

Control Ball Valves

ACTIVAL

***Designed for Installers –
one-touch lever-locking
mechanism makes
actuator and valve
installation easy!***

When you purchase control ball valves you must evaluate quality, performance and price. Yamatake control ball valves (ACTIVAL) get high marks in each area. As one of the world's leading controls manufacturers, Yamatake is known for high quality, well-built products.

ACTIVAL features simplify installation for you and increase comfort for your customers and their tenants. They are built to perform over the long haul. Given the high quality construction and the exclusive features, the ACTIVAL is a great valve.

Yamatake Control Ball Valves (**ACTIVAL**) Combine Superior Performance and Great Value



- Low cost control ball valve with globe valve performance
 - Stainless steel ball and stem
 - PTFE seat ring
 - Double O-ring seal
- Cast bronze valve body
 - Corrosion resistant
 - Dezincification resistant
- Precise temperature control
 - Excellent equal percentage flow characteristics
- Available in a wide range of capacities and in the most popular sizes
 - 2-way valves 1/2" to 1-1/2" – 2.5 Cv to 40 Cv
 - 3-way valves 3/4" to 1-1/2" – 4.0 Cv to 25 Cv

FEATURE	BENEFIT
One-touch lever-locking mechanism	Reduces assembly, installation time
Snap-on cover and screwless wire terminals	Faster installation time increases your profit
Limit switch turns off motor power at full opening position	Provides energy savings and prolongs actuator life
IP54 splash - waterproof enclosure	Allows use in severe conditions
Anti-condensation structure prevents condensation and dripping from the actuator in humid environments.	Prolongs the life of the actuator and reduces maintenance callbacks
One actuator can be used with all sizes	Simplifies your ordering and reduces inventory cost
Rated for 200,000 full-stroke cycles	Reliable performance in building automation and control systems
Can be applied as zone valves, unitary equipment controls, small Air Handling Unit (AHU) heating and cooling coils and domestic hot water	Wide application means greater convenience and opportunities for your company
Characterized "equal percentage" flow provides precise temperature control. Can replace globe valves in control systems.	Increases the operating life of the valve and reduces energy use and cost

One-Touch Lever-Locking Mechanism*

Designed with the installer in mind – the lever-locking mechanism on the actuator greatly simplifies installation.



No tool is required to attach an actuator! The snap-on cover and screwless wire terminals makes installation fast and easy.

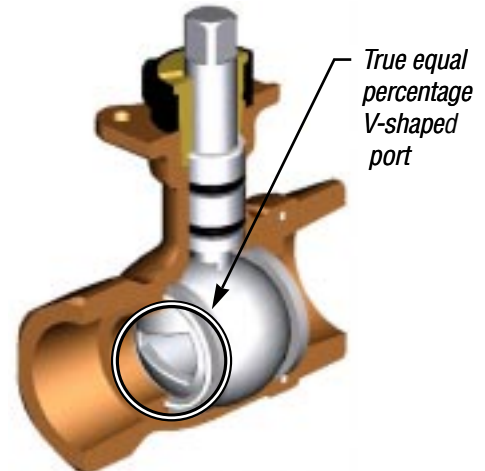
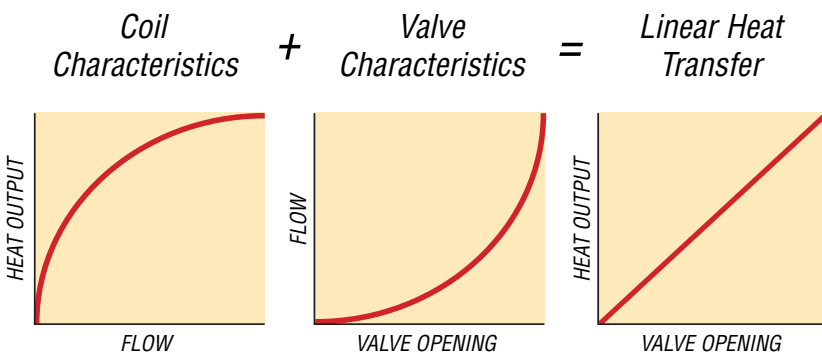
*PATENT PENDING



TWO & THREE-WAY VALVES		SPECIFICATIONS	
Type	Two-way and three-way control ball valve, female screwed		
Applicable fluid	Chilled/hot water, glycol solutions (to 50 percent)		
Pressure rating	PN16 (1.6 MPa)		
Materials	Body:	Bronze casting	
	Ball, Stem:	Stainless steel	
	Seat ring:	PTFE	
	Grand packing:	Double O-ring	
Fluid temperature	0° to 100°C		
Flow characteristic	Two-way valve: Equal percentage	Three-way valve: Linear	
Mounting position	Horizontal or vertical piping		



ACTUATOR		SPECIFICATIONS		
Power supply	24V AC ±15 % 50/60 Hz			
Timing	60/ 50 +/- 5 sec. (50/60 Hz)			
Control signal input	Floating Floating with 135 ohm feedback potential 2 to 10 VDC input Nominal 135 ohm input			
Environmental conditions		Rated operating conditions	Transport storage conditions	
	Ambient Temperature	-20° to 50°C	-20° to 70°C	
	Humidity	5% to 95 %RH	5% to 95 %RH	
Enclosure	Plenum rated – IP54 (IEC 529) – Splash-waterproof – NEMA 2 Pending			
Auxiliary switches	Number of auxiliary switches: one Maximum applied voltage/current: 30V AC, 1 A Actuating position: variable within 20% to 80%			
Installation orientation	Installable in any position ranging vertical to horizontal.			
Manual operation	Yes. Turn off the power supply. Push the clutch bottom and rotate the manual lever simultaneously.			



The V-shaped port provides a slowly opening valve. Equal movements of the stem change the flow an equal percentage. The combination of the typical flow characteristics of a coil and the true equal percentage of the valve provides linear heat transfer.

ORDERING INFORMATION



Actuators

MODEL NO.	CONTROL SIGNAL	AUX SWITCH + FEEDBACK POT
MY5370A0000	Floating	
MY5310A1000	Floating	One SPST switch + 135 ohm Feedback Pot
MY5340A1000	2 to 10 VDC input	One SPST switch
MY5320A1000	Nominal 135 ohm input	One SPST switch

Two-Way Valves

MODEL NO.	SIZE mm (inches)	CV VALUE	CLOSE-OFF RATING
VY5302A0011	15 (1/2")	2.5	1 MPa
VY5302A0012	15 (1/2")	4.0	1 MPa
VY5302A0022	20 (3/4")	6.3	1 MPa
VY5302A0023	25 (1")	10	1 MPa
VY5302A0031	32 (1-1/4")	16	0.5 MPa
VY5302A0041	40 (1-1/2")	25	0.5 MPa
VY5302A0042	40 (1-1/2")	40	0.5 MPa

Three-Way Valves

MODEL NO.	SIZE mm (inches)	CV VALUE	CLOSE-OFF RATING
VY5303A0021	20 (3/4")	4.0	0.5 MPa
VY5303A0022	20 (3/4")	6.3	0.5 MPa
VY5303A0023	25 (1")	10	0.5 MPa
VY5303A0031	32 (1-1/4")	16	0.3 MPa
VY5303A0041	40 (1-1/2")	25	0.3 MPa

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Yamatake – A Global Leader in Controls Manufacturing

For nearly 100 years, Yamatake has developed control products and systems to deliver innovative solutions for production facilities, office buildings, commercial buildings and homes.

- 1906 – Yamatake established in Japan.
- 1933 – First control valve manufactured in Japan.
- 1952 – Technical license agreement signed with Honeywell.
- 1956 – Corporate name changed to Yamatake-Honeywell.
- 1991 – Yamatake-Honeywell is first Japanese control company to receive ISO 9001 Certification.
- 1996 – Yamatake-Honeywell is first Japanese control company to receive ISO 14001 Certification.
- 1998 – Corporate name changed to Yamatake Corporation.

Today Yamatake is one of the largest controls companies in the world. The Yamatake Building Systems business is the market leader in Japan in providing building automation products and components.

In Japan:

Yamatake Corporation
International Business Division (Tokyo)
Yamatake Building Systems Co., Ltd (Tokyo)

In China:

Yamatake China Limited (Hong Kong)
Yamatake Corporation
Beijing Representative Office (Beijing)
Yamatake Corporation
Shanghai Representative Office (Shanghai)
Yamatake-SIC Building Automation Co., Ltd. (Shanghai)
Yamatake Environmental Control (Beijing) Co., Ltd. (Beijing)

In Europe:

Yamatake Europe N.V. (Belgium)

In Korea:

Yamatake Korea Co., Ltd. (Seoul)

In Taiwan:

Yamatake Taiwan Co., Ltd. (Taipei)

In Thailand:

Yamatake (Thailand) Co., Ltd. (Bangkok)

In Indonesia:

P.T. Yamatake Berca Indonesia (Jakarta)

In India:

SICAL Yamatake Limited (Chennai)

In Philippines:

Yamatake Philippines, Inc. (Manila)

In Singapore:

Yamatake Controls Singapore Pte. Ltd. (Singapore)

In Malaysia:

Yamatake Automation (M) Sdn. Bhd. (Malaysia)

In U.S.A.:

Yamatake Sensing Control, Limited (Santa Clara, CA)

