



Directional Control Valves  
Technical Information  
Model 1025



**DESCRIPTION**

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

**TYPICAL APPLICATIONS**

Sweepers, loaders, 3-point hitch control, fork lifts, and 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
- All porting options machined and plugged
- Individually boxed and labeled

**OTHER FEATURES  
AVAILABLE**

- Custom metering
- A range of port sizes

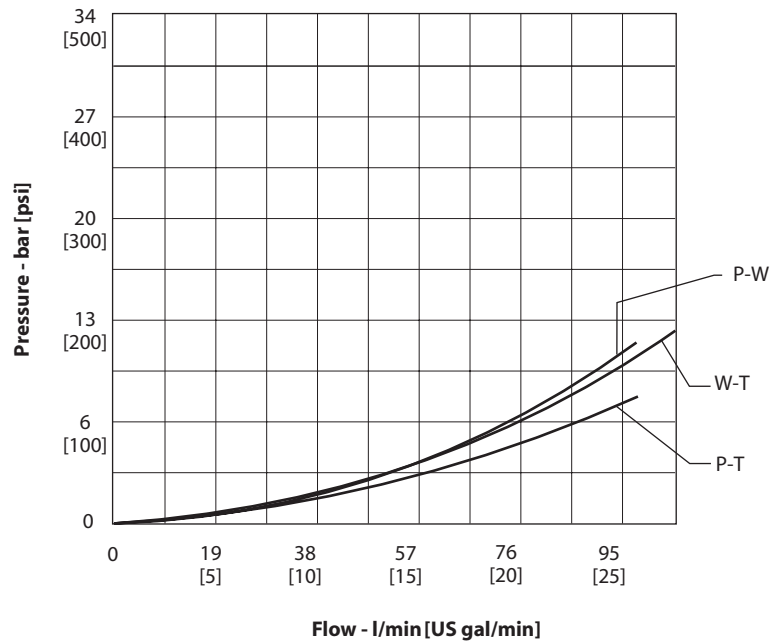


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#### PRESSURE DROP



#### PORTING

<b>Inlet/outlet</b>	7/8-14, SAE 10
<b>Locations available</b>	inlet-side outlet-top
<b>Work ports</b>	3/4-16, SAE 8

Power-beyond port machined and plugged. (Remove plug and install sleeve for power-beyond feature.)

BSP and other port configurations available upon request.

#### HANDLES

Code	Description
C	C-hook kit
H	Standard handle with C-hook kit
P	Pivot-block handle kit

#### 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>	76 l/min	[20 US gal/min]
<b>Spool travel in and out from neutral</b>	6.4 mm	[0.25 in]
<b>Spool travel to position from neutral</b>	12.7 mm	[0.50 in]
<b>Maximum port leakage at 69 bar [1000 psi]</b> <b>21 mm<sup>2</sup>/sec (cSt) [102 SUS]</b>	24 cm <sup>3</sup> /min	1.46 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° C to 60° C	[-20° F 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>	200 N	[53 lbf]



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#### OPTIONS

#### Spool types

Code	Symbol	Description
C		4-way, 3-position Closed center Work ports blocked to tank in neutral position
F		4-way, 4-position Open center Work ports blocked to tank in neutral open to tank in fourth position float
O		4-way, 3-position Open center motor Work ports open to tank in neutral position
T		4-way, 3-position Open center Work ports blocked to tank in neutral position
V		3-way, 3-position Open center Work port blocked to tank in neutral: B or D port
X		3-way, 3-position Open center Work port blocked to tank in neutral: A or C port

#### Spool actions

Code	Description	Code	Description
A	Spring centered, detent in float	M	Motor start switch in and out
D	3-position detent	N	Spring centered, detent in
K	Spring centered, detent in and out	S	Spring centered
L	Spring centered, detent out		

#### Relief valve

Code	Description
2	Direct-acting ball and spring <ul style="list-style-type: none"> <li>• 1 bar/l [50 psi/gal] rise</li> <li>• Standard setting 83 bar [1200 psi] crack pressure at 2.9 l/min [0.75 US gal/min]</li> <li>• Not for use on setting over 30 l/min [8 US gal/min]</li> <li>• Full flow setting at 138 bar [2000 psi]</li> </ul>
3	Pilot operated relief valve <ul style="list-style-type: none"> <li>• 0.4 bar/l [20 psi/gal] rise</li> <li>• No restrictions on setting up to 210 bar [3000 psi]</li> <li>• Standard setting 138 bar [2000 psi] crack pressure at 2.9 l/min [0.75 US gal/min]</li> </ul>



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### DIMENSIONS

