

# SØCLA

## CHECK VALVE



## Technical data sheet

# Type 407

## Non-return valve System M

### Applications and special features



- Operates in any position,
- Low head loss,
- Does not generate hammering,
- Closing system : flexible membrane (thick elastomer disc) held in its center on a metal seat consisting of a grid (flow equivalent to the minimal section)
- Sealing ensured by self-closing membrane
- On membrane check valves, the opening regulated by the elasticity and the thickness of the membrane is very progressive and can be obtained as a result of a few centimeters of W/C. Because of this, this check valve is particularly suitable for variable flow pumps and pulsatory operation.

### Technical description

DN	"	mm	PN	PFA in bar	PS in bar				Cat.	References	Vvs-nr
					L1	L2	G1	G2			
1 1/2	40	10/16	16	16	16	16	16	16	I	149B 2164	
2	50	10/16	16	16	16	16	16	16	I	149B 2165	
2 1/2	65	10/16	16	16	16	15	16	16	I	149B 2166	
3	80	10/16	16	16	16	12	16	16	I	149B 2167	
4	100	10/16	16	16	16	10	16	16	I	149B 2168	
5	125	10/16	16	16	16	0,5	16	16	I	149B 2169	
6	150	10/16	16	13	16	0,5	16	16	I	149B 2170	
8	200	10	10	10	10	0,5	10	10	I	149B 2237	

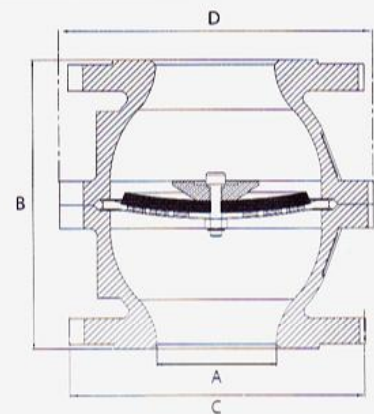
#### Important notice :

The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

- **Connection** : flanges drilled PN : see table
- **Permissible operating pressure PFA - water-** (for supply, distribution and disposal of water) : See table
- **Maximum Permissible pressure PS - other mediums:** See table
- **θ :** Mini. -10 °C  
Maxi. 60 °C
- **Mediums :** Clear liquids, gas
- **Approvals :** ACS (except DN 100 up to 200)
- **International construction Standards :**  
CE Conformity Directive 97/23/CE  
Flange drilling according to EN1092-2

### Overall dimensions

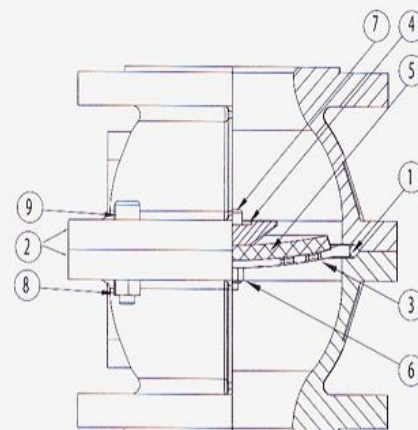
	A	B	C	D	Weight
"	mm	mm	mm	mm	kg
1 1/2	40	148	150	140	6,9
2	50	158	164	159	8,9
2 1/2	65	176	183	169	11,9
3	80	196	200	212	15,9
4	100	213	220	234	19,5
5	125	228	250	250	25,4
6	150	266	285	324	39,5
8	200	439	340	426	81,6




