



Wafer Type Butterfly Valves

Fig. 20W / 40W / 50W



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 LV 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 BV



N° ROB 064



ROB-GAZ



DNV



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



CERTIFICATE OF APPROVAL QUALITY
MANAGEMENT SYSTEM STANDARD
ISO 9001:2008
No.: SGI 220220



EC CERTIFICATE OF CONFORMITY
Lloyd's Register
DIRECTIVE 89/100/EEC
CERTIFICATE No.: 0088PES/MS0158



FIRE SAFE TEST
FOR VALVES



CE
2014/68/UE

Torque valves (Nm)

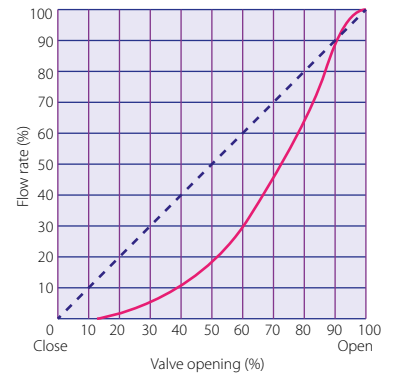
DN		Torque (Nm)		
mm	in	6 bar	10 bar	16 bar
32	1 1/4"	3	6	9
40	1 1/2"	3	6	9
50	2"	5	8	11
65	2 1/2"	7	10	20
80	3"	10	14	29
100	4"	12	18	47
125	5"	18	31	82
150	6"	31	59	130
200	8"	55	93	210
250	10"	123	206	360
300	12"	216	330	475
350	14"	333	425	760
400	16"	519	640	1300
450	18"	735	1176	1600
500	20"	931	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:

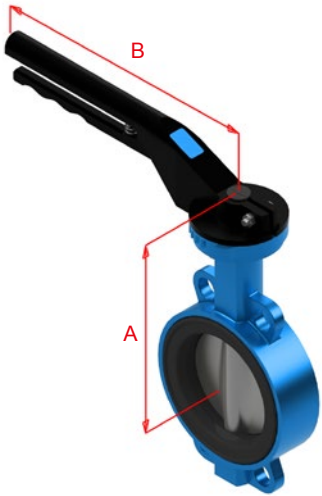
Name	Applications	Limitations	Temp. Rating
EPDM	Water, sea water, alcohols, organic salts dissolutions, mineral acid solutions, mineral bases alkaline	Not recommended for organic hydrocarbons	-20°C to 110°C
High Temp. EPDM	Water	Not recommended for hydrocarbons	-20°C to 130°C
NBR	Mineral and vegetable 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.: 20W9040 NO

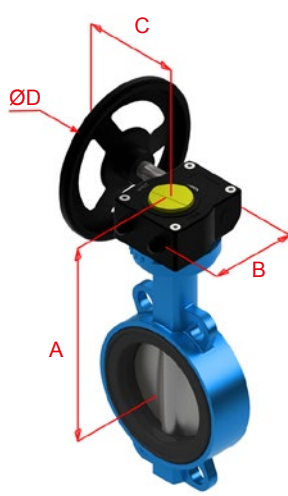
Body Material		Body Series		Valve Type		Stem Material		Disc Material		Seat Material	
20		W				90		40		NO	
10	GJL250	W	Wafer		Concentric standard soft seated	30	AISI 304	20	GJS500-7	CO	NATURAL RUBBER
20	GJS500-7	L	Lug	V	Vulcanized seat	40	AISI 316	40	CF-8M	E0	EPDM
40	CF-8M	B	Flanged S20		PTFE seat - Stainless 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	NO
					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**

