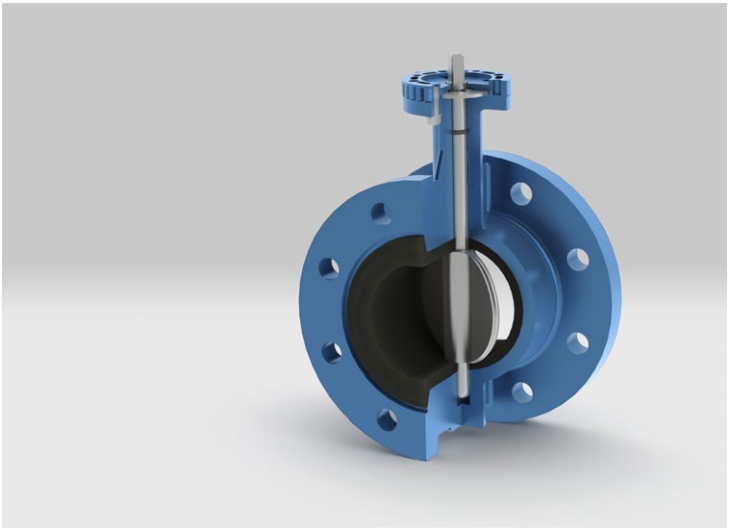
Butterfly valves

Double Flange

Valves & Technology

Technical Data

Manufacturing range	DN32 – DN2000
Face to face	EN 558 Series 13
	ISO 5752 Series 13
	API 609 Table 3
	EN 593
Mounting between	PN10/16-ANSI150 Lbs.
Flanges	ISO 7005, DIN 2501, EN 1092-1
	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



Feautures

- Valves certified and approved for different applications.
- 100% tight shut off, 0% leakage.
- 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.
- Posibility of operation through different manual controls (hand lever, gearbox…), electric, pneumatic, hydraulic actuator,…
- Low operation torque.
- Aerodynamic butterfly design that minimizes pressure drop.

General Aplications

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

Torque valves (Nm)

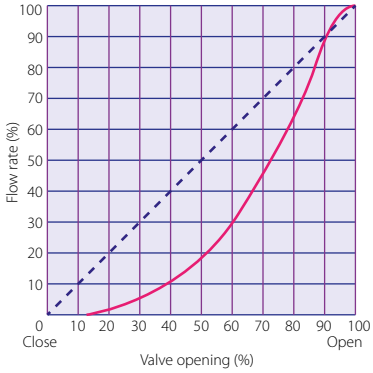
DN		Torque (Nm)		
mm	in	6 bar	10 bar	16 bar
32	1 1/4"	3	6	9
40	1 1/2"	3	6	9
50	2"	5	8	11
65	2 1/2"	7	10	20
80	3"	10	14	29
100	4"	12	18	47
125	5"	18	31	82
150	6"	31	59	130
200	8"	55	93	210
250	10"	123	206	360
300	12"	216	330	475
350	14"	333	425	760
400	16"	519	640	1300
450	18"	735	1176	1600
500	20"	931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

Kv data

DN		Flow coefficient Kv
mm	in	90º
32	1 1/4"	70
40	1 1/2"	70
50	2"	164
65	2 1/2"	201
80	3"	359
100	4"	627
125	5"	995
150	6"	1471
200	8"	2509
250	10"	3936
300	12"	5865
350	14"	8179
400	16"	10660
450	18"	12889
500	20"	16023
600	24"	22741
700	28"	32448
750	30"	35033
800	32"	44850
900	36"	51247
1000	40"	66104
1100	44"	81526
1200	48"	97355
1300	52"	119787
1400	56"	138400
1600	64"	166080



Cv= 1.16 • KV

Kv: Volume of water in m^3/h, that will flow through a given restriction or valve opening with a pressure drop of 1 bar at 20ºC

Chart for temperature and resistance:

Name	Applications	Limitations	Temp. Rating
EPDM	Water, sea water, alcohols, organic salts dissolutions, mineral acid solutions, mineral bases alcaline	Not recommended for oganic hydrocarbons	-20ºC a 110ºC
High Temp. EPDM	Water	Not recommended for hydrocarbons	-20ºC a 130ºC
NBR	Mineral and vegetable oils, gas, non-aromatic hydrocarbons, animal fats, vegetable fats, air	Organic acids, some mineral acids, chlorine, alcohols, aromatic hydrocarbons	-10ºC a 80ºC
Hypalon	Mineral acid dissolutions, organic and inorganic acids,oxidizing substances	Mineral and vegetable oils, hydrocarbons, animal and vegetable fats, cetones	-10ºC a 80ºC
FKM	Acids, fats, hydrocarbons, vegetable and mineral oils, fuels	Steam and hot water (max. 130ºC) unleaded gasoline, cetones, amines, freon 22	-5ºC a 180ºC
Silicone	Low and high temperature resistance, food grade	Hydrocarbons, acids, bases, atmosfpheric agents	-10ºC a 160ºC
High Temp. Silicone	Superheated	Hydrocarbons, strong acids and strong bases	-40ºC a 150ºC
Epiclorhidrine	Ozone resistance, hydrocarbons, aromatic oils	Steam, intermediate resistance to oils	-30ºC a 130ºC

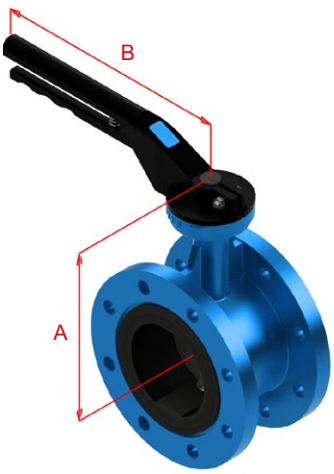
How to order: Ex.: 20HV9040 N0

Body Material		Body Series		Valve Type		Stem Material		Disc Material		Seat Material	
20		H		0		90		40		N0	
10	GJL250	H	Double flange	V	Vulcanized seat	30	AISI 304	20	GJS500-7	C0	NATURAL RUBBER
20	GJS500-7			F	API605	40	AISI 316	40	CF-8M	E0	EPDM
40	CF-8M					90	AISI 420	50	WCB	EA	DRINKING WATER EPDM
50	WCB					95	17-4 PH	80	B-148 C95500	EN	NORDEL
51	LCB					D0	1.4462	91	CA-15	H0	HYPALON
60	Aluminium					D1	1.4517	95	17-4 PH	N0	NITRILE (NBR)
80	B-148 C95500					M5	MONEL K-500	D0	1.4470	NC	CARBOXYLATED NITRILE
								D1	1.4517	NG	GAS NITRILE
								H0	HASTELLOY C	NL	LOW TEMPERATURE NITRILE
								U0	URANUS B6	ST	HIGH TEMPERATURE SILICONE
								S3	1.4469	V0	FKM (KNOWN AS VITON)
								S7	CK3MCuN	ST	EPICHLOROHYDRIN (ECO)

