DATA SHEET

VZU RQ Three-way Zone Ball Valves with Easy Click Actuator

Main Features	
Application	They are used as diverter valves in heating or solar thermal systems using water or antifreeze, and in drinking water systems. Without a control signal, the valves are open to port B; when a control signal is applied, they open to port A. Port AB remains open at all times, and the flow of fluid through this port is not interrupted during switching. They can be controlled by a thermostat or other controller with a 230 V switching contact. The valve position and the presence of the control signal are indicated on the control knob. Thanks to the Easy Click system, the actuator can be easily removed and fitted without the use of tools and without removing the valve from the pipework. The valves are available in two versions: nickel-plated with an actuator fitted with an auxiliary switch and the option of manual operation (designation NI MS), or non-nickel-plated without an auxiliary switch and without the option of manual operation.
Working fluid	Working fluid Drinking water, water; water/glycol (max. 1:1) or water/glycerine (max. 2:1).
Installation	Installation Any position, except for the actuator facing downwards.

Control	
Electric control	The neutral conductor (blue wire) and the permanent live (black wire) must be permanently connected to the valve actuator. With this connection, the valve is open to port B. When the switched live (brown wire) is applied, the valve opens to port A and closes port B; simultaneously, in the NI MS valve version, the auxiliary contact (red and grey wires) closes. When the switched live is switched off, the valve returns to port B and the auxiliary contact opens.
Auxiliary switch	The actuator for valves marked MS is fitted with a potential-free auxiliary switch. The switch is open in end position B (OFF) and closed during shifting and in end position A (ON).
Manual control	For valves with manual operation, pressing the button marked with a hand symbol switches the actuator to manual mode. The actuator can then be operated manually using the knob. For valves without a manual override function, the actuator must be removed to operate the valve manually. The valve can then be operated by turning the spindle. The actuator can be removed and refitted without the use of tools and without removing the valve from the piping.

REGULUS spol. s r. o. Czech Republic
Do Koutů 1897/3, 143 00 Praha 4
Tel.: +420 241 765 191
Fax: +420 241 763 976
E-mail: sales@regulus.eu
Web: www.regulus.eu

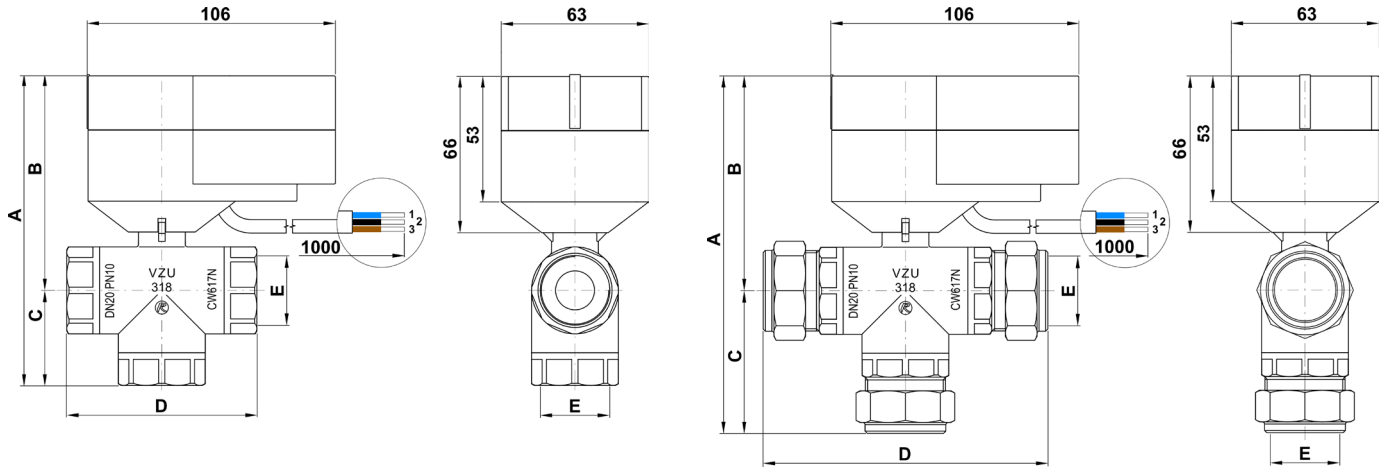
DATA SHEET

VZU RQ Three-way Zone Ball Valves with Easy Click Actuator

Technical data of valves with no manual control and no auxiliary switch

Marking	Code	Nominal diameter DN	Connecting dimension E	A [mm]	B [mm]	C [mm]	D [mm]	Open/close time [s]	K_{vs} [m³/h]	Weight [kg]
VZU RQ318-1F	22053	20	3 x G 1" F	133	90	43	86	13	8.4	0.86
VZU RQ318-1M	22055	20	3 x G 1" M	133	90	43	86	13	8.2	0.90
VZU RQ318-5/4M	22057	20	3 x G 5/4" M	145	90	55	110	13	8.4	1.06
VZU RQ318-Cu28	22059	20	3 x Cu 28 mm	155	90	65	130	13	8.2	1.24

