

FORGED Y PATTERN GLOBE VALVE A105N CLASS 1500 TRIM 5



Size : DN 15 to 50 (NPS 1/2" to 2")
Ends : Socket Welding
Min Temperature : -29°C
Max Temperature : + 425°C
Max Pressure : 250 Bars (Class 1500)
Specifications : Rising stem (OS&Y)
Welded bonnet
Full bore

Materials : Forged carbon steel A105N

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SPECIFICATIONS :

- Respect the flow direction (indicated by the arrow)
- Full bore
- Rising stem (OS&Y)
- Welded bonnet
- Bolted gland pack
- Forged carbon steel A105N
- Full stellite (Trim 5)
- Class 1500

USE :

- Petroleum industry, steam, high pressure
- Min and max Temperature Ts : - 29°C to + 425°C
- Max Pressure Ps : 250 bars (see graph)

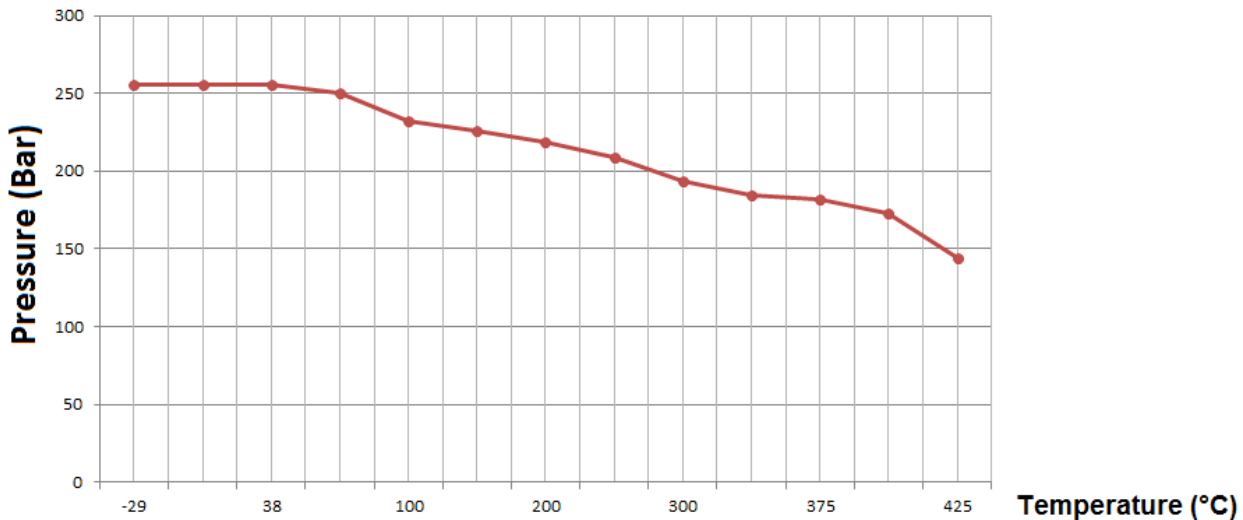
FLOW COEFFICIENT Kvs (M3 / h) :

DN	15	20	25	32	40	50
NPS	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Kvs (m3/h)	3.9	8.7	13.8	19.9	40.7	69.3

PRESSURE / TEMPERATURE RELATION :

Pressure (bar)	255.3	255.3	255.3	250.4	231.9	226.1	219.1	208.6	193.7	184.8	182.3	172.5	143.8
Temperature (°C)	-29	0	38	50	100	150	200	250	300	350	375	400	425

PRESSURE / TEMPERATURE GRAPH :

