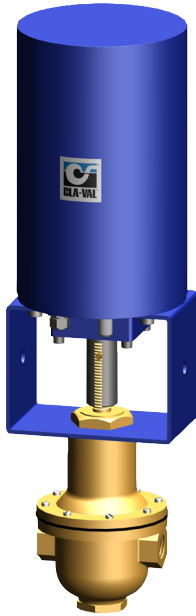




—MODELS— CRD-32 and CRA-32

Electronic Actuated Pressure Reducing Pilot Control

- Simplified Remote Valve Set-Point Control
- 12-24VDC Input Power
- Easy Interfacing to SCADA Systems
- Accurate Pressure Control
- Reliable Hydraulic Operation
- Submersible (IP-68)

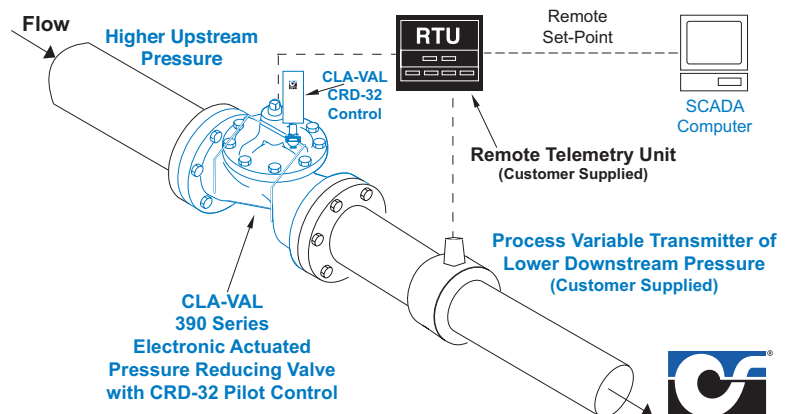
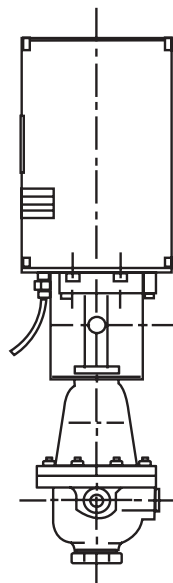
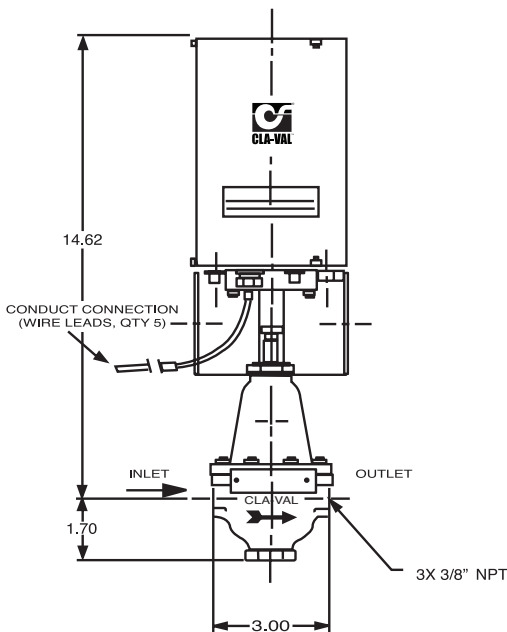


The Cla-Val Model CRD-32 and CRA-32 Electronic Actuated Pressure Reducing Pilot Controls provide remote set-point adjustment and accurate downstream pressure control on Cla-Val 390 Series Control Valves. Remote set-point command signals can be from any SCADA-type control system that uses analog 4-20 mA signals. The CRD-32 senses valve outlet pressure directly and the CRA-32 senses downstream pressure with remote hydraulic connection. Operating on 12 to 24 VDC and consuming very little power, they are an ideal control system for remote valve sites that may even be solar powered. Existing manually-set Cla-Val 90 Series Pressure Reducing control valves can be retrofitted with CRD-32 or CRA-32 to add remote set-point control of delivery pressure. Verification of downstream pressure may be sent to SCADA system from customer supplied pressure sensor attached to valve outlet.

