











Size :	DN 1/4" to 1"		
Ends :	Female-Female BSP or NPT		
Min Temperature :	- 20°C		
Max Temperature :	+ 180°C		
Max Pressure :	400 Bars		
Specifications :	Ball check valve with spring		
	All positions		
	Metal / metal thickness		

Materials : Stainless steel





#### **SPECIFICATIONS :**

Ball check valve with spring

All positions (respect the flow direction indicated by the arrow )

Metal / metal tightness

Stainless steel

Class 6000 Psi

#### <u>USE :</u>

Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air

Min Temperature Ts : - 20°C

Max Temperature Ts :+ 180°C

Max pressure Ps : 400 bars

#### **OPENING PRESSURE ( bar ) :**

Opening pressure : 1 bar

### RANGE :

Female / female threaded BSP cylindrical **Ref. 388** from DN 1/4" to DN 1" Female / female threaded NPT **Ref. 389** from DN 1/4" to DN 1"







MATERIALS :



Item	Designation	Materials		
1	Body	AISI 316		
2	Nipple	AISI 316		
3	Ball	AISI 316		
4	Seat	AISI 316		
5	Spring	AISI 304		
6	Guide	AISI 316		
7	Gasket	FKM		







<u>SIZE ( in mm ) :</u>



Ref.	DN	1/4"	3/8"	1/2"	3/4"	1"
388 / 389	Ø P	8	8	10	14	16
	н	90	90	90	110	127
	W ( on flat )	32	32	32	41	50
	Weight ( Kg )	0.500	0.480	0.450	0.880	1.50



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### STANDARDS :

Fabrication according to ISO 9001 : 2008

DIRECTIVE 97/23/CE : CE N° 0496 Risk category III Module H

Construction according to ISO 15761

Pressure tests according to API 598, table 6

Materials according to NACE MR 01-75

BSP cylindrical threaded ends according to ISO 228-1

NPT threaded 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 check 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 check valves to be installed are of correct strenght 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 check valves, clean and remove any objects from the pipes (in particular bits of sealing and metal) which could obstruct and block the check valves.

Ensure that both connecting pipes either side of the check 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 check valve unit will not absorb any gaps. Any distortions in the pipes may affect the thightness of the connection, the working of the check valve and can even cause a rupture. To be sure, place the kit in position to ensure the assembling will work.

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 check valve.

Fluids in the check valve must not contain solid objects (it could damaged the seat).

If there is a direction changing or if there's another material, it's better to take away the check valve so that it is outside the turbulence area ( **between 3 and 5 times the ND before and after** ).

After a pump please refer to FD CEN/TR 13932 to install the check valve :

If it is essential to keep priming the pump, a non-return check valve can be fitted to the suction pipe at a distance L1 ( straight length suction ) > 10xD1 (diameter suction )

The check valve is designed to meet the maximum flow rate in service

In other cases, the non-return check valve is mounted on the discharge pipe at a distance of L2 (straight length at discharge) > 3xD2 (diameter at discharge)



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