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## Control Valves

### CV10

The CV10 is a close-coupled control valve suited for pressure control, level control and flow control on separators, scrubbers, wellheads and other production equipment. The hammer union allows the topworks to be removed without taking the valve out of line for easy repair and trim replacement. The cage-guided design improves seat alignment and longevity.

- Globe, tee and angle bodies.
- 1" and 2" female NPT, flanged, butt weld and socket weld connections.
- Direct/Reverse No. 35 and No. 70 actuators.
- Quick open and throttling (0.25"-1.00") trim in SST and tungsten carbide. 1.25" & 1.50" available in Quick Open SST.
- 4,000 psi pressure rating.
- -50°F to 200°F temperature range (-46°C to 93°C).
- NACE and low-temp options available.



### CV15

The CV15 is an open yoke control valve suited for pressure control, level control and flow control on separators, scrubbers, wellheads and other production equipment. The open yoke allows mounting positioners, limit switches and other external devices. The exposed stem provides accurate travel indication and higher-temperature service.

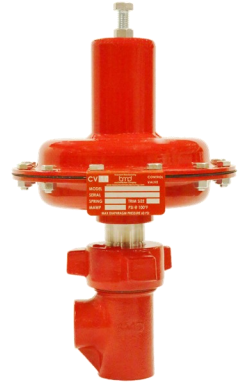
- Globe, tee and angle bodies.
- 1" and 2" female NPT, flanged, butt weld and socket weld connections.
- Direct/Reverse No. 35 and No. 70 actuators.
- Quick open and throttling (0.25"-1.00") trim in SST and tungsten carbide.
- 4,000 psi pressure rating.
- -50°F to 400°F temperature range (-46°C to 204°C).
- NACE and low-temp options available.



### CV10S AND CV15S

Ideal for applications where space is an issue, the CV10S and CV15S offer the same benefits as the CV10 and CV15 but with a shortened body. The CV10S and CV15S can also be assembled with a non-adjustable actuator, further reducing the valve's footprint.

- 1" FNPT globe and angle bodies.
- Direct/Reverse No. 35 and Non-adjustable actuators.
- Quick open and throttling (0.25"-1.00") trim in SST and tungsten carbide.
- 4,000 psi pressure rating.
- -50°F to 200°F temperature range (-46°C to 93°C).
- NACE and low-temp options



### CV20

The CV20 is a rugged, compact, freezable dump valve. The angle body can be installed so that the valve cage and plug are submerged into the process media giving the valve its freezable characteristic. Typical installations include separators, scrubbers, and other production vessels. Utilizes the same trim set as the CV10, offering more versatility with multiple trim sizes and material options.

- 1" FNPT X 1" FNPT, 2" MNPT X 1" FNPT connections.
- Direct/Reverse No. 35 and No. 70 actuators.
- Quick open and throttling (0.25"-0.50") trim in SST and tungsten carbide.
- 1500 psi pressure rating.
- -50°F to 200°F temperature range (-46°C to 93°C).
- NACE and low-temp options available.



## CV30

The CV30 is a rugged, full port control valve in a compact package. The CV30 features balanced, plug control trim for excellent throttling or on/off control of fluids. The adjustable actuator has plenty of space for a controller mount. Ideally suited for a wide range of applications including pressure control, level control and flow control.

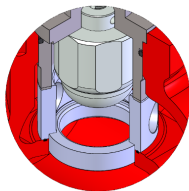
- 2", 3", 4" and 6" globe bodies.
- 2" FNPT, flanged, butt weld connections.
- Direct/Reverse No. 70 (2"), and No. 120 (3-6") actuators.
- Modified % trim (1.5", 2", 3", 4", 6") with variety of trim material/size options.
- 3,900 psi pressure rating.
- -50°F to 300°F temperature range (-46°C to 149°C).
- NACE option available.
- Metal to Metal trim available.



## CV40

The CV40 is a low pressure, full port, dump valve that features balanced plug control trim with a quick opening characteristic, or an optional unbalanced metal to metal trim option, and an adjustable actuator. The CV40 is a great economical choice for a variety of low-pressure applications when paired with a PC48 pressure controller.

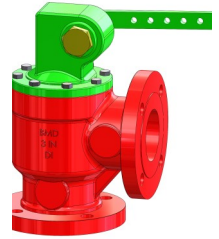
- 2", 3", and 4".
- NPT and Flanged connections.
- Direct/Reverse No. 35 and No. 70.
- Quick Open Trim Characteristic.
- Pressure Rating: 500 psi - 2" size, 250 psi - 3" & 4" sizes.
- -20°F to 400°F temperature range (-46°C to 204°C).
- NACE option available.
- Metal to Metal trim available (Hex Plug).



## CV45

The CV45 is a low pressure, full port, mechanical dump valve. That features balanced plug control trim with quick opening characteristics. The CV45 can be used for discharging liquid or gas from separators, treaters, knockouts or other vessels making it a great economical choice for a variety of low pressure applications..

- 2", 3", and 4" Globe or Angle Bodies.
- FNPT and Flanged connections.
- Quick Open Trim Characteristic.
- Features exclusive Gator spline mechanism.
- Pressure Rating: 500 psi - 2" size, 250 psi - 3" & 4" sizes.
- -20°F to 400°F temperature range (-46°C to 204°C).



## Level Controls

### LC10, LC10S AND LC10B

The LC10 is a rugged, field configurable, displacer-operated, liquid level controller. Ideal applications include scrubbers, separators, and heater treaters. Industry-proven force balance design allows for control of gas/liquid as well as liquid/liquid interfaces. Wide variety of sizes, end connections, and displacer arm lengths to fit any vessel configuration. Snap pilot available with soft seat option that meets 40 CFR Part 60, Subpart 0000. Sealed case (LC10S) and backmount options (LC10B) available.

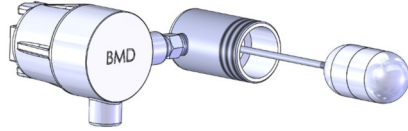
- Threaded (6000 psi), flanged (up to ANSI 2500) and union connections (1500 psi).
- LH or RH mount.
- Horizontal or Vertical.
- Direct or Reverse action.
- Snap, throttle or zero bleed snap pilot options.
- SPDT or DPDT electric switch options.
- -50°F to 400°F temperature rating (-46°C to 204°C).
- NACE and low-temp options available.



## LC25

The LC25 is a low-pressure, float operated, liquid level switch. With a working pressure of up to 200 psi, the LC25 features a rugged aluminum housing containing a SPDT switch that can be wired to either make or break contact when the liquid level rises or falls.

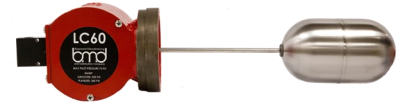
- 2" NPT
- Pressure Rating: 200 psi
- -20°F to 400°F temperature range (-29°C to 204°C).
- Electrical Switch Ratings:  
 15A @ 125, 250, 480 VAC  
 1/8 HP @ 125 VAC  
 1/4A @ 250 VDC  
 1/4 HP @ 250 VAC



## LC60

The LC60 is a low/medium pressure float operated liquid level control with a wide adjustable span. Fully adjustable high/low level trigger points are easily accessed by removing cover. 3-way block and bleed pilot features a soft seat for bubble tight shutoff.

- 4"-150 flanged, 4" grooved connections.
- 285 psi pressure rating (flanged), 500 psi (grooved).
- -20°F to 400°F (-29°C to 204°C) temperature range.
- -1/4" NPT pilot connections (75 psi max).
- 10" arm with 3.5" X 6" SST float (standard).
- 60° max span.
- Pneumatic/Electric and Interface options.



## LC40

The LC40 is a low-pressure level control for atmospheric storage tanks. The LC40 monitors the level of a tank by sensing the head pressure created by the height of the fluid in the tank. When equipped with an SPDT switch, the LC40 can be set to trigger at any level on rise and fall. The hinged door provides both a weather seal and quick access to the internals for trigger point, zero calibration and span adjustments.

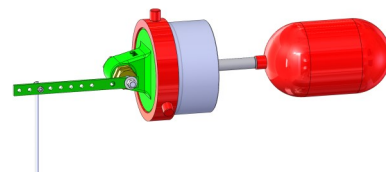
- 1/2" NPT (Electrical), 2" (Grooved or NPT) connections.
- 0-16', 0-24' or 0-30' standard scale ranges.
- Max tank height 60'.
- -20°F to 225°F temperature range (-29°C to 107°C).



## LC70

The LC70 is a float operated liquid level control device sometimes referred to as a "trunnion" or "float nose." The LC70 utilizes a large float, linkage rod and levers to mechanically operate a dump valve via rotational connections.