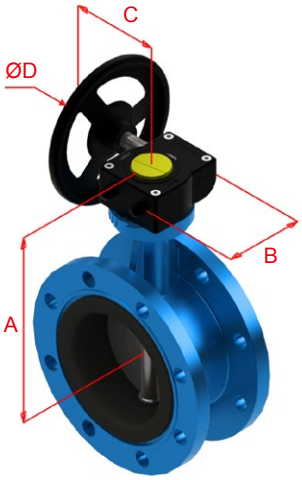
Doble Brida / *Double Flanged*

Válvula con accesorios / *Valve with accesories*

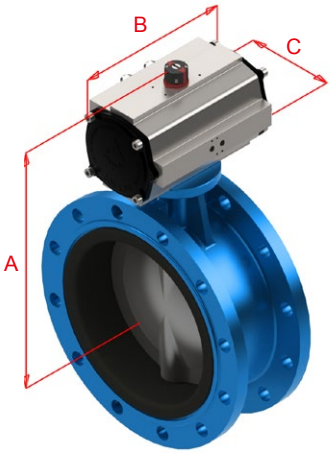
Mando palanca
Lever-operated



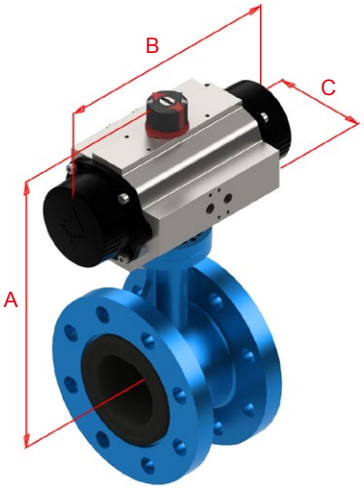
Reductor
Worm-gear



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*	Modelo *Model*	A	B	C	ØD	Peso *Weight*	Modelo *Model*	A	B	C	Peso *Weight*	Modelo *Model*	A	B	C	Peso Weight
40	2 1/2"	170	205	8	AM1-TTV	213	128	116	140	9	ADA20	236	145	76	9	ASR40	255	195	91	10
50	2"	186	205	8,3	AM1-TTV	229	128	116	140	9,5	ADA20	252	145	76	9,5	ASR40	271	195	91	10,5
65	2 1/2"	190	205	8,8	AM1-TTV	234	128	116	140	10	ADA40	275	158	91	11	ASR80	297	217	111	12,5
80	3"	198	205	10,8	AM1-TTV	242	128	116	140	12	ADA40	283	158	91	13	ASR130	315	258	122	15,5
100	4"	215	205	12,8	AM1-TTV	260	128	116	140	13,5	ADA80	322	177	111	15	ASR130	332	258	122	17
125	5"	237	330	16,5	AM1-TTV	279	128	120	200	18	ADA130	354	225	135	19	ASR300	389	348,5	152,5	27
150	6"	245	330	22,5	AM1-TTV	288	128	120	200	24	ADA200	380	225	135	28	ASR300	397	348,5	152,5	33
200	8"	286	330	30,5	AM1-TTV	328	128	120	200	32	ADA200	421	225	135	36	ASR500	455	397	173	45,5
250	10"	334	600	50,2	AM2-TTV	352	175	223	300	51	ADA300	433	273	152,5	55,5	ASR850	472	473	191,5	69,5
300	12"	363	600	65,2	AM2-TTV	384	175	223	300	66	ADA500	479	304	176	73,5	ASR1200	529	560	212,5	96,5
350	14"	-	-	-	AM3-TTV	427	224	322	400	99,5	ADA1200	553	439	212,5	116	ASR1750	584	601	242,5	136
400	16"	-	-	-	AM3-TTV	467	224	322	400	132,5	ADA1750	620	461	242,5	155,5	ASR2500	723	702	276,5	223
450	18"	-	-	-	ARC10	483	226	381	600	161	ADA2100	703	510	276,5	192	ASR4000	824	940	415	325
500	20"	-	-	-	ARC11	542	258	402	600	217	ADA2500	823	518	356	260	-	-	-	-	-
600	24"	-	-	-	ARC12	630	322,5	447	700	323,5	ADA2500	890	630	415	355	-	-	-	-	-
700	28"	-	-	-	ARC13	699	403	447	500	439	-	-	-	-	-	-	-	-	-	-
800	32"	-	-	-	ARC15	779	390	447	700	532	-	-	-	-	-	-	-	-	-	-
900	36"	-	-	-	ARC16	824	469	500	600	635	-	-	-	-	-	-	-	-	-	-
1000	40"	-	-	-	ARC16	893	469	500	600	995	-	-	-	-	-	-	-	-	-	-
1200	48"	-	-	-	ARC17	1012	370	556	800	2100	-	-	-	-	-	-	-	-	-	-
1300	52"				ARC18	1188	510	589	700	2582										
1400	56"	-	-	-	ARC18	1257	510	589	700	2932	-	-	-	-	-	-	-	-	-	-
1600	64"	-	-	-	ARC19	1422	510	589	700	4042	-	-	-	-	-	-	-	-	-	-

