

По всем вопросам обращайтесь в наш офис ООО "ТИ-Системс":
Тел/факс: (495) 7774788, 5007154,55, 65, 7489626, 7489127, 28, 29
Эл. почта: info@tisys.ru Интернет: www.tisys.ru www.tisys.kz www.tisys.by www.tisys.ru

BUTTERFLY VALVES



**FE
VISA**

Válvulas Industriales FEVISA

C/ Siderurgia, Parcela 4-1, Valnalón
33930 - La Felguera - Asturias - Spain
Tlf (+34) 985 69 05 79 - Fax (+34) 985 69 85 04



BUTTERFLY VALVES

RANGE AND INDEX

Size	Class 125	Class 150	Class 250
4"	● / △ / ★ / ☆	● / △ / ★ / ☆	● / △ / ★ / ☆
6"	● / △ / ★ / ☆	● / △ / ★ / ☆	● / △ / ★ / ☆
8"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
10"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
12"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
14"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
16"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
18"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
20"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
24"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
28"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
30"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
36"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
42"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
48"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
54"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
60"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
66"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
72"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
84"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆
88"	△ / ★ / ☆	△ / ★ / ☆	△ / ★ / ☆

Note: ● Stands for handle operated valves △ Stands for gearbox operated valves ☆ Stands for air operated valves ★ Stands for electrically operated valves
 / Stands for no option of this Those not covered in the table can be custom made to users' requirements.

FEVISA Rubber seated centric butterfly Valves are available in body lined, disc lined or both. These terms are defined in API609 or AWWA C504.

PRESSURE RATE

MAXIMUM PRESSURE RATINGS		
CONNECTION	AWWA Class	CWP (psig)
ANSI 125# Gray Iron Flange	150B	150
AWWA MJ Gray Iron	150B	150
ANSI 250# Ductile Iron Flange	250B	250
AWWA MJ Ductile Iron	250B	250
ANSI 125# Ductile Iron Flange	250B	250
ANSI 125# FLG x MJ Gray Iron	150B	150





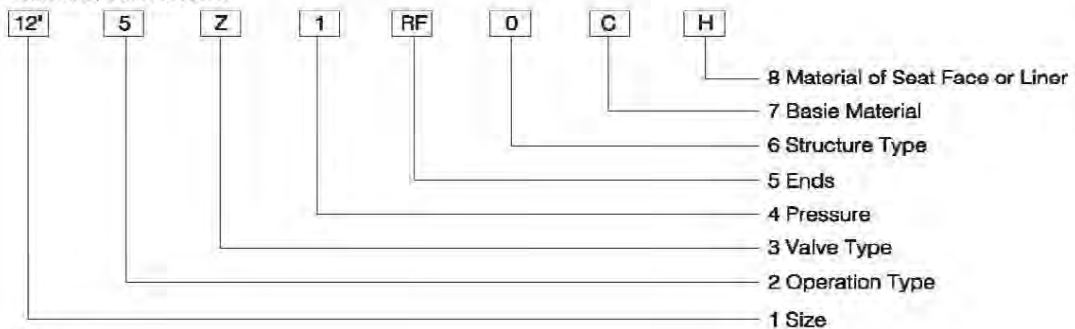
BUTTERFLY VALVES

FIGURE NUMBERING

A familiarity with our figure number system is not necessary when specifying or ordering our valves. Providing a full description of the valve will also do. Our sales office will translate this into our figure number. A full description of the valve would begin with FEVISA Rubber seated centric butterfly Valve and followed by size, pressure rating, flange details etc. We give an example below in order to illustrate a typical figure number. But if a complete specification is required, please feel free to contact our sales team.

1	Size	The inch series is expressed with xxin; the metric series is expressed with xx, with the unit mm omitted					
2	Operation Type	1- Bare Stem	3- Worm Gear Operated	6** - Air Operated	7□ - Hydraulic Operated	9- Electric Operated Hand Operated (omit)	
3	Valve Type	D- Butterfly valve DTF- Aeration Butterfly Valve		DH- Check Butterfly Valve Ds- Flexible Butterfly Valve	DK- Vacuum Butterfly Valve		
4	Pressure	0a- PN6	0b- PN2.5	0- PN10	1- PN16 Class150	2- PN25	3- Class3000
		4- PN40 Class400	6- PN64 Class600	9- Class900	10- PN100	1a- Class125	2a- Class250
5	Ends	RF- Raised Face	FF- Flat Face	MFM- Male and Female Face	RJ- Ring Joint	BW- Butt-weld	WS- Wafe with 4 lugs WL- Wafe with no lug WF- Single Reinforcement Wafer Type WU- Unthreaded Hole Wafer Type LL- Full Lug Screw Wafer Type LU- U- U Screw Wafer Type
6	Structure Type	1- Middle Eccentric Structure	2- Single Eccentric Structure	3- Double Eccentric Structure	4- Veriable Eccentric Structure	5- Three Eccentric Structure	
7	Basie Material	C- WCB	C- C5	C6- WC6	C9- WC9	BL- LCB	CL- LCC
		8- CF8	8M- CF8M	3- CF3	3M- CF3M	ML- MONEL	H- IRON
8	*Material of Seat Face or Liner	H- Cr13S.S		E- 18-8S.S		F- PTFE	
		D- Nitriding Steel		M- Monel Alloy		X- Rubber	

- Note: 1. Use "W" to express seat sealing surface material which is processed directly by valve body.
 2. When the materials of sealing surface are different, use low hardness material symbol to express.
 3. Special requirements not shown, should be indicated in the purchase order.
 4. The models listed in the sample book have no reference to pressure, sizes and valve material symbols, they are to be decided by users.
 5. **6S Spring Return, 6A Air Operated Control.
 6. B- Pressure Retaining Type, Q- Full Pressure Type, S- Locked Type.
 7. PN < 0.25MPa, Omit Pressure.



FOR EXAMPLE

6"-3D1RF5CH

BUTTERFLY VALVE , 6", WORMGEAR OPERATED , ANSI CLASS 150, RF FLANGE ENDS, TRIPLE ECCENTRIC STRICTURE, BODY & DISC CAST STEEL WCB, 13Cr FACE SEAT 150-3D1RF5CH

BUTTERFLY VALVE , DN 150 PN16 , WORM GEAR OPERATED , RF FLANGE ENDS , TRIPLE ECCENTRIC STRICTURE, BODY & DISC CAST STEEL WCB, 13Cr FACE SEAT .

