



Pilot-operated, pressure reducing valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, allowing circuits with multiple pressure requirements to be operated using a single pump.

CONFIGURATION

| | | |
|--------------------------------|------------------|--|
| L | Control | Standard Screw Adjustment |
| A | Adjustment Range | 75 - 3000 psi (5 - 210 bar), 200 psi (14 bar) Standard Setting |
| N | Seal Material | Buna-N |
| (none) Material/Coating | | |

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

| | |
|--|------------------------------------|
| Cavity | T-163A |
| Series | 0 |
| Capacity | 20 L/min. |
| Maximum Operating Pressure | 350 bar |
| Factory Pressure Settings Established at | blocked control port (dead headed) |
| Control Pilot Flow | 0,11 - 0,16 L/min. |
| Adjustment - No. of CW Turns from Min. to Max. setting | 5 |
| Valve Hex Size | 19,1 mm |
| Valve Installation Torque | 27 - 33 Nm |
| Adjustment Screw Internal Hex Size | 4 mm |
| Locknut Hex Size | 12,7 mm |
| Locknut Torque | 9 - 10 Nm |
| Seal kit - Cartridge | Buna: 990163007 |
| Seal kit - Cartridge | Polyurethane: 990163002 |
| Seal kit - Cartridge | Viton: 990163006 |
| Model Weight | 0.11 kg. |

CONFIGURATION OPTIONS

Model Code Example: **PBBBLAN**

| CONTROL | (L) | ADJUSTMENT RANGE | (A) | SEAL MATERIAL | (N) | MATERIAL/COATING |
|---|----------|--|----------|---------------|---------------------------------|------------------|
| L Standard Screw Adjustment | A | 75 - 3000 psi (5 - 210 bar), 200 psi (14 bar) Standard Setting | N | Buna-N | Standard Material/Coating | |
| C Tamper Resistant - Factory Set | W | 75 - 4500 psi (5 - 315 bar), 200 psi (14 bar) Standard Setting | E | EPDM | JAP Stainless Steel, Passivated | |
| K Handknob | B | 75 - 1500 psi (5 - 105 bar), 200 psi (14 bar) Standard Setting | V | Viton | LH Mild Steel, Zinc-Nickel | |
| W Hex Wrench Adjustment | N | 75 - 800 psi (5 - 55 bar), 200 psi (14 bar) Standard Setting | | | | |
| | Q | 75 - 400 psi (5 - 28 bar), 200 psi (14 bar) Standard Setting | | | | |

TECHNICAL FEATURES

- Full reverse flow from reduced pressure (port 1) to inlet (port 2) may cause the main spool to close. If reverse free flow is required in the circuit, consider adding a separate check valve to the circuit.
- Minimum setting is 75 psi (5 bar) for all spring ranges.
- Pilot operated valves exhibit exceptionally flat pressure/flow characteristics, are very stable and have low hysteresis.
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Recommended maximum inlet pressure is determined by the adjustment range. Ranges A, B, N, and Q are tested with a 3000 psi (210 bar) maximum differential between inlet and reduced pressure. Range W is tested with 5000 psi (350 bar) of inlet pressure.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES

