

Sometimes it's not whether you stack up,  
but whether you fit in

## Series 0 Pressure Reducing/Relieving Valves

And Sun's Series 0 pressure reducing/relieving valves do both. These small, high-performance valves offer reliable hydraulic pressure control for demanding applications. They definitely stack up. And they're perfect for solutions where space is at a premium. They have no problem fitting in.

With a 0.75" (19,1 mm) hex size, these small pressure reducing and reducing/relieving valves provide a 5-gpm (20 L/min) capacity and – thanks to high-strength, heat-treated steel construction – accommodate a 5000-psi (350-bar) inlet pressure.

With the introduction of the small Series 0 valves, Sun can offer reducing and reducing/relieving valves in capacities ranging from these 5-gpm (20-L/min) Series 0 valves up to 80-gpm (320-L/min) Series 4 valves.

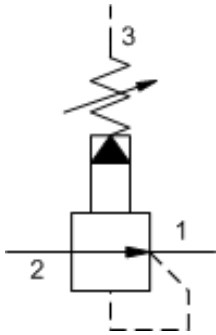
Each Series 0 valve introduced here offers different functionality for a range of applications.



Highlight

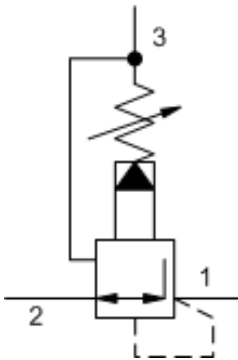
Series 0 Pressure Reducing/Relieving Valves

Pilot-operated reducing valve (PBBB)



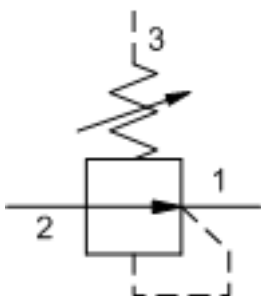
Pilot-operated pressure reducing valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, allowing circuits with multiple pressure requirements to be operated using a single pump. And because they're pilot operated, they offer flat pressure/flow characteristics and have low hysteresis.

Pilot-operated reducing/relieving valve (PPBB)



Pilot-operated, pressure reducing/relieving valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, with a full-flow relief function from port 1 to tank (port 3). This valve provides good pressure control and dynamic response.

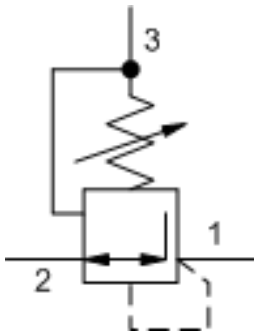
Direct-acting reducing valve (PRBR)



Direct-acting pressure reducing valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1. These valves incorporate a damped construction for stable operation. Note that they should not be used in dead-headed applications since they have no relieving capability.

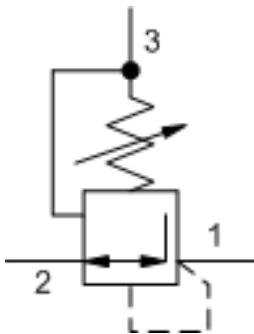
Series 0 Pressure Reducing/Relieving Valves continued

Direct-acting reducing/relieving valve (PRBB)



Direct-acting pressure reducing/relieving valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, with a full-flow relief function from port 1 to tank (port 3). These valves incorporate a damped construction for stable operation in dead headed applications. They're suitable for accumulator circuits since the absence of pilot-control flow results in reduced secondary circuit leakage.

Direct-acting reducing/relieving valve with open transition (PRBC)



Similar to the PRBB, the PRBC is a direct-acting pressure reducing/relieving valve, but because the valve is open in the transition from reducing to relieving, it provides excellent pressure control and dynamic response for demanding applications. And because they are direct acting with open transition, they offer greater protection in contaminated environments, especially at dead-headed conditions.

Stack up & fit in

These small Series 0 pressure reducing/relieving valves round out a complete family of products for a wide range of flow rates. Check out our full range of reducing cartridges and our reducing/relieving cartridges available from your local distributor.

Keep in mind that all these three-port pressure reducing and reducing/relieving cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size). When considering mounting configurations, it is recommended that a full capacity return line (port 3) be used with reducing/relieving cartridges.

For more technical details on these products and their application, see our Technical Tip "Reducing & Reducing/Relieving Valves."