



JIS10K CAST IRON GLOBE VALVES

Literature



Introduction:



Figure 1 JIS 10K Cast Iron Globe Valve

Globe valves are installed on pipelines to allow, stop and regulate the flow of fluids. The hand wheel type handle will be rotated towards open position or close position to lifting up or lifting down the disc vertically along the seat. It is designed and manufactured according to ASME B16.10/ASME B16.34/API 602/F7307 standard. It also went through inspection and testing according to API 598/JIS F7400 standard. Globe valve is suitable to install on pipeline systems that require flow regulating action such as cooling water systems and fuel oil systems.

Material and Design:

JIS10K flange end globe valve is available in stainless steel SS316 or cast iron material. The cover of JIS flange end globe valve is designed in bolted cover type, as the design might be different in shape due to different design standards. Bolted bonnet type is where the bonnet is attached to the valve body which holds the internal parts by tightening screws and nuts.

The stem of the globe valve is available in rising stem design and non-rising stem design. For globe valves that come with rising stem design, the stem will rise and be exposed when the wheel handle is turned to open position and lower when the wheel handle is turned to close position. By having a rising stem design globe valve installed on the pipeline system, it can tell us if the valve is in open position or close position by referring to the amount of stem exposed.

For globe valves with non-rising stem design, the valve is in open position when we turn the handle towards open position as far as possible and in close position when we turn the handle towards close position as far as possible. However it is unable to check the valve in open or close position like rising stem design. Non-rising stem design globe valve is suitable to install on pipelines that have limited space for rising stem design, for example, underground hydraulic systems.

Size and Pressure Rating:

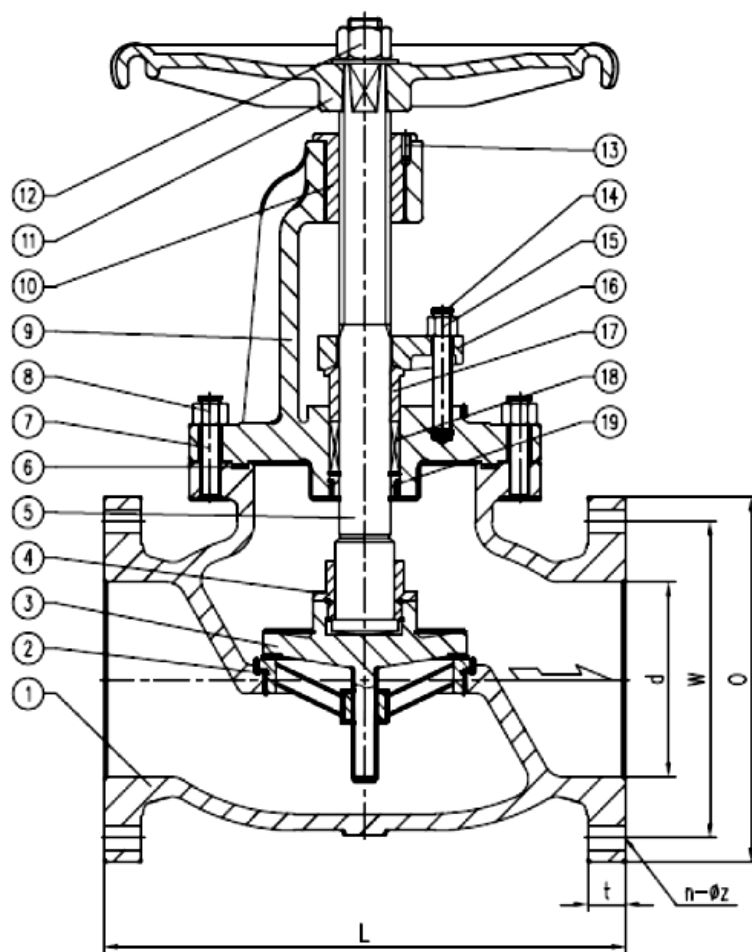
The available size for the globe valve is ranged from 1" to 6", subject to material. JIS 10K flange end globe valve can withstand up to 10kg/cm² which is equivalent to 150 PSI working pressure.



Figure 2 JIS 10K Cast Iron Globe Valve

Connection Type:

For the flange end globe valve, the connection comes with both end flanges which the other end connection must be flange end too to connect. The number of bolt holes is dependent on valve size, 4 bolt holes for size below 4" and 8 bolt holes for size above 4". Other accessories such as gasket, bolts and nuts are required to connect the both flanges together.

