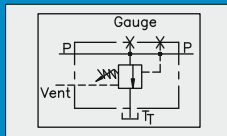
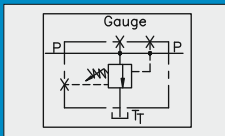
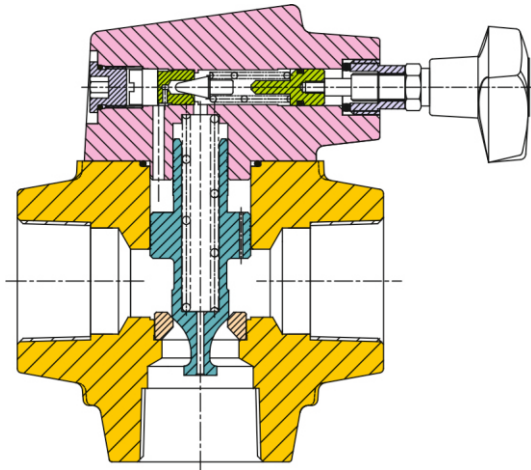


BALANCED PISTON TYPE RELIEF VALVES (THREADED CONNECTION)



SERIES - PCV4



Basic Characteristics

Operating Pressure (maximum) - 210 bar (3000 psi)

Rated Capacity (maximum) -

PCV4-03-S = 175 L/min. (Std.)

PCV4-06-T/S = 227 L/min. (Std.)
= 340 L/min. (High Flow)

PCV4-10-T/S = 454 L/min. (Std.)
= 680 L/min. (High Flow)

Approx. Weights

PCV4-03/06 -T/S = 2.7 kg.

PCV4-10-T/S = 6.4 kg.

General Description

Inlet and Outlet pressure connections can be used interchangeably when the valve is mounted in the pressure line. The valve may also be teed off the pressure line with one of the inlet pressure connections plugged.

Minimum venting pressure (see curves) designates the pressure at which the valve operates (regardless of adjustment) when the vent connection is open to tank. This action is sometimes required during a part of a cycle. Use only when indicated by circuit.

Pressure adjustment

Pressure is adjusted by loosening the jam nut and turning the control knob. Clockwise rotation increases pressure and counterclockwise rotation decreases pressure.

Filtration

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

ORDERING INFORMATION

PCV 4 - * - * - * - * - *

1 2 3 4 5 6 7

1. Model Code - PCV

2. Model Series - 4

3. Nominal Valve Size -

- 03 - 0.875"-14 UNF-2B
- 06 - 3/4" pipe or 1.0625"-12 UN-2B
- 10 - 1-1/4" pipe or 1.6250"-12 UN-2B

4. Connection Type -

- T = NPTF Thread (not available in 03 valve size)
- S = SAE Straight Thread

5. Pressure Range -

YD = 125 - 1000 psi

DC = 500 - 2000 psi

RD = 1500 - 3000 psi

6. High Vent Spring -

V = Optional High Vent Spring Installed

Omit if not required

7. Design No - For 03 & 06-50 (Subject to change)

For 10-30 (Subject to change)

Typical Model Code :- **PCV4-03-S-YD-V-50**

PCV4-06-T-YD-V-50, or PCV4-06-S-YD-V-50

PCV4-10-T-YD-V-30, or PCV4-10-S-YD-V-30

Relief Valve Configuration

The PCV4-03/06/10 is designed for use in applications requiring an adjustable pressure relief or regulating valve to limit the pressure in a hydraulic circuit to a desired maximum.

In addition to conventional relief valve operation, two other functional modes can be used: 1) system pressure can be limited to the valve's relatively low venting pressure by directing flow from the vent connection to tank; 2) system pressure can be remotely controlled by directing flow from the vent connection to a remote control pressure relief valve such as the PCV1 or PCV3-02.

The pressure setting of the relief valve selected should be approximately 10 to 14 bar (150 to 200 psi) above actual system working pressure. A higher setting could waste power and put unnecessary loads on the pump and other system components.

Tank Connection

Flow from the T port should be piped directly to the tank to minimize back pressure. Any pressure in the tank line is additive to the pressure setting. If tank line back pressure exceeds system pressure by 7 bar (100 psi), a malfunction may occur. Contact your Microtact representative for alternatives.

Pressure Range

The available pressure ranges for this valve are from 8,5 to 70 bar (125 to 1000 psi), from 35 to 140 bar (500 to 2000 psi), and from 100 to 210 bar (1500 to 3000 psi). Select the appropriate pressure range that will prevent excessively high working pressures from being imposed on the pump and other equipment.

High-Flow Designation

A high vent spring must be included in high-flow models of the PCV4-06- * and PCV4-10- *. The high-flow option is not available for the PCV4-03- *.

ALL DIMENSIONS ARE IN mm.

MODEL	A	B	C	D	E	F	G	H	J	K	L-SYSTEM CONNECTIONS	
											PCV4-S MODELS	PCV4-T MODELS
PCV4-03-S	143.3	95.5	47.8	39.9	55.6	65.6	32.8	62.0	45.7	53.9	7/8"-14 UNF 2B THD.	--
PCV4-06-S	143.3	95.5	47.8	39.9	55.6	65.6	32.8	62.0	46	55	1 1/8"-12 UN 2B THD.	3/4" NPTF THD.
PCV4-06-T												
PCV4-10-S	157.2	124	61.9	41.2	61.9	83.3	41.7	66.5	70	63.5	1 1/2"-12 UN 2B THD.	1 1/4" NPTF THD.
PCV4-10-T												

