

2-WAY CAST BRONZE VALVE



YTT-5000 series

Application

Used as a control or blocking valve in heating, ventilation, air conditioning system & domestic water facilities.

- Hot water : Maximum 160°C 16k Max (Maximum pressure).
- Domestic water.
- Cold water : Maximum -15°C.
- Water with the following additives.
 - Oxygen absorption chemical / Glycol(antifreeze) with the maximum 50%.
- Steam(Max.2.0 kgf/cm²)
- Refrigerant R12, R22, R502.
- BSPT 16k, Screw Connection.

Technical Data

Valves					Close-Off Rating (Max,ΔP(kgf/cm ²))	
Valve Size (A)	Type Reference	Cv	Max. Pressure Max, (kgf/cm ²)	Lift (mm)	YGC(D) Actuator Series	
					41	51
15	YTT-5015	4.7	16	19	10	15
20	YTT-5020	7	16	19	8.7	15
25	YTT-5025	11.7	16	19	8	15
32	YTT-5032	18.7	16	19	5	13
40	YTT-5040	29	16	19	3.5	12
50	YTT-5050	47	16	19	3	12
					-	7.2

- Max.Pressure(kgf/cm²)=Maximum pressure in a opened or closed valve.
- Max,ΔP(kgf/cm²)=Maximum differential pressure in a closed valve.
- Water : Range ability 90%, Valve size is 1 step increased when flow velocity is above 3m/s.
- Steam : Range ability 55%, Valve size is 1 step increased when flow velocity is above 10m/s.

2-WAY CAST BRONZE VALVE

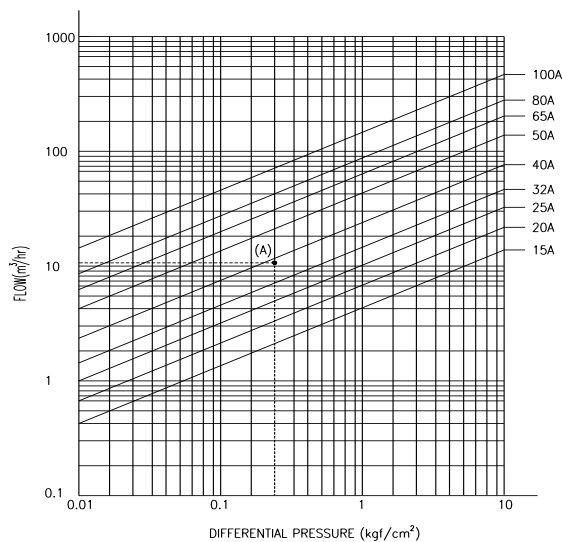
Technical Data

• Body Thread	: PF,PT (Pipe Threaded)
• Valve Body Rating	: KS 16Kgf/cm ²
• Leakage	: 0.01% Valve capacity at full travel ANSI B 16.104-1976 ClassIV
• Flow Characteristics	: Equal Percentage
• Range Ability	: 30:1
• Recommended Actuator	: YGC(D)-41, YGC(D)-51
Body	: Cast Bronze(BC6)
Bonnet	: Brass, Cast Bronze(BC6)
Stem	: STS304, STS410
• Materials	
Plug	: STS304
Seat-Ring	: SSC14A
Packing Box	: Single Gland Sealing (E.P.D.M) / Teflon, Viton O-ring

Valve sizing

- First side= 3kgf/cm², Second side= 2.7kgf/cm², Flow velocity= 12m³/hr.

Valve size is : $\Delta P = 0.3\text{kgf/cm}^2$, therefore the valve size is 40A at the point A when the flow velocity= 12m³/hr.



Design characteristics

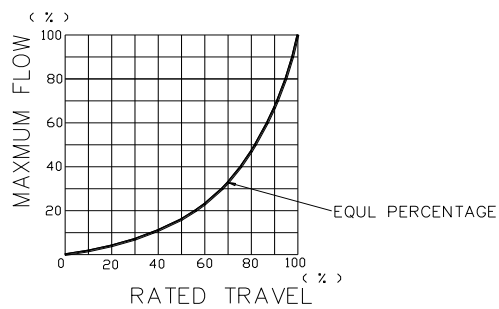
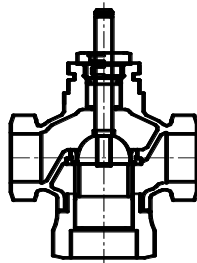
Valve & controller are provided separately, and the assembly does not require special tools or modification.

Valve body material is made of Ductile Iron, and the Stem, Seat-ring & Plug material are of Stainless steel(see the Valve structure & Fluid direction figures).

Plug shape is divided into Parabolic(P), Profile(V), etc. according to the valve size & unique range ability, and Perforate shape is also available in an unstable condition such as cavitation.

1) Valve Design characteristics

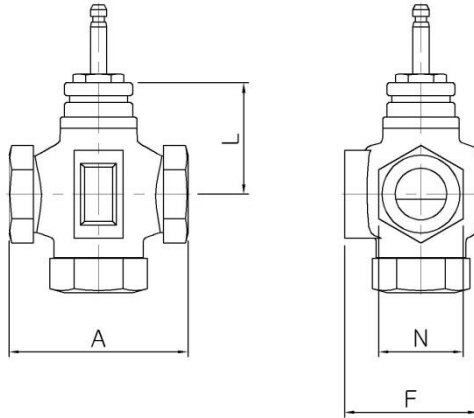
- Valve stem is decreased : Open.
- Valve stem is increased : Close.



2) Gland sealing box characteristics

- A pair of O-Rings & dust protection strip-attached Sealing Gland.
- Self-adjusting Teflon sleeve-attached Sealing Gland.
- Sealing Gland is changeable without separating the valve

Shape Dimension



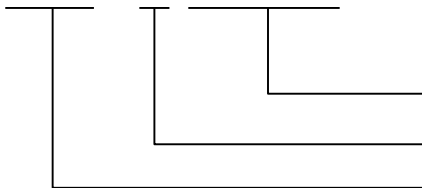
Size(A)	PT	A	L	N	F	Weight(kg)
15	1/2	100	65	29	64	1.2
20	3/4	100	65	35	64	2.1
25	1	105	68	44	64	2.6
32	1 1/4	110	69.5	54	84	3.6
40	1 1/2	140	81.5	60	114	5.2
50	2	150	81.5	74	126	8.6

Order specifications

Product name & Type are required to be filled with the type appendages when ordering.

Ex) Two-way valve YTT-5020(5000series)

Y T T - 5 □ □ □



Valve Size(A) : 15 ~ 50A

Valve Type : 5 – 16Kgf/cm², 2Way Valve

Product Group : Thread Type