

▲ Model 65 Globe

The OCV Basic Control Valves 65 Globe and 65 Angle are full port engineered valves. When equipped with a variety of pilots and accessories, these valves perform a wide range of automatic fluid control, making them specified valves in municipal water, fire protection, irrigation, industrial, petroleum and aviation fueling systems.

The Model 65 is dependable and hard working; with a simplicity of design that ensures minimal part wear for exceptional performance and longevity.

Self-contained, the valve operates automatically off of line pressure.

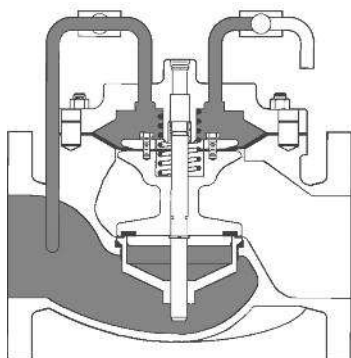
The 65 consists of three major components: body, bonnet and diaphragm assembly.

OCV has a long history in providing control valves for fire protection systems. The valve models presented in this catalog address the typical hydraulic issues encountered in such systems. The OCV control valve is designed to perform numerous control functions, and can be custom-built to any specification so it is therefore not limited to these models. Feel free to contact us to discuss your particular requirements.

VALVE FEATURES

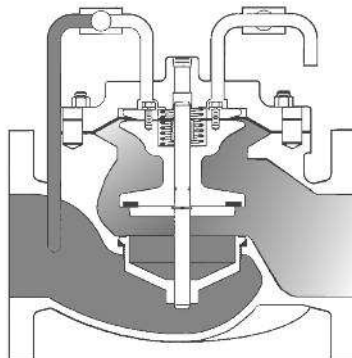
- Operates automatically off line pressure
- Throttling seat retainer for flow and pressure stability
- Diaphragm assembly guided top and bottom
- Heavy duty nylon reinforced diaphragm
- Rectangular –shaped, soft seat, provides drip tight class VI closure
- Easily maintained without removal from the line
- Diaphragm replaced without removal of internal stem assembly
- Replaceable seat ring
- Alignment pins assure proper reassembly after maintenance
- Valves factory tested, serial numbered and registered

VALVE OPERATION



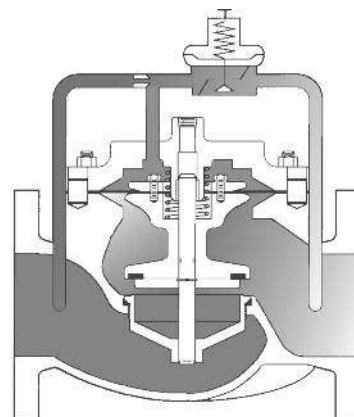
Valve Closed

When line pressure from the valve inlet is applied to the cover chamber, pressuring the diaphragm, the valve is closed drip-tight.



Valve Open

When diaphragm chamber pressure is vented, the valve travels to the full open position.



Valve Modulating

The valve is between full open and closed. The valve's control pilot modulates the pressure in the diaphragm chamber, positioning the valve to control the desired pressure or flow. OCV pilot systems provide accurate control in a wide range of performance requirements.

BASIC VALVE FLOW CHARACTERISTICS

VALVE	US	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	14"	16"	24"
SIZE	METRIC	DN32	DN40	DN50	DN65	DN80	DN100	DN150	DN200	DN250	DN300	DN350	DN400	DN600
GLOBE	US	23	27	47	68	120	200	450	760	1250	1940	2200	2850	6900
	Cv	METRIC	5.5	6.5	11.3	16.3	28.7	47.9	108	182	299	465	527	1653
ANGLE	US	30	35	65	87	160	270	550	1000	1600	2400	--	4000	--
	Cv	METRIC	7.2	8.4	15.6	20.8	38.3	64.7	132	240	383	575	--	958

where:

$$DP = sg \left(\frac{Q}{C_v} \right)^2$$

Q = Flow Rate in USGPM (U.S.) or Q = Flow Rate in liters/sec (Metric)

Cv = Flow Rate in USGPM @ 1 psi pressure drop (U.S.) or Cv = Flow Rate in liter/sec @ 1 bar pressure drop (Metric)

DP = Pressure drop in psi (U.S.) or DP = Pressure drop in bar (Metric)

sg = specific gravity of line fluid

ABOUT YOUR VALVE

OCV Control Valves was founded more than 60 years ago with a vision and commitment to quality and reliability. From modest beginnings, the company has grown to be a global leader just a half century later. In fact, OCV valves can be found in some capacity in nearly every country around the world from fire protection systems in Malaysia to aircraft fueling systems in Africa and from oil refineries in Russia to water supply systems in the USA and Canada. You will also find our valves in irrigation systems in Europe, South America and the Middle East.

