

Logic Elements

PCS14-10

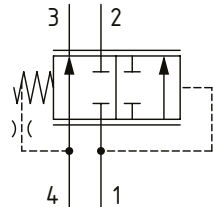
Pressure Compensator, Priority Type

350 bar [5000 psi] • 38 l/min [10 US gpm]

DESCRIPTION AND OPERATION

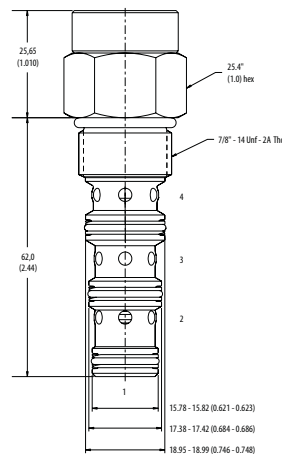
This is a 4-ported spool valve where flow from port 1 to port 2 is blocked and port 4 is connected to port 3. The spring chamber is connected to port 4 through an orifice in the spool. When port 4 is connected to the outlet of a control orifice and port 1 is connected upstream of the orifice, the valve functions as a priority pressure compensator. When the pressure drop across the orifice is equal to the spring set pressure, the spool begins to restrict the flow to port 3, while opening port 1 to port 2 to allow excess flow to pass to another part of the circuit. If the pressure in the second part of the circuit rises above the pressure in port 3, the spool will move back to restrict the flow from port 1 to port 2 and maintain the priority flow to port 3 regardless of pressure changes between port 3 and port 2. These valves are ideal for use in circuits where a priority flow is needed to a function while allowing the excess flow to be used for other purposes.

SCHEMATIC



DIMENSIONS

mm [in]

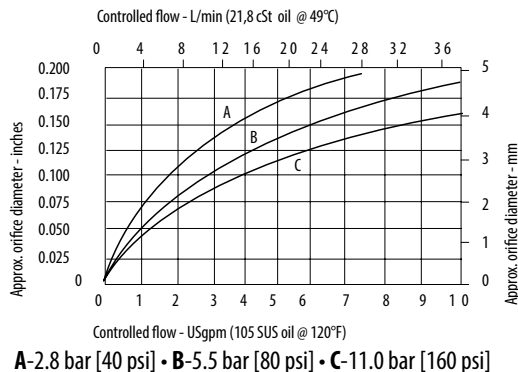


Installation torque
A-47-54 Nm [35-40 ft. lbs]
S-68-75 Nm [50-55 ft. lbs]

PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	38 l/min [10 US gpm]
Weight	0.14 kg [0.32 lb]
Cavity	SDC10-4

PERFORMANCE CURVES



MODEL CODE

PCS14 - 10 - V - A - 3B - 40

Seal Option

Code	Seal kit
Omit -Buna - N	889651
V -Viton	889653

Housing Material

Omit-No housing
A-Aluminum
S-Steel

Housing

Code	Ports	Aluminum Standard duty	Aluminum Heavy duty	Steel
0	No housing			
3B	3/8" BSP	02-179705		
6T	#6 SAE	566161		02-175137
8T	#8 SAE			02-175138
2G	1/4" BSP		876709	02-175139
3G	3/8" BSP		876715	02-175140
6H	#6 SAE		876708	
8H	#8 SAE		876713	

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

* Additional housings available

Differential Pressure

Code	Bar	Psi
40	2.8	[40]
80	5.5	[80]
160	11.0	[160]