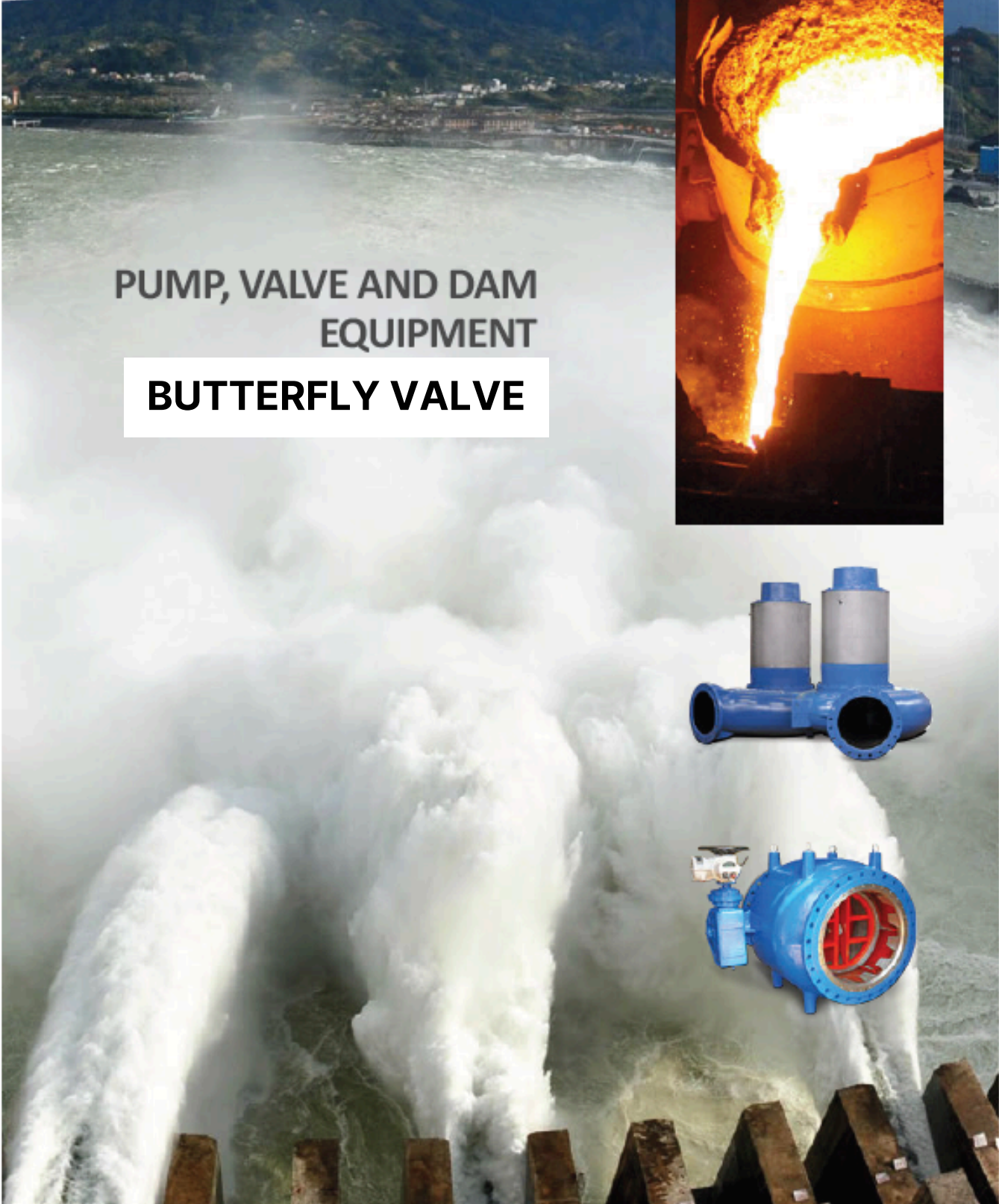


PUMP, VALVE AND DAM
EQUIPMENT
BUTTERFLY VALVE



Since 1984, SEMSAN PUMP is main mechanical equipment and specific process pumps manufacturer for most important projects of Turkey. SEMSAN is most wanted company in Turkey market when SEMSAN PUMP established.

SEMSAN PUMP relocated in Samsun organized industrial zone at 2002 for growing marketing requests.

SEMSAN PUMP has 5000m2 work field in Samsun Industrial zone. Our company has 2x2000 kg. + 2x750 kg. Inducto therm brand twin induction furnaces. We can offer our brands manufacturing and high-tech forming and induction equipment's we can produce stainless steel and ductile products.

SEMSAN PUMP has TSE certificates on all products and all processes have to obey TSE ISO 9001:2008, TSE-EN-ISO 14001, İSG-OHSAS TS18001 quality management.

SEMSAN PUMP also has European CE Declaration of conformity for pumps and valves.

SEMSAN PUMP has innovative perspective, daily gaining new features on our company. Also SEMSAN PUMP check updates and newest products in the marketing world wide and keeps updating and upgrading self.

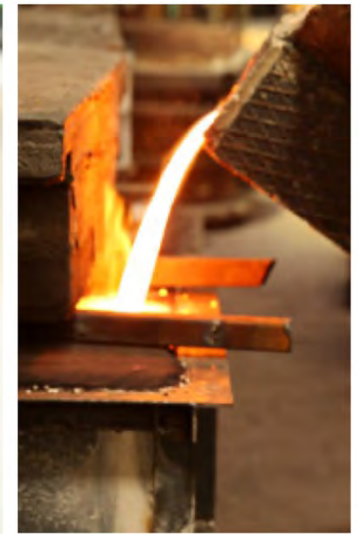
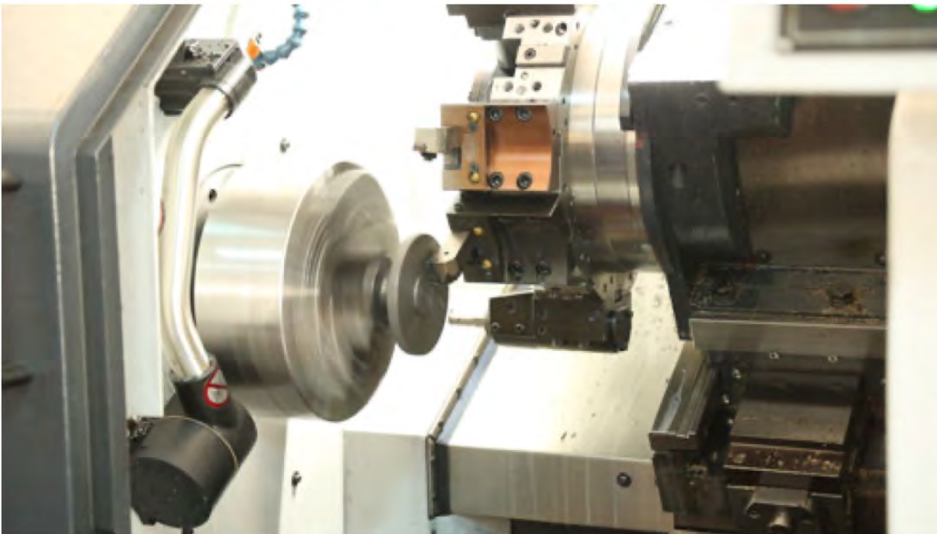
CERTIFICATION

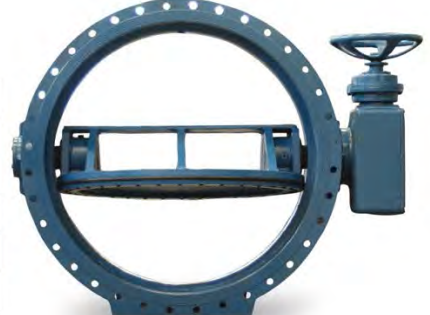
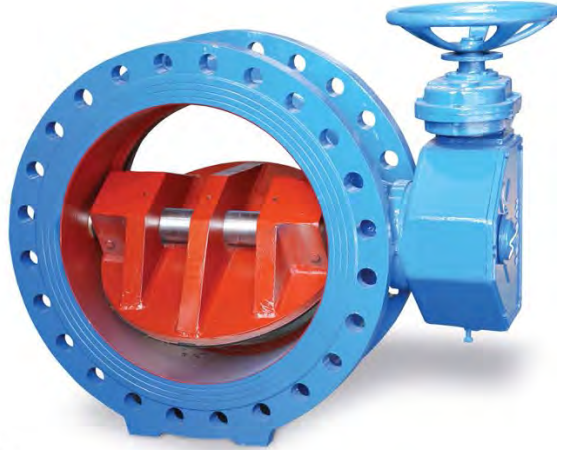
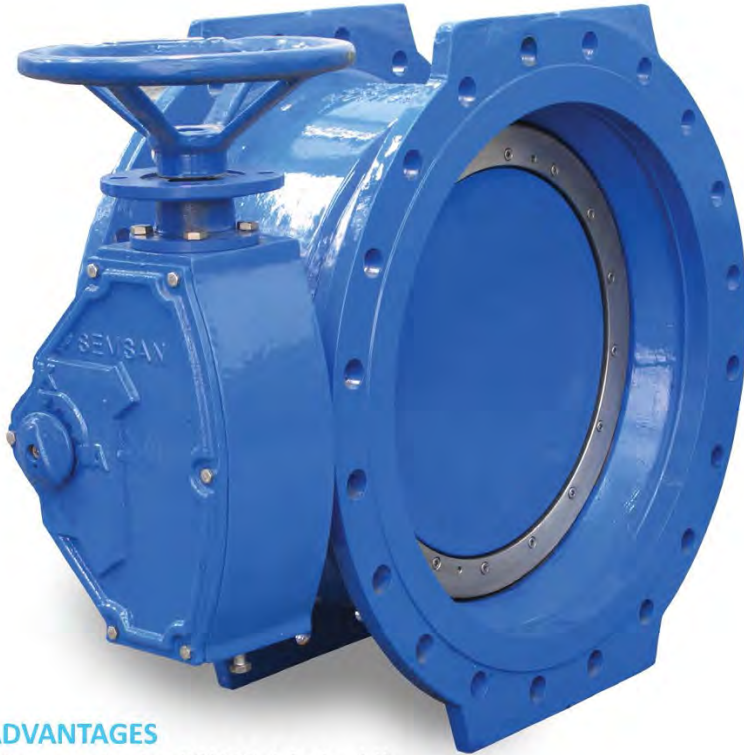
- K-Q TSE ISO EN 9000 QUALITY MANAGEMENT SYSTEM
- TSE İSG-OHSAS TS 18001 HEALTH AND SAFETY MANAGEMENT SYSTEM
- Ç-E TSE-ISO-EN 14000 ENVIROMENTAL MANAGEMENT SYSTEM
- TS EN 593 BUTTERFLY VALVE
- TS EN 12334 CHECK VALVE
- TS 12599 SUBMERSIBLE SEWAGE PUMP
- TSE K 461 DISMANTLIG JOINT
- 97/23/EC PRESSURE EQUIPMENT CASTING CERTIFICATE
- CE DECLARATION OF CONFORMITY ABOUT PUMPS
- TS 12873 SERVICE QUALIFICATION CERTIFICATE - PUMPS
- TS 12844 SERVICE QUALIFICATION CERTIFICATE - VALVE
- WRAS - COATING AND EPDM SEALING SUITABLE FOR DRINKING WATER



MANUFACTURING

- FOUNDRY; 2x2000 kg + 2x750 kg Inductotherm Induction Furnace
- CNC Machining Department
- Electrostatic Epoxy Coating Line
- Double Compound Wet Epoxy Line
- Quality Control
- Material Laboratory: Spectrometer, Tensile Strength Test Machine, Microstructure Analysis Microscope, Hardness Tests
- Hydrostatic Pressure Tests for EN 12266 -1,2
- Pump Performance Tests for ISO 9906
- Material Certification for EN 10204 3.1
- Coating Thickness, Pull of and Spark Test
- Surface Roughness Tests





ADVANTAGES

- Compact Design (EN 558-1 Series 14)
- Low Operation Torque for Bigger Diameters with Double Eccentric
- Low maintenance cost
- Leakage Tests, EN 12266 Class A (completely tightness)

DESIGN

- TS EN 593 Certificated
- Double Flange
- Double Eccentric
- Flanges DIN EN 1092 PN 10 – PN40
- Valve Shaft Double Offset
- Face to Face EN 558-1 Series 14 (DIN 3202, F4) (Short Pattern is Optional)
- Mechanical Position Indicator and Limit stops on Gear Box
- Body Sealing Surface;
- Corrosion - Resistant Stainless Welded AISI 316 and Microfinished.
- Adjustable and Replaceable Sealing Ring
- EN 12516 – 1 Steel Welded Design (Optional)
- Max Operation Temperature 50 °C (120 °C Optional)

APPLICATION AREAS

- Drinking Water Lines
- Drinking Water Treatment Plants
- Waste Water Treatment Plants
- Pumping Stations
- Irrigation Projects
- Dams and Reservoirs
- Neutral Gas and Cool Power Plants
- Hydroelectric Power Plants
- Industrial Plants

OPERATION

- Handwheel
- Electrical Actuator
- Pneumatic Actuator
- Hydraulic Actuator
- On – Off or Modulating Operation

CORROSION PROTECTION

- Electrostatic Powder Coating for Drinking Water
- Zinc – Rich Epoxy Primer
- Coal – Tar Epoxy
- Glass Flake Epoxy
- Enamel Epoxy for Ultraviolet
- Completely Stainless Steel Design
- Ebonite Coating for Seawater

LAST QUALITY CONTROL EN 12266 – 1 CLASS A

Nominal Diameter (DN)	Nominal Pressure PN kg / cm2	Test Pressure		Max Pressure for Temperature 50 °C
		Body	Disk	
100.....2800	10	15	11	10
100.....2800	16	24	18	16
100.....2800	25	37,5	27,5	25
100.....2800	40	60	44	40

* All of dimensions and explanations has been given for information. SEMSAN reserve right to keep change all them off.



HYDRAULIC CONTROLLED CHECK BUTTERFLY VALVE (TURBINE INLET VALVE)

DN 250/2800 | PN 10 / 16 / 25 / 40

DESIGN

- TS EN 593 Certificated
- Double Flange
- Double Eccentric
- Flanges DIN EN 1092
- Valve Shaft Double Offset
- PN 10 – PN40
- Face to Face EN 558-1 Series 14 (DIN 3202, F4) (Short Pattern is Optional)
- Mechanical Position Indicator and Limit Stops on Gear Box
- Body Sealing Surface; Corrosion - Resistant Stainless Welded AISI 316 and Microfinished.
- Adjustable and Replaceable Sealing Ring
- EN 12516 – 1 Steel Welded Design (Optional)
- Max Operation Temperature 50 °C

APPLICATION AREAS

- Turbine Inlet Valves in Hydroelectric Power Plants
- Emergency Shut Off Valves in Dams and Reservoirs
- Check Butterfly Valves for Pumping Stations

CORROSION PROTECTION

- Electrostatic Powder Coating for Drinking Water
- Zinch – Rich Epoxy Primer
- Coal – Tar Epoxy
- Glass Flake Epoxy
- Enamel Epoxy for Ultraviolet
- Completely Stainless Steel Design
- Ebonite Coating for Seawater

ADVANTAGES

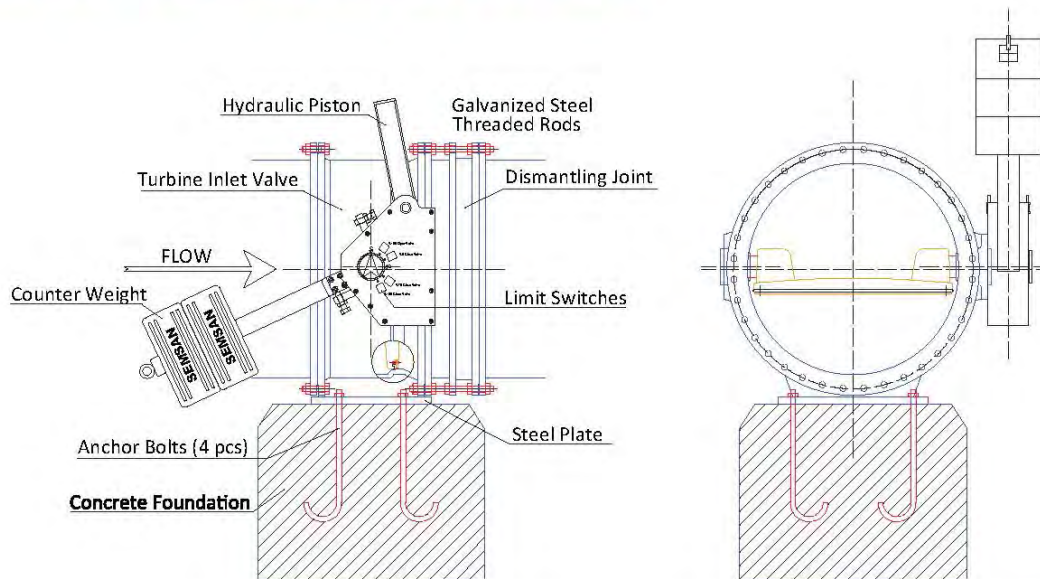
- Opening and Closing With Hydraulic Piston
- Closing With Counter Weight
- High Security Coefficient
- Suddenly Shut-Off for Emergency
- Additional Limit Switch for Hydraulic Leakages
- Two Different Operation Adjust Valve

LAST QUALITY CONTROL EN 12266 – 1 CLASS A

Nominal Diameter (DN)	Nominal Pressure PN kg / cm ²	Test Pressure		Max Pressure for Temperature 50 °C
		Body	Disk	
250.....2800	10	15	11	10
250.....2800	16	24	18	16
250.....2800	25	37,5	27,5	25
250.....2800	40	60	44	40

* All of dimensions and explanations has been given for information. SEMSAN reserve right to keep change all them off.

TURBINE INLET VALVE – EMERGENCY SHUT OFF VALVES



OPERATING PRINCIPLES

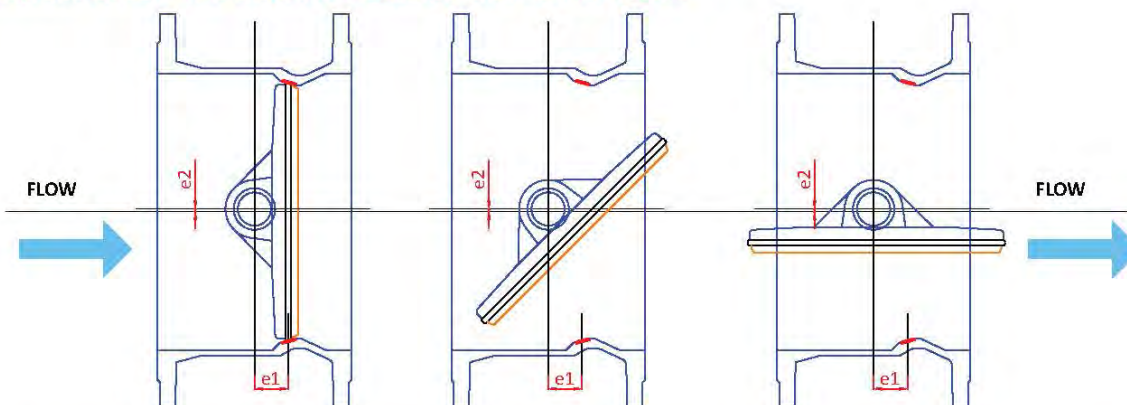
Check-Butterfly valve; It is the valve closed by weight fastened to valve shaft and opened by hydraulic pump. Oil pressure disappearing in hydraulic cylinder of the valve opened by hydraulic pump will be supported by accumulator having a diaphragm in the volume of 2,0 L, since S1 and S2 solenoid valves are closed. If cylinder pressure falls down from adjusted pressure, hydraulic pump will operate and increase system pressure. If adjustable pressure shifter doesn't operate, valve will start to close. When it is closed at the rate of 5 %, limit switch on the valve box cover will be closed, pump will operate, increase the system pressure and valve will come into the position of full open.

If close order comes to the valve because of extreme speed and low pressure, it sends 24 V current to the coil of S1 solenoid valve on hydraulic power unit. by opening of S1 solenoid valve, valve starts to close, it completes with high speed the closing ratio of 70 % and with low speed the remaining closing ratio of 30 %.

Valve closing at the ratio of 70 % closes limit switch on the valve box cover, sends 24 V DC current to the coil of S2 solenoid valve on the power unit. Solenoid valve operates and slowly closes 30 % of valve. There are 4 pieces limit switch on the valve box cover

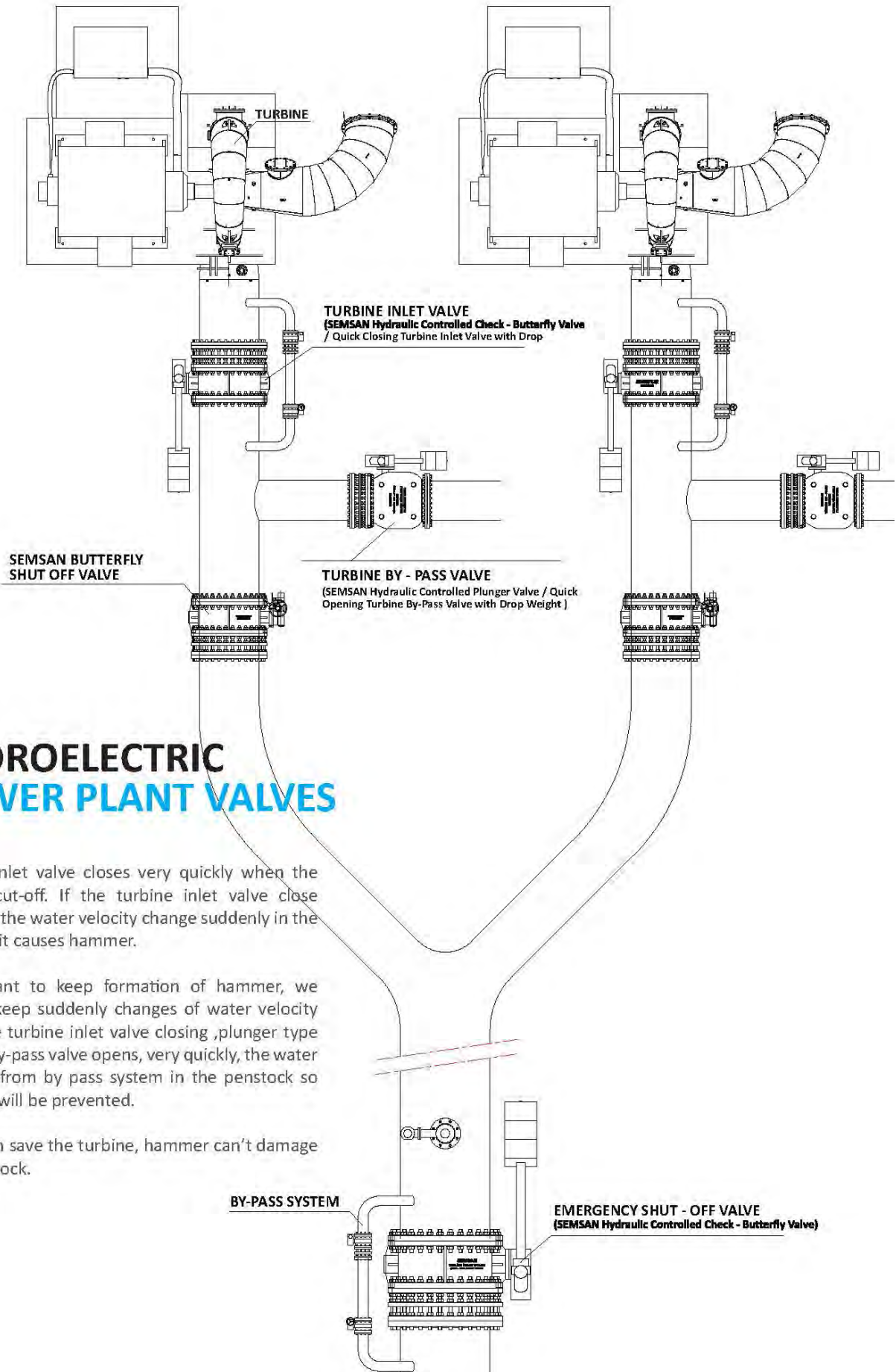


DOUBLE ECCENTRIC DOUBLE FLANGED BUTTERFLY VALVE



e1: Difference of Sealing Ring Seat Axis – Shaft Axis (For perfect contact of sealing ring to seat surface at flow direction)

e2: Difference of Disc Axis – Valve Axis (For low operation torque at opening direction)

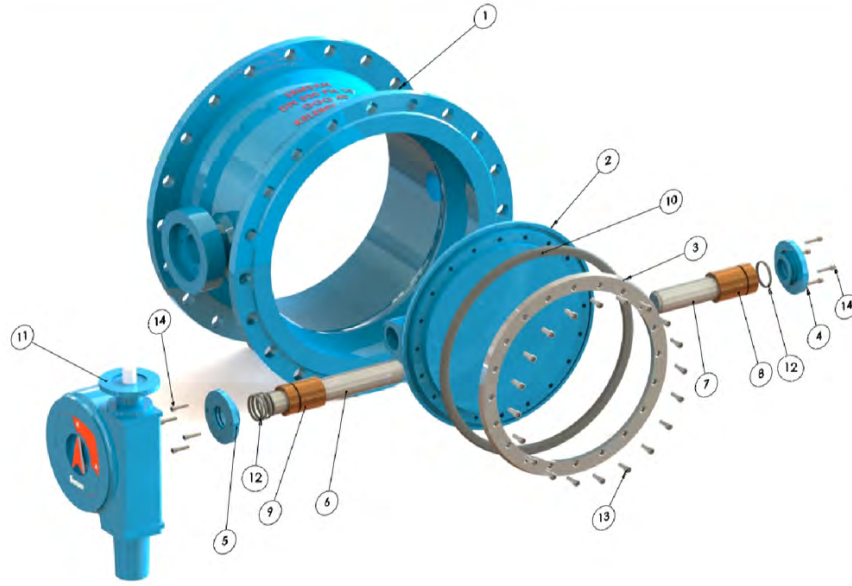


HYDROELECTRIC POWER PLANT VALVES

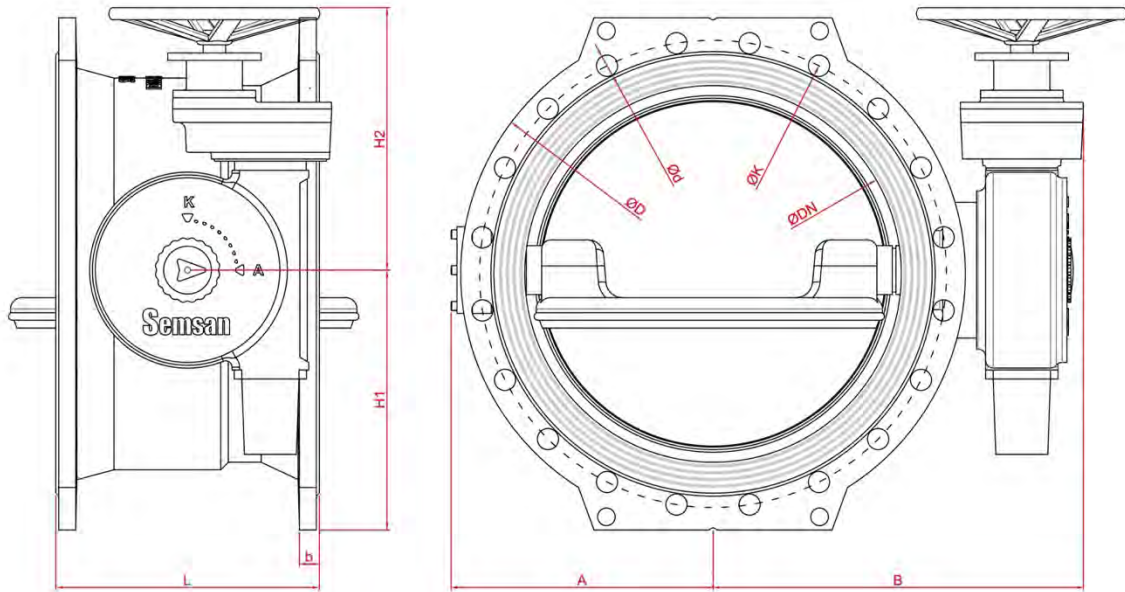
Turbine inlet valve closes very quickly when the turbine cut-off. If the turbine inlet valve close suddenly the water velocity change suddenly in the pipe and it causes hammer.

If we want to keep formation of hammer, we have to keep suddenly changes of water velocity when the turbine inlet valve closing ,plunger type turbine by-pass valve opens, very quickly, the water released from by pass system in the penstock so hammer will be prevented.

So we can save the turbine, hammer can't damage the penstock.



NO	PART	STANDART MATERIAL	OPTIONAL MATERIALS	
1	VALVE BODY	DUCTILE IRON GJS400.15 / GJS400.18 / GJS500.7 / GJS500.14	STAINLESS STEEL AISI 304 / AISI 316 / AISI 329 Duplex (S32900)	STEEL S235JR / S355J / GS C25
2	VALVE DISC	DUCTILE IRON GJS400.15 / GJS400.18 / GJS500.7 / GJS500.14	STAINLESS STEEL AISI 304 / AISI 316 / AISI 329 Duplex (S32900)	STEEL S235JR / S355J / GS C25
3	SEALING RING FLANGE	STAINLESS STEEL AISI 304 / AISI 316	DUCTILE IRON GJS400.15 / GJS400.18 / GJS500.7 / GJS500.14	STEEL S235JR / S355J
4	BLIND LID	DUCTILE IRON GJS400.15 / GJS400.18 / GJS500.7 / GJS500.14	STAINLESS STEEL AISI 304 / AISI 316 / AISI 329 Duplex (S32900)	STEEL S235JR / S355J / GS C25
5	SHAFT LID	DUCTILE IRON GJS400.15 / GJS400.18 / GJS500.7 / GJS500.14	STAINLESS STEEL AISI 304 / AISI 316 / AISI 329 Duplex (S32900)	STEEL S235JR / S355J / GS C25
6	CONTROL SHAFT	1.4021 (AISI420)	1.4057 (AISI431)	1.4462 (Duplex SS)
7	SHORT SHAFT	1.4021 (AISI420)	1.4057 (AISI431)	1.4462 (Duplex SS)
8	SHORT BUSH	GCuSn10	Derlin	PTFE
9	LONG BUSH	GCuSn10	Derlin	PTFE
10	SEALING RING	EPDM	NBR	VITON
11	CONTROL BOX	SEMSAN NDK SERIES (IP68)		
12	O-RING	EPDM	VITON	
13	INLET BOLTS	A2	A4	
14	OTHER BOLTS AND NUTS	8.8 GALVANISED	A2	A4
15	BODY SEAT	AISI 309L Si	AISI 316L Si	
16	COATING	ELECTROPOWDER EPOXY	WET EPOXY, GLASS FLAKE	EBONITE



PN10	VALVE DIMENSIONS							FLANGE DIMENSIONS (in mm)					Weight (KG)
DN	Series 13	Series 14	L	A	B	H1	H2	D	K	No of Holes	d	b	
100	127	190	190	110	230	110	176	220	180	8	19	19	23,2
125	140	200	200	125	250	125	176	250	210	8	19	19	28,2
150	140	210	210	143	255	143	176	285	240	8	23	19	33,2
200	152	230	230	170	305	184	176	340	295	8	23	20	56,2
250	165	250	250	200	360	214	230	400	350	12	23	22	82
300	178	270	270	233	385	245	230	455	400	12	23	24,5	102
350	190	290	290	275	410	260	230	505	460	16	23	24,5	131
400	216	310	310	283	402	295	230	565	515	16	28	24,5	150
450	222	330	330	330	466	320	270	615	565	20	28	25,5	182
500	229	350	350	350	481	350	270	670	620	20	28	26,5	240
600	267	390	390	398	547	400	299	780	725	20	31	30	342
700	292	430	430	490	672	474	417	895	840	24	31	32,5	512
800	318	470	470	545	770	525	417	1015	950	24	34	35	652
900	330	510	510	586	813	572	482	1115	1050	28	34	37,5	898
1000	410	550	550	650	882	635	482	1230	1160	28	37	40	1162
1100	440	590	590	690	917	690	482	1340	1270	32	37	43	1408
1200	470	630	630	750	1063	750	560	1455	1380	32	41	45	1758
1300	500	670	670	830	1113	830	560	1570	1490	32	44	45	2278
1400	530	710	710	890	1158	860	715	1675	1590	36	44	46	2545
1500	560	750	750	930	1215	920	642	1785	1700	36	44	47,5	3543
1600	600	790	790	1000	1275	995	642	1915	1820	40	50	49	4233
1800	670	870	870	1100	1375	1090	642	2115	2020	44	50	52	5068
2000	760	950	950	1200	1525	1190	797	2325	2230	48	50	55	7180
2200	-	1030	1030	1315	1605	1225	797	2550	2440	52	56	59	9300
2400	-	1110	1110	1450	1760	1415	952	2760	2650	56	56	62	11400

PN16	VALVE DIMENSIONS							FLANGE DIMENSIONS (in mm)					Weight (KG)
	DN	Series 13	Series 14	L	A	B	H1	H2	D	K	No of Holes	d	
100	127	190	190	110	230	110	176	220	180	8	19	19	23,2
125	140	200	200	125	250	125	176	250	210	8	19	19	28,2
150	140	210	210	143	255	143	176	285	240	8	23	19	33,2
200	152	230	230	170	305	184	230	340	295	12	23	20	55
250	165	250	250	200	360	214	230	400	355	12	28	22	82
300	178	270	270	233	385	245	230	455	410	12	28	24,5	110
350	190	290	290	275	410	270	230	520	470	16	28	26,5	131
400	216	310	310	290	418	310	270	580	525	16	31	28	190
450	222	330	330	330	466	330	270	640	585	20	31	30	240
500	229	350	350	358	481	373	270	715	650	20	34	31,5	300
600	267	390	390	420	547	430	299	840	770	20	37	36	503
700	292	430	430	490	697	480	434	910	840	24	37	39,5	688
800	318	470	470	545	802	530	482	1025	950	24	40	43	793
900	330	510	510	586	813	577	482	1125	1050	28	40	46,5	988
1000	410	550	550	650	882	648	482	1255	1170	28	43	50	1338
1100	440	590	590	690	917	700	482	1355	1270	32	43	53,5	1588
1200	470	630	630	750	1113	765	560	1485	1390	32	49	57	2108
1300	500	670	670	830	1158	845	560	1585	1490	32	49	58	2563
1400	530	710	710	890	1148	870	642	1685	1590	36	49	60	2963
1500	560	750	750	930	1215	940	642	1820	1710	36	57	62,5	3773
1600	600	790	790	1000	1275	1000	797	1930	1820	40	57	65	4468
1800	670	870	870	1100	1375	1100	797	2130	2020	44	57	70	5320
2000	760	950	950	1250	1585	1280	952	2345	2230	48	62	75	7450

PN25	VALVE DIMENSIONS							FLANGE DIMENSIONS (in mm)					Weight (KG)
	DN	Series 13	Series 14	L	A	B	H1	H2	D	K	No of Holes	d	
100	127	190	190	110	230	110	176	220	180	8	19	19	29,2
125	140	200	200	135	250	135	176	270	220	8	28	19	33,2
150	140	210	210	150	290	150	230	300	250	8	28	20	50
200	152	230	230	180	340	194	230	360	310	12	28	22	85
250	165	250	250	213	390	225	264	425	370	12	31	24,5	90
300	178	270	270	243	395	255	264	485	430	16	31	27,5	140
350	190	290	290	278	440	285	264	555	490	16	34	30	185
400	216	310	310	310	429	325	299	620	550	16	37	32	267
450	222	330	330	335	477	350	299	670	600	20	37	34,5	387
500	229	350	350	365	575	380	434	730	660	20	37	36,5	468
600	267	390	390	423	630	438	434	845	770	20	40	42	613
700	292	430	430	490	704	500	482	960	875	24	43	46,5	938
800	318	470	470	545	802	560	482	1085	990	24	49	51	1168
900	330	510	510	593	813	612	482	1185	1090	28	49	55,5	1848
1000	410	550	550	660	882	680	482	1320	1210	28	56	60	2118
1100	440	590	590	710	917	730	482	1420	1310	32	56	64	2318
1200	470	630	630	765	1113	785	560	1530	1420	32	56	69	2818
1300	500	670	670	830	1130	845	642	1640	1530	32	62	72	3568
1400	530	710	710	890	1165	900	642	1755	1640	36	62	76	4018
1500	560	750	750	933	1215	960	797	1865	1750	36	62	77,5	4400
1600	600	790	790	1000	1275	1015	797	1975	1860	40	62	81	5500
1800	670	870	870	1100	1375	1125	797	2195	2070	44	70	88	9000
2000	760	950	950	1250	1585	1280	952	2425	2300	48	70	95	11500

PN40	VALVE DIMENSIONS							FLANGE DIMENSIONS (in mm)					Weight (KG)
DN	Series 13	Series 14	L	A	B	H1	H2	D	K	No of Holes	d	b	
100	127	190	190	120	275	120	230	235	190	8	22	24	42
125	140	200	200	135	285	135	230	270	220	8	26	26	60
150	140	210	210	150	320	150	264	300	250	8	26	28	65
200	152	230	230	190	380	204	264	375	320	12	30	34	140
250	165	250	250	225	405	237	264	450	385	12	33	38	225
300	178	270	270	258	407	270	299	515	450	16	33	42	300
350	190	290	290	290	449	297	299	580	510	16	36	46	377
400	216	310	310	330	542	345	434	660	585	16	39	50	492
450	222	330	330	345	570	360	434	685	610	20	39	50	633
500	229	350	350	378	597	393	482	755	670	20	42	52	773
600	267	390	390	445	659	460	482	890	795	20	48	60	1018
700	292	430	430	498	712	508	482	995	900	20	48	64	1318
800	318	470	470	570	827	585	482	1140	1030	24	56	72	2368
900	330	510	510	625	843	644	482	1250	1140	28	56	76	2618
1000	410	550	550	680	928	700	560	1360	1250	28	56	80	2895
1100	440	590	590	750	1045	770	642	1470	1380	28	56	84	4698
1200	470	630	630	825	1175	845	642	1575	1460	32	62	88	6568

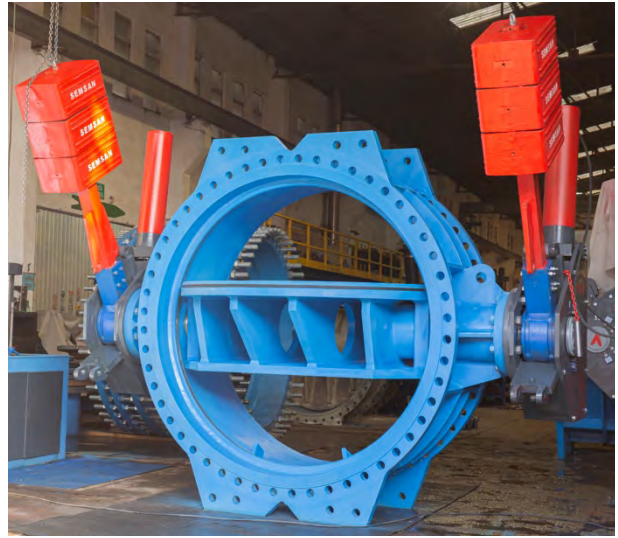


HYDRAULIC

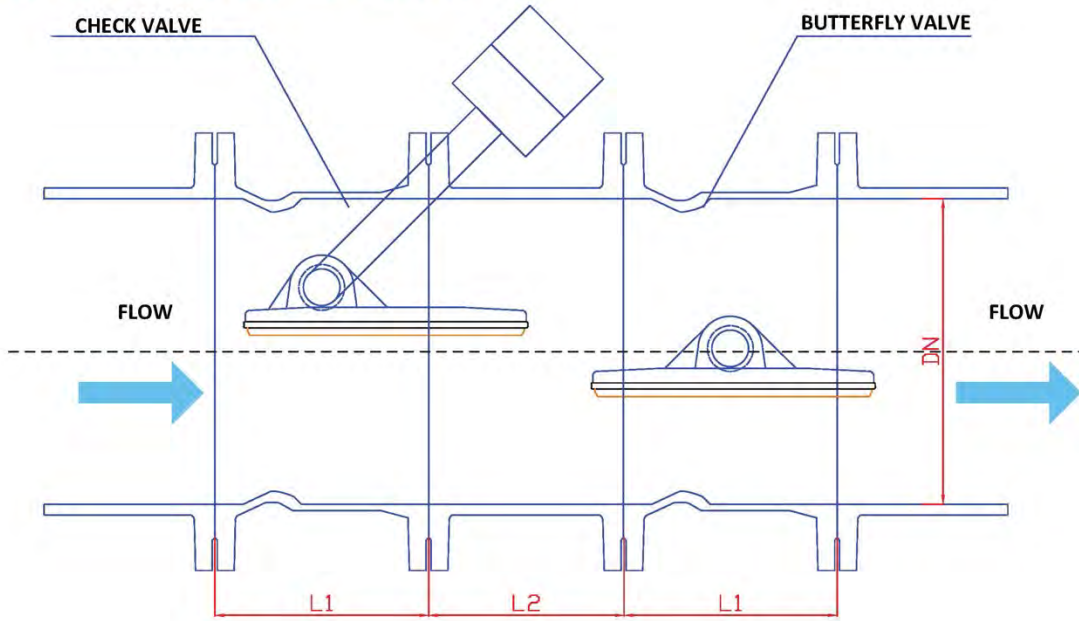


PNEUMATIC

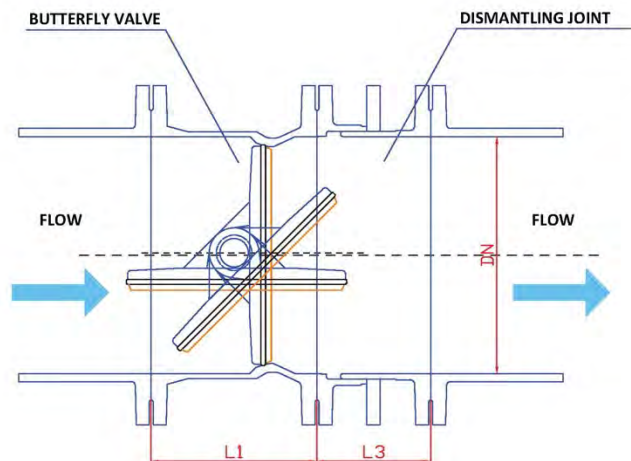


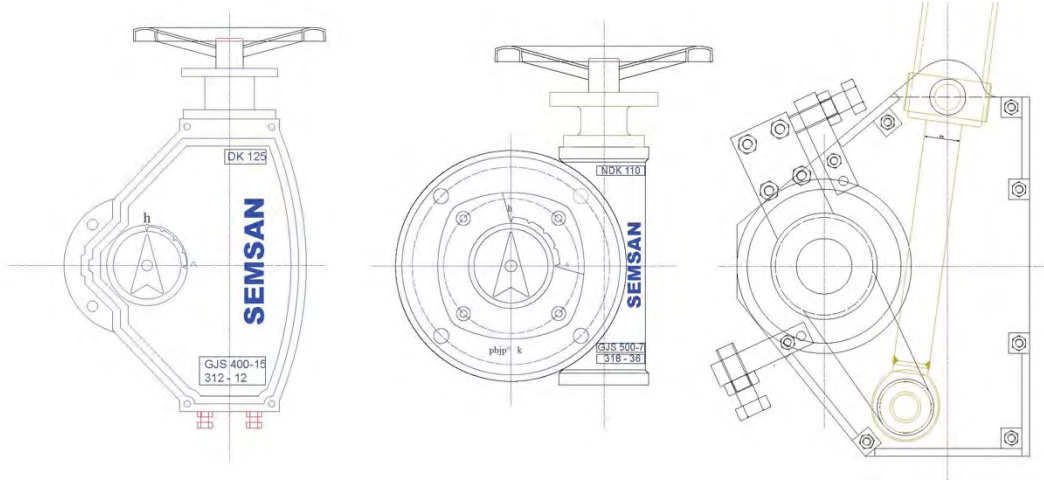


BUTTERFLY VALVE ASSEMBLY DRAWING



DN	L1 (mm)	L2 (mm)	L3 (mm)
150	210	150	200
200	230	150	220
250	250	150	220
300	270	150	220
350	290	225	230
400	310	225	230
450	330	300	250
500	350	300	260
600	390	400	260
700	430	500	260
800	470	600	290
900	510	650	290
1000	550	750	290
1100	590	800	300
1200	630	900	320
1300	670	1000	340
1400	710	1100	360





PN10	Gearbox					HYDRAULIC		PNEUMATIC
DN	MODEL	Valve connection flange(ISO 5211)	Actuator connection flange (ISO 5210)	Turn / stroke	Operation Torque (Nm)	CONTROL UNIT	Weight (kg)	UNIT
100	NDK50	F07	F07/F10 - 20 / 30 mm	10	30			RA80DA
125	NDK50	F07		10	30			RA80DA
150	NDK50	F07		10	30			RA80DA
200	NDK50	F07		10	60	HK50	85	RA120DA
250	NDK80	F12		16,5	60	HK50	101	RA120DA
300	NDK80	F12		16,5	60	HK50	121	PN1
350	NDK80	F14		16,5	60	HK50	150	PN1
400	NDK80	F14		16,5	60	HK50	169	PN1
450	NDK125	F16	F10/F14 - 20 / 30 mm	15	60	HK63	202	PN2
500	NDK125	F16		15	120	HK63	260	PN2
600	NDK125+MR3	F16	F10/F14 - 20 / 30 mm	45	120	HK100	426	PN2
700	NDK160+R3	F25		45	120	HK100	556	
800	NDK160+R3	F25		45	120	HK125	776	
900	NDK200+R9	F30	F10/F14 - 30 mm	126	120	HK125	924	
1000	NDK200+R9	F30		126	120	HK125	1188	
1100	NDK200+R12	F30		168	120	HK125	1434	
1200	NDK285+R16	F35		216	120	HK125	1640	
1300	NDK285+R25	F35		337,5	120	HK160	2260	
1400	NDK285+R36	F35		486	120	HK160	2518	
1500	NDK370+R25	F40		356	250	HK160	3355	
1600	NDK370+R25	F40		356	250	HK160B	4085	
1800	NDK370+R25	F40	F14 - 30 mm	356	250	HK160B	4920	
2000	NDK450+R36	F48		356	500	HK200	7162	
2200	NDK450+R36	F48		486	500	HK200x2	10322	
2400	NDK450+R36	F48		486	500	HK200x2	12422	

PN16	Gearbox					HYDRAULIC		PNEUMATIC	
DN	MODEL	Valve flange (ISO 5211)	Actuator flange (ISO 5210)	Turn / stroke	Operation Torque (Nm)	CONTROL UNIT	Weight (kg)	UNIT	
100	NDK50	F07	F07/F10 - 20 / 30 mm	10	30			RA80DA	
125	NDK50	F07		10	30			RA80DA	
150	NDK50	F07		10	30			RA80DA	
200	NDK80	F12		16,5	60	HK50	74	RA120DA	
250	NDK80	F12		16,5	60	HK50	101	RA120DA	
300	NDK80	F12		16,5	60	HK50	129	PN1	
350	NDK80	F14		16,5	120	HK50	150	PN2	
400	NDK125	F16	F10/F14 - 20 / 30 mm	15	120	HK50	194	PN2	
450	NDK125	F16		15	120	HK63	260	PN3	
500	NDK125	F16		15	120	HK63	320	PN3	
600	NDK125+MR3	F16	F10/F14 - 30 mm	45	120	HK100	587	PN3	
700	NDK125+R9	F25		135	120	HK100	730		
800	NDK200+R9	F30		126	120	HK125	819		
900	NDK200+R9	F30		126	120	HK125	1014		
1000	NDK200+R12	F30		168	120	HK125	1364		
1100	NDK200+R16	F30		168	120	HK125	1614		
1200	NDK285+R25	F35		337,5	120	HK160	2090		
1300	NDK285+R25	F35		337,5	250	HK160	2545		
1400	NDK370+R25	F40		356	250	HK160	2775		
1500	NDK370+R25	F40		356	250	HK160	3585		
1600	NDK370+R25	F40	F14 - 30 mm	486	250	HK160B	4320		
1800	NDK450+R36	F48		356	250	HK160B	4622		
2000	NDK450+R36	F48		486	500	HK200	7432		
PN25									
100	NDK50	F07	F07/F10 - 20 / 30 mm	10	30				
125	NDK50	F07		10	30				
150	NDK80	F12		16,5	60				
200	NDK80	F12		16,5	60	HK50	104		
250	NDK110	F16	F10/F14 - 20 / 30 mm	13	60	HK50	99		
300	NDK110	F16		13	120	HK50	149		
350	NDK110	F16		13	120	HK50	194		
400	NDK125+MR3	F16		45	120	HK50	247		
450	NDK125+MR3	F16		45	120	HK63	383		
500	NDK160+R9	F25		F10/F14 - 30 mm	135	120	HK63	382	
600	NDK160+R9	F25			135	120	HK100	615	
700	NDK200+R12	F30			168	120	HK125	964	
800	NDK200+R12	F30			168	250	HK125	1194	
900	NDK200+R16	F30			224	250	HK125	1874	
1000	NDK200+R16	F30	224		250	HK125	2144		
1100	NDK200+R16	F30	224		250	HK125	2344		
1200	NDK285+R25	F35	337,5		500	HK160	2800		
1300	NDK370+R25	F40	F14 - 30 mm		356	500	HK160	3380	
1400	NDK370+R25	F40			356	500	HK160	3830	
1500	NDK370+R36	F40		486	500	HK160B	4243		
1600	NDK450+R36	F48		356	500	HK160B	4802		
1800	NDK450+R36	F48		486	500	HK200	8982		
2000	NDK450+R36	F48		486	500	HK200x2	12522		

PN40	Gearbox					HYDRAULIC		PNEUMATIC
DN	MODEL	Valve connection flange(ISO 5211)	Actuator connection flange (ISO 5210)	Turn / stroke	Operation Torque (Nm)	CONTROL UNIT	Weight (kg)	UNIT
100	NDK80	F12	F07/F10 - 20 / 30 mm	16,5	120			
125	NDK80	F12		16,5	120			
150	NDK80	F16		13	120			
200	NDK110	F16		13	120	HK50	149	
250	NDK110	F16		13	120	HK50	234	
300	NDK110	F16		45	120	HK50	309	
350	NDK125+MR3	F16		45	120	HK50	357	
400	NDK125+MR3	F25	F10/F14 - 30 mm	135	120	HK50	472	
450	NDK125+R9	F25		135	120	HK63	587	
500	NDK160+R9	F30		168	120	HK63	687	
600	NDK160+R9	F30		168	120	HK125	1100	
700	NDK200+R12	F30	F14 - 30 mm	224	250	HK125	1344	
800	NDK200+R16	F30		224	250	HK125	2394	
900	NDK285+R25	F30		224	250	HK125	2500	
1000	NDK285+R36	F35		337,5	250	HK125	2768	
1100	NDK370+R25	F40		356	250	HK125	4410	
1200	NDK370+R25	F40		356	250	HK160	6380	

INTERNETIONAL STANDARTS FOR DESIGN

MAIN TYPE	EN 593	Double Eccentric Double Offset
FACE TO FACE DIMENSONS	EN 558 - 1	SERIES 14 and SERIES 13
FLANGE DIMENSIONS	EN 1092	Flange norm can be revise up to customer
VALVE CONNECTION FLANGES	ISO 5211	
FINAL ACCEPTANCE TEST	EN12266 1 - 2	Rate A (Zero Leakage)
DESIGN TEST	1074 / EN 1267	
BODY AND DISC MATERIALS	EN1563 / AISI / EN 10202 / EN 10213	
SHAFT MATERIAL	EN 10088 / AISI	
BEARING MATERIALS	EN 1982	
CONTROL BOX	EN 60529	IP68
NON METALLIC MATERIAL	EN 681 - 1	SHORE 70 +-5
COATING	EN ISO 12944 / EN ISO 2409 / EN ISO 4624 (min 250 mikron - electropowder epoxy up to DN1400; DN1500 and bigger wet epoxy)	
COATING FOR SEAWATER	min 3 mm ebonite coating / Glass Flake Epoxy Coating	
CERTIFICATION	10204 3.1 (non witnessed) 10204 3.2 (witnessed) Third Party Tests Raw Material Certificates	

Our Products



Butterfly Valve



Plunger Valve



Tilting Check Valve



Nozzle Check Valve



Dismantling Joint



Submersible Mixed Flow Column Type Pump



Hydraulic Controlled Check Butterfly Valve



Strainer - Y - Type / Inline - Basket Type



Swing Check Valve



Knife Gate Valve



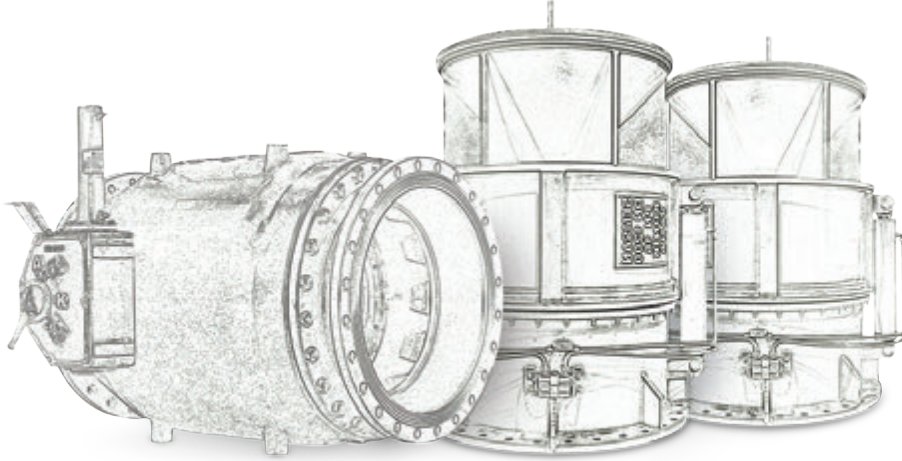
Hollow Jet Valve / Gate Valve



Submersible Sewage Pump



PUMP, VALVE & DAM
EQUIPMENTS
PRODUCT CATALOGUE



SEMSAN POMPA MAKİNA SANAYİ VE TİCARET LTD. ŞTİ.

Adres : Organize Sanayi Bölgesi Erdođan Cebeci Bulvarı.
No:42/B Kutlukent / SAMSUN / TURKEY
Phone : +90 362 266 88 33
Fax : +90 362 266 88 58
E-mail : semsan@semsan.com.tr
Web : www.semsan.com.tr

