

**CONFIGURATION**

|               |                        |                           |
|---------------|------------------------|---------------------------|
| <b>X</b>      | Control                | Not Adjustable            |
| <b>D</b>      | Minimum Pilot Pressure | 50 psi (3,5 bar)          |
| <b>N</b>      | Seal Material          | Buna-N                    |
| <b>(none)</b> | Material/Coating       | Standard Material/Coating |

These unbalanced poppet, logic valