



S100 68F Series



Fire Protection



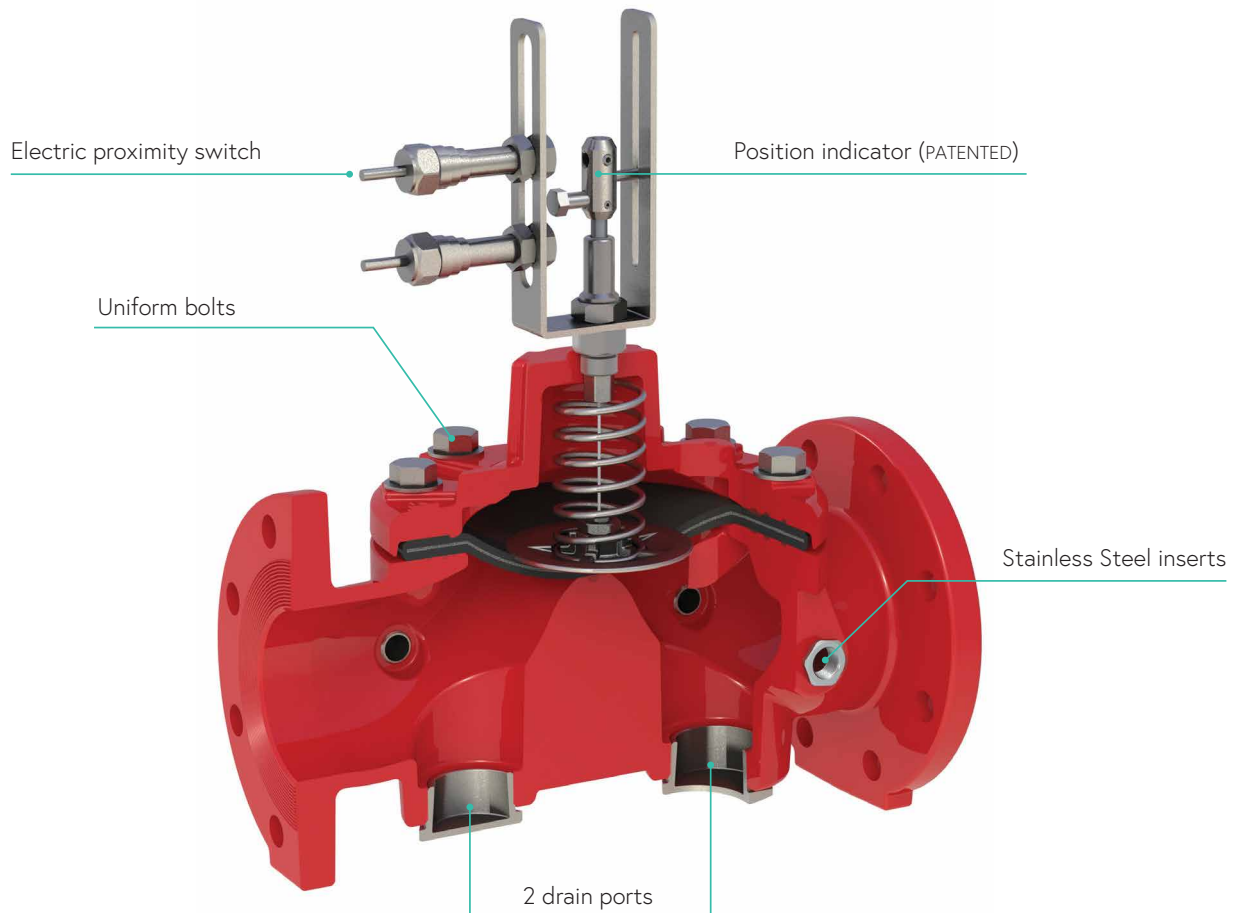
The OCV S100 68F series globe valve, is a hydraulically actuated, direct seal diaphragm-operated control valve, engineered specifically for demanding fire protection systems. The simple valve design is comprised of three major components: Body, Cover and Diaphragm Assembly; enabling superior performance, high reliability and durability. Its high flow capacity with minimal pressure losses, deliver fast, reliable operation when it matters most.

Specifically designed for Deluge and Pre-action systems, the OCV S100 68F is certified to meet rigorous fire protection FM standards. In addition, it is also suitable for use with other common fire extinguishing systems, such as monitoring, pressure relief/sustaining and more. These valves also work well in various kinds of liquids, including concentrate and foam solution, seawater and others.

