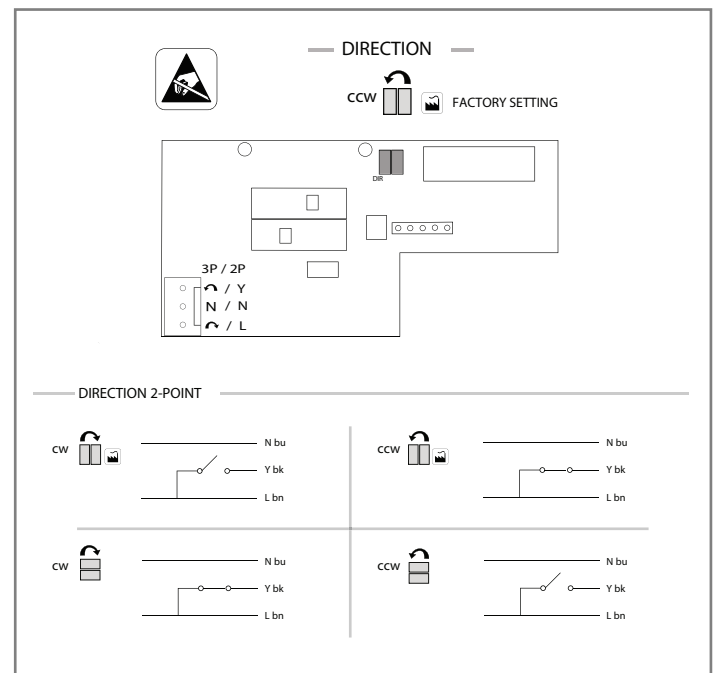
VRG 131 – L Pattern Valve



VRG 231 – T Pattern Valve



ARA Actuator - Internal Jumper



All ESBE actuators are pre-set in mid-position.

During set-up, ensure that the valve spindle is in between the two outlet ports prior to mounting the actuator.



Installation & Setup Guides



SCAN FOR VRG 130
SETUP GUIDE



SCAN FOR VRG 230
SETUP GUIDE



SCAN FOR ARA200
2-POINT GUIDE

To change the switch live direction of travel for DHW demand, an internal jumper within the actuator will need to be altered 90 degrees.

Please refer to page 8 of the ARA 2-point Actuator Instruction Manual for further details.

Available to Purchase from your Preferred Plumbing Merchant.

Contact our friendly team on 01489 779068 for technical support or sizing advice.