

Parker DXV Series Direct Acting Crossover Relief Service Manual

General Description

Series DXV relief valves are direct acting, crossover reliefs (cushion valves). They are designed to eliminate or minimize shock, surge, or overload conditions on hydraulic equipment. They may be used with cylinders of equal displacement, or with motors to provide cross-over relief when the motors are stopped.

Operation

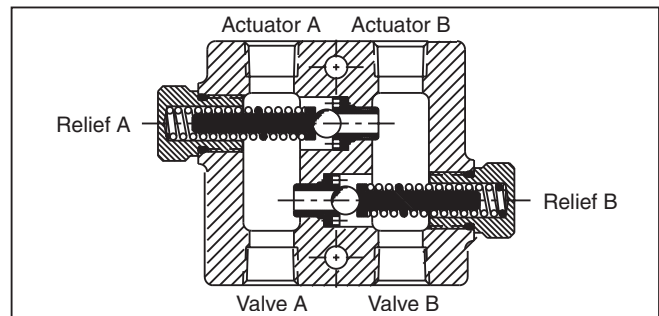
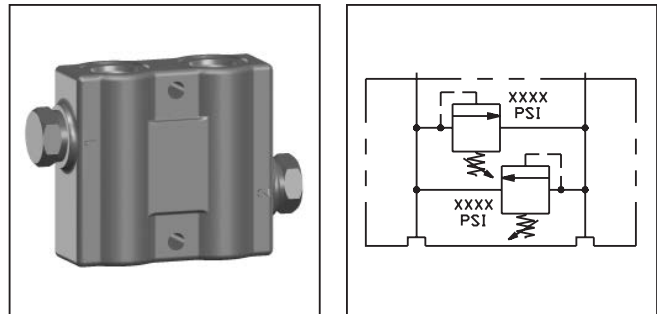
The DXV relief valve relieves oil from one side of the actuator to tank, therefore reducing shock and preventing overload. It also eliminates cavitation and the need for a separate tank connection. The valve should be installed as close to the actuator as possible for best results.

Features

- Compact, low profile design
- Hardened seats for long life
- Fast response to cushion shocks and protect actuators
- High tensile, compacted graphite body

Specifications

Input Flow	37.5 LPM (10 GPM)
Operating Pressure SAE Ports NPTF Ports	210 Bar (3000 PSI) 138 Bar (2000 PSI)
Operating Temperature Range (Ambient)	Nitrile Seals: -40°C to +93°C (-40°F to +200°F)
Material	Body – High strength cast iron Poppet – Hardened and ground steel
Filtration	ISO Code 16/13 SAE Class 4 or better
Mounting Position	In-line; no restrictions



Ordering Information

DXV	—	—	—	—
Direct Acting Crossover Relief	Port Size	Adjustment Option	Pressure Range	
Code	Description	Code	Description	
8	SAE-8 (3/4" - 16 UNF)	Omit	Shim Adjustable	
10	SAE-10 (7/8" - 14 UNF)			
38	3/8" - 18 NPT			
50	1/2" - 14 NPT			
75	3/4" - 14 NPT			

Code	Setting	Range
400	28 Bar (400 PSI)	3.5 - 28 Bar (50 - 400 PSI)
750	53 Bar (750 PSI)	28 - 53 Bar (400 - 750 PSI)
900	64 Bar (900 PSI)	53 - 64 Bar (750 - 900 PSI)
1300	92 Bar (1300 PSI)	64 - 92 Bar (900 - 1300 PSI)
1450	103 Bar (1450 PSI)	91 - 103 Bar (1300 - 1450 PSI)
1800	128 Bar (1800 PSI)	103 - 128 Bar (1450 - 1800 PSI)
2000	142 Bar (2000 PSI)	128 - 142 Bar (1800 - 2000 PSI)
3000*	210 Bar (3000 PSI)	142 - 210 Bar (2000 - 3000 PSI)

* SAE ported bodies only.

Service Parts

Upper Relief Valve Seal	2115N-7
Relief Adjustments	
Shim Adjustment	
100 PSI	00462001
150 - 250 PSI	00459001
250 - 450 PSI	00458001

Note: The body and the internal parts of the relief valve (including the spring) are non-service items.

Inch equivalents for millimeter dimensions are shown in (**)