A unique standout feature of the valve design is its FM-patented Integrated Electrical Visual Indicator, enabling real-time status feedback directly to the Fire & Gas (F&G) control panel - enhancing safety, monitoring and system integration.



Standout Features

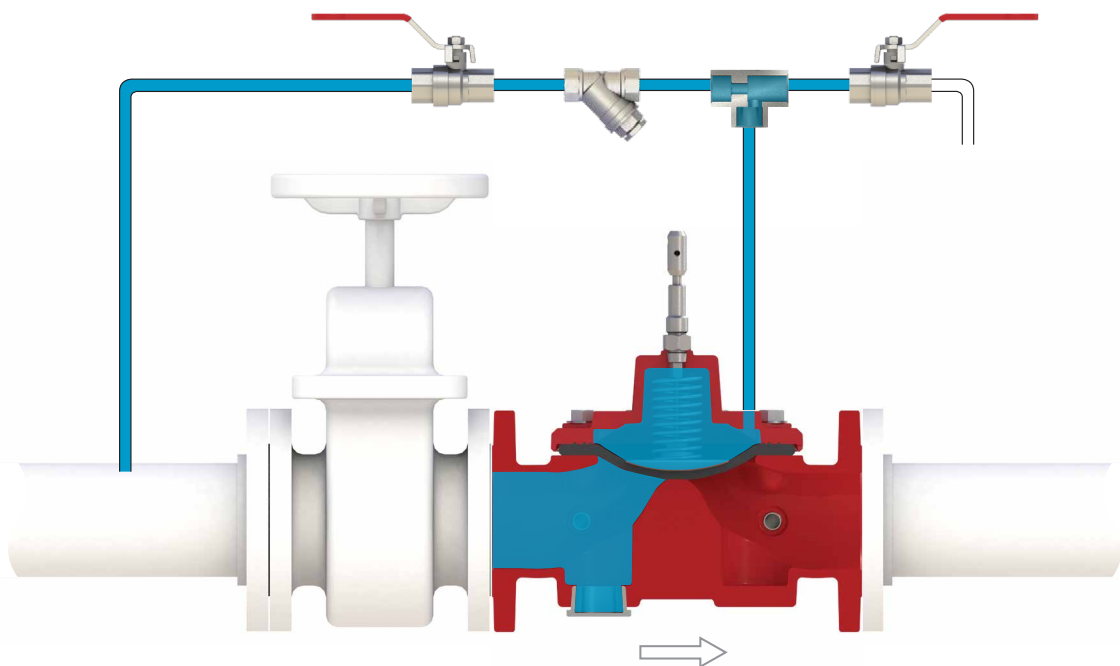


Features and Benefits

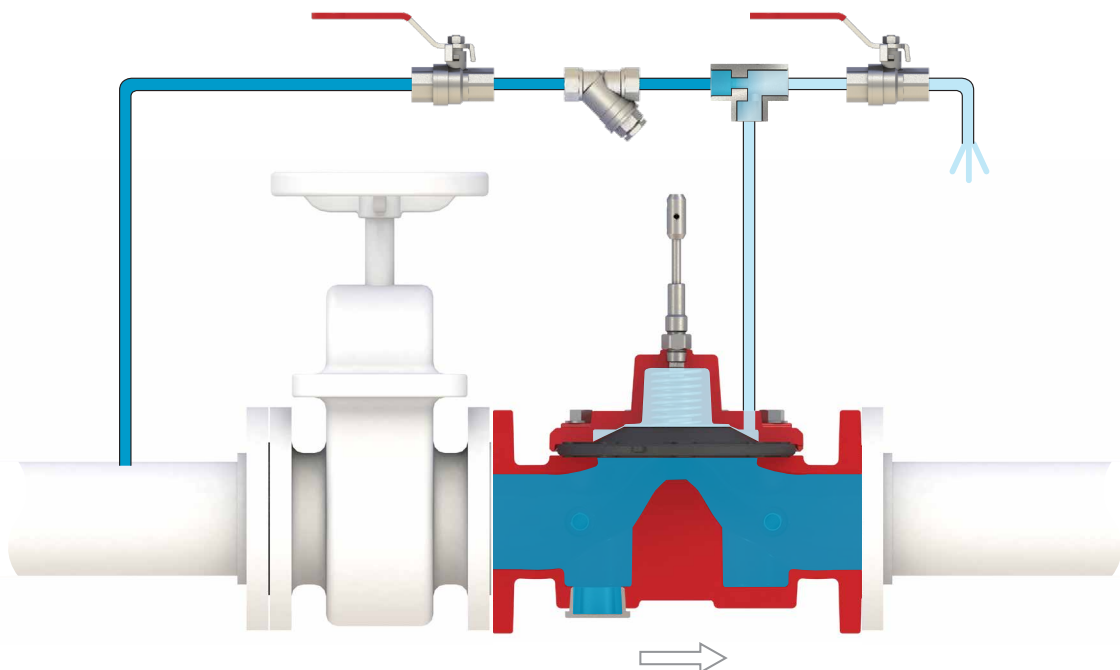
 FM-approved position indicator (PATENTED)	Integrated electrical visual position indicator for real-time status feedback to Fire & Gas control panel
2 drain ports	Enhanced installation flexibility & simplified commissioning
Preformed, reinforced diaphragm	Provides extremely reliable, long-lasting performance
Simple design	3 main parts, low maintenance costs, improved reliability
Fail-safe design (Poka-Yoke)	Simplified assembly; prevents maintenance reassembly errors
Uniform bolts	Fewer parts for easy assembly & maintenance or spare parts management
Large control port connections	Optional Stainless Steel port sleeves

General Operation

Standby Position (closed)



Manually Actuated (open)



FM Approved application Models

OCV S100 68F DE\EL-MR

Pre-action Valve
Single or Double-interlock
Electrically Actuated
Manually Reset



OCV S100 68F DE\PTMR

Deluge Valve
Pneumatically Actuated
Manually Reset



OCV S100 68F DE\EL-MR

Deluge Valve
Electrically Actuated
Manually Reset



OCV S100 68F DE\PTMR\PRF

Deluge Valve Pressure Reducing
Pneumatically Actuated
Manually Reset



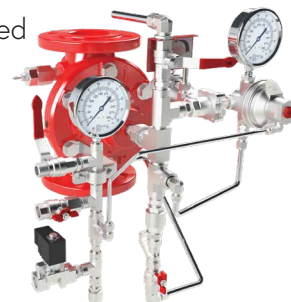
OCV S100 68F DE\RC-MR

Deluge Valve
Electrically Actuated
Manually Reset



OCV S100 68F DE\EL\PTMR\PRF

Deluge Valve, Pressure Reducing
Electrically / Pneumatically Actuated
Manually Reset



OCV S100 68F DE\RC-LC

Deluge Valve
Electrically Actuated
Remote Reset



OCV S100 68F DE\EL\PTMR

Deluge Valve
Electrically / Pneumatically Actuated
Manually Reset



OCV S100 68F DE\RCL\PRF

Deluge Valve, Pressure Reducing
Electrically Actuated
Manually Reset



Parts List and Specifications

No.	Part
1	Bolts kit
2	Bonnet
3	Spring
4	Seat Disc
5	Diaphragm
6	Valve Body
7	Drain Plug

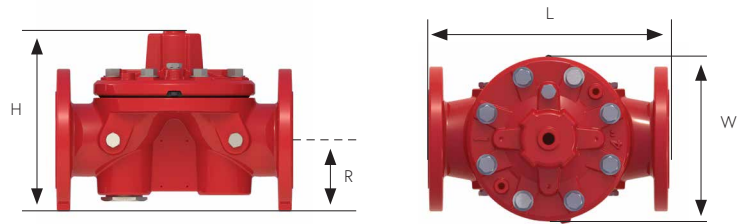


Optional Components

- Position Indicator
- Limit/Proximity Switch Assembly
- Alarm Test Trim
- Drain Valve (upstream plugged standard, downstream upon request)
- Open/Close Speed Control
- Block & Bleed Valves for Pressure Sensing Components
- PPCS for Pneumatically Actuated Models
- Stainless Steel inserts

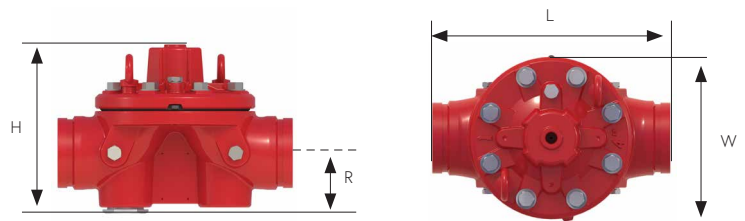


Dimensions and Weight



Flanged model

Valve Size	DN50 (2")		DN65 (2½")		DN80 (3")		DN100 (4")		DN150 (6")		DN200 (8")	
Dimensions	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
L	245	9.63	334	13.19	334	13.19	384	15.19	480	18.88	600	23.63
H	178	7	251	9.88	295	11.63	292	11.50	368	14.50	470	18.50
R	83	3.31	96	3.88	100	3.88	115	4.63	140	5.50	183	7.19
W	173	6.88	236	9.31	236	9.31	267	10.50	327	12.88	402	15.81
Weight	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs
	10	22	20	44	21	46	33	73	52	115	92	203

