



700 Series valve

700 Series valve

The 700 series basic hydraulic valve is a diaphragm-actuated, hydraulically-operated, globe valve in either the oblique (Y) or angle pattern design. This design ensures that cavitation is reduced and, pressure loss is up to 30% less than from other control valves. The perfected design meets the requirements for drinking water distribution on an urban scale and in buildings, wastewater, fire protection systems, industry and water flows in general. The valve comprises two major components: the body seat assembly and the actuator assembly. The actuator assembly is unitized and is removable from the body as an integral unit. It consists of both an upper and a lower control chamber. Due to this design the valve is maintenance friendly and can be done without removing the unit from the installation. We can advise you based on the required flow rate, functions, quality marks and applications.

The advantages of 700 Series valves:

- Low pressure loss due to semi-straight flow
- Protected diaphragm
- Adjustable closing speed to prevent water hammer
- Excellent cavitation resistance
- Maintenance-friendly
- Exceptional pressure control stability
- Opens at low inlet pressure

The 700 Series valves come in 3 varieties:

- 700: The standard 700 Series
- 700 EN: Full bore throughput for lower pressure loss
- 700 ES: Anti-cavitation valve with greater cavitation resistance for conditions with greater pressure loss.



Subject to modifications
No liability accepted for errors or misprints



700 Series valve Technical data

Specifications:

- Max. temperature: 80 °C
- Connection: flange
- Pressure class: PN16 and PN25

Materials:

- Body and cover: cast iron with epoxy coating (Option: steel, stainless steel, bronze, duplex, NAB, SMO, titanium)
- Spring: stainless steel
- Diaphragm: NBR, nylon-reinforced; Options: EPDM, FPM

Models:

- Sizes straight: 1½" - 48" DN40 - DN1200
- Sizes (angled): 1½" - 18" DN50 - DN450
- Sizes straight EN: 2" - 12" DN50 - DN300
- Sizes straight ES: 1½" - 24" DN40 - DN600

Functions:

- Both hydraulic and electrical opening and closing
- Pressure reducing
- Pressure sustaining
- Flow limiting
- Level control for reservoirs
- Check valve
- Pump control valve
- Water hammer arrestor

Options:

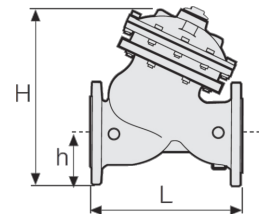
- Combination of functions
- Polyester coating
- Various materials
- Various flange standards
- Various solenoids
- N.O. version-electrically closing
- Various diaphragm rubbers
- Valve position indicator
- Third backup diaphragm chamber
- Anti-cavitation cage
- Other options on request



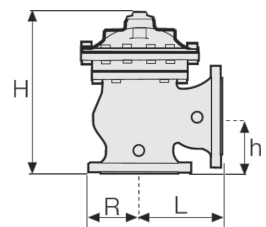
700 Series valve Technical data

700 series models with flange

700 globe		1½"	2"	2½"	3"	4"	6"	8"	10"	12"	14"
L	mm	205	210	222	250	320	415	500	605	725	733
H	mm	239	244	257	305	366	792	584	724	840	866
h	mm	78	83	95	100	115	143	172	204	242	268
Width	mm	155	165	178	200	223	320	390	480	550	550
Weight	kg	9,1	10,6	13	22	37	75	125	217	370	381
CCDV ¹	ltr	0,125	0,125	0,125	0,3	0,45	2,15	4,5	8,5	12,4	12,4
KV ²	m ³ /h	42	50	55	115	200	460	815	1250	1850	1990

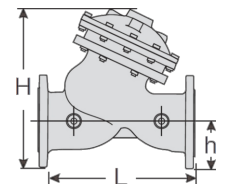


700 angled		1½"	2"	2½"	3"	4"	6"	8"	10"	12"	14"
L	mm	124	124	149	152	190	225	265	320	396	400
H	mm	227	227	251	281	342	441	545	633	777	781
h	mm	85	85	109	102	127	152	203	219	273	279
Width	mm	155	155	178	200	222	320	390	480	550	550
Weight	kg	9,5	10	12	22	35	71	118	205	350	370
CCDV ¹	ltr	0,125	0,125	0,125	0,3	0,45	2,15	4,5	8,5	12,4	12,4
KV ²	m ³ /h	46	55	61	127	220	506	897	1375	2035	2189

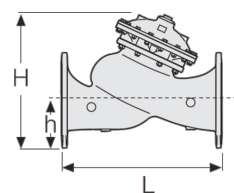


700-EN		2"	3"	4"	6"	8"	10"	12"
L	mm	230	310	350	480	600	730	850
H	mm	244	305	369	500	592	733	841
h	mm	82,5	100	118	150	180	213	243
Width	mm	165	200	235	320	390	480	550
Weight	kg	9,7	21	31	70	115	198	337
CCDV ¹	ltr	0,125	0,3	0,45	2,15	4,5	8,5	12,4
KV ²	m ³ /h	50	115	200	460	815	1250	1850

1: Control Chamber Displacement Volume
2: KV value: valve flow coefficient (flow in m³/h at 1 bar pressure differential)



700-ES		1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"	16"
L	mm	230	230	290	310	350	400	480	600	730	850	1100
H	mm	240	250	250	260	320	375	420	510	605	725	895
h	mm	80	90	100	105	125	142	155	190	220	250	320
Width	mm	150	165	185	200	235	270	300	360	425	530	626
Weight	kg	10	10,8	13,2	15	26	40	55	95	145	255	436
CCDV ¹	ltr	0,125	0,125	0,125	0,125	0,3	0,45	0,5	2,15	4,5	8,5	12,4
KV ²	m ³ /h	54	57	60	65	145	215	395	610	905	1520	2250



