

WW

6"

720

EN

55

Y

C

16

Sector	Code
Waterworks	WW

Model	Code
SIGMA	EN
SIGMA	ES

Size	
700-EN	

DN40	1.5"
DN50	2"
DN65	2.5"
DN80	3"
DN100	4"
DN150	6"
DN200	8"
DN250	10"
DN300	12"
DN400	16"

Size	
700-ES	

DN65	2.5"
DN80	3"
DN100	4"
DN125	5"
DN150	6"
DN200	8"
DN250	10"
DN300	12"
DN350	14"
DN400	16"
DN450	18"
DN500	20"
DN600	24"

Primary Feature	Code
Basic Valve (Double Chambered Actuator)	700
Basic Valve (Single Chambered Actuator)	705
Solenoid Controlled Valve	710
Electronic Control Valve	718
Pressure Management Valve, Flow Compensated PRV	7PM
Pressure Reducing Control Valve	720
Pressure Reducing & Sustaining Valve	723
Differential Pressure Reducing Valve	726
Flow Control Valve, Constant Downstream Pressure	727
Pressure Sustaining/Relief Valve	730
Pressure Relief Valve, Quick Type	73Q
Pressure Sustaining Valve Remote Sensing Type	730R
Surge Anticipating Valve	735
Differential Pressure Sustaining Valve	736
Booster Pump Control Valve, Double Chambered Actuator	740
Booster Pump Control & Pressure Reducing Valve	742
Booster Pump Control & Pressure Sustaining Valve	743
Deep Well Pump Electric Control Valve	745
Booster Pump & Flow Control Valve	747
Pump Circulation & Pressure Sustaining Valve	748
Level Control Valve	750
Level Control & Pressure Sustaining Valve	753
Level & Flow Control Valve	757
Level Sustaining Valve (Reservoir Outlet)	75A
Flow Control Valve	770
Flow Control & Pressure Reducing Valve	772
Flow Control & Pressure Sustaining Valve	773
Flow Control, Pressure Reducing & Sustaining Valve	775
Burst Control Valve (Excessive Flow)	790
Burst Control & Pressure Reducing Valve	792
Burst Control & Pressure Sustaining Valve	793
Safety Valve (Reservoir Outlet)	79A
Check Valve (Lift Type)	70N*
Strainer (Stone and Gravel Trap)	70F*

Other primary features available on request.
* Available in 700-EN only

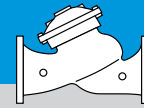
Additional Feature (Multiple Options Permitted)	Code
No Additional Feature	00
Closing and Opening Speed Control	03
Hydraulic Override	09
High Sensitivity Pilot	12*
Electronic Control	18
Flow Control Constant Downstream Pressure	2U
Check Feature	20
Pressure Reducing	22
Independent Lift Check	25
Pressure Sustaining	33
Relief Override	3Q
Closing at Pressure Rise	41
Electrically Selected Multi-Level Setting	45
Downstream Over Pressure Guard	48
Closing Surge Prevention	49
Motorized Pilot	4S
Electronic Multi-Level Setting - Type 4R (water)	4R
Electronic Multi-Level Setting - Type 4T (air)	4T
BEC PM1 Pressure Management Controller	4V
2-Way Hydraulic Relay	50
3-Way Hydraulic Relay	54
Solenoid Controlled	55
Electric Override	59
w/o Electric Float (65)	6E
w/o Hydraulic Float (60/67)	6H
Modulating Horizontal Float	60
Bi-Level Electric Float	65
Bi-Level Vertical Float	66
Modulating Vertical Float	67
Bi-Directional Flow	70
Level Control valve Options	
Altitude Pilot	80*
Modulating Altitude Pilot	82*
Sustaining Altitude Pilot	83*
Bi-Level Altitude Control	86*
Altitude Control with Bi-Directional Flow	87*
Setting Range	
2-6 meter; 7-20 feet	M1
2-14 meter; 7-46 feet	M6
5-22 meter; 17-72 feet	M5
15-35 meter; 49-115 feet	M4
25-70 meter; 82-230 feet	M8
Hydraulic Positioning	85
Burst Control	90
Closing at Downstream Pressure Drop	91
Single Cavitation Cage	C1
Double Cavitation Cage	C2
Triple Chamber Valve	TC
Panel Mounted Control	L1
PRV Low Flow By-Pass	2B
Proportional	PD
Flow Meter**	
Battery Powered	T1
90-264V AC Powered	T2
12-24V AC-DC Powered	T3
90-264V AC Powered with GSM	T4
12-24V AC-DC Powered with GSM	T5
Battery Powered with 10m cable	T6
Pressure Management	PM
Dual Control System	X2
Drinking Water Compliance	
WRAS	D1
DVGW	
ACS	
GOST	
BELGAQUA	
PZH	
BULGARCONTROLA	
SVGW	
NSF 61/372	D2
AS 5081	D3

