

### General Description

Series ZRV direct operated check valves have a cartridge type insert to provide zero leakage and high life time.

The check function can be located in the P-port or in the T-port.

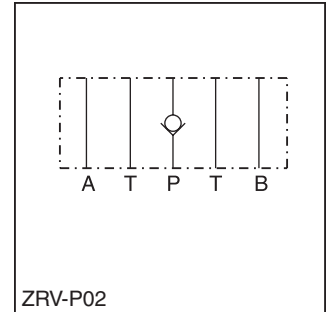
**B**

### Features

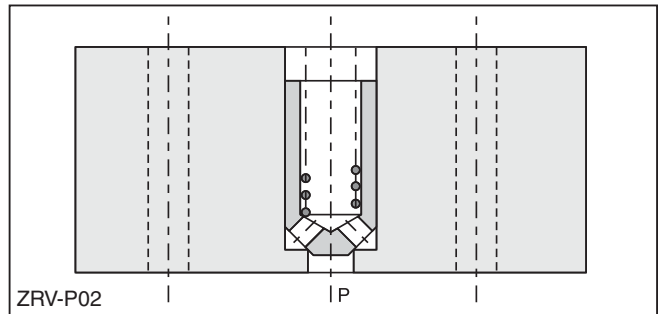
- Leakage-free seat.
- High life time.
- Cracking pressure 0.5 Bar (7.25 PSI).
- Sizes:
  - ZRV01 – NFPA D03 / NG6 / CETOP 3
  - ZRV02 – NFPA D05 / NG10 / CETOP 5



ZRV-P02

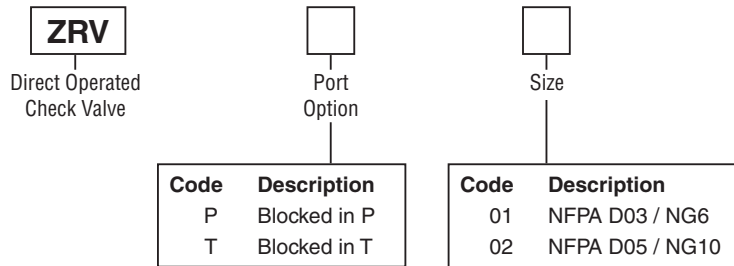


ZRV-P02



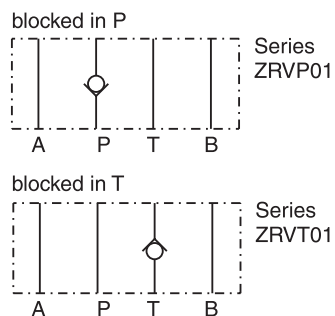
ZRV-P02

### Ordering Information

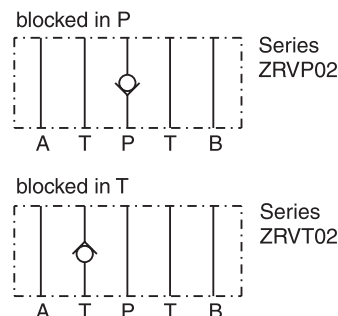


**Weight:**  
 ZRV\*01 0.7 kg (1.5 lbs)  
 ZRV\*02 2.0 kg (4.4 lbs.)

### ZRV01



### ZRV02



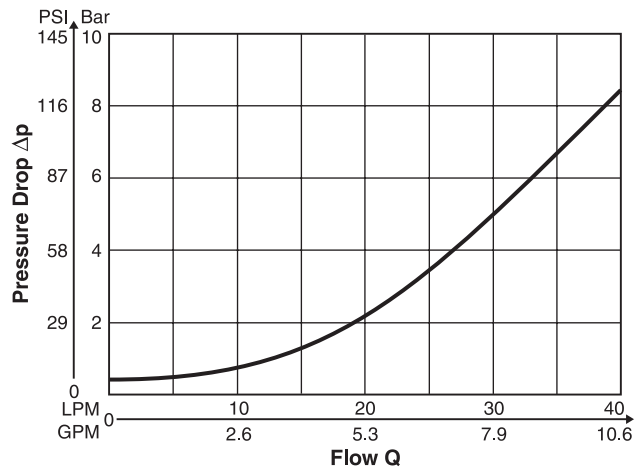
**Specifications**

General		
<b>Size</b>	<b>NG6</b>	<b>NG10</b>
<b>Mounting Interface</b>	DIN 24340 A6 ISO 4401 NFFPA D03 CETOP RP 121	DIN 24340 A10 ISO 4401 NFFPA D05 CETOP RP 121 5
<b>Mounting Position</b>	Unrestricted	
<b>Ambient Temperature</b>	-20°C to +50°C (-4°F to +122°F)	
Hydraulic		
<b>Max. Operating Pressure</b>	350 Bar (5075 PSI)	
<b>Nominal Flow</b>	40 LPM (10.6 GPM)	100 LPM (26.5 GPM)
<b>Cracking Pressure</b>	0.5 Bar (7.25 PSI)	0.5 Bar (7.25 PSI)
<b>Fluid</b>	Hydraulic oil as per DIN 51524 ... 51525	
<b>Fluid Temperature</b>	-20°C to +80°C (-4°F to +176°F)	
<b>Viscosity</b>	10 to 650 cSt / mm <sup>2</sup> /s (46 to 3013 SSU)	
<b>Permitted</b>	30 cSt / mm <sup>2</sup> /s (139 SSU)	
<b>Recommended</b>		
<b>Filtration</b>	ISO 4406 (1999) 18/16/13 (acc. NAS 1638: 7)	

**B**

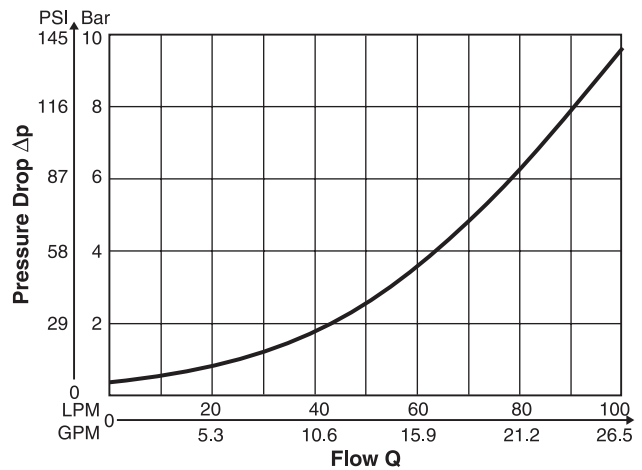
**p/Q Performance Curves**

**ZRV P/T01**



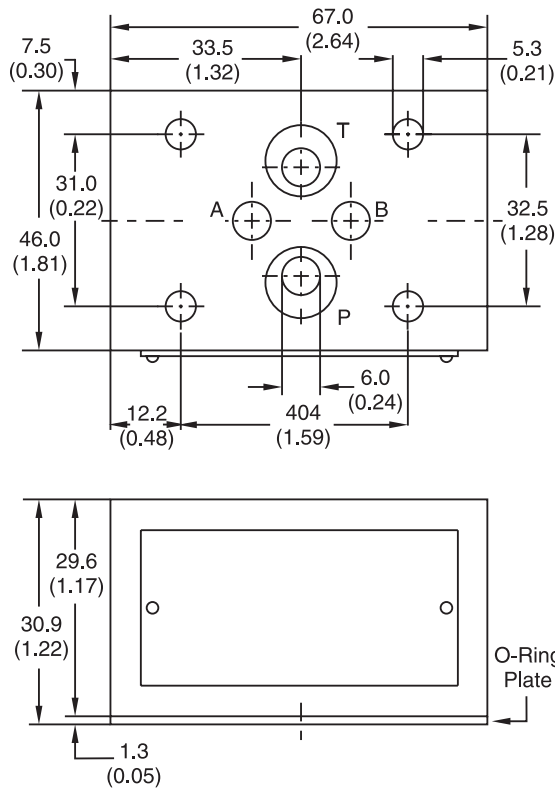
Fluid Viscosity 30 cSt at 50°C (122°F)

**ZRV P/T02**

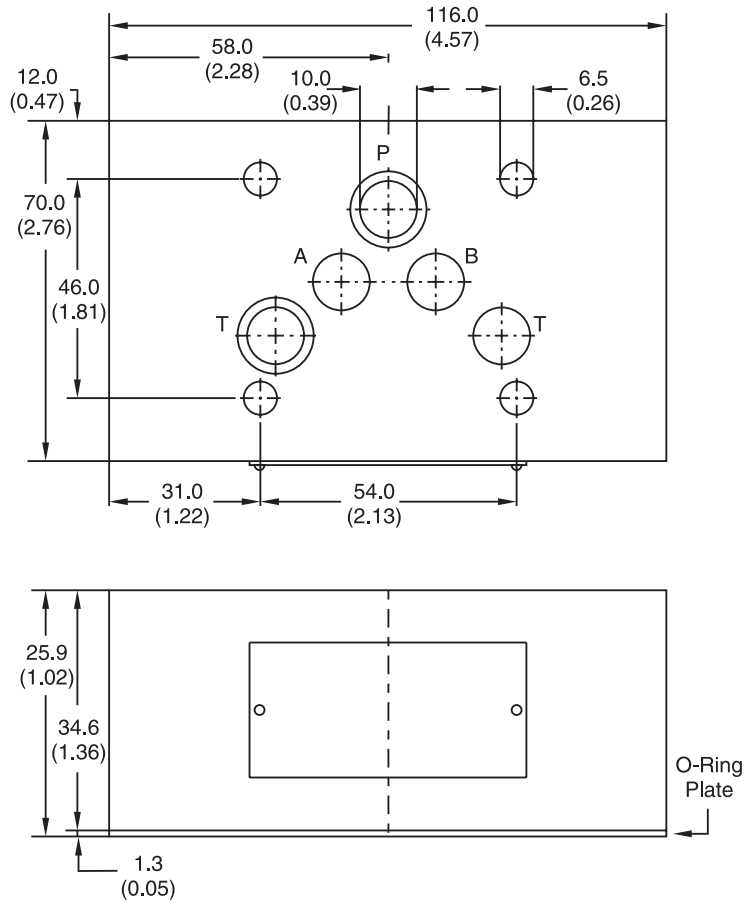


Fluid Viscosity 30 cSt at 50°C (122°F)

**ZRV01** – Inch equivalents for millimeter dimensions are shown in (\*\*)

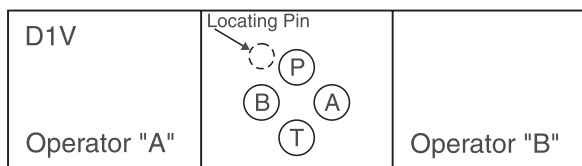


**ZRV02** – Inch equivalents for millimeter dimensions are shown in (\*\*)



**CAUTION:**  
**Sandwich Installation**

Prior to installation of Sandwich valves, please review flow paths. Due to the reversibility of the DO3 size, incorrect installation will alter the hydraulic circuit. Care must be taken during installation to insure that the Sandwich is installed in compliance with the hydraulic schematic. Please consult with your Parker representative with any questions that may arise.



**Pressure Ratings**

Unless otherwise specified, all Parker Sandwich valves have continuous duty pressure rating as shown in this catalog.

**Special Requirements**

Consult your Parker representative for factory recommendations on such situations as:

- Installations that will operate at pressures higher than published catalog ratings.
- Use of hydraulic fluids which do not meet our recommended specifications.
- Operations where fluid temperature will exceed 121°C (250°F).

**Recommended Mounting Surface**

Surface must be flat within .0004 inch T.I.R. and smooth with 32 micro-inch.

**System Cleanliness**

Any hydraulic system that includes Parker valves should be carefully protected against dirt and fluid contamination. Life of the valves, as well as of all other components, will be greatly lengthened. Operation will be smoother and more precise. Maintenance and repairs will be reduced. Lost production because of low pressure and flow will be minimized. Fluid contamination should be maintained to less than 500 particles larger than 10 micrometers per milliliter of fluid (SAE class 4 or better/ISO Code 16/13).

**Hydraulic Fluids**

Parker recommends using top-quality hydraulic fluids having a viscosity range of 32 to 54 cSt (150 to 250 SSU) at 38°C (100°F). The absolute viscosity range should be 16 to 220 cSt (80 to 1000 SSU). Fluids should have highest anti-wear characteristics and be treated to avoid rust and oxidation.

**Seals**

When used with water-glycol, water/oil emulsions, and high-grade petroleum base hydraulic fluids, Parker standard nitrile seals are suitable.

When using phosphate ester fluids or their blends, specify Parker optional seals made of fluorocarbon. Synthetic fire-resistant fluids require special seal materials which your Parker representative can recommend.

**Torque Specifications**

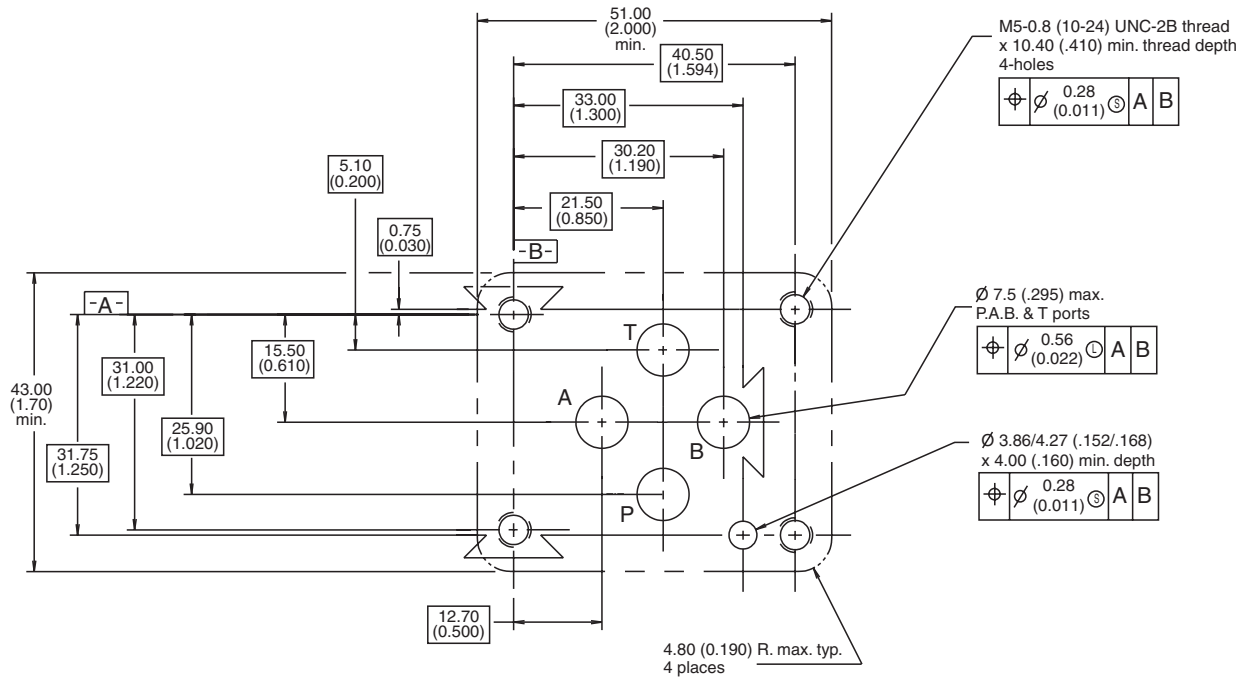
The recommended torque valves are for the bolts which mount the valve to the manifold or subplate are as follows:

Size	Torque Valve
D03	5.7 N.m. (50 in.-lbs.)
D05	16.3 N.m. (12 ft.-lbs.)
D07	63.0 N.m. (46.5 ft.-lbs.)
D08	108.5 N.m. (80 ft.-lbs.)



