Technical Bulletin

LEAD FREE*

Model LFPV20CB

System Pressure Relief Valve

Size: 1/2" and 3/4" Threaded

The Watts Model LFPV20CB is a direct sensed direct acting; diaphragm actuated System Pressure Relief Valve. The intended installations are in systems where it is anticipated that the internal pressure exceeds the rated pressure of the system components, or for installation downstream of a pressure reducing valve in accordance with ANSI/NFPA 13.

The LFPV20CB valve is normally held closed by the force of the adjustable spring setting above the diaphragm. It modulates toward an open position when the control pressure exceeds the spring set point and modulates toward a closed position when the control pressure falls below the spring set point. The LFPV20CB senses upstream pressure through the inlet port sense line exerting force into the power chamber below the diaphragm. The large diaphragm-to-seat ratio allows the valve to open and close within close pressure tolerances.

Turning the adjustment screw clockwise raises the control set point. Turning the adjustment screw counterclockwise lowers the control set point.

Flow Charts









Model LFPV20CB

Specifications

Body Material: Lead Free Copper Silicon Alloy

Seat: 316 Stainless Steel

Elastomers: Buna-N (standard)

Viton (optional) EPDM (optional)

Inlet Pressure Rating: 450psi (27.6 bar) maximum

Valve Sizes and Ranges Available

| Size | Range PSI | | | | |
|------|-----------|----------|--------|--------------|---------|
| | 0-30 | 10-100 | 20-200 | 100-300 | 200-450 |
| 1/2" | ✓ | √ | (4) ⊴ | (Պ) ⊴⊵ | (4) ⊴ |
| 3/4" | ✓ | √ | (4) € | (l) <u>₹</u> | (4) € |

Approximate PSI Per Turn

| Range | 0-30 | 10-100 | 20-200 | 100-300 | 200-450 |
|----------|------|--------|--------|---------|---------|
| PSI Turn | 3.5 | 12 | 25 | 30 | 55 |

Viton® is a registered trademark of DuPont Dow Elastomers.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

NOTICE

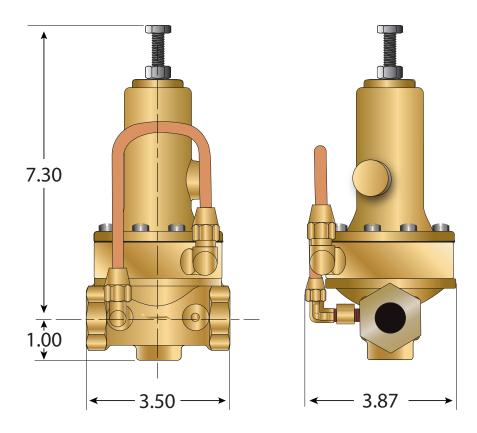
The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

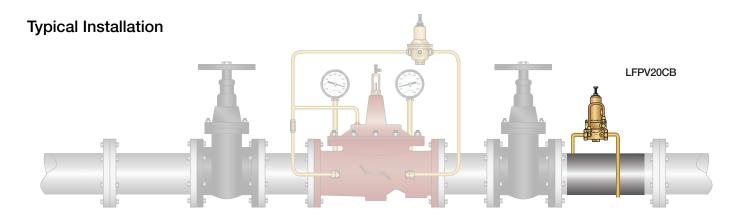


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Model LFPV20CB System Pressure Relief Valve

Dimensions

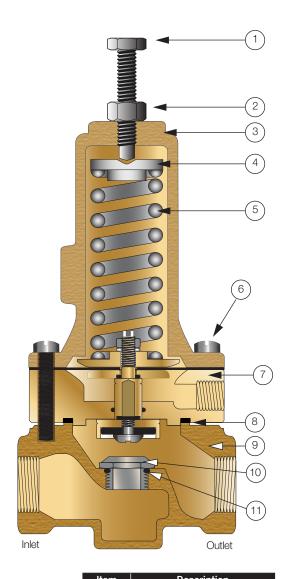


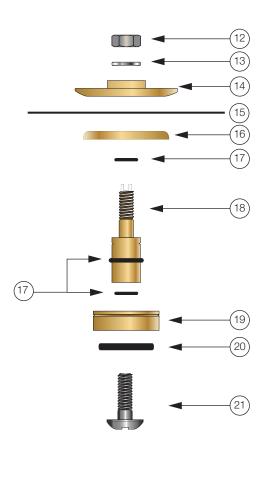


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| Item | Description | | |
|------|-----------------|--|--|
| 1 | Adjusting Screw | | |
| 2 | Jam Nut | | |
| 3 | Spring Housing | | |
| 4 | Spring Guide | | |
| 5 | Spring | | |
| 6 | Cap Screw | | |
| 7 | Power Chamber | | |
| 8 | 0-Ring* | | |
| 9 | Body | | |
| 10 | Seat | | |
| 11 | 0-Ring* | | |

| Item | Description | | |
|------|------------------|--|--|
| 12 | Nut | | |
| 13 | Lockwasher | | |
| 14 | Diaphragm Washer | | |
| 15 | Diaphragm* | | |
| 16 | Diaphragm Washer | | |
| 17 | 0-Ring* | | |
| 18 | Stem | | |
| 19 | Retainer | | |
| 20 | Rubber Disc* | | |
| 21 | Screw | | |

*Included in Repair Kit



USA: T: (713) 943-0688 • F: (713) 944-9445 • Watts.com **Canada:** T: (905) 332-4090 • F: (905) 332-7068 • Watts.ca

Latin America: T: (52) 81-1001-8600 • Watts.com