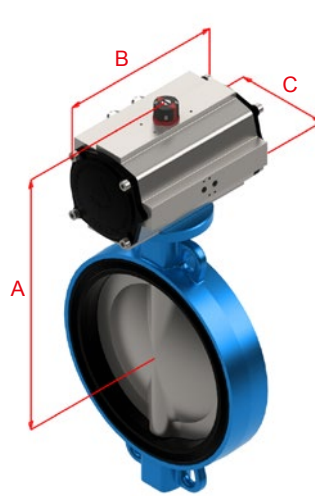
Mando palanca
Lever-operated



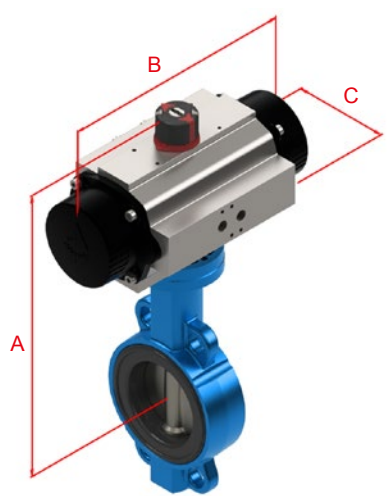
Reductor
Worm-gear



Actuador neumático doble efecto
Double acting actuator

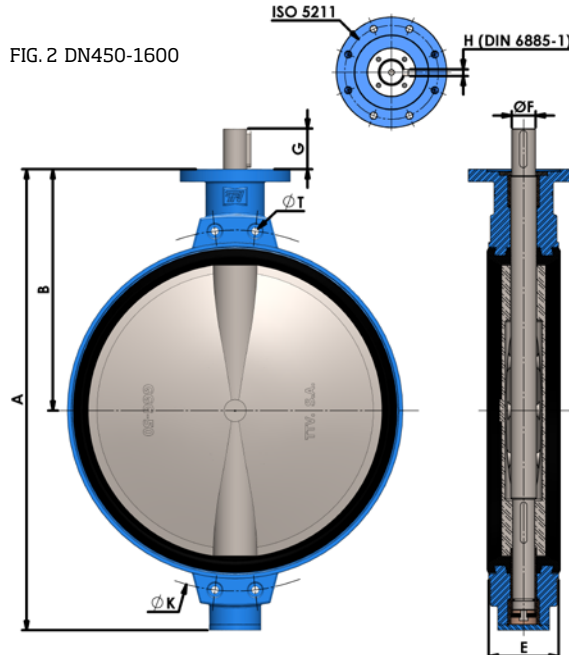
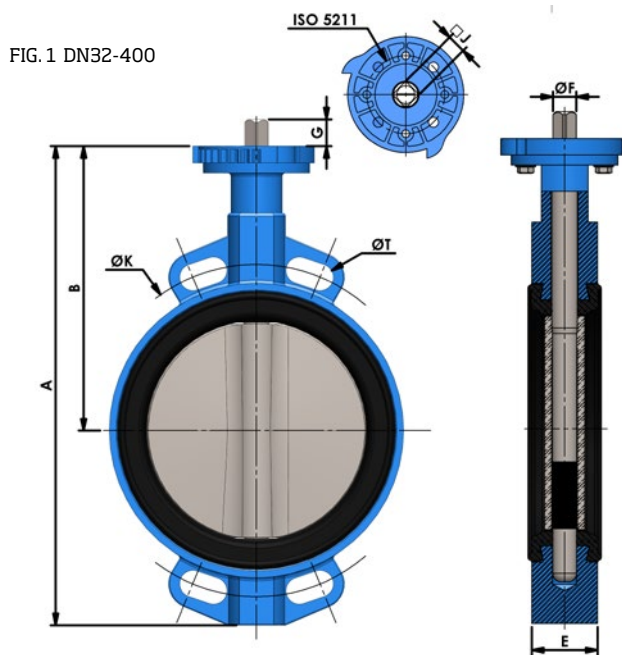


Actuador neumático simple efecto
Spring Return Actuator



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
32	1 1/4"	170	205	2,5	198	128	116	140	3,5	214	145	76	ADA20	3,5	255	195	91	ASR40	4,5
40	1 1/2"	170	205	2,5	198	128	116	140	3,5	214	145	76	ADA20	3,5	255	195	91	ASR40	4,5
50	2"	186	205	4	214	128	116	140	5	252	145	76	ADA20	5	271	195	91	ASR40	6
65	2 1/2"	191	205	5	219	128	116	140	6	276	158	91	ADA40	6,5	298	217	111	ASR80	8,5
80	3"	199	205	5,5	227	128	116	140	6,5	284	158	91	ADA40	7	316	258	122	ASR130	10
100	4"	217	205	7	245	128	116	140	8	324	177	111	ADA80	9,5	334	258	122	ASR130	11,5
125	5"	235	330	9,5	264	128	120	200	10	353	225	135	ADA130	12	376	348,5	152,5	ASR300	19
150	6"	145	330	10,5	273	128	120	200	11	380	225	135	ADA200	14,5	397	348,5	152,5	ASR300	20
200	8"	285	330	16,5	313	128	120	200	17	420	225	135	ADA200	20,5	457	397	173	ASR500	30,5
250	10"	331	600	25	322	175	223	300	25,5	430	273	152,5	ADA300	40	469	473	191,5	ASR850	44
300	12"	363	600	33	354	175	223	300	34	479	304	176	ADA500	41,5	529	560	212,5	ASR1200	64,5
350	14"	-	-	-	398	224	322	400	48,5	549	439	212,5	ADA1200	65	580	601	242,5	ASR1750	85
400	16"	-	-	-	438	224	322	400	61,5	620	461	242,5	ADA1750	84,5	759	702	276,5	ASR2500	152
450	18"	-	-	-	486	226	381	600	106	703	510	276,5	ADA2100	102	824	940	415	ASR4000	270
500	20"	-	-	-	542	258	402	600	144	823	518	356	ADA2500	187	-	-	-	-	-
600	24"	-	-	-	630	322,5	447	700	216	863	630	415	ADA2500	247	-	-	-	-	-
700	28"	-	-	-	699	390	447	500	307	-	-	-	-	-	-	-	-	-	-
750	30"	-	-	-	723	390	447	500	345	-	-	-	-	-	-	-	-	-	-
800	32"	-	-	-	779	390	447	700	379	-	-	-	-	-	-	-	-	-	-
900	36"	-	-	-	824	469	500	600	580	-	-	-	-	-	-	-	-	-	-
1000	40"	-	-	-	894	469	500	600	736	-	-	-	-	-	-	-	-	-	-
1100	44"	-	-	-	954	469	500	600	927	-	-	-	-	-	-	-	-	-	-
1200	48"	-	-	-	1012	574	556	800	1107	-	-	-	-	-	-	-	-	-	-
1300	52"	-	-	-	1237	574	589	700	1882	-	-	-	-	-	-	-	-	-	-
1400	56"	-	-	-	1257	713	589	700	2132	-	-	-	-	-	-	-	-	-	-
1600	64"	-	-	-	1422	713	589	700	2582	-	-	-	-	-	-	-	-	-	-