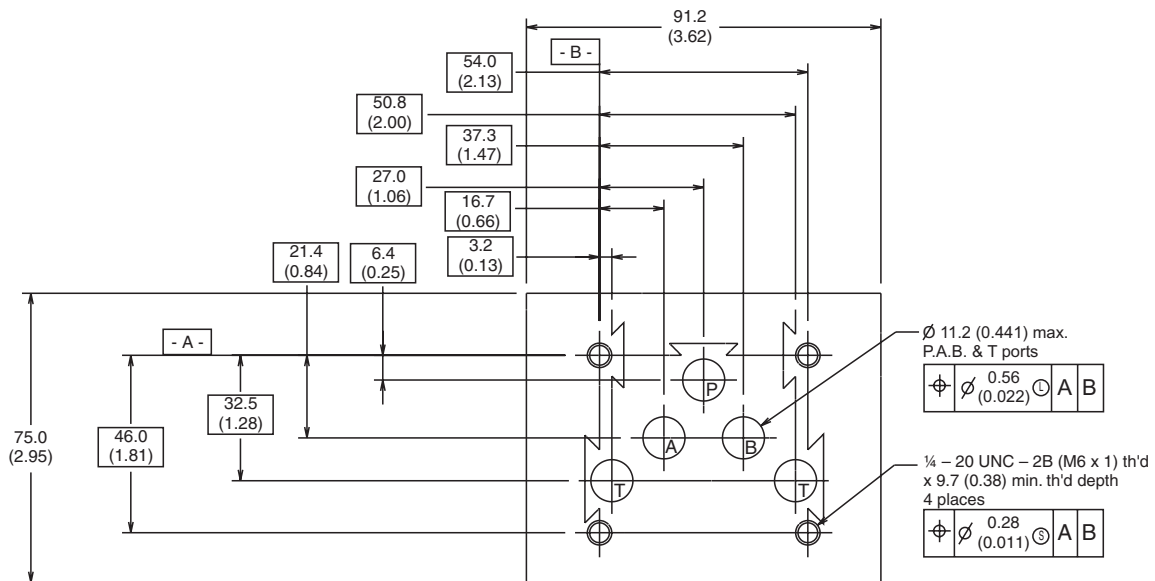
**Mounting Pattern – NFPA D03, CETOP 3 & NG6**

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



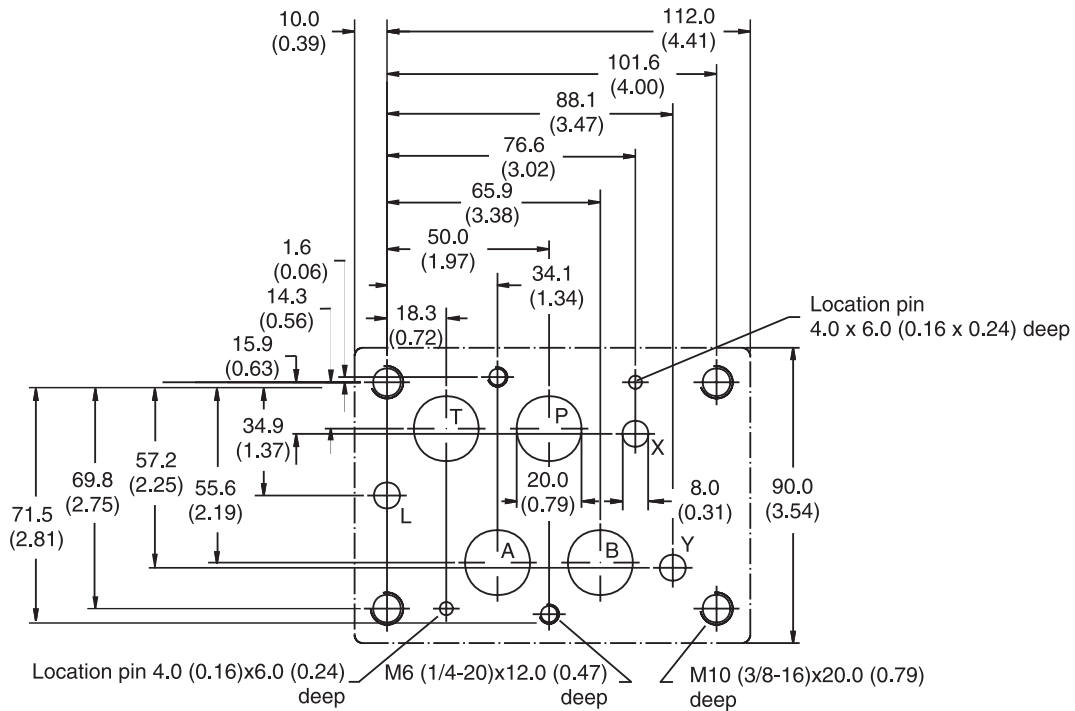
**Mounting Pattern – NFPA D05, CETOP 5 & NG10**

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



**Mounting Pattern – NFPA D07, CETOP 7 & NG16**

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



**Mounting Pattern – NFPA D08, CETOP 8 & NG25**

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

