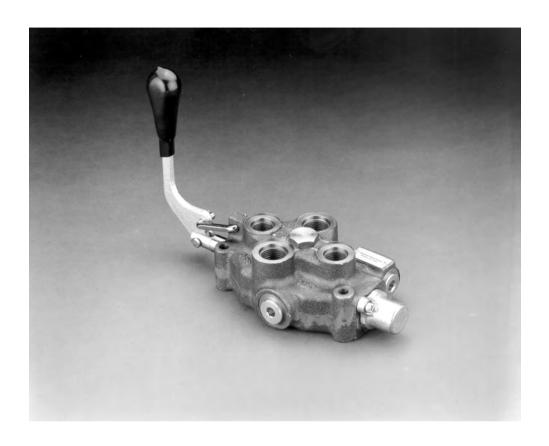


# Directional Control Valves Technical Information Model 1612



## **DESCRIPTION**

Single spool monoblock valve. 76 l/min [20 US gal/min] maximum flow. 207 bar [3000 psi] maximum pressure.

## **TYPICAL APPLICATIONS**

Sweepers, mowers, agricultural equipment, auxiliary valves, tree removal equipment

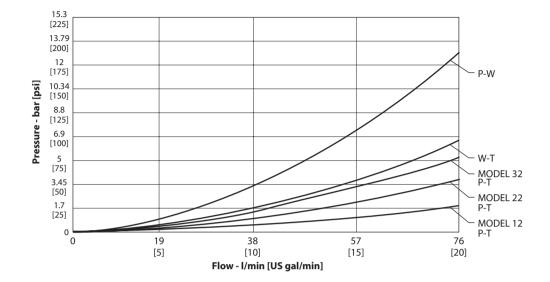
- All valves supplied with clevis end spools
- Power-beyond port machined and plugged (use whenever a downstream valve is required)
- Cast-iron body
- Chrome plated spools select fit to body for leakage control
- Paint color: black primer
- Closed transition spool timing prevents load drop before raise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



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### **PRESSURE DROP**



## **PORTING**

Inlet/outlet	et 7/8-14, SAE (standard)	
	3/4-16 SAE	
Locations available	top and side	
Work ports	3/4-16, SAE (standard)	

## **HANDLES**

- C-hook kit
- Standard handle with C-hook kit
- Pivot-block handle kit

## **TECHNICAL DATA**

Maximum pressure	207 bar	[3000 psi]
Maximum tank line pressure	69 bar	[1000 psi]
Maximum oil flow	76 l/min	[20 US gal/min]
Spool travel in and out from neutral	6.3 mm	[0.25 in]
Spool travel to float position from neutral	12.6 mm	[0.50 in]
Maximum port leakage at 69 bar [1000 psi] 21 mm²/sec (cSt) [102 SUS]	24 cm³/min	[1.46 in <sup>3</sup> /min]
Maximum lift check leakage at 69 bar [1000 psi] 21 mm²/sec (cSt) [102 SUS]	82 cm³/min	[82 cm³/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 <sup>2</sup> /sec (cSt)	[45 SUS]
Maximum viscosity	440 mm <sup>2</sup> /sec (cSt)	[2000 SUS ]
Fluid cleanliness per ISO 4406	19/16	·
typical spool effort: dry, full stroke	231 N	[53 lbf]



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#### **OPTIONS**

Spool types

Symbol	Description
P	4-way open center
P T T T T T T T T T T T T T T T T T T T	4-way open center
P T T A B	4-way float open center
P T T A A A A A A A A A A A A A A A A A	3-way port A open center
P T T A B	4-way motor open center

## **Spool action**

- Spring center
- Detent in, detent out, and three position detent
- Detent in float
- Motor start switches

## **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**

