

## Technical characteristics



Body type	WAFER / Replaceable seat rubber / Aluminium body materia
Characteristics	Concentric and bidirectional
Production range	DN 50-600
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 6/PN 10/PN 16/ANSI class 150
Marking	EN 19
Maximum working pressure	10 bar DN 050-100 6 bar DN 125-200 3 bar DN 250-600
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

## General description

Sigeval has developed this new type of valve using the experience of more than 40 years, designing and producing butterfly valves and the latest technology. The KL type butterfly valve covers all the HVAC field: cold and hot water, air conditioning and more. The valve offers reduced weight and is suitable for the most common drilling norms in the market. This valve has been designed mainly for heating, ventilation and air conditioning but it is suitable when a light and economically valve is necessary: installations of air and non-corrosive gases, agricultural irrigation, agriculture-food industry and more.

## Applications

- HVAC systems
- Air and gas installations
- Irrigation
- Food industry
- Pharma industry

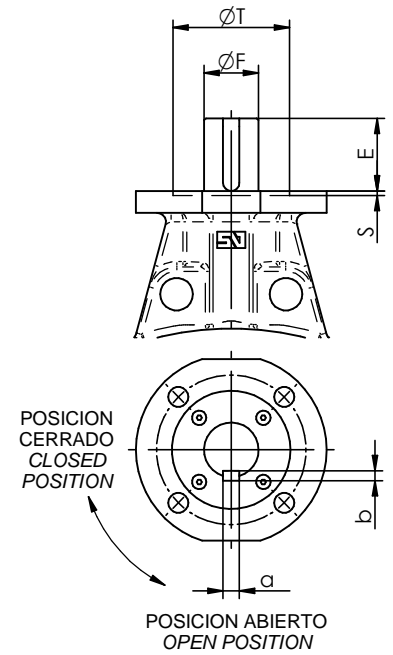
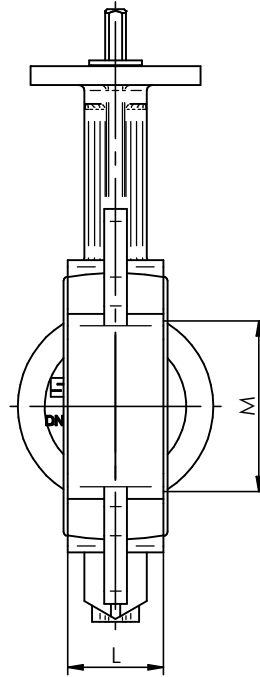
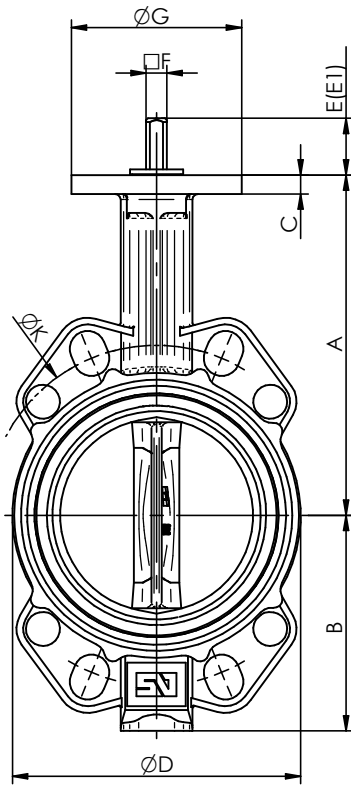


## Technical sheets and dimensional drawings

KL-001-DT	General dimensions
KL-002-DT	Dimensions manual actuator
KL-003-DT	Dimensions pneumatic actuator
KL-004-DT	Dimensions electrical actuator Bernard
KL-005-DT	Dimensions electrical actuator AUMA
KL-006-DT	Assembling flanges
KL-007-DT	Assembling screws
KL-0010-DT	Materials detail DN 050-200
KL-0011-DT	Materials detail DN 250-500
KL-0012-DT	Materials detail DN 600

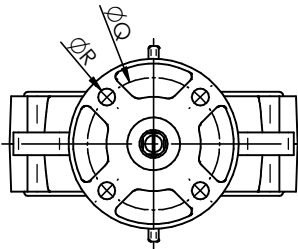


# VALVULA DE MARIPOSA "KL" / BUTTERFLY VALVE "KL" DIMENSIONES GENERALES / GENERAL DIMENSIONS



DN 50/500

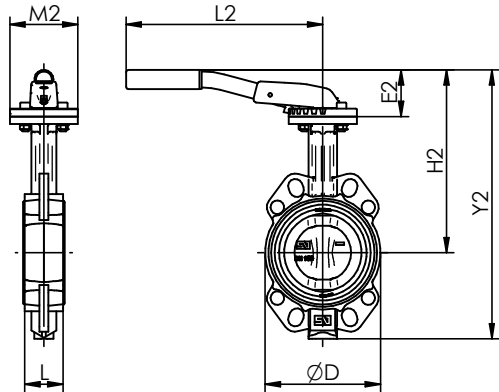
DN 600



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

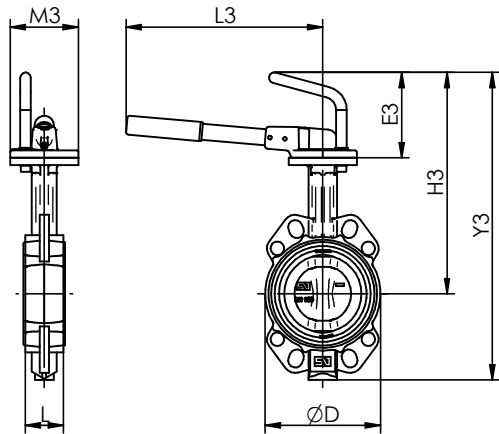
DIMENSIONES GENERALES / GENERAL DIMENSIONS													BRIDA / TOP FLANGE								
DN	A	B	C	D	E	E1	F	G	K			L	M	Kg	ISO	Q	R	S	T	a x b	
									PN10	PN16	Cl.150										
50	2"	140	80	10	97	30	16	11	90	125	125	120.6	43	29	1.2	F-07	70	4x9			
65	2½"	154	91	10	113	30	16	11	90	145	145	139.7	46	46	1.6	F-07	70	4x9			
80	3"	160	100	10	128	30	16	11	90	160	160	152.4	46	65	1.9	F-07	70	4x9			
100	4"	180	114	10	153	30	16	11	90	180	180	190.5	52	90	2.3	F-07	70	4x9			
125	5"	197	130	10	182	33	18	14	90	210	210	215.9	56	112	3.4	F-07	70	4x9			
150	6"	211	145	10	207	33	18	14	90	240	240	241.3	56	139	4.2	F-07	70	4x9			
200	8"	240	175	10	262	33	18	17	90	295	295	298.5	60	191	7.3	F-07	70	4x9			
250	10"	283	210	14	324	30	23	22	130	350	355	361.9	68	241	12.1	F-10	102	4x12	3	70	
300	12"	308	240	14	376	30	23	22	130	400	410	431.8	78	290	18.1	F-10	102	4x12	3	70	
350	14"	339	263	16	422	31		22	160	460	470	476.2	78	338	23.0	F-10	102	4x12	3	70	
400	16"	380	308	18	480	31		27	160	515	525	539.7	102	387	36.1	F-12	125	4x14	4	85	
450	18"	381	340	20	536	38		36	190	565	585	577.8	114	434	54.6	F-14	140	4x18	4	100	
500	20"	433	380	20	593	38		36	210	620	650	635.0	127	478	72.9	F-14	140	4x18	4	100	
600	24"	494	440	24	690	80		60	210	725	770	749.3	154	570	114	F-16	165	4x22	5	130	18x11

# VALVULA DE MARIPOSA "KL" / BUTTERFLY VALVE "KL" ACTUADOR MANUAL / MANUAL ACTUATOR



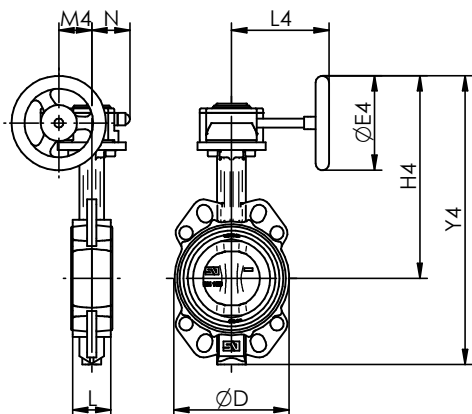
"MN"

DN	D	L	MN						
			E2	H2	Y2	L2	M2	Kg	
50	2"	96	43	49	189	269	220	90	1.6
65	2½"	112	46	49	203	294	220	90	2.1
80	3"	128	46	60	220	320	260	90	2.4
100	4"	152	52	60	240	354	260	90	2.9
125	5"	182	56	75	272	402	315	90	4.0
150	6"	207	56	75	286	431	315	90	4.8
200	8"	262	60	75	315	490	315	90	7.9



"MR"

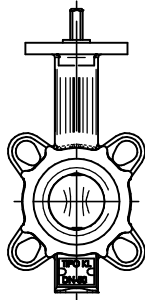
DN	D	L	MR						
			E3	H3	Y3	L3	M3	Kg	
50	2"	96	43	113	253	333	260	90	1.8
65	2½"	112	46	113	267	358	260	90	2.2
80	3"	128	46	113	273	373	260	90	2.6
100	4"	152	52	113	293	407	260	90	3.0
125	5"	182	56	113	310	440	310	90	4.1
150	6"	207	56	113	324	468	310	90	4.9
200	8"	262	60	113	353	528	310	90	8.0
250	10"	324	68	121	403	613	500	130	14.0
300	12"	376	78	121	429	669	500	130	19.2



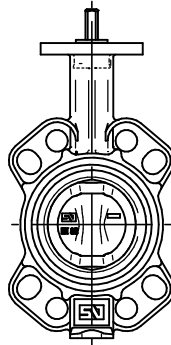
"MDV"

DN	D	L	P.N. Bar	MDV							
				REF	E4	H4	Y4	L4	M4	N	Kg
50	2"	96	10	0/X-21	125	228	308	129	43.5	50.5	2.4
65	2½"	112	10	0/X-21	125	242	333	129	43.5	50.5	2.9
80	3"	128	10	0/X-21	125	248	348	129	43.5	50.5	3.2
100	4"	152	10	0/X-21	125	268	382	129	43.5	50.5	3.6
125	5"	182	6	1/X-21	160	302	432	135	43.5	50.5	4.9
150	6"	207	6	1/X-21	160	316	461	135	43.5	50.5	5.6
200	8"	262	6	1A/X-41	200	370	545	152	52.5	59	9.9
250	10"	324	3	2/X-61	250	442	652	222	61.2	70.5	15.7
300	12"	376	3	2/X-61	250	468	708	222	61.2	70.5	21.0
350	14"	422	3	2/X-61	250	498	762	222	61.2	70.5	26.7
400	16"	480	3	2A/Q-800	300	572	880	277	68.8	72.5	44.5
450	18"	536	3	3/Q-2000	400	630	970	321	96.5	91.5	74.0
500	20"	593	3	3/Q-2000	400	682	1062	321	96.5	91.5	92.0
600	24"	690	3	4/Q-4000	500	798	1239	408	138	140	149

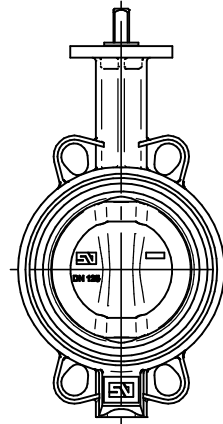
# VALVULA DE MARIPOSA "KL" / BUTTERFLY VALVE "KL" BRIDAS DE MONTAJE / ASSEMBLY FLANGES



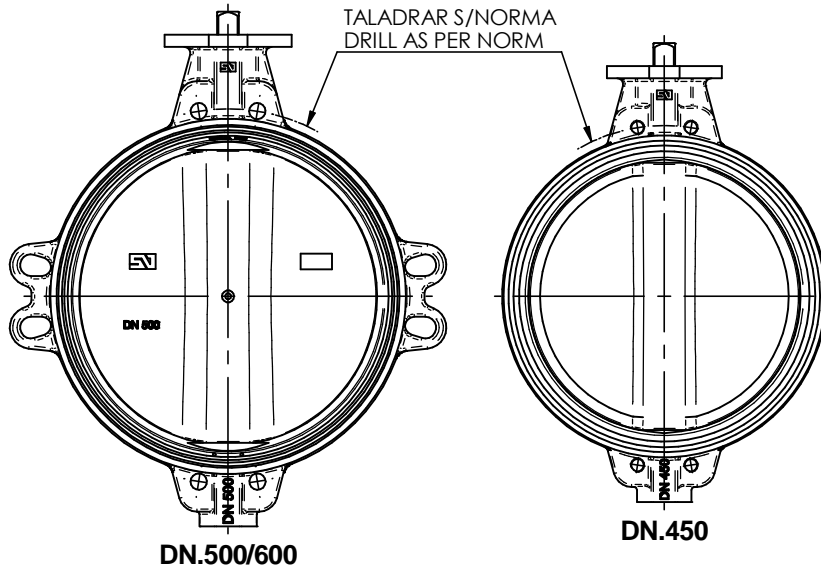
DN.50/65



DN.80/100



DN.125/400



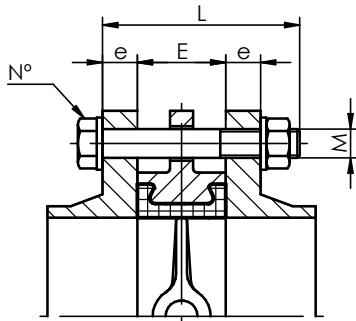
DN.500/600

DN.450

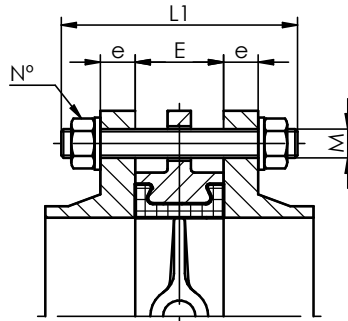
X ESTANDAR / STANDARD  
O BAJO DEMANDA / ON REQUEST  
-- NO POSIBLE / NOT POSSIBLE

POSIBILIDADES DE MONTAJE S/NORMAS DE BRIDAS POSSIBILITIES ASSEMBLY ACCORDING NORMS OF FLANGES																
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
50	2"	X	X	X	X	X					O	O	--	X	O	O
65	2 1/2"	X	X	X	X	X					O	O	X	X	O	X
80	3"	X	X	X	X	X					O	O	O	O	O	X
100	4"	X	X	X	X	X	X				O	X	--	O	O	X
125	5"	X	X	X	X	X	X				X	X	X	X	O	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	O	O	O	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	O	X
400	16"	O	X	X	X	X	X				O	O	O	X	X	O
450	18"	O	X	X	X	X	X				X	X	O	X	X	X
500	20"	O	X	X	X	X	X				O	O	O	X	X	O
600	24"	O	X	X	X	X	X				O	O	O	X	X	O

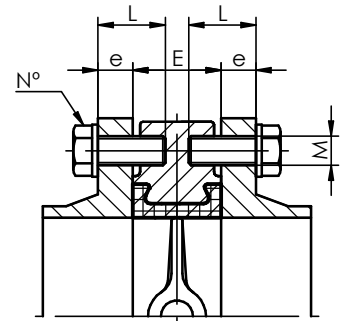
# VALVULA DE MARIPOSA "KL" / BUTTERFLY VALVE "KL" TORNILLERIA DE MONTAJE / ASSEMBLY SCREWING



"A-A"  
TORNILLO / SCREW

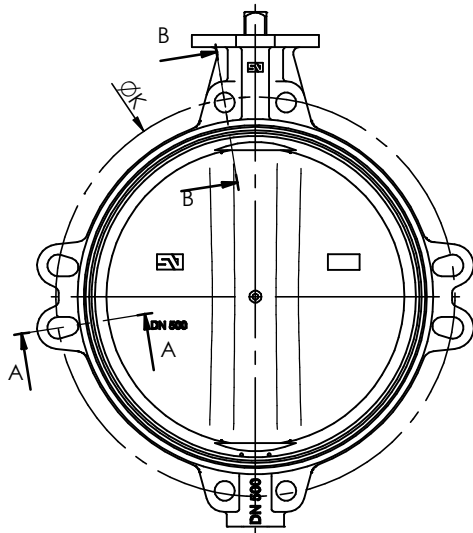


"A-A"  
TIRANTE / LINK



"B-B"  
TORNILLO SOLO/  
SCREW ONLY

DN.450	PN.10-PN.16
DN.500	ANSI 150

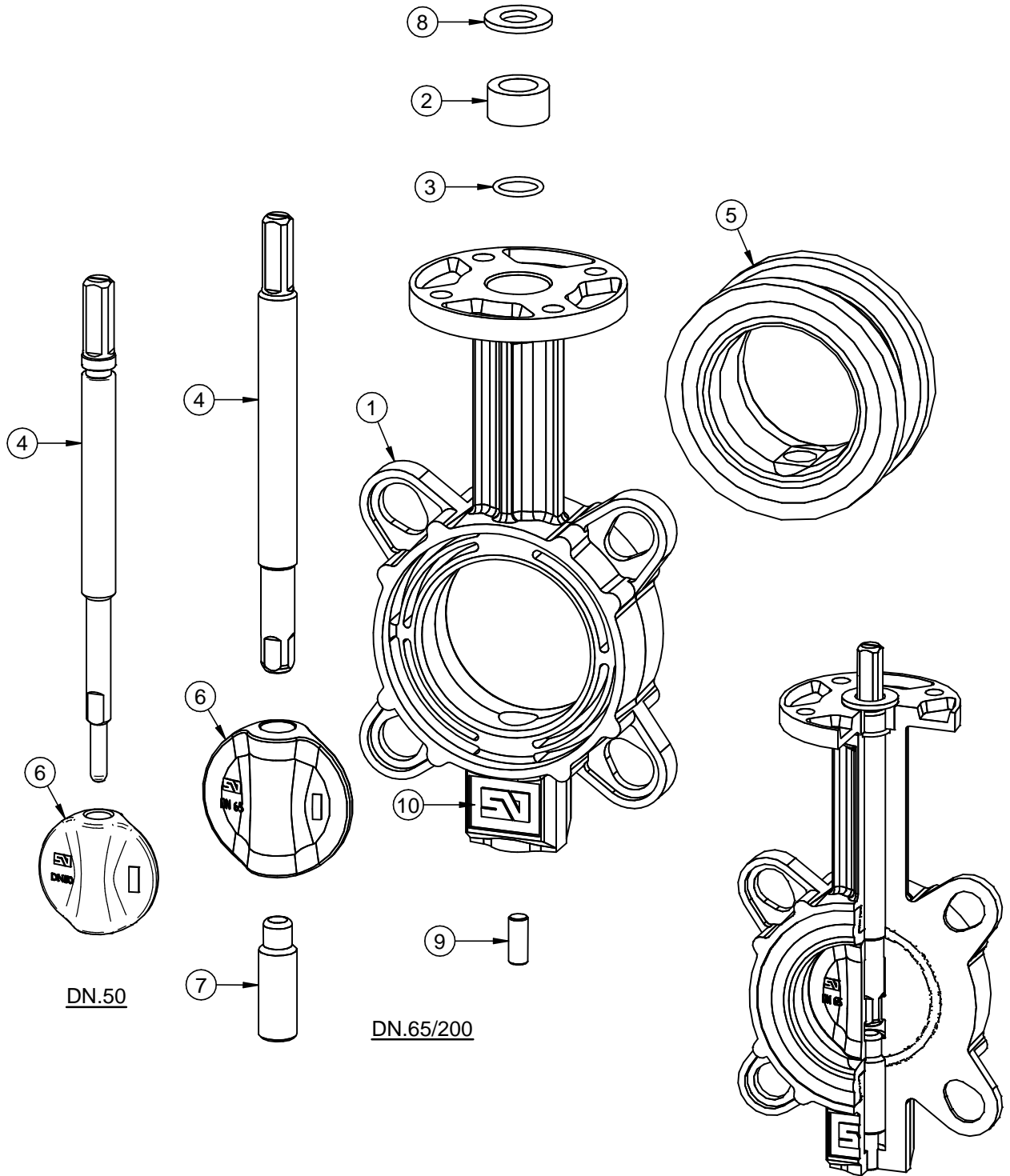


LOS TALADROS ROSCADOS PARA EL MONTAJE ENTRE BRIDAS SERÁN:  
- ROSCA METRICA PARA NORMAS PN.  
- ROSCA UNC PARA NORMAS ANSI 150.  
OTRO TIPO DE ROSCAS BAJO DEMANDA.

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	L1	N°	K	e	M	L	L1	N°	K	e	M	L	L1	N°			
50	2"	43	125	18	M16	100	120	4	125	18	M16	100	120	4	120.6	19	5/8"	M16	100	120	4	
65	2½"	46	145	18	M16	100	120	4	145	18	M16	100	120	4	139.7	22.2	5/8"	M16	110	130	4	
80	3"	46	160	20	M16	110	130	8	160	20	M16	110	130	8	152.4	23.8	5/8"	M16	110	130	4	
100	4"	52	180	20	M16	110	130	8	180	20	M16	110	130	8	190.5	23.8	5/8"	M16	120	140	8	
125	5"	56	210	22	M16	120	140	8	210	22	M16	120	140	8	215.9	23.8	3/4"	M20	130	150	8	
150	6"	56	240	22	M20	130	150	8	240	22	M20	130	150	8	241.3	25.4	3/4"	M20	130	150	8	
200	8"	60	295	24	M20	130	160	8	295	24	M20	130	160	12	298.5	28.6	3/4"	M20	140	160	8	
250	10"	68	350	26	M20	150	170	12	355	26	M24	150	170	12	361.9	30.2	7/8"	M24	160	180	12	
300	12"	78	400	26	M20	160	180	12	410	28	M24	160	180	12	431.8	31.7	7/8"	M24	170	190	12	
350	14"	78	460	26	M20	170	180	16	470	30	M24	170	190	16	476.2	34.9	1"	M27	180	200	12	
400	16"	102	515	26	M24	180	210	16	525	32	M27	200	220	16	539.7	36.5	1"	M27	210	230	16	
					M24	60	8	M27			60	8										
450	18"	114	565	26	M24	190	220	16	585	32	M27	210	240	16	577.8	39.7	1.1/8"	M30	230	250	16	
					M24	60	8	M27			60	8										
500	20"	127	620	28	M24	210	230	20	650	34	M30	230	260	20	635.0	46	1.1/8"	M30	250	280	16	
600	24"	154	725	28	M27	240	270	20	770	36	M33	260	290	20	749.3	47.6	1.1/4"	M33	280	310	20	

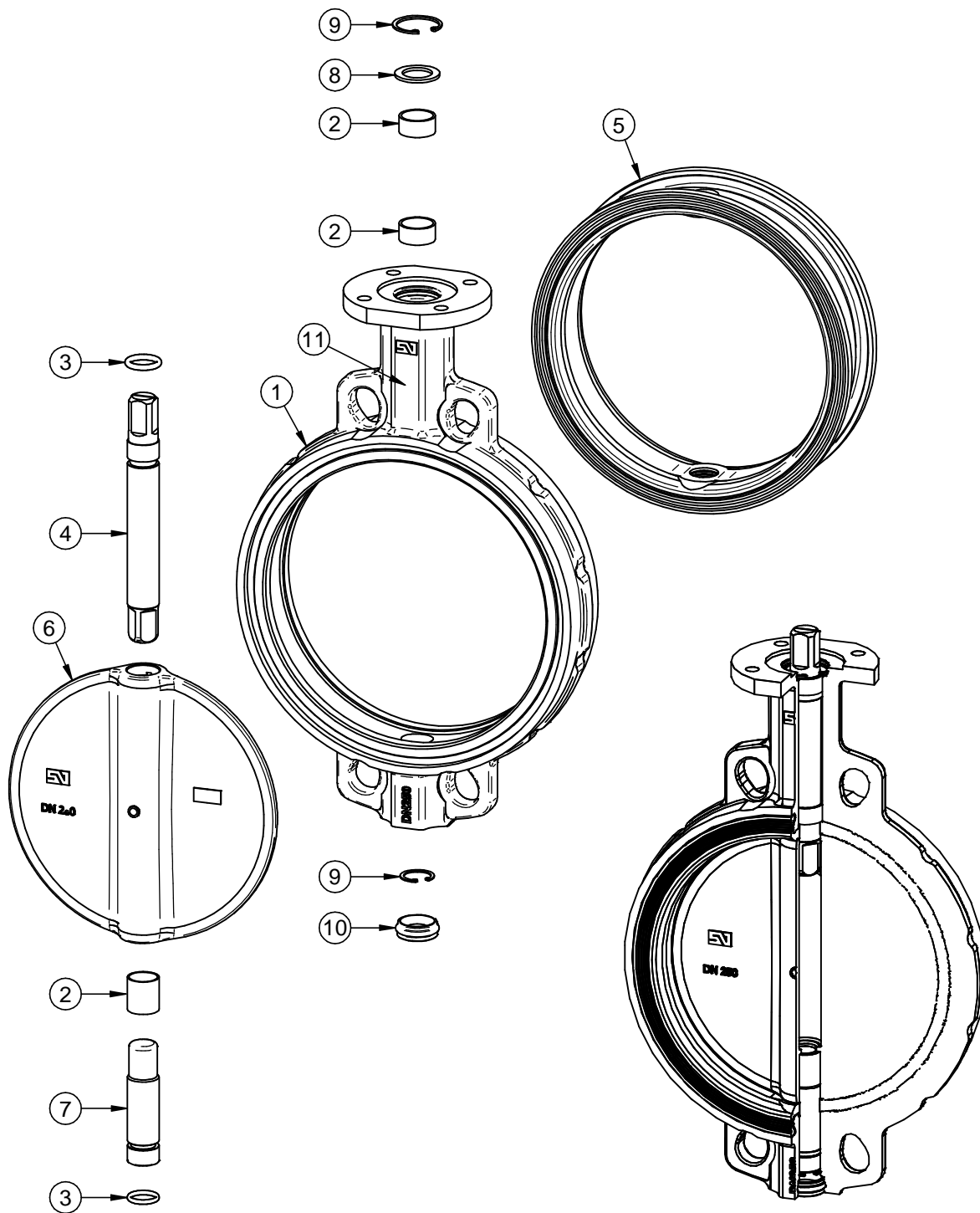
# VALVULA DE MARIPOSA "KL" / BUTTERFLY VALVE "KL" DESPIECE DE MATERIALES "DN.50/200" / MATERIALS DETAIL



**DATOS TECNICOS / TECHNICAL DATA**  
**FABRICACION ESTANDAR / STANDARD PRODUCTION**  
 - DN.50/100 - 10 Bar  
 - DN.125/200 - 6 Bar  
**PRUEBA HIDROSTATICA Y DE RESISTENCIA**  
**HYDROSTATIC AND RESISTANCE TEST:**  
 CON VALVULA ABIERTA / OPEN VALVE:  
 - 10 Bar - 15 Kg/cm<sup>2</sup>  
 - 6 Bar - 9 Kg/cm<sup>2</sup>  
 CON VALVULA CERRADA / CLOSED VALVE:  
 - 10 Bar - 11 Kg/cm<sup>2</sup>  
 - 6 Bar - 7 Kg/cm<sup>2</sup>

10	PLACA CARACTERISTICAS FEATURES TAG	POLIESTER POLYESTER		1
9	TORNILLO INFERIOR LOWER SCREW	ACERO CINCADO ZINC PLATED STEEL	DIN 916	1
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.65/200	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	NITRILO NITRILE		1
2	CASQUILLO ROZAMIENTO BUSHING	ACETAL DELRIN		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

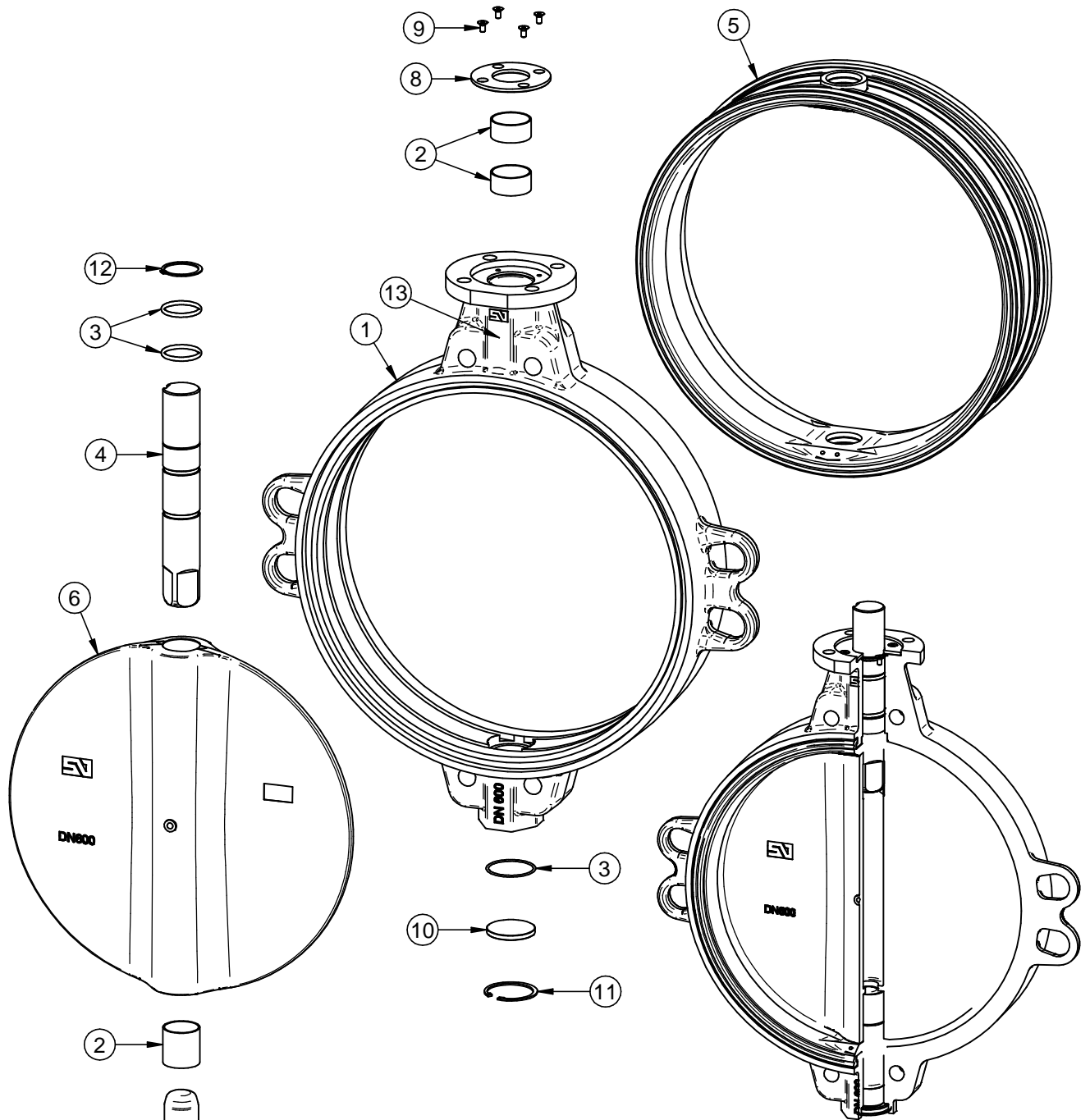
# VALVULA DE MARIPOSA "KL" / BUTTERFLY VALVE "KL" DESPIECE DE MATERIALES "DN.250/500" / MATERIALS DETAIL



**DATOS TECNICOS / TECHNICAL DATA**  
**FABRICACION ESTANDAR / STANDARD PRODUCTION**  
 - DN.250/500 - 3 Bar  
**PRUEBA HIDROSTATICA Y DE RESISTENCIA**  
**HYDROSTATIC AND RESISTANCE TEST:**  
 CON VALVULA ABIERTA / OPEN VALVE:  
 - 3 Bar - 4.5 Kg/cm<sup>2</sup>  
 CON VALVULA CERRADA / CLOSED VALVE:  
 - 3 Bar - 3.3 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	NITRILLO 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 "KL" / BUTTERFLY VALVE "KL" DESPIECE DE MATERIALES "DN.600" / MATERIALS DETAIL



**DATOS TECNICOS / TECHNICAL DATA**  
**FABRICACION ESTANDAR / STANDARD PRODUCTION**  
 - DN.600 - 3 Bar  
**PRUEBA HIDROSTATICA Y DE RESISTENCIA**  
**HYDROSTATIC AND RESISTANCE TEST:**  
 CON VALVULA ABIERTA / OPEN VALVE:  
 - 3 Bar - 4.5 Kg/cm<sup>2</sup>  
 CON VALVULA CERRADA / CLOSED VALVE:  
 - 3 Bar - 3.3 Kg/cm<sup>2</sup>

13	PLACA CARACTERISTICAS FEATURES TAG	POLIESTER POLYESTER		1
12	ANILLO ELASTICO EJE RETAINING RING SHAFT	ACERO CINCADO ZINC PLATED STEEL	DIN 471	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	4
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