

Chapter 1

Protection Systems

BA AND CA
BACKFLOW PREVENTERS

EA ANTIPOLLUTION
NON-RETURN VALVES

EB ANTIPOLLUTION
NON-RETURN VALVES

EC AND ED
DOUBLE CHECK VALVES

Chapter 1.1

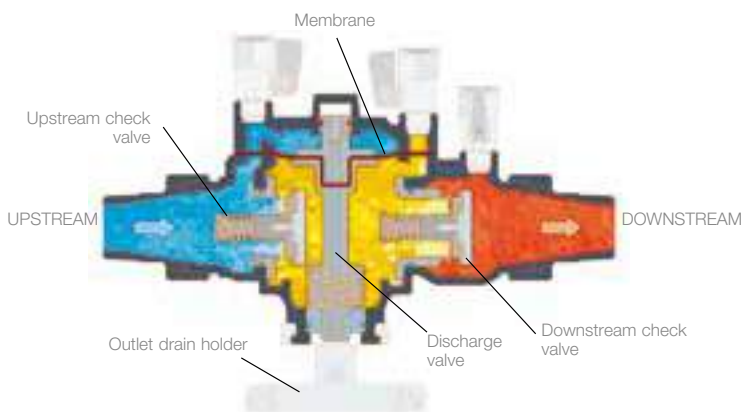
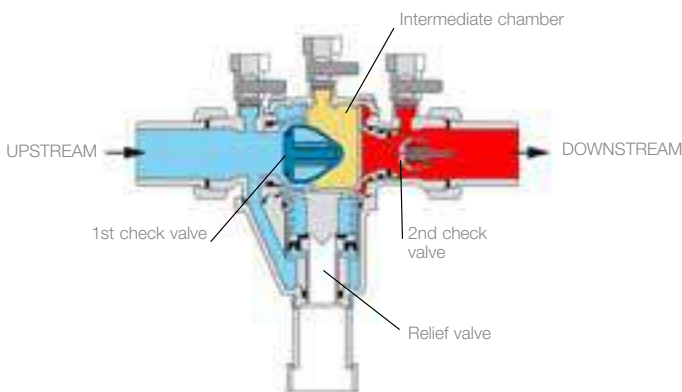
BA and CA BACKFLOW PREVENTERS

Agriculture, chemical or agricultural industries, collective or individual housing, workshop or business, all kinds of user are served by and linked to the same network : the risks of cross contamination multiply. As the network becomes more and more complex, an incident is more and more likely to occur in the water distribution system. Incidents may occur of various degrees of seriousness when pumping a polluted liquid, siphoning a tank of chemical product, disposing of a dangerous product or rejecting waste water.

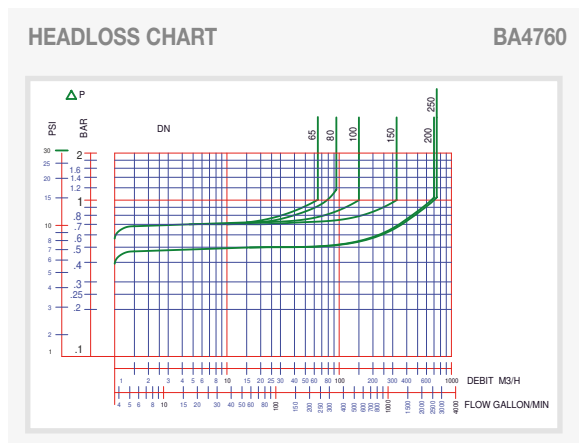
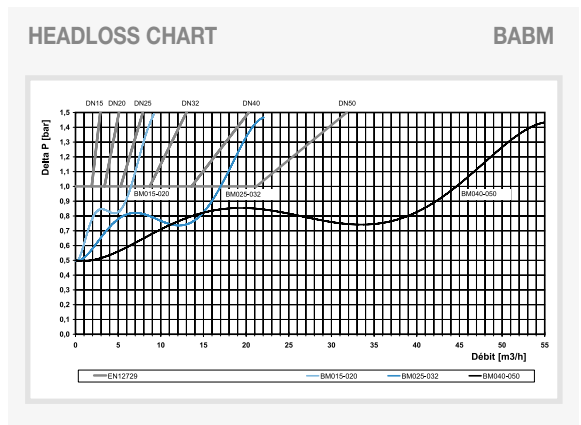
Backflow preventers protect the drinking water network by interrupting the continuity of the supply, emptying and evacuating to waste in case of danger of water being turned back into the main pipeline.

BA BACKFLOW PREVENTER

with verifiable reduced pressure zone

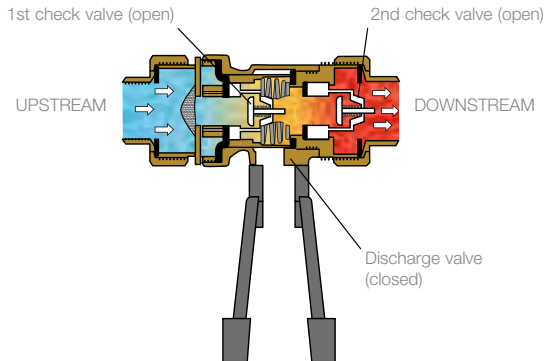


For systems liable to bring serious pollution risks : industrial surface treatment plants, hospitals, chemicals, plant protection, industrial and «commercial» heating etc. Backflow preventers demonstrate effective protection acknowledged by most European authorities.