## Technical data sheet Type 407 - Non-return valve

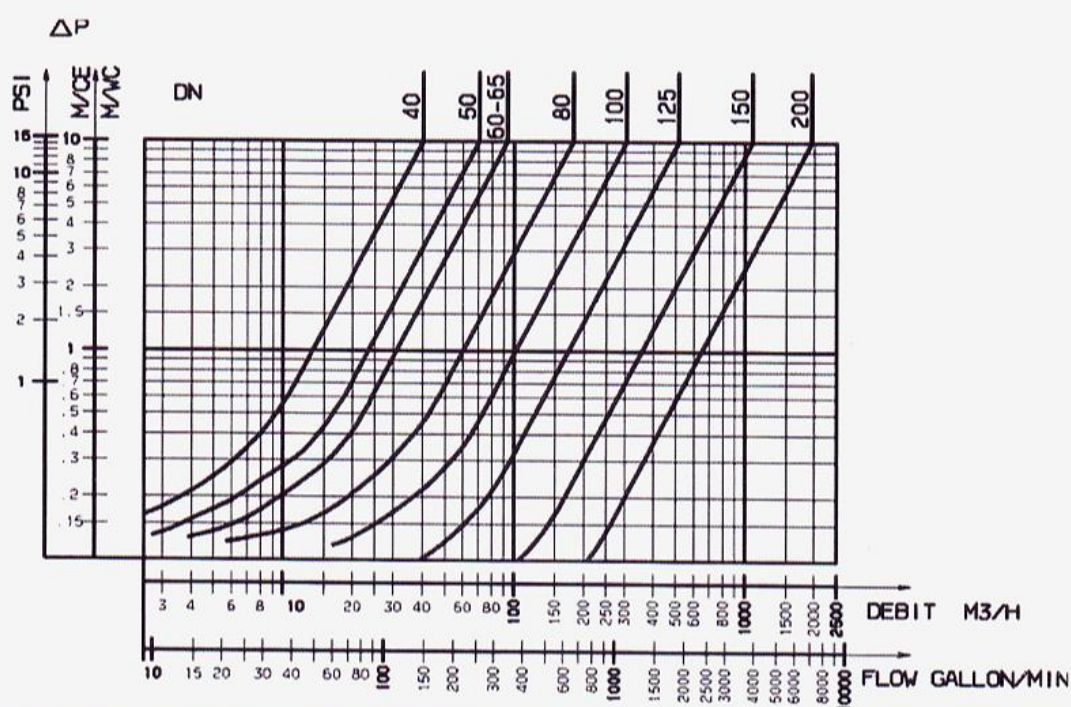
### Spare parts list and materials

Nb	Description	Materials	EURO	ANSI
1	O-RING	EPDM		
2	CASING	Cast iron + epoxy	EN-GJL-250	ASTM A 48 35 B
3	SEAT	Stainless steel	CB7Cu-1	
4	CUPEL DN 40 to 65 DN 80 to 200	Stainless steel	X6Cr17	AISI 430
		Brass	CuZn39Pb3	
5	MEMBRANE	NR		
6	SCREW	Stainless steel	X5Cr-Ni18-10	AISI 304
7	BOLT	Stainless steel	X5Cr-Ni18-10	AISI 304
8	SCREW	Stainless steel	X5Cr-Ni18-10	AISI 304
9	BOLT	Stainless steel	X5Cr-Ni18-10	AISI 304



### Working principle

DN		Opening pressure in mm/WC 	Kv	$\zeta$
"	mm		m <sup>3</sup> /H	
1 1/2	40	Near 0	40,30	2,50
2	50		70,50	1,97
2 1/2	65		93,30	3,21
3	80		180,00	1,98
4	100		305,50	1,68
5	125		515,00	1,44
6	150		1072,00	0,70
8	200		1940,00	0,60



## Technical data sheet

### Type 302

Foot valve  
System 02

#### Applications and special features



- Operates in any position from horizontal to vertical ascending
- Minimum head loss
- Silent, reliable sealing, compact
- Exceptional robustness
- Does not generate hammering
- Closing system : long back axial guiding for reduced displacement
- Sealing guaranteed by a flat seal
- Return spring

#### Technical description

DN "	mm	PN	PFA bar	PS - bar				Cat.	References Steel strainer	Références Strainer SS 304L
				L1	L2	G1	G2			
2	50	10/16	16	16	16	x	x	3.3	149B 2754	149B 15094
2 <sup>1/2</sup>	65	10/16	16	16	16	x	x	3.3	149B 2755	149B 15001
3	80	10/16	16	16	16	x	x	3.3	149B 2756	149B 14999
4	100	10/16	16	16	16	x	x	3.3	149B 2757	149B 15428
5	125	10/16	10	10	10	x	x	3.3	149B 2701	149B 15002
6	150	10/16	10	10	10	x	x	3.3	149B 2702	149B 15424
8	200	10	10	10	10	x	x	3.3	149B 2703	149B 15036
10	250	10	10	10	10	x	x	I	149B 2704	149B 14906
12	300	10	10	10	10	x	x	I	149B 2705	149B 15505
14	350	10	10	10	10	x	x	I	149B 2706	149B 97244
16	400	10	10	10	10	x	x	I	149B 2707	149B 15737
20	500	10	10	10	10	x	x	I	149B 23135	Consult us

