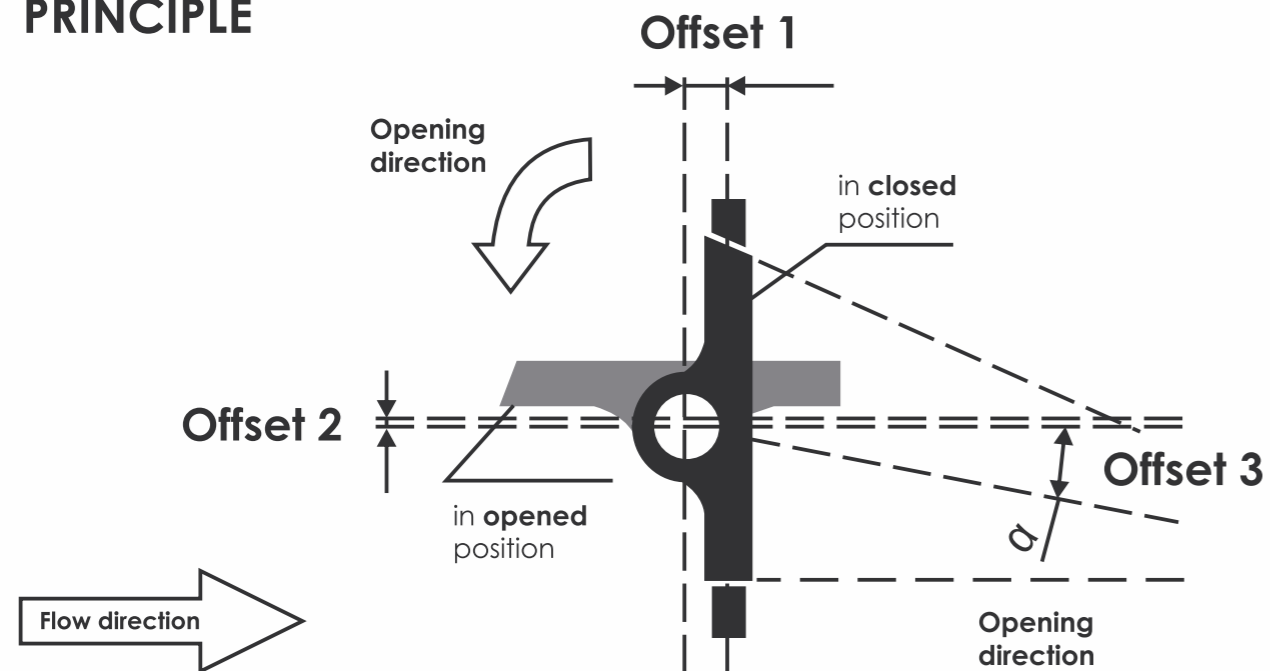


## Lifetime and warranty

Service life of LD butterfly valve is more than 30 years and can change depending on operating conditions. Manufacturer's warranty -10 years for hot water from start up date but not more than 10 years and 6 months from the date of purchase provided that all storage, installation and operating requirements are met.

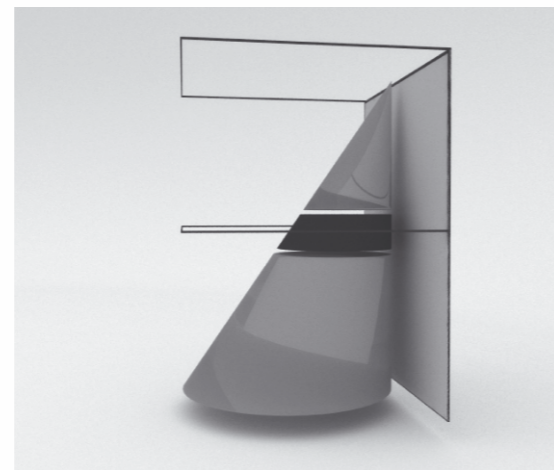
## TRIPLE OFFSET PRINCIPLE



Triple offset principle provides "A" rate tightness at a minimal torque.

Friction-free metal-to-metal sealing with triple offset construction of butterfly valves provides effective disc opening at maximum pressure drops. At the same time triple offset construction prevent wedging of the disc. Low torque enables choosing of smaller manual gears as well as smaller (and consequently inexpensive) electric, pneumatic or hydraulic actuators.

- **Offset 1** displaces shaft axis relative to sealing surface
- **Offset 2** displaces shaft axis relative to pipeline axis
- **Offset 3** – cone sealing surface relative to cone axis measured by "a" angle



Offset 3



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e-mail: office@chsgs.ru

**chsgs.com**



STEEL VALVES

# TRIPLE OFFSET BUTTERFLY VALVE

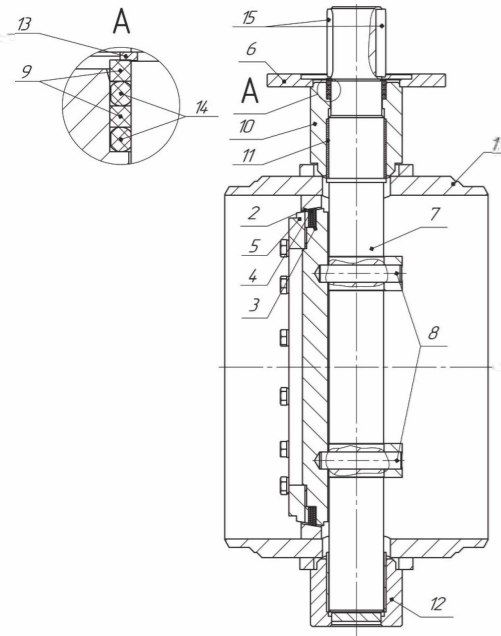
Metal seated



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# LD BUTTERFLY VALVE CONSTRUCTION

MATERIAL OF MAIN PARTS		
Nº	Part	Material
1	Body	Carbon steel
2	Facing	AISI 301
3	Disc	AISI 321H
4	Disc seal	AISI 321H
5	Retaining ring	AISI 321H
6	Top flange	Carbon steel
7	Shaft	AISI 431
8	Pin	AISI 420
9	Stem sealing	TEG
10	Stem shell	Carbon steel
11	Washer	Tin-free cast bronze
12	Trunnion	Carbon steel
13	Retaining ring	Spring steel
14	Stem sealing	FVMQ
15	Spline insert	Carbon steel



## Application

LD butterfly valves are designed for application in district heating systems, can be used in critical industrial pipelines, including petrochemical and oil-processing industry. Valves are used for control and shut-off purposes and provide "A" rate tightness in both directions of flow.

## Identification

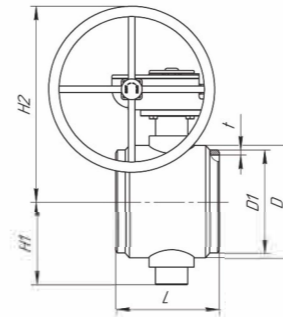
BV.	X.	X.	XXX.	XX.	XX.
Connection to pipeline:					
Flange/flange	F				
Welding/welding	W				
Operation:					
Manual gear	G				
Electric actuator	A				
Nominal diameter					
DN					
Pressure class					
PN					
Steel grade					

## Main characteristics of LD triple offset butterfly valve

- ✓ Body: carbon steel
- ✓ Facing: stainless steel AISI 301
- ✓ Disc material: stainless steel AISI 321H
- ✓ Disc sealing: stainless steel AISI 321H
- ✓ Nominal pressure: PN 1,6 and 2,5 Mpa
- ✓ Nominal diameter: 200-1200
- ✓ Connection: welding/welding, flange/flange
- ✓ Designed for tightness rate "A"

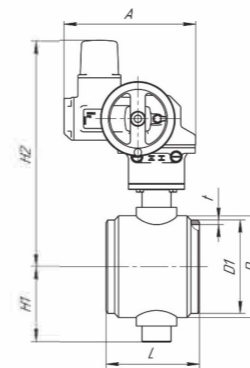
## TECHNICAL DATA WELDING/WELDING WITH MANUAL GEAR

Identification	DN	D1	L	D	t	H1	H2	Top flange	Gearbox	Weight, kg
BV.W.G.200.025.02	200	219,1	230	290	4,5	168	439	F12	242-40S	36
BV.W.G.250.025.02	250	273	250	400	5	199	474	F12	AB880	60
BV.W.G.300.025.02	300	323,9	270	365	5,6	240	652	F16	AB2000N	120
BV.W.G.350.025.02	350	355,6	290	402	5,6	279	585	F16	AB2000N	125
BV.W.G.400.025.02	400	406,4	310	426	6,3	305	610	F16	AB1950/PR4	184,5
BV.W.G.500.025.02	500	508	350	550	6,3	359	731	F25	AB6800N/PR6	291,7
BV.W.G.600.025.02	600	610	390	650	7,1	421	779	F25	AB6800N/PR6	366,7
BV.W.G.700.025.02	700	711	430	750	8	475	875	F30	A200N/PR10	630
BV.W.G.800.025.02	800	813	470	850	8,8	545	945	F35	A250N/PR10	1100
BV.W.G.900.025.02	900	914	510	960	10	640	1032	F35	IW9 IR2	1233
BV.W.G.1000.025.02	1000	1016	550	1270	11	690	1160	F35	IW9 IR2	1260
BV.W.G.1200.025.02	1200	1219	630	1340	12,5	825	1315	F40	IW10 IR2	2293



## TECHNICAL DATA WELDING/WELDING WITH ACTUATOR

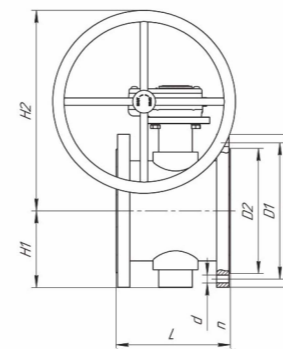
Identification	DN	D1	L	D	t	H1	H2	A	Top flange	Actuator(AUMA)	Weight, kg
BV.W.A.200.025.02	200	219,1	230	290	4,5	168	478	353	F12	SQ 12.2	55
BV.W.A.250.025.02	250	273	250	400	5	199	419	553	F12	SQ 14.2(SA10.2/ GS 80.3)	94
BV.W.A.300.025.02	300	323,9	270	365	5,6	240	492	736	F16	SA 07.6/GS 125.3	159
BV.W.A.350.025.02	350	355,6	290	402	5,6	279	540	746	F16	SA 10.2/GS 125.3	169
BV.W.A.400.025.02	400	406,4	310	426	6,3	305	570	748	F16	SA 10.2/GS 125.3	219
BV.W.A.500.025.02	500	508	350	550	6,3	359	633	920	F25	SA 10.2/GS 160.3	341
BV.W.A.600.025.02	600	610	390	650	7,1	421	683	920	F25	SA 10.2/GS 160.3	416
BV.W.A.700.025.02	700	711	430	750	8	475	778	1127	F30	SA 10.2/GS 200.3	611
BV.W.A.800.025.02	800	813	470	850	8,8	525	965	1243	F35	SA 14.2/GS 250.3	1246
BV.W.A.900.025.02	900	914	510	960	10	636	1023	1243	F35	SA 14.2/GS 250.3	1354
BV.W.A.1000.025.02	1000	1016	550	1270	11	682	1069	1243	F35	SA 14.2/GS 250.3	1381
BV.W.A.1200.025.02	1200	1219	630	1340	12,5	822	1224	1570	F40	SA 14.6/GS 315	2304



## TECHNICAL DATA FLANGE/FLANGE WITH MANUAL GEAR

Identification	DN	D	D1	D2	L	n	d	H1	H2	Top flange	Gear	Weight, kg
BV.F.G.200.016.02	200	340	295	278	250	12	22	170	437	F12	242-40S	65
BV.F.G.250.016.02	250	405	355	335	270	12	26	203	470	F12	AB880	100
BV.F.G.300.016.02	300	460	410	390	290	12	26	240	652	F16	AB2000N	169
BV.F.G.350.016.02	350	520	470	450	310	16	26	279	585	F16	AB2000N	196
BV.F.G.400.016.02	400	580	525	505	340	16	30	305	610	F16	AB1950/PR4	275,5
BV.F.G.500.016.02	500	715	650	615	380	20	33	359	731	F25	AB6800N/PR6	427,5
BV.F.G.600.016.02	600	840	770	720	420	20	36	421	779	F25	AB6800N/PR6	548,7
BV.F.G.700.016.02	700	910	840	820	460	24	42	480	870	F30	A200N/PR10	994
BV.F.G.800.016.02	800	1025	950	930	500	24	48	545	1045	F35	A250N/PR10	1475
BV.F.G.900.016.02	900	1125	1050	1005	540	28	48	640	1032	F35	IW9 IR2	1523
BV.F.G.1000.016.02	1000	1255	1170	1110	590	28	56	690	1160	F35	IW9 IR2	1719
BV.F.G.1200.016.02	1200	1485	1390	1330	660	32	56	825	1315	F40	IW10 IR2	2890

PN25 - on request



## TECHNICAL DATA FLANGE/FLANGE WITH ACTUATOR

Identification	DN	D	D1	D2	L	n	d	H1	H2	A	Top flange	Actuator(AUMA)	Weight, kg
BV.F.A.200.016.02	200	340	295	278	250	12	22	170	437	353	F12	SQ 12.2	55
BV.F.A.250.016.02	250	405	355	335	270	12	26	203	470	553	F12	SQ 14.2(SA10.2/ GS 80.3)	94
BV.F.A.300.016.02	300	460	410	390	290	12	26	240	652	736	F16	SA 07.6/GS 125.3	159
BV.F.A.350.016.02	350	520	470	350	310	16	26	279	585	746	F16	SA 10.2/GS 125.3	169
BV.F.A.400.016.02	400	580	525	505	340	16	30	305	610	748	F16	SA 10.2/GS 125.3	219
BV.F.A.500.016.02	500	715	650	615	380	20	33	320	731	920	F25	SA 10.2/GS 160.3	341
BV.F.A.600.016.02	600	840	770	720	420	20	36	359	779	920	F25	SA 10.2/GS 160.3	416
BV.F.A.700.016.02	700	910	840	820	460	24	42	421	870	1127	F30	SA 10.2/GS 200.3	611
BV.F.A.800.016.02	800	1025	950	930	500	24	48	480	1045	1243	F35	SA 14.2/GS 250.3	1246
BV.F.A.900.016.02	900	1125	1050	1005	540	28	48	640	1032	1243	F35	SA 14.2/GS 250.3	1354
BV.F.A.1000.016.02	1000	1255	1170	1110	590	28	56	690	1160	1243	F35	SA 14.2/GS 250.3	1381
BV.F.A.1200.016.02	1200	1485	1390	1330	660	32	56	825	1315	1570	F40	SA 14.6/GS 315	2304

PN25 - on request