Doble Brida / *Double Flanged*

Valves & Technology

Dimensiones válvulas / *Valve dimensions*

FIG. 1 DN32-400

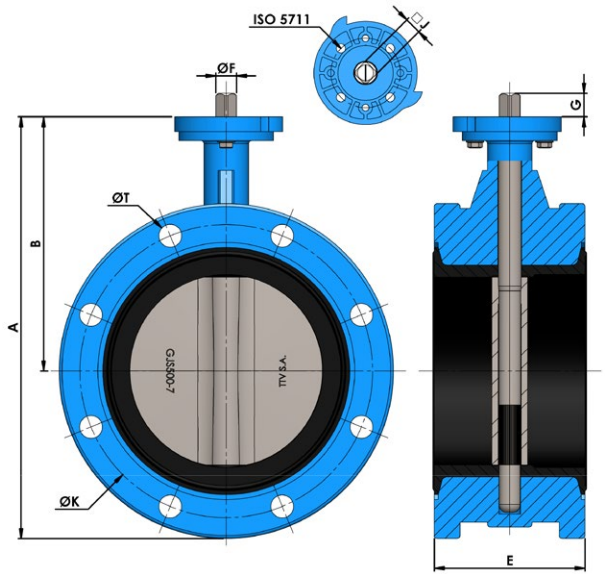
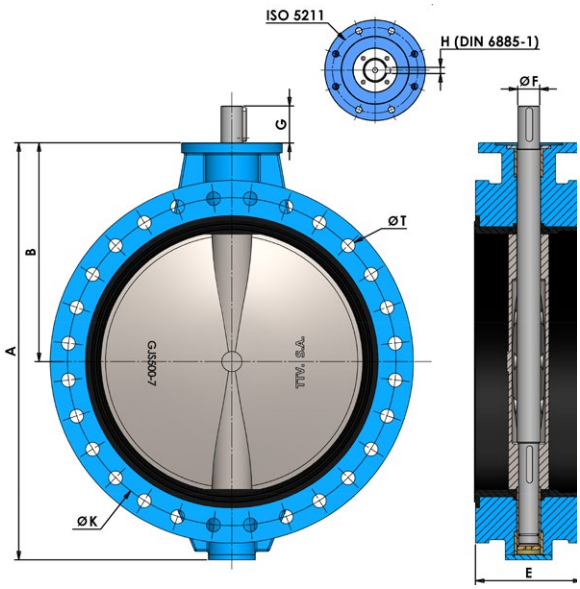
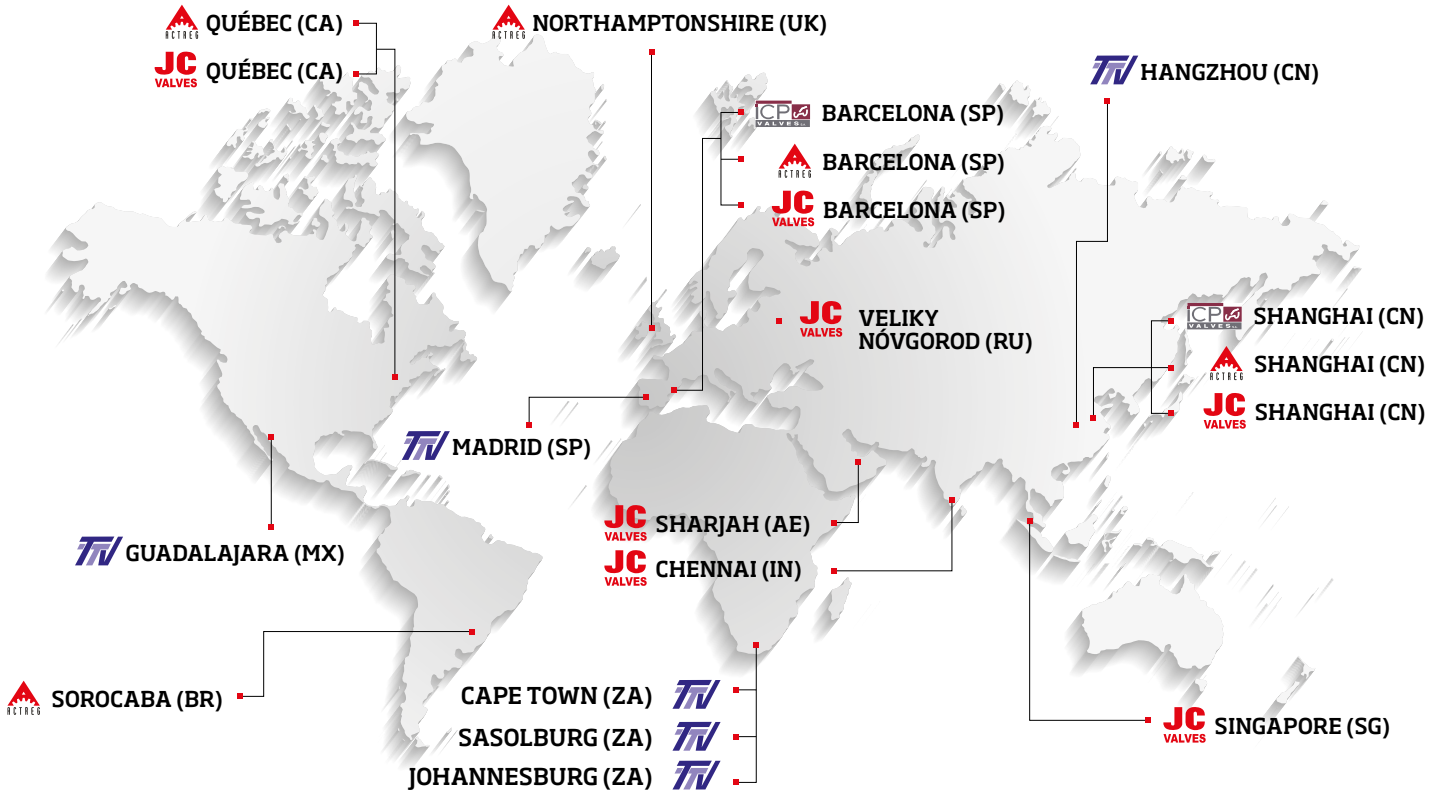