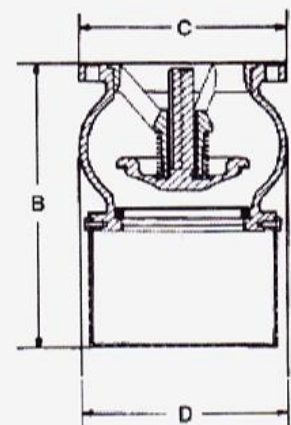
#### Important notice :

The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

- **Connection** : flanges drilled PN : see table
- **Permissible operating pressure PFA - water** (for supply, distribution and disposal of water) : See table
- **Maximum permissible pressure PS - other mediums** : See table
- **θ** : Mini. -10 °C  
Maxi. 100 °C
- **Mediums** : Clear liquids
- **Approvals** : ACS - PED 97/23/CE
- **International construction Standards** :  
CE Conformity Directive 97/23/CE  
Flange drilling according to EN1092-2

#### Overall dimensions

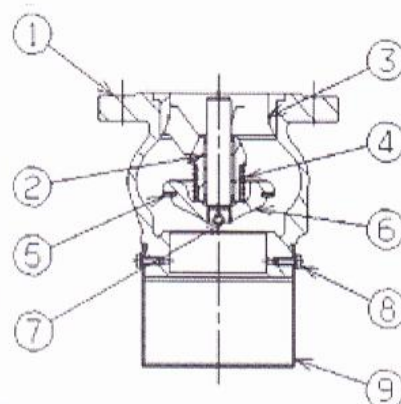
DN "	mm	B mm	C mm	D mm	Weight kg
2	50	143	165	97	4,3
2 <sup>1/2</sup>	65	185	185	125	6,4
3	80	218	200	150	9,3
4	100	265	220	181	13,6
5	125	333	254	217	19
6	150	373	285	256	28
8	200	483	343	336	48
10	250	572	406	416	90
12	300	652	482	486	133
14	350	771	533	580	226
16	400	876	597	676	343



## Technical data sheet Type 302 - Foot valve

### Spare parts list and materials

Nb	Description	Materials	EURO	ANSI
1	CASING	Cast iron/Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
2	RING	Bronze	EN 1982 CuSn12-C GS	
3	GUIDE DN50	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
	Other DN	Cast iron/Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
4	SPRING	Stainless steel	EN 10270-3 X10CrNi18-8	AISI 302
5	SEAL	EPDM		
6	CLOSING SYSTEM	Cast iron/Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
	DN50-65 : one-piece	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
7	STEM	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
8	SCREW DN50 to 150	Galvanised steel		
	SCREW DN200 to 400	Brass		
9	STRAINER	Galvanised steel		
	STRAINER (optional)	Stainless steel 304L		



