



Double Flanged Butterfly Valves

Fig. 20B / 40B / 50B



Valves & Technology

► Technical Data

Manufacturing range	DN32 – DN2000
Face to face	EN 558 Series 20 ISO 5752 Series 20 API 608 Table 1 BS 5155 Series 4
Mounting between	PN10/16-ANSI150 Lbs.
Flanges	ISO 7005, DIN 2501, BS 4504 ANSI Class 150: ANSI B16.5
Top Flange	ISO 5211
Tightness Test	ISO 5208, zero leakage API 598
Coating	Rilsan®
Working Pressure	DN32 – DN600, Max. 20 bar >DN600, Max. 16 bar



► Features

- Valves certified and approved for different applications.
- 100% tight shut off, 0% leakage.
- Replaceable or vulcanized seat.
- One piece dry shaft. The fluid is not in contact with either the shaft or the body.
- Bi-directional sealing.
- Self-cleaning.
- Lightweight design for easier installation.
- Easy maintenance.
- Possibility of operation through different manual controls (hand lever, gearbox...), electric, pneumatic, hydraulic actuator,...
- Low operation torque.
- Aerodynamic butterfly design that minimizes pressure drop.

► General Applications

Water:

- Irrigation
- Potable water
- Sea water
- Water supply
- Pumping station
- Industrial water
- Waste water
- Fire protection systems
- Cooling tower

Industry:

- Food
- Paper mills
- Chemical
- Petrochemical
- Sugar mills
- Cement industry
- Petroleum
- Steel industry

Power generation

- Shipbuilding and offshore
- Mining
- Heating
- Air conditioning
- Compressed air
- Construction



ATTESTATION DE CONFORMITE
SANITAIRE
14 AGC LY 011



FDA SEATS
Test Report:
891/13/9797 M1



APSA
N° Ref.: P.J.NGR/RB/10.10/VAN.045



FDA
CODE OF FEDERAL
REGULATIONS 21 CFR



ATEX
2014/34/UE



TYPE APPROVAL
MARINE & OFFSHORE DIVISION
CERTIFICATE No.: 1487/CO BY



N° ROB 064



ROB-GAZ



CERTIFICATE OF CONFORMITY
N° TC: RU-CES-MOR2.8.0212
W/02864



CERTIFICATE OF APPROVAL QUALITY
MANAGEMENT SYSTEM STANDARD
ISO 9001:2008
No.: SGI 2202208



EC CERTIFICATE OF CONFORMITY
DIRECTIVE 89/100/EEC
CERTIFICATE No.: 0088PES/MSD/018



FIRE SAFE TEST
FOR VALVES



CE
2014/68/UE

Torque valves (Nm)

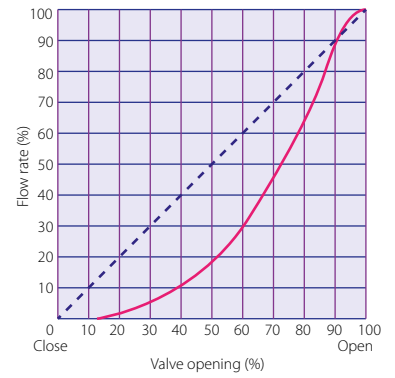
DN		Torque (Nm)		
mm	in	6 bar	10 bar	16 bar
32	1 1/4"	3	6	9
40	1 1/2"	3	6	9
50	2"	5	8	11
65	2 1/2"	7	10	20
80	3"	10	14	29
100	4"	12	18	47
125	5"	18	31	82
150	6"	31	59	130
200	8"	55	93	210
250	10"	123	206	360
300	12"	216	330	475
350	14"	333	425	760
400	16"	519	640	1300
450	18"	735	1176	1600
500	20"	931	1450	2340
600	24"	1372	2850	3300
700	28"	2254	4600	6250
750	30"	3136	5800	7644
800	32"	3724	7400	8938
900	36"	4410	11000	11760
1000	40"	6223	13600	15876
1100	44"	9702	14200	18535
1200	48"	12150	16400	21000
1300	52"	-	17800	-
1400	56"	-	19200	-
1600	64"	-	29000	-

All torque valves shown in the chart are for wet (water and other non-lubricating media) on-off service. For dry services (non-lubricating, dry gas media) multiply the values by 1.15
For lubricous services (clean, non-abrasive lubricating media) multiply values by 0.85

Please contact technical department for additional data/info.