FIG. 2 DN450-1600



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										Nº×T		Nº×T		Nº×T
FIG. 1 DN32-400															
40	1 1/2"	215	140	106	9,8	14	8	F05/07	7,6	110	4×19	110	4×19	98,5	4×16
50	2"	239	156	108	9,8	14	8	F05/07	8	125	4×19	125	4×19	120,6	4×19
65	2 1/2"	253	160	112	12	16	9	F05/07	8,5	145	4×19	145	4×19	139,7	4×19
80	3"	268	168	114	14	16	11	F05/07	10,5	160	8×19	160	8×19	152,4	4×19
100	4"	300	185	127	14	20	11	F05/07	12	180	8×19	180	8×19	190,5	8×19
125	5"	335	207	140	18	20	14	F07	16	210	8×19	210	8×19	215,9	8×23
150	6"	358	215	140	18	20	14	F07	22	240	8×23	240	8×23	241,3	8×23
200	8"	425	256	152	22	24	17	F07	30	295	8×23	295	12×23	298,5	8×23
250	10"	452	251	165	25	24	19	F10	47	350	12×23	355	12×27	362	12×26
300	12"	523	280	178	28	24	22	F10	62	400	12×23	410	12×27	431,8	12×26
350	14"	569	304	190	28	29	22	F14	90	460	16×23	470	16×27	476,3	12×29
400	16"	643	340	216	35	29	27	F14	123	515	16×27	525	16×30	539,8	16×29
FIG. 2 DN450-1600															
450	18"	736	390	222	50	80	-	F14	142	565	20×27	585	20×30	577,9	16×32
500	20"	825	440	229	50	80	-	F14	190	620	20×27	650	20×33	635	20×32
600	24"	965	507	267	60	90	-	F16	285	725	20×30	770	20×36	749,3	20×36
700	28"	1100	575	292	60	90	-	F25	390	840	24×30	840	24×36	863	28×36
800	32"	1248	655	318	65	110	-	F25	480	950	24×33	950	24×39	978	28×41
900	36"	1325	685	330	80	110	-	F25	650	1050	28×33	1050	28×39	1086	32×41
1000	40"	1457	754	410	80	110	-	F25	920	1160	28×36	1170	28×42	1200	36×41
1200	48"	1721	873	470	100	110	-	F25	2000	1380	32×39	1390	32×48	1422	44×41
1300	52"	1910	1005	530	120	130	-	F30	2350	1490	32×43	1490	32×48	1537	44×48
1400	56"	1990	1025	530	120	130	-	F30	2700	1590	36×42	1590	36×48	1651	48×48
1600	64"	2320	1190	600	150	160	-	F35	3810	1820	40×48	1820	40×56	1879,6	52×51

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



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