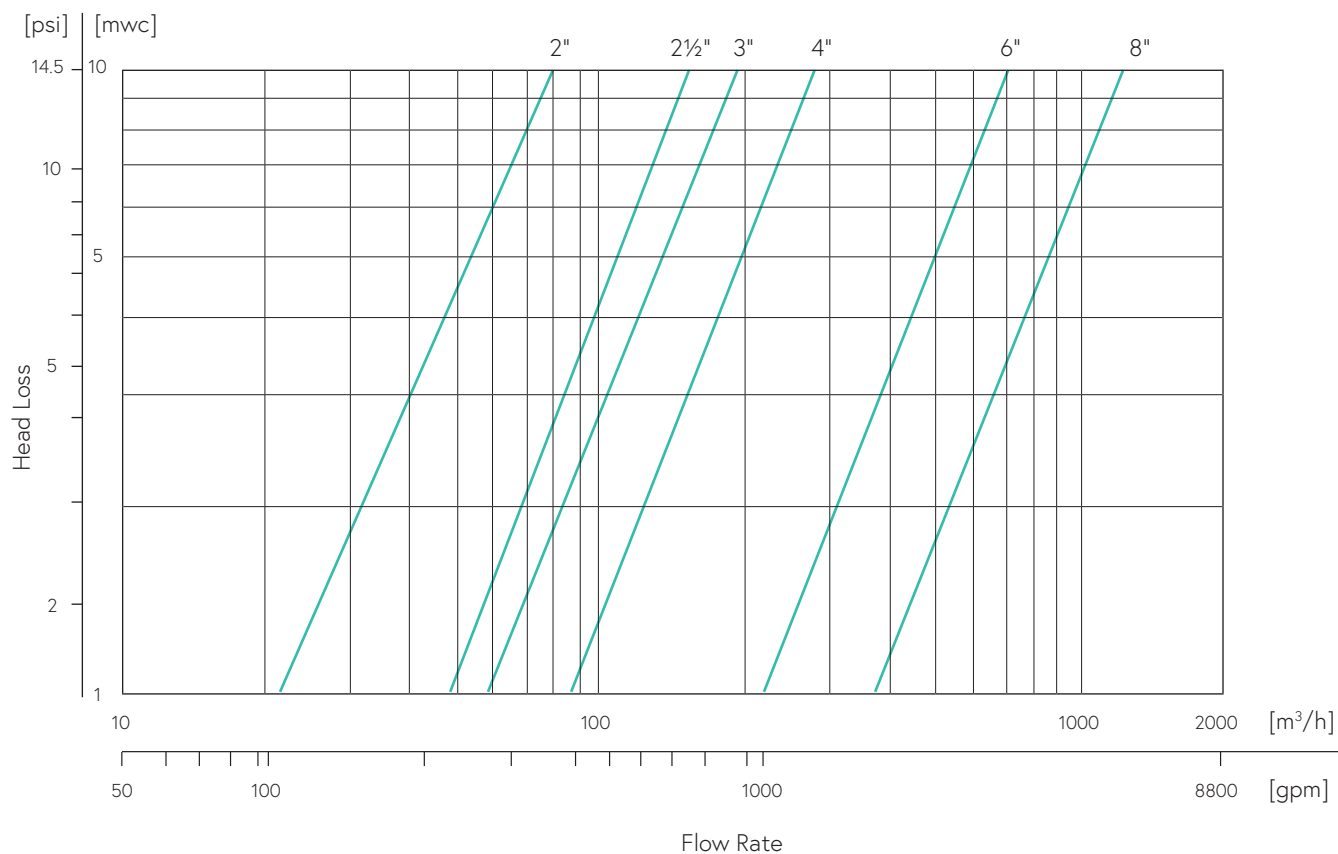


Grooved model

Valve Size	DN50 (2")		DN65 (2½")		DN80 (3")		DN100 (4")		DN150 (6")		DN200 (8")	
Dimensions	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
L	245	9.63	334	13.19	334	13.19	384	15.19	480	18.88	600	23.63
H	178	7	225	8.88	225	8.88	265	10.50	327	12.88	417	16.38
R	83	3.31	67	2.63	67	2.63	89	3.50	100	3.88	130	5.13
W	173	6.88	236	9.19	236	9.19	265	10.50	327	12.88	400	15.69
Weight	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs
	4.5	10	16	35	16	35	23	51	38	84	44	97

All product weights & dimension are approximate, due to the differences in flange standards, materials and variable accessories.

