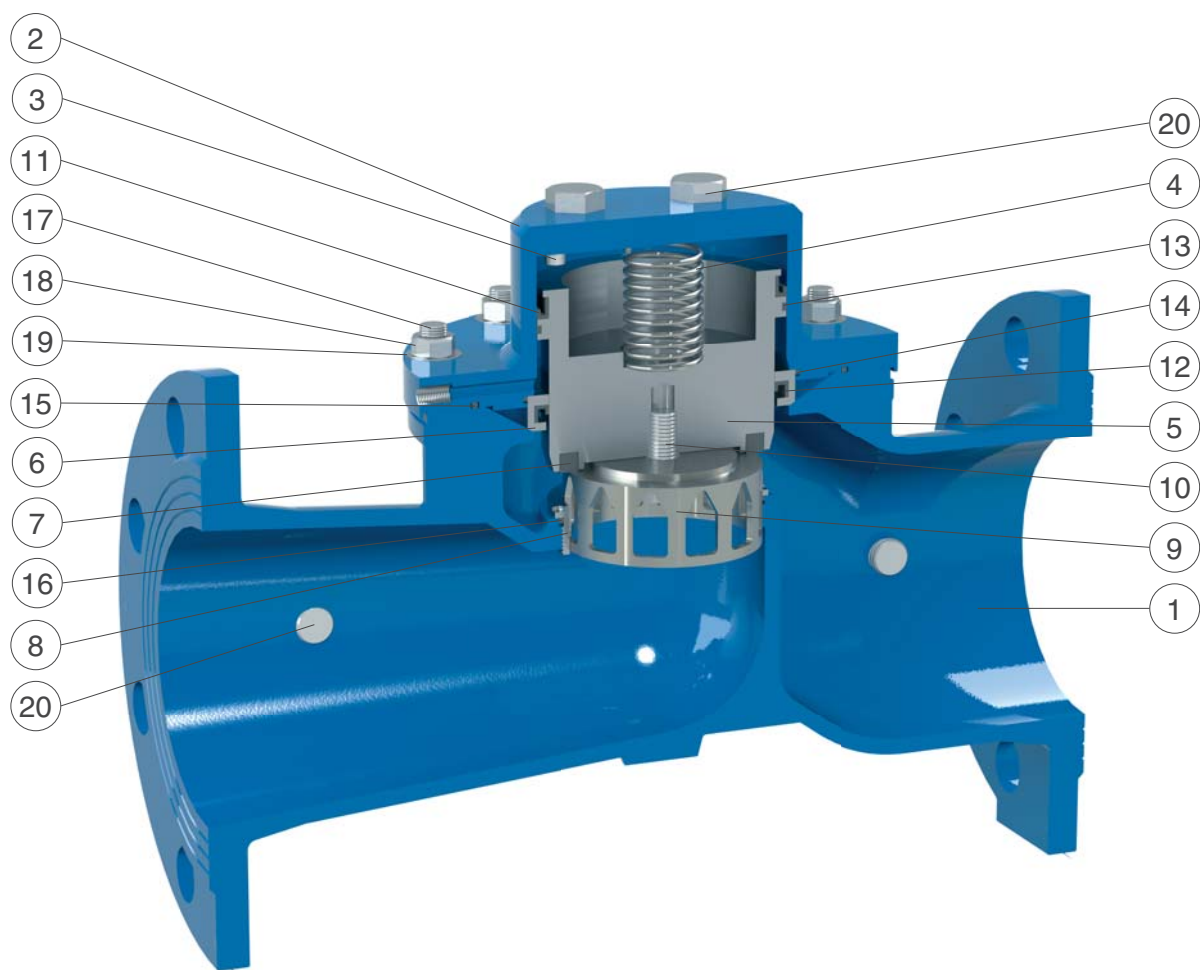


## XLC 600 and 500 - Technical details



N.	Component	Standard material	Optional
1	Body	ductile cast iron GJS 450-10 or GJS 500-7	
2	Cap	painted steel and stainless steel AISI 303	
3	Screws	stainless steel AISI 304	stainless steel AISI 316
4	Spring	stainless steel AISI 302	
5	Piston	stainless steel AISI 303	
6	Bush	stainless steel AISI 303	
7	Plane gasket	NBR	
8	Seat for system AC	stainless steel AISI 303 (316 from DN 200)	stainless steel AISI 316
9	V-port	stainless steel AISI 303 (304 from DN 200)	stainless steel AISI 316
10	Screw with washer	stainless steel AISI 304	stainless steel AISI 316
11	Gasket	NBR	
12	Gasket	NBR	
13	Sliding ring	PTFE	
14	O-ring	NBR	EPDM/Viton
15	O-ring	NBR	EPDM/Viton
16	Seat O-ring	NBR	EPDM/Viton
17	Studs	stainless steel AISI 304	stainless steel AISI 316
18	Nuts	stainless steel AISI 304	stainless steel AISI 316
19	Washers	stainless steel AISI 304	stainless steel AISI 316
20	Pressure outlet taps	stainless steel AISI 316	

The list of materials and components is subject to changes without notice.

