

VY5200

Actival Motorized Two-Way Valve

The Actival VY5200 is a series of motorized two-way valves with a screw connection. The valve and actuator are integrated in a single unit. The valve body can be used for the control of chilled/hot water and steam.

The 4 to 20mA_{dc} and 2 to 10V_{dc} input methods provide proportional control.



Specifications

Valve body pressure rating		2MPa (valve size: 15 to 32A), 1.6MPa (valve size: 40A, 50A)					
Close-off ratings		980kPa (490kPa for valve size 50A)					
Piping connections		Screw (taper thread))					
Valve materials	Body	Bronze casting (CAC406)					
	Plug and stem	Stainless steel (equivalent to SCS)					
	Seat ring	Aluminum bronze (for water), heat-proof Teflon (for steam)					
	Gland packing	Inorganic fiber					
	Gasket	Non-asbestos joint sheet					
Allowable fluid temperature and pressure		For water: 0 to 150°C and 1.6MPa 0 to 80°C and 2MPa (valve size: 15A to 32A) For steam: 0 to 175°C and 0.98MPa					
Applicable fluids		Chilled/hot water or hot water (in high temperature): VY52□8F Steam: VY52□9F					
Power		24Vac ±15% 50/60Hz					
Power consumption		F motor type: 7VA Other types: 8VA					
Timing		63±5s (50Hz), 53±5s (60Hz)					
Ambient temperature		-20 to +50°C (for fluid temperature 0 to 150°C) -20 to +40°C (for fluid temperature 150 to 175°C)					
Ambient humidity		5 to 95% RH					
Actuator materials	Case	Aluminum alloy casting					
	Cover	Plastic (polycarbonate resin)					
	Yoke	Steel plate					
Control signal		Nominal 135 Ω feedback potentiometer, nominal 135Ω resistance input, 4–20mAdc input (input impedance: 100kΩ), and 2–10Vdc input (input impedance: 150kΩ or more).					
2–10Vdc analog output (only with 4–20mAdc and 2–10Vdc inputs)		Range: 2Vdc (0%) to 10Vdc (100%) Max. load: 10kΩ or more (max. 1mA)					
Protective structure		Splash-proof (equivalent to IP54)					
Mass	Valve size	15A	10A	25A	32A	40A	50A
	Mass (kg)	3.2	3.8	4.2	4.6	6.8	9.1

Selection Guide

I II III IV V VI Example: VY5218F0011

Segment	Model No. selection	Description		
I	Basic No.	VY52	Screw-type motorized two-way valve	
II	Actuator/valve control signal	1	Nominal 135Ω feedback potentiometer (F motor type)	
		2	Nominal 135Ω resistance input (E motor type)	
		3	4–20mA _{dc} input with 2–10V _{dc} feedback signal	
		4	2–10V _{dc} input with 2–10V _{dc} feedback signal	
III	Actuator/valve rating/material	8	Bronze casting (CAC406) (for water)	
		9	Bronze casting (CAC406) (for steam)	
IV	Actuator type	F	Splash-proof (IP54), standard torque type, and actuator with terminal block (valve sizes 15A to 50A).	
V	Option	00	None	
VII	Valve size and Cv value		Valve size	CV value
		11	15A (Rc 1/2")	1.0
		12	15A (Rc 1/2")	2.5
		13	15A (Rc 1/2")	4.0
		14	15A (Rc 1/2")	1.6 (for steam only)
		21	20A (Rc 3/4")	6.0
		22	25A (Rc 1")	10
		31	32A (Rc 1 1/4")	16
		41	40A (Rc 1 1/2")	25
		51	50A (Rc 2")	40

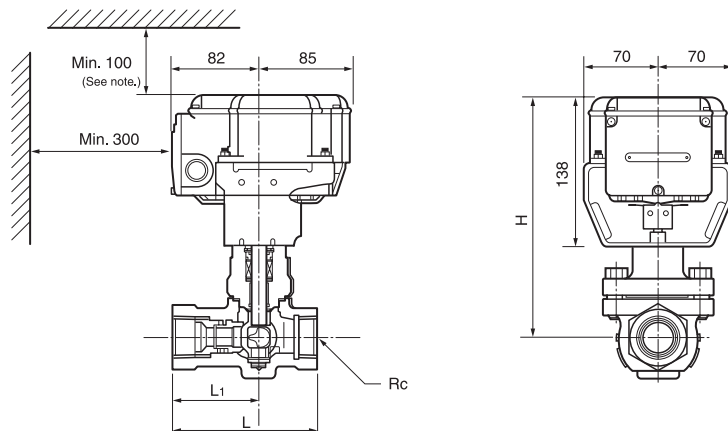
• A circle (○) denotes availability.

Accessories (sold separately)

Model No.	Description
AT72-J1	Power supply transformer

Dimensions

(Unit: mm)



Note: To open the top cover, leave a space at least 300mm wide.

Connection diameter (mm)	Connection Rc	L	L ₁	H
15	1/2	105	62	203
20	3/4	117	74	203
25	1	131	81	208
32	1 1/4	140	88	208
40	1 1/2	159	97	240
50	2	168	99	240