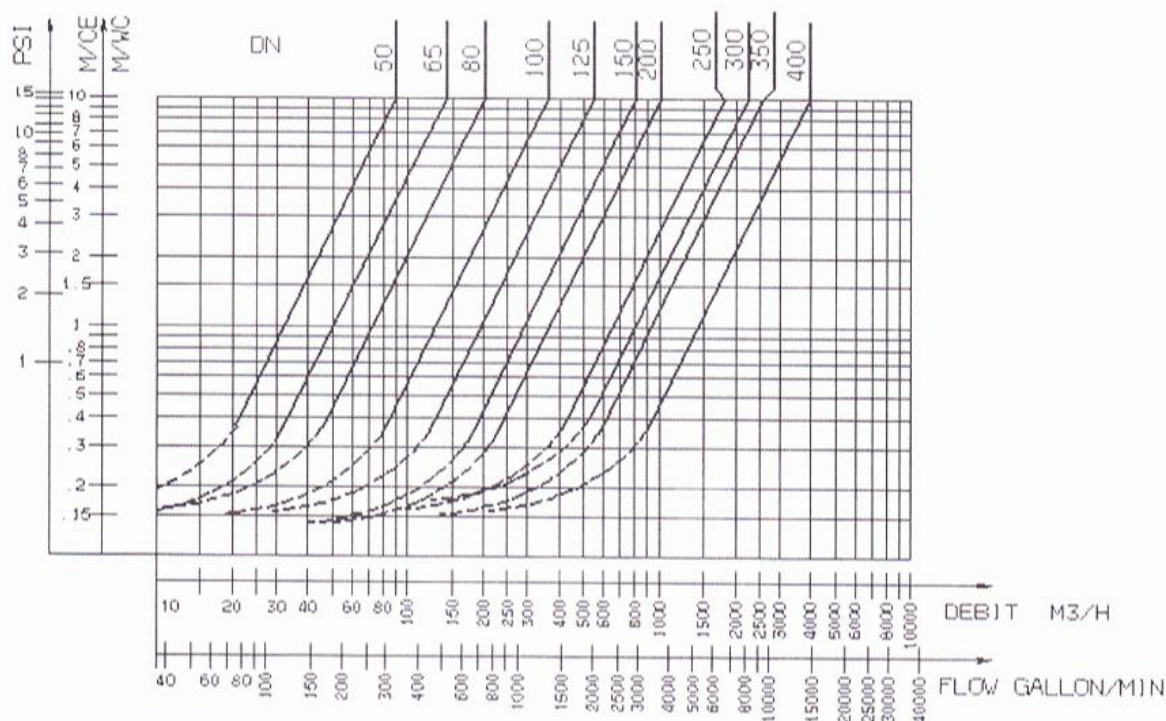
### Working principle

DN	Opening pressure in mm/CE	Kv	$\zeta$
2	230	89,00	1,23
2 <sup>1/2</sup>	240	143,00	1,36
3	280	199,00	1,60
4	290	356,00	1,20
5	350	557,00	1,20
6	400	801,00	1,20
8	450	1008,00	2,46
10	560	1818,00	1,85
12	760	2210,00	2,60
14	810	2560,00	3,60
16	900	3930,00	2,60
20		6914,00	2,05

#### Directions for use :

- Solid line : Valve completely open
- Dotted line : opening stage of valve

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## Technical data sheet

# Type 402

## Non return valve

### System 02

### Applications and special features



- Operates in any position
- Minimum head loss
- Silent, reliable sealing, compact
- Exceptional robustness
- Does not generate hammering
- Notch provided for cable to submerged pumps until DN 100.
- Closing system : long back axial guiding for reduced displacement
- Sealing guaranteed by a flat seal
- Return spring

### Technical description

DN	"	mm	PN	PFA in bar	PS in bar				Cat	Ref.	Vvs-nr
					L1	L2	G1	G2			
1 1/2	40	10/16	16	16	16	16	16	I	149B2281		
2	50	10/16	16	16	16	16	16	I	149B2282		
2 1/4	60	10/16	16	16	16	16	16	I	149B1176		
2 1/2	65	10/16	16	16	16	15	16	I	149B2283		
3	80	10/16	16	16	16	12	16	I	149B2284		
3	80	10/16	16	16	16	16	16	II	149B2284C2		
4	100	10/16	16	16	16	10	16	I	149B2285		
4	100	10/16	16	16	16	16	16	II	149B2285C2		
5	125	10/16	16	16	16	0,5	16	I	149B2226		
5	125	10/16	16	16	16	16	16	II	149B2226C2		
6	150	10/16	16	13	16	0,5	16	I	149B2227		
6	150	10/16	16	16	16	16	16	II	149B2227C2		
8	200	10	10	10	10	10	10	II	149B2229		
10	250	10	10	10	10	10	10	II	149B2230		
12	300	10	10	10	10	10	10	II	149B2231		
14	350	10	10	10	10	0,5	10	II	149B2232		
16	400	10	10	10	10	0,5	10	II	149B2233		
20	500	10	10	10	10	0,5	10	II	149B2235		

#### Important notice:

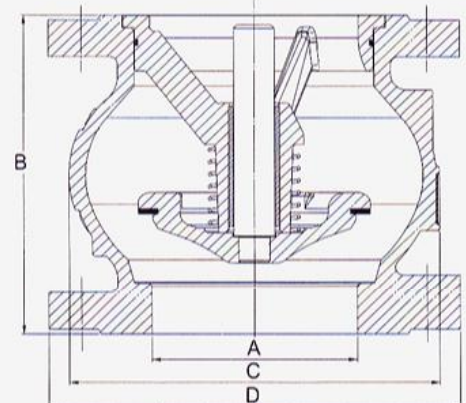
The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

The operating instructions are available on our web site [www.socla.com](http://www.socla.com) or by requesting from our sales department.

