





ISO 9001: 2015



PED 2014/68/EU





Certificate 3.1

Size: DN 10 to 50 (NPS 3/8" to 2")

Ends: Female – Female NPT, Socket Welding

Min Temperature : - 49°C **Max Temperature :** + 538°C

Max Pressure: 132 Bars (Class 800)

Specifications: Rising rotating stem (OS&Y)

Bolted bonnet and gland pack

Standard port

Materials: Stainless steel ASTM A182 F316

Sferaco 90 rue du Ruisseau 38297 St Quentin Fallavier Tel: + 33 (0) 474.94.15.90 Fax: + 33 (0) 474.95.62.08 Internet: www.sferaco.fr E-mail: sferaco@sferaco.fr



SPECIFICATIONS:

- Respect the flow direction (indicated by the arrow)
- Standard port
- Rising rotating stem (OS&Y)
- · Bolted bonnet and gland pack
- Forged stainless steel F316
- Trim 10 standard SS 316
- Class 800

USE:

- Petroleum industry, steam, high pressure
- Min and max Temperature Ts: 49°C to + 538°C
- Max Pressure Ps: 132 bars (see graph)

FLOW COEFFICIENT Kvs (M3/h):

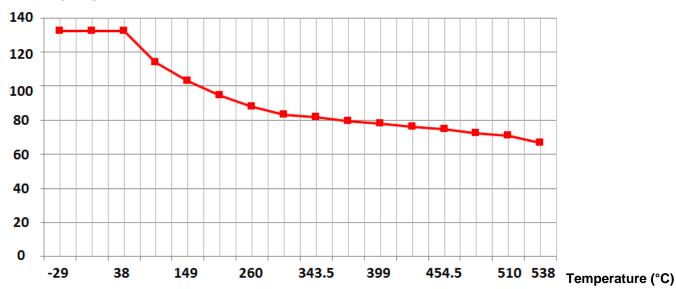
DN	10	15	20	25	32	40	50
NPS	NPS 3/8"		3/4"	1"	1"1/4	1"1/2	2"
Kvs (m3/h)	1.2	1.3	3.3	5.9	9.5	12.4	21.6

PRESSURE / TEMPERATURE RELATION :

Pressure (bar)	132.4	132.4	132.4	114.1	103.1	94.5	87.9	83.1	81.7	79.3	77.9	76.2	74.5	72.4	71	66.9
Temperature (°C)	-49	0	38	93,5	149	204,5	260	315,5	343,5	371	399	425	454.5	482	510	538

PRESSURE / TEMPERATURE GRAPH:

Pressure (Bars)



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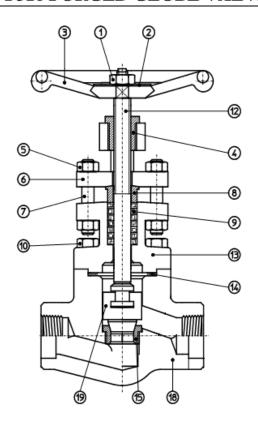
RANGE:

• Forged A182 F316 stainless steel globe valve TRIM 10 with NPT threaded ends Ref.453 DN 10 to DN 50 (NPS 3/8" to DN 2")

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MATERIALS:

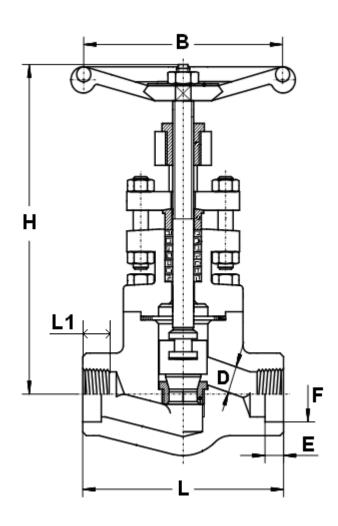


Item	Designation	Materials				
1	Wheel nut	Carbon steel				
2	Name plate	Aluminium				
3	Handwheel	Carbon steel				
4	Yoke nut	ASTM A582 type 303				
5	Gland nut	ASTM A194 GR.8				
6	Gland flange	ASTM A182 F304				
7	Gland stud	ASTM A193 B8				
8	Gland	ASTM A479 type 304				
9	Packing	Graphite				
10	Bolts	ASTM A193 B8				
12	Stem	ASTM A479 type 316				
13	Bonnet	ASTM A182 F316				
14	Gasket	SS 316 + graphite spiral wound				
15	Seat	ASTM A479 type 316				
18	Body	ASTM A182 F316				
19	Disc	ASTM A479 type 316				

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SIZE (in mm):



Ref.	DN (mm)	10	15	20	25	32	40	50
	NPS (")	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
452/453	Ø D	9	9	13	17.5	22.5	29.5	35
	L	80	80	90	110	127	155	170
	H (opened)	148	148	165	180	213	248	257
	ØВ	90	90	90	110	130	130	180
453	L1	13	15	18	19	20	21	21
452	E(SW)	11.1	12.7	14.5	16	17.5	19	22
	ØF(SW)	17.6	21.8	27.2	33.9	42.7	48.8	61.2
452/453	Weight (in Kg)	1.9	1.9	2.18	3.52	5.3	7.3	11.3

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STANDARDS:

- Fabrication according to ISO 9001: 2015
- DIRECTIVE 2014/68/EU: CE N° 0036 Risk category III module H
- Certificate 3.1 on request
- Designing according to ISO 15761 and API 602 8th
- Pressure tests according to API 598, table 6
- Valves approved by the main oil industries (certificates on request)
- ATEX Group II Category 2 GD T3 Zone 1 & 21 Zone 2 &22 (optional marking) according to directive 2014/34/EU
- Threaded female NPT ends according to ANSI B1.20.1
- Socket Welding ends according to ISO 15761

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 thightness 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

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