

# AG1-SV OVER-SPEED BUTTERFLY VALVE



**ANGODOS**  
*Válvulas*

*“From 1970, close to our clients”*

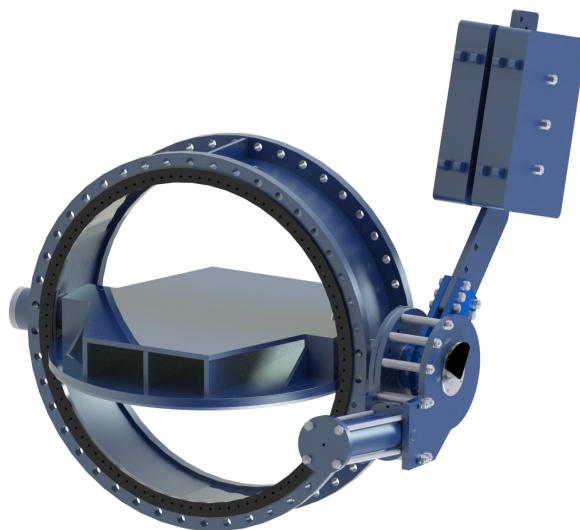
## Over-speed Butterfly valve

**ANGODOS SV** is a full bore butterfly valve with flanged body and over-speed automatic closing system.

The sealing gasket is the key for reliable sealing performance and it's placed in the body. The disc is attached to the eccentric (simple or double) shaft bearing assuring an uniform seat and avoiding critical leaking by pressure discontinuities at the sealing area. In this way the sealing system assures perfect sealing under the most demanding conditions.

Full bore and hydrodynamic internal design provides outstanding hydrodynamic features minimizing the head loss.

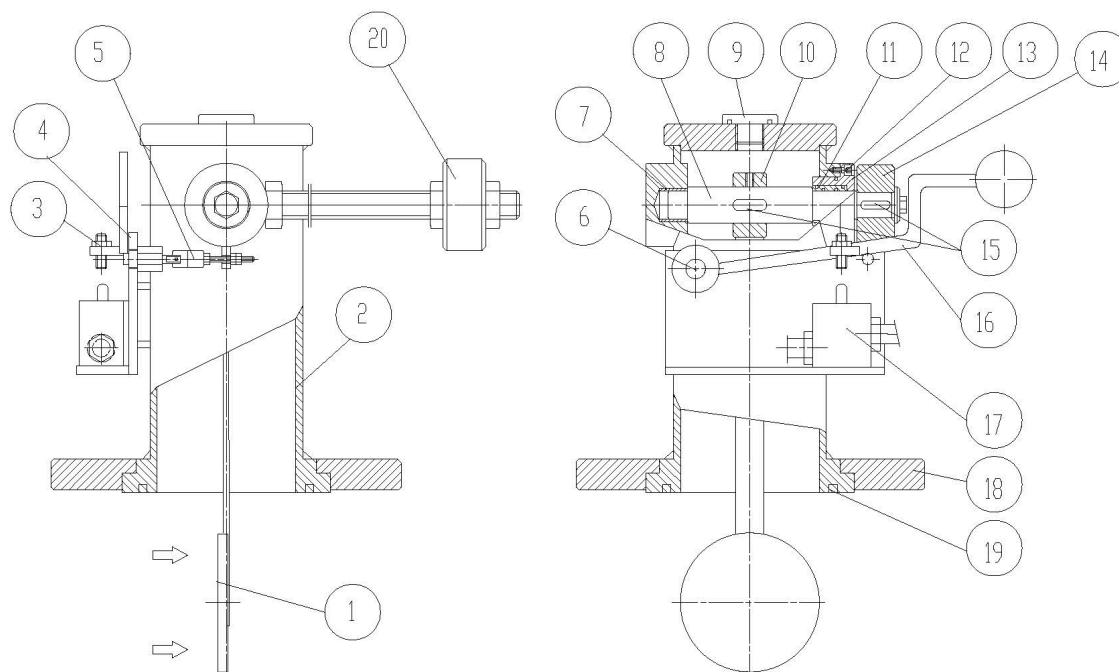
The over-speed detector guarantees an appropriate closing due to over-speed of the fluid. At the same time the closing system is simple and robust offering the maximum safety.



### Características principales

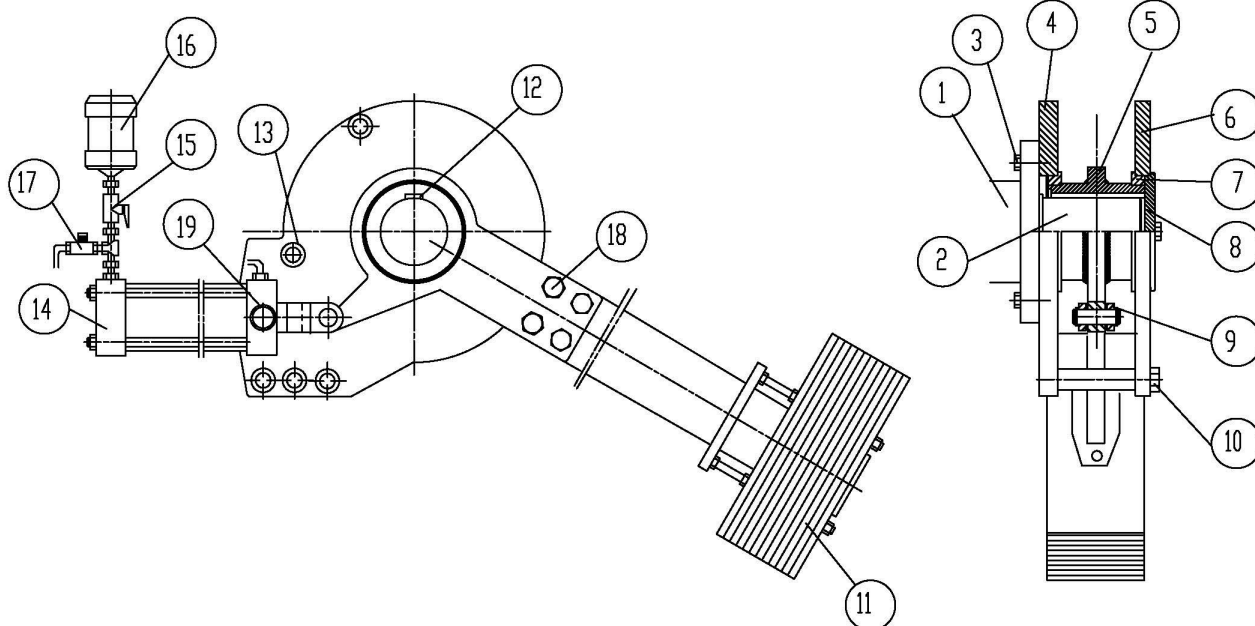
- Full bore.
- Minimum head loss.
- Low maintenance due to robust, simple and compact design.
- Made with top quality materials, certified for drinking water and highly corrosion resistant.
- Easy elastomers replacement.
- Flat lateral gaskets included, body embedded for easy installation.
- Flange connection according to UNE-EN 1092.
- Face to face dimensions series 13 and 14 according to UNE-EN 558.
- Simple or double eccentricity.
- Low friction and maintenance free bearing system.
- Adjustable hydraulic closing system equipped with counterweight, offers safe and smooth closing.
- Adjustable and high accurate over-speed detector.
- Two way fluid over-speed detector.
- Easy installation due to the lifting attachments and compact size.
- Wide manufacturing range DN300-DN3.000 / PN10, PN16, PN25, PN40.
- Optimum performance in clean water and reused water systems up to 60°C.
- Special materials available upon request.
- Other dimensions available upon request.

## Parts lists and materials



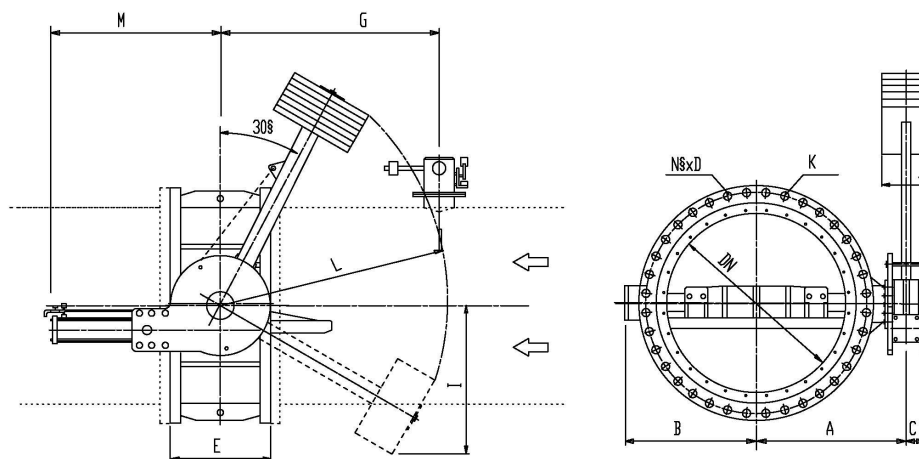
Component	Material
1 Disc	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
2 Shaft	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
3 Regulation Screw	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
4 Mount	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
5 Ratchet	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
6 Hammer shaft	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
7 Bearing	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304) + PTFE
8 Shaft	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
9 Cover	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
10 Bearing	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
11 Bearing	Bronze CC491K to UNE-EN 1982 (ASTM B62 C83600) (or PTFE)
12 Allen screws	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
13 Side cover	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
14 Counterweight mount	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
15 Pin (drag)	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
16 Hammer	Stainless steel 1.4301 to UNE-EN 10088-1 (AISI 304)
17 Hydraulic limit switch	Comercial
18 Flange	Steel S235J
19 O-ring	Elastomer EPDM 70 Shore to UNE-EN 681-1
20 Adjustable counterweight	Steel S235J

## Parts lists and materials



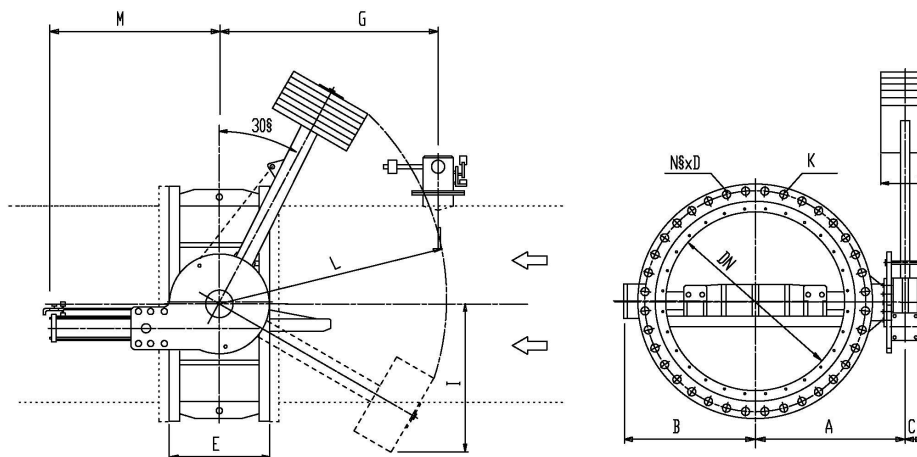
Component	Material
1 Butterfly valve	Tailor-made
2 Valve shaft	Stainless steel 1.4021 to UNE-EN 10088-1 (AISI 420)
3 Screw	Bicromate steel
4 Inner flange	Carbon steel ST44
5 Rod	Carbon steel ST44
6 Upper flange for actuator	Carbon steel ST44
7 Bearing	Bronze CC491K to UNE-EN 1982 (ASTM B62 C83600) (or PTFE)
8 Mounting clamp	Carbon steel ST44
9 Carrying fork	Carbon steel ST44
10 Fixing screw	Bicromate steel
11 Counterweight plates	Carbon steel ST44
12 Pin of drag	Carbon steel Acero F-114
13 Plates separators	Carbon steel ST44
14 Hydraulic cylinder	ST52
15 Shut-off valve	Standard
16 Hydraulic accumulator	Standard
17 Válvula de corte	Comercial
18 Tornillos de fijación del brazo de contrapeso	Acero carbono
19 Casquillo	Permaglide

## Dimensional characteristics



DN	PN	A (mm)	B (mm)	C (mm)	E (mm)	G (mm)	I (mm)	J (mm)	M (mm)	K (mm)	L (mm)	N°xD (mm)
300	10	335	300	180	270	1000	500	200x180	450	410	600	12x23 (M20)
	16	335	300	180	270	1000	500	200x180	450	415	600	12x28 (M24)
	25	335	300	180	270	1000	500	200x180	450	420	600	16x31 (M27)
400	10	405	340	180	310	1200	590	280x200	500	515	820	16x27 (M24)
	16	405	340	180	310	1200	590	280x200	500	525	820	16x30 (M24)
	25	405	340	180	310	1200	590	280x200	500	550	820	16x36 (M33)
500	10	580	420	180	350	1500	700	400x200	650	620	1000	20x27 (M24)
	16	580	420	180	350	1500	700	400x200	650	650	1000	20x33 (M30)
	25	580	420	180	350	1500	700	400x200	650	660	1000	20x36 (M33)
600	10	640	485	200	390	1800	750	400x200	650	725	1100	20x30 (M27)
	16	640	485	200	390	1800	750	400x200	650	770	1100	20x36 (M23)
	25	640	485	200	390	1800	750	400x200	650	770	1100	20x39 (M36)
700	10	645	547	200	292	2100	890	500x260	720	840	1330	24x30 (M27)
	16	645	547	200	292	2100	890	500x260	720	840	1330	24x36 (M33)
	25	645	547	200	292	2100	890	500x260	720	875	1330	24x42 (M39)
800	10	660	590	200	318	2400	940	600x300	720	950	1330	24x33 (M30)
	16	660	590	200	318	2400	940	600x300	720	950	1330	24x39 (M36)
	25	660	590	200	318	2400	940	800x300	890	990	1330	24x48 (M45)
900	10	720	650	230	330	2700	1030	600x300	890	1050	1440	28x33 (M30)
	16	720	650	230	330	2700	1030	600x300	890	1050	1440	28x39 (M36)
	25	720	650	230	330	2700	1030	800x300	890	1090	1440	28x48 (M45)
1000	10	790	700	230	410	3000	1080	600x300	890	1160	1660	28x36 (M33)
	16	790	700	230	410	3000	1080	600x300	890	1160	1660	28x42 (M39)
	25	790	700	230	410	3000	1080	800x300	890	1210	1660	28x52 (M56)

## Dimensional characteristics



DN	PN	A (mm)	B (mm)	C (mm)	E (mm)	G (mm)	I (mm)	J (mm)	M (mm)	K (mm)	L (mm)	N°xD (mm)
1200	10	940	830	250	470	3600	1210	700x350	1010	1380	1850	32x39 (M36)
	16	940	830	250	470	3600	1210	700x350	1010	1390	1850	32x48 (M45)
	25	940	830	250	470	3600	1210	700x350	1010	1420	1850	32x48 (M45)
1300	10	990	890	250	495	3600	1210	700x350	1010	1480	1850	32x42 (M39)
	16	990	890	250	495	3600	1210	700x350	1010	1490	1850	32x48 (M45)
	25	990	890	250	495	3600	1210	700x350	1010	1490	1850	32x62 (M56)
1400	10	1.150	980	250	530	4200	1690	700x350	1280	1590	2100	36x42 (M39)
	16	1.150	980	250	530	4200	1690	700x350	1280	1590	2100	36x48 (M45)
	25	1.150	980	250	530	4200	1690	700x350	1280	1640	2100	36x62 (M56)
1500	10	1.210	1040	250	565	4200	1690	800x350	1280	1705	2100	36x42 (M39)
	16	1.210	1040	250	565	4200	1690	800x350	1280	1705	2100	36x48 (M45)
	25	1210	1040	250	565	4200	1690	800x350	1280	1705	2100	36x62 (M56)
1600	10	1.235	1.115	250	600	4200	1690	850x350	1280	1820	2100	40x48 (M45)
	16	1.235	1.115	250	600	4200	1690	850x350	1280	1820	2100	40x56 (M52)
	25	1.235	1.115	250	600	4200	1750	850x350	1280	1860	2330	40x62 (M56)
1800	10	1.400	1.325	250	725	5000	1690	1000x400	1280	2230	2100	44x48 (M45)
	16	1.400	1.325	250	725	5000	1690	1000x400	1280	2020	2200	44x56 (M52)
	25	1.400	1.325	250	725	5000	1750	1000x400	1280	2070	2330	44x70 (M64)
2000	10	1.500	1.490	250	725	5000	1690	1000x400	1280	2230	2160	48x48 (M45)
	16	1.500	1.490	250	725	5000	1690	1000x400	1280	2230	2200	48x62 (M56)
	25	1.500	1.490	250	725	5000	1690	1000x400	1280	2230	2330	48x70 (M64)