- **Connection** : flanges drilled PN : see table
- **Permissible operating pressure PFA - water-** (for supply, distribution and disposal of water) : See table
- **Maximum Permissible pressure PS - other mediums:** See table
- **θ** Mini. -10 °C  
Maxi. 100 °C
- **Mediums** : Clear liquids
- **Approvals** : ACS
- **Other approvals available** : **kiwa**  
Wras approved material : Consult us
- **International construction Standards** :  
CE Conformity Directive 97/23/CE  
Flange drilling according to EN1092-2

### Overall dimensions

	A	B	C	D	Weight
"	mm	mm	mm	mm	kg
1 1/2	40	85	80	150	4,2
2	50	100	97	165	5,8
2 1/4	60	120	125	185	8,1
2 1/2	65	120	125	185	8,1
3	80	140	150	200	10,2
4	100	170	187	220	14,5
5	125	200	220	250	24
6	150	230	250	285	32
8	200	289	340	340	53
10	250	354	420	405	94
12	300	396	490	460	140
14	350	473	586	533	225
16	400	560	680	597	312
20	500	750	800	670	540

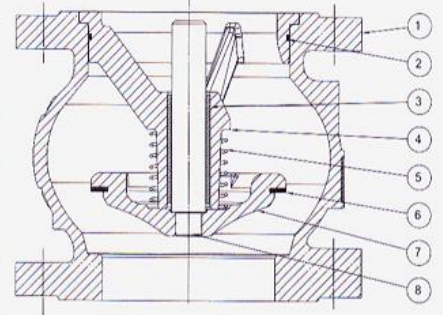


## Technical data sheet

## Type 402 - Non return valve

### Spare parts list and materials

Nb	Description	Materials	EURO	ANSI
1	CASING DN 40-400 DN 500	Cast iron/epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
		Ductile iron/epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12
2	O-RING SEAL DN 40-250	EPDM		
3	RING	Bronze	EN 1982 CuSn12-C GS	
4	GUIDE DN50 DN 40 & 60-400 DN 500	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
		Cast iron/epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
		Ductile iron/epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12
5	SPRING	Stainless steel	EN 10270-3 X10CrNi18-8	AISI 302
6	SEAL	EPDM		
7	CLOSING SYSTEM DN 40 DN 50-65	Brass	EN12164CuZn40Pb2 R360	
		Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
7-8	DN 80-400 STEM CHECK-VALVE	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
		Cast iron/epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
7-8	DN 500 STEM CHECK-VALVE	Bronze	EN 1982 CuSn12-C GS	
		Ductile iron/epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12