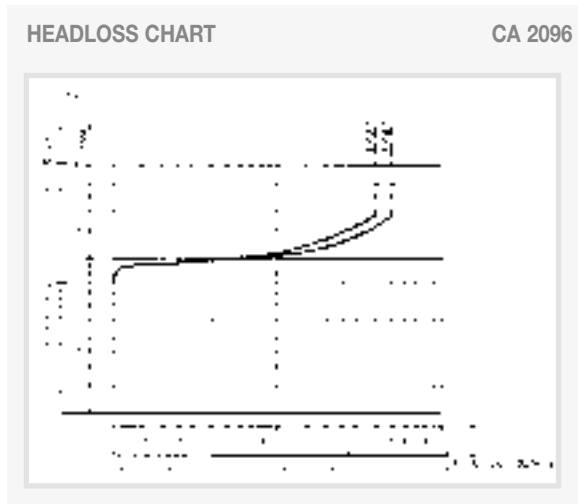


CA BACKFLOW PREVENTER

with non-verifiable reduced pressure zone



To protect low risk or intermittent risk installations which nevertheless require a backflow prevention system : domestic heating units < 70 kw, vending machines, certain laboratory equipment.



PROTECTION OF DRINKING WATER NETWORKS

BABM - male/male

EN 12729

PRESSURE PFA 10 bar θ 65°

Backflow preventer with verifiable reduced pressure zone with funnel attached
Piston technology system, without membrane, total accessibility for the maintenance of the modular parts:

CASING : Brass

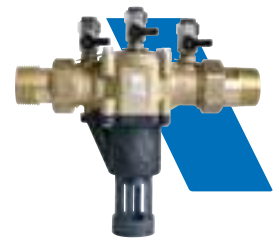
RELIEF VALVE : Polymer PA

CHECK VALVES : Polymer POM

APPROVALS :



Other approval available :



Part Number	DN mm	DN "	UV
149B 70000	15	1/2	1
149B 70001	20	3/4	1
149B 70002	25	1	1
149B 70003	32	1 1/4	1
149B 70004	40	1 1/2	1
149B 70005	50	2	1

Dimensions at the end of the section.

BA4760 - with PN10 flanges

EN 12729

PRESSURE PFA 10 bar θ 65°

Backflow preventer with verifiable reduced pressure zone with funnel attached

CASING : cast iron with epoxy coating

VALVES : BA4760 : valve head in DZR brass or bronze and valve seat in PPO or bronze

SEALS : EPDM/Silicone

SPRING : stainless steel

APPROVALS :



Note: Horizontal installation



Part Number	DN mm	DN "	UV
149B 3486	65	2 1/4	1
149B 3097	80	3	1
149B 3098	100	4	1
149B 3400	150	6	1
149B 3401	200	8	1
149B 3402	250	10	1

Dimensions at the end of the section.

HEATING INSTALLATIONS WITH LESS THAN 70 KW

CA 2096 - female/female

PRESSURE PFA 10 bar θ 65°

Backflow preventer with non-verifiable reduced pressure zone with funnel attached

CASING : brass

VALVES : POM (polyacetal) and brass

MEMBRANE AND SEALS : NBR (nitrile) and EPDM

SPRING : stainless steel

Female threaded union nuts and drain holder

APPROVALS :  ACS  

OPTIONS : threaded male/male version and male/male or female/female nickel-plated versions available on request



Part Number	DN mm	UV
149B 3781	15	1
149B 3782	20	1

Dimensions at the end of the section.

ACCESSORIES - PROTECTION OF PUMPS, VALVES, PRESSURE REDUCING VALVES, BACKFLOW PREVENTERS

Y333P - with PN10 flanges

PRESSURE PFA/PS en bar θ 100°

FILTER : GJL cast iron epoxy coated internal/external (DN40 to 50) GJS ductile iron epoxy coated internal/external (DN65 to 400)

STRAINER : stainless steel

DRAIN COCK : brass 1/2"

APPROVALS : ACS   PED 97/23/CE

MESH Ø :

DN 1"1/2 and 2" : 500 microns

DN 3" to 8" : 1250 microns

DN 2"1/2 : 800 microns

DN 10" to 16" : 1600 microns



Part Number	DN	PFA			PS				Cat	UV
		«	mm	water	L1	L2	G1	G2		
149B 3280	1 1/2	40	16	16	16	x	x	3.3	1	
149B 3281	2	50	16	16	16	x	x	3.3	1	
149B 3282	2 1/2*	65	16	16	16	x	x	3.3	1	
149B 3283	3**	80	16	16	16	x	x	3.3	1	
149B 3284	4	100	16	16	16	x	x	3.3	1	
149B 3285	5	125	16	16	16	x	x	3.3	1	
149B 3286	6	150	16	13	16	x	x	3.3	1	
149B 3287	8	200	10	10	10	x	x	3.3	1	
149B 3288	10	250	10	10	10	x	x	1	1	
149B 3289	12	300	10	10	10	x	x	1	1	
149B 3788	14	350	10	10	10	x	x	1	1	
149B 3791	16	400	10	10	10	x	x	1	1	

*Double drilling DN65 / DN60 - **Double drilling : 4 and 8 holes

Dimensions at the end of the section.

