

Global performance. **Personal** touch.

waterworks

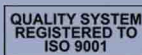


OCV Control Valves was founded more than 50 years ago with a vision and commitment to quality and reliability. From modest beginnings, the company has grown to be a global leader just a half century later. In fact, OCV valves can be found in some capacity in nearly every country around the world from 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.

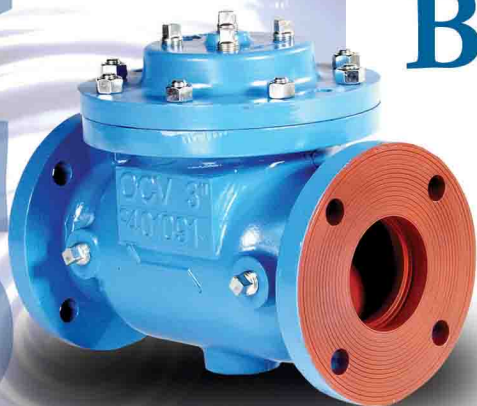
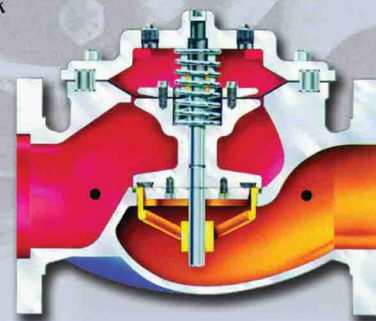
Being ISO 9001 certified means we are committed to a quality assurance program. Our policy is to supply each customer with consistent quality products and ensure that the process is right every time. Our valves meet and exceed industry standards around the world, including approvals by:



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.

OCV Control Valves are hydraulically operated, diaphragm actuated globe or angle valves that operate automatically from either line pressure or an independent power source. Internal moving parts are minimal and all valves can be adjusted and serviced without removal from the line.

Global performance. **Personal** touch.



Basic Valve

Series 65 Basic Valve

The OCV Basic Control Valve 65 Globe and 65 Angle is a full port engineered valve. When equipped with a variety of pilots and accessories, the valve performs a wide range of automatic fluid control, making it a specified valve in municipal water, fire protection, irrigation, industrial, petroleum and aviation fueling systems.

- The 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, diaphragm assembly.

Series 66 Power Actuated

The Basic Control Valve 66 Globe and 66 Angle is a full port engineered valve equipped with two diaphragm chambers, sealed from each other by the diaphragm, and isolated from the valve's main flow passage by an intermediate plate. By pressurizing one control chamber while simultaneously venting the other, the valve is positively powered to both open and close.

A large majority of OCV control valves have a single diaphragm chamber and operate off line pressure; more specifically, off the pressure differential between the inlet and outlet ports of the valve. There are, however, conditions that do not lend themselves to such an operation. For example, adequate differential to properly actuate the valve may not exist, the liquid being handled may be extremely dirty or otherwise unsuitable, or design of the system may, for some reason, make it preferable to use an outside power source. Under such conditions, the OCV Power Actuated Valve 66/66A provides an excellent solution.

Power Actuated





Diaphragm Check

Series 94 Diaphragm Check

The OCV Series 94 check valve is a simple on-off valve that opens to allow forward flow when inlet pressure exceeds outlet pressure and closes tightly to prevent backflow when outlet pressure exceeds inlet pressure.

Series Features:

- Non-surge opening and/or closing when equipped with adjustable opening and/or closing speed controls.
- Equipped with valve position indicator on all models.

Series 108 Pressure Relief

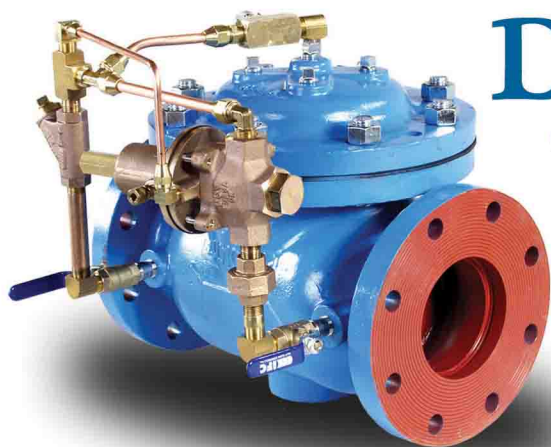
In many liquid piping systems, it is vital that line pressure is maintained within relatively narrow limits. This is the function of the 108 Pressure Relief / Back Pressure Series of the OCV control valves. Installed in the main flow line, the standard Model 108-2 acts as a back-pressure or pressure sustaining valve. In this configuration, the valve maintains a constant upstream pressure regardless of fluctuating downstream demand. When used in a bypass line, the same model will function as a relief valve, protecting the system against potentially damaging surges.

Series Features:

- Relief: Maintains a constant inlet pressure by relieving excess high pressure.
- Sustaining: Prevents pressure from dropping below a minimum.
- Inlet pressure is adjustable with a complete range of control springs.
- Inlet pressure is accurate over a wide range of flow.
- Quick opening with controlled closing.



Pressure Relief



Differential Control

Series 110 Differential Control

The Series 110 Differential Control Valve is designed to accurately control the pressure difference between any

two points. In some systems this means the valve remains closed until pressure differential commands its opening. It is a pilot-operated, modulating type valve which controls pressure accurately and consistently at the desired setting.

Series Features:

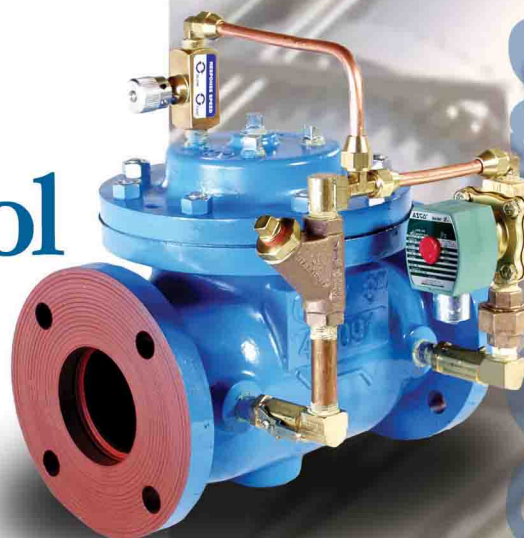
- Opens on increasing differential.
- Dual pilot sense lines can be valve or remote connected.
- Differential is adjustable over complete range of control springs.

Series 115 Solenoid Control

The OCV Series 115 Solenoid Control Valve is designed to provide on/off or open/close control of fluids in response to an electrical signal. The valve consists of the basic OCV model 65 with solenoid-operated pilot. With the appropriate solenoid, the valve may be normally closed (energize to open) or normally open (energize to close).

Series Features:

- The 115 Series provides responsive control in answer to such triggering devices as clocks, timers, relays, probes, pressure or temperature sensors.
- Available for AC or DC voltages.
- Wider range of sizes and flow capacity than is available with direct-acting solenoid valves.
- Valves can be equipped with Manual Override solenoid operation.
- Solenoid feature can be added to other hydraulic control functions.



Solenoid Control

OCV
control
valves

Surge Anticipation



Series 118 Surge Anticipation

The OCV Series 118/108SA surge anticipation valves are designed to be installed in a bypass line and provide protection against damaging surges that can occur in pumping systems when a pump is suddenly stopped. Unlike conventional

relief valves, which open only when a high pressure wave hits, surge anticipation valves sense the precursor of the high pressure wave (pump power failure or low pressure wave) and opens in anticipation of the returning high pressure wave that follows. By opening, the valve prevents the buildup of pressure before it occurs.

Series Features:

Electro-hydraulic Series 118

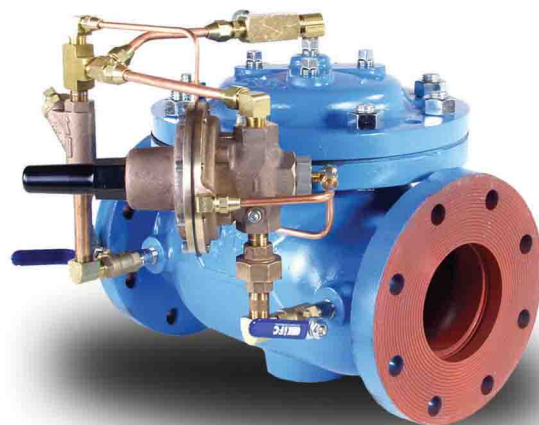
- Electrical power connection to pumping system for opening on loss of power or on a pressure switch low-pressure signal.
 - Valve closes after (adjustable) predetermined time on power failure or low-pressure opening.
 - Hydraulic, pilot operated, high-pressure relief opening.
 - Available with Surge Commander electronics package (Model 118-4).
- Hydraulic Model 108SA-3*
- No electrical requirements. • Low-pressure opening pilot. • High-pressure relief pilot.

Series 120 Rate of Flow

The OCV Series 120 Rate of Flow control valve is designed to control or limit flow to a predetermined rate, regardless of fluctuations in downstream or upstream pressure.

- Self contained, including the differential-sensing orifice plate and pilot.
- Flow rate is field adjustable (within orifice bore range)
- Extra-sensitive-differential pilot specifically designed for Rate-of-Flow application.
- Works equally well on all types of clean, non-abrasive liquids.

Rate of Flow



Pump Control

Series 125 Pump Control

The OCV Series 125 and 126 Pump Control Valves are designed to effectively eliminate the surges associated with the starting and stopping of the pump. Electrically interfaced with the

pump motor, the valve opens and closes at an adjustable speed, providing a smooth, predictable transition of pump discharge pressure and volume into the system.

Series Features:

- Valve opening speed is adjustable to pump and system requirements for smooth increase in pressure.
- Valve closing speed is adjustable, gradually decreasing pressure to system as valve closes.
- Valve is interlocked with pump motor to perform unified pump and valve operation.
- Built-in reverse flow check feature.
- Valve automatically shuts off pump motor on loss of pump discharge pressure (shaft lock-up).
- Two simple field adjustments: opening speed and closing speed.

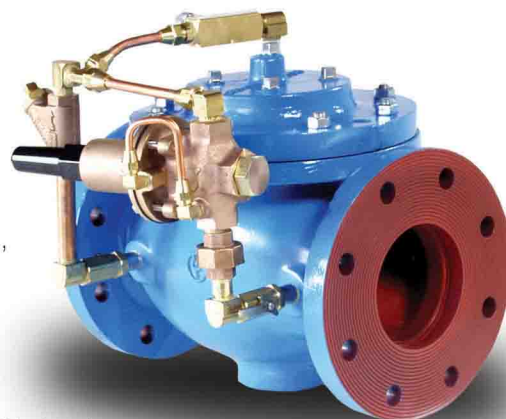
Series 127 Pressure Reducing

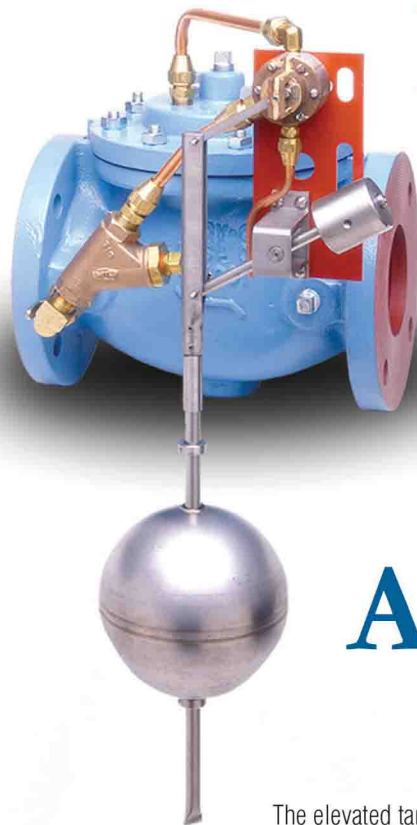
The OCV Pressure-Reducing Valve is used in many applications worldwide. The primary function of the 127 series is to reduce a greater upstream pressure to a lesser, more manageable downstream pressure, operating without regard to either upstream supply or downstream demand.

Series Features:

- Reduces higher inlet pressure to a constant lower outlet pressure.
- Outlet pressure is accurate over wide range of flow.
- Pilot-operated main valve is not subject to pressure fall-off characteristic of direct-acting PRV's.
- Outlet pressure is adjustable over complete range of control spring (see pilot features).

Pressure Reducing





Float Control

Series 8000 Float Control

The OCV Series 8000 float control valves are designed to maintain a desired level in a tank or reservoir by opening for filling the tank when fluid is below the high level point and closing tightly when the desired level is reached.

Series Features:

- The 8000 is a non-modulating valve; either full open or full closed. It is available in two basic configurations:
 1. Model 8000, with the float pilot provided separate from the main valve for remote mounting. This configuration is used when the fill line is located at the bottom of the tank.
 2. Model 8000VM, with the float pilot mounted on the main valve. This configuration is typically used when the fill line is located at the top of the tank.
- All Series 8000 valves include an OCV Model 65 Basic Valve assembly and a Model 814 three-way rotary float pilot. For faster operation, valves 8" and larger also include a Model 3600 three-way auxiliary pilot.

Altitude Control

Series 3330 Altitude Control

The elevated tank, standpipe or storage reservoir is a common and important element found in many water distribution systems: municipal, fire protection, commercial, military and industrial. The function of the OCV Series 3330 Altitude Control Valve is accurate, automatic level control, without the use of floats or sensors. Pilot controls for the series can accommodate storage facilities up to 230 feet high, maintaining the liquid level to within inches of a predetermined set point.

The series is offered in two basic types. The Model 3331 one-way flow is used for tank fill only. The Model 3333 allows flow both into and out of the tank.

Series Features:

- Consistently maintains water level to within inches of set point in tank/reservoirs from 5 to 230 ft high.
- Installs at the base of tank
- Operates hydraulically without need for a tank-mounted float or electrical controls or sensors.



Digital Electronic Control

Series 22/88 Digital Electronic Control

With the development and proliferation of high level SCADA systems comes the need for automatic control valves to interface with such systems. The OCV Series 22 and 88 digital electronic control valves were specifically designed for this task. While retaining the advantages of simplicity and operation from line pressure, these valves offer a level of ease of operation and degree of control not previously achieved.

Series Features:

- Can be used as part of a SCADA system, or as a "stand alone"
- Extreme stability over a wide range of flows
- Useful when set points must be changed frequently
- Remote set point available
- Can be used to control almost any process variable
- Hydraulic pilot backup available
- Can be configured to accept all common process signals (4-20 mA, 0-5 volt, etc.)
- Can be configured for low head pressure applications.

When it comes to a waterworks environment, OCV supplies valves of choice that are dependable, easily maintained, and cost effective in water municipal / rural systems. OCV Valves deliver solutions to your distribution and supply systems. If you are an ENGINEER, CONTRACTOR, OPERATOR, or DISTRIBUTOR...We invite you to contact us today for more information. Also receive a FREE copy of our valve sizing CD and compare OCV's performance and personal touch.

OCV control valves

Specifications

VALVE BODY & BONNET		DUCTILE IRON		CAST STEEL		CAST BRONZE		STAINLESS STEEL	
Material Specifications		ASTM A536 (epoxy coated)		ASTM A216/WCB (epoxy coated)		ASTM B61		ASTM A743/CF8M	
END CONNECTIONS									
Flange Standard (also available in metric)		ANSI B16.42		ANSI B16.5		ANSI B16.24		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		250 psi	640 psi	285 psi	740 psi	225 psi	500 psi	285 psi	740 psi
Screwed Working Pressure:		ANSI B1.20.1 (B2.1) 640 psi			Grooved End Working Pressure:		300 psi		
INTERNALS									
Stem		STAINLESS STEEL AISI 303				OPTIONAL MONEL			
Spring		STAINLESS STEEL AISI 302							
Spool		DUCTILE IRON ASTM A536 (epoxy coated)				B-61		STN. STL. ASTM A 743/CF8M	
Seat Disc Retainer		DUCTILE IRON ASTM A536 (epoxy coated) 4" & SMALLER VALVES - STAINLESS STEEL				B-61		STAINLESS STEEL	
Diaphragm Plate		DUCTILE IRON ASTM A536 (epoxy coated)				B-61		STAINLESS STEEL	
Seat Ring (Trim)		BRONZE B61 OPTIONAL STAINLESS STEEL ASTM A743/CF8M						STN. STL. ASTM A 743/CF8M	
Upper Stem Bushing		STANDARD BRONZE ASTM B438		VALVE W/ STAINLESS STEEL SEAT RING-TEFLON				TEFLON	
Lower Stem Bushing		SEAT MATERIAL VALVES W/ STAINLESS STEEL SEAT RING-TEFLON						TEFLON	
ELASTOMER PARTS (Rubber)									
Diaphragm/Seat Disc/O-Rings		STANDARD - BUNA-N NYLON REINFORCED				OPTIONAL - VITON®		OPTIONAL - EPDM	
Operating Temperature		-40°F to 180°F				32°F to 400°F		0°F to 300°F	
COATINGS									
WIDE RANGE OF COATING PER YOUR FLUID APPLICATION. COATINGS HANDLE MUNICIPAL POTABLE WATER, SEAWATER, PETROLEUM AND REFINED PRODUCTS.									
ELECTRICAL SOLENOIDS									
Bodies		STANDARD BRASS			STAINLESS STEEL			OPTIONAL	
Elastomers		STANDARD - BUNA-N NYLON REINFORCED				OPTIONAL - VITON®			
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, 6 12, 24, 240 VOLTS	
Operation		ENERGIZE TO OPEN (NORMALLY CLOSED)				DE-ENERGIZE TO OPEN (NORMALLY OPEN)			
CONTROL PILOTS									
Bodies		BRONZE B62/B61		STAINLESS STEEL ASTM A743/CF8M					
Internal		AISI 303							
CONTROL CIRCUITS									
Tubing		COPPER OR STAINLESS STEEL							
Fittings		BRASS OR STAINLESS STEEL							

VITON® is a registered trademark of DuPont Dow Elastomers

DIAPHRAGM PLATE

DIAPHRAGM

SPOOL

SEAT DISC

SEAT RING

BONNET

SPRING

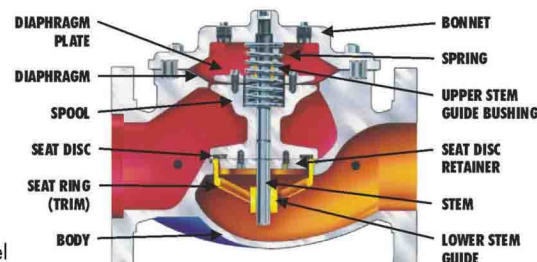
UPPER STEM GUIDE BUSHING

SEAT DISC RETAINER

SALTWATER SERVICE VALVE MATERIALS

Cast Steel Special Coatings --Ni Aluminum Bronze ASTM B148 --Super Duplex Stainless Steel

VITON® is a registered trademark of DuPont Dow Elastomers.



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"
32mm	50mm	65mm	80mm	100mm

Dimensions

U.S. DIMENSIONS - INCHES

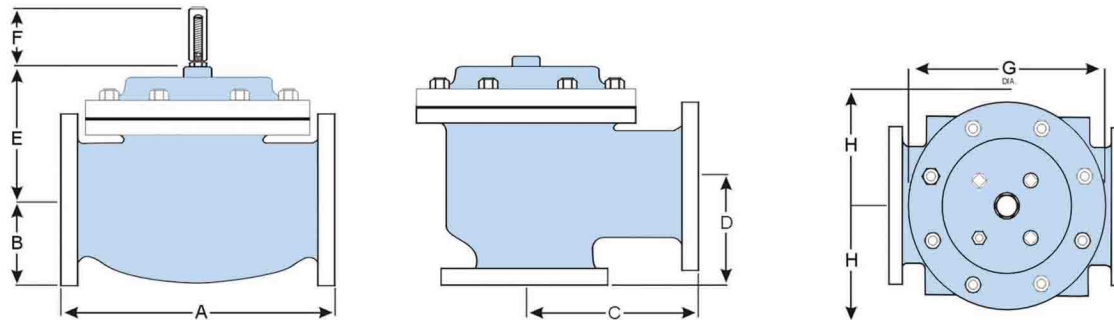
DIM	END CONN.	1 1/4-1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	24
A	SCREWED	8 3/4	9 7/8	10 1/2	13	--	--	--	--	--	--	--	--
	GROOVED	8 3/4	9 7/8	10 1/2	13	15 1/4	--	--	--	--	--	--	--
	150# FLGD	8 1/2	9 3/8	10 1/2	12	15	17 3/4	25 3/8	29 3/4	34	39	40 3/8	62
	300# FLGD	8 3/4	9 7/8	11 1/8	12 3/4	15 5/8	18 5/8	26 3/8	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	162	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



For maximum efficiency, the OCV control valve should be mounted in a piping system so that the valve bonnet (cover) is in the top position. Other positions are acceptable but may not allow the valve to function to its fullest and safest potential. In particular, please consult the factory before installing 8" and larger valves, or any valves with a limit switch, in positions other than described. Space should be taken into consideration when mounting valves and their pilot systems.

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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1-888-OCV-VALV (628-8258)

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www.controlvalves.com



Represented by:



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