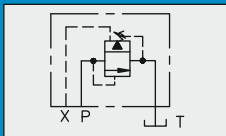


PRESSURE RELIEF VALVES (GASKET CONNECTION)



SERIES - PCV17

Basic Characteristics

Operating Pressure (maximum) - 350 bar (5000 psi)

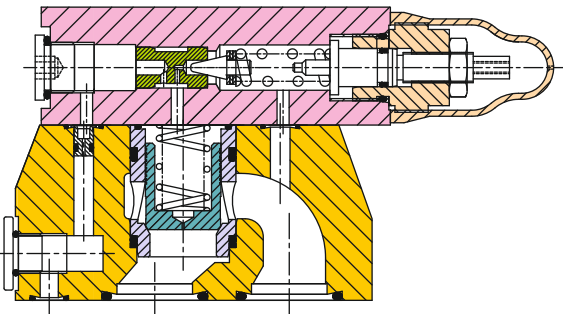
Rated Capacity (maximum) - 400 L/min.

Drain flow- when manual adjuster valve are in operation- 1.8 L/min

Mounting Surface- ISO 6264

Approx. Weights

PCV17 -8 = 4.4kg.



General Description

This is a pressure Relief valve, which can be used to limit or control pressure by directing up to the system fluid flow to the reservoir when the system pressure reaches the setting of the valve. System actuators are thus protected against overload. In this relief valve incorporates a vent port that can be connected a vent port that can be connected to a separate pilot control valve to remotely control or unload system pressure.

Venting

System pressure can be dropped to near-zero by connecting vent port X to the reservoir through a suitable pilot valve.

Filtration

For the satisfactory service life of these components in industrial application, use full flow filtration to provide fluid which meets ISO cleanliness code 18 / 15 or cleaner.

ORDERING INFORMATION

PCV 17 - 8 - G - * - W - 10
 1 2 3 4 5 6 7

1. Model Code - PCV

2. Model Series - 17

3. Mounting Surface -
• 8 - ISO 6264

4. Connections Type -
G = Gasket Connection

5. Pressure Range -

YD = 44 - 1000 psi

HI = 44 - 2000 psi

HC = 44 - 3000 psi

YO = 44 - 5000 psi

6. Adjustment type-

W = Screw & Locknut (standard)

7. Design No - 10 (Subject to change)

Typical Model Code :- PCV17-8-G-HC-W-10

PCV17

[illegible][illegible]

Technical drawing of a rectangular plate with the following dimensions and specifications:

- Overall width: 118.00
- Overall height: 102.00
- Top edge dimensions (from left): 35.00, 66.70
- Bottom edge dimensions (from left): 70.00, 35.00
- Left edge dimensions (from top): 16.00, 35.00
- Right edge dimensions (from top): 55.60, 33.40
- Bottom edge dimensions (from right): 11.10, 23.80
- Hole specifications:
 - Top-left hole: $\phi 6.30$
 - Top-right hole: $\phi 23.40$
 - Bottom-left hole: $\phi 23.40$
 - Bottom-right hole: $\phi 7.50$, 6.00 deep
- Labels: P, T, X
- Note: plug or omit if this vent/hydraulic port is not to be used.
- Text: M16x30 THD LENGTH 4 NOS.

P - PRESSURE INLET
T - OUTLET TO RESEVOIR
X - VENT. OR REMOT PILOT CONTROL PORT

Typical with oil at 22 cSt (106 SUS) and at 50° C (122° F)

The graph illustrates the relationship between pressure and flow rate for the 1000 Series. The y-axis represents pressure in both psi (0 to 5000) and bar (0 to 350). The x-axis represents flow rate in both L/min (0 to 400) and USgpm (0 to 100). Eight curves are shown, each corresponding to a specific pressure rating. The curves are stacked vertically, with the top curve representing 3000 psi and the bottom curve representing 100 psi. All curves show a slight increase in pressure as flow rate increases.

Flow rate (L/min)	Flow rate (USgpm)	3000 psi (bar)	2500 psi (bar)	2000 psi (bar)	1500 psi (bar)	1000 psi (bar)	500 psi (bar)	250 psi (bar)	100 psi (bar)
0	0	300	250	200	150	100	50	25	10
100	25	320	270	215	160	105	55	28	11
200	50	340	285	225	165	110	58	30	11
300	75	355	295	235	170	115	60	31	11
400	100	365	305	245	175	120	62	32	11

The graph illustrates the relationship between flow rate and pressure for the 1000 Series. The pressure increases as the flow rate increases, starting at approximately 28 psi (2 bar) at 0 L/min and reaching 80 psi (6 bar) at 400 L/min.

Flow rate (L/min)	Flow rate (USgpm)	Pressure (psi)	Pressure (bar)
0	0	28	2
100	26	35	2.5
200	52	42	3
300	78	50	3.5
400	104	80	6

- Close matching to application requirements from a choice of four adjustment control ranges covering 3 to 350 bar (44 to 5000psi)
- Remote parallel control by other pilot valves connected to the 'vent' port.
- High Machine productivity resulting from full system flow being available for work output until system pressure is very close to valve setting.
- Pressure override optimizes without detriment to other performance parameters.
- Excellent repeatability and stable performance from cartridge type design or main stage parts.
- Low off- load power wastage.
- International mounting interfaces.
- Low installed cost and space requirement from high power & size ratios.

Maximum pressure on 'T' port - for relief valves this is normally connected directly to reservoir because back pressure here adds to the effective setting of the valve