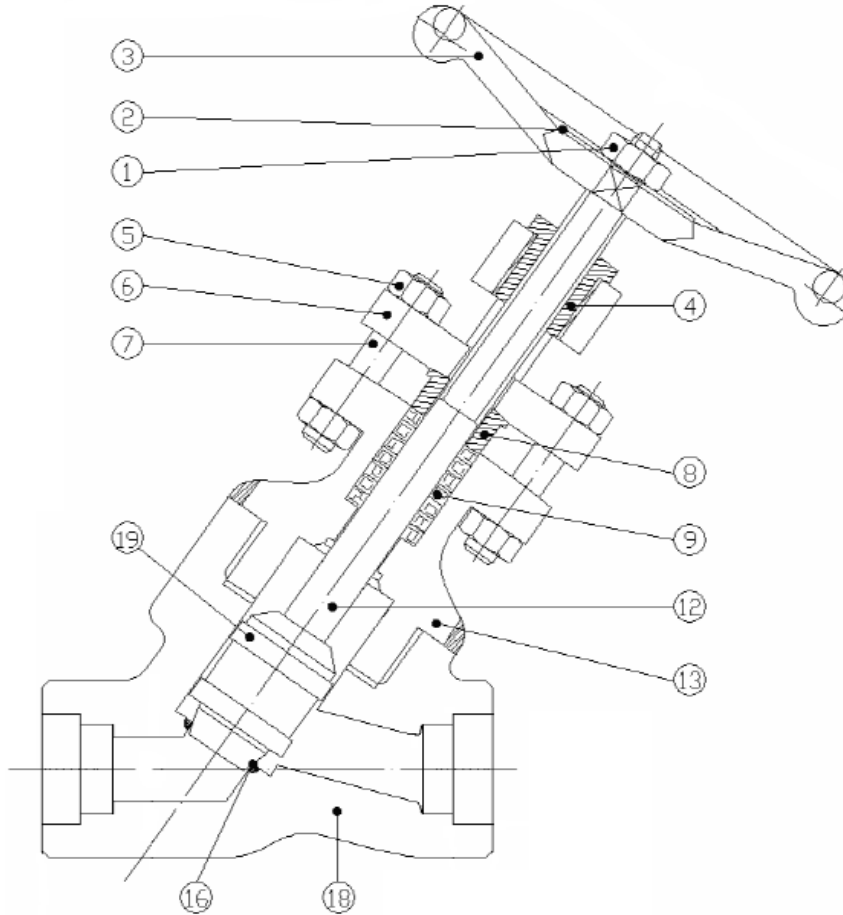


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RANGE :

- Forged Y pattern globe valve A105N with Socket Welding ends **Ref.405** from DN 15 to 50 (NPS 1/2" to 2")

