









Size: DN 1/4" to 2"

Ends: Female - Female BSP

Min Temperature : - 10°C Max Temperature : + 180°C Max Pressure : 25 Bars

Specifications: Rising rotating stem and handwheel

PTFE packing

Disc PTFE or stainless steel

Materials: Bronze body



SPECIFICATIONS:

- Respect the flow direction (indicated by the arrow)
- · Rising rotating stem and handwheel
- PTFE packing
- Bronze body with union hat
- PTFE or stainless steel disc
- Threaded female BSP cylindrical

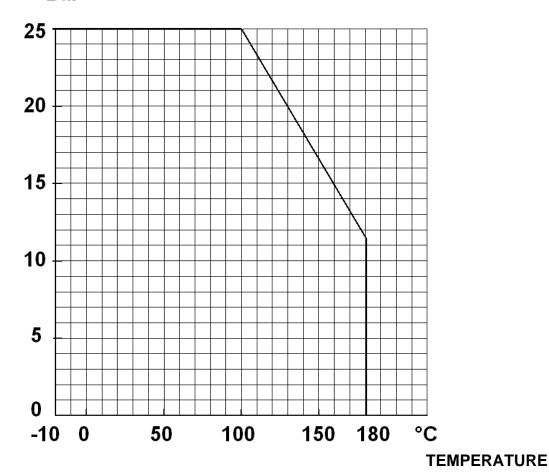
USE:

- For common fluids of 2nd group
- Min and max Temperature Ts: 10°C to + 180°C
- Max Pressure Ps : 25 bars (see graph)

PRESSURE / TEMPERATURE GRAPH:

PRESSURE

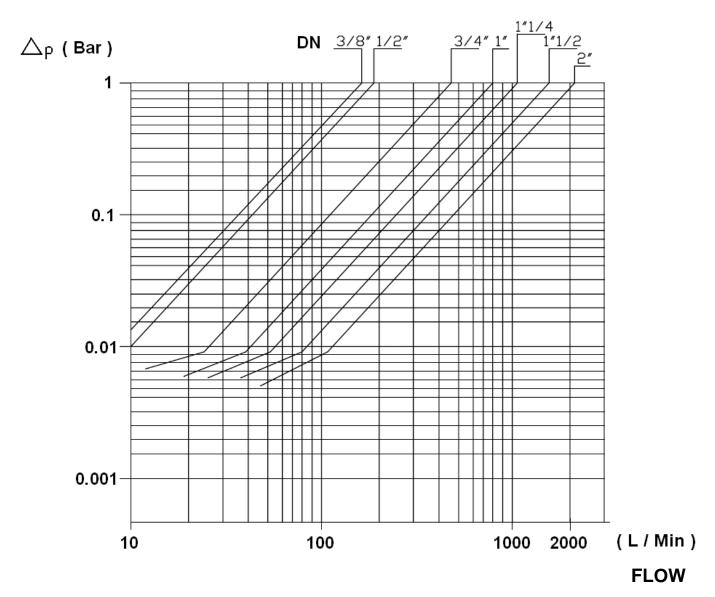
Bar



Date: 12/13 Rev.01



HEAD LOSS GRAPH:

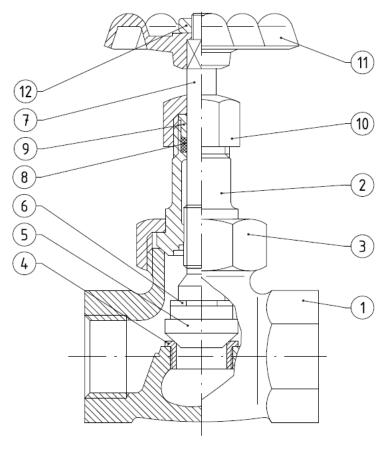


RANGE:

- Bronze body and stainless steel disc, female threaded cylindrical BSP from DN 1/4" to DN 2" Ref. 451
- Bronze body and PTFE disc, female threaded cylindrical BSP from DN 1/4" to DN 2" Ref. 454



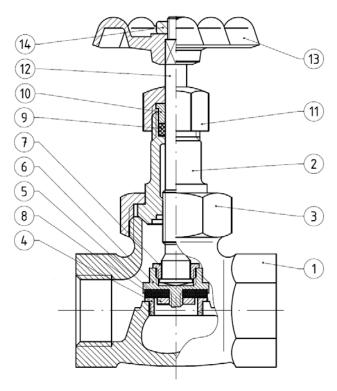
MATERIALS FOR TYPE 451 S.S. DISC:



Item	Designation	Materials 451				
1	Body	Bronze C83600 ASTM B62				
2	Bonnet	Brass CW 617N according to EN 12165				
3	Bonnet nut	Brass CW 617N according to EN 12165				
4	Seat	SS 316L				
5	Disc	SS 316L				
6	Washer ring	Brass CW 614N according to EN 12164				
7	Stem	Brass CW 614N accoriding to EN 12164				
8	Packing DN 1/4" - 1/2"	PTFE				
8	Packing DN 3/4" - 2"	High temperature Fiber AF/15/MA				
9	Packing gland	Brass CW 614N according to EN 12164				
10	Packing nut	Brass CW 614N according to EN 12164				
11	Handwheel	Aluminium GD12FE UNI EN 1706				
12	Handwheel nut	Steel S6 UNI 5589				



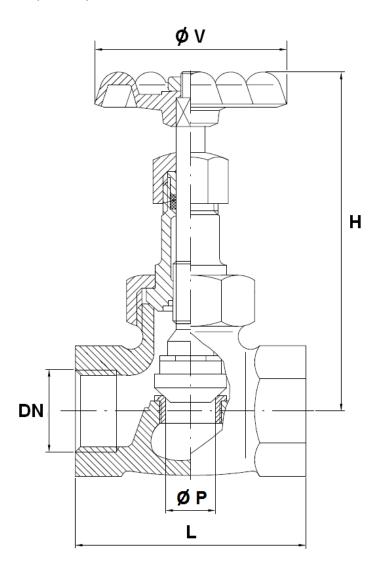
MATERIALS FOR TYPE 454 PTFE DISC:



Item	Designation	Materials 454				
1	Body	Bronze C83600 ASTM B62				
2	Bonnet	Brass CW 617N according to EN 12165				
3	Bonnet nut	Brass CW 617N according to EN 12165				
4	Seat	SS 316L				
5	Disc ring	PTFE				
6	Disc	Brass CW 614N according to EN 12164				
7	Disc insert	Brass CW 614N according to EN 12164				
8	Disc nut	Brass CW 614N according to EN 12164				
9	Packing DN 1/4" - 1/2"	PTFE				
9	Packing DN 3/4" - 2"	High temperature fiber AF/15/MA				
10	Packing gland	Brass CW 614N according to EN 12164				
11	Packing nut	Brass CW 614N according to EN 12164				
12	Stem	Brass CW 614N according to EN 12164				
13	Handwheel	Aluminium GD12FE UNI EN 1706				
14	Handwheel nut	Steel S6 UNI 5589				



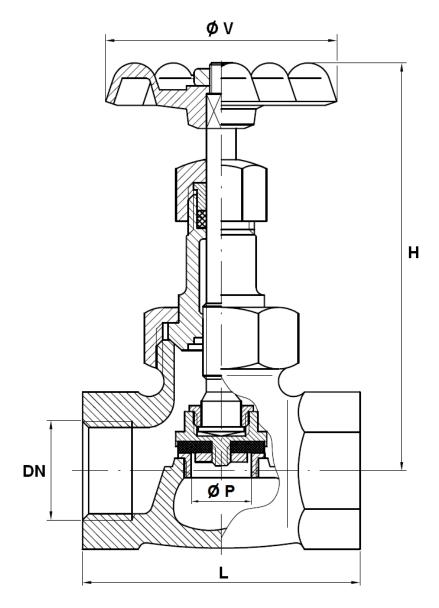
SIZE REF. 451 S.S. DISC (in mm):



Ref.	DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
451	L	46	46	56	62	74	91	100	128
	Н	100	100	105	135	150	170	195	220
	ØΡ	10.8	10.8	12.5	18	20	30	30	37
	øν	50	50	50	50	55	60	70	80
	Weight (Kg)	0.27	0.28	0.36	0.65	0.90	1.42	1.79	2.98



SIZE REF. 454 PTFE DISC (in mm):



REF.	DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
454	L	46	46	56	62	74	91	100	128
	Н	100	100	105	135	150	170	195	220
	ØΡ	10.8	10.8	12.5	18	20	30	30	37
	øν	50	50	50	50	55	60	70	80
	Weight (Kg)	0.28	0.29	0.37	0.67	0.93	1.40	1.80	2.99



STANDARDS:

Fabrication according to ISO 9001: 2008

 DIRECTIVE 97/23/CE : CE N° 0497 Risk Category III Module H

Threaded female BSP cylindrical according to ISO 228-1

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.



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