Y222P - female/femalePRESSURE PFA 25 bar θ 110°

FILTER : brass

STRAINER : stainless steel

DRAIN COCK : brass 1/4" (except DN 1/2" : 1/8")

APPROVALS :



MESH Ø :

500 microns (except DN 1/2" : 300 microns)



Part Number	DN mm	UV
149B 5950	1/2	1
149B 5160	3/4	1
149B 5161	1	1
149B 5191	1 1/4	1
149B 5162	1 1/2	1
149B 5163	2	1

Dimensions at the end of the section.

SPARE PARTS FOR BACKFLOW PREVENTER**Kit for backflow preventer BABM**Components : 1 upstream valve, 1 downstream valve, 1 discharge valve,
+ 1 draining valve set for BA4760

Packing : 1 kit by box

(For any order, please give the serial number of the product).

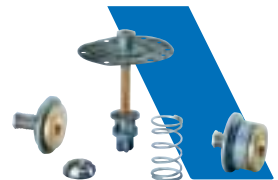


Part Number	For BABM	UV
149B 1391	149B 70000	1
149B 1391	149B 70001	1
149B 1393	149B 70002	1
149B 1393	149B 70003	1
149B 1395	149B 70004	1
149B 1395	149B 70005	1

SPARE PARTS FOR BACKFLOW PREVENTER**Kit for Backflow preventer BA4760**

For backflow preventers type BA2660/4660 : please consult us precising the serial number

Part Number	For BA4760	UV
149B 19	3486	1
149B 20	3097	1
149B 21	3098	1
149F 017922	3400	1
149B 25	3401	1
149B 25	3402	1



FOR TESTING AND SERVICING BACKFLOW PREVENTERS ON SITE

Testing Kit

Come in a shockproof case with manual, calibration certificate of the electronic gauge and maintenance procedure.

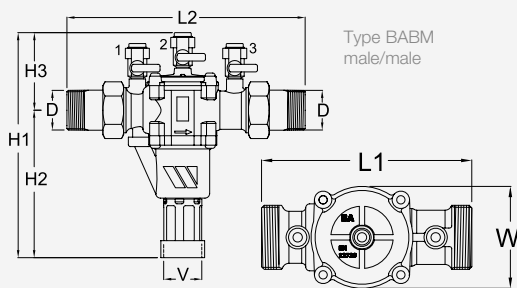
For Backflow preventers type BA : ø 15mm to 250 mm 



Part Number	UV
149B MC1022	1

OVERALL DIMENSIONS

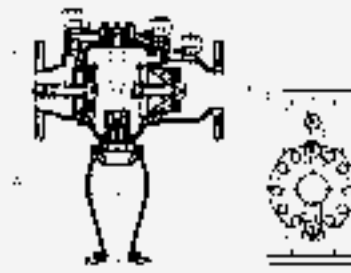
BABM



Type BABM male/male

DN	D	V	L1	L2	H1	H2	H3	W	Kg
mm	"	mm	mm	mm	mm	mm	mm	mm	
15	1/2	32	122	201	168,5	103	65,5	53	1,2
20	3/4	32	122	201	168,5	103	65,5	53	1,2
25	1	40	157	252	238	156	82	76	2,7
32	1 1/4	40	157	252	238	156	82	76	2,7
40	1 1/2	50	220	336	303,5	202,5	101	115	6,5
50	2	50	220	336	303,5	202,5	101	115	6,5

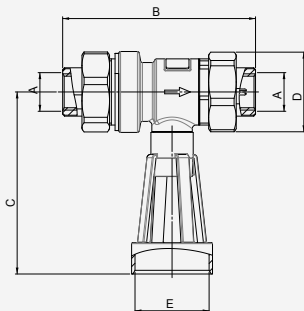
BA4760



Type BA4760 flanged

DN	Ø A	B	C	D	Ø E	Ø F	Kg
mm	mm	mm	mm	mm	mm	mm	
65	185	356	155	326	63	180	26,25
80	200	440	173	337	63	200	33,00
100	220	530	201	434	80	255	65,00
150	285	630	230	456	80	310	92,00
200	340	763	272	499	80	390	150,00
250	395	763	272	499	80	390	161,00

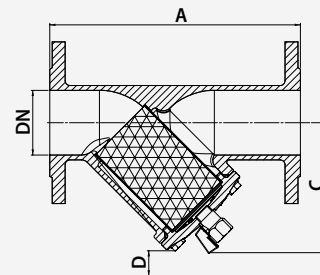
CA 2096



Type CA 2096 female/female

DN	A	B	C	D	E	Kg
mm	"	mm	mm	mm	mm	
15	1/2	105	59	44	40	0,6
20	3/4	105	59	44	40	0,6

Y333P



Type Y333P flanged

Ø mm	A mm	C mm	D mm	Mesh mm	Kg	KV m ³ /H	ζ
40	200	130	35	0,50	6,5	42,7	2,20
50	230	145	50	0,50	8,5	66,7	2,20
65	290	137	65	0,80	9,8	89	3,50
80	310	159	75	1,25	13,5	127	4,00
100	350	187	90	1,25	18	200	3,90
125	400	249	125	1,25	27,5	364	2,60
200	600	403	220	1,25	83	937	2,90
250	730	472	200	1,60	112	1137	4,80
300	850	508	250	1,60	160	1844	3,80
350	980	587	315	1,60	297	1844	7,10
400	1100	658	370	1,60	406	2172	8,80

