

Ball Check Valves



**CAS
FLOW** VALVES S.L.

BALL CHECK VALVES

APPLICATIONS

Pumping stations for clean, sewage water and loaded or viscous fluids.

TECHNICAL DATA

- Range :
 - Threaded ends from 1" to 3" (DN 25 to DN 80).
 - Flanged ends from (DN 40 to DN 400).
- Connections:
 - Threaded type "BSP" acc to ISO 228-1 and NFE 03-005.
 - Flanged type : for mounting between flanges PN 10 (standard) and PN16, ANSI 150#, BS table D&E on request.
- Maximum working pressure 10 bars. (limits acc to material)
- Operating temperatures 10°C + 70°C.
- Seating acc to category A standard ISO 5208.
- Minimum backpressure for tightness : 0,3 to 0,5 bars.
- Face to face dimensions for flanged type according to EN-558-1 serie 48(DIN 3202 F-6).

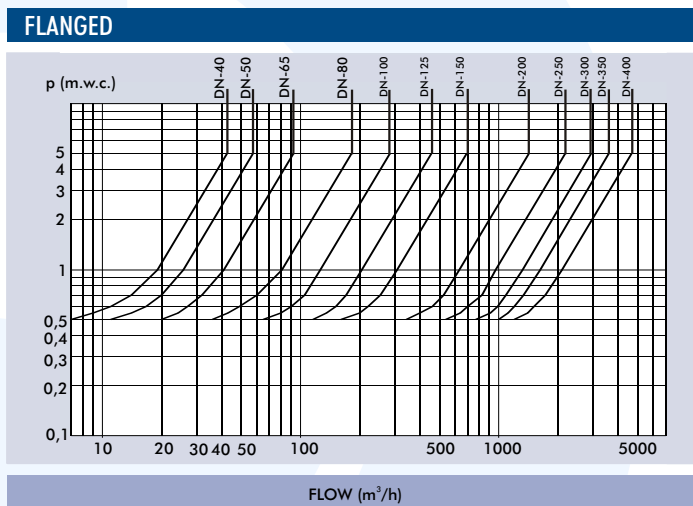
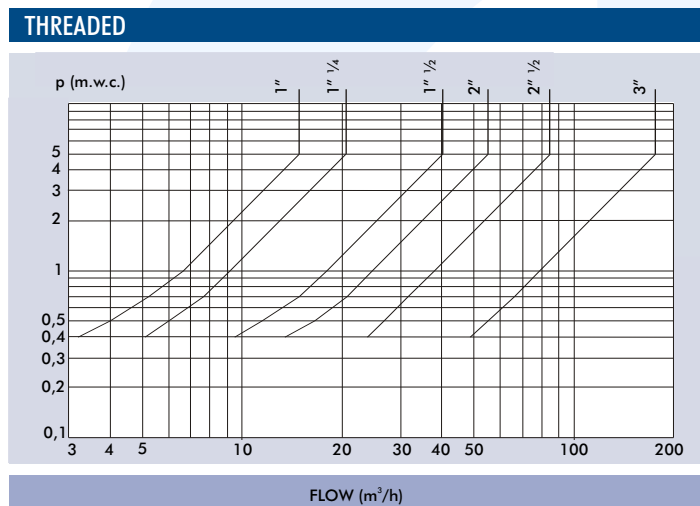
TECHNICAL PERFORMANCES

- Full bore ensured.
- Self cleaning ball.
- Low pressure drop.
- Silent.
- Removable bonnet for cleaning or changing the ball without disassembly out of the pipeline.
- Horizontal and vertical installation in the pipeline.
- Optional floating balls.

TEST

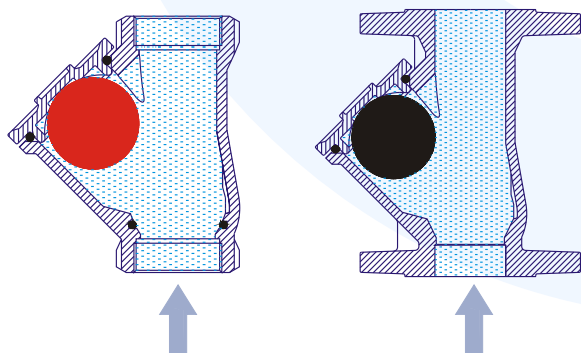
- Seat : 1,1 x nominal pressure.
- Body : 1,5 x nominal pressure.

