



Logic Elements Technical Information

Spool Type CP703-2

OPERATION

The CP703-2 is a 20-size, normally closed, vent-to-open, 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.

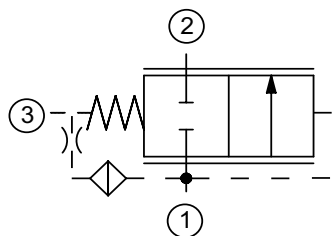
APPLICATION

Common applications include: pump unloading, pilot-operated relief valve (mechanical or proportional), sequence valve and selector circuit. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.

SPECIFICATION

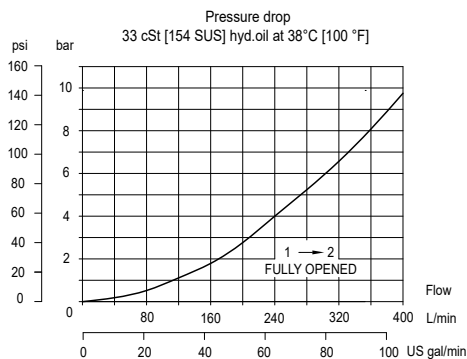
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	340 l/min [90 US gal/min]
Weight	1.18 kg [2.60 lb]
Cavity	CP20-3S

SCHEMATIC



PERFORMANCE CURVE

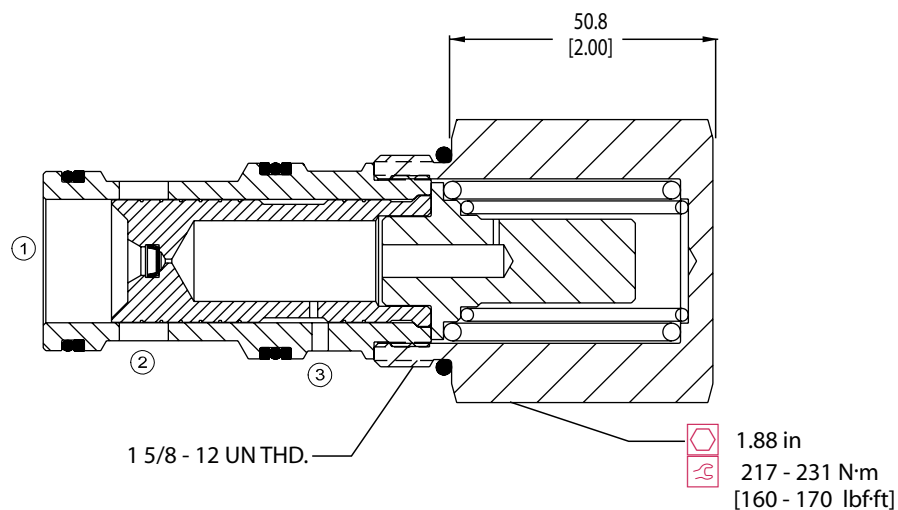
Theoretical performance



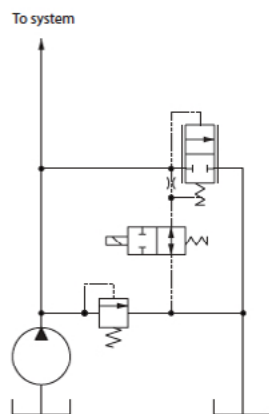
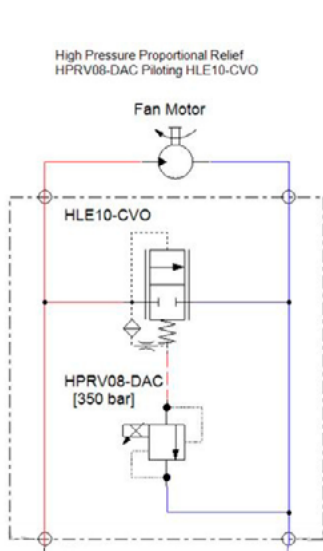
DIMENSION

mm [in]

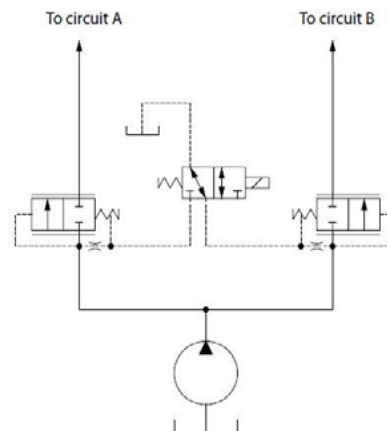
Cross-sectional view



EXAMPLE CIRCUITS



Pump unloading



Selector valve

ORDERING INFORMATION

CP703 - 2 - B - 16S - 080			Differential control pressure	
Seals	Housing and ports	Housing P/N	Pilot port	bar [psi]
B = Buna-N	0 = No housing	No housing		050 = 3.4 [50]
V = Viton	8B = AL, 1 BSP	CP20-3S-8B/2B = 1/4 BSP		080 = 5.5 [80]
	10B = AL, 1-1/4 BSP	CP20-3S-10B/2B = 1/4 BSP		100 = 6.9 [100]
	16S = AL, #16 SAE	CP20-3S-16S/4S = #4 SAE		130 = 9.0 [130]
	20S = AL, #20 SAE	CP20-3S-20S/4S = #4 SAE		150 = 10.3 [150]
	other housings available			