OVERALL DIMENSIONS

Y222P



Type Y222P threaded

\varnothing	A	B	C	Mesh	Kg	KV	ζ
mm	mm	mm	mm	mm		m3/H	
15/21	63	60	40	0,5	0,18	2,7	10,33
20/27	96	69	69	0,5	0,41	5,1	9,50
26/34	101	87	73	0,5	0,57	11,3	4,70
33/42	125	106	84	0,5	0,86	17,2	5,50
40/49	129	117	91	0,5	1,18	23	7,50
50/60	145	147	103	0,5	1,81	46,8	4,50

Chapter 1.2

EA ANTIPOLLUTION NON-RETURN VALVES

HOUSING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS

EA271 - Threaded male/male

PRESSURE PFA/PS in bar θ 80°

CASING : brass, 2 drilled bosses 1/4" with POM (polyacetal) plugs

GUIDING + CLOSING SYSTEM : POM (polyacetal) or PA

SEAL : NBR (nitrile) lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other approvals available: 

SPECIAL : with sockets and nuts

01 SYSTEM



Part Number	DN «	PFA water	PS				Cat	UV
			L1	L2	G1	G2		
149B 2300	1/2	10	10	10	10	10	3.3	10
149B 2201K	3/4	10	10	10	10	10	3.3	10
149B 2202K	1	10	10	10	10	10	3.3	10
149B 2203K	1 1/4	10	10	10	x	10	3.3	10
149B 2204K	1 1/2	10	10	10	x	10	3.3	6
149B 2205K	2	10	10	10	x	10	3.3	5

Dimensions at the end of the section.

EA253 - Threaded female/female

PRESSURE PFA/PS in bar θ 100°

CASING : Ductile iron with epoxy coating, Drilled BOSSES

CLOSING SYSTEM + STEM : DZR brass

SEAT + SPRING : Stainless steel

PLUGS : Brass

APPROVALS :   ACS   PED 97/23/CE
BELGAOJA

03 SYSTEM



Part Number	DN «	PFA water	PS				Cat	UV	
			F/F com	L1	L2	G1			G2
149B 3810	50	16	2 1/2	16	16	15	16	1	10
149B 3811	65	16	3	16	16	12	16	1	10

Dimensions at the end of the section.

EA221B - female/femalePRESSURE PFA/PS in bar θ 80°

CASING : brass (DN2" in bronze) 2 drilled bosses 1/4" with POM (polyacetal) plugs + seal in EPDM

GUIDING : PPO (polyacetal)

CLOSING SYSTEM : POM (polyacetal) or PA

SEAL : NBR (nitrile) lip-ring - SPRING : stainless steel

APPROVALS :   ACS

01 SYSTEM

Part Number	DN «	PFA water	PS				Cat	UV
			L1	L2	G1	G2		
149B 2171	3/4	10	10	10	10	10	3.3	10
149B 2172	1	10	10	10	10	10	3.3	10
149B 2173	1 1/4	10	10	10	x	10	3.3	10
149B 2174	1 1/2	10	10	10	x	10	3.3	6
149B 2175	2	10	10	10	x	10	3.3	6

Dimensions at the end of the section.

FOR DRINKING WATER PROTECTION, CLEAR LIQUIDS, WATER, GAS**EA291NF - female/female**PRESSURE PFA/PS in bar θ 80°

CASING : brass 2 drilled bosses 1/4" with POM (polyacetal) plugs

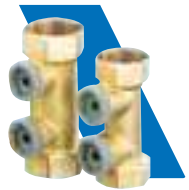
GUIDING + CLOSING SYSTEM : POM

SEAL : NBR

SPRING : stainless steel

APPROVALS :    ACS

01 SYSTEM



Part Number	DN «	PFA water	PS				Cat	UV
			L1	L2	G1	G2		
149B 2220	1/2	10	10	10	10	10	3.3	10
149B 2212	3/4	10	10	10	10	10	3.3	10
149B 2222	1	10	10	10	10	10	3.3	10
149B 2213	1 1/4	10	10	10	x	10	3.3	10
149B 2214	1 1/2	10	10	10	x	10	3.3	10
149B 2215	2	10	10	10	x	10	3.3	6
149B 2216	2 conn. 2 1/2	10	10	10	x	10	3.3	2

Dimensions at the end of the section.

FOR DRINKING WATER PROTECTION AND WATER PROTECTION

EA453 - PN10/16

PRESSURE PFA/PS in bar θ 100°
 CASING : ductile iron with external/internal epoxy coating
 CLOSING SYSTEM + SHAFT : DZR brass
 VALVES + PLUG : Brass
 SEAT + SPRING : Stainless steel
 APPROVALS :



03 SYSTEM



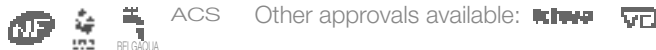
Part Number	DN «	PFA water	PS				Cat	UV	
			L1	L2	G1	G2			
149B3831W	40/50	16	16	16	16	16		1	
149B3832W	60/65	16	16	16	16	15	16		1
149B3833W	80	16	16	16	16	12	16		1
149B3834W	100	16	16	16	16	10	16		1
149B3836W	150	16	16	16	16	0,5	16		1
149B24871W	200	10	10	10	10	0,5	10		1
149B99957	250	10	10	10	10	0,5	10		1

Dimensions at the end of the section.

