

B50.18.1-I

STANDARD BUTTERFLY VALVES

Butterfly Valves
AWWA-C504 and
ABNT NBR 15768

The standard Butterfly Valves, in line with AWWA C504 and ABNT NBR 15768 standard are designed to be used mainly for adduction systems, water distribution, water and sewage treatment stations, and also for irrigation systems.

For connection with the drive, the valves have coupling according to ISO 5211. The drive can be of the manual type with lever or wheel with or without worm gear. The versions are also available by means of electric actuator, hydraulic cylinder and pneumatic cylinder. You can also opt for the mixed actuation by hydraulic cylinder to open and counterweight to close.

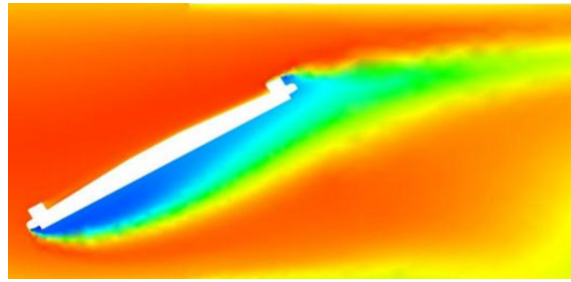
The flanges of the valves are manufactured according to ABNT NBR 7675 (ISO 2531) or according to ANSI B 16.1, ANSI B 16.47, ANSI B 16.5 and AWWA C207 standards, upon customer's request.



In addition to its standardized range, with diameters from 50mm up to 1600mm and a pressure class of 10, 16 and 25 bar, **hydrostec** develops and

manufactures custom designs that meet the particular conditions and technical requirements of the customer.

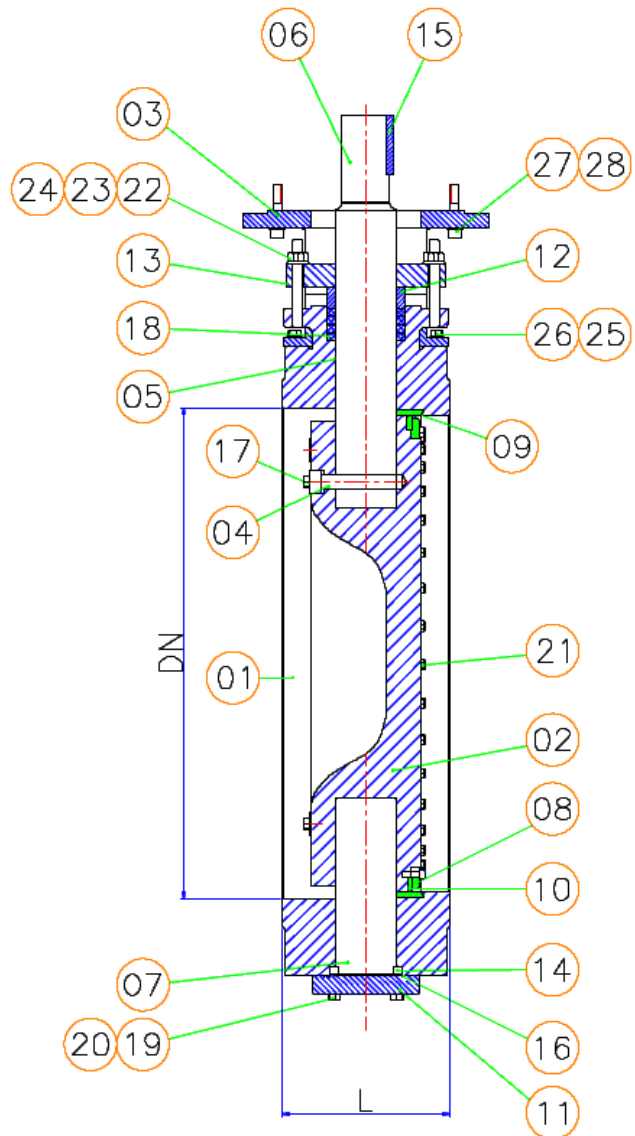
Hydrostec designs all its butterfly valves from structural and hydraulic analysis. All development and optimization is done through finite element methods.

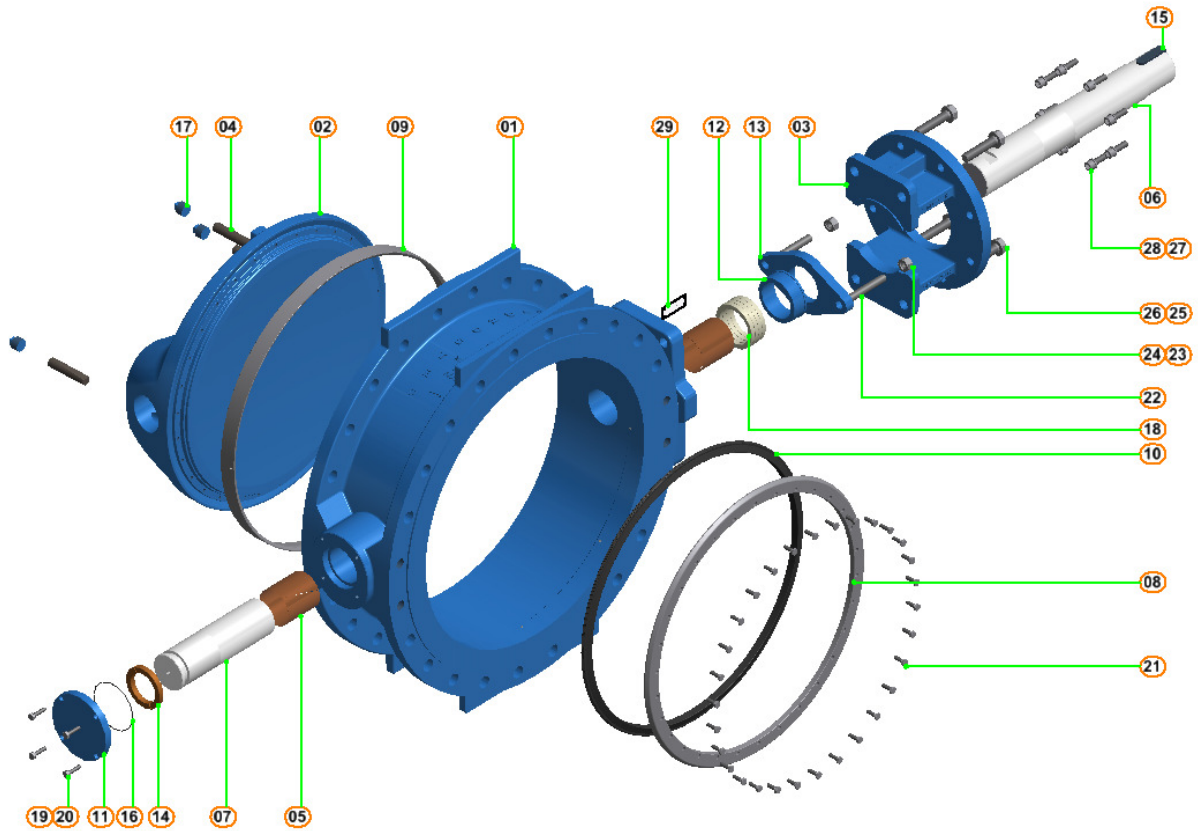


Hydraulic profile study in CFD.

DIMENSIONS FACE TO FACE			
DN		AWWA C504 - SHORT BODY L (mm)	ISO 5752 L (mm)
(Inch)	(mm)		
2	50	127*	108
3	75	127	127*
4	100	127	127
6	150	127	140
8	200	152	152
10	250	203	165
12	300	203	178
14	350	203	190
16	400	203	216
18	450	203	222
20	500	203	229
24	600	203	267
28	700	305*	292
30	750	305	305*
32	800	305*	318
36	900	305	330
40	1000	305*	410
48	1200	381	470
56	1400	381*	530
60	1500	381	530*
64	1600	457	600

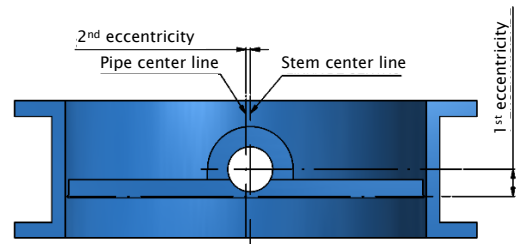
* Manufactured according to **hydrostec** standard.





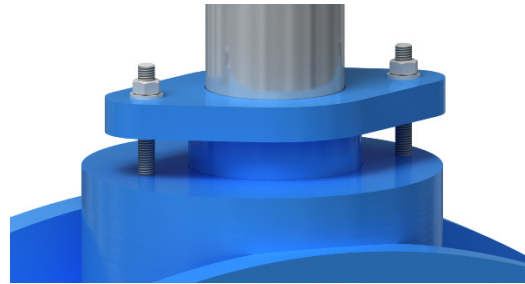
ITEM	COMPONENTS	MATERIAL	
01	BODY	DUCTILE CAST IRON	ASTM A536 GR-65.45.12
02	DISC	DUCTILE CAST IRON	ASTM A536 GR-65.45.12/CF8
03	CASTEL	DUCTILE CAST IRON	ASTM A536 GR-65.45.12
04	LOCKING PIN	STAINLESS STEEL	ASTM A276
05	BEARING BUSHING	BRONZE, GRAPHITE AND PTFE	NORGLIDE
06	CONTROL SHAFT	STAINLESS STEEL	ASTM A276
07	MOVABLE SHAFT	STAINLESS STEEL	ASTM A276
08	DISC RING	CARBON STEEL	ASTM A36
09	SEAT RING	STAINLESS STEEL	ASTM A240
10	SEALING RING	RUBBER	EPDM / BUNA N
11	COVER	CARBON STEEL	ASTM A36
12	GLAND FOLLOWER HUB	CARBON STEEL	ASTM A36
13	GLAND FOLLOWER PLATE	CARBON STEEL	ASTM A36
14	AXIAL LIMITER	BRONZE	TM 23
15	KEY	CARBON STEEL	SAE 1045
16	O'RING	RUBBER	SBR
17	PLUG	CARBON STEEL	SAE 1020
18	GLAND	GRAPHITE / RUBBER	FLEXIBLE GRAPHITE / BUNA N
19	WASHER	GALVANIZED STEEL	-
20	SCREW	GALVANIZED STEEL	-
21	SCREW	STAINLESS STEEL	ASTM A320
22	THREADED BAR	GALVANIZED STEEL	SAE 1020
23	WASHER	GALVANIZED STEEL	-
24	NUT	GALVANIZED STEEL	-
25	WASHER	GALVANIZED STEEL	-
26	SCREW	GALVANIZED STEEL	-
27	SCREW	GALVANIZED STEEL	-
28	WASHER	GALVANIZED STEEL	-
29	NAMEPLATE	STAINLESS STEEL	ASTM A240

Bi-eccentricity: The body, disc and stem assembly are designed with a dual eccentricity system, reducing friction between the disc and the seat, increasing the service life, and allowing greater fluid flow in small opening angles of the disc.



Detail of the eccentricities

Gland Follower: The inverted type allows adjustment and replacement of the gaskets without the removal of the drive.



Detail of gland follower

Hydrostec standard butterfly valves can be manufactured with the seal on the shutter or body.



Detail of shutter seal



Detail of body seal

Notes:

- 1-For other dimensions, pressure classes or standards, consult;
- 2-All images in this catalog are illustrative;
- 3-Images/tables represent the valve with the seal positioned on the obturator;
- 4-The specified materials are **hydrostec** standard, and can be changed according to customer need and market availability.