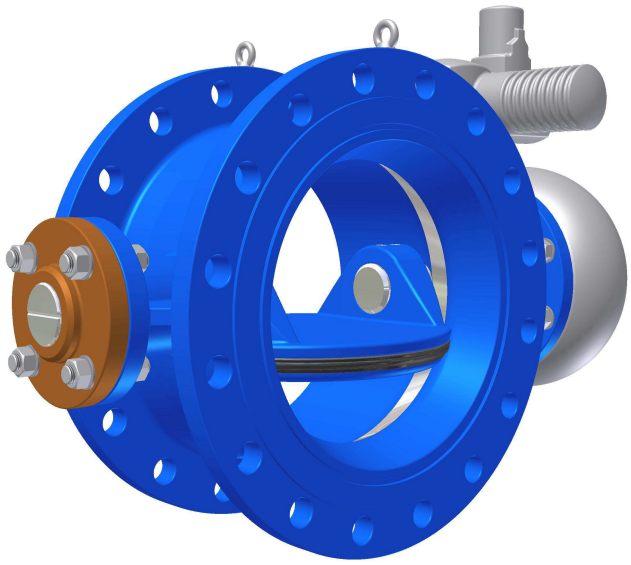
IRUA TECH Ind.
Pol. Ind Erletxe, C-2 nave 3
48960 Galdácano (Vizcaya)
- SPAIN
www.irua.es



DOUBLE ECCENTRIC BUTTERFLY VALVES

General Catalogue

DOUBLE ECCENTRIC BUTTERFLY VALVE

Description

Butterfly valves are isolating valves (ON – OFF) and can be installed either horizontally or vertically.

According to the type of connection can be double flanged or wafer type.

Double eccentric butterfly valve type is when the disk´s point of rotation lies both horizontally and vertically outside the sealing plane.

Disk design to withstand the maximum differential pressure in either direction of flow

Disc closure seating in resilient type

Disc contoured to get the lowest possible resistance to flow and for throttling operation with minimum vibration

With self-lubricating bronze bearing bushes to achieve a long and safe service life

Main fields of applications

Municipal water systems in drinking water supply networks or water treatment plants.

Hydro-power plants in pressurized conduits and for closures in the event of emergency (Anti Burst).

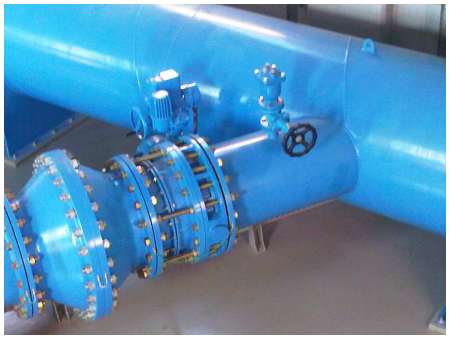
Technical Details

Design Pressure: PN10/ PN16/ PN25/ PN40

Sizes: DN300 – DN2000 (12” – 80”)

For water up to max. 70ºC

Max. fluid speed is 4,9 m/s (acc. To AWWAC C504)



Bi-directional service

Low head loss

Rugged global design

Easily replaceable seal retaining ring for field service

Self lubricated bushes

Hand wheel and worm gear operation

Standards:

AWWA C-504-80

AWWA M49 “Butterfly Valves: Torque Head Loss and Cavitation Analysis

Design according to ASME section VIII, AWWA C504-80 & DIN3840

Certification: Material and test certificates available upon request

Sizes DN200 –DN1.200

Material:

Body: Ductile Iron EN-GJS-450-10

Valve Disc: Ductile Iron EN-GJS-450-10

Shaft: Stainless Steel BS 970 part 4 Gr 431

Retaining Ring: Stainless Steel BS 970 part 4 Gr 431

Bush Bearing: Aluminum bronze

Sealing Rubber: Ethylene Propylene Rubber (EPDM) or Nitrile Rubber (NBR)