Head Loss Chart



Hydraulic Performance

Valve Size		DN50 (2")	DN65 (2½")	DN80 (3")	DN100 (4")	DN150 (6")	DN200 (8")
Kv	m³/hr @ 1 bar	80	150	200	300	700	1200
Cv	gpm @ 1 psi	92	173	231	347	809	1387
K Factor	-	1.57	1.3	1.64	1.78	1.66	1.78
Equivalent Pipe Length @ CHW = 120	meters	4	4	6	9	13	20
	feet	12	12	21	29	44	66
Control Chamber Displacement Volume	Liters	0.18	0.3	0.3	0.5	2	4.8
	Gallons	0.05	0.08	0.08	0.13	0.53	1.27

➤ Max. Pressure Ratings – Material vs. Connection Type

Material	End connection	Pressure rating
Ductile Iron ASTM A536	ANSI150	250 psi / 17.2 bar
Cast Steel ASTM A216 WCB		285 psi / 19.6 bar
Stainless Steel ASTM CF8M		285 psi / 19.6 bar
Ni-Al Bronze ASTM B148 gr.C95800		225 psi / 15.5 bar
Ductile Iron ASTM A536	ANSI300	375 psi / 25.8 bar
Cast Steel ASTM A216 WCB		375 psi / 25.8 bar
Stainless Steel ASTM CF8M		375 psi / 25.8 bar
Ni-Al Bronze ASTM B148 gr.C95800		375 psi / 25.8 bar
Ductile Iron ASTM A536	ISO PN16	230 psi / 16 bar
Cast Steel ASTM A216 WCB		230 psi / 16 bar
Stainless Steel ASTM CF8M		230 psi / 16 bar
Ni-Al Bronze ASTM B148 gr.C95800		230 psi / 16 bar
Ductile Iron ASTM A536	ISO PN25	375 psi / 25.8 bar
Cast Steel ASTM A216 WCB		375 psi / 25.8 bar
Stainless Steel ASTM CF8M		375 psi / 25.8 bar
Ni-Al Bronze ASTM B148 gr.C95800		375 psi / 25.8 bar
Ductile Iron ASTM A536	Grooved	375 psi / 25.8 bar
Cast Steel ASTM A216 WCB		375 psi / 25.8 bar
Stainless Steel ASTM CF8M		375 psi / 25.8 bar
Ni-Al Bronze ASTM B148 gr.C95800		375 psi / 25.8 bar

Technical Specifications

Size range - FM Approved	DN50/2" - DN200/8"	
Max. Working pressures	Up to 25 bar / 375 psi	
Min. system water pressure	1.5 bar / 22 psi	
Max. water temperature	85°C / 185°F Elastomers suitable for extreme climates available upon request	
End connections	Flanged	ISO-PN16 & ISO-PN25 ANSI B16.42 & B16.5 Class #150 & #300
	Grooved	ASME/ANSI AWWA 606
	Additional options available upon request	
Construction Materials	Standard	Optional
Body and cover	Ductile Iron ASTM A536	Cast Steel ASTM A216 WCB Cast Steel ASTM A352 LCB Stainless Steel ASTM A351 CF8M NAB ASTM B148 gr.C95800 Duplex Stainless Steel Super Duplex Stainless Steel Titanium
Coating	Polyurethane - (UV-Protected with High-Built) Fusion-Bonded Epoxy RED RAL 3002	EN12944 C5M Rilsan (Nylon) Rubber lined Un-coate Other RAL color Special coating material available for any fluid type and corrosion environment
Trim components	Bronze Brass	Stainless Steel 316 Nickel Plated Brass MONEL® Super Duplex Aluminum-Bronze
Tube and tube fittings	Coppe Bronze Brass	Super Duplex Stainless Steel 316 MONEL® Cu-Ni 90/10
Diaphragm	NR	EPDM Neoprene NBR
Items to Specify	Electrical features other than standard (24VDC, IP65/NEMA4)	
	If explosion proof accessories are required such as solenoids, pressure switches, etc., please define classification	
	Control trim material other than standard	
	Required standards, certifications and approvals	
	Drain port or valve: Upstream plugged as standard. Downstream upon request	