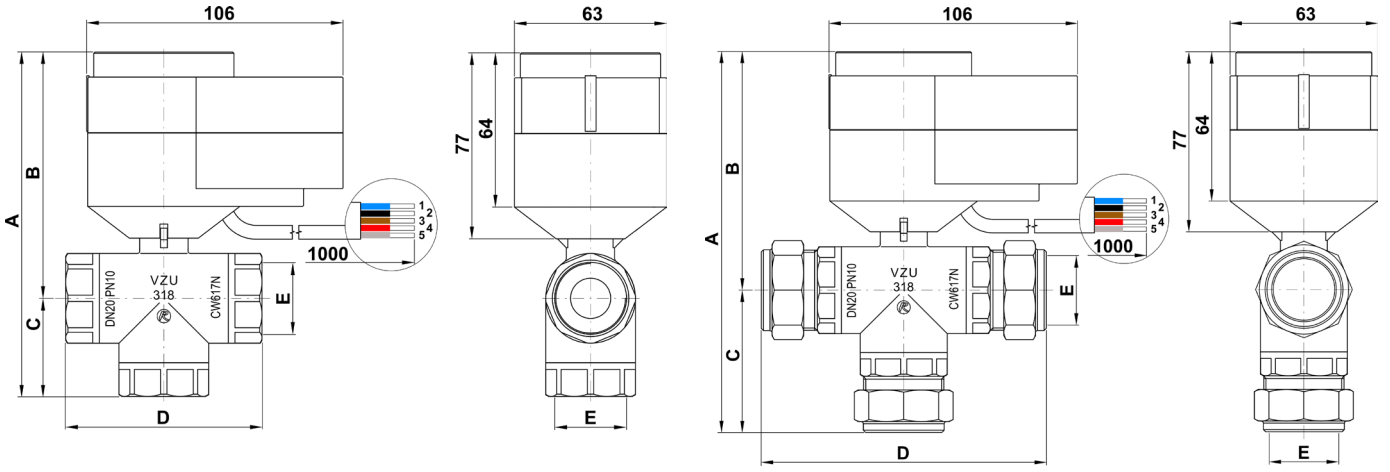
Dimensions of valves with no manual control and no auxiliary switch [mm]



Technical data of manually operated valves with auxiliary switch

Marking	Code	Nominal diameter DN	Connecting dimension E	A [mm]	B [mm]	C [mm]	D [mm]	Open/close time [s]	K_{vs} [m³/h]	Weight [kg]
VZU RQ318-1F NI MS	22054	20	3 x G 1" F	144	101	43	86	13	8.4	0.90
VZU RQ318-1M NI MS	22056	20	3 x G 1" M	144	101	43	86	13	8.2	0.94
VZU RQ318-5/4M NI MS	22058	20	3 x G 5/4" M	156	101	55	110	13	8.4	1.10
VZU RQ318-Cu28 NI MS	22060	20	3 x Cu 28 mm	166	101	65	130	13	8.2	1.28

Dimensions of manually operated valves with auxiliary switch



R E G U L U S spol. s r. o. Czech Republic
Do Koutů 1897/3, 143 00 Praha 4
Tel.: +420 241 765 191
Fax: +420 241 763 976
E-mail: sales@regulus.eu
Web: www.regulus.eu

DATA SHEET

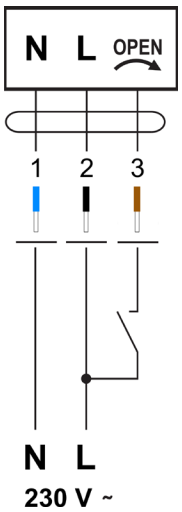
VZU RQ Three-way Zone Ball Valves with Easy Click Actuator

Valve Data	
Max. working pressure	10 bar
Max. pressure difference	10 bar
Fluid working temperature	7 °C to 90 °C (110 °C in short term)
Angle of rotation	90°
Valve housing material	CW617N brass (nickel-plated – valves marked NI)
Valve spindle material	CW617N brass (nickel-plated – valves marked NI)
Valve ball material	CW617N brass, chrome-plated
O-rings material	EPDM, FPM
Spindle guide and ball seal material	PTFE

Actuator Data	
Power supply	230 V 50 Hz
Max. power input	5 W
Auxiliary switch	230 VAC, 3(1) A
Torque	5 Nm
Ambient working temperature	5 °C to 55 °C
IP rating	IP42
Protection class	II
Power cable length	1 m
Power cable cross section	5 x 0.5 mm² or 3 x 0,5 mm² (MS version)
Power cable material	Cu, PVC insulation

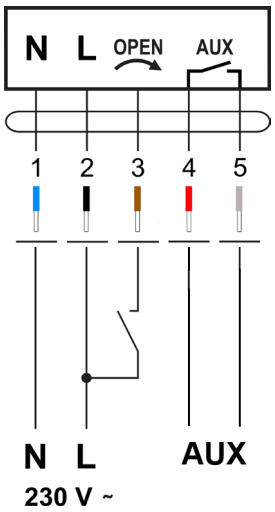
Electrical Wiring

no manual control, no aux. switch



1 – blue – neutral conductor,
2 – black – live – permanent,
3 – brown – live – switched by a controller or thermostat with a 230 V switching contact.

with manual control and aux. switch



1 – blue – neutral conductor,
2 – black – live – permanent,
3 – brown – live – switched by a controller or thermostat with a 230 V switching contact,
4 – red – potential-free auxiliary switch,
5 – grey – potential-free auxiliary switch.