

Logic Elements

PFRD-16

Pressure Compensator, Load Sense, Dynamic, Priority Type

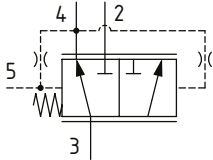
280 bar [4000 psi] • 150 l/min [40 US gpm]



DESCRIPTION AND OPERATION

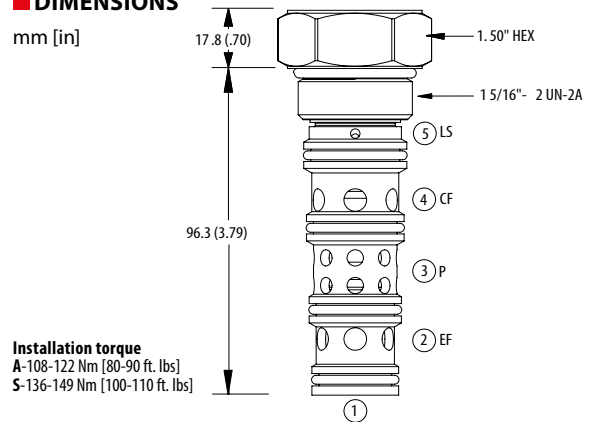
This is a 5-ported, dynamic, priority load sense pressure compensator that supplies fluid on demand to an actuator or a steering valve. Flow passes from the inlet port 3 to the controlled flow port 4. Pressure in port 4 is connected to port 1 (which is plugged) through an orifice and to port 5. When the pressure in port 1 is higher than the load sense pressure in port 5, the spool moves against the spring and begins to open port 2 and allows excess flow to pass to the rest of the system. When the flow is no longer required through the controlled port and the load sense line falls, all of the oil will pass to the excess flow port 2. Some oil will pass from port 5 to port 1, which provides additional stability to the system.

SCHEMATIC



DIMENSIONS

mm [in]



Installation torque

A-108-122 Nm [80-90 ft. lbs]

S-136-149 Nm [100-110 ft. lbs]

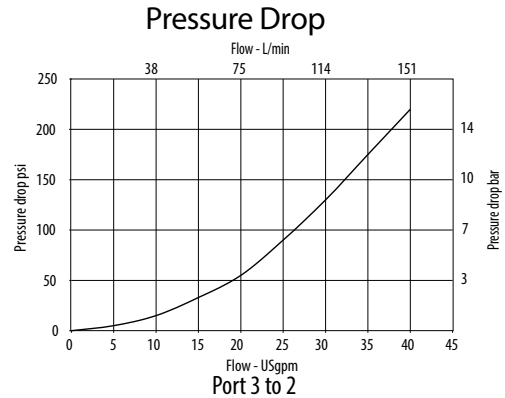
PERFORMANCE DATA

Rated pressure	280 bar [4000 psi]
Rated flow	150 l/min [40 US gpm]
Leakage	164 ml/min [10 in ³ /min] @ 210 bar [3000 psi]
Weight	0.47 kg [1.05 lb]
Cavity	C-16-S5

Note: Port 1 is unused and should be plugged.

Note: Minimum inlet flow should not be less than 1/4 maximum of inlet flow.

PERFORMANCE CURVES



MODEL CODE

PFRD - 16 - U - A - 12T - 080

Basic Code

PFRS - Static signal
PFRD - Dynamic signal

Seal Option

Code	Seal kit
U-Urethane	202915-922

Housing Material

0 - No housing
A - Aluminum
S - Steel

Differential Pressure

Code	Bar	Psi
080	5.5	[80]
110	7.6	[110]
130	9.0	[130]

Housing

Code	Port 2, 3 & 4	Port 5	Aluminum	Steel
000	No housing			
12T	#12 SAE	#4 SAE	4994880-001	4994881-001
16T	#16 SAE	#4 SAE	4994880-002	4994881-002
06G	3/4" BSP	1/4" BSP	4994880-003	4994881-003
08G	1" BSP	1/4" BSP	4994880-004	4994881-004

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

* Additional housings available