

VY5300, MY5300

Actival Control Ball Valve and Actuator

The VY5302A is a two-way ball valve with threaded connection, and the VY5303A is a three-way ball valve. These valves proportionally control chilled/hot water for HVAC (heating, ventilation, and air conditioning) control. They are used in combination with the MY53X0A actuator.



MY53X0A

VY5302A

VY5303A

Specifications

● VY5302A and VY5303A valves

Model	VY5302A	VY5303A
Type	Two-way ball valve with female threaded connection	Three-way ball valve with female threaded connection
Close-off ratings	1MPa (0.5MPa for valve size 32A to 40A)	0.5MPa (0.3MPa for 32A and 40A)
Piping connections	Screwed (taper thread)	
Applicable actuator	MY53X0A Electro-Mechanical Actuator	
Applicable fluids	Chilled/hot water	
Pressure rating	1.6MPa	
Valve materials	Body Ball and stem Seat ring	Bronze casting Stainless steel PTFE
Allowable fluid temperature	0°C to 100°C	
Mounting direction	In any position ranging from upright (with the actuator mounted on the valve) to sideways	
Mass	Model No. Valve size Mass (kg)	VY5302A 15A 20A 25A 32A 40A 0.4 0.6 0.8 1.2 1.5 VY5303A 20A 25A 32A 40A 0.7 0.9 1.4 1.7

● MY53X0A actuator

Power	24Vac ±15% 50/60Hz
Applicable valves	VY5302A two-way control ball valve VY5303A three-way control ball valve
Power consumption	F motor type: 4 VA max., Other types: 7 VA max.
Timing	60±6s (50Hz), 50±6s (60Hz)
Ambient temperature	-20 to +50°C (for fluid temperature 0 to 100°C)
Ambient humidity	5 to 95% RH
Actuator materials	Case Cover Yoke
Control signal	Floating (3-position) with nominal 135Ω feedback potentiometer, nominal 135Ω feedback potentiometer, nominal 135Ω resistance input, 4–20mAdc input (input impedance: 100Ω), and 2–10Vdc input (input impedance: 150kΩ or more).
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	0.5kg

Selection Guide

● VY5302A ☐ ☐ ☐ Example: VY5302A0011

Segment	Model No. selection	Description
I	Basic No.	VY5302 Two-way ball valve
II	Option	A00 None
III	Valve size and Cv value	Valve size Cv
	11	15A (Rc 1/2") 2.5
	12	15A (Rc 1/2") 4.0
	22	20A (Rc 3/4") 6.3
	23	25A (Rc 1") 10
	31	32A (Rc 1 1/4") 16
	41	40A (Rc 1 1/2") 25
	42	40A (Rc 1 1/2") 40

● VY5303A ☐ ☐ ☐ Example: VY5303A0021

Segment	Model No. selection	Description
I	Basic No.	VY5303 Three-way ball valve
II	Option	A00 None
III	Valve size and Cv value	Valve size Cv
	21	20A (Rc 3/4") 4.0
	22	20A (Rc 3/4") 6.3
	23	25A (Rc 1") 10
	31	32A (Rc 1 1/4") 16
	41	40A (Rc 1 1/2") 25

● MY53X0A ☐ ☐ ☐ ☐ ☐ ☐ Example: MY5310A1001

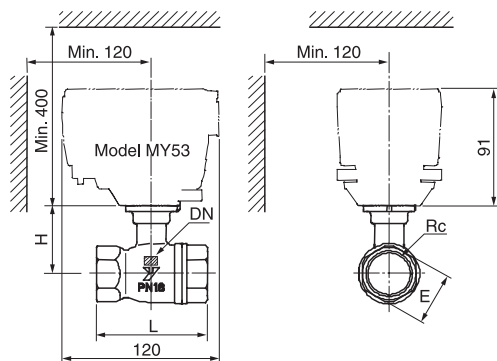
Segment	Model No. selection	Description
I	Basic No.	MY53 ↓ Low torque actuator
II	Control signal	1 ○ – Floating (3 position) with nominal 135Ω feedback potentiometer (F motor type) 2 ○ – Nominal 135Ω resistance input (E motor type) 3 – ○ 4–20mAdc input 4 – ○ 2–10Vdc input
III	Combined valve type and control fluid type	0 ○ ○ Bronze proportional control valve (2-way/3-way) / water
IV	Type	A ○ ○ Splash-proof non-spring return type
V	Options	1 ○ ○ One built-in auxiliary switch (normally open, 30Vac, 1A) 2 – ○ 2–10Vdc output for position feedback
VI	Cable length	001 ○ ○ 60cm 002 ○ ○ 3m

• A circle (○) denotes availability.

Dimensions

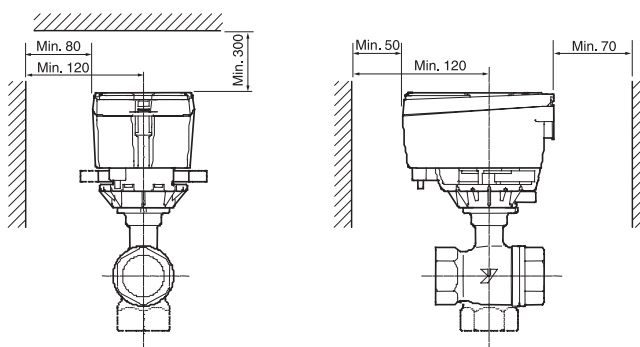
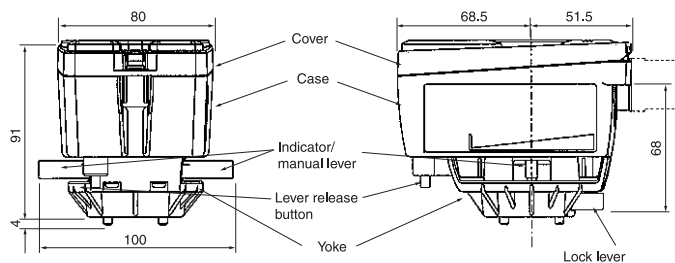
(Unit: mm)

• VY5302A

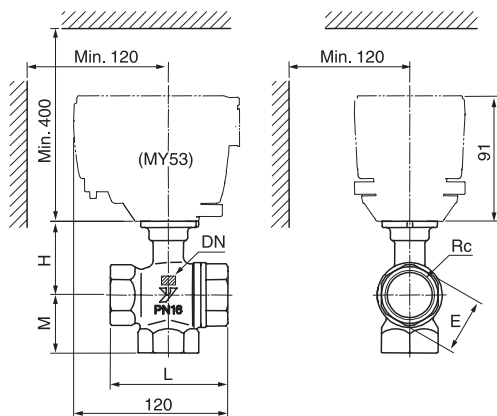


Model number	L	H	E
VY5302A0011	63	48	27
VY5302A0012	63	48	27
VY5302A0022	72	50	33
VY5302A0023	85	54	41
VY5302A0031	99	69	50
VY5302A0041	109	72	55
VY5302A0042	109	72	55

• MY53X0A



• VY5303A



Model number	L	H	E	M
VY5303A0021	72	50	33	36
VY5303A0022	72	50	33	36
VY5303A0023	85	54	40	42
VY5303A0031	99	69	49	50
VY5303A0041	109	72	55	52