## Directional Control Valves

PTS9-20
Directional Control Valve, 3-Way, Spool Type, Hydraulic Pilot, External Drain

## 280 bar [ 4000 psi • $230 \mathrm{I} / \mathrm{min}$ [60 US gpm]

## DESCRIPTION AND OPERATION

This is a 3-way, spool type, hydraulically piloted directional control valve with an external drain at port 5 . In the normal condition, port 3 is connected to port 4 with port 2 blocked. Pilot pressure at port 1 will cause the valve to shift, connecting port 3 to port 2 with port 4 blocked. In the crossover transition all ports are open. Due to the external drain, the pilot pressure required shift the valve is dependent on the pressure in port 5 , which would normally be connected to tank.

## ■SCHEMATIC




## - PERFORMANCE CURVES



280 bar [4000 psi] $230 \mathrm{I} / \mathrm{min}$ [ 60 US gpm ]

| Rated pressure | $\mathbf{2 8 0}$ bar [4000 psi] |
| :--- | ---: |
| Rated flow | $\mathbf{2 3 0 1 / m i n}[60 \mathrm{US} \mathrm{gpm}]$ |
| Leakage | $164 \mathrm{ml} / \mathrm{min}\left[10 \mathrm{in}^{3} / \mathrm{min}\right] @ 210 \mathrm{bar}[3000 \mathrm{psi}]$ |
| Weight | $0.86 \mathrm{~kg}[1.9 \mathrm{lb}]$ |
| Cavity | $(-20-5 \mathrm{~S}$ |


| PTS9 - $20-\underline{U}-\underline{A}-16 T-\underline{040}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seal Option |  |  |  |  |  |  |  |
| Code | Seal Kit |  |  |  |  |  |  |
| U-Uret | 02-187543 |  |  |  |  |  |  |
| Housing Material |  |  |  |  | Shift Pressure |  |  |
| 0-No housing A-Aluminum S-Steel |  |  |  |  |  |  |  |
| Housing |  |  |  |  | Code | Bar | [Psi] |
| Code | Port 2, 3 \& 4 | Port 1 \& 5 | Aluminum | Steel | 040 | 2.75 | [40] |
| 000 | No Housing |  |  |  | 080 | 5.5 | [80] |
| 16 T | \#16SAE | \# 4 SAE | 4998822-002 | 4998823-002 |  |  |  |
| 08 G | 1" BSP | 1/4" BSP | 4998822-004 | 4998823-004 |  |  |  |
| * Aluminum bodies are to be used for pressures less than 210 bar [ 3000 psi ]. <br> * Additional housings available |  |  |  |  |  |  |  |

