

2-WAY CAST STEEL VALVE



YFF-4000 series

Application

Used as a control or opening valve in local heating, cooling & heating, air conditioning system, heat material, industrial equipment, etc.

- Temperature range : -15 ~ 180°C
- Applicable fluid : Cold & Hot water, steam(Max 6Kgf/cm²)

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	61	71	81
15	YFF-4015	4.7	20	20	10	15	-	-	-
20	YFF-4020	7	20	20	8.7	15	-	-	-
25	YFF-4025	11.7	20	20	8	15	-	-	-
32	YFF-4032	18.7	20	20	5	13	-	-	-
40	YFF-4040	29	20	20	3.5	12	-	-	-
50	YFF-4050	47	20	20	3.0	7.2	-	-	-
65	YFF-4065	68	20	40	-	4.0	-	-	-
80	YFF-4080	91	20	40	-	3.0	11.0	-	-
100	YFF-4100	150	20	40	-	2.1	7.0	-	-
125	YFF-4125	237	20	40	-	1.5	4.5	-	-
150	YFF-4150	355	20	40	-	1.0	3.1	6.8	-
200	YFF-4200	794	20	65	-	-	-	3.8	7.9
250	YFF-4250	1050	20	65	-	-	-	2.5	5.0
300	YFF-4300	1620	20	70	-	-	-	-	3.5
350	YFF-4350	2360	20	75	-	-	-	-	2.6

- 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 STEEL VALVE

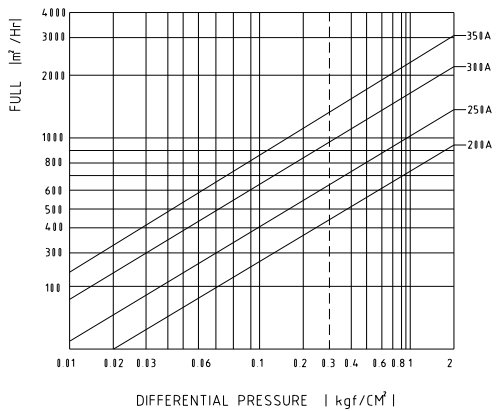
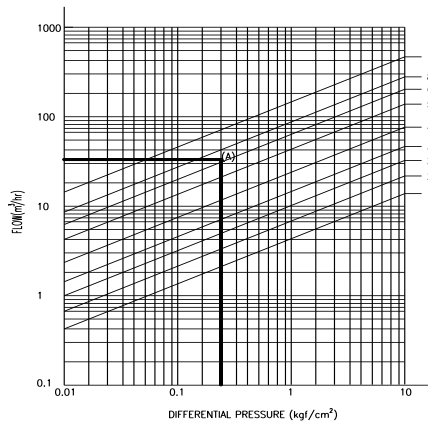
Technical Data

• End Connection	: RF (Flange Type)
• Valve Body Rating	: KS 20Kgf/cm ²
• Leakage	: 0.01% Valve capacity at full travel ANSI B 16.104-1976 ClassIV
• Flow Characteristics	: Equal Percentage
• Range Ability	: 50:1
• Recommended Actuator	: YGC(D)-41, YGC(D)-51, YGC(D)-61, YGC(D)-71, YGC(D)-81
Body	: Cast Steel (SCPH2)
Bonnet	: Cast Steel (SCPH2)
• Materials	
Stem	: STS304, STS410
Plug	: STS304
Seat-Ring	: Under 150A :SSC14A / Above 200A : BsC3
Packing Box	: Spring loaded PTFE and Elastomer V-ring

Valve sizing

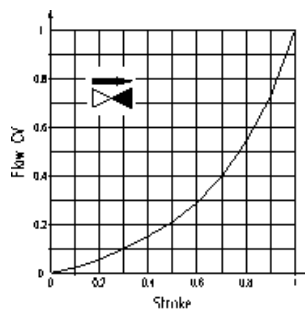
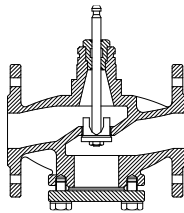
- First side= 3kgf/cm², Second side= 2.7kgf/cm², Flow velocity= 32m²/hr.

Valve size is : $\Delta P = 0.3 \text{ kgf/cm}^2$, therefore the valve size is 80A at the point A
when the flow velocity= 32 m²/hr.



Design characteristics

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

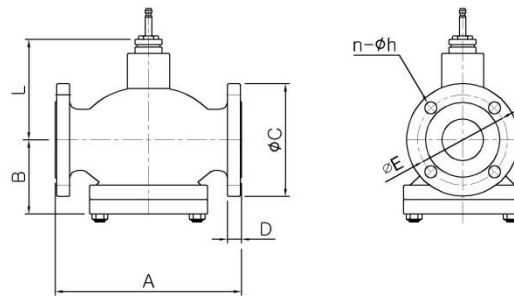
- Valve size : 15A~ 150A
 Valve stem is decreased : Open.
 Valve stem is increased : Close.
- Valve size : 200A~ 350A
 Valve stem is decreased : Close.
 Valve stem is increased : Open.

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

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Shape Dimension



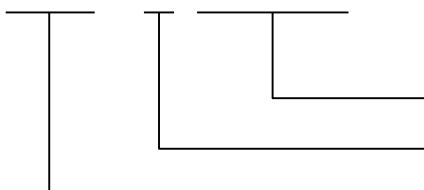
Size(A)	A	B	C	D	E	n-φ h	L	Weight (kg)
15	130	62	95	14	70	4-15	78	4.5
20	150	62	100	16	75	4-15	78	6
25	160	65	125	16	90	4-19	73	6.5
32	200	89	135	18	100	4-19	76	8.5
40	200	89	140	18	105	4-19	76	9
50	230	102	155	18	120	8-19	119	19
65	290	115	175	20	140	8-19	134	26
80	310	133	200	22	160	8-23	149	42
100	350	158	225	24	185	8-23	172	55
125	400	176	270	26	225	8-25	176	80
150	480	201	305	28	260	12-25	199	90
200	612	230	350	30	305	12-25	270	-
250	724	276	430	34	380	12-27	322	-
300	850	297	480	36	430	16-27	420	-
350	980	-	540	40	480	16-33	490	-

Order specifications

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

Ex) Two-way valve YFF-4065(4000series)

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Valve Size(A) : 15A ~ 350A

Valve Type : 4 -20Kgf/cm2

Product Group : Flange Type