



— MODEL — **CDHS-18**

3/8" Differential Control



- **Direct-Acting Precision Control**
- **Simple Design**
- **Easy to Adjust**
- **Operates in Any Position**
- **Long Service Life**
- **Rugged Construction**

The Cla-Val Model CDHS-18 Differential Control Valve is a normally-open, spring-loaded, diaphragm-type pilot valve that operates hydraulically and is designed to close on a rising differential pressure. When used as a pilot control with Cla-Val valves it acts as a flow limiting control. The CDHS-18 pilot uses automatic hydraulic control of valve to assure system stability under all conditions. There is one inlet port and two outlet ports in the body for either straight or angle installation. The outlet port senses high pressure created by differential producing device installed downstream of valve. Spring chamber above diaphragm senses lower downstream pressure created by differential producing device.

It provides accurate differential pressure control for rate of flow control by Cla-Val 40 Series Control Valves. Flow through the CDHS-18 control responds to changes in differential pressure created by a precision metering orifice plate assembly installed in-line with 40 Series valves. Turning the adjusting screw clockwise increases the delivery flow rate. Turning it counterclockwise decreases the delivery flow rate.

The CDHS-18 automatically maintains a maximum pressure differential at orifice plate and a corresponding flow rate through valve within limits of adjustment spring range of 30 to 480 inches water column. Pressure differential settings are linear between these limits.

Cla-Val 40 Series Rate-of-Flow control valves using the CDHS-18 can be retrofitted with CDHS-33 Electronic Actuated Pilot Control to add remote set-point control. Consult factory for details.

Specifications

Size: 3/8" NPT Threaded inlet and two outlet ports, with one 1/8" NPT Threaded sensing port

Temperature Range: Water, to 180°F Max.

Materials

Body and Cover: Low Lead Bronze
Trim: Stainless Steel 303 and Brass
Rubber: Buna-N Rubber

Optional Materials: Cast Aluminum 356-T6
 Stainless Steel 303 or 316

Pressure Rating: Cast Bronze 400 psi Max.
 Cast Aluminum 275 psi Max.
 Stainless Steel 400 psi Max.

Adjustment Range: 30 inches to 480 inches Water Column Differential