- 8" Union Connection, Bolted Connection.
- Pressure Rating: 500 psi.
- -20°F to 400°F (-29°C to 204°C) temperature range.
- Features exclusive Gator spline mechanism.



## LC50

The LC50 is a low/medium pressure, float operated, snap liquid level control. The adjustable range allows it to be used as a high/low alarm or traditional level controller. 3-way block and bleed pilot features a soft seat for bubble tight shutoff.

- 2" threaded, 4" union, 4" grooved connections.
- 500 psi pressure rating (threaded).
- -20°F to 400°F (-29°C to 204°C) temperature range.
- 1/4" NPT pilot connections (75 psi max).
- 10" arm with 2" X 6" SST float (standard).
- Other lengths/sizes available upon request.
- 15° max span per side.
- Pneumatic/Electric and Interface options.
- NACE option available.



## Glass Liquid Level Gauges

### LG20

BMD's LG20 Glass Liquid Level Gauges are rugged flat glass gauges for mid-range pressure temperature applications. Standard construction includes a solid one-piece chamber machined from carbon steel with covers, toughened glass and chrome-molybdenum bolts and nuts. All metal parts are rustproofed. Recessed gasket seat prevents movement and insures leak-free service.

- 1/2" FNPT (standard) top-bottom connections. 1/2", 3/4" Side and Back connections.
- 3-9 standard glass sizes.
- Reflex or transparent style options.
- Glass conforms to BS3463, DIN 7081.
- Wetted parts conform to NACE MR-01-75.
- Pressures up to 2700 psi (Varies by size)



## Gauge Valves

### GV20

BMD's GV20 Gauge Valves are designed to be used with BMD's LG20 Level Gauges but are also compatible with all armored flat-glass level gauges. FNPT glass connections and union tank connections make for easy installation and removal.

- 1/2" FNPT glass connections.
- 1/2" or 3/4" Union tank connections.
- SST ball check upstream of seat to shut off flow if level gauge breaks.
- Sturdy, ergonomic tee handle for ease of use.
- Body and drain offset from tank connection for easy glass cleaning.
- Wetted parts conform to NACE MR-01-75.

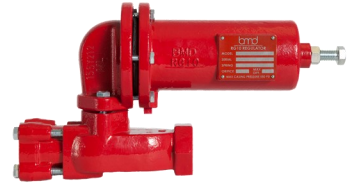


## Regulators

### RG10

The RG10 is a high pressure, direct spring operated, pressure regulator. Its high pressure, heavy duty design makes it ideal for pressure regulation in the oil and natural gas industry. Typical applications include farm taps, first or second cut regulation, transmission to distribution and many other high pressure processes.

- 1" and 2" WCB steel bodies.
- FNPT and flanged connections.
- 1500 psi max inlet, 27-500 psi outlet.
- -20°F to 150°F temperature range (-29°C to 66°C).
- Orifice sizes from .125" to 0.50" in both brass and SST.
- Buna, Viton® and Nylon disks.
- Neoprene and Viton® Diaphragms.
- NACE option available.



### RG20 AND RG20H

The RG20 is a direct spring operated, pressure regulator that can be used anywhere pressure regulation of natural gas, air or other gas is required. Its housing can be moved to one of four positions. The body is accessible without removing it from the line for easy maintenance. The RG20H is a high pressure option, featuring a steel housing and spring cover capable of handling outlet pressures up to 500 PSI.

- 1" and 2" WCB steel bodies.
- 2000 psi pressure rating.
- FNPT connections.
- -20°F to 150°F temperature range (-29°C to 66°C).
- Orifice sizes from .125" to 0.50" in aluminum and SST.
- Buna, Viton® and nylon disks.
- Buna and Viton® diaphragms.



## RG30

The RG30 is a compact, spring-operated regulator used to supply air or gas to pilots, positioners or other pneumatic controls. It features an internal relief to help maintain an accurate downstream pressure, rugged aluminum housing construction with dual outlets and a built-in micron filter.

- 1/4" NPT connection.
- 250 psi inlet pressure rating.
- Outlet ranges: 0-30 psi, 0-60 psi and 0-120 psi.
- -20°F to 180°F temperature range (-29°C to 82°C).



## RG40

The RG40 is a compact, high pressure, spring operated regulator designed to reduce high pressures down to working pressures. It features a rugged brass body and housing with a durable metal diaphragm and nylon disk for handling high pressure drops. Typical applications include reduction of high pressure to operate chemical injection pumps, valve actuators or controllers.