BUILDING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS

EA223 - male/male

PRESSURE PFA/PS in bar T°C 80°
 CASING : brass with threaded male / male connections for mounting with nuts and nipples
 2 drilled bosses 1/4" brass plug
 GUIDE / CLOSING SYSTEM : brass
 GUIDE STEM in DZR brass
 SEAL : EPDM / SPRING : stainless steel
 APPROVALS :



03 SYSTEM



Part Number	DN		PFA water	PS				Cat	UV
	mm	«		L1	L2	G1	G2		
149B 2890	15	1/2	16	16	16	16	16	3.3	1
149B 2891	20	3/4	16	16	16	16	16	3.3	1
149B 2892	25	1	16	16	16	16	16	3.3	1
149B 2893	32	1 1/4	16	16	16	x	16	3.3	1
149B 2894	40	1 1/2	16	16	16	x	16	3.3	1
149B 2895	50	2	16	16	16	x	16	3.3	1

Dimensions at the end of the section.

EA223D - male/male

PRESSURE PFA/PS in bar @ 80°
 CASING : brass with nuts and nipples connection 2 drilled bosses 1/4" with brass plug
 GUIDE STEM in DZR brass
 GUIDE / CLOSING SYSTEM : brass
 SEAL : EPDM
 SPRING : stainless steel
 SPECIAL : particularly adapted to pressure water systems

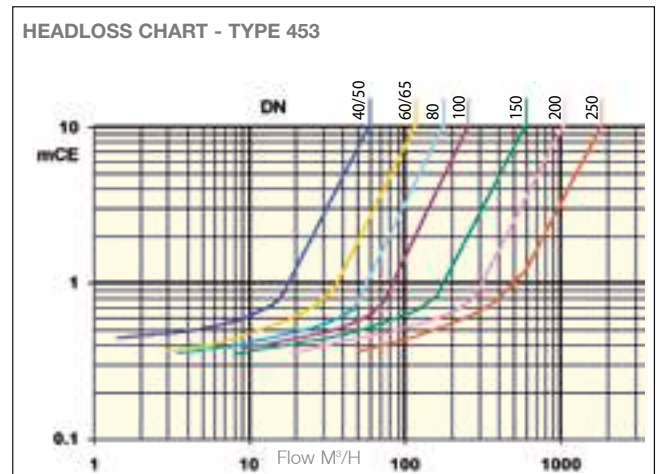
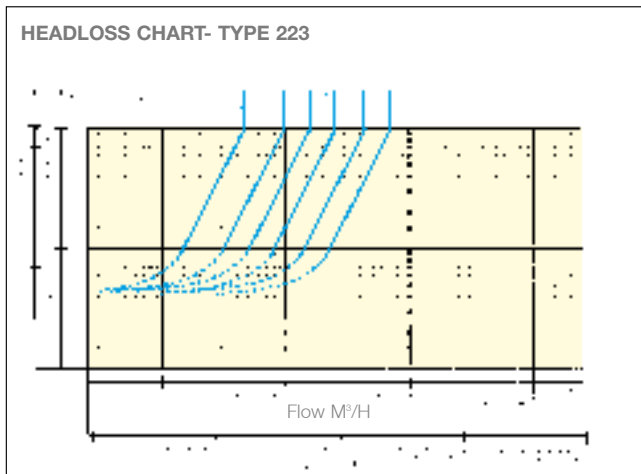


APPROVALS :    Other approvals available: 

03 SYSTEM

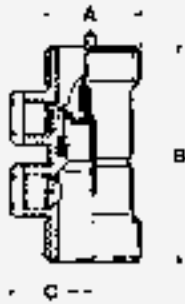
Part Number	DN		PFA water	PS				Cat	UV
	mm	«		L1	L2	G1	G2		
149B 2890 D	15	1/2	16	16	16	16	16	3.3	1
149B 2891 D	20	3/4	16	16	16	16	16	3.3	1
149B 2892 D	25	1	16	16	16	16	16	3.3	1
149B 2893 D	32	1 1/4	16	16	16	x	16	3.3	1
149B 2894 D	40	1 1/2	16	16	16	x	16	3.3	1
149B 2895 D	50	2	16	16	16	x	16	3.3	1

Dimensions at the end of the section.