The original foundation on which the company was built allows our team of professionals to not only provide the service required to be a worldwide supplier, but more importantly, the opportunity to afford the personal touch necessary to be each of our customers' best partner. Simply stated, we take pride in all that we do.

Committed to the work they do, our employees average over 15 years of service. This wealth of knowledge allows us to provide quality engineering, expert support, exacting control and the know-how to create valves known for their long life.

Being ISO 9001 certified means we are committed to a quality assurance program. Our policy is to supply each customer with consistent quality products and ensure that the process is right every time. Our valves meet and exceed industry standards around the world. Including approvals by:



All valves are not created equal. OCV Control Valves proves that day in and day out. We stand behind our valves and are ready to serve your needs.

TOLL FREE 1.888.628.8258 • phone: (918)627.1942 • fax: (918)622.8916 • 7400 East 42nd Place, Tulsa, Ok 74145
email: sales@controlvalves.com • website: www.controlvalves.com

SPECIFICATIONS

VALVE BODY & BONNET	DUCTILE IRON		CAST STEEL		NICKEL ALUMINUM BRONZE		STAINLESS STEEL	
Material Specifications	(epoxy coated)		(epoxy coated)		All Grades		All Grades	
END CONNECTIONS								
Flange Standard (also available in metric)	ANSI B16.42		ANSI B16.5		---		ANSI B16.5	
Flange Class	150#	300#	150#	300#	150#	300#	150#	300#
Flange Face	Flat	Raised	Raised	Raised	Flat	Flat	Raised	Raised
Maximum Working Pressure (at 100°F)	250 psi	640 psi	285 psi	740 psi	225 psi	500 psi	285 psi	740 psi
Screwed End Working Pressure: ANSI B1.20.1 640 psi					Grooved End Working Pressure: 300 psi			
INTERNALS								
Stem	STAINLESS STEEL				OPTIONAL MONEL®			
Spring	STAINLESS STEEL				OPTIONAL - INCONEL®			
Spool	DUCTILE IRON (epoxy coated) / OPTIONAL - STN. STL.				NI-AL-BRONZE		STAINLESS STEEL	
Seat Disc Retainer	DUCTILE IRON (epoxy coated) (10" & LARGER) STN. STL. (8" & SMALLER / OPTIONAL - ALL SIZES)				NI-AL-BRONZE		STAINLESS STEEL	
Diaphragm Plate	DUCTILE IRON (epoxy coated) / OPTIONAL - STN. STL.				NI-AL-BRONZE		STAINLESS STEEL	
Seat Ring (Trim)	BRONZE or STN. STL.		BRONZE or STN. STL.		NI-AL-BRONZE		STAINLESS STEEL	
Upper Stem Bushing	BRONZE or TEFLON®		BRONZE or TEFLON®		BRONZE or TEFLON®		TEFLON®	
Lower Stem Bushing	NOT APPLICABLE FOR BRONZE OR NI-AL-BRONZE SEAT RINGS / TEFLON® FOR STN. STL. SEAT RINGS							
ELASTOMER PARTS (Rubber)								
Diaphragm/Seat Disc/O-Rings	STANDARD - BUNA-N				OPTIONAL - EPDM			
Fluid Operating Temperature*	32°F to 180°F				32°F to 230°F			
*Consult factory when temperatures approach low or high temperature allowance. Other materials available upon request.								
COATINGS WIDE RANGE OF COATING PER YOUR FLUID APPLICATION. COATINGS HANDLE MUNICIPAL POTABLE WATER, SEAWATER, PETROLEUM AND REFINED PRODUCTS.								
ELECTRICAL SOLENOIDS								
Bodies	STANDARD - BRASS				OPTIONAL - STAINLESS STEEL			
Enclosures	WATER TIGHT, NEMA 1, 3, 4, & 4X - EXPLOSION PROOF - OPTIONAL (NEMA 7 & 9)							
Power	AC, 60HZ - 24, 120, 240, 480 VOLTS		AC, 50HZ - In 110 VOLT MULTIPLES		DC, 12, 24, 125, 240 VOLTS			
Operation	ENERGIZE TO OPEN (NORMALLY CLOSED)				DE-ENERGIZE TO OPEN (NORMALLY OPEN)			
CONTROL PILOTS					VITON® and TEFLON® are registered trademarks of DuPont Dow Elastomer Corporation MONEL® and INCONEL® are registered trademarks of Special Metals Corporation			
Bodies	BRONZE	STAINLESS STEEL						
Internal	STN. STL.	STAINLESS STEEL						
CONTROL CIRCUITS								
Tubing	COPPER	STN.S STL. / OPTIONAL MONEL®						
Fittings	BRASS	STN. STL. / OPTIONAL MONEL®						

