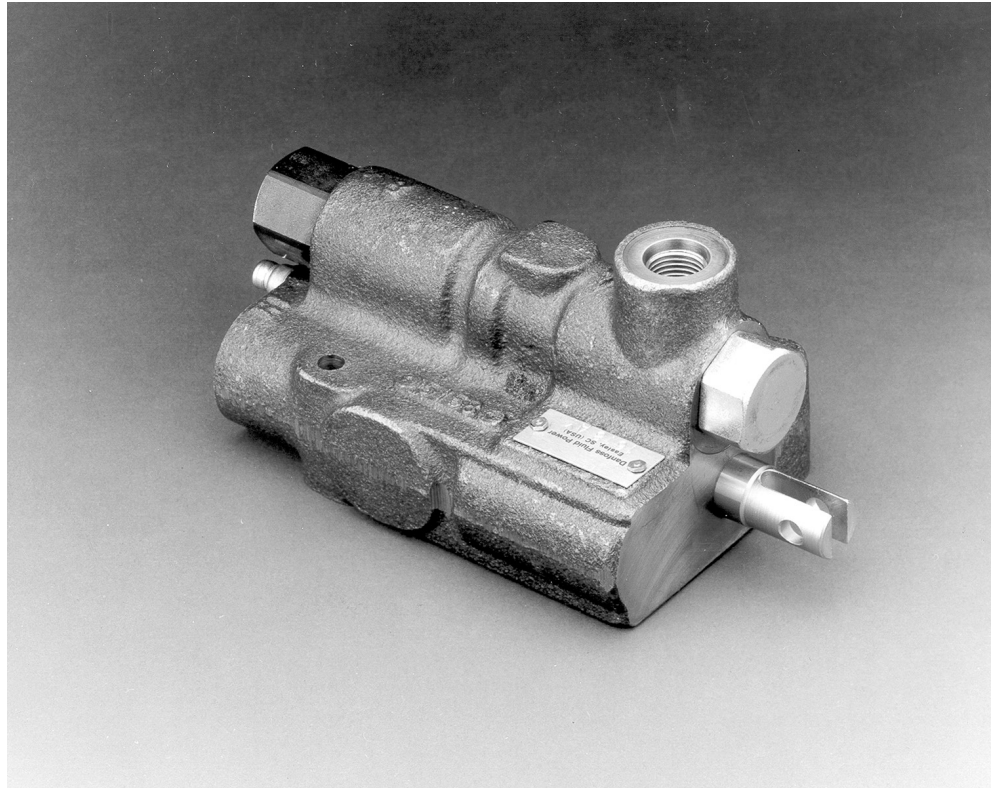




Directional Control Valves  
Technical Information  
Model 1618



Single spool monoblock valve. 38 l/min [10 US gal/min] maximum flow. 207 bar [3000 psi] maximum pressure.

**TYPICAL APPLICATIONS**

Mowers, sweepers, fork lifts, aerial lift equipment, utility trucks, snow blades, trenchers, agricultural equipment

- All valves supplied with clevis end spools
- Power-beyond port machined and plugged (use whenever a downstream valve is required)
- Cast-iron body
- Chrome plated spools select fit to body for leakage control
- Paint color: black primer
- Closed transition spool timing prevents load drop before raise
- Individually boxed and labeled

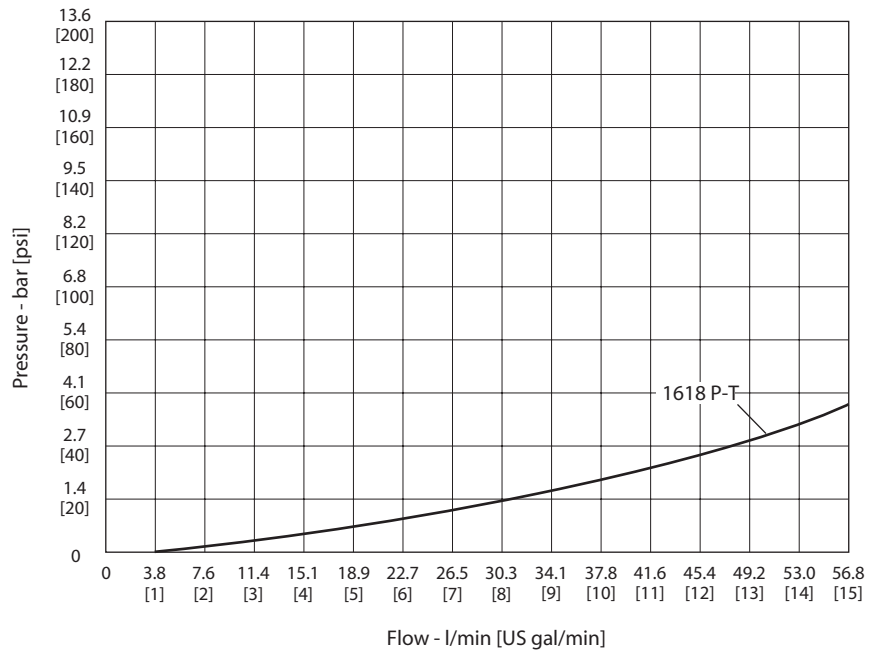


# Directional Control Valves

## Technical Information

### Model 1618

#### PRESSURE DROP



#### PORTING

<b>Inlet/outlet</b>	9/16 -18 SAE, 3/4 - 6 SAE
<b>Locations available</b>	side, end B/D ports - end A/C ports - top,end
<b>Work ports</b>	9/16 -18 SAE, 1/2 -20 SAE , 7/16 -20 SAE

#### HANDLES

None Available

#### TECHNICAL DATA

<b>Maximum pressure</b>	207 bar	[3000 psi]
<b>Maximum tank line pressure</b>	69 bar	[1000 psi]
<b>Maximum oil flow</b>	38 l/min	[10 US gal/min]
<b>Spool travel in and out from neutral</b>	4.8 mm	[0.19 in]
<b>Maximum standby leakage @ 69 bar [1000 psi] 21 mm<sup>2</sup>/sec (cSt) [102 SUS]</b>	300 cm <sup>3</sup> /min	[18 in <sup>3</sup> /min]
<b>Standard pilot check leakage@ 69 bar [1000 psi] 21 mm<sup>2</sup>/sec (cSt) [102 SUS]</b>	0.5 cm <sup>3</sup> /min	[0.03 in <sup>3</sup> /min]
<b>Minimum oil temperature</b>	-29° C	[-20° F]
<b>Maximum oil temperature</b>	82° C	[180° F]
<b>Ambient temperature range</b>	-29° to 60° C	[-20° to 140° F]
<b>Minimum viscosity</b>	6 mm <sup>2</sup> /sec (cSt)	[45 SUS]
<b>Maximum viscosity</b>	440 mm <sup>2</sup> /sec (cSt)	[2000 SUS]
<b>Fluid cleanliness per ISO 4406</b>	19/16	
<b>Typical spool effort: dry, full stroke</b>	231 N	[52 lbf]



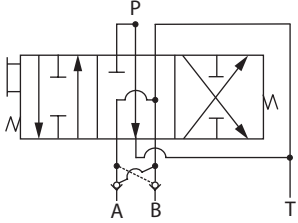
# Directional Control Valves

## Technical Information

### Model 1618

#### OPTIONS

#### Spool types

Code	Symbol	Description
		3-position, 4-way

#### Spool action

- Spring center
- Detent in, detent out, and three position detent

#### Relief valve

##### *Direct acting ball and spring*

- 0.9 bar per liter [50 psi per gallon] rise
- Not for use on settings over 30 l/min [8 US gal/min]. Full flow setting at 138 bar [2000 psi]
- Adjustable is standard, tamper-proof cap is optional.

##### *Pilot operated relief valve*

- 0.4 bar per liter [20 psi per gallon] rise
- No restrictions on setting up to 207 bar [3000 psi]
- Adjustable standard, tamper-proof is optional.