PRESSURE DROP CURVE

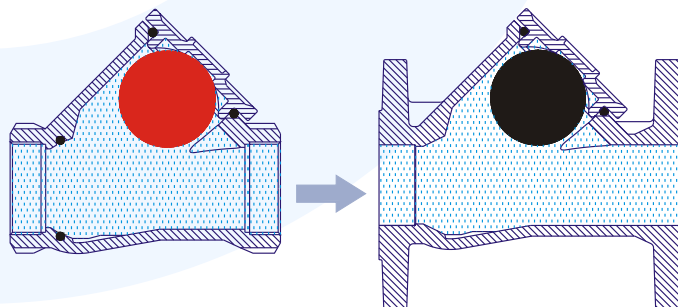


MOUNTING IN PIPELINE

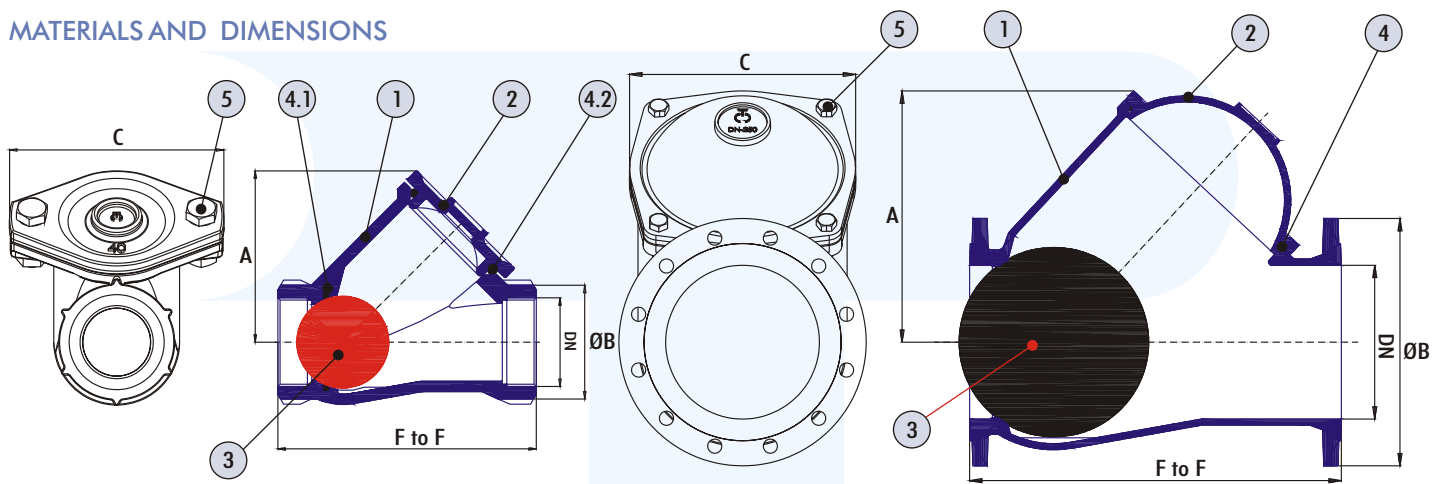
VERTICAL INSTALLATION



HORIZONTAL INSTALLATION



MATERIALS AND DIMENSIONS



MATERIAL DESCRIPTION DN-32 TO DN-65 (THREADED) AND DN-40 TO DN-65 (FLANGED)

Nº	DESCRIPTION	STANDARD	OPTION
1	Body *	GG-25 (EN-GJL-250)	GGG-40 (EN-GJS-400-15)
2	Bonnet *	GG-25 (EN-GJL-250)	GGG-40 (EN-GJS-400-15)
3	Ball	Phenolic Resin	Floating Ball
4.1	Seal Gasket	Elastomer /NBR	Elastomer /Viton
4.2	Bonnet Gasket	Elastomer /NBR	Elastomer /Viton
5	Bolting	Stainless Steel	-

* Paint epoxy blue RAL-5017

MATERIAL DESCRIPTION DN-80 (THREADED) AND DN-80 TO DN-400 (FLANGED)

