



Butterfly valves

Wafer, Lug & Flanged

► 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
SANSIANS
"H ADEL" E11



FDA SEATS
Test Report:
891/13/9797 M1



APSAD
N° Ref.: P2JNGRBD/C.10VAN.045



FDA
CODE OF FEDERAL
REGULATIONS 21 CFR



ATEX
2014/34/UE



TYPE APPROVAL
MARINE & OFFSHORE DIVISION
CERTIFICATE No. 147FCO BV



N° ROB 054



ROB-GAZ



DNV



CERTIFICATE OF CONFORMITY
N° 10/14/25/2014/0010
BY/00001



CERTIFICATE OF APPROVAL QUALITY
MANAGEMENT SYSTEM STANDARD
Lloyd's Register
LRQA
ISO 9001:2008
No. 842 2202308



EC CERTIFICATE OF CONFORMITY
Lloyd's Register
DIRECTIVE 2002/95/EC
ROHS/EN60950-1



SGS
FIRE SAFE TEST
FOR VALVES



UKAS
VALVES
001



2014/68/UE

Torque valves (Nm)

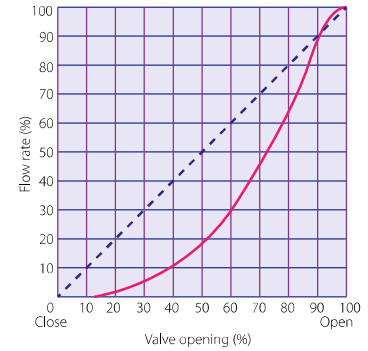
DN		Torque (Nm)		
mm	in	6 bar	10 bar	16 bar
32	1 1/4"	3	6	9
40	1 1/2"	3	6	9
50	2"	5	8	11
65	2 1/2"	7	10	20
80	3"	10	14	29
100	4"	12	18	47
125	5"	18	31	82
150	6"	31	59	130
200	8"	55	93	210
250	10"	123	206	360
300	12"	216	330	475
350	14"	333	425	760
400	16"	519	640	1300
450	18"	735	1176	1600
500	20"	931	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
Epiclorhidrine	Ozone resistance, hydrocarbons, aromatic oils	Steam, intermediate resistance to oils	-25°C to 145°C

How to order: Ex.: 20W9040N0

Body Material		Body Series		Valve Type		Stem Material		Disc Material		Seat Material	
20		W				90		40		N0	
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	90	AISI 420	50	WCB	EA	DRINKING WATER EPDM
50	WCB	3	Flanged S13	P	PTFE seat - PTFE covered disc: Please add "T" at the end of the code	95	17-4 PH	80	B-148 C95500	ET	HIGH TEMPERATURE EPDM
51	LCB	4	Flanged S14			D0	1.4462	91	CA-15	EN	NORDEL
60	Aluminium	R	Groove end	M	Metal/ metal concentric	D1	1.4517	95	17-4 PH	F0	PTFE
80	B-148 C95500			X	Metal/ metal double eccentric Metal/ PTFE double eccentric	M5	MONEL K-500	D0	1.4470	H0	HYPALON
				D	Double flanged double eccentric soft seated			D1	1.4517	N0	NITRILE (NBR)
				C	Triple eccentric			H0	HASTELLOY C	NC	CARBOXYLATED NITRILE
								U0	URANUS B6	NG	GAS NITRILE
								S3	1.4469	NL	LOW TEMPERATURE NITRILE
								S7	CK3MCuN	S0	SILICONE (VQM)
										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 + STELLITE
										4G	AISI 316 + GRAPHITE

