

Better performance comes from working together.



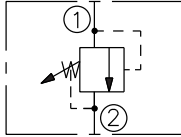
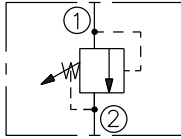
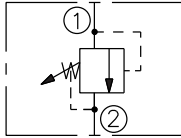
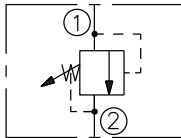
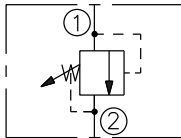
**HYDRAFORCE**  
POWER FORWARD

January 2016

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## HydraForce Relief Valve Selection Guide

	Type/Model No./Cavity	Pressure/Flow	Uses	Characteristics
	<b>DIRECT-ACTING POPPET</b> High pressure for demanding applications. Model: <b>RVD50-20</b> ; Cav: 10-2	<b>5075 psi/350 bar</b> ; 30 gpm/114 lpm	<ul style="list-style-type: none"> <li>• Safety relief.</li> <li>• Low Leakage.</li> <li>• Very Low hysteresis.</li> <li>• Continuous duty.</li> <li>• Medium flow range.</li> <li>• Stable.</li> </ul>	<ul style="list-style-type: none"> <li>• Extremely fast response.</li> <li>• Very low pressure rise.</li> <li>• Smooth, quiet relief.</li> <li>• Contamination-tolerant.</li> <li>• Consistent pressure setting.</li> </ul>
	<b>DIRECT-ACTING POPPET</b> Model: <b>RV08-20</b> ; Cav: 08-2 Model: <b>RV58-20</b> ; Cav: 08-2 Model: <b>RV10-20</b> ; Cav: 10-2 Model: <b>RV08-29</b> ; Cav: 08-2	3600 psi/248 bar; 6 gpm/22 lpm <b>5000 psi/345 bar</b> ; 6 gpm/22 lpm 3300 psi/228 bar; 10 gpm/38 lpm 3500 psi/241 bar; 0.5 gpm/1.9 lpm	<ul style="list-style-type: none"> <li>• Safety relief.</li> <li>• Low flow range.</li> <li>• Low internal leakage.</li> <li>• RV58-20 may not be used for cross-over relief applications.</li> </ul>	<ul style="list-style-type: none"> <li>• Inexpensive.</li> <li>• Fast response.</li> <li>• Contamination-tolerant.</li> <li>• Higher flow stability.</li> </ul>
	<b>DIFFERENTIAL-AREA POPPET</b> Model: <b>RV08-22</b> ; Cav: 08-2 Model: <b>RV10-22</b> ; Cav: 10-2 Model: <b>RV50-22</b> ; Cav: 10-2	3600 psi/248 bar; 8 gpm/30 lpm 3500 psi/241 bar; 30 gpm/114 lpm <b>5000 psi/345 bar</b> ; 20 gpm/75 lpm	<ul style="list-style-type: none"> <li>• Medium flow range.</li> <li>• Low hysteresis.</li> <li>• Very low internal leakage.</li> <li>• Continuous duty.</li> <li>• RV50-22 may not be used in cross-over relief applications.</li> </ul>	<ul style="list-style-type: none"> <li>• Extremely fast response.</li> <li>• Higher reseal resistance.</li> <li>• Low pressure rise.</li> <li>• Accurate.</li> </ul>
	<b>PILOT-OPERATED POPPET</b> Model: <b>RV10-24</b>	—	— Obsolete —	—
	<b>PILOT-OPERATED SPOOL</b> Model: <b>RV10-26</b> ; Cav: 10-2 Model: <b>RV50-26</b> ; Cav: 10-2 Model: <b>RV12-26</b> ; Cav: 12-2 Model: <b>RV52-26</b> ; Cav: 12-2 Model: <b>RV16-26</b> ; Cav: 16-2 Model: <b>RV56-26</b> ; Cav: 16-2	3500 psi/241 bar; 30 gpm/114 lpm <b>5000 psi/345 bar</b> ; 30 gpm/114 lpm 3500 psi/241 bar; 40 gpm/150 lpm <b>5000 psi/345 bar</b> ; 40 gpm/150 lpm 3500 psi/241 bar; 80 gpm/303 lpm <b>5000 psi/345 bar</b> ; 100 gpm/379 lpm	<ul style="list-style-type: none"> <li>• High flow range.</li> <li>• Pilot leakage.</li> <li>• Continuous duty.</li> <li>• Low hysteresis.</li> <li>• No cross-over relief.</li> <li>• Varying load conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• Very quiet.</li> <li>• Stable pressure relief.</li> <li>• Higher pressure rise.</li> <li>• Contamination tolerant.</li> <li>• Reseal at 90% of crack pressure.</li> </ul>
	<b>PILOT-OPERATED SPOOL, REVERSE CHECK</b> Model: <b>RV10-28</b> ; Cav: 10-2A	3500 psi/241 bar; 30 gpm/114 lpm	<ul style="list-style-type: none"> <li>• Low leakage.</li> <li>• Low hysteresis.</li> <li>• No cross-over relief.</li> </ul>	<ul style="list-style-type: none"> <li>• Fast response.</li> <li>• Reverse free flow.</li> <li>• Low pressure overshoot.</li> </ul>