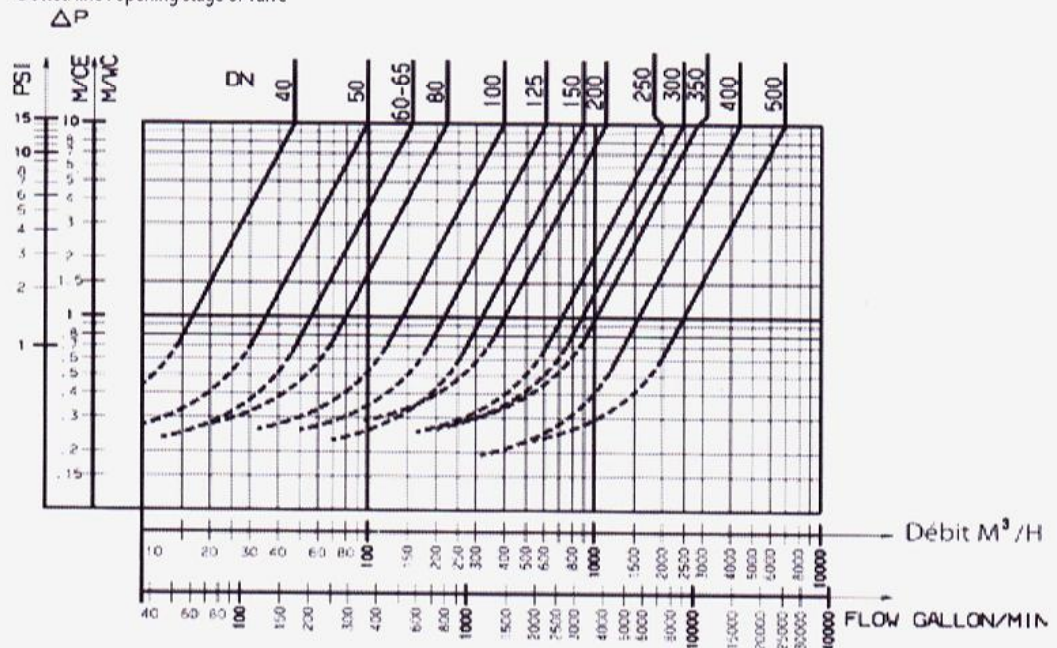


### Working principle

DN	"	mm	Opening pressure in mm/CE				Kv m <sup>3</sup> /H	ζ
			↑	↓	↔	without spring		
1 <sup>1/2</sup>	40	440	210	320	120	47,00	1,80	
2	50	440	220	330	110	99,00	1,00	
2 <sup>1/4</sup>	60	450	190	320	130	159,00	1,10	
2 <sup>1/2</sup>	65	450	190	320	130	159,00	1,10	
3	80	450	190	320	130	222,00	1,30	
4	100	500	240	370	130	396,00	1,00	
5	125	510	210	360	150	619,00	1,00	
6	150	550	210	380	170	890,00	1,00	
8	200	590	210	400	190	1120,00	2,00	
10	250	710	210	460	250	2010,00	1,50	
12	300	820	90	460	365	2459,00	2,10	
14	350	860	100	480	380	2843,00	2,90	
16	400	800	50	410	390	4370,00	2,10	
20	500	1030	0	430	580	6914,00	2,05	

#### Direction for use :

- Solid line : Valve completely open
- Dotted line : opening stage of valve



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## Technical data sheet

# Type 418

## Non return valve System B

### Applications and special features



- Vertical ascending and horizontal position (position the ball housing above the axis of the pipe)
- Minimum head loss
- Silent, robust
- Non incrustating materials
- Closing system : ball lifted up by the liquid and guided to a lateral housing completely out of the way
- Sealing guaranteed by the coating of the ball.

### Technical description

DN	PN	PFA bar	PS - bar				Cat.	References	Vvs-nr
			L1	L2	G1	G2			
2	50	10/16	10	10	10	10	I	149B 3140	
2 <sup>1/2</sup>	65	10/16	10	10	10	10	I	149B 3141	
3	80	10/16	10	10	10	10	I	149B 3142	
4	100	10/16	10	10	10	10	I	149B 3143	
5	125	10/16	10	10	0,5	10	I	149B 3144	
6	150	10/16	10	10	0,5	10	I	149B 3145	
8	200	10	10	10	0,5	10	I	149B 3146	
10	250**	10	10	10	0,5	10	I	149B 2907	
12	300**	10	10	10	0,5	10	I	149B 2908	
14	350**	10	10	10	0,5	10	I	149B 2909	

\*\* Type 408

- **Connection** : flanges drilled PN : see table
- **Permissible operating pressure PFA - water-** (for supply, distribution and disposal of water) : See table
- **Maximum permissible pressure PS - other mediums** : See table

- **θ** Mini -10°C  
Maxi. 80 °C
- **Mediums** : Thick liquids, viscous liquids, loaded liquids

- **Approvals** :   PED 97/23/CE  
CPR 305/2011/UE

- **International construction Standards** :  
CE Conformity Directive 97/23/CE  
CE Conformity Regulation 305/2011/UE EN12050-4 Standard  
Flange drilling according to EN1092-2  
Length according to EN558 series 48

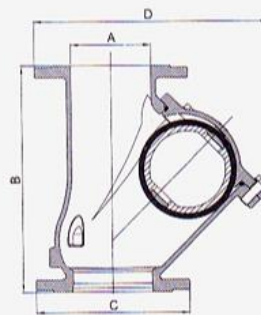
### Important notice :

The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

### Overall dimensions

DN	B	C	D	Weight	
"	A mm	mm	mm	kg	
2	50	200	165	173	5,5
2 <sup>1/2</sup>	65	240	185	214	9,1
3	80	260	200	252	13,3
4	100	300	220	289	20,9
5	125	350	250	368	27,5
6	150	400	285	424	35,7
8	200	500	340	509	63,7
10**	250	600	400	593,5	128,9
12**	300	700	455	725,5	220,1
14**	350	875	505	820	345,6

\*\* Type 408

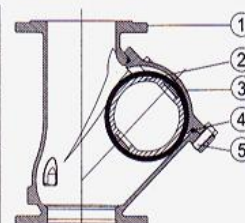


Type 418

## Technical data sheet Type 418 - Non return valve

### Spare parts list and materials

Nb	Description	Materials	EURO	ANSI
1	CASING	Ductile iron + epoxy	EN-GJS-400.15	ASTM A 536 60-40-18
2	BALL DN 50 up to 100 DN up to 350	Aluminium + NBR Cast iron + NBR		
3	CAP	Ductile iron + epoxy	EN-GJS-400.15	ASTM A 536 60-40-18
4	SEAL	NBR		
5	SCREW-WASHER	Stainless steel	X5Cr-Ni18-10	AISI 304