OVERALL DIMENSIONS

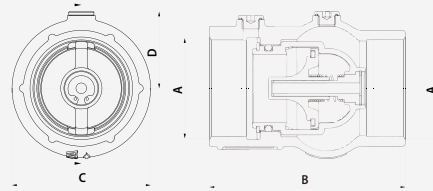
EA271



Type EA271
male/male

DN	A		B mm	C mm	Kg	KV m ³ /H	ζ
	"	mm					
1/2	3/4	20/27	65	20	0,24	5,05	3,10
3/4	1	26/34	75	30	0,18	9,20	2,96
1	1 ^{1/4}	33/42	90	34	0,34	14,50	2,75
1 ^{1/4}	1 ^{1/2}	40/49	110	38	0,52	25,50	2,50
1 ^{1/2}	2	50/60	120	41	0,73	35,00	3,30
2	2 ^{1/2}	66/76	150	49	1,33	56,50	3,06

EA253



Type EA253
female/female

"	A		B mm	C mm	D mm	KG
	F/F conn.					
50	2 ^{1/2}		147	104	58	2,6
65	3		199	146	94,5	4,8

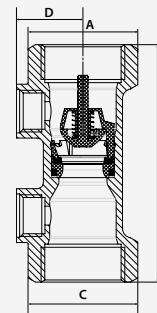
EA221B



Type EA221 B
female/female

"	A		B mm	C mm	D mm	Kg	KV m ³ /H	ζ
		mm						
3/4	20/27		78	30,5	32	0,24	12,5	1,6
1	26/34		93	32,5	41	0,46	19,6	1,6
1 1/4	33/42		113	39,5	50	0,74	33,1	1,5
1 1/2	40/49		120	41,0	55	0,85	46,0	1,9
2	50/60		150	48,0	70	1,44	84,0	1,4

EA291NF



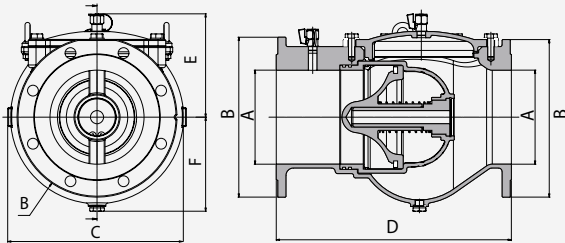
Type EA291NF
female/female

"	A		B mm	C mm	D mm	Kg	KV m ³ /H	ζ
		mm						
1/2	15/21		65	26	23	0,13	4,2	4,5
3/4	20/27		75	30	28	0,19	13,8	1,3
1	26/34		90	38	28	0,29	18,0	1,6
1 1/4	33/42		110	47	36	0,57	28,0	2,1
1 1/2	40/49		120	54	38	0,74	41,0	2,4
2	50/60		150	66	46	1,22	55,8	3,1
2 1/2	66/76		150	84	46	2,00	59,9	8,1

OVERALL DIMENSIONS

EA453

Type EA453
with flanges



A mm	B mm	C mm	D mm	E mm	F mm	Kg
40/50	165	-	200	113	80	7,65
60/65	185	-	240	118	93	11,45
80	200	-	260	131	98	14,36
100	222	-	300	141	115	20,20
150	285	-	400	197	144	42,00
200	340	380	500	220	200	65,00
250	400	438	600	256	235	94,00

EA223

Type EA 223
male/male



DN "	A mm	B mm	C mm	Kg	KV m³/H	ζ
1/2	3/4	67,0	28	0,20	4,25	4,39
3/4	1	74,0	35	0,30	9,00	3,09
1	1 1/4	80,5	39	0,47	14,53	2,90
1 1/4	1 1/2	88,5	44	0,64	23,30	3,00
1 1/2	2	95,0	48	0,85	40,47	2,45
2	2 1/2	115,0	56	1,75	65,27	2,30

EA223D

Type EA 223 D
male/male



DN		A mm	B mm	C mm	Kg	KV m³/H	ζ
"	mm						
15	1/2	1/2	132	28	0,22	4,25	4,39
20	3/4	3/4	148	35	0,55	9,00	3,09
25	1	1	166	39	0,88	14,53	2,90
32	1 1/4	1 1/4	184	44	1,23	23,30	3,00
40	1 1/2	1 1/2	194	48	1,94	40,47	2,45
50	2	2	231	56	3,22	65,27	2,30

Chapter 1.3

EB ANTIPOLLUTION NON-RETURN VALVES

WATER DISTRIBUTION NETWORKS, PROTECTION OF DRINKING WATER NETWORKS

EB201 - Threaded female/male

PRESSURE PFA/PS in bar @ 80°




CASING : brass 1 downstream boss drilled 1/4" (DN 1/2" without boss)

POM (polyacetal) plug

GUIDING + CLOSING SYSTEM : POM (polyacetal)

SEAL : NBR (nitrile) or EPDM (1/2") lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available   



01 SYSTEM

Part Number	DN «	PFA water	PS				Cat	UV
			L1	L2	G1	G2		
149B 2293	1/2	10	10	10	10	10	3.3	1
149B 2002	3/4	10	10	10	10	10	3.3	1
149B 2003	1	10	10	10	10	10	3.3	1

Dimensions at the end of the section.

HOUSING, WATER DISTRIBUTION

EB241 - Threaded male/male

PRESSURE PFA/PS in bar @ 80°

CASING : brass

GUIDING + CLOSING SYSTEM : POM (polyacetal)

SEAL : NBR (nitrile) or EPDM lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available 



01 SYSTEM

Part Number	DN «	PFA water	PS				Cat	UV
			L1	L2	G1	G2		
149B 2014	1/4	10	10	10	10	10	3.3	1
149B 2015	3/8	10	10	10	10	10	3.3	1
149B 2008	1/2	10	10	10	10	10	3.3	1
149B 94105*	3/4	10	10	10	10	10	3.3	1

* with NBR Seal

Dimensions at the end of the section.