For detailed information and specifications, visit [www.hydraforce.com](http://www.hydraforce.com) or contact your local HydraForce representative at [www.hydraforce.com/distrib/world.htm](http://www.hydraforce.com/distrib/world.htm)

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	Type/Model No./Cavity	Pressure/Flow	Uses	Characteristics
	<p><b>DIRECT-ACTING BI-DIRECTIONAL</b>            Model: <b>CR10-28</b>; Cav: 10-2            Model: <b>CR08-38</b>; Cav: 08-3</p>	<p>3500 psi/240 bar; 16 gpm/60 lpm            3500 psi/241 bar; 10 gpm/38 lpm</p>	<ul style="list-style-type: none"> <li>• Low flow range.</li> <li>• Low leakage.</li> <li>• Continuous duty.</li> <li>• Prohibits back pressure.</li> </ul>	<ul style="list-style-type: none"> <li>• Fast response.</li> <li>• Reseat at 90% of crack pressure.</li> </ul>
	<p><b>CROSS-OVER DIRECT-ACTING POPPET</b>            Model: <b>CRV08-20</b>; Cav: N/A            Model: <b>CRV10-20</b>; Cav: N/A</p>	<p>3300 psi/228 bar; 6 gpm/22 lpm            3500 psi/241 bar; 20 gpm/76 lpm</p>	<ul style="list-style-type: none"> <li>• Protection from load-induced pressure surges.</li> <li>• Low flow range.</li> <li>• Low internal leakage.</li> </ul>	<ul style="list-style-type: none"> <li>• Extremely fast response.</li> <li>• Contamination tolerant.</li> <li>• Poor pressure-rise characteristics.</li> </ul>
	<p><b>CROSS-OVER DIFFERENTIAL-AREA POPPET</b>            Model: <b>CRV08-22</b>; Cav: N/A            Model: <b>CRV10-22</b>; Cav: N/A</p>	<p>2600 psi/180 bar; 8 gpm/30 lpm            3500 psi/241 bar; 20 gpm/76 lpm</p>	<ul style="list-style-type: none"> <li>• Medium flow range.</li> <li>• Protection from load-induced pressure surges.</li> <li>• Low internal leakage.</li> </ul>	<ul style="list-style-type: none"> <li>• Extremely fast response.</li> <li>• Smooth response to pressure surges.</li> </ul>
	<p><b>THERMAL RELIEF</b>            Model: <b>TR04-B20</b>; Cav: 04-B2</p>	<p>6000 psi/414 bar</p>	<ul style="list-style-type: none"> <li>• Relief of pressure-induced thermal intensification.</li> <li>• Low Leakage.</li> </ul>	<ul style="list-style-type: none"> <li>• 10 drops/minute at 85% of pressure setting.</li> <li>• Withstands high pressure.</li> </ul>