Nº	DESCRIPTION	STANDARD	OPCION
1	Body (DN80)* Body (DN100 up to Dn400)*	GG-25 (EN-GJL-250) GGG-40 (EN-GJS-400-15)	GGG-40 (EN-GJS-400-15) GG-25 (EN-GJL-250)**
2	Bonnet (DN80)* Bonnet (DN100 up to DN400)*	GG-25 (EN-GJL-250) GGG-40 (EN-GJS-400-15)	GGG-40 (EN-GJS-400-15) GG-25 (EN-GJL-250)**
3	Ball (DN80 up to DN250) Ball (DN300 up to DN400)	Aluminium + Elastomer / EN-AC-AISI12Cu1(Fe) + NBR Steel + Elastomer / ST-44 + NBR ***	Floating ball or Reduced weight ball
4	Bonnet Gasket	Elastomer /NBR	-
5	Bolting	Stainless Steel	-

* Paint epoxy blue RAL-5017

** Body and Bonnet GG-25 up to DN-300 max. Working pressure: 6 bar (DN250-DN-300)

***DN-400 Ball Iron + Elastomer NBR

DIMENSIONS THREADED

DN	A	ØB	C	F to F	Kv	Weight
mm	mm	mm	mm	mm	m³/h	Kg
25	85	57	110	141	21	2,2
32	85	57	110	141	29	2,2
40	90	64	120	150	57	2,8
50	115	77	140	175	78	3,9
65	135	95	155	214	120	6,5
80	160	108	185	248	250	8,1

CRACKING PRESSURE THREADED(mmwc)

DN	POSITION
mm	mm
25	24,0
32	14,6
40	16,0
50	21,0
65	22,3
80	67,0

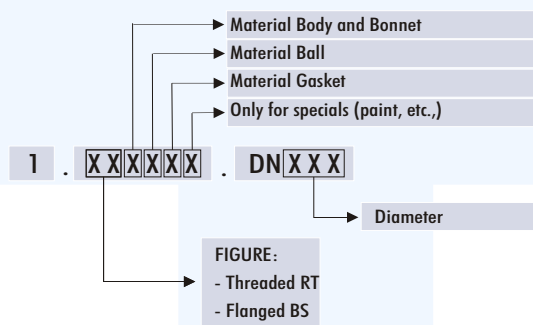
DIMENSIONS FLANGED

DN	A	ØB	C	F to F	Kv	Weight
mm	mm	mm	mm	mm	m³/h	Kg
40	90	150	120	180	60	8,2
50	115	165	140	200	81	9,4
65	135	185	155	240	130	12,5
80	160	200	185	260	255	15,0
100	190	226	220	300	400	20,0
125	222	253	255	350	645	30,0
150	268	285	290	400	970	38,0
200	335	342	370	500	2000	70,0
250	420	403	380	600	3050	125,0
300	495	445	445	700	4150	180,0
350	580	505	520	800	5100	290,0
400	730	565	712	900	6600	420,0

CRACKING PRESSURE FLANGED (mmwc)

DN	POSITION
mm	mm
40	16,0
50	21,0
65	22,3
80	67,0
100	87,1
125	92,9
150	122,9
200	146,6
250	180,1
300	183,3
350	220,4
400	265,8

CODIFICATION FOR ORDERS



CODE

FAMILY	FIGURE	BODY AND BONNET	BALL	SEAL	DIAMETER	
1.	RT (Threaded with bonnet)	G (Cast Iron)	R (Phenolic Resin)	S (Nitrile)	. DN	1"
						1" 1/4
	BS (Flanged STD) PN-10/16					1" 1/2-40
	BE (Special Flanged) Different drilling	N (Ductile Iron)	E (Floating ball)	V (Viton)		2"-50
						2" 1/2-65
						3"80
	BS (Flanged STD) PN-10/16	N (Ductile Iron)	A (Al + Nitrile)	S (Nitrile)		100
	BE (Special Flanged) Different drilling					125
	BS (Flanged STD) PN-10	G (Cast Iron)	F (Floating Al + NBR)			200
	B2 (Special Flanged) PN-16					250
			BE (Special Flanged) Different drilling			S (Stell + Nitrile)
						F (Floating + NBR)
			B(Cast + NBR)			400
			L (Reduced weight)			

Example:

1.RTGRS.DN2"

Threaded Ball Check valve 2" body and bonnet cast iron, ball phenolic resin and Gasket Nitrile.



Configuration STD

Configuration Special