



# Main Turbine Inlet Valve

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## Brief Introduction

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HD Series main inlet butterfly type usually applied in hydro power station used as a safety device. The valve is located within the power house on the upstream side, shutting-off pressure water supply from the penstock to the turbine distributor. These valves act as isolating devices for inspection of penstock without dewatering entire head race tunnel.

The inlet valve butterfly valve having a very less head loss. The hydraulic power pack can be separately installation or integrated.

Further, these special design butterfly valves can also be used for turbine inlet application instead of Spherical Valves.

## PHOTO GALLERY



● Normally the opening and closing of the MIV will be done under balanced water conditions

● Complete along with servomotors, counter weights, lever arm assembly, bypass valve, differential pressure switch, electrical control panel, upstream/downstream connecting pipe pieces for joining with the penstocks, dismantling joint etc. required to make a complete unit.

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## Standards and Performance

Standard	GB/T 14478、DL/T1068、GB/T 12238、JB/T 8527	
Driven device	GB/T 14478、DL/T1068、JB/T5299,Q/BZZ09-2014	
Structure length	GB/T 12221	
Flange	cast iron	GB/T 17241.6
	Ductile iron	GB12380.1~12380.3
	steel	GB/T 9112~9131
Accumulator	GB/T 2352	
Inspection and test	GB/T 14478、DL/T1068、GB/T13927、Q/BZZ09-2014	
Quality assurance	ISO9001 ,ISO14001,OHSAS18001	

Note: it should be stated in the contract once use other relevant standards and foreign standards ,and flange size can manufacture according to user requirements .



## Main parameters

Pressure	Sealing	1.1×PN		
	Body strength	1.5×PN		
Duration of Hydrostatic Test		30min		
Medium temp.		≤80°C		
Pipeline medium		clean water, water with sand, sea water		
Min.flow efficiency		0.1		
Open/ close data	Diameter	<1000	≥1000	
	Open valve time	10~60s(adjustable)	20~120s(adjustable)	
	Close valve time	Quick closing	1.5~15s(adjustable)	2.5~30s (adjustable)
		Slow closing	2.5~60s(adjustable)	6~90s (adjustable)
	Valve close degree	Quick closing	75°±10° (adjustable)	75°±10° (adjustable)
		Slow closing	75°±10° (adjustable)	75°±10° (adjustable)

Note:

■ 1Mpa=10.2kgf/cm<sup>2</sup>

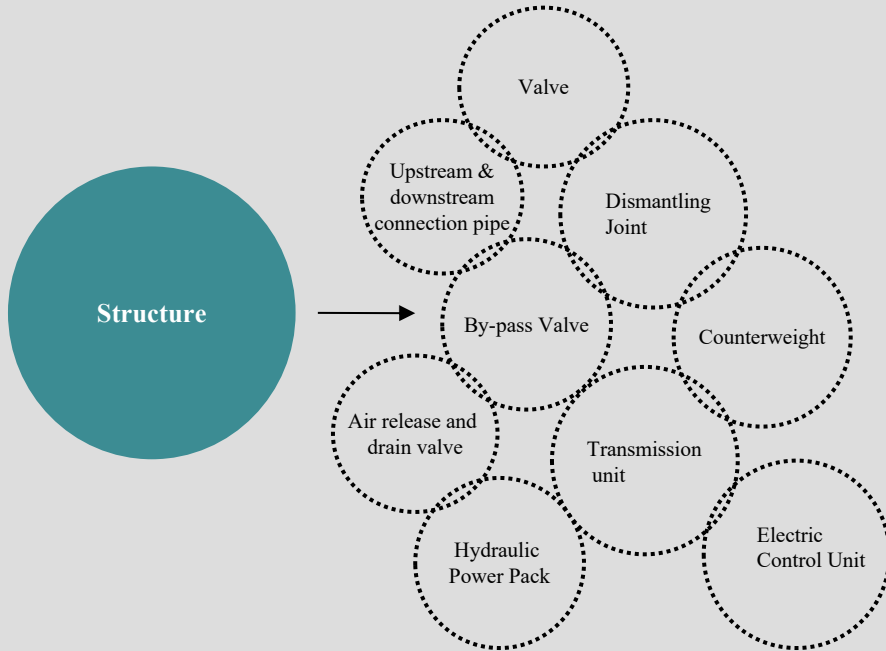
■ Sealing test pressure can be calculated as per highest static.



## Main Part Material

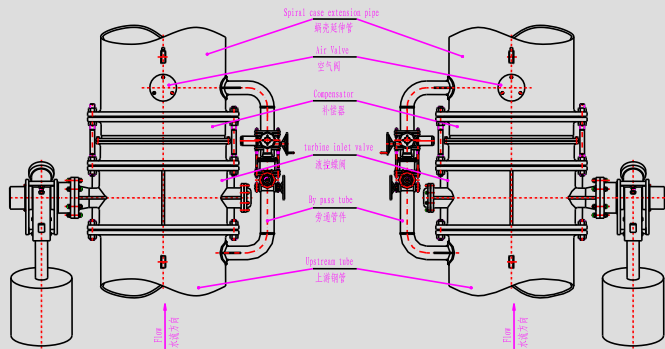
Best workmanship and quality control are ensured in the manufacture of components. The castings and plate steel weld fabricated structure are duly machined.

Component	Material
Body	grey cast iron, ductile cast iron, carbon steel, cast steel
Disc	grey cast iron, ductile cast iron, carbon steel, cast steel
Shaft	Stainless steel, carbon steel
Body Sealing Ring	copper alloy, Stainless steel
Disc sealing ring	NBR, Stainless steel with flexible graphite
Bearing	Self-lubricating composite material
Packing	flexible graphite, V type sealing ring
Transmission frame	carbon steel



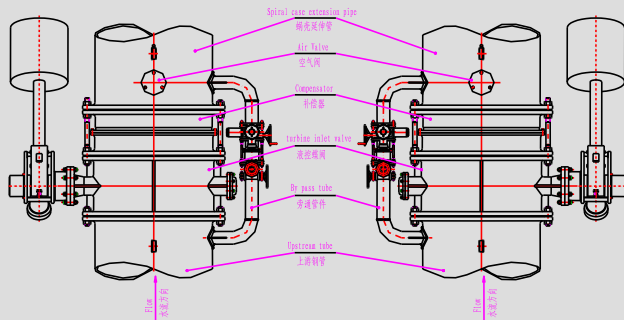


Installation Direction



Reverse Installation

Obverse Installation Inverting



Obverse Installation

Inverting Reverse Installation



# THANKS

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