Kv data

Flow coefficient Kv
90°
70
70
164
201
359
627
995
1471
2509
3936
5865
8179
10660
12889
16023
22741
32448
35033
44850
51247
66104
81526
97355
119787
138400
166080



$$Cv = 1.16 \cdot Kv$$

Kv: Volume of water in m³/h, that will flow through a given restriction or valve opening with a pressure drop of 1 bar at 20°C

Chart for temperature and resistance:

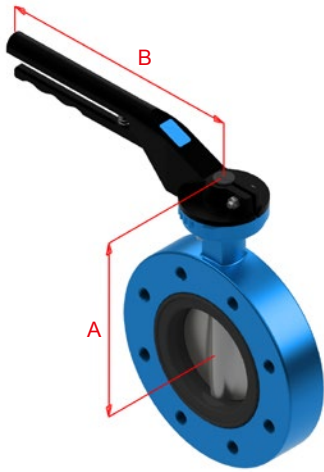
Name	Applications	Limitations	Temp. Rating
EPDM	Water, sea water, alcohols, organic salts dissolutions, mineral acid solutions, mineral bases alkaline	Not recommended for organic hydrocarbons	-20°C to 110°C
High Temp. EPDM	Water	Not recommended for hydrocarbons	-20°C to 130°C
NBR	Mineral and vegetable oils, gas, non-aromatic hydrocarbons, animal fats, vegetable fats, air	Organic acids, some mineral acids, chlorine, alcohols, aromatic hydrocarbons	-10°C to 80°C
Hypalon	Mineral acid dissolutions, organic and inorganic acids, oxidizing substances	Mineral and vegetable oils, hydrocarbons, animal and vegetable fats, cetones	-10°C to 80°C
FKM	Acids, fats, hydrocarbons, vegetable and mineral oils, fuels	Steam and hot water (max. 130°C) unleaded gasoline, cetones, amines, freon 22	-5°C to 180°C
Silicone	Low and high temperature resistance, food grade	Hydrocarbons, acids, bases, atmospheric agents	-10°C to 160°C
High Temp. Silicone	Superheated	Hydrocarbons, strong acids and strong bases	-50°C to 160°C
Epichlorhydrine	Ozone resistance, hydrocarbons, aromatic oils	Steam, intermediate resistance to oils	-25°C to 145°C

How to order: Ex.: 20W9040NO

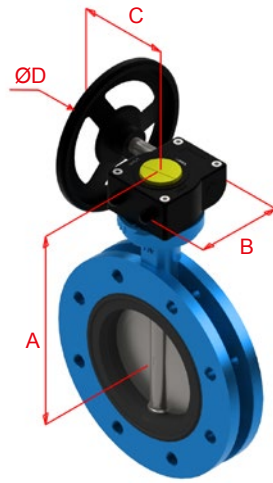
Body Material		Body Series		Valve Type		Stem Material		Disc Material		Seat Material	
20		W				90		40		NO	
10	GJL250	W	Wafer		Concentric standard soft seated	30	AISI 304	20	GJS500-7	CO	NATURAL RUBBER
20	GJS500-7	L	Lug	V	Vulcanized seat	40	AISI 316	40	CF-8M	E0	EPDM
40	CF-8M	B	Flanged S20		PTFE seat - Stainless disc PTFE seat - PTFE covered disc: Please add "T" at the end of the code	90	AISI 420	50	WCB	EA	DRINKING WATER EPDM
50	WCB	3	Flanged S13	P			95	17-4 PH	80	B-148 C95500	ET
51	LCB	4	Flanged S14		Metal/ metal concentric	D0	1.4462	91	CA-15	EN	NORDEL
60	Aluminium	R	Groove end	M			D1	1.4517	95	17-4 PH	F0
80	B-148 C95500				Metal/ metal double eccentric Metal/ PTFE double eccentric	M5	MONEL K-500	D0	1.4470	H0	HYPALON
				X					D1	1.4517	N0
					Double flanged double eccentric soft seated			H0	HASTELLOY C	NC	CARBOXYLATED NITRILE
				D					U0	URANUS B6	NG
					Triple eccentric			S3	1.4469	NL	LOW TEMPERATURE NITRILE
				C					S7	CK3MCuN	S0
										SA	FOOD GRADE SILICONE
										ST	HIGH TEMPERATURE SILICONE
										V0	FKM (KNOWN AS VITON)
										ST	EPICHLOROHYDRIN (ECO)
										NE	NEOPRENE
										F5	PTFE+25% GLASS FIBRE
										4L	CF-3M
										I0	INCONEL
										4E	AISI 316 + STELITE
										4G	AISI 316 + GRAPHITE