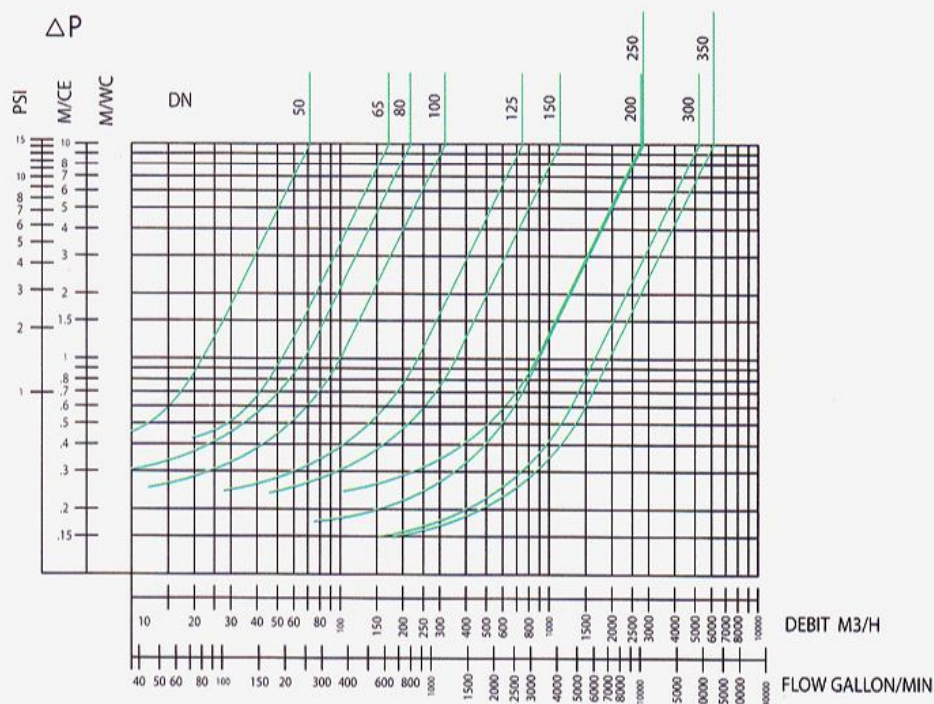
Type 418

### Working principle

DN		Opening pressure in mm/CE		Kv	ζ
"	mm			m <sup>3</sup> /H	
2	50	25	near 0	71,5	1,95
2 <sup>1/2</sup>	65	30		171,5	0,97
3	80	160		217,5	1,38
4	100	160		319	1,57
5	125	170		744,9	0,7
6	150	200		1133,7	0,63
8	200	250		2766	0,33
10	250	180		2826	0,78
12	300	200		5228	0,48
14	350	220		6132	0,64

#### Directions for use :

- Solid line : Valve completely open

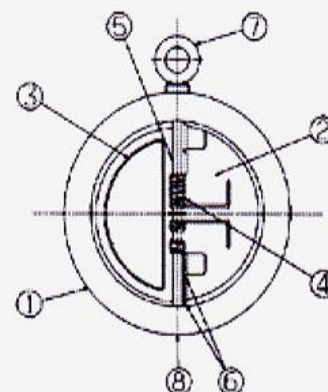


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## Technical data sheet Type 895 - Non return-valve

### Spare parts list and materials

Nb	Description	Materials	EURO	ANSI
1	CASING DN50 to 150	Cast iron + epoxy	EN-GJL-250	ASTM A 48 35 B
	DN200 to 400	Ductile iron + epoxy	EN-GJS-400.15	ASTM A 536 60-40-18
2	PLATES	Stainless steel	GX5CrNi19-10	AISI 304
3	SEAL	EPDM		
4	SPRING	Stainless steel	X5CrNiMo17-12-2	AISI 316
5	STEM	Stainless steel	X5CrNiMo17-12-2	AISI 316
6	BEARING	PTFE		
7	EYE BOLT DN>150	Steel XC15		
8	PLUGS	Brass		