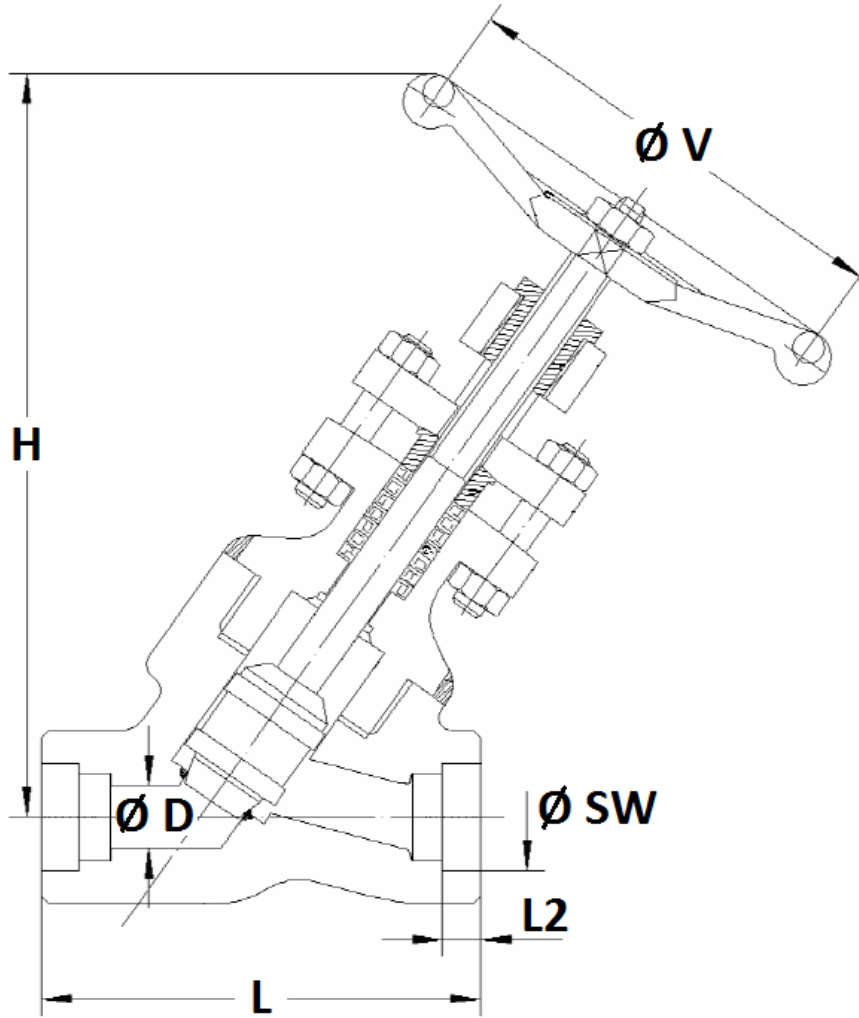
MATERIALS :



Item	Designation	Materials
1	Handwheel nut	Carbon steel
2	ID plate	Aluminium
3	Handwheel	Carbon steel
4	Yoke nut	ASTM A473 type 416
5	Gland nut	ASTM A194 2H
6	Gland flange	ASTM A105
7	Gland stud	UNS S41000
8	Gland	UNS S41000
9	Packing	Graphite
12	Stem	ASTM A276 type 410
13	Bonnet	ASTM A105N
16	Seat	Stellite GR.6
18	Body	ASTM A105N
19	Disc	ASTM A276 type 410 stellite

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SIZE (in mm) :



Ref.	DN (mm)	15	20	25	32	40	50
	NPS (")	1/2"	3/4"	1"	1"1/4	1"1/2	2"
405	Ø D	11	15	19.5	27.5	31.5	39
	L	110	142	142	170	170	180
	H (opened)	170	240	250	280	380	420
	Ø V	110	130	130	180	180	180
	L2	12.7	14.5	16	17.5	19	22
	Ø SW	21.8	27.2	33.9	42.7	48.8	61.2
	Weight (Kg)	2	4.2	5.2	9	10.5	13.5

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STANDARDS :

- Fabrication according to **ISO 9001 : 2008**
- **DIRECTIVE 97/23/CE : CE N° 0036**
Risk category III module H
- Designing according to **ISO 15761** and **API 602** 8th
- Pressure Tests according to **API 598, table 6**
- Approval certificate Russian Federation **GOST-R**
- Valves approved by the main oil industries (certificates on request)
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 (optional marking)
- Threaded female NPT ends according to **ANSI B1.20.1**

ADVICE : Our opinion and our advice are not guaranteed and SFERACO shall not be liable for the consequences of damages.
The customer must check the right choice of the products with the real service conditions.

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INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not, the valves may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- **During welding operation, for S.W. types half open the valve and do not exceed 350-400°C**
- The theoretical lengths given by ISO/R7 for the tapping are typically longer than required, the length of the thread should be limited, and **check that the end of the tube does not press right up to the head of the thread.**
- **Never use a vice to tighten the fixings of the valve.**
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.**
- **It may be necessary to screw the packing gland during using according to the type of use.**
- **Do not use a tool to shut the valve**
- **Fluids in the valve must not contain solid objects (it could damaged the seat).**
- It's recommended to operate the valve (open and close) 1 to 2 times per year