

OPERATION

The CP702-4 is a 16-size, normally open, pilot-to-open, spring-biased differential-sensing logic element. It will modulate flow from 2 to 1 based on the spring control pressure, inlet pressure at port 1, and outlet pressure at port 3.

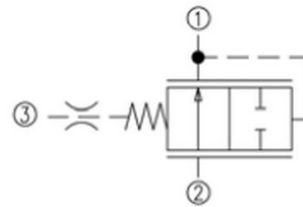
APPLICATION

Common applications include: pre-compensator for proportional directional control or flow controls, as well as a pressure control valve. A common application for this valve is as a pressure compensator when applied with a fixed, or adjustable orifice to create a pressure-compensated flow control. This ensures that flow rate, and resulting actuator speed is maintained regardless of pressure drop across the control orifice. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.

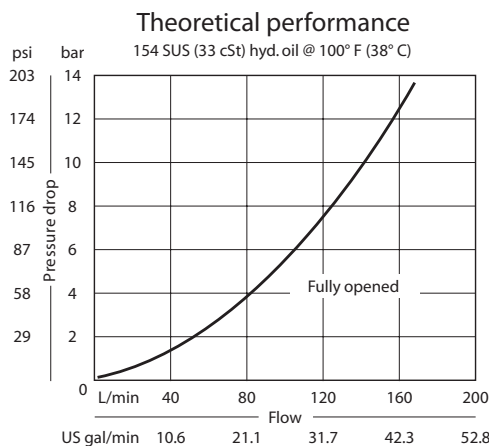
SPECIFICATION

| | |
|-------------------------------|---------------------------|
| Rated pressure | 210 bar [3000 psi] |
| Rated flow at 7 bar [100 psi] | 114 l/min [30 US gal/min] |
| Weight | 0.38 kg [0.83 lb] |
| Cavity | SDC16-3S |

SCHEMATIC



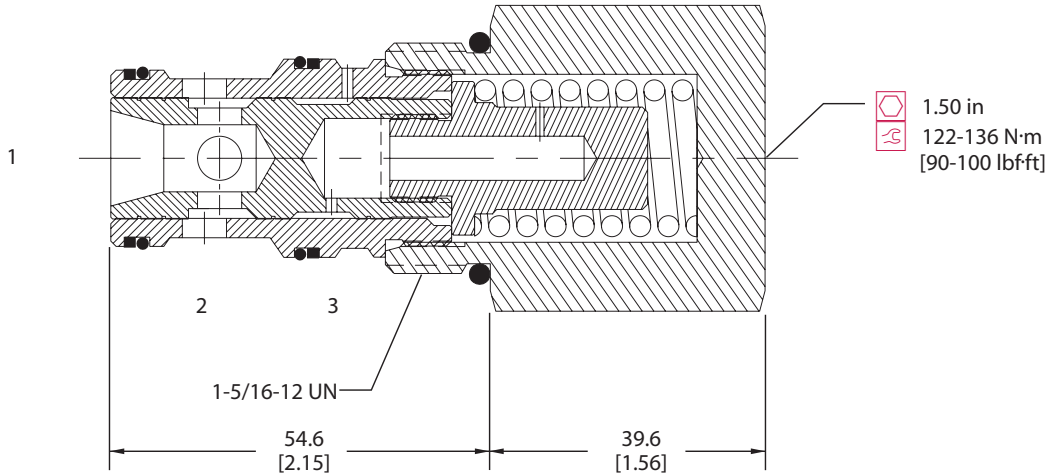
PERFORMANCE CURVE



DIMENSION

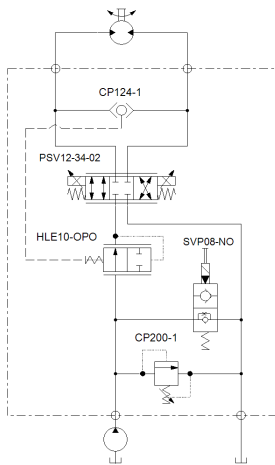
mm [in]

Cross-sectional view

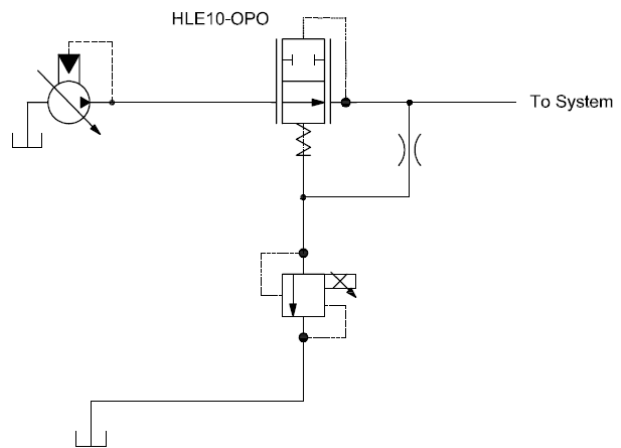


EXAMPLE CIRCUITS

Compensated Circuit



Proportional Pressure Reducing



ORDERING INFORMATION

CP702-4-B-16S-080

Seal Option

| Code | Seal Material | Seal kit |
|------|---------------|----------|
| B | Buna | 120033 |
| V | Viton | 120034 |

| Housings & Ports | Housing P/N | Pilot port |
|-------------------|----------------|------------|
| 0: Cartridge Only | No Housing | |
| 6B: 3/4 BSP, AL | CP16-3S-6B/2B | 1/4 BSP |
| 8B: 1 BSP, AL | CP16-3S-8B/2B | 1/4 BSP |
| 12S: #12 SAE, AL | CP16-3S-12S/4S | #4 SAE |
| 16S: #16 SAE, AL | CP16-3S-16S/4S | #4 SAE |

Other Housings available

Differential Control Pressure

| Code | bar | [psi] |
|------|------|-------|
| 040 | 2.8 | [40] |
| 080 | 5.5 | [80] |
| 110 | 7.6 | [110] |
| 150 | 10.3 | [150] |
| 190 | 13.1 | [190] |