BONNET

SPRING

UPPER STEM GUIDE BUSHING

DIAPHRAGM PLATE

DIAPHRAGM

SPOOL

SALTWATER SERVICE VALVE MATERIALS

Ductile Iron (special coatings) / Cast Steel (special coatings) /
Nickel-Aluminum-Bronze / Duplex Stainless Steel

Sizes circled in red are UL Listed. Listings vary by model, please consult factory.



Globe Flanged Sizes

1.25"	1.5"	2"	2.5"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
32mm	40mm	50mm	65mm	80mm	100mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm

*CONSULT FACTORY



Angle Flanged Sizes

1.25"	1.5"	2"	2.5"	3"	4"	6"	8"	10"	12"	16"
32mm	40mm	50mm	65mm	80mm	100mm	150mm	200mm	250mm	300mm	400mm



Globe/Angle Screwed Sizes

1.25"	1.5"	2"	2.5"	3"
32mm	40mm	50mm	65mm	80mm

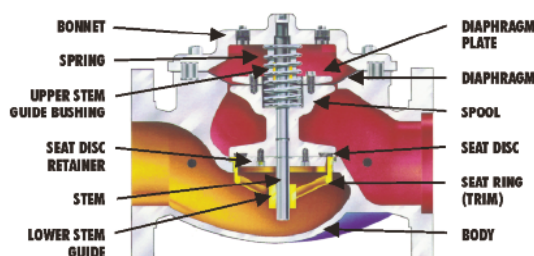


Globe/Angle Grooved Sizes

1.5"	2"	2.5"	3"	4"	6"
32mm	50mm	65mm	80mm	100mm	150mm

*GLOBE ONLY

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Global performance. **Personal** touch.

REVISED 08/11/15

DIMENSIONS

U.S. DIMENSIONS - INCHES

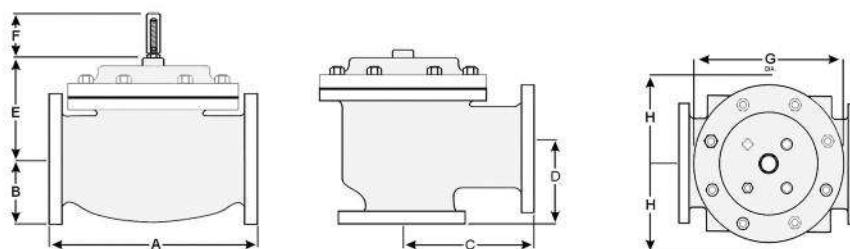
DIM	END CONN.	1 1/4-1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	24
A	SCREWED	8 3/4	9 7/8	10 1/2	13	--	--	--	--	--	--	--	--
	GROOVED	8 3/4	9 7/8	10 1/2	13	15 1/4	--	--	--	--	--	--	--
	150# FLGD	8 1/2	9 3/8	10 1/2	12	15	17 3/4	25 3/8	29 3/4	34	39	40 3/8	62
	300# FLGD	8 3/4	9 7/8	11 1/8	12 3/4	15 5/8	18 5/8	26 3/8	31 1/8	35 1/2	40 1/2	42	63 3/4
B	SCREWED	1 7/16	1 11/16	1 7/8	2 1/4	--	--	--	--	--	--	--	--
	GROOVED	1*	1 3/16	1 7/16	1 3/4	2 1/4	--	--	--	--	--	--	--
	150# FLGD	2 5/16-2 1/2	3	3 1/2	3 3/4	4 1/2	5 1/2	6 3/4	8	9 1/2	10 5/8	11 3/4	16
	300# FLGD	2 5/8-3 1/16	3 1/4	3 3/4	4 1/8	5	6 1/4	7 1/2	8 3/4	10 1/4	11 1/2	12 3/4	18
C ANGLE	SCREWED	4 3/8	4 3/4	6	6 1/2	--	--	--	--	--	--	--	--
	GROOVED	4 3/8*	4 3/4	6	6 1/2	7 5/8	--	--	--	--	--	--	--
	150# FLGD	4 1/4	4 3/4	6	6	7 1/2	10	12 11/16	14 7/8	17	--	20 13/16	--
	300# FLGD	4 3/8	5	6 3/8	6 3/8	7 13/16	10 1/2	13 3/16	15 9/16	17 3/4	--	21 5/8	--
D ANGLE	SCREWED	3 1/8	3 7/8	4	4 1/2	--	--	--	--	--	--	--	--
	GROOVED	3 1/8*	3 7/8	4	4 1/2	5 5/8	--	--	--	--	--	--	--
	150# FLGD	3	3 7/8	4	4	5 1/2	6	8	11 3/8	11	--	15 11/16	--
	300# FLGD	3 1/8	4 1/8	4 3/8	4 3/8	5 13/16	6 1/2	8 1/2	12 1/16	11 3/4	--	16 1/2	--
E	ALL	6	6	7	6 1/2	8	10	11 7/8	15 3/8	17	18	19	27
F	ALL	3 7/8	3 7/8	3 7/8	3 7/8	3 7/8	3 7/8	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	8
G	ALL	6	6 3/4	7 11/16	8 3/4	11 3/4	14	21	24 1/2	28	31 1/4	34 1/2	52
H	ALL	10	11	11	11	12	13	14	17	18	20	20	28 1/2

*GROOVED END NOT AVAILABLE IN 1 1/4"

METRIC DIMENSIONS - M.M.

DIM	END CONN.	DN32-DN40	DN50	DN65	DN80	DN100	DN150	DN200	DN250	DN300	DN350	DN400	DN600
A	SCREWED	222	251	267	330	--	--	--	--	--	--	--	--
	GROOVED	222	251	267	330	387	--	--	--	--	--	--	--
	150# FLGD	216	238	267	305	381	451	645	756	864	991	1026	1575
	300# FLGD	222	251	283	324	397	473	670	791	902	1029	1067	1619
B	SCREWED	37	43	48	57	--	--	--	--	--	--	--	--
	GROOVED	25*	30	37	44	57	--	--	--	--	--	--	--
	150# FLGD	59-64	76	89	95	114	140	171	203	241	270	298	406
	300# FLGD	67-78	83	95	105	127	159	191	222	260	292	324	457
C ANGLE	SCREWED	111	121	152	165	--	--	--	--	--	--	--	--
	GROOVED	111*	121	152	165	194	--	--	--	--	--	--	--
	150# FLGD	108	121	152	152	191	254	322	378	432	--	529	--
	300# FLGD	111	127	162	162	198	267	335	395	451	--	549	--
D ANGLE	SCREWED	79	98	102	114	--	--	--	--	--	--	--	--
	GROOVED	79*	98	102	114	143	--	--	--	--	--	--	--
	150# FLGD	76	98	102	102	140	152	203	289	279	--	398	--
	300# FLGD	79	105	111	111	148	165	216	306	298	--	419	--
E	ALL	152	152	178	165	203	254	302	391	432	457	483	686
F	ALL	98	98	98	98	98	98	162	162	162	162	162	203
G	ALL	152	171	195	222	298	356	533	622	711	794	876	1321
H	ALL	254	279	279	279	305	330	356	432	457	508	508	724

*GROOVED END NOT AVAILABLE IN DN32



NOTE:

Model 127-3FC consult factory for dimensions, do not use this chart unless instructed.

A routine inspection & maintenance program should be established and conducted yearly by a qualified technician. Consult our factory @ 1-888-628-8258 for parts and service.

How to order your valve:

When ordering please provide: - Series Number - Valve size - Globe or Angle - Pressure Class - Screwed, Flanged, Grooved - Trim Material - Adjustment Range - Pilot Options - Special needs / or installation requirements.

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