



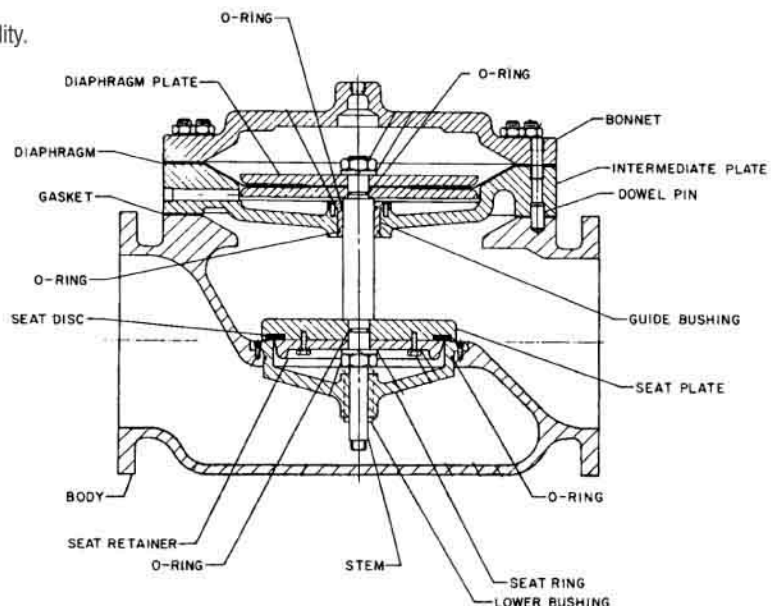
The Basic Control Valve 66 Globe and 66 Angle is a full port engineered valve. Equipped with two diaphragm chambers, sealed from each other by the diaphragm, and isolated from the valve's main flow passage by an intermediate plate. By pressurizing one control chamber while simultaneously venting the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

▲ 66-shown

## FEATURES / BENEFITS

- ▶ Operates automatically off line pressure or independent pressure source.
- ▶ Heavy-duty, nylon-reinforced diaphragm isolates top chamber operating pressure from bottom chamber line pressure.
- ▶ Rectangular-shaped, soft seat seal provides drip-tight Class VI closure.
- ▶ Diaphragm assembly guided center and bottom
- ▶ Throttling seat retainer for flow and pressure stability.
- ▶ Easily maintained without removal from the line.
- ▶ Diaphragm replaced without removing internal stem assembly.
- ▶ Replaceable seat ring.
- ▶ Alignment pins assure proper reassembly after maintenance.
- ▶ Center-tapped bonnet facilitates installation of position indicator or valve-actuated switches.
- ▶ Ductile iron and steel valves are epoxy-coated inside and out, for maximum corrosion protection.
- ▶ Valves are factory tested.
- ▶ Valves are serial numbered and registered to facilitate replacement parts and factory support.

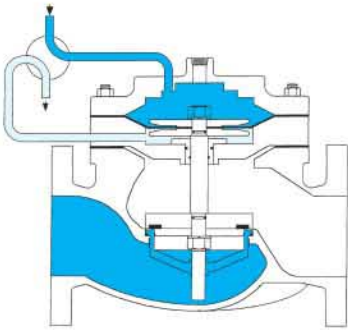


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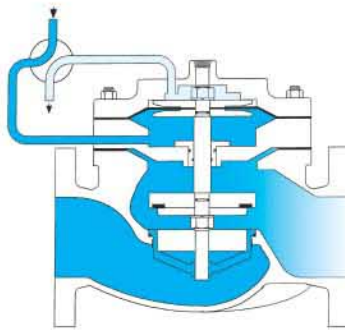
**Power Actuated Valve 66/66A**

## FUNCTIONAL OPERATION



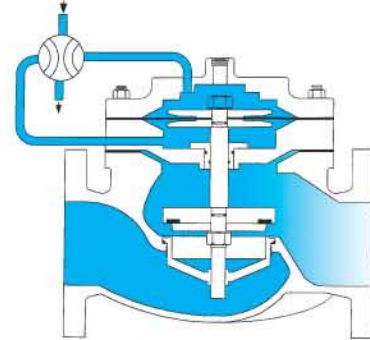
### Valve Closed

Applying pressure to the upper diaphragm chamber and simultaneously venting the lower chamber (typically to drain) causes the valve to go fully closed.



### Valve Open

Applying pressure to the lower diaphragm chamber and simultaneously venting the upper chamber (typically to drain) causes the valve to go fully open.



### Valve Modulating

Locking pressures in both the upper and lower diaphragm chamber simultaneously allows for holding the valve in a position other than full open or closed.

## 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	683	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:

Q = Flow Rate in USGPM (US) or Q = Flow Rate in liters/sec (Metric)

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

DP = Pressure drop in psi (US) or DP = Pressure drop in bar (Metric)

sg = specific gravity of line fluid

## ABOUT YOUR VALVE

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.

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## SPECIFICATIONS

VALVE BODY & BONNET	DUCTILE IRON		CAST STEEL		CAST BRONZE		STAINLESS STEEL	
<b>Material Specifications</b>	ASTM A536 (epoxy coated)		ASTM A216/WCB (epoxy coated)		ASTM B61		ASTM A743/CF8M	
<b>END CONNECTIONS</b>								
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 (Bronze 500 psi)			Grooved End Working Pressure: 300 psi					
<b>INTERNALS</b>								
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	
<b>ELASTOMER PARTS (Rubber)</b>								
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	
<b>COATINGS</b>								
WIDE RANGE OF COATING PER YOUR FLUID APPLICATION. COATINGS HANDLE MUNICIPAL POTABLE WATER, SEAWATER, PETROLEUM AND REFINED PRODUCTS.								

VITON® is a registered trademark of DuPont Dow Elastomers.

### SALTWATER SERVICE VALVE MATERIALS

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



#### 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

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