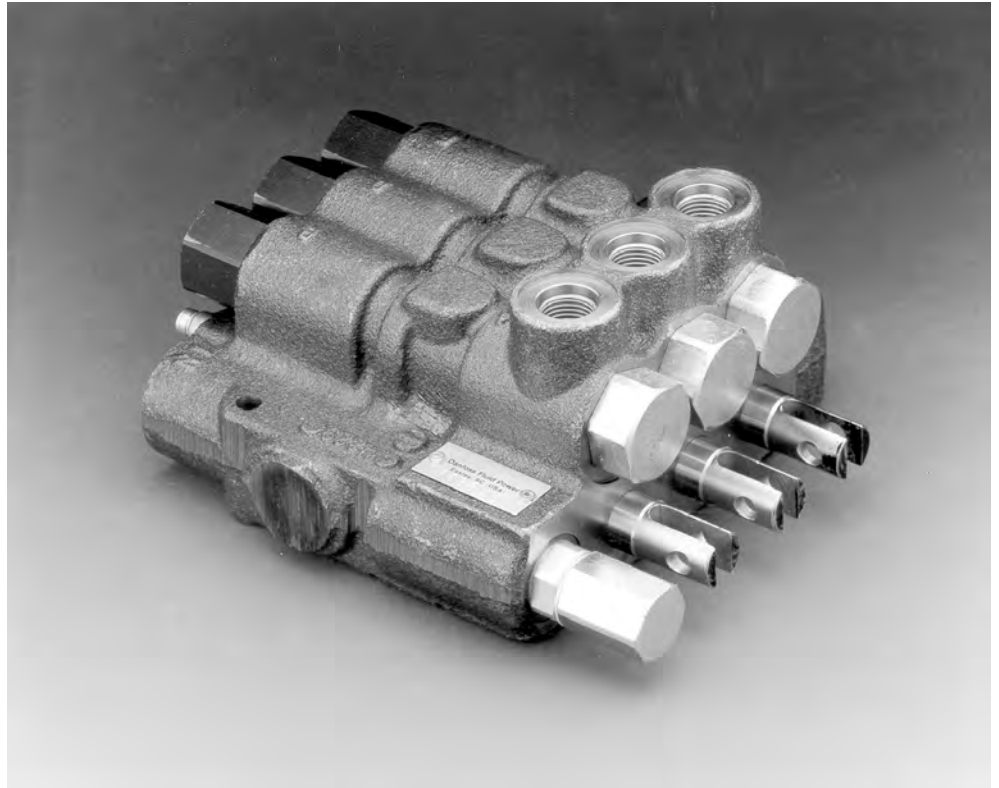




Directional Control Valves
Technical Information
Model 1638



DESCRIPTION

Three 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

STANDARD FEATURES

- 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

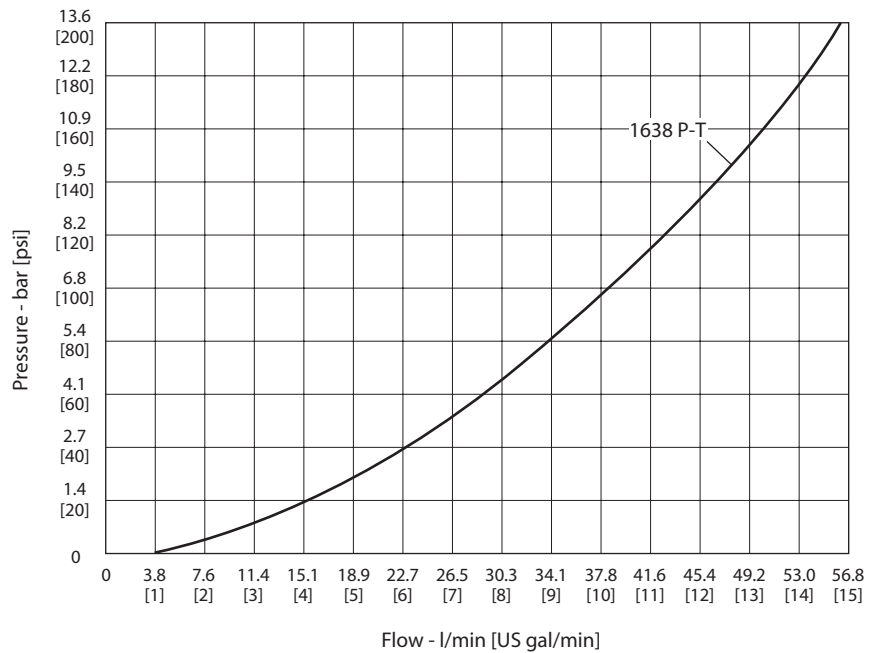


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PRESSURE DROP



PORTING

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

HANDLES

TECHNICAL DATA

Maximum pressure	207 bar	[3000 psi]
Maximum tank line pressure	69 bar	[1000 psi]
Maximum oil flow	38 l/min	[10 US gal/min]
Spool travel in and out from neutral	4.8 mm	[0.19 in]
Maximum standby leakage @ 69 bar [1000 psi] 21 mm²/sec (cSt) [102 SUS]	300 cm ³ /min	[18 in ³ /min]
Standard pilot check leakage@ 69 bar [1000 psi] 21 mm²/sec (cSt) [102 SUS]	0.5 cm ³ /min	[0.03 in ³ /min]
Minimum oil temperature	-29° C	[-20° F]
Maximum oil temperature	82° C	[180° F]
Ambient temperature range	-29° to 60° C	[-20° to 140° F]
Minimum viscosity	6 mm ² /sec (cSt)	[45 SUS]
Maximum viscosity	440 mm ² /sec (cSt)	[2000 SUS]
Fluid cleanliness per ISO 4406	19/16	
Typical spool effort: dry, full stroke	231 N	[52 lbf]



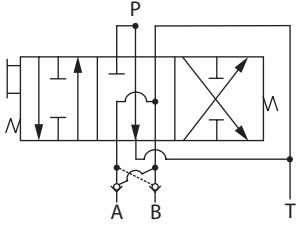
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OPTIONS

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.



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DIMENSIONS