JIS 10K Cast Iron Globe Valve 2" – 4" (DN50 – DN100) Drawing:


No	Part Name	Material
1	Body	FC
2	Seat	FC
3	Disc	FC
4	Cover	A29 1025
5	Stem	A276 410
6	Gasket	SS304 + Graphite
7	Bolts	A29 1035
8	Nuts	A29 1025
9	Bonnet	FC
10	Stem Nut	A276 410

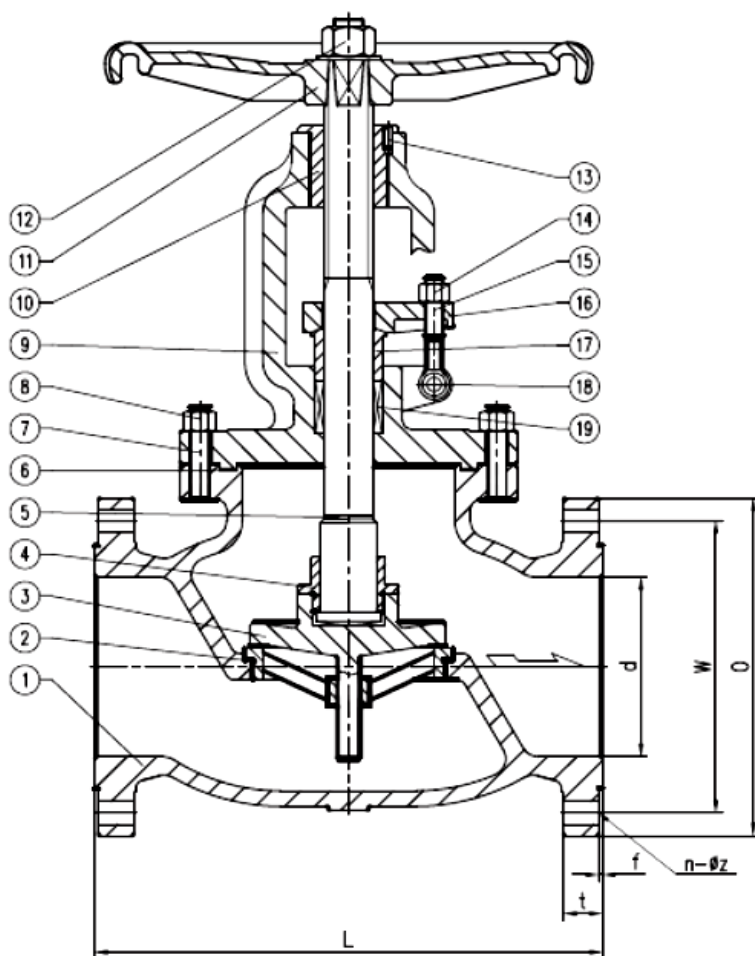
11	Handwheel	A47 32510
12	Nut	A29 1025
13	Screw	SS304
14	Nut	A29 1025
15	Bolt	A29 1035
16	Gland Flange	FC
17	Packing Gland	A276 410
18	Packing	Flexible Graphite
19	Back Seat	A276 410

Main Technical Parameter:

Nominal Pressure	10K
Hydraulic Body Test	2.06 MPa
Seal Test	3.0 MPa
Hermetical Seal Test	0.6 MPa
Max Working Pressure	≤ 230°C

Technical Specifications:

1. Basic design and manufacture according to JIS F7307
2. Face to face dimension: JIS F7307
3. Flange End: JIS B2210
4. Inspection and test: JIS F7400

JIS 10K Cast Iron Globe Valve 5" – 6" (DN125 – DN150) Drawing:


No	Part Name	Material
1	Body	ASTM A126 B
2	Seat	ASTM A126 B + SS304
3	Disc	ASTM A126 B + SS304
4	Cover	ASTM A29 1025
5	Stem	ASTM A276 410
6	Gasket	SS304 + Graphite
7	Bolts	ASTM A29 1035
8	Nuts	ASTM A29 1025
9	Bonnet	ASTM A126 B
10	Stem Nut	ASTM A276 410
11	Handwheel	ASTM A47 32510

12	Nut	ASTM A29 1025
13	Screw	SS304
14	Nuts	ASTM A29 1025
15	Bolts	ASTM A29 1035
16	Gland Flange	ASTM A126 B
17	Packing Gland	ASTM A276 410
18	Pin	ASTM A29 1025
19	Packing	Flexible Graphite

Main Technical Parameter

Normal Pressure	10K
Hydraulic Body Test	2.06 MPa
Seal Test	1.57 MPa
Hermetical Seal Test	0.6 MPa
Max Working Pressure	$\leq 230^{\circ}\text{C}$

Technical Specifications:

1. Basic design and manufacture according to ASME B16.10
2. Face to face dimension: ASME B16.10
3. Flange End: JIS B2212
4. Inspection and test: API598

Chuan Kok Hardware & Machinery Pte Ltd

Address : 1783 Geylang Bahru, #01-02, Singapore 339708
Telephone Number : +65 6294 2566
Email Address : info@chuankok.com
Website : www.chuankok.com
Business Registration Number : 198201577Z
Country of Registration : Singapore

Conditions of Use of Catalogue:

The information in the catalogue are not binding and in order to improve distribution, Chuan Kok Hardware & Machinery Pte Ltd reserves the right to make any change including size and pressure ratings considered necessary at any time and without prior notice. According to the copyright and the civil law, any reproduction (also partial) of figures and texts of this catalogue by means of electronic, mechanical, photocopies, microfilms, recordings or other is forbidden without Chuan Kok Hardware & Machinery Pte Ltd's authorization.
Catalogue Version: 2021