HOUSING, WATER DISTRIBUTION, INDUSTRY**EB261 - Threaded female/male**PRESSURE PFA/PS 10 bar θ 80°

CASING : brass 1 downstream boss drilled 1/4"

POM (polyacetal) plug

GUIDING + CLOSING SYSTEM : POM (polyacetal)

SEAL : NBR (nitrile) or EPDM lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available 

01 SYSTEM

Part Number	DN	PFA water	PS				Cat	UV
	«		L1	L2	G1	G2		
149B 2210	1/2	10	10	10	10	10	3.3	1
149B 2011	3/4	10	10	10	10	10	3.3	1

Dimensions at the end of the section.


HOUSING, WATER DISTRIBUTION, HEATING**EB231 - Threaded female/female**PRESSURE PFA/PS in bar θ 80°

CASING : DZR brass

GUIDING + CLOSING SYSTEM : POM (polyacetal) or PPO (Polyphenylene oxyd) or PA

SEAL : NBR (nitrile) or EPDM lip-ring or FKM*

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available 

01 SYSTEM (Except ref. 2089 and 2090)



Part Number	DN	PFA water	PS				Cat	UV
	«		L1	L2	G1	G2		
149B 2069	3/8	10	10	10	10	10	3.3	10
149B 2089*	3/8	10	10	10	10	10	3.3	10
149B 2070	1/2	10	10	10	10	10	3.3	10
149B 2090*	1/2	10	10	10	10	10	3.3	10
149B 2091	3/4	10	10	10	10	10	3.3	10
149B 2092	1	10	10	10	10	10	3.3	10
149B 2093	1 1/4	10	10	10	x	10	3.3	10
149B 2094	1 1/2	10	10	10	x	10	3.3	6
149B 2095	2	10	10	10	x	10	3.3	6

Dimensions at the end of the section.

HOUSING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS

EB281 - Threaded male/female

PRESSURE PFA/PS in bar θ 80°
 CASING : brass
 GUIDING + CLOSING SYSTEM : POM (polyacetal) or PPO (Polyphenylene oxyd)
 SEAL : EPDM or NBR (nitrile) lip-ring
 SPRING : stainless steel
 APPROVALS :  ACS Other Approvals Available 






01 SYSTEM

Part Number	DN		PFA water	L1	PS		G2	Cat	UV
	M	F			L2	G1			
149B 2518	1/2	3/8	10	10	10	10	10	3.3	10
149B 2519	1/2	1/2	10	10	10	10	10	3.3	10
149B 2520	3/4	3/4	10	10	10	10	10	3.3	10
149B 2521	1	1	10	10	10	10	10	3.3	10

Dimensions at the end of the section.

EB281C - Threaded male/female

PRESSURE PFA/PS in bar θ 80°
 CASING : chrome plated brass
 GUIDING + CLOSING SYSTEM : POM (polyacetal)
 SEAL : EPDM or NBR (nitrile) lip-ring
 SPRING : stainless steel
 APPROVALS :  ACS  BELGAQUA Other Approvals Available 



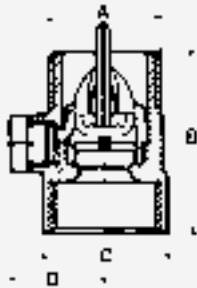
01 SYSTEM

Part Number	DN		PFA water	L1	PS		G2	Cat	UV
	M	F			L2	G1			
149B 2065	1/2	1/2	10	10	10	10	10	3.3	10
149B 2514*	3/4	3/4	10	10	10	10	10	3.3	10

Dimensions at the end of the section.

OVERALL DIMENSIONS

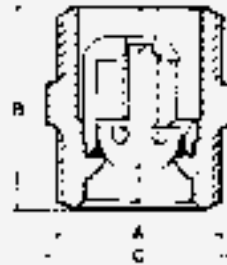
EB201



Type EB 201
female/male

"	A		B mm	C mm	D mm	Kg	KV m ³ /H	ζ
	"	mm						
1/2	3/4	20/27	31	24	-	0,05	3,2	7,8
3/4	1	26/34	50	30	27	0,20	4,3	13,6
1	1 1/4	33/42	64	37	30	0,18	7,8	10,7

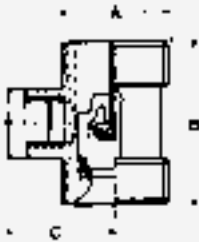
EB241



Type EB241
male/male

"	A		B mm	C mm	Kg	KV m ³ /H	ζ
	"	mm					
1/4	3/8	12/17	39,0	20	0,05	0,8	10,03
3/8	1/2	15/21	40,5	20	0,06	1,7	5,43
1/2	3/4	20/27	26,0	24	0,04	3,4	6,90
3/4	1	26/34	50,0	30	0,11	9,6	2,70

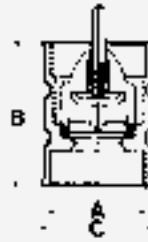
EB261



Type EB261
male/male

DN	A		B mm	C mm	Kg	KV m ³ /H	ζ
	"	mm					
1/2	3/4	20/27	39	27,0	0,14	5	3,1
3/4	1	26/34	47	30,5	0,11	9	3,0