The CRD-32 and CRA-32 consists of a hydraulic pilot and integral controller that accepts a 4-20 mA remote set-point and positions the pilot to maintain a pressure at valve outlet within preset limits. Pressure settings are linear between these settings. Special USB connector cable and free downloadable software is required to change built-in electronic range limits for downstream reduced pressure. Continuous internal monitoring of actuator position results in smooth transitions between pilot set-points with no backlash or dithering. When power or control input fail, the CRD-32 or CRA-32 pilot remains in automatic hydraulic control assuring system stability under all conditions.

Typical Applications

The CRD-32 and CRA-32 are installed on Cla-Val 390 Series valves that maintain downstream pressure and require this pressure to be changed from a remote location. It is also an effective solution for lowering costs associated with "confined space" requirements by eliminating the need for entry in valve structure for set-point adjustment. Additional pilot controls, hydraulic and/or electronic, are also available to perform multiple functions to fit exact system requirements.



CRD-32 and CRA-32 Purchase Specifications

The Electronic Actuated Pressure Reducing Pilot Control shall have an integral hydraulic pilot and electronic controller contained in a IP-68 rated submersible enclosure to provide interface between remote telemetry and valve set-point control. It will compare a remote analog command signal with an internal position sensor signal and adjust the hydraulic pilot control spring mechanism to a new set-point position. 4-20 mA actuator position feedback output shall be supplied standard.

If power fails the valve shall continue to control to the last set-point command. If the Remote Set-Point signal is lost the actuator is programmable to go to either the 4mA, Last, or 20mA command set-point. No mechanical adjustments shall be necessary to the actuator. The low and high position range adjustment shall be accomplished only with valve manufacturer's components and instructions to be supplied in a separate kit.

The Electronic Actuated Pressure Reducing Pilot Control shall be Cla-Val Model CRD-32 or CRA-32 as manufactured by Cla-Val, Newport Beach, CA.

Pilot Control Subassembly Specifications

Adjustment Ranges

2 to 30 psi
15 to 75 psi
30 to 300 psi (12Volts limited to 200 psi)

End Connection

3/8" NPT

Temperature Range

Water: to 180°F

Materials

Pilot Control: Bronze ASTM B62
Trim:Stainless Steel Type 303
Rubber:Buna-N® Synthetic Rubber

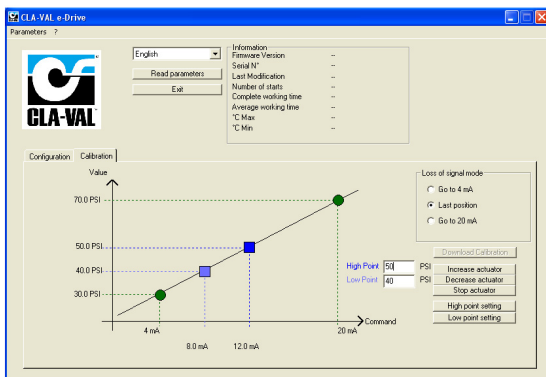
Available with optional Stainless Steel or Monel materials at additional cost. Consult factory for details.

Note: Available with remote sensing control (specify CRA-32)

Options:

Re-ranging software - free download from www.cla-val.com.

USB connection cable required when changing range parameters or restoring range parameters after servicing pilot control subassembly.



Ranging software makes it easy to set low (4mA) and high (20mA) set-point limits.

130VC-2 Electronic Actuator Specifications

Supply Power Input: 12V to 24V DC
No Load draw: 50 mA
Max. Load draw: 250 mA

Remote Command Input: 4-20 mA analog signal

Position Feedback Signal: 4-20 mA

Speed of Rotation: Adjustable On/Off time, max 6 rpm

Diagnostic: LED Indicator

Loss of Power: Actuator will remain in last commanded position.

Loss of Signal Programmable - 4mA, Last, or 20mA

Electrical Connections: Single, permanently attached cable with color-coded power supply and signal wires

Mechanical Specifications:

Environmental

Protection Class: IP-68 (Temporary submersible)

Ambient Temperature: 15° to 150° F (-10° to 65° C)

Materials

Enclosure and Bracket: Anodized Aluminum

Coupling Assembly: Stainless Steel

Gear Train: Stainless Steel, permanently lubricated

When Ordering, Please Specify

1. Catalog No. CRD-32 (Direct Sensing) or CRA-32 (Remote Sensing)
2. Adjustment Range
3. Materials - Pilot Control
4. X56 Mounting Kit (Specify Valve Size)



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