Pattern	Code
Oblique	Y

Construction Material	Code
Ductile Iron	C

End Connection	Code
ISO 7005 PN10	10
ISO 7005 PN16	16
ISO 7005 PN25	25
ISO 7005 PN16/25	26
ANSI #150-RF	A5
ANSI #300-RF	A3
ANSI #150-FF	a5
ANSI #300-FF	a3
ABNT PN10	B1
ABNT PN16	B6
ABNT PN25	B2
AS 4087 PN16	SA
AS 4087 PN35	SB
AS 2129 - C	SC
AS 2129 - D	SD
AS 2129 - E	SE
AS 2129 - F	SF
AS 2129 - H	SH
BS 10 - D	BD
BS 10 - E	BE
BS 10 - H	BH
JIS B2239 10K	J1
JIS B2239 16K	J6
JIS B2239 20K	J2
KSB-1511-10K	K0
KSB-1511-16K	K6
KSB-1511-20K	K4
KSD-3578-F12	K1
KSD-3578-F15	K5
KSD-3578-F20	K2
Undrilled Type A	OA
Undrilled Type B	OB
Undrilled Type C	OC

Other additional features available on request.
* Select Setting Range
** Only for 3"-24" Valves



EB

4AC

NN

V

Voltage	Main Valve Position (When Solenoid De-energized)	Code
24VAC/50Hz	- Normally Closed	4AC
24VAC/50Hz	- Normally Open	4AO
24VAC/50Hz	- Last Position	4AP
24VAC/60Hz	- Normally Closed	46C
24VAC/60Hz	- Normally Open	46O
24VAC/60Hz	- Last Position	46P
24VDC	- Normally Closed	4DC
24VDC	- Normally Open	4DO
24VDC	- Last Position	4DP
24VDC	- Latch Solenoid	4DS
220VAC/50-60Hz	220VAC/50-60Hz - Last Position	2AP
220VAC/50-60Hz	220VAC/50-60Hz - Normally Closed	2AC
220VAC/50-60Hz	220VAC/50-60Hz - Normally Open	2AO
220VDC	- Normally Closed	2DC
220VDC	- Normally Open	2DO
220VDC	- Latch Solenoid	2DS
110VAC/50-60Hz	110VAC/50-60Hz - Normally Closed	5AC
110VAC/50-60Hz	110VAC/50-60Hz - Normally Open	5AO
110VDC	- Normally Closed	5DC
110VDC	- Normally Open	5DO
110VDC	- Latch Solenoid	5DS
12VDC	- Normally Closed	1DC
12VDC	- Normally Open	1DO
12VDC	- Last Position	1DP
12VDC	- Latch Solenoid	1DS

Tubing & Fittings	Code
St. St. 316 Tubing & Fittings	NN
Copper Tubing & Brass Fittings	CB
Plastic Reinforced Tubing & Brass Fittings	PB

Additional Attributes (Multiple Options Permitted)	Code
Double Chamberd - Active	B
In-Line Filter	C
S.S 316 Actuator Internal Assembly	D
EPDM Elastomers (Seals & Diaphragm)	E1
VITON Elastomers (Seals & Diaphragm)	E2
Large Control Filter	F
Extra Large Control Filter	F1
Two Large Control Filters	FF
Two Extra Large Control Filters	F1F1
High Grade Bearing & Stem	K
Balancing Piston Assembly	G
Valve Position Indicator	I
Junction Box	J
Lifting Spring	L
Flow Stem	M
S.S.316 All Control Accessories	N
Flow Over The Seat	O
Pressure Switch	P
Valve Position Transmitter*	Q
Valve Position Transmitter For Side Indicator*	Q2
Delrin Bearing	R
Electric Limit-Switch*	S
Electric Limit Switch For for Side Indicator*	S2
Double Limit Switch Assy*	SS
S.S 316 Internal Trim Closure & Seat	T
Differential Flow Sensor (Orifice)	U

V-Port Throttling Plug	V
3W Conrol	X
3 Position Manual Control Selector	Z
Pressure Separator	d
External Control Pressure	e
Pitot Tube	j
St.St.316 Small Control Accessories (Check/Needle/Y" Filter)	n
Closing Spring	q
PVDF Bearing	r
Pressure Gauges	6
Double Pressure Gauge	66
S.S Pressure Gauge	6n
Double S.S Pressure Gauges	6n6n

* Include I

Coating	Code
Epoxy FB Dark Blue	EB
Epoxy FB Dark Blue and UV protection	EV

Other coatings available on request.

Reduction Ratios					
700-EN			700-ES		
Size	Flat Disk	V-Port	Size	Flat Disk	V-Port
DN40; 1.5"	2.8	3.0	DN65; 2.5"	2.8	3.0
DN50; 2"	2.8	3.0	DN80; 3"	2.8	3.0
DN65; 2.5"	2.8	3.2	DN100; 4"	2.6	2.8
DN80; 3"	2.7	3.0	DN125; 5"	2.5	2.8
DN100; 4"	2.4	2.6	DN150; 6"	2.4	2.7
DN150; 6"	2.4	2.6	DN200; 8"	2.4	2.6
DN200; 8"	2.3	2.5	DN250; 10"	2.3	2.5
DN250; 10"	2.3	2.5	DN300; 12"	2.3	2.5
DN300; 12"	2.2	2.4	DN350; 14"	2.3	2.5
DN400; 16"	2.2	2.3	DN400; 16"	2.2	2.4
			DN450; 18"	2.2	2.3
			DN500; 20"	2.2	2.3
			DN600; 24"	2.2	2.3

The reduction ratios are based on flow velocity of 2.0-3.0 m/sec. Reduction ratio may vary at extreme flow velocity & upstream pressure.