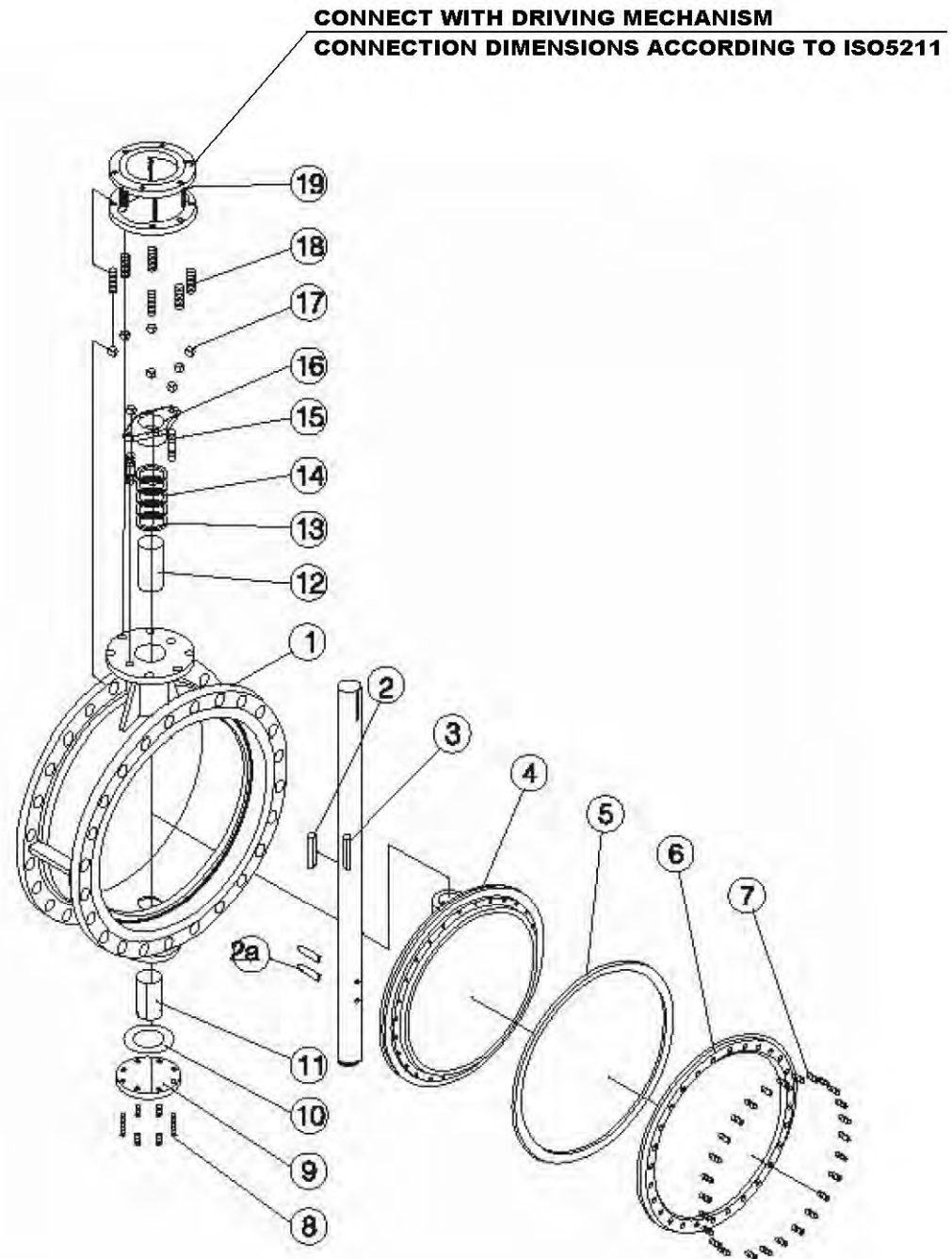
Válvulas Industriales FEVISA

C/ Siderurgia, Parcela 4-1, Valnalón
 33930 - La Felguera - Asturias - Spain
 Tlf (+34) 985 69 05 79 - Fax (+34) 985 69 85 04



BUTTERFLY VALVES

EXPLODED VIEW OF CONSTRUCTION





BUTTERFLY VALVES

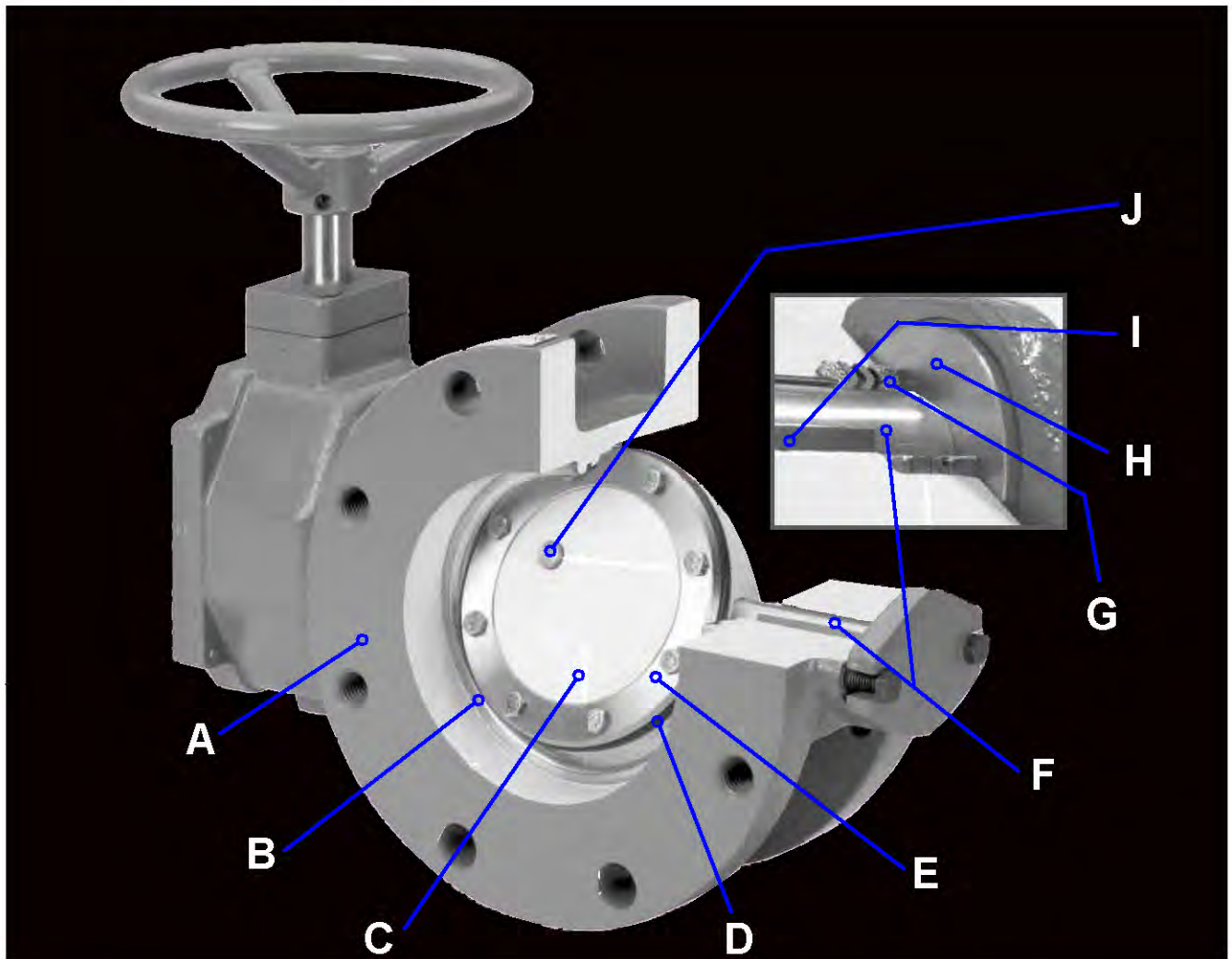
MATERIAL OF CONSTRUCTION

COMPONENT	STANDARD	OPTIONAL
150B Body	Cast Iron ASTM A126, Class B	Ductile Iron ASTM A536 Gr. 65-45-12
250B Body	Ductile Iron ASTM A536 Gr. 65-45-12	Consult Factory
Disc	Ductile Iron ASTM A536 Gr. 65-45-12	Consult Factory
150B Shaft	Stainless Steel ASTM A276 Type 304	Stainless Steel ASTM A276 Type 316
250B Shaft	Stainless Steel ASTM A564 Type 630,	Consult Factory
Resilient Seat	Buna-N	EPDM, Viton
Shaft Bearings 2"-24"	Nylatron	Teflon
Shaft Bearings 30" and Larger	Teflon-Lined, Fiberglass-Backed	Consult Factory
Body Seat and Hardware	T316 Stainless Steel	Consult Factory
Interior Coating	NSF 61 Epoxy	Fusion Bonded Epoxy
Exterior Coating	Universal Primer	Fusion Bonded Epoxy



BUTTERFLY VALVES

DESIGN FEATURE



A - BODY
 AVAILABLE IN FLANGED AND MECHANICAL JOINT END CONNECTIONS IN AWWA CLASS 150B AND 250B

B - BODY SEAT
 360° UNINTERRUPTED BODY SEAT WITH NO SHAFT PENETRATION FACILITATES LEAK FREE PERFORMANCE TYPE 316 STAINLESS STEEL PROVIDES LONG LIFE AND CORROSION FREE MATING SURFACE FOR RESILIENT SEAT

C - DUCTILE IRON DISC
 DUCTILE IRON PROVIDES STRENGTH AND RIGIDITY TO WITHSTAND IMPACTS FROM FLOW AND PRESSURE TRANSIENTS

D - RESILIENT SEAT
 EASILY ADJUSTED AND REPLACED IN THE FIELD ,THE 360° RESILIENT SEAT IS UNINTERRUPTED FOR POSITIVE SEATING

E - TRI-OFFSET SEAT RETENTION SYSTEM
 PROVEN DEPENDABILITY SINCE 1997 RESILIENT SEAT IS MECHANICALLY RETAINED BY THREE METHODS . ALL SEAT HARDWARE IS TYPE 316 STAINLESS STEEL

F - SHAFT
 TYPE 304 STAINLESS STEEL SHAFTS MEET AWWA C504 DIAMETER REQUIREMENTS THROUGH SHAFTS PROVIDED STANDARD ON SIZES 4"-24" OPTIONAL 30" AND LARGER

G - SHAFT SEAL
 SHAFT SEAL IS A SELF-ADJUSTING/WEAR COMPENSATING V-TYPE PACKING IS EASILY REPLACED WITHOUT REMOVAL OF THE VALVE FROM THE LINE

H - THRUST BEARING
 FACTORY SET BRONZE THRUST BEARING ASSURES PROPER CENTERING OF VALVE DISC FIELD ADJUSTABLE IN SIZES 30" AND LARGER

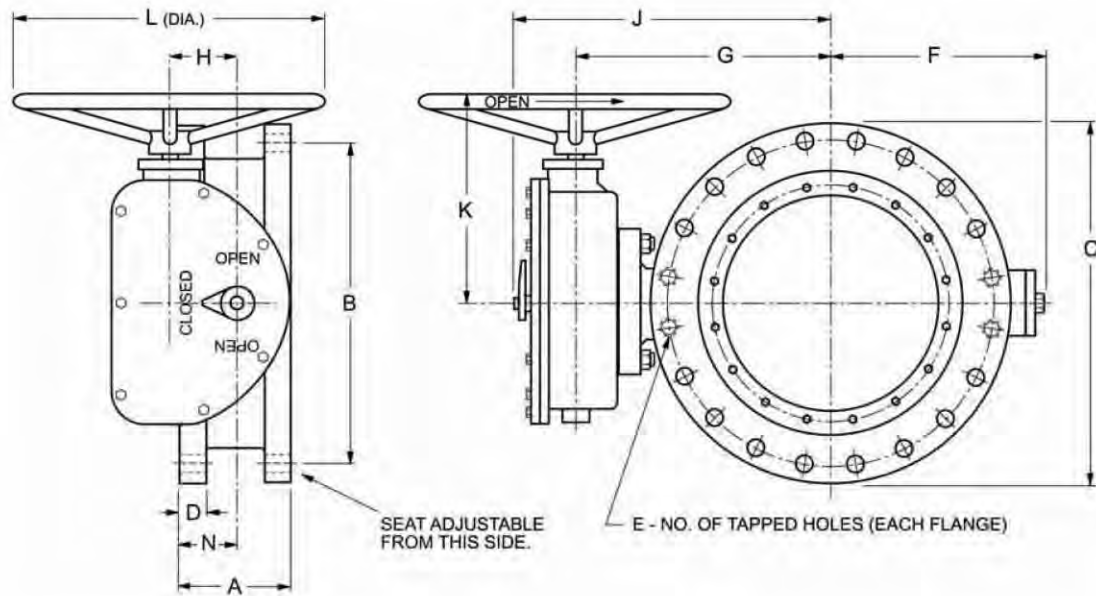
I - SLEEVE BEARINGS
 BEARINGS ARE SELF-LUBRICATING AND NON-CORROSIVE, FOR A LONG TROUBLE-FREE LIFE

J - TAPER PINS
 STAINLESS STEEL TAPER PINS LOCK DISC TO SHAFT WITH STAINLESS STEEL NUTS TAPER PIN O-RING SEAL PREVENTS LEAKAGE



BUTTERFLY VALVES

DATASHEET FOR 4"-24", CLASS 150B- CLASS 250B, FLANGE END.



DIMENSIONS IN MM

Valve Size	AWWA Press. Class	A	B	C	D	E	F	G	H	J	K	L	N	Turns to Open	No. of Bolts	Bolt Size	Approx. Shipping Weight
4	150B	127	191	229	24	0	153	193	39	245	239	204	64	15	8	16	33
	250B	143	143	254	32	0							72		8	20	37
6	150B	127	242	280	26	4	178	210	39	264	239	204	64	15	8	20	41
	250B	150	429	318	37	4		216					12		20	59	
8	150B	153	299	339	29	0	204	234	39	286	239	204	77	15	8	20	57
	250B	178	331	381	42	4		248					12		23	66	
10	150B	204	362	407	31	0	254	297	51	359	264	305	102	20	12	23	91
	250B	239	388	445	48	0		120					16		26	103	
12	150B	204	432	483	32	0	297	324	51	388	264	407	102	20	12	23	114
	250B	242	451	521	51	0		331					16		29	137	
14	150B	204	477	534	35	0	343	399	89	483	383	610	102	35	12	26	182
	250B	242	515	585	54	4							121		20	29	205
16	150B	204	540	597	37	0	372	424	89	508	383	610	102	35	16	26	218
	250B	245	572	648	58	4							123		20	32	250
18	150B	204	578	635	40	4	394	461	127	550	464	610	102	50	16	29	291
	250B	245	629	712	61	4							123		24	32	341
20	150B	204	635	699	43	4	445	512	127	601	489	610	102	50	20	29	352
	250B	245	686	775	64	4							123		24	32	409
24	150B	204	750	813	48	4	521	588	127	677	515	610	102	50	20	32	493
	250B	248	813	915	70	4							124		24	39	613

NOTES:

Flange drilling conforms to ANSI B16.1, Class 125 or Class 250.
Consult factory for Worm Gear dimensions.