EB231



Type EB 231
female/female

"	A		B mm	C mm	Kg	KV m ³ /H	ζ
	"	mm					
3/8	1/2	15/21	39	25,0	0,06	3,2	1,63
1/2	3/4	20/27	41	30,0	0,10	4,4	4,10
3/4	1	26/34	50	32,5	0,20	7,3	4,70
1	1 1/4	33/42	64	39,0	0,17	12,4	4,00
1 1/4	2	50/60	89	48,0	0,24	22,0	3,40
1 1/2	2	50/60	78	55,0	0,36	29,0	4,80
2	2 1/2	63/72	89	67,0	0,60	46,5	4,50

EB281



Type EB 281
male/female

M "	A		B mm	C mm	Kg	KV m ³ /H	ζ
	F "	"					
1/2	3/8	1/2	30	22	0,05	3,2	7,7
1/2	1/2	3/4	30	26	0,07	3,9	5,2
3/4	3/4	1	38	30	0,08	10,6	2,2
1	1	1 1/4	41	38	0,17	15,9	2,4

EB281C



Type EB281C
male/female

M "	A		B mm	C mm	Kg	KV m ³ /H	ζ
	F "	"					
1/2	1/2	3/4	30	26	0,06	3,9	5,2
3/4	3/4	1	38	30	0,08	10,6	2,2

Chapter 1.4

EC AND ED DOUBLE CHECK VALVES

PROTECTION OF DRINKING WATER NETWORKS

EC453/453 - PN10/16

PRESSURE PFA in bar θ 65°

Double check valves made with 2 check valves type 453(*) coupled together.
03 SYSTEM



Part Number	DN		PFA water	UV
	“	mm		
149B99917	1 1/2	40/50	16	1
149B99918	2 1/2	60/65	16	1
149F049398	3	80	16	1
149F049399	4	100	16	1
149F049400	6	150	16	1
149F049610	8	200	10	1
149B99959	10	250	10	1

Dimensions at the end of the section.

PROTECTION OF DRINKING WATER NETWORKS, BUILDING


ED2231 - Drilled flanges female/female

PRESSURE PFA/PS in bar θ 80°

CASING : DZR brass, Drilled boss 1/4”, POM (polyacetal) plug

CLOSING SYSTEM : double check valve POM (polyacetal)

GUIDE : POM (polyacetal) / SEAL : NBR (nitrile) or EPDM lip-ring

APPROVALS :  ACS

01 SYSTEM



Part Number	DN “	PFA water	PS				Cat	UV
			L1	L2	G1	G2		
149B 2790	1/2	10	10	10	10	10	3.3	10
149B 2791	3/4	10	10	10	10	10	3.3	10
149B 2792	1	10	10	10	10	10	3.3	10
149B 2637	1 1/4	10	10	10	x	10	3.3	10
149B 2638	1 1/2	10	10	10	x	10	3.3	6
149B 2639	2	10	10	10	x	10	3.3	6

Dimensions at the end of the section.

FOR DRINKING WATER PROTECTION, CLEAR LIQUIDS, WATER, GAS

ED2211 - Compression fitting

PRESSURE PFA/PS in bar θ 80°

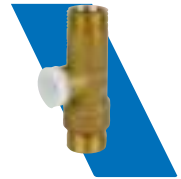
CASING : DZR brass, Drilled boss 1/4", POM (polyacetal) plug

CLOSING SYSTEM : double check valve POM (polyacetal)

GUIDE : POM (polyacetal) / SEAL : NBR (nitrile) or EPDM lip-ring

APPROVALS : 

SPECIAL : MM 1/2" or fitting and screws, copper pipe 15mm

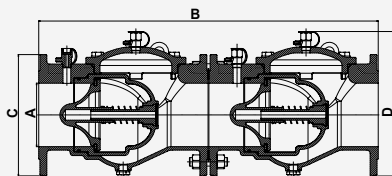


Part Number	DN	PFA	PS				Cat	UV
	"	water	L1	L2	G1	G2		
149B 2796	1/2	10	10	10	10	10	3.3	10

Dimensions at the end of the section.

OVERALL DIMENSIONS

EC453/453



Types EC 453/453 flanges

A		B mm	C mm	D mm	Kg
"	mm				
1 1/2	40-50	402	165	193	17
2 1/2	60-65	482	185	211	25
3	80	522	200	229	31
4	100	602	222	256	43
6	150	802	285	341	86
8	200	1002	340	420	132
10	250	1202	400	491	190

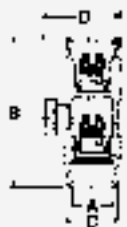
ED2231



Type ED2231 female/female

A		B mm	C mm	D mm	Kg	KV m³/H	ζ
"	mm						
1/2	15/21	59	26	38	0,130	2,4	13,80
3/4	20/27	90	32	43	0,280	5,0	10,03
1	26/34	105	40	49	0,500	9,3	7,4
1 1/4	33/42	146	48	57	0,700	19,0	4,55
1 1/2	40/49	175	55	62	1,010	25,0	6,42
2	50/60	196	67	77	1,560	36,8	7,23

ED2211



Type ED2211 compression fitting

A		B mm	C mm	D mm	Kg	KV m³/H	ζ
"	mm						
1/2	15	73	24	36	0,112	2,5	13,0