



Logic Elements Technical Information

Spool Type LE20-CPC

OPERATION

The LE20-CPC is a 20-size, normally-closed, pilot-to-close, spool-type, spring biased differential-sensing logic element. It will modulate flow from 1 to 2 based on the spring control pressure, inlet pressure at port 1, and pilot pressure at port 3.

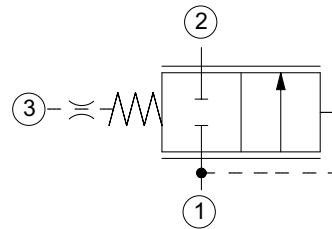
APPLICATION

Common applications include load-sensing bypass compensator for a fixed displacement pump with single or multiple actuators as well as bypass-type pressure-compensated flow control. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.

SPECIFICATION

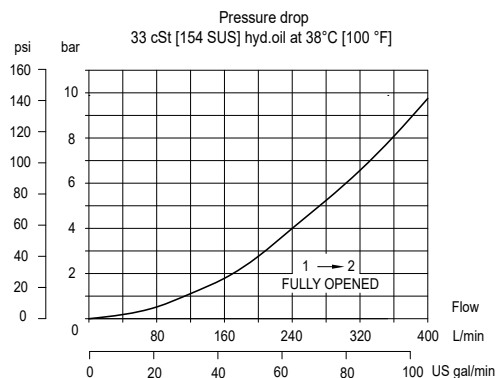
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	340 l/min [90 US gal/min]
Weight	1.19 kg [2.62 lb]
Cavity	CP20-3S

SCHEMATIC



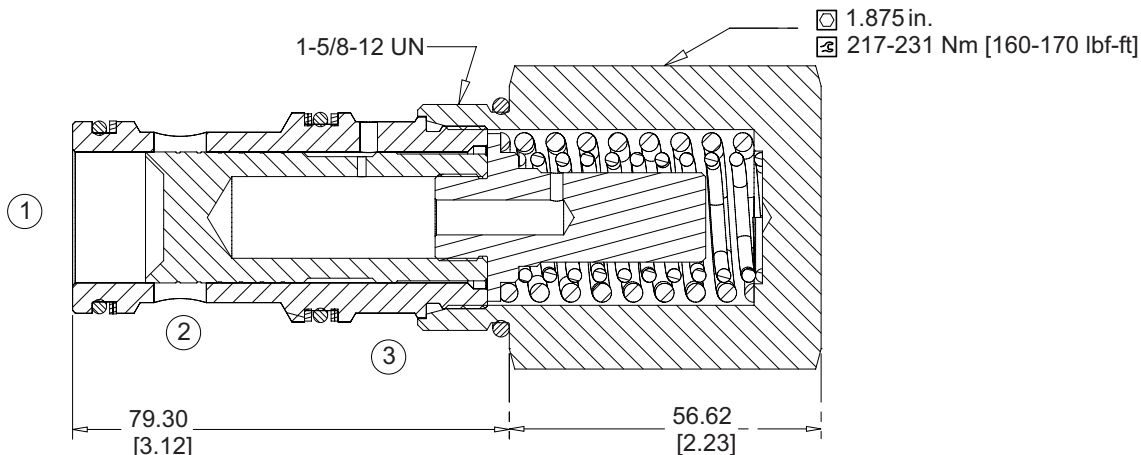
PERFORMANCE CURVE

Theoretical performance

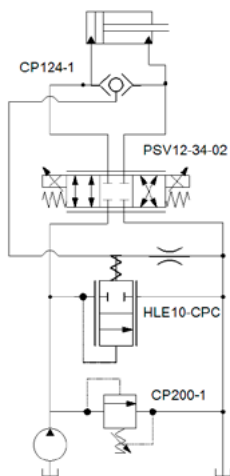


DIMENSION mm [in]

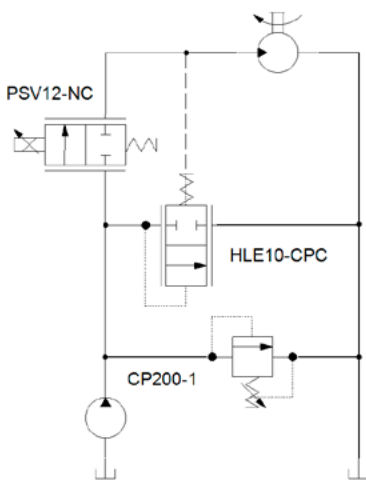
Cross-sectional view



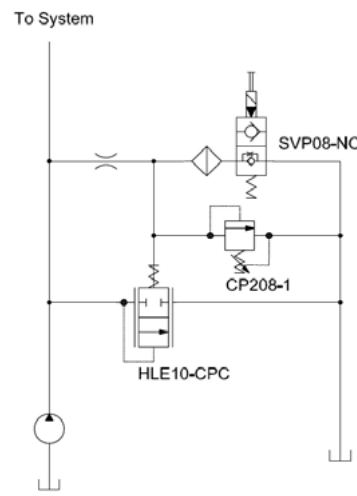
EXAMPLE CIRCUITS



Double Acting Cylinder with Proportional Speed Control, Unloading Valve and Circuit Relief



Proportional Bypass Flow Control



Dump and Relief Valve for a Fixed Pump

ORDERING INFORMATION

LE20-CPC-5.5-B-00

Logic Element,
20 Size Cavity
Normally Closed,
Pilot-to-Close
Differential Control Pressure
5.5 = 5.5 bar [80 psi]
7.0 = 7 bar [100 psi]
10.0 = 10.0 bar [150 psi]
15.0 = 15.0 bar [218 psi]

Housing and ports
00 = No Housing
8B = Al, 1 BSP
10B = Al, 1-1/4 BSP
16S = Al, #16 SAE
20S = Al, #20 SAE

Seals
B = Buna-N
V = Viton
Seal Kit
120380
120381

Housing Part # Pilot Port
No Housing
CP20-3S-8B/2B 1/4 BSP
CP20-3S-10B/2B 1/4 BSP
CP20-3S-16S/4S #4 SAE
CP20-3S-20S/4S #4 SAE