► Dimensiones válvulas / Valve dimensions



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

FIG. 1 DN32-400

32	1 1/4"	206	140	33	9,8	14	8	F05/07	2	100	4x18	100	4x18	88,9	4x16
40	1 1/2"	206	140	33	9,8	14	8	F05/07	2	110	4x18	110	4x18	98,5	4x16
50	2"	228	156	43	9,8	14	8	F05/07	3,5	125	4x18	125	4x18	120,6	4x19
65	2 1/2"	248	161	46	12	16	9	F05/07	4,5	145	4x18	145	4x18	139,7	4x19
80	3"	265	169	46	14	16	11	F05/07	5	160	4x18	160	4x18	152,4	4x19
100	4"	298	187	52	14	20	11	F05/07	6,5	180	4x18	180	4x18	190,5	4x19
125	5"	331	206	56	18	20	14	F07	8	210	4x18	210	4x18	215,9	4x23
150	6"	349	215	56	18	20	14	F07	9	240	4x23	240	4x23	241,3	4x23
200	8"	430	255	60	22	24	17	F07	15	295	4x23	295	4x23	298,5	4x23
250	10"	461	248	68	25	24	19	F10	21,5	350	4x23	355	4x27	362	4x26
300	12"	524	280	78	28	24	22	F10	30	400	4x23	410	4x27	431,8	4x26
350	14"	570	300	78	28	29	22	F14	39	460	4x23	470	4x27	476,3	4x29
400	16"	644	340	102	35	29	27	F14	52	515	4x27	525	4x30	539,8	4x29

FIG. 2 DN450-1600

450	18"	736	390	114	50	80	-	F14	87	565	4xM24	585	4xM27	577,9	4x1 1/8"
500	20"	825	440	127	50	80	-	F14	117	620	4xM24	650	4xM30	635	4x1 1/8"
600	24"	965	507	154	60	90	-	F16	177	725	4xM27	770	4xM33	749,3	4x1 1/4"
700	28"	1100	575	165	60	90	-	F25	258	840	4xM27	840	4xM33	863	4x1 1/4"
750	30"	1150	600	190	65	110	-	F25	296	900	4xM30	900	4xM33	914	4x1 1/4"
800	32"	1248	655	190	65	110	-	F25	330	950	4xM30	950	4xM36	978	4x1 1/2"
900	36"	1325	685	203	80	110	-	F25	505	1050	4xM30	1050	4xM36	1086	4x1 1/2"
1000	40"	1457	754	216	80	110	-	F25	661	1160	4xM33	1170	4xM39	1200	4x1 1/2"
1100	44"	1580	815	216	80	110	-	F25	840	1270	4xM33	1270	4xM39	1314	4x1 1/2"
1200	48"	1721	873	254	100	110	-	F25	1020	1380	4xM36	1390	4xM45	1422	4x1 1/2"
1300	52"	1910	1005	360	120	120	-	F30	1650	-	-	-	-	1537	4x1 3/4"
1400	56"	1990	1025	360	120	130	-	F30	1900	1590	4xM39	1590	4xM45	1651	4x1 3/4"
1600	64"	2320	1190	360	150	160	-	F35	2350	1820	4xM45	1820	4xM52	1879,6	4x1 7/8"

• Las dimensiones son nominales +/- 1 mm / Dimensions are nominal +/- 1 mm
 • Sujeto a cambios sin previo aviso / Subject to change without notice

