

## Technical characteristics



Body type	LUG / Replaceable seat rubber
Characteristics	Concentric and bidirectional
Production range	DN 25-1000
Design standard	EN 593
Face to Face	EN 558-1 Series 20 ISO 5752 Series 20 DIN 3202 T3 K1 API 609 Category A BS 5155 series 4-5 except DN350
Top flange	ISO 5211
Assembly flanges	PN 10/PN 16/ANSI class 150
Marking	EN 19
Maximum working pressure	16 bar DN 025-150 10 bar DN 200-1000 (16 bar optionally) 25 bar DN 025-0300 special series
Temperature range	-40°C a 210°C depends of material
Hydraulic tests	EN 12266 / ISO 5208 Rate A
Remarks	Pressure equipment directive
Options	ATEX (II 2GD) 2014/34/EU Vulcanized seat

## General description

The LUG(w) type valve, is designed for industrial applications, and replaces double flanged valves, especially in small diameters. It offers considerable advantages where dead-end services are needed, such as pump outlets, tanks and ship sides among many. It gives an effective solution to several needs in shipbuilding, water treatment plants, heating, cooling, vacuum systems, gas and many others.

## Applications

- Water treatment and distribution
- Cooling systems
- Fire fighting systems.
- Heating
- Naval industry.
- Gas distribution.



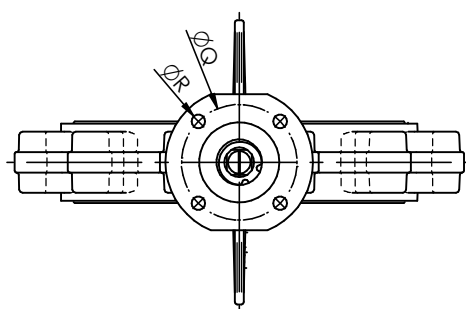
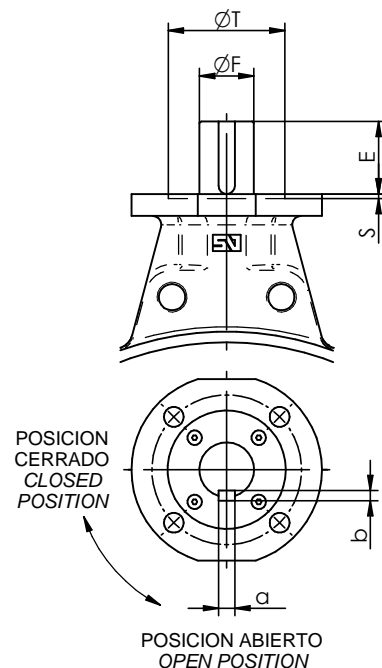
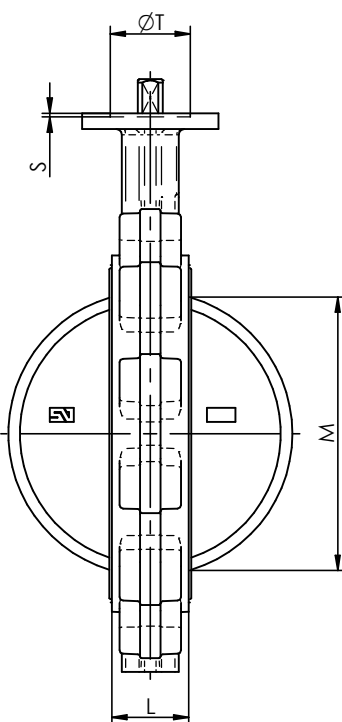
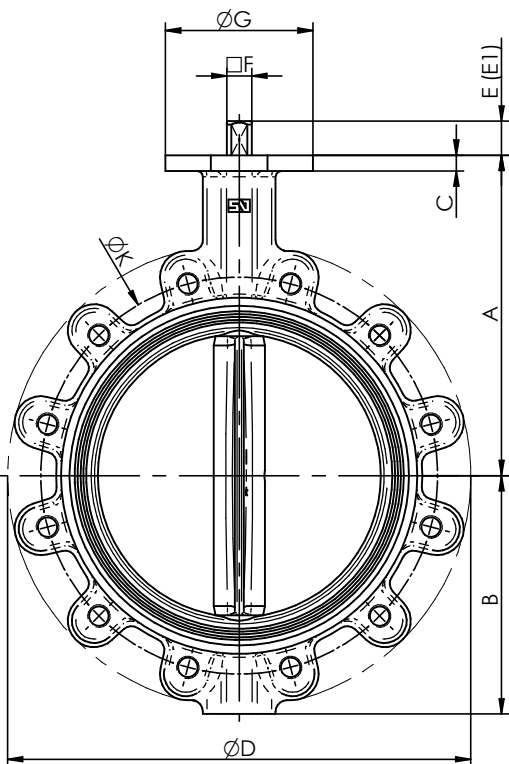
## Technical sheets and dimensional drawings

LUG(w)-001-DT	General dimensions
LUG(w)-002-DT	Dimensions manual actuator
LUG(w)-003-DT	Dimensions pneumatic actuator
LUG(w)-004-DT	Dimensions electrical actuator Bernard
LUG(w)-005-DT	Dimensions electrical actuator AUMA
LUG(w)-006-DT	Assembling flanges
LUG(w)-007-DT	Assembling screws
LUG(w)-0010-DT	Materials detail DN 025-200
LUG(w)-0011-DT	Materials detail DN 250-500
LUG(w)-0012-DT	Materials detail DN 600-1000



# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)"

## DIMENSIONES GENERALES / GENERAL DIMENSIONS



**DN 25/500**

**DN 600/1000**

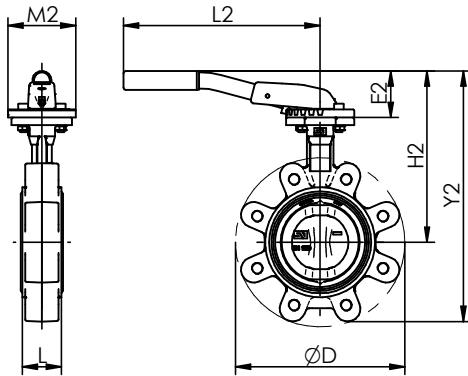
E1 - EJE CORTO OPCIONAL BAJO PEDIDO  
E1 - SHORT SHAFT ON REQUEST

### DIMENSIONES GENERALES / GENERAL DIMENSIONS

### BRIDA / TOP FLANGE

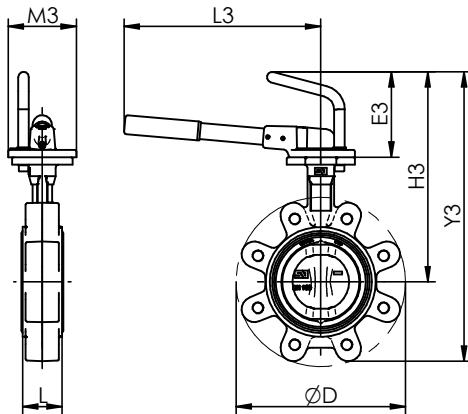
DN	A	B	C	D	E	E1	F	G	K			L	M	Kg	BRIDA / TOP FLANGE					
									PN10	PN16	Cl.150				ISO	Q	R	S	T	a x b
25	1"	103	50	8	130	30	16	11	90	85	85	79.4	33	14	1.9	F-07	70	4x9		
32	1 1/4"	103	50	8	130	30	16	11	90	100	100	88.9	33	14	1.9	F-07	70	4x9		
40	1 1/2"	110	54	10	140	30	16	11	90	110	110	98.4	33	26	2.0	F-07	70	4x9		
50	2"	120	59	10	156	30	16	11	90	125	125	120.6	43	29	2.9	F-07	70	4x9		
65	2 1/2"	135	66	10	175	30	16	11	90	145	145	139.7	46	46	3.3	F-07	70	4x9		
80	3"	141	91	10	194	30	16	11	90	160	160	152.4	46	65	4.8	F-07	70	4x9		
					185										3.5					
100	4"	165	105	10	224	30	16	11	90	180	180	190.5	52	90	6.3	F-07	70	4x9		
125	5"	180	125	12	267	33	18	14	90	210	210	215.9	56	112	9.8	F-07	70	4x9		
150	6"	193	136	12	292	33	18	14	90	240	240	241.3	56	139	10.6	F-07	70	4x9		
200	8"	225	156	12	334	33	18	17	90	295	295	298.5	60	191	13.4	F-07	70	4x9		
			171		352										17.5					
250	10"	283	210	14	409	30	23	22	130	350	355	361.9	68	241	26.4	F-10	102	4x12	3	70
300	12"	308	240	14	480	30	23	22	130	400	410	431.8	78	290	39.6	F-10	102	4x12	3	70
350	14"	339	263	18	522	31		22	160	460	470	476.2	78	338	56.1	F-10	102	4x12	3	70
					522										56.0					
400	16"	380	308	18	595	31		27	160	515	525	539.7	102	387	74.9	F-12	125	4x14	4	85
450	18"	381	340	20	633	38		36	190	565	585	577.8	114	434	103	F-14	140	4x18	4	100
					638										94.6					
500	20"	433	380	20	717	38		36	210	620	650	635.0	127	478	158	F-14	140	4x18	4	100
600	24"	494	440	24	833	80		60	210	725	770	749.3	154	570	220	F-16	165	4x22	5	130
700	28"	560	485	25	904	106		65	300	840	840	863.5	165	660	293	F-25	254	8x18	5	200
					924										312					
750	30"	590	530	25	964	106		80	300	900	900	914.4	190	705	373	F-25	254	8x18	5	200
					979										392					
800	32"	630	565	27	1020	106		80	300	950	950		190	763	432	F-25	254	8x18	5	200
900	36"	695	610	32	1120	110		80	350	1050	1050		203	866	539	F-25	254	8x18	5	200
1000	40"	770	675	32	1246	110		80	350	1160	1170		216	966	690	F-25	254	8x18	5	200

# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)" ACTUADOR MANUAL / MANUAL ACTUATOR



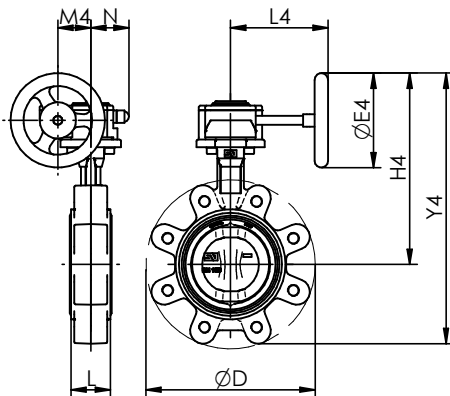
"MN"

DN	D	L	P.N. Bar	MN						
				E2	H2	Y2	L2	M2	Kg	
25	1"	130	33	10-16	49	151.5	202	220	90	2.3
32	1¼"	130	33	10-16	49	151.5	202	220	90	2.3
40	1½"	140	33	10-16	49	159	213	220	90	2.5
50	2"	156	43	10-16	49	169	230	220	90	3.3
65	2½"	175	46	10-16	49	184	252	220	90	3.7
80	3"	194	46	10-16	60	201	294	260	90	5.3
100	4"	224	52	10-16	60	225	330	260	90	6.8
125	5"	267	56	10-16	75	255	381	315	90	10.4
150	6"	292	56	10-16	75	268	405	315	90	11.2
200	8"	334	60	10	75	300	476	315	90	14.0
		16		471			18.1			



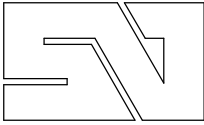
"MR"

DN	D	L	P.N. Bar	MR						
				E3	H3	Y3	L3	M3	Kg	
25	1"	130	33	10-16	113	215.5	266	260	90	2.5
32	1¼"	130	33	10-16	113	215.5	266	260	90	2.5
40	1½"	140	33	10-16	113	223	277	260	90	2.7
50	2"	156	43	10-16	113	233	292	260	90	3.5
65	2½"	175	46	10-16	113	248	314	260	90	3.9
80	3"	194	46	10-16	113	254	345	260	90	5.4
100	4"	224	52	10-16	113	278	383	260	90	7.0
125	5"	267	56	10-16	113	293	416	310	90	10.5
150	6"	292	56	10-16	113	306	422	310	90	11.3
200	8"	334	60	10	113	338	493	310	90	14.1
		16		508			18.2			
250	10"	408	68	10-16	121	403	613	500	130	28.1
300	12"	480	78	10-16	121	429	669	500	130	41.4



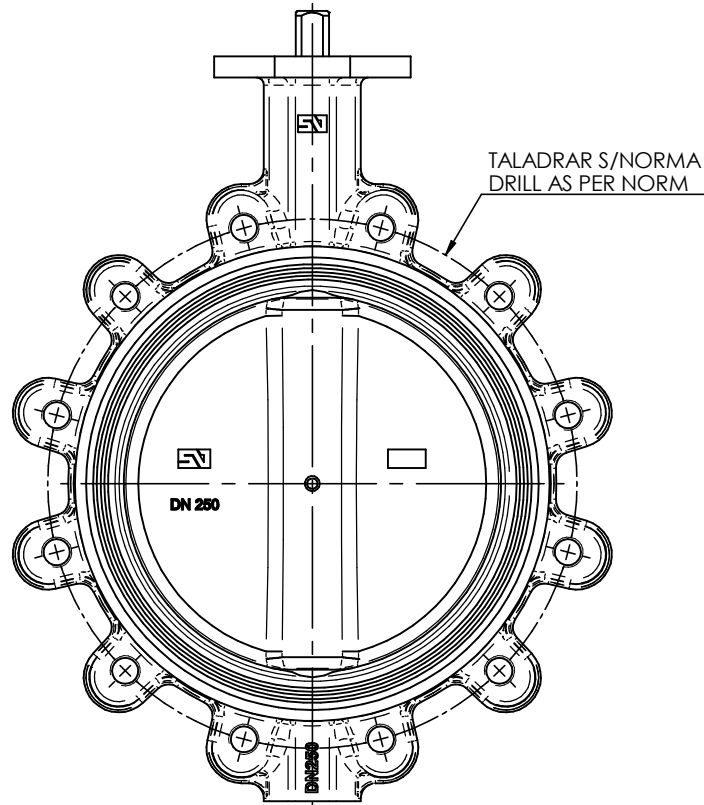
"MDV"

DN	D	L	P.N. Bar	MDV								
				REF	E4	H4	Y4	L4	M4	N	Kg	
25	1"	130	33	10-16	0/X-21	125	190	241	129	43.5	50.5	3.1
32	1¼"	130	33	10-16	0/X-21	125	190	241	129	43.5	50.5	3.1
40	1½"	140	33	10-16	0/X-21	125	198	252	129	43.5	50.5	3.3
50	2"	156	43	10-16	0/X-21	125	208	267	129	43.5	50.5	4.2
65	2½"	175	46	10-16	0/X-21	125	223	289	129	43.5	50.5	4.6
80	3"	194	46	10-16	0/X-21	125	229	320	129	43.5	50.5	6.0
100	4"	224	52	10-16	0/X-21	125	253	358	129	43.5	50.5	7.6
125	5"	267	56	10-16	1/X-21	160	286	410	135	43.5	50.5	11.3
150	6"	292	56	10-16	1/X-21	160	298	435	135	43.5	50.5	12.0
200	8"	334	60	10	1A/X-41	200	355	511	152	52.5	59	16.0
		16		526				20.1				
250	10"	408	68	10-16	2/X-61	250	442	652	222	61.2	70.5	29.8
300	12"	480	78	10-16	2/X-61	250	468	708	222	61.2	70.5	43.1
350	14"	522	78	10-16	2/X-61	250	498	762	222	61.2	70.5	59.5
400	16"	595	102	10-16	2A/Q-800	300	572	880	277	68.8	72.5	84.0
450	18"	633	114	10-16	3/Q-2000	400	630	970	321	96.5	91.5	122
500	20"	717	127	10-16	3/Q-2000	400	682	1062	321	96.5	91.5	177
600	24"	833	154	10-16	4/Q-4000	500	798	1239	408	138	140	255
700	28"	904	165	10	4/Q-4000	500	864	1350	408	138	140	329
				16	5/Q-6500	600	914	1400	456	138	140	333
750	30"	964	190	10-16	5/Q-6500	600	944	1474	456	138	140	415
800	32"	1020	190	10	5/Q-6500	600	984	1550	456	138	140	474
				16	6/Q-12000	700	1044	1608	510	180	156	487
900	36"	1120	203	10-16	6/Q-12000	700	1108	1718	510	180	156	601
1000	40"	1246	216	10-16	7/Q-16000	700	1184	1858	579	180	156	758



# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)"

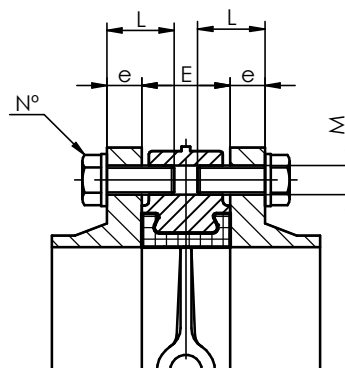
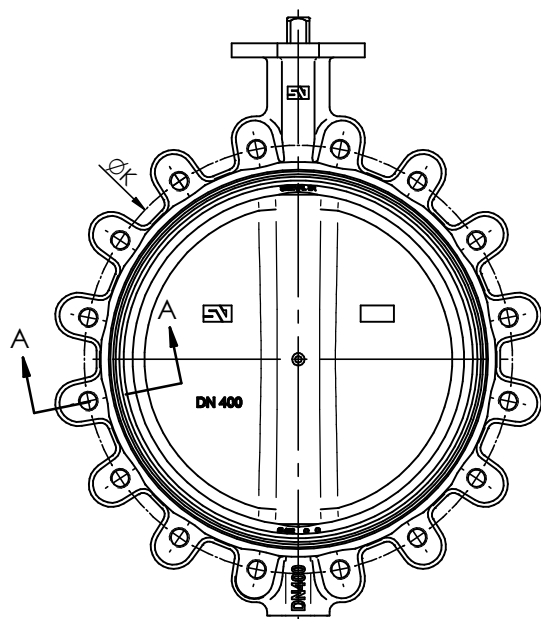
## BRIDAS DE MONTAJE / ASSEMBLY FLANGES



X ESTANDARD / STANDARD  
 O BAJO DEMANDA / ON REQUEST  
 -- NO POSIBLE / NOT POSSIBLE

DN		PN.6	PN.10	PN.16	PN.20	ANSI 150 Lbs	AWWA C207	ASME B16.47a-150	ASME B16.47a-300	ASME B16.47b-150	ASME B16.47b-300	BS, D	BS, E	JIS 5k	JIS 10k	JIS 16k	AS 2129 E
25	1"	X	X	X	X	X						X	X	X	X	X	X
32	1 1/4"	X	X	X	X	X						X	X	X	X	X	X
40	1 1/2"	X	X	X	X	X						X	X	X	X	X	X
50	2"	X	X	X	X	X						X	X	--	X	O	X
65	2 1/2"	X	X	X	X	X						X	X	X	X	O	X
80	3"	X	X	X	X	X						X	X	X	X	X	X
100	4"	O	X	X	X	X	X					O	X	X	X	X	X
125	5"	X	X	X	X	X	X					X	X	X	X	X	X
150	6"	X	X	X	X	X	X					X	X	X	X	O	X
200	8"	X	X	X	X	X	X					X	X	X	X	X	X
250	10"	X	X	X	X	X	X					O	X	X	X	O	X
300	12"	X	X	X	X	X	X					X	X	X	O	O	X
350	14"	X	X	X	X	X	X					X	X	O	X	X	X
400	16"	X	X	X	X	X	X					O	O	X	X	X	O
450	18"	X	X	X	X	X	X					O	X	X	X	O	X
500	20"	O	X	X	X	X	X					O	O	X	X	X	O
600	24"	O	X	X	X	X	X					O	O	X	O	O	O
700	28"	--	X	X		--	--							X	X	--	--
750	30"	X	X	X		X	X					--	--	X	X	--	--
800	32"	O	X	X		--	--					--	--	O	--	--	--
900	36"	--	X	X		--	--					--	--	--	X	--	--
1000	40"	O	X	X		--	--					--	--	O	X	--	--

# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)" TORNILLERIA DE MONTAJE / ASSEMBLYING SCREWING



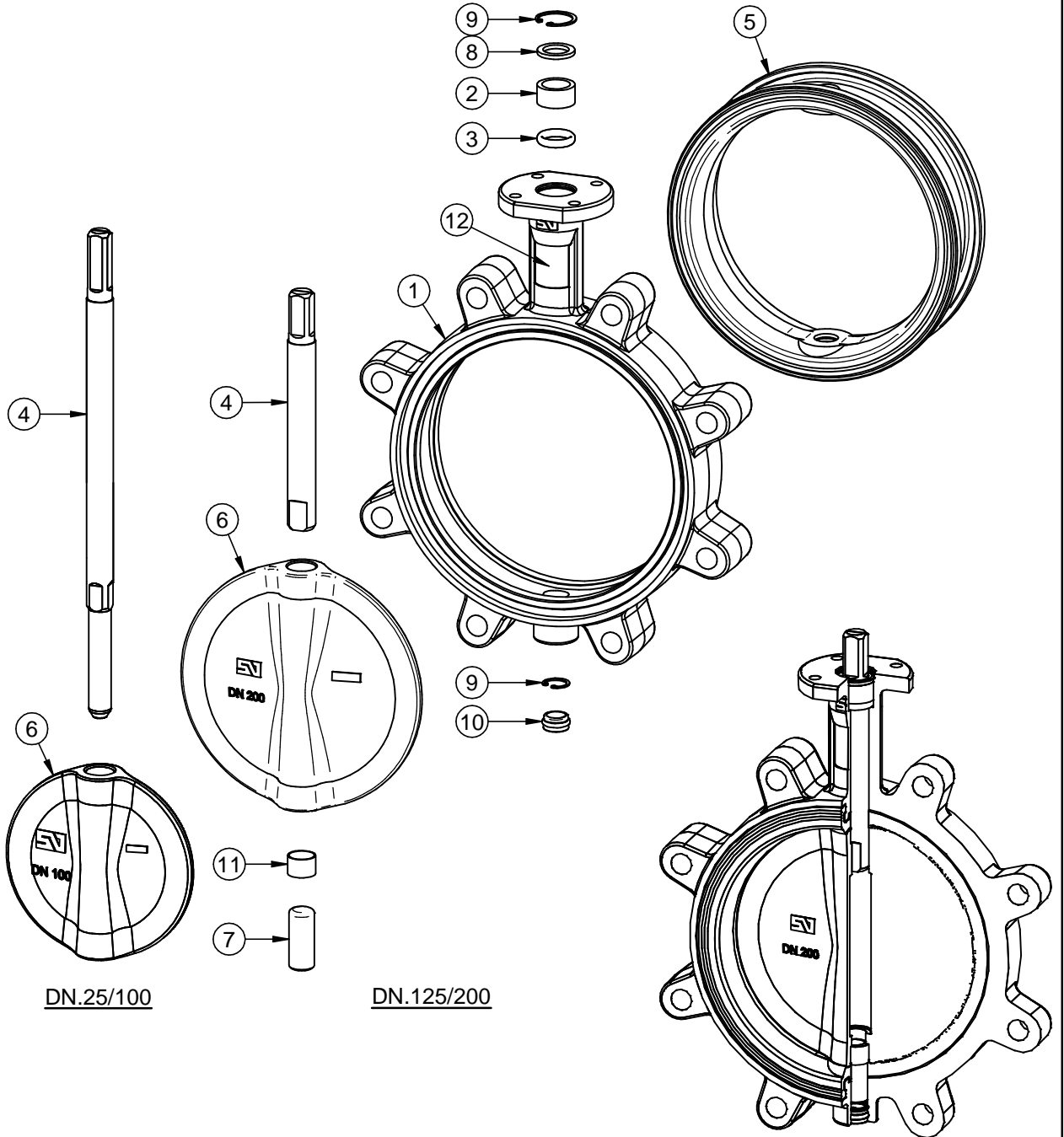
"A-A"  
TORNILLO / SCREW

LOS TALADROS ROSCADOS PARA EL MONTAJE ENTRE BRIDAS SERÁN:  
- ROSCA METRICA PARA NORMAS PN.  
- ROSCA UNC PARA NORMAS ANSI 150.  
OTRO TIPO DE ROSCAS BAJO DEMANDA.

THREADED HOLES FOR THE ASSEMBLY BETWEEN FLANGES WILL BE:  
- METRIC THREAD STANDARDS FOR PN. NORMS.  
- UNC THREAD STANDARDS FOR ANSI 150 NORMS.  
OTHER THREAD ON REQUEST.

DN	E	PN.10						PN.16						ANSI 150 Lbs / PN.20					
		K	e	M	L	Nº	K	e	M	L	Nº	K	e	M	L	Nº			
25	1"	33	85	16	M12	30	8	85	16	M12	30	8	79.4	14.3	1/2"	M14	30	8	
32	1 1/4"	33	100	16	M16	30	8	100	16	M16	30	8	88.9	17.5	1/2"	M14	30	8	
40	1 1/2"	33	110	16	M16	30	8	110	16	M16	30	8	98.4	17.5	1/2"	M14	30	8	
50	2"	43	125	18	M16	35	8	125	18	M16	35	8	120.6	19	5/8"	M16	35	8	
65	2 1/2"	46	145	18	M16	40	8	145	18	M16	40	8	139.7	22.2	5/8"	M16	45	8	
80	3"	46	160	20	M16	40	16	160	20	M16	40	16	152.4	23.8	5/8"	M16	45	8	
100	4"	52	180	20	M16	45	16	180	20	M16	45	16	190.5	23.8	5/8"	M16	45	16	
125	5"	56	210	22	M16	50	16	210	22	M16	50	16	215.9	23.8	3/4"	M20	50	16	
150	6"	56	240	22	M20	50	16	240	22	M20	50	16	241.3	25.4	3/4"	M20	50	16	
200	8"	60	295	24	M20	50	16	295	24	M20	50	24	298.5	28.6	3/4"	M20	55	16	
250	10"	68	350	26	M20	60	24	355	26	M24	60	24	361.9	30.2	7/8"	M24	60	24	
300	12"	78	400	26	M20	65	24	410	28	M24	65	24	431.8	31.7	7/8"	M24	70	24	
350	14"	78	460	26	M20	65	32	470	30	M24	65	32	476.2	34.9	1"	M27	70	24	
400	16"	102	515	26	M24	75	32	525	32	M27	80	32	539.7	36.5	1"	M27	85	32	
450	18"	114	565	26	M24	75	32	585	32	M27	80	32	577.8	39.5	1.1/8"	M30	85	32	
					M24	60	8			M27	60	8							
500	20"	127	620	28	M24	90	40	650	34	M30	65	40	635.0	46	1.1/8"	M30	105	40	
600	24"	154	725	28	M27	100	40	770	36	M33	110	40	749.3	47.6	1.1/4"	M33	120	40	
700	28"	165	840	30	M27	110	40	840	36	M33	120	40	863.6	52.5	1.1/4"	M33	130	48	
					M27	80	8			M33	85	8				M33	100	8	
750	30"	190	900	32	M30	130	40	900	38	M33	130	40	914.4	54	1.1/4"	M33	150	48	
					M30	100	8			M33	100	8				M33	110	8	
800	32"	190	950	32	M30	130	40	950	38	M36	130	40							
					M30	110	8			M36	110	8							
900	36"	203	1050	34	M30	130	48	1050	40	M36	140	48							
					M30	95	8			M36	100	8							
1000	40"	216	1160	34	M33	140	48	1170	42	M39	150	48							
					M33	95	8			M39	100	8							

# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)" DESPIECE DE MATERIALES "DN.25/200" / MATERIALS DETAIL



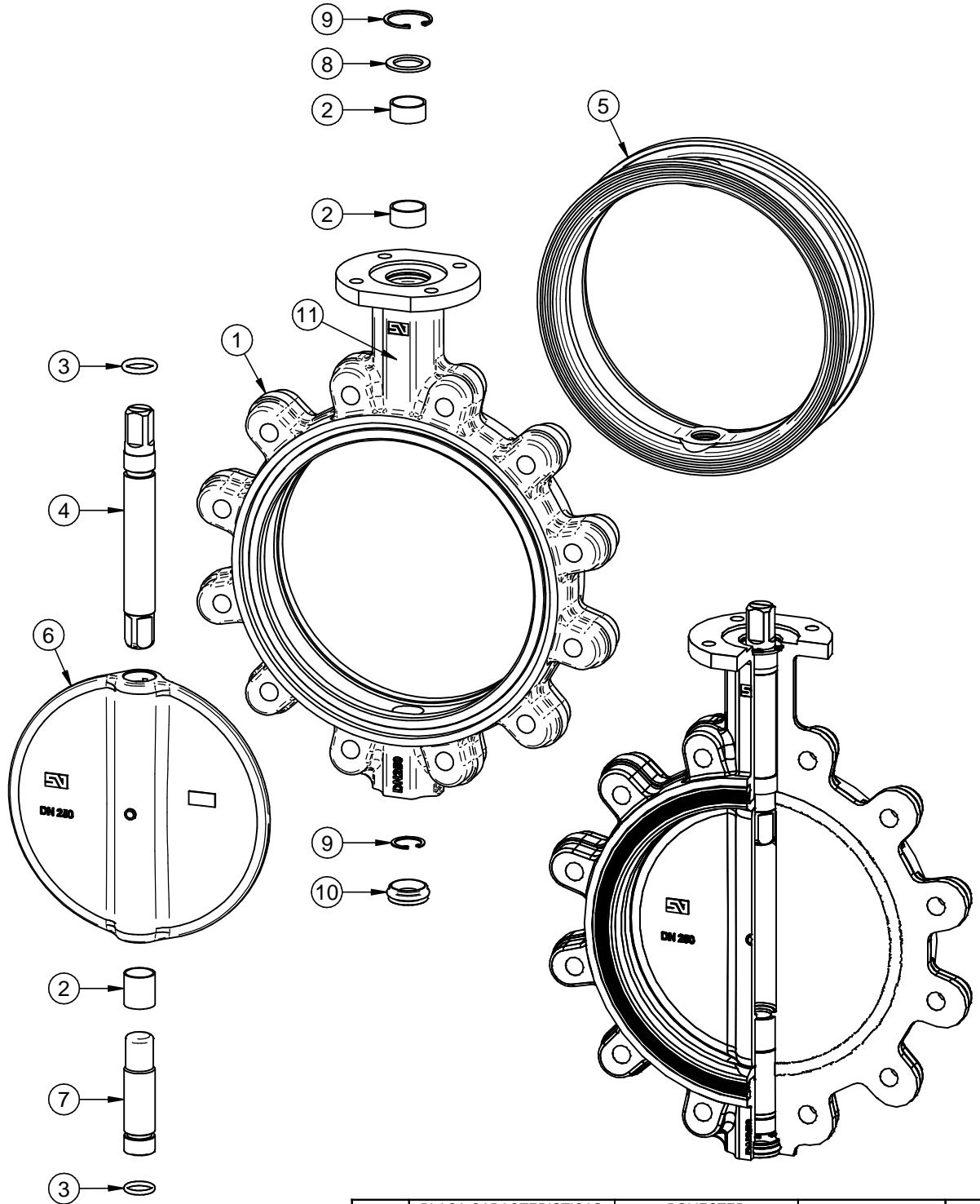
DN.25/100

DN.125/200

**DATOS TECNICOS / TECHNICAL DATA**  
**FABRICACION ESTANDAR / STANDARD PRODUCTION**  
 - DN.25/150 - 16 Bar  
 - DN.200 - 10 Bar  
**PRUEBA HIDROSTATICA Y DE RESISTENCIA**  
**HYDROSTATIC AND RESISTANCE TEST:**  
 CON VALVULA ABIERTA / OPEN VALVE:  
 - 10 Bar - 15 Kg/cm<sup>2</sup>  
 - 16 Bar - 24 Kg/cm<sup>2</sup>  
 CON VALVULA CERRADA / CLOSED VALVE:  
 - 10 Bar - 11 Kg/cm<sup>2</sup>  
 - 16 Bar - 17.6 Kg/cm<sup>2</sup>

12	PLACA CARACTERISTICAS FEATURES TAG	POLIESTER POLYESTER		1
11	CASQUILLO ROZAMIENTO BUSHING	ACERO-BZ-PTFE STEEL-BZ-PTFE	DN.200	1
10	TAPON INFERIOR LOWER PLUG	E.P.D.M.	DN.125/200	1
9	ANILLO ELASTICO DIN 472 ZEGI RING BODY DIN 472	ACERO CINCADO ZINC PLATED STEEL	DN.32/100	1
			DN.125/200	2
8	ARANDELA RETENCION RETAINING RING	ACERO CINCADO ZINC PLATED STEEL		1
7	EJE INFERIOR LOWER SHAFT	S/HOJA E-0001 ACC. TO SHEET E-0001	DN.125/200	1
6	MARIPOSA DISC	S/ HOJA M-0001 ACC. TO SHEET M-0001		1
5	ANILLO SEAT	S/ HOJA A-0001 ACC. TO SHEET A-0001		1
4	EJE SUPERIOR UPPER SHAFT	S/ HOJA E-0001 ACC. TO SHEET E-0001		1
3	JUNTA TORICA "O" RING	NITRIL NITRILE		1
2	CASQUILLO ROZAMIENTO BUSHING	ACETAL DELRIN	DN.40/200	1
1	CUERPO DE VALVULA VALVE BODY	S/ HOJA C-0001 ACC. TO SHEET C-0001	RECUB. EPOXY COATING EPOXY	1
POS ITEM	DESIGNACION DESIGNATION	MATERIAL MATERIAL	OBSERVACIONES REMARKS	CANT QUAN

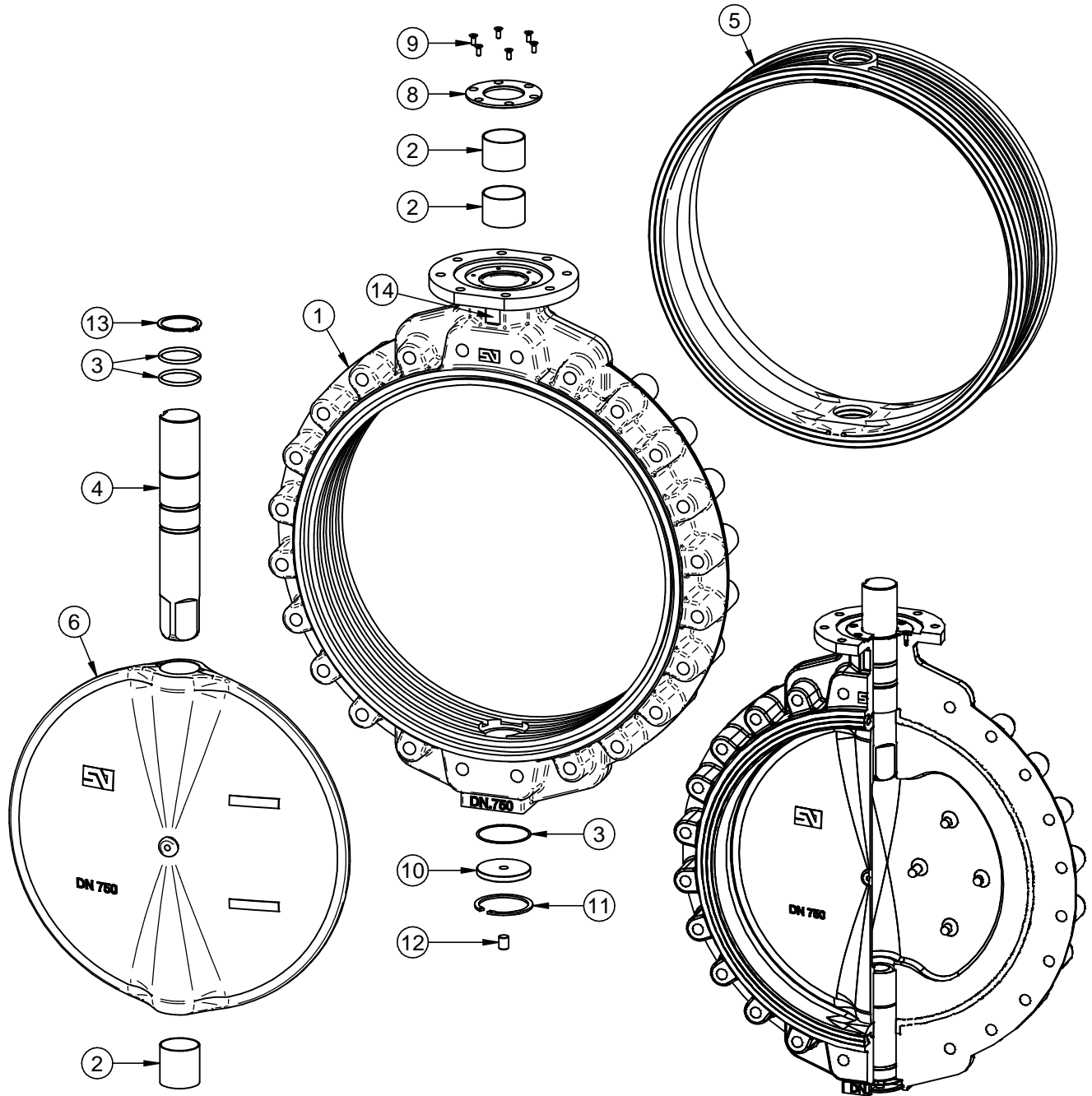
# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)" DESPIECE DE MATERIALES "DN.250/500" / MATERIALS DETAIL



**DATOS TECNICOS / TECHNICAL DATA**  
**FABRICACION ESTANDAR / STANDARD PRODUCTION**  
 - DN.250/500 - 10 Bar  
**PRUEBA HIDROSTATICA Y DE RESISTENCIA**  
**HYDROSTATIC AND RESISTANCE TEST:**  
 CON VALVULA ABIERTA / OPEN VALVE:  
 - 10 Bar - 15 Kg/cm<sup>2</sup>  
 CON VALVULA CERRADA / CLOSED VALVE:  
 - 10 Bar - 11 Kg/cm<sup>2</sup>

11	PLACA CARACTERISTICAS FEATURES TAG	POLIESTER POLYESTER		1
10	TAPON INFERIOR LOWER PLUG	E.P.D.M.		1
9	ANILLO ELASTICO ZEGI RING BODY	ACERO CINCADO ZINC PLATED STEEL	DIN 472	2
8	ARANDELA RETENCION RETAINING RING	ACERO CINCADO ZINC PLATED STEEL		1
7	EJE INFERIOR LOWER SHAFT	S/HOJA E-0001 ACC. TO SHEET E-0001		1
6	MARIPOSA DISC	S/ HOJA M-0001 ACC. TO SHEET M-0001		1
5	ANILLO SEAT	S/ HOJA A-0001 ACC. TO SHEET A-0001		1
4	EJE SUPERIOR UPPER SHAFT	S/ HOJA E-0001 ACC. TO SHEET E-0001		1
3	JUNTA TORICA "O" RING	NITRILO NITRILE		2
2	CASQUILLO ROZAMIENTO BUSHING	ACERO-BZ-PTFE STEEL-BZ-PTFE		3
1	CUERPO DE VALVULA VALVE BODY	S/ HOJA C-0001 ACC. TO SHEET C-0001	RECUB. EPOXY COATING EPOXY	1
POS ITEM	DESIGNACION DESIGNATION	MATERIAL MATERIAL	OBSERVACIONES REMARKS	CANT QUAN

# VALVULA DE MARIPOSA "LUG(W)" / BUTTERFLY VALVE "LUG(W)" DESPIECE DE MATERIALES "DN.600/1000" / MATERIALS DETAIL



**DATOS TECNICOS / TECHNICAL DATA**  
**FABRICACION ESTANDAR / STANDARD PRODUCTION**  
 - DN.600/1000 - 10 Bar  
**PRUEBA HIDROSTATICA Y DE RESISTENCIA**  
**HYDROSTATIC AND RESISTANCE TEST:**  
 CON VALVULA ABIERTA / OPEN VALVE:  
 - 10 Bar - 15 Kg/cm<sup>2</sup>  
 CON VALVULA CERRADA / CLOSED VALVE:  
 - 10 Bar - 11 Kg/cm<sup>2</sup>

14	PLACA CARACTERISTICAS FEATURES TAG	POLIESTER POLYESTER		1
13	ANILLO ELASTICO EJE RETAINING RING SHAFT	ACERO CINCADO ZINC PLATED STEEL	DIN 471 DN600/800	1
12	ESPARRAGO SCREW	ACERO CINCADO ZINC PLATED STEEL	DIN 913 DN.750/1000	1
11	ANILLO ELASTICO ZEGI RING BODY	ACERO CINCADO ZINC PLATED STEEL	DIN 472	1
10	TAPA INFERIOR LOWER COVER	ACERO CARBONO CARBON STEEL	RECUB. EPOXY COATING EPOXY	1
9	TORNILLO TAPA SUP BOLT UPPER COVER	ACERO CINCADO ZINC PLATED STEEL	DIN 7991	DN.600 4 DN.700/1000 6
8	TAPA SUPERIOR UPPER COVER	ACERO CARBONO CARBON STEEL	RECUB. EPOXY COATING EPOXY	1
7	EJE INFERIOR LOWER SHAFT	S/HOJA E-0001 ACC. TO SHEET E-0001		1
6	MARIPOSA DISC	S/ HOJA M-0001 ACC. TO SHEET M-0001		1
5	ANILLO SEAT	S/ HOJA A-0001 ACC. TO SHEET A-0001		1
4	EJE SUPERIOR UPPER SHAFT	S/ HOJA E-0001 ACC. TO SHEET E-0001		1
3	JUNTA TORICA "O" RING	NITRILO NITRILE		4
2	CASQUILLO ROZAMIENTO BUSHING	ACERO-BZ-PTFE STEEL-BZ-PTFE		3
1	CUERPO DE VALVULA VALVE BODY	S/ HOJA C-0001 ACC. TO SHEET C-0001	RECUB. EPOXY COATING EPOXY	1
POS ITEM	DESIGNACION DESIGNATION	MATERIAL MATERIAL	OBSERVACIONES REMARKS	CANT QUAN