Válvulas Industriales FEVISA

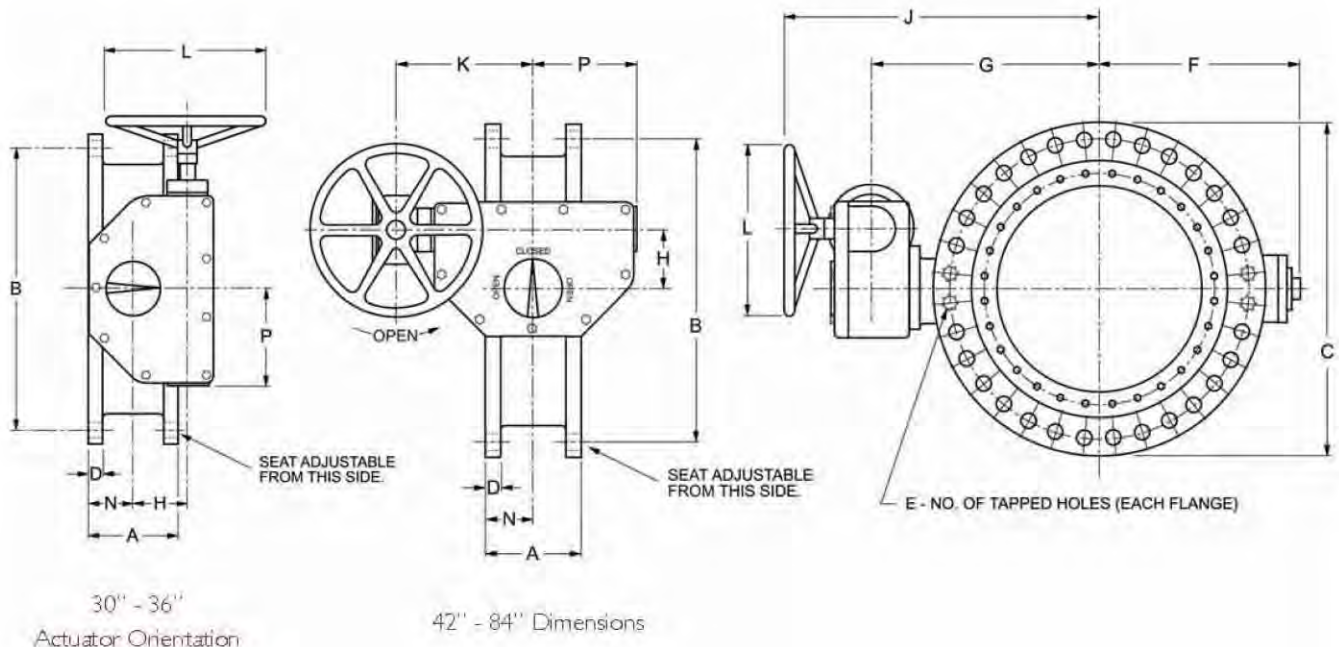
C/ Siderurgia, Parcela 4-1, Valnalón
33930 - La Felguera - Asturias - Spain
Tlf (+34) 985 69 05 79 - Fax (+34) 985 69 85 04





