

# Logic Elements

## PFRD-20

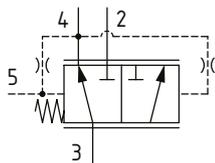
Pressure Compensator, Load Sense, Dynamic, Priority Type

240 bar [3500 psi] • 230 l/min [60 US gpm]

### DESCRIPTION AND OPERATION

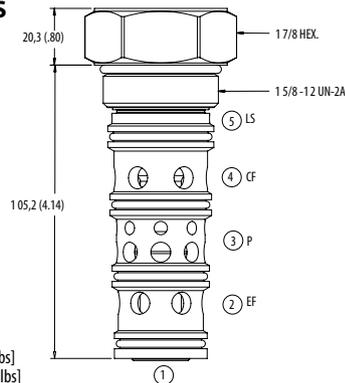
This is a 5-ported, dynamic, priority load sense pressure compensator that supplies fluid on demand to an actuator or a steering valve. Flow passes from the inlet port 3 to the controlled flow port 4. Pressure in port 4 is connected to port 1 (which is plugged) through an orifice and to port 5. When 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-130-155 Nm [95-115 ft. lbs]  
 S-160-180 Nm [120-135 ft. lbs]

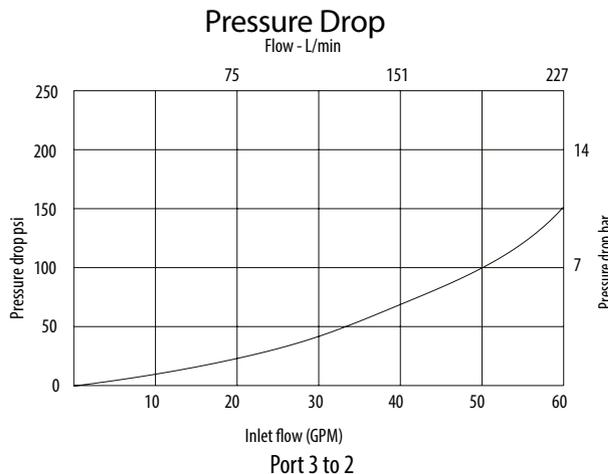
### PERFORMANCE DATA

<b>Rated pressure</b>	<b>240 bar [3500 psi]</b>
<b>Rated flow</b>	<b>230 l/min [60 US gpm]</b>
<b>Leakage</b>	164 ml/min [10 in <sup>3</sup> /min] @ 210 bar [3000 psi]
<b>Weight</b>	0.86 kg [1.9 lb]
<b>Cavity</b>	C-20-55

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 - 20 - U - A - 12T - 085**

#### Basic Code

PFRS - Static signal  
 PFRD - Dynamic signal

#### Seal Option

Code	Seal kit
U-Urethane	02-187543

#### Housing Material

0 - No Housing  
 A - Aluminum  
 S - Steel

#### Differential Pressure

Code	Bar	Psi
085	5,9	[85]
110	7,6	[110]

#### Housing

Code	Port 2, 3 & 4	Port 5	Aluminum	Steel
000	No housing			
12T	#12 SAE	#4 SAE	4998822-001	4998823-001
16T	#16 SAE	#4 SAE	4998822-002	4998823-002
06G	3/4" BSP	1/4" BSP	4998822-003	4998823-003
08G	1" BSP	1/4" BSP	4998822-004	4998823-004

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

\* Additional housings available