► Válvula con accesorios / Valve with accessories

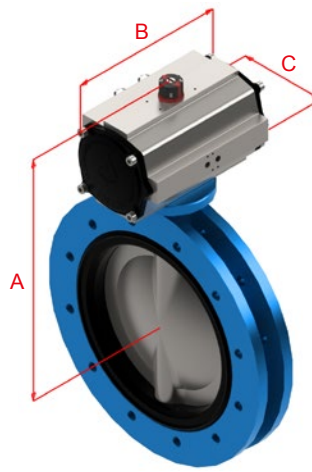
Mando palanca
Lever-operated



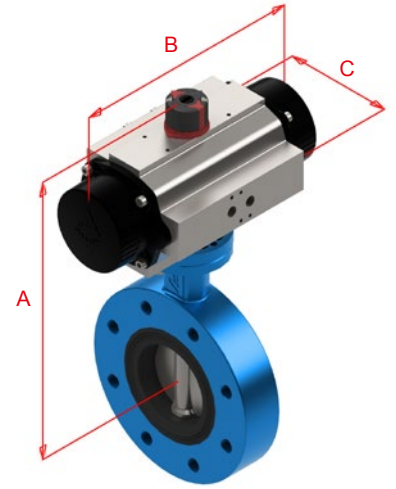
Reductor
Worm-gear



Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator



Diámetro nominal		Mando palanca			Reductor					Actuador neumático doble efecto					Actuador neumático simple efecto				
Nominal size		Lever-operated			Worm-gear					Double acting actuator					Spring return actuator				
(mm)	In	A	B	Peso Weight	A	B	C	ØD	Peso Weight	A	B	C	Modelo Model	Peso Weight	A	B	C	model	Peso Weight
50	2"	186	205	7	214	128	116	140	7	252	145	76	ADA20	7	271	195	91	ASR40	8
65	2 1/2"	191	205	7,5	219	128	116	140	7,5	276	158	91	ADA40	7,5	298	217	111	ASR80	8,5
80	3"	199	205	9	227	128	116	140	9	284	158	91	ADA40	9	316	258	122	ASR130	10,5
100	4"	217	205	13,5	245	128	116	140	13,5	324	177	111	ADA80	15	334	258	122	ASR130	17
125	5"	237	205	17,5	264	128	120	200	18	353	225	135	ADA130	20	376	348,5	152,5	ASR300	27
150	6"	245	205	15,5	273	128	120	200	16	380	225	135	ADA200	20	397	348,5	152,5	ASR300	25
200	8"	285	330	23,5	313	128	120	200	24	420	225	135	ADA200	28	457	397	173	ASR500	37,5
250	10"	331	330	41,5	322	175	223	300	38	430	273	152,5	ADA300	42,5	469	473	191,5	ASR850	57
300	12"	363	330	55,5	354	175	223	300	52	479	304	176	ADA500	59,5	529	560	212,5	ASR1200	83
350	14"	387	330	65,5	398	224	322	400	67,5	549	439	212,5	ADA1200	84	580	601	242,5	ASR1750	104
400	16"	423	330	88,5	438	224	322	400	90,5	620	461	242,5	ADA1750	113,5	759	702	276,5	ASR2500	181
450	18"	-	-	-	482	226	381	600	137	703	510	276,5	ADA2100	168	824	940	415	ASR4000	301
500	20"	-	-	-	542	258	402	600	171	823	518	356	ADA2500	214	-	-	-	-	-
600	24"	-	-	-	630	322,5	447	700	258,5	863	630	415	ADA2500	290	-	-	-	-	-
700	28"	-	-	-	699	403	447	500	349	-	-	-	-	-	-	-	-	-	-
750	30"	-	-	-	723	390	447	500	419	-	-	-	-	-	-	-	-	-	-
800	32"	-	-	-	779	390	447	700	464	-	-	-	-	-	-	-	-	-	-
900	36"	-	-	-	824	469	500	600	640	-	-	-	-	-	-	-	-	-	-
1000	40"	-	-	-	893	469	500	600	850	-	-	-	-	-	-	-	-	-	-
1100	44"	-	-	-	954	469	500	600	1077	-	-	-	-	-	-	-	-	-	-
1200	48"	-	-	-	1012	370	556	800	1437	-	-	-	-	-	-	-	-	-	-
1300	52"	-	-	-	1237	510	589	700	2332	-	-	-	-	-	-	-	-	-	-
1400	56"	-	-	-	1257	510	589	700	2682	-	-	-	-	-	-	-	-	-	-
1600	64"	-	-	-	1422	510	589	700	2942	-	-	-	-	-	-	-	-	-	-
1400	56"	-	-	-	1257	713	589	700	2132	-	-	-	-	-	-	-	-	-	-
1600	64"	-	-	-	1422	713	589	700	2582	-	-	-	-	-	-	-	-	-	-

► Dimensiones válvulas / Valve dimensions

FIG. 1 DN32-400

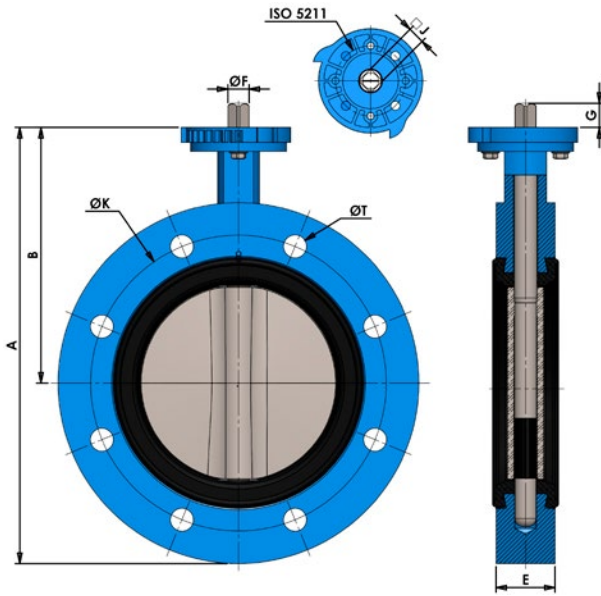
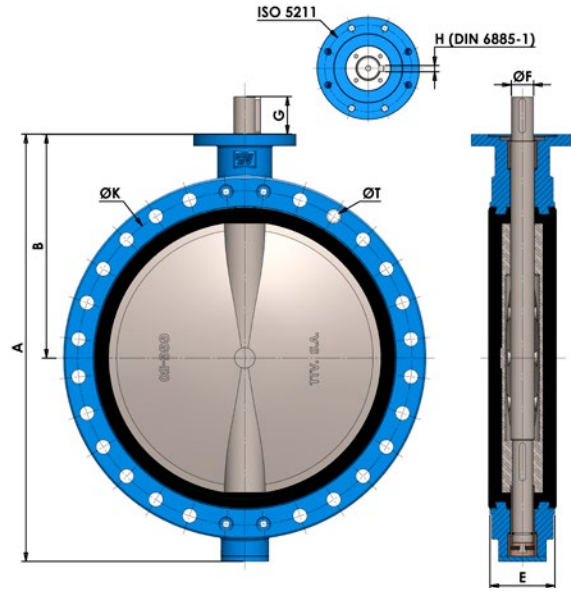


FIG. 2 DN450-1600



Dimensiones válvulas / Valves dimensions										PN10		PN16		ANSI150				
DN		A	B	E	F	G	J	ISO 5211	Peso Weight (Kg)	K	Taladros Holes		K	Taladros Holes		K	Taladros Holes	
mm	In										N°xT	N°xT1		N°xT	N°xT1		N°xT	N°xT1