BUTTERFLY VALVES

DATASHEET FOR 30"-84", CLASS 150B-CLASS 250B, FLANGE END



DIMENSIONS IN MM																			
Valve Size	AWWA Press. Class	A	B	C	D	E	F	G	H	J	K	L	N	P	Turns to Open	No. of Bolts	Bolt Size	Approx. Shipping Weight	
30	150B	305	915	985	54	4	696	740	216	877	788	610	153	362	63	28	32	1105	
	250B	324	997	1093	77								175				45	1271	
36	150B	305	1086	1169	61	4	750	810	216	947	788	610	153	362	63	32	39	1554	
	250B	356	1169	1270	86								178				51	1815	
42	150B	305	1258	1347	67	4	896	912	216	1258	496	610	153	362	187	36	39	2062	
	250B	359	1340	1448	94								180				51	2359	
48	150B	381	1423	1512	70	4	999	1053	267	1467	632	610	191	448	290	44	39	3142	
	250B	445	782	1651	102								223				40	3675	
54	150B	381	1594	1683	77	8	1124	1155	267	1569	632	610	191	448	290	44	45	4198	
60	150B	381	1759	1855	80	8	1226	1318	267	1782	632	610	191	448	290	52	45	5843	
66	150B	458	1931	2032	86	8	1355	1477	267	1940	632	610	229	448	290	52	45	6723	
72	150B	458	2096	2198	89	8	1499	1550	356	2013	820	610	229	594	579	60	45	8074	
84	150B	610	2420	2534	99	8	1810	1820	356	2029	820	610	305	594	579	64	51	12275	

NOTES:

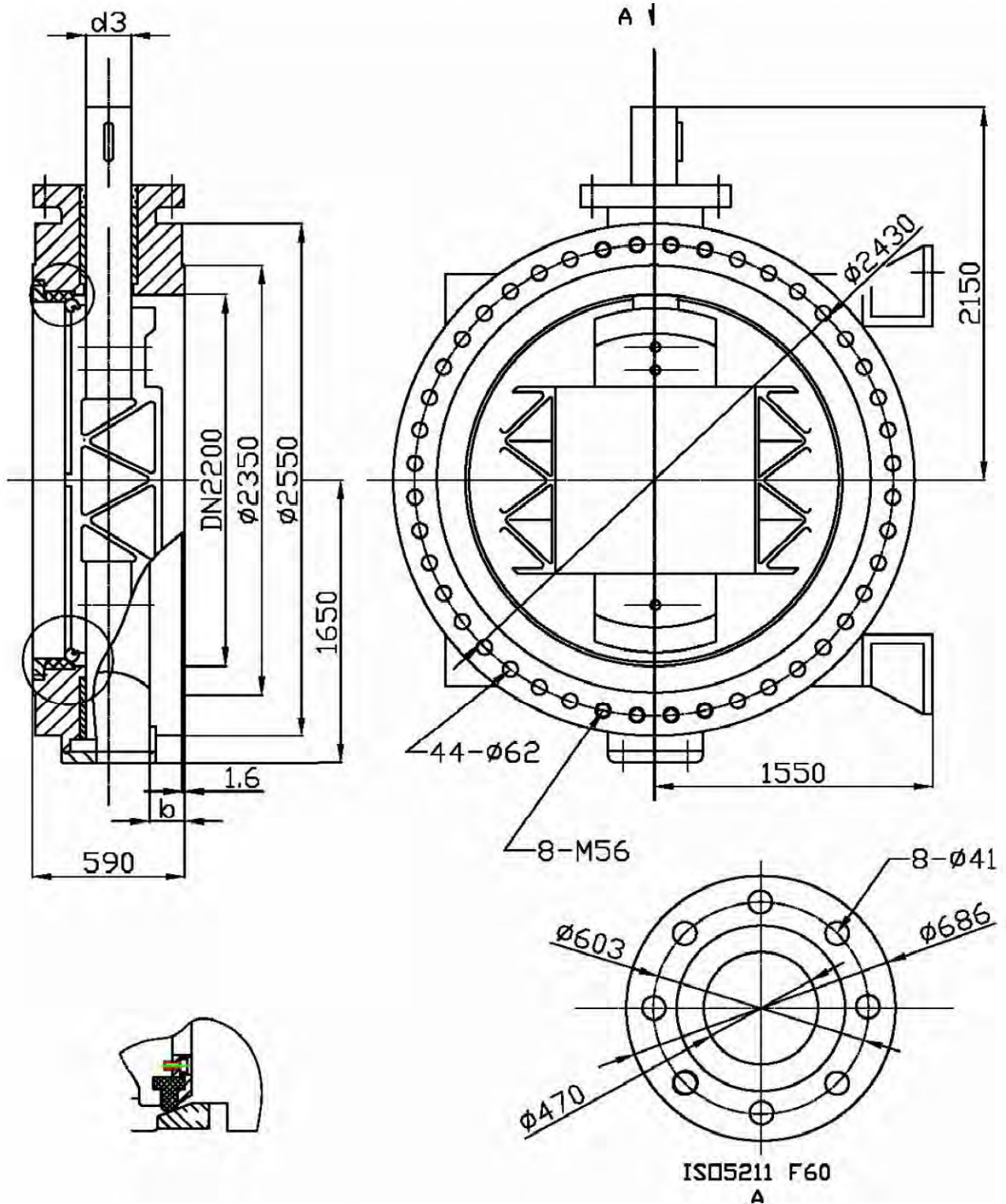
Flange drilling conforms to ANSI B16.1, Class 125 or Class 250
 Consult factory for Worm Gear dimensions.





BUTTERFLY VALVES

DATASHEET FOR 88", CLASS 150B, FLANGE END



TORQUE TO OPEN: 30000NM , WT 11000 KG

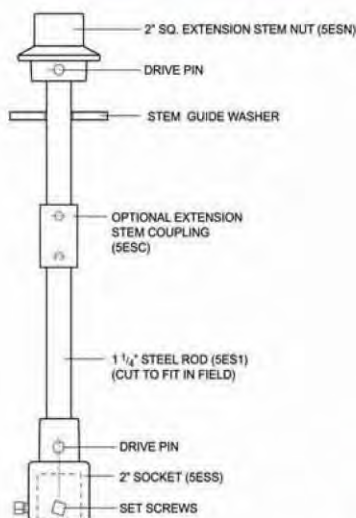


BUTTERFLY VALVES

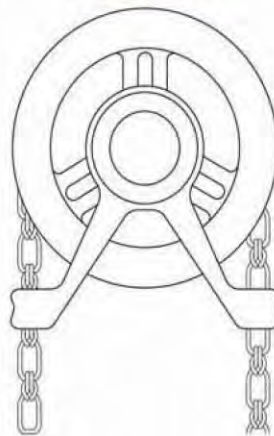
ACCESSORIES

SPACE LIMITATIONS AND APPLICATION SPECIFICS OFTEN REQUIRE SPECIAL ACCESSORIES IN ADDITION TO THOSE SHOWN BELOW, " FEVISA" OFFERS A WIDE RANGE OF ACCESSORIES TO MEET YOUR APPLICATION REQUIREMENTS. PLEASE CONSULT FACTORY FOR ASSISTANCE.

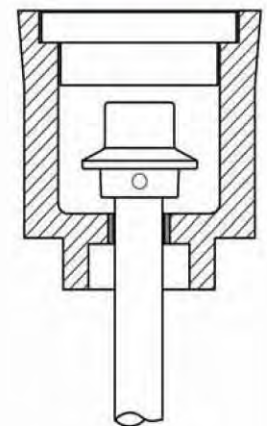
Extension Stem Assembly



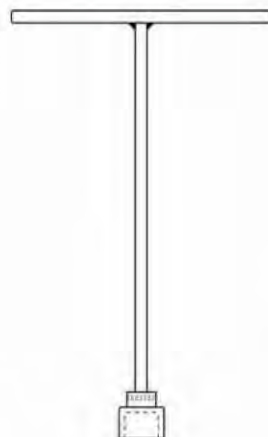
Chainwheel



Valve Box



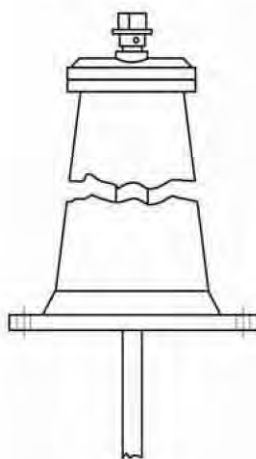
"T" Wrench



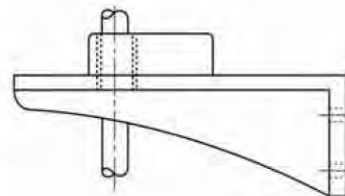
Extended Bonnet



Floor Stand



Stem Guide



BUTTERFLY VALVES

CV VALUE LIST

FLOW COEFFICIENTS

SIZE	4	6	8	10	12	14	16	18	20	24
K _v	500	1250	2400	3800	5700	7200	10200	13000	16000	23500

SIZE	30	36	42	48	54	60	66	72	84	88
K _v	36000	53500	75000	98000	125000	155000	191000	230000	320000	380000

