



# ANSI 150# SS316 GLOBE VALVES

## Literature



### Introduction:



Figure 1 ANSI 150# SS316 Globe Valve

Globe valve is a valve that is used to permit, stop and regulate the flow in a pipeline system. The disc can be lifted up or lifted down vertically by turning the wheel handle to open position or close position. It is designed and manufactured according to ASME B16.10/ASME B16.34/BS 1873/API 602 standard due to different kinds of materials. Inspection and testing had been carried out according to API 598 standard. Globe valve is widely installed on systems that require flow regulating such as fuel oil system and cooling water system.

### Material and Design:

ANSI 150# flange end globe valve is available in stainless steel SS316, cast iron A126B, cast steel WCB, and forged steel A105. For ANSI flange end globe valves, the cover is available in bolted cover type where the cover is tightened with the valve body with screws and nuts to hold the internal parts.

There are two designs for the stem element, namely rising stem design and non-rising stem design. Rising stem design globe valve is a type of globe valve where the stem will rise and be exposed when the valve is turned to open position and lower when the valve is turned to close position. This design allows the user to check if the valve is in open position or close position by looking at the amount of stem that is exposed.

For non-rising stem design globe valves, the valve is in open position when the handle is turning to open position and in close position when the handle is turning to close position. However it is unable to check the position of the non-rising stem globe valve compared to rising stem globe valve. This design globe valve is suitable to install on systems that have limited space, for example, underground pipeline systems.

### Size and Pressure Rating:

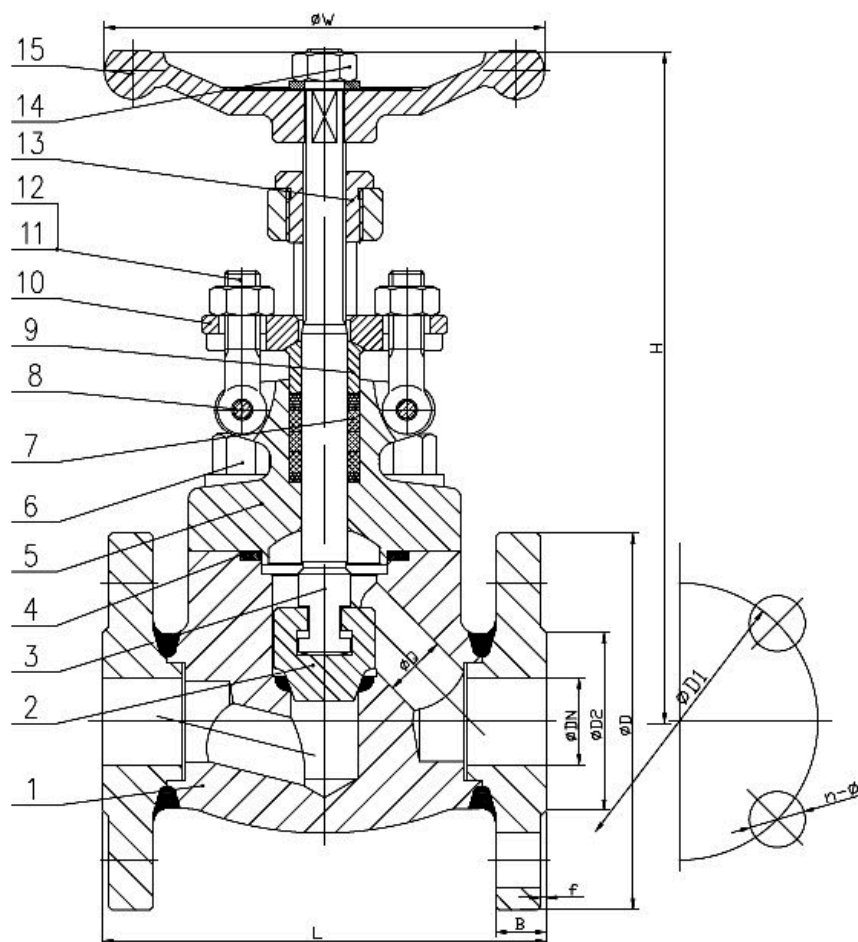
The size for the globe valve is available from 1" to 6", subject to material type. ANSI 150# flange end globe valve can withstand up to 150 PSI working pressure.



Figure 2 ANSI 150# SS316 Globe Valve

### Connection Type:

The both end of ANSI globe valve is come with ANSI 150# flange connection. The pipe end has to be in the same flange end connection to connect between pipe and globe valve. Some accessories like gasket, bolts and nuts are needed to connect both flanges together. The number of bolt holes is dependent on globe valve size, for example, 4 bolt hole design for valve size below 4" and 8 bolt hole design for valve size above 4".