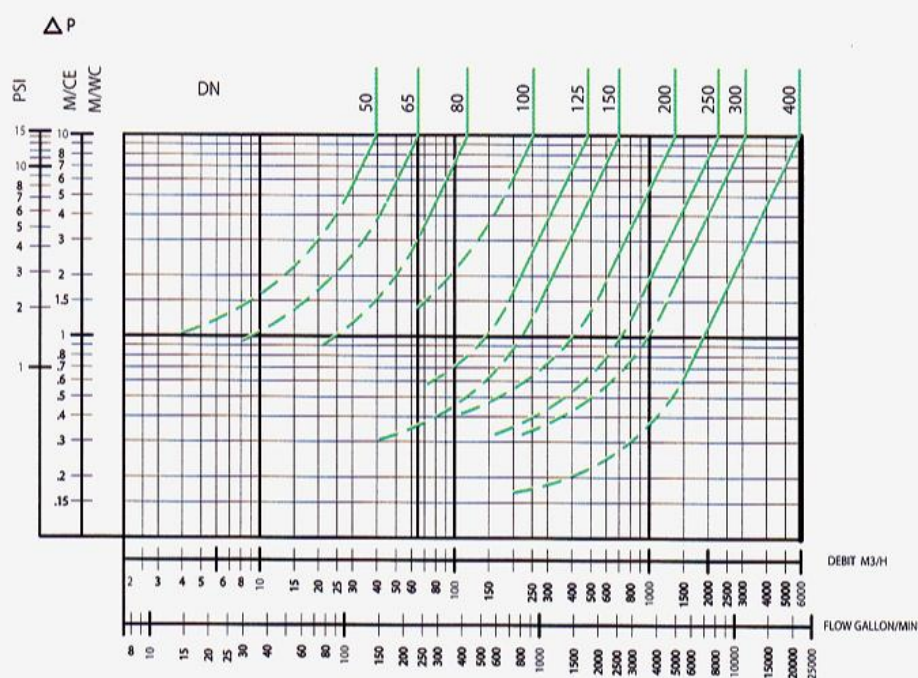


### Working principle

DN		Opening pressure in mm/CE	Kv m <sup>3</sup> /H	ζ
"	mm			
2	50	Near 0	35,7	7,81
2 1/2	65		64,7	6,81
3	80		116,1	4,86
4	100		253,3	2,49
5	125		481,8	1,68
6	150		698,4	1,66
8	200		1345,5	1,41
10	250		2249,5	1,23
12	300		3098	1,35
16	400		5867	1,2

#### Directions for use :

- Solid line : Valve completely open
- Dotted line : opening stage of valve





## Technical data sheet

### Type 895

Non return-valve  
System 05

#### Applications and special features



- Operating position : horizontal and vertical
- Minimum occupation of space
- Very low head loss
- For pumping, water supply, general industry
- Closing system : double plate with return spring
- Using these check valves on networks equipped with piston pumps or compressors is not recommended.

#### Technical description

DN "	mm	PN	PFA in bar	PS in bar				Cat.	References	Vvs-nr
				L1	L2	G1	G2			
2	50	10/16	16	16	16	16	16	I	149B 3000	
2 <sup>1/2</sup>	65	10/16	16	16	16	15	16	I	149B 3001	
3	80	10/16	16	16	16	12	16	I	149B 3002	
4	100	10/16	16	16	16	10	16	I	149B 3003	
5	125	10/16	16	16	16	0,5	16	I	149B 3004	
6	150	10/16	16	13	16	0,5	16	I	149B 3005	
8	200	10/16	16	10	16	0,5	16	I	149B 3006	
10	250	10/16	16	10	16	0,5	14	I	149B 3007	
12	300	10/16	16	10	16	0,5	11	I	149B 3008	
16	400	10/16	16	10	16	-	8	I	149B 3010	

#### Important notice:

The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

- **Connection** : Mounting between flanges, PN see table.
- **Permissible operating pressure PFA - water-** (for supply, distribution and disposal of water) : See table

- **Maximum permissible pressure PS - other mediums** : See table

- **θ** Mini. -10 °C  
Maxi. 100 °C

- **Mediums** : Clear water, gas

- **Approvals** : ACS  PED 97/23/CE 

Wras approved material : Consult us

- **International construction Standards** :

CE Conformity Directive 97/23/CE

Flange drilling according to EN1092-2

Overall dimensions according to EN558-1 serie 50

#### Overall dimensions

	A	B	C	D	Weight
"	mm	mm	mm	mm	kg
2	50	54	60	109	1,2
2 <sup>1/2</sup>	65	54	73	129	1,8
3	80	57	89	144	2,9
4	100	64	114	164	3,9
5	125	70	141	194	5,8
6	150	76	168	220	8
8	200	95	219	275	14
10	250	108	273	330	22
12	300	143	324	380	34
16	400	191	410	491	83

