

Y-pattern Globe Valves Globe Check Valves



XIAMEN GUTE VALVE COMPANY

Y-pattern Globe Valves/Globe Check Valves

Function

They are used for straight-lined medium flow with minimum turbulence, at the same time ensuring internal tightness. Y-pattern globe valves can be found in crude-oil production, refineries, chemical/petrochemical industries and heat-power engineering.

Y-pattern globe valves ensure low pressure drop, being practically 70% lower than that of conventional T-pattern globe valves. Owing to their linear flow characteristics, they can be successfully used also for short-time manual or automatic regulation (start-up, shutdown), although this not their main objective of using. Additionally, they have an excellent resistance to thermal elongation or compression. Stop check valve version, except of its tightness, offers also a function of lift check valve. From the design point of view, it is practically identical to stop version, the only difference being the stem not to be connected to the disc (plug), which enables free plug movement when the valve is in open position. In case of installation of the stop check valve at nonstandard position, there is a possibility to use a spring that is located above the plug. In order to pressure equalization, thus ensuring full plug travel, the body and oulet can be connected by equalizing pipe.





Application

Refinery (hydrocracking, hydrotreating, hydrofining)

Discription:	Standard:	Options:
Nominal Diameter	1/2" - 24"	Size bigger than 24" – upon request
Nominal Pressure	ASME 900-2500	Pressure higher that Class 2500 – upon request
Body Type	Forged 1/2"-2", cast 2 1/2" - 24"	forged 2 1/2" - 12"
Body Material	Carbon, alloy and stainless steel	Duplex, Inconel, Monel, Hastelloy
Bonnet	Pressure seal or bolted	welded
Trim	Stem stainless steel, seat hardfaced	Seat and disc surfaces hardfaced
Packing	Graphite	ISO 15848/ T A LUFT, Bellevile springs
Connection	Welded, flanged	Others upon request
Design Standards	ASME B16.34, AP1623, B51873	NACE MR 103, MR0175, others upon request
Tightness Standards	EN 12266, A P I 598	GOST R - 54808-2011
Operation	HW, gear, pneumatic, electric or hydraulic actuator	Impactor handwheel or gear

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HANDWHEEL

Ordinary or "impactor" type which closing force is many times of that of an ordinary handwheel for positive seating.

THRUST BEARINGS

They minimize torque requirements and help to achieve smoother operation and longer valve life.

STEM PACKING SYSTEM
Utilizes flexible graphite packing

BONNET

It is precision machined, retains packing and provides an integral hardfaced stem backseat.

STEM

It is a solid piece made from a material that is heat treated to achieve adequate mechanical properties and hardness. Precise machining and subsequent grinding ensure minimal friction during operation.

DISC

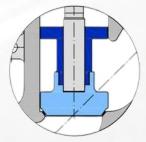
It can be of flat or conical type, both are body guided to eliminate misalignment, galling and stem bending. The sealing surface is hardfaced.



BACKSEAT

It enables to replace packing material when valve is in opene position. The sealing surface is hardfaced.

PRESSURE SEAL GASKET It is a preloaded, pressure energized design for long reliable service.



Stop check valve plug

SEAT

Integral type, hard material is welded into the body with subsequent mechanical machining and lapping.

BODY

utilizes optimized flow passages to minimize flow direction changes and reduce pressure drop. Wall thickness according to API, ASME or with bigger values to cover all service potential risks.