**ANSI 150# SS316 Globe Valve 1" - 1 1/2" (DN25-40) Drawing:**


No	Part Name	Material
1	Body + Seat	ASTM A182 F316
2	Disc	ASTM A182 F316
3	Stem	ASTM A182 F316
4	Gasket	SS316 + Graphite
5	Bonnet	ASTM A182 F316
6	Bonnet Bolt	ASTM A193 B8M
7	Packing	Graphite
8	Pin	ASTM A182 F316
9	Gland	ASTM A182 F316
10	Gland Flange	ASTM A182 F316

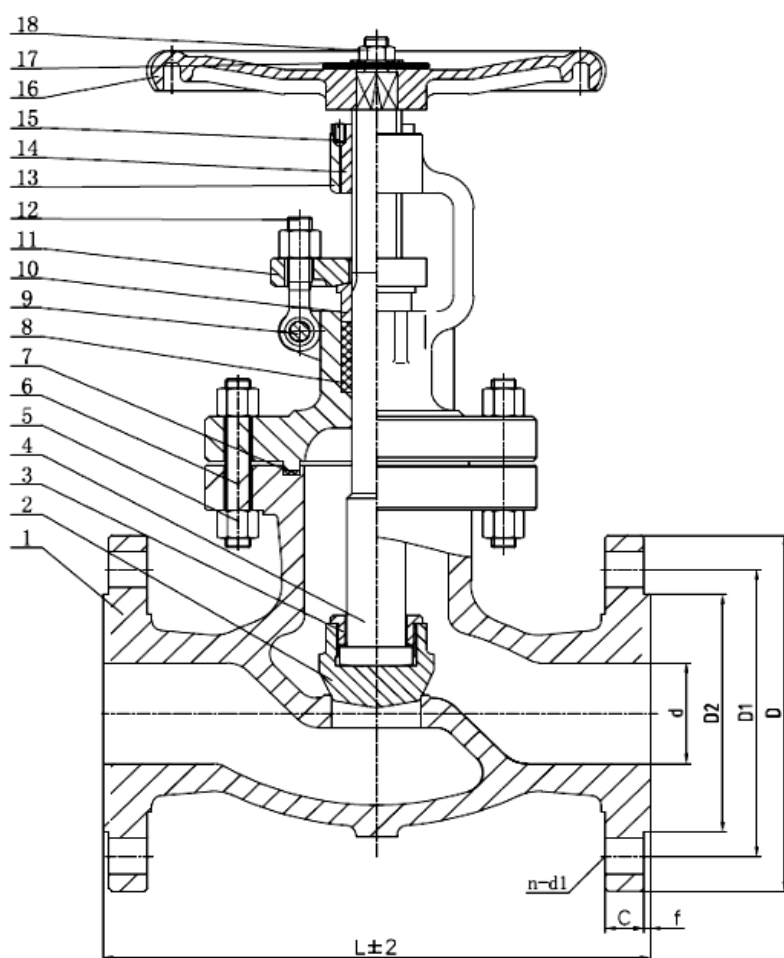
11	Gland Bolt	ASTM A193 B8M
12	Gland Nut	ASTM A194 8M
13	Yoke Sleeve	ASTM A276 410
14	Lock Nut	Carbon Steel
15	Hardwheel	ASTM A197

**Main Technical Parameter:**

<b>Normal Pressure</b>	150 PSI
<b>Shell Test Pressure</b>	3.0 MPa
<b>Seal Test</b>	2.2 Mpa
<b>Gas-Tightness Test</b>	0.6 MPa
<b>Max Working Pressure</b>	-20°C to 425°C

**Technical Specifications:**

1. Basic design and manufacture according to API602/BS5352
2. Face to face dimension: ASME B16.10
3. Flange End: ASME B16.5 RF
4. Inspection and test: API 598

**ANSI 150Z# SS316 Globe Valve 2" – 4" (DN50 – DN100) Drawing:**


No	Part Name	Material
1	Body	A351 CF8M
2	Disc	SS316
3	Grand	SS316
4	Stem	SS316
5	Bolt	A193 B8M
6	Nut	A193 B8M
7	Gasket	SS316 + Graphite
8	Packing	Graphite
9	Pin	SS304
10	Gland Nut	SS316

11	Packing Gland	A351 CF8M
12	Eye Bolt	A193 B8M
13	Bonnet	A351 CF8M
14	Stem Nut	A439 D2
15	Screw	AISI 1025
16	Handwheel	A216 WCB
17	Gasket	SS316
18	Nut	A194 B8M

**Main Technical Parameter:**

<b>Normal Pressure</b>	150 PSI
<b>Shell Test Pressure</b>	3.0 MPa
<b>Seal Test</b>	2.2 Mpa
<b>Back Seal Test</b>	2.2 MPa
<b>Gas-Tightness Test</b>	0.6 MPa
<b>Max Working Pressure</b>	≤ 425°C

**Technical Specifications:**

1. Basic design and manufacture according to ASME B16.34 & BS 1873
2. Face to face dimension: ASME B16.10
3. Flange End: ASME B16.5
4. Inspection and test: API 598

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Catalogue Version: 2021

