

# 2-WAY DUCTILE IRON VALVE



## YFF-1000 series

### Application

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

- Temperature range : -15 ~ 120°C.
- Applicable fluid : Cold & Hot water

### Technical Data

Valves					Close-Off Rating(Max,ΔP(kgf/cm <sup>2</sup> ))			
Valve Size (A)	Type Reference	Cv	Max. Pressure (kgf/cm <sup>2</sup> )	Lift (mm)	YGC(D) Actuator Series			
					41	51	61	71
15	YFF-1015	4.7	10	20	10	-	-	-
20	YFF-1020	7	10	20	8.7	-	-	-
25	YFF-1025	11.7	10	20	8	-	-	-
32	YFF-1032	18.7	10	20	5	-	-	-
40	YFF-1040	29	10	20	3.5	-	-	-
50	YFF-1050	47	10	20	3	7.2	-	-
65	YFF-1065	68	10	40	-	5	-	-
80	YFF-1080	91	10	40	-	3.5	-	-
100	YFF-1100	150	10	40	-	3	7.0	-
125	YFF-1125	237	10	40	-	2.5	4.4	3.8
150	YFF-1150	344	10	40	-	1	3.0	2.5

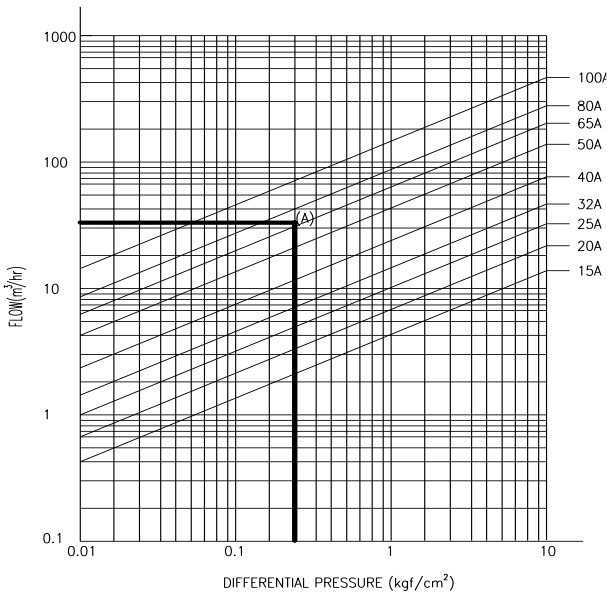
- Max. Pressure(kgf/cm<sup>2</sup>)=Maximum pressure in a opened or closed valve.
- Max,ΔP(kgf/cm<sup>2</sup>)=Maximum differential pressure in a closed valve.
- Water : Range ability 90%, Valve size is 1 step increased when flow velocity is above 3m/s.  
Steam : Range ability 55%, Valve size is 1 step increased when flow velocity is above 10m/s.

**Technical Data**

- Body Thread : RF Flange
- Valve Body Rating : KS 10Kgf/cm2
- Leakage : 0.01% Valve capacity at full travel ANSI B 16.104-1976 ClassIV
- Flow Characteristics : Equal Percentage
- Range Ability : 25:1
- Recommended Actuator : YGC(D)-41, YGC(D)-51, YGC(D)-61
  - Body : Ductile Iron(GCD45)
  - Bonnet : Ductile Iron(GCD45)
- Materials
  - Stem : STS304, STS410
  - Plug : STS304
  - Seat-Ring : SSC14A
  - Packing Box : Single Gland Sealing (E.P.D.M) / Teflon, Viton O-ring

**Valve sizing**

- First side= 3kgf/cm<sup>2</sup>, Second side= 2.7kgf/cm<sup>2</sup>, Flow velocity= 12m<sup>2</sup>/hr.  
 Valve size is : ΔP= 0.3kgf/cm<sup>2</sup>, therefore the valve size is 40A at the point A when the flow velocity= 12m<sup>2</sup>/hr.



### Design characteristics

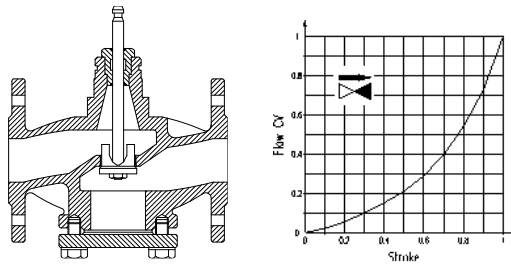
Valve & controller are provided separately, and the assembly does not require special tools or modification.

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

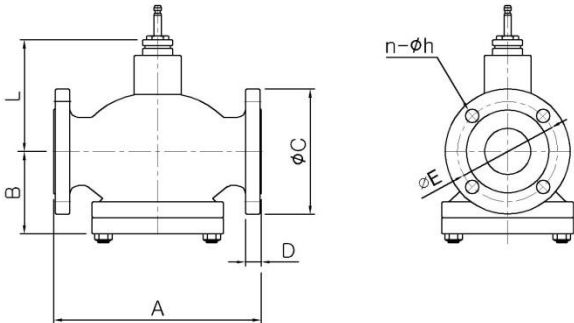
- Valve stem is decreased : Open.
- Valve stem is increased : Close.



#### 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



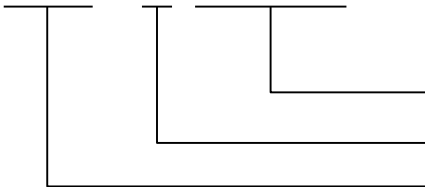
Size(A)	A	B	C	D	E	n-φ h	L	Weight (kg)
15	130	62	95	16	70	4-15	78	4.5
20	150	62	100	18	75	4-15	78	6
25	160	65	125	18	90	4-19	73	6.5
32	200	89	135	20	100	4-19	76	8.5
40	200	89	140	20	105	4-19	76	9
50	230	102	155	20	120	4-19	119	19
65	290	115	175	22	140	4-19	134	26
80	310	133	185	22	150	8-19	149	42
100	350	158	210	24	175	8-19	172	55
125	400	176	250	24	210	8-23	176	80
150	480	201	280	26	240	8-23	199	90

Order specifications

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

Ex) Two-way valve YFF-1020(1000series).

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Valve Size(A) : 15A ~ 150A

Valve Type : 1 -10Kgf/cm2

Product Group : Flange Type