FIG. 1 DN32-400

50	2"	239	156	43	9,8	14	8	F05/07	6	125	4x19	-	125	4x19	-	120,6	4x19	-
65	2 1/2"	254	161	46	12	16	9	F05/07	7.5	145	4x19	-	145	4x19	-	139,7	4x19	-
80	3"	269	169	46	14	16	11	F05/07	9	160	8x19	-	160	8x19	-	152,4	4x19	-
100	4"	306	187	52	14	20	11	F05/07	12	180	8x19	-	180	8x19	-	190,5	8x19	-
125	5"	337	207	56	18	20	14	F07	16	210	8x19	-	210	8x19	-	216	8x23	-
150	6"	361	215	56	18	20	14	F07	14	240	8x23	-	240	8x23	-	241,3	8x23	-
200	8"	435	255	60	22	24	17	F07	22	295	8x23	-	295	12x23	-	298,5	8x23	-
250	10"	458	248	68	25	24	19	F10	34	350	8x23	4xM20	355	8x27	4xM24	362	8x26	4x7/8"
300	12"	521	280	78	28	24	22	F10	48	400	8x23	4xM20	410	8x27	4xM24	431,8	8x26	4x7/8"
350	14"	565	300	78	28	29	22	F14	58	460	12x23	4xM20	470	12x27	4xM24	476,3	8x29	4x1"
400	16"	645	340	102	35	29	27	F14	81	515	12x27	4xM24	525	12x30	4xM27	539,8	12x29	4x1"

FIG. 2 DN450-1600

450	18"	736	390	114	50	80	-	F14	118	565	16x27	4xM24	585	16x30	4xM27	577,9	12x32	4x1 1/8"
500	20"	825	440	127	50	80	-	F14	144	620	16x27	4xM24	650	16x33	4xM30	635	16x32	4x1 1/8"
600	24"	965	507	154	60	90	-	F16	220	725	16x30	4xM27	770	16x36	4xM33	749,3	16x36	4x1 1/4"
700	28"	1100	575	165	60	90	-	F25	300	840	20x30	4xM27	840	20x36	4xM33	863	24x36	4x1 1/4"
750	30"	1150	600	190	65	110	-	F25	370	900	20x33	4xM30	900	20x36	4xM33	914	24x36	4x1 1/4"
800	32"	1248	655	190	65	110	-	F25	415	950	20x33	4xM30	950	20x39	4xM36	978	24x41	4x1 1/2"
900	36"	1325	685	203	80	110	-	F25	565	1050	24x33	4xM30	1050	24x39	4xM36	1086	28x41	4x1 1/2"
1000	40"	1457	754	216	80	110	-	F25	775	1160	24x36	4xM33	1170	24x42	4xM39	1200	32x41	4x1 1/2"
1100	44"	1580	815	216	80	110	-	F25	990	1270	28x36	4xM33	1270	28x42	4xM39	1314	36x41	4x1 1/2"
1200	48"	1721	873	254	100	110	-	F25	1350	1380	28x39	4xM36	1390	28x48	4xM45	1422	40x41	4x1 1/2"
1300	52"	1910	1005	360	120	130	-	F30	2100	-	-	-	-	-	-	1537	40x48	4x1 3/4"
1400	56"	1990	1025	360	120	130	-	F30	2450	1590	32x42	4xM39	1590	32x48	4xM45	1651	44x48	4x1 3/4"
1600	64"	2320	1190	360	150	160	-	F35	2710	1820	36x48	4xM45	1820	36x56	4xM52	1879,6	44x51	4x1 7/8"
1800	72"	2525	1310	360	150	170	-	F35	3100	2020	36x48	8xM45	2020	36x56	8xM52	2096	52x51	8x1 7/8"
2000	80"	2680	1360	360	150	170	-	F35	3650	2230	40x48	8xM45	2230	40x62	8xM56	2311	52x54	8x2"

• Las dimensiones son nominales +/- 1 mm / Dimensions are nominal +/- 1 mm

• Sujeto a cambios sin previo aviso / Subject to change without notice