- 1/4" NPT connection (1 inlet, 3 outlets).
- 5000 psi inlet pressure rating.
- Outlet ranges: 0-125 psi, 0-225 psi.
- -20°F to 180°F temperature range (-29°C to 82°C).
- SST diaphragm and nylon disk.
- Optional tee handle adjustment.



## RG50

The RG50 is a pressure reducing regulator with a wide variety of applications such as natural gas distribution systems, boilers, furnaces, and much more. The RG50 provides high accuracy, no atmospheric bleed, and a heavy main spring that provides a tight shutoff. With high-capacity pressure control and excellent low flow control, topped off with ease of maintenance, the RG50 is the perfect solution for pressure reducing applications.

- 2" FNPT and flanged connection.
- 3/8", 1/2", 5/8", 7/8" and 1 1/8" port sizes
- Inlet pressure: up to 400 psi.
- Outlet range: 35 to 100 psi.
- -20°F to 300°F temperature range (-29°C to 149°C).



## Relief Valves

### RV10

The RV10 safety relief valves are well-suited for overpressure protection of production equipment. Non-rising stem and soft-seat design ensure long lasting set pressure repeatability and bubble-tight shutoff. ASME certified for gas service. Manufactured in accordance with the ASME BPVC, capacity tested and certified by the National Board and meet the requirements of Section VIII, Div. 1 of the ASME Code.

- NPT and flanged connections.
- Wide variety of inlet/outlet combinations.
- 15-3000 psi set pressure range.
- Stainless Steel trim with D to M orifice sizes.
- Viton® or Carbon-Filled PTFE
- -50°F to 400°F temperature range (-46°C to 204°C).
- NACE and low-temp options available.



## Pressure Pilots

### PC48

The PC48 low-pressure pilot is well-suited for regulating inlet pressure to gas compressors, supply pressure control and distribution system pressure control. When used with a control valve, the pilot can serve as a back pressure regulator or pressure reducing regulator. The PC48 can also be used to send a signal when the sense pressure goes above or below a set point.

- 1/4" FNPT connections.
- Accurate control (1 psi sense pressure change = 8 psi output change).
- 5 to 300 psi set pressure range.
- -20°F to 400°F temperature range (-29°C to 204°C).
- Single adjustment.
- Filtered gas supply.
- Intermittent vent pilot construction.
- Direct/Reverse Acting.
- NACE option available.



## PC88

The PC88 is a rugged, high-pressure pilot that can be used as a back pressure regulator or pressure reducing regulator with a control valve. The PC88 can also be used to send a signal when sense pressure goes above or below a set point.

- 1/4" FNPT connections, 1/8" FNPT vent.
- 125 to 1500 psi set pressure range.
- -20°F to 400°F temperature range (-29°C to 204°C).
- Single adjusting screw (1 turn = 40 psi set point change).
- Accurate/proportional control (1 psi sense pressure change = 1 psi output change).
- Intermittent vent pilot construction.
- Direct/Reverse Acting.
- NACE option available.



## CH20

BMD's CH20 horizontal chamber, a shorter version of the CH10, is designed to be used with the LC20 liquid level switches, but may also be used with other types of level switches and controllers. The CH20 is also an excellent choice for situations where the main vessel internal geometry may block the direct installation of a level controller.

- 2" NPT controller connection.
- 1" NPT process connection.
- 2000 psi pressure rating.
- Carbon steel or SST option.



## Chambers and Domes

### CH10

BMD's CH10 horizontal chamber is designed to be used with the LC10 liquid level controller, but may also be used with other types of level switches and controllers. Chambers offer the benefit of isolating the process fluid from the turbulence of the main vessel making for a more accurate level measurement. They are also an excellent choice for situations where the main vessel internal geometry may block the direct installation of a level controller.

- 2" NPT controller connection.
- 1" NPT process connection.
- 2000 psi pressure rating.
- Carbon steel or SST option.



### CH30

BMD's CH30 full line of vertical chambers are designed to be used with the LC10 liquid level controller, but may also be used with other types of level controllers. The CH30s are fully customizable to meet many process piping sizes and connections. The upper dome portion can also be ordered separately for top entry into a vessel.

- 3" and 4" chambers.
- 2" NPT or flanged controller connections.
- 1", 1 1/2", 2" NPT and flanged process connections.
- Flanged pressure rating up to 1500 class.
- Threaded pressure rating 600 class.
- Carbon steel or SST options.