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## XLC 600 - Technical data

DN (mm)	40	50	65	80	100	150
Kv (m³/h)	32,5	32,5	56	79	132	312
Stroke (mm)	15	15	18	21	27	43

### Head loss coefficient

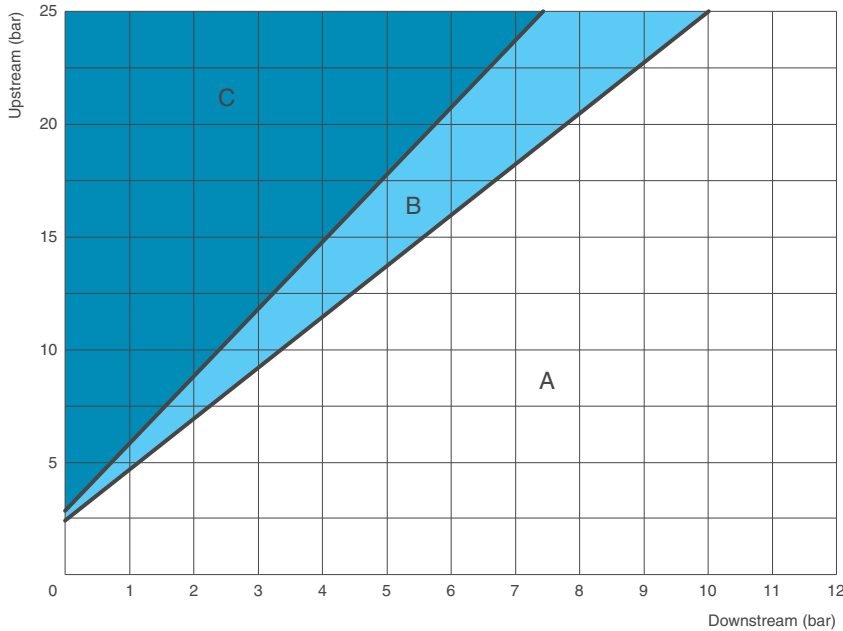
Kv coefficient representing the flow rate which is flowing through the valve fully open, and producing a head loss of 1 bar.

### Cavitation chart

The cavitation analysis is very important since it may lead to substantial damages, in addition to vibration and noise. The cavitation chart has to be used to determine whether the working point obtained by the intersection of the lines, connecting upstream (y axis) and downstream (x axis) pressure conditions, lies within one of the 3 zones to be identified as follows:

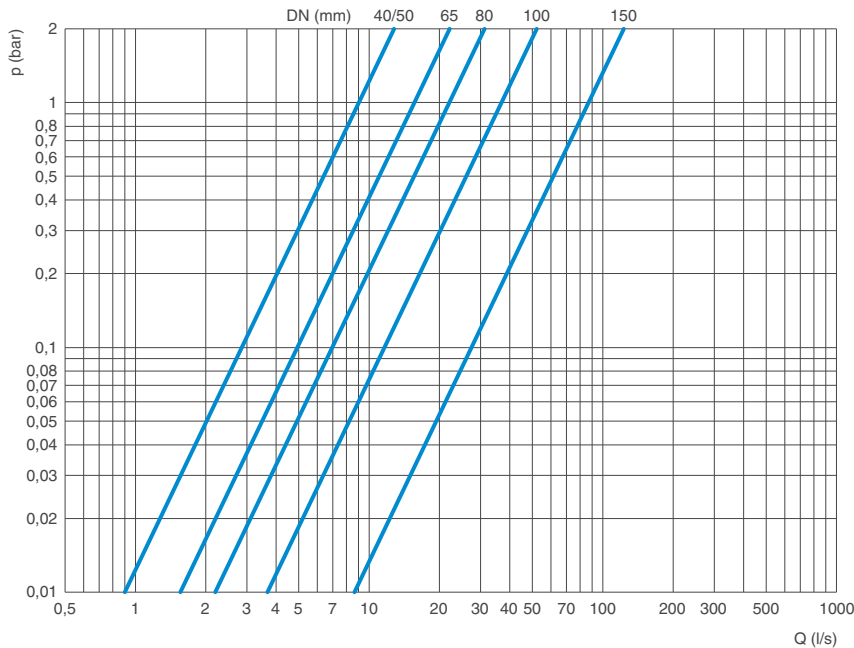
- A: Recommended working conditions;
- B: Noise cavitation;
- C: Damage cavitation.

The chart is to be used for valves modulating with an opening percentage between 35-40% at standard water temperature and elevation below 300 m. More accurate results are determined through the control valves sizing software CSA-CVS.



### Head loss chart

The chart indicates the head loss of XLC automatic control valves fully open versus flow rate in l/s.



### Recommended flow rate

The following chart shows the recommended flow rate for the proper sizing of XLC control valves.

DN (mm)			40/50	65	80	100	150
Flow rate (l/s)	Low head loss (0,1-0,15 bar)	Max.	2,8	4,9	6,9	11	27
		Min.	0,5	0,9	1,4	2,2	4,9
	Recommended	Max.	7,9	14	19	30	67
		Pressure relief	Max.	12	20	30	46

The technical informations are indicative and can change according to the number and dimension of holes.

