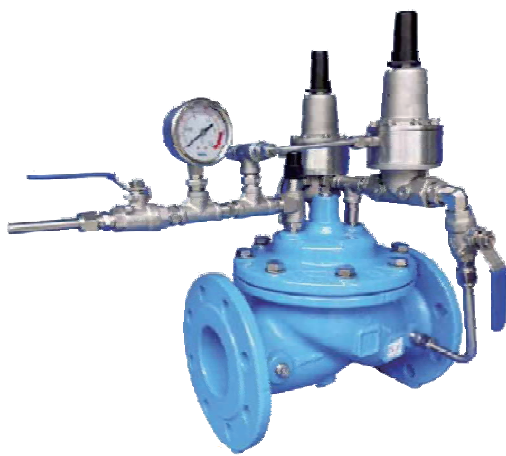


Surge Anticipating Valve

Fig. 1355

**Valve Function**

The Model 1355 Surge Anticipating Valve is indispensable for protection pumps, pumping equipment and all application pipelines from dangerous pressure surges caused by rapid changes of flow velocity within a pipeline. When a power failure take place, the abrupt stopping of the pump can cause dangerous surges in the system which could result in severe equipment damage. Power failure to pump will usually result in a down surge in pressure, followed by an up surge in pressure. The surge control valve opens on the initial low pressure wave diverting the returning high pressure wave from the system. In effect, the valve has anticipated the returning high pressure wave and is open to dissipate the damage causing surge. The valve will then close slowly without generating any further pressure surges.



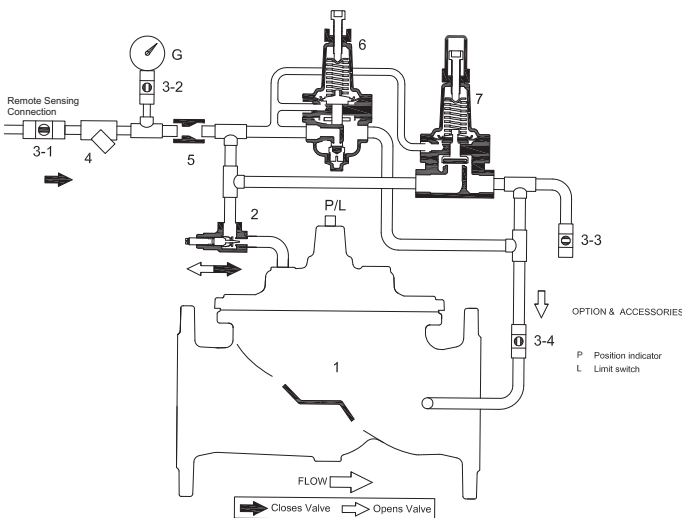
**Valve Standard :**  
Comply with EN1074-5

**Pressure Temperature Ratings**

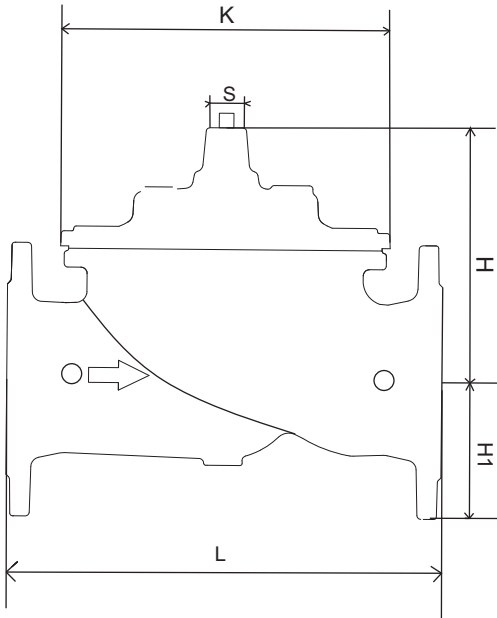
Working pressure(Bar)	10/16/25
Testing Pressure(Bar)	Shell:15/24/37.5
	Seal:11/17.6/27.5
Working Temperature(°C)	-20 to 110°C EPDM
	-11 to 80°C NBR
Suitable Media	Water/Oil

**Material Specification**

Part	Material	Spec.
Body	Ductile Iron	EN-JL1050
Disc Retainer	Ductile Iron	EN-JL1050
	Stainless Steel	Bs970 304S15
Seat	SS/Brass/Bronze	
Seal Ring	EPDM/NBR	
Stem	Stainless Steel	Bs970 304S15
Diaphragm	Nylon+EPDM/NBR	
O-ring	EPDM/NBR	
Bonnet	Ductile Iron	EN-JL1050
Spring	Stainless Steel	
Needle Valve	Brass	Commercial
Ball Valve	Brass	Commercial
Y Strainer	Brass	Commercial
Restriction	Stainless Steel	Bs970 304S15
P20C Low surge Pressure Pilot	Stainless Steel	Bs970 304S15
Pressure Relief Pilot	Stainless Steel	Bs970 304S15



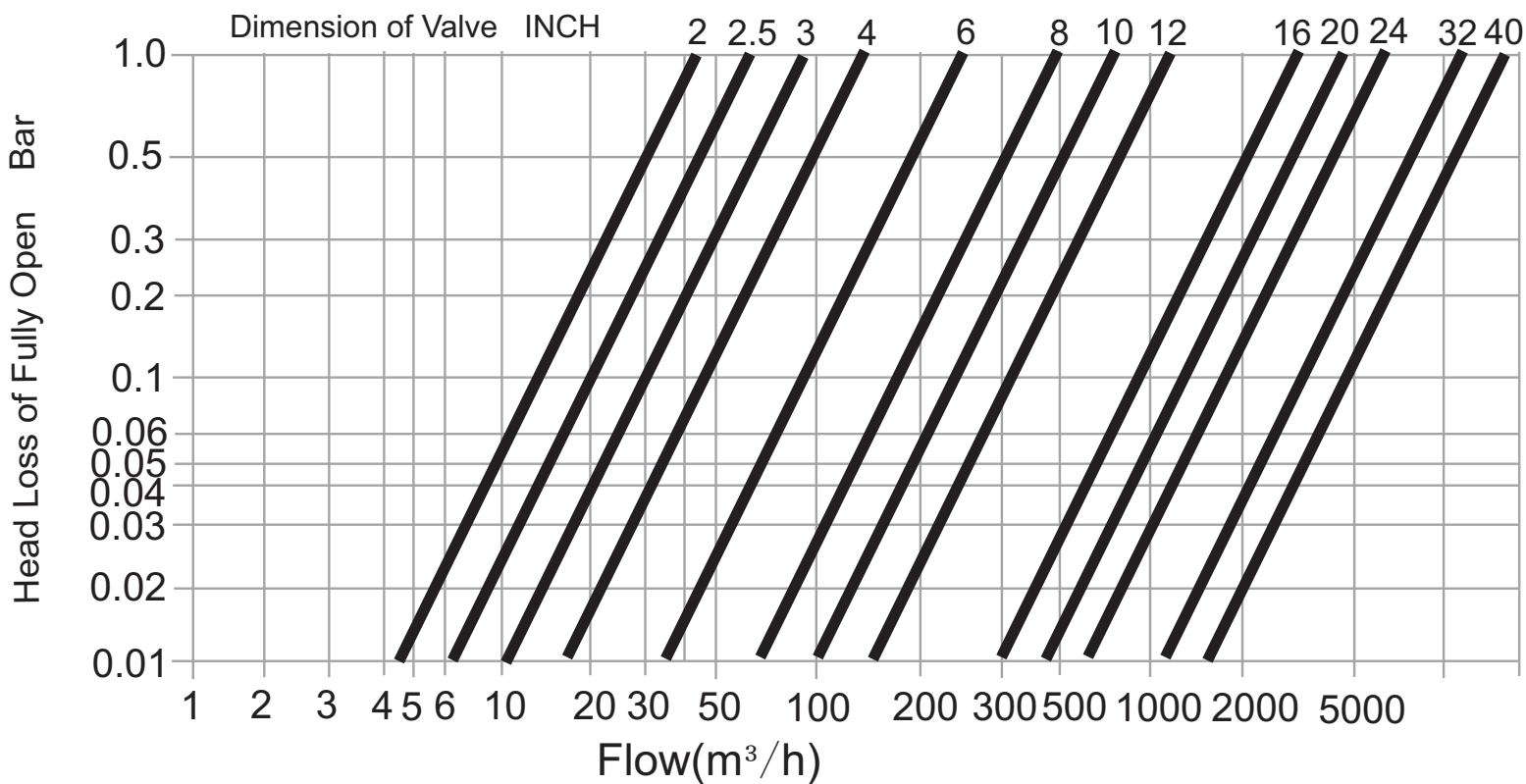
## Surge Anticipating Valve



Main Valve Full ore Dimensions

Size	mm	Dn50	Dn65	Dn80	Dn100	Dn150	Dn200	Dn250	Dn 0 0	Dn400	Dn500	Dn600	Dn800	Dn1000
	inch	2	2.5		4	6	8	10	12	16	20	24	2	40
L	mm	230	290	310	350	480	600	730	850	1100	1250	1450	1850	2250
	inch	9.06	11.42	12.20	16.22	13.78	23.62	28.74	23.70	43.31	49.21	57.09	72.83	88.58
1	mm	85	95	102	112	145	172	205	232	292	360	425	515	630
	inch	3.35	3.74	4.02	4.41	5.71	6.78	8.07	9.13	11.50	14.17	16.73	20.28	24.80
K	mm	139	159	179	214	333	407	476	526	624	720	835	1110	1350
	inch	5.51	6.30	7.09	8.43	13.11	16.02	18.74	20.71	24.57	28.35	32.87	43.70	53.15
K	mm	173	198	226	265	351	436	524	606	741	1002	1308	1755	2231
	inch	6.81	7.80	8.90	10.43	13.82	17.17	20.63	23.86	29.17	39.37	51.50	69.09	87.83
S	inch	3/8	3/8	3/8	3/8	1/2	3/4	1	1	1-1/2	2	2	2	2

Main Valve Flow Chart

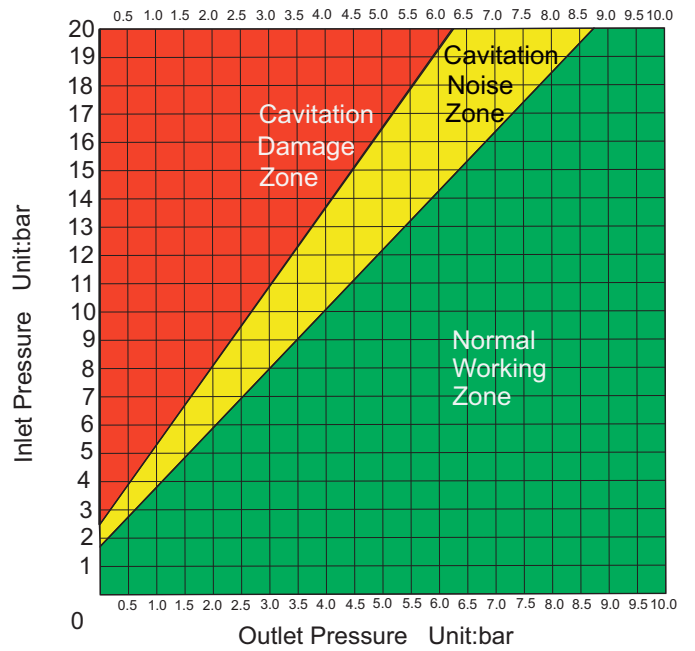


**Cavitation Guide Chart**

This chart is used for guide to proper selection of the pressure drop.

When pressure drop is too big, the velocity of the flow across the seat will be very fast, then cavitation occurs, also with shaking and noise.

The value should be used in the green zone to guarantee continue working.



**Comparasion of pipeline pressure between using and not using this valve.**