700 series models with thread

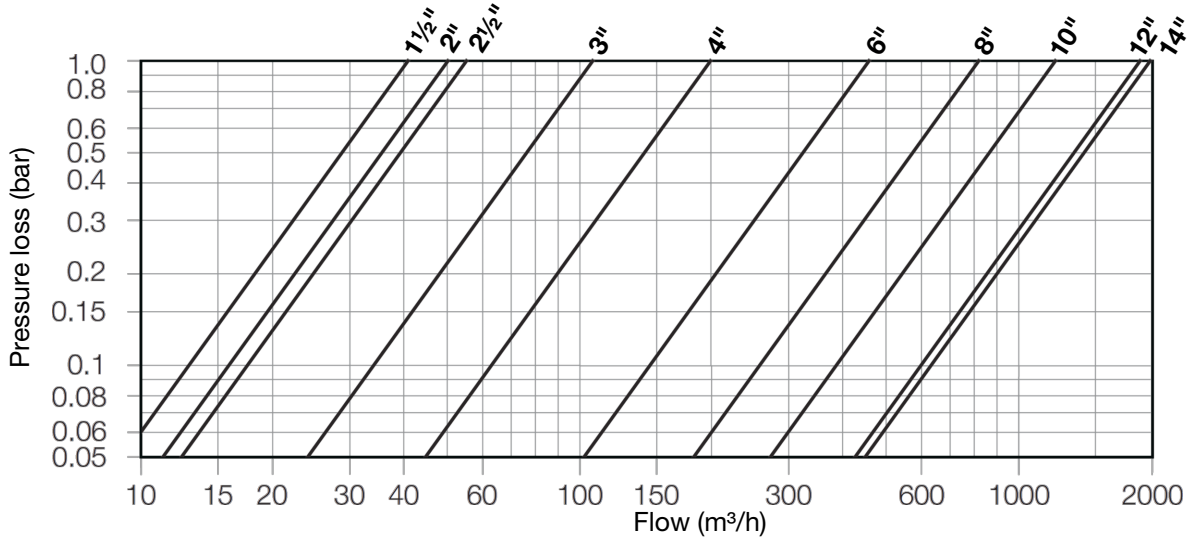
700 globe		1½"	2"	2½"	3"	700 angled		2"	2½"	3"
L	mm	155	155	212	250	L	mm	121	140	159
H	mm	201	202	209	264	H	mm	225	242	294
h	mm	40	40	48	56	h	mm	83	102	115
Width	mm	122	122	122	163	Width	mm	122	122	163
Weight	kg	5,5	5,5	8	17	Weight	kg	5,5	7	15
CCDV ¹	ltr	0,125	0,125	0,125	0,3	CCDV ¹	ltr	0,125	0,125	0,3
KV ²	m ³ /h	42	50	55	115	KV ²	m ³ /h	55	61	127



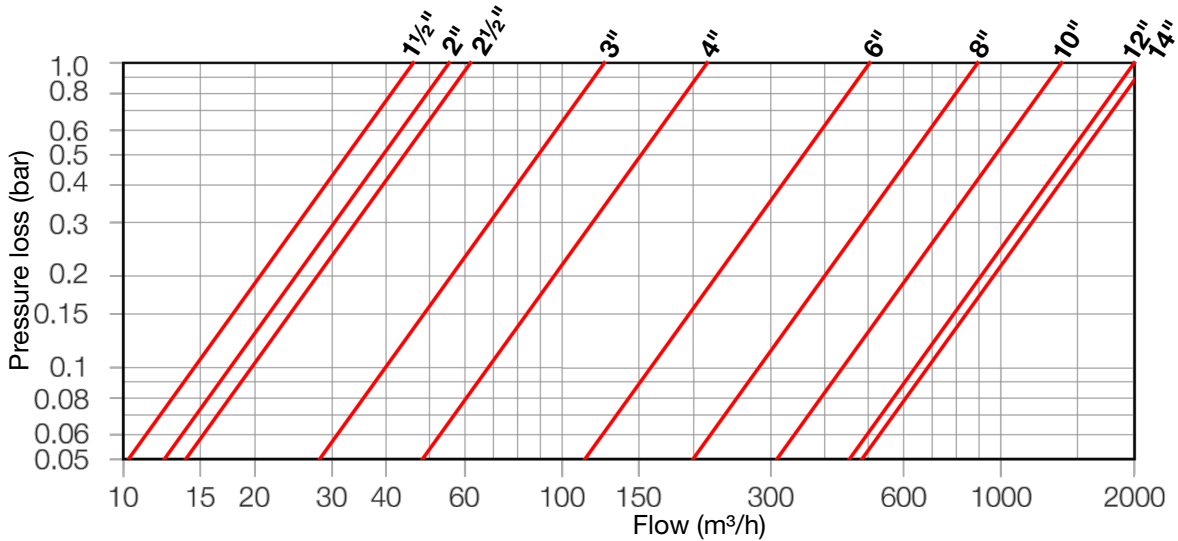


700 Series valve Technical data

Flow diagram for completely open globe (straight) 700 and 700 EN valves:



Flow diagram for completely open angled 700 valves:



Flow diagram for completely open globe (straight) 700 ES valves:

