







Certificate 3.1

Size: DN 1/4" to 2"

Ends: Female - Female BSP

Min Temperature: +0°C Max Temperature: +180°C Max Pressure: 200 Bars

Specifications: Rotating rising stem

1 piece type Standard bore

Materials: ASTM A105 yellow galvanized

SPECIFICATIONS:

- Respect the flow direction (indicated by the arrow)
- · Standard bore
- · Rising rotating stem
- 1 piece type
- Forged A105 carbon steel
- 3000 Psi type (PN200)

USE:

- Petroleum industry, steam, high pressure
- Min and max Temperature Ts: + 0°C to + 180°C
- Max Pressure Ps : 200 bars at 20°C

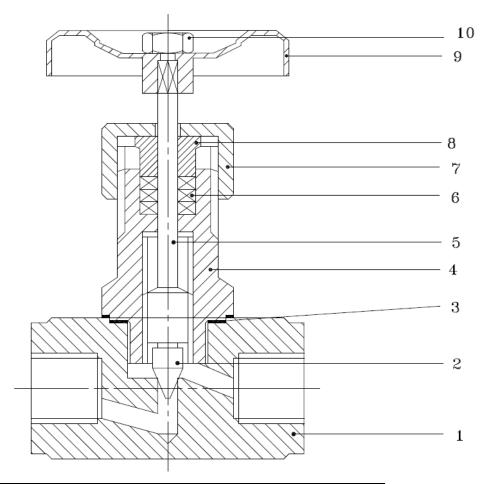
FLOW COEFFICIENT Kvs (m3/h):

DN	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Kvs (m3/h)	2.59	3.46	4.32	10.37	12.97	15.56	42.37

RANGE:

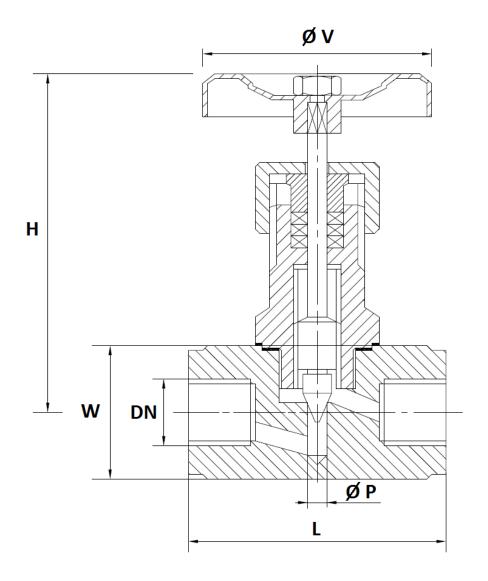
Needle valve forged carbon steel threaded female BSP cylindrical Ref. 489 from DN 1/4" to DN 2"

MATERIALS:



Item	Designation	Materials				
1	Body	ASTM A105 yellow galvanized				
2	Needle	AISI 410				
3	Gasket	Klingerite				
4	Bonnet	ASTM A105				
5	Stem	AISI 410				
6	Packing	Cotton coated PTFE				
7	Packing nut	Steel 6S				
8	Packing Gland	AISI 410				
9	Handwheel	Steel				
10	Nut	Steel 6S				

SIZE (in mm):



Ref.	DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
489	ØΡ	5	6	8	9	11	15	19	22
	L	61	61	70	78	90	100	130	140
	H (opened)	100	100	100	115	145	150	160	170
	øν	70	70	70	80	100	100	125	150
	W	30	30	35	40	50	60	70	80
	Weight (Kg)	0.55	0.55	0.75	1.1	2	2.5	3	3.5

STANDARDS:

- Fabrication according to ISO 9001: 2008
- DIRECTIVE 97/23/CE : CE N° 0948 Risk category III module B+C1
- Certificate 3.1 on request
- Pressure tests according to API 598, table 6
- Threaded female BSP cylindrical ends according to ISO 7/1 Rp

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.

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.
- 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