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## XLC 500 - Technical data

DN (mm)	80	100	125	150
Kv (m <sup>3</sup> /h)	43	93	146	154
Stroke (mm)	15	21	27	27

### Head loss coefficient

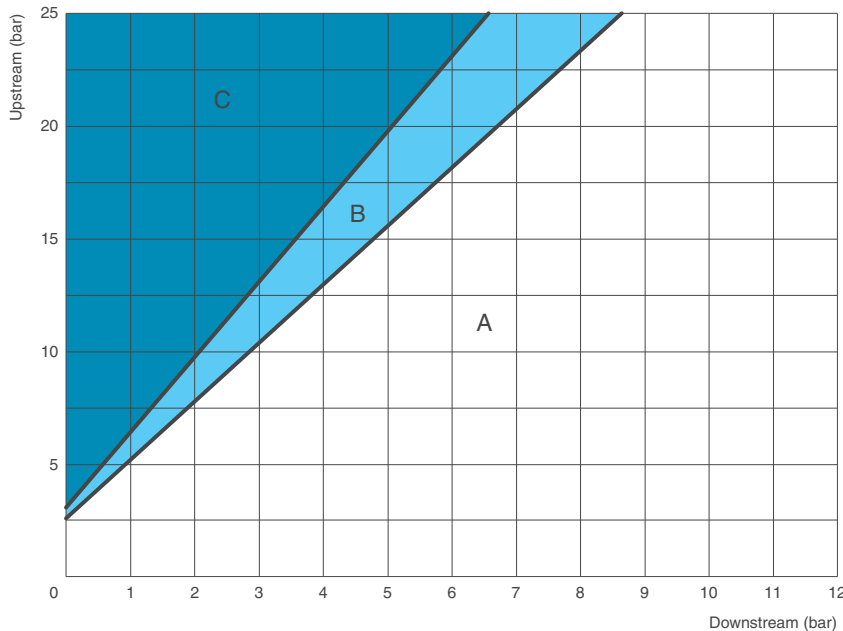
Kv coefficient representing the flow rate which is flowing through the valve fully open, and producing a head loss of 1 bar.

### Cavitation chart

The cavitation analysis is very important since it may lead to substantial damages, in addition to vibration and noise. The cavitation chart has to be used to determine whether the working point obtained by the intersection of the lines, connecting upstream (y axis) and downstream (x axis) pressure conditions, lies within one of the 3 zones to be identified as follows:

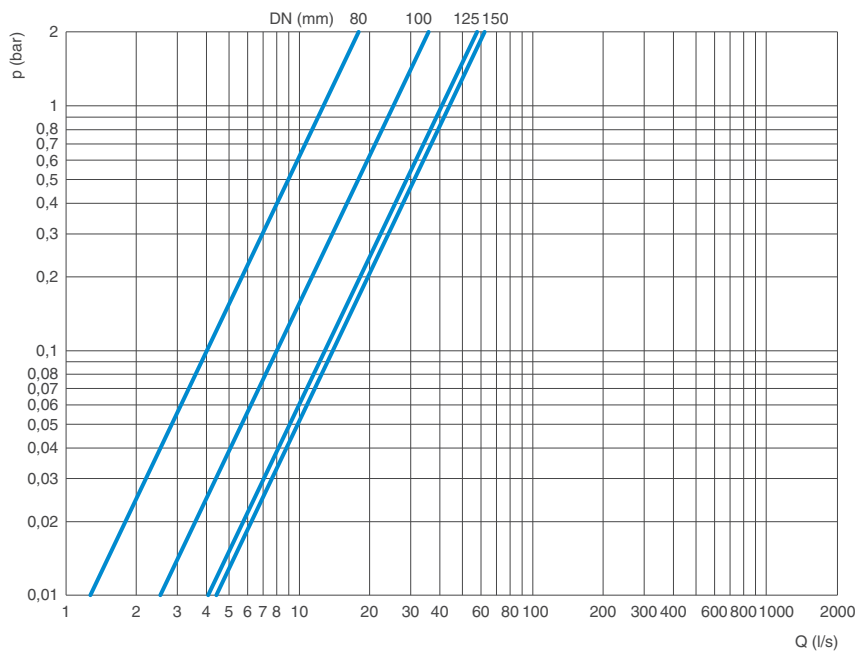
- A: Recommended working conditions;
- B: Noise cavitation;
- C: Damage cavitation.

The chart is to be used for valves modulating with an opening percentage between 35-40% at standard water temperature and elevation below 300 m. More accurate results are determined through the control valves sizing software CSA-CVS.



### Head loss chart

The chart indicates the head loss of XLC automatic control valves fully open versus flow rate in l/s.



### Recommended flow rate

The following chart shows the recommended flow rate for the proper sizing of XLC control valves.

DN (mm)			80	100	125	150
Flow rate (l/s)	Low head loss (0,1-0,15 bar)	Max.	1,2	2,6	4	4,3
		Min.	0,5	1,4	2,2	2,3
	Recommended	Max.	8,8	23	33	35
		Pressure relief	Max.	12	30	46

The technical informations are indicative and can change according to the number and dimension of holes.

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