Hand wheel: Ductile Iron BS 2789

Seat: AISI-316

Flanges: EN 1092

Distance between flanges: DIN3202 part 3 serie F4

External and Internal Bolting:SST A4

Coating: Body and Disc: Internal and External 300 microns thickness of fusion bonded epoxy coating. According to AWWA C213-79

Hydraulic tests acc to DIN 3840:

Body test pressure: 1,5 times body rated pressure

Seat Leakage test: 1,1 times body rated pressure

Any other type of material and coating available upon request

Sizes DN500 – DN2000

Material:

Body: Carbon Steel GGG50 / Stainless Steel AISI 304

Valve Disc: Carbon Steel GGG50 / Stainless Steel AISI 304

Shaft: Stainless Steel BS 970 part 4 Gr 431

Retaining Ring: Stainless Steel BS 970 part 4 Gr 431

Bush Bearing: Aluminum bronze

Sealing Rubber: Ethylene Propylene Rubber (EPDM) or Nitrile Rubber (NBR)

Hand wheel: Ductile Iron BS 2789

Seat: AISI-316

Flanges: EN 1092

Distance between flanges: DIN3202 part 3 serie F4

External and Internal Bolting: SST A4

Coating: Body and Disc: Internal and External 300 microns thickness of fusion bonded epoxy coating. According to AWWA C213-79

Hydraulic tests acc to DIN 3840:

Body test pressure: 1,5 times body rated pressure

Seat Leakage test: 1,1 times body rated pressure

Any other type of material and coating available upon request

Accessories:

Extension Spindle

Different types of gear boxes, electric or hydraulic actuators

Prepared for by-pass

Prepared for tele-control

Special materials for Seawater applications, etc

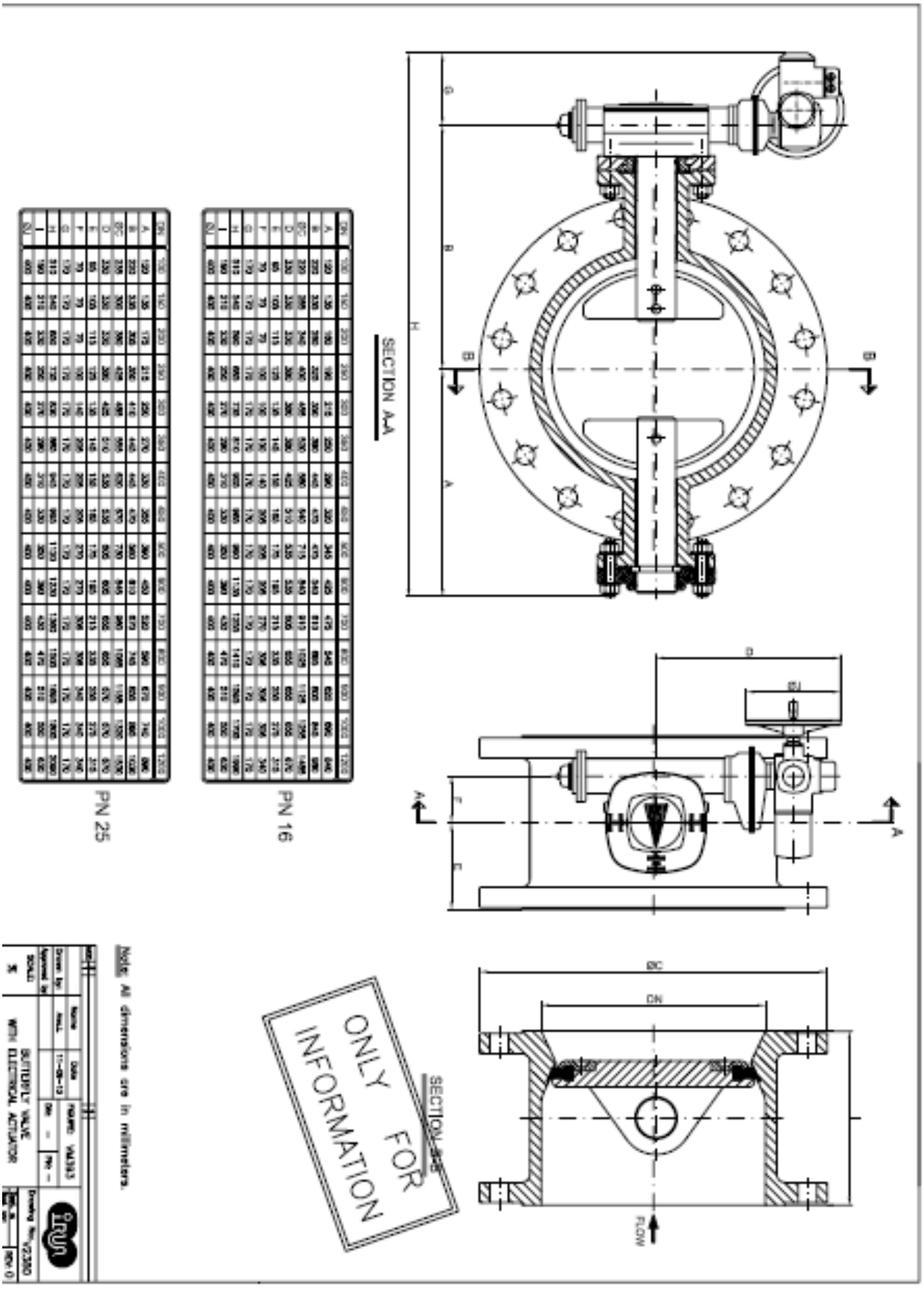
Actuator types:

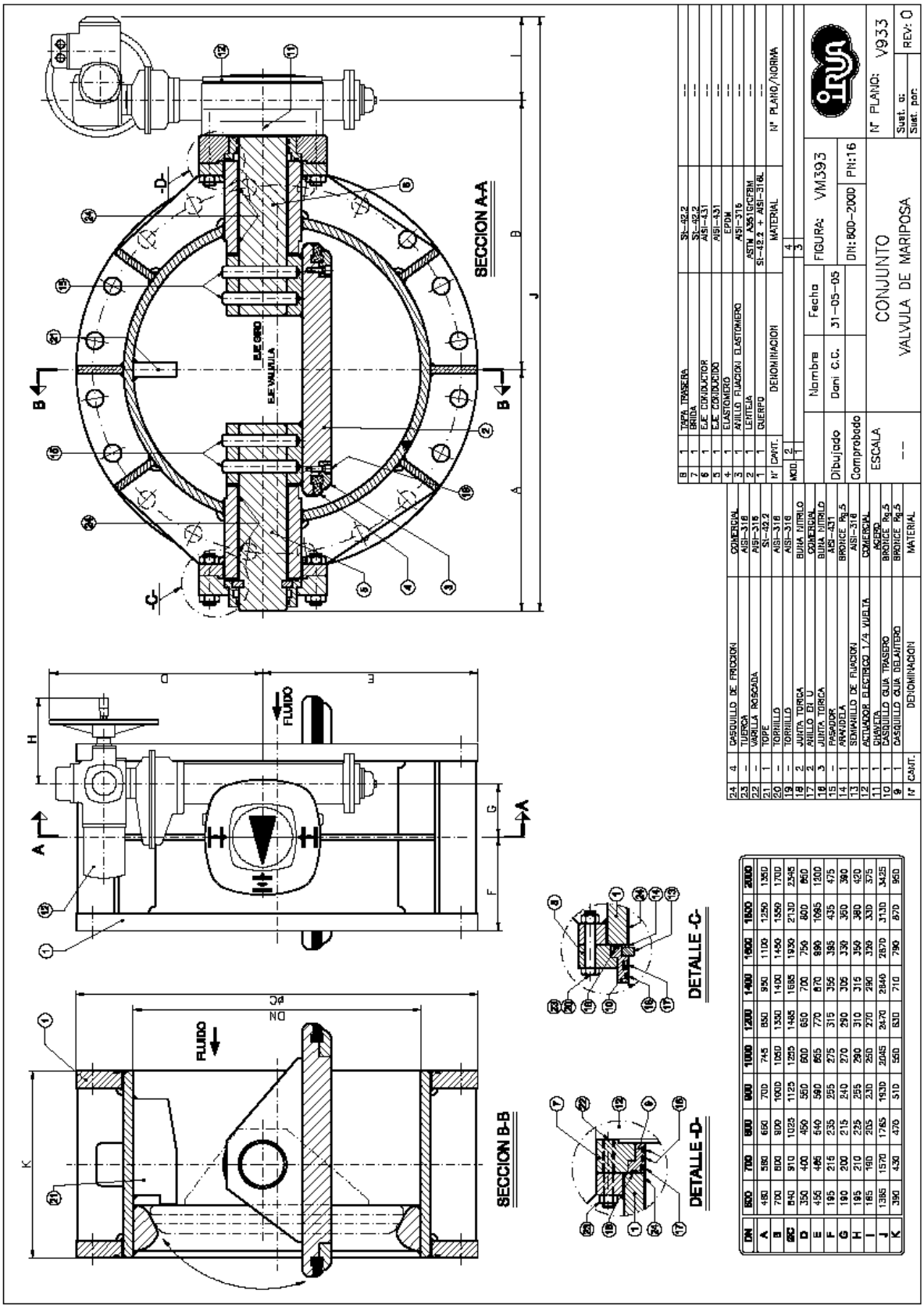
- Electric actuator
- Hydraulic actuator
- Pneumatic actuator

Anti-Burst Valve Features

All devices of the detection system are external to make easy the maintenance work

Detection systems: Hydraulic / Differential Pressure Pilot


SECTION A-A
SECTION B-B
ONLY FOR INFORMATION
FLOW
Note: All dimensions are in millimeters.
BUTTERFLY VALVE WITH ELECTRICAL ACTUATOR
PN 16
PN 25



Nº	CANT.	DENOMINACION	MATERIAL
8	1	TAPA TRASERA	SI-42.2
7	1	BRIDA	SI-42.2
6	1	EJE CONDUCTOR	AISI-431
5	1	EJE CONDUCIDO	AISI-431
4	1	ELASTOMERO	EPDM
3	1	ANILLO FIJACION ELASTOMERO	AISI-316
2	1	LENTEJA	ASTM A351GrCF8M
1	1	CUERPO	SI-42.2 + AISI-316L
Nº	CANT.	DENOMINACION	MATERIAL
MOD.	2		
	1		
24	4	CASQUILLO DE FRICCION	COMERCIAL
23	—	TUERCA	AISI-316
22	—	VARILLA ROSCADA	AISI-316
21	1	TOPE	SI-42.2
20	—	TORNILLO	AISI-316
19	—	TORNILLO	AISI-316
18	2	JUNTA TORICA	BUNA NITRILO
17	2	ANILLO ELU	COMERCIAL
16	3	JUNTA TORICA	BUNA NITRILO
15	1	PASADOR	AISI-431
14	1	ARANDELA	BRONCE Pb5
13	1	SEMIANILLO DE FIJACION	AISI-316
12	1	ACTUADOR ELECTRICO 1/4 VUELTA	COMERCIAL
11	1	CHAVETA	ACERO
10	1	CASQUILLO GUIA TRASERO	BRONCE Pb5
9	1	CASQUILLO GUIA DELANTERO	BRONCE Pb5

DN	600	700	800	900	1000	1200	1400	1600	1800	2000
A	480	580	680	700	745	850	950	1100	1250	1350
B	700	800	900	1000	1050	1350	1400	1450	1550	1700
ØC	840	970	1028	1123	1225	1485	1685	1930	2130	2345
D	350	400	450	500	600	680	700	750	800	850
E	455	485	540	590	655	770	870	980	1065	1300
F	195	215	235	255	275	315	355	395	435	475
G	190	200	215	240	270	290	305	330	360	390
H	195	210	225	255	290	310	315	350	380	420
I	185	190	205	230	260	270	290	320	330	375
J	1386	1570	1765	1930	2045	2470	2840	2670	3130	3425
K	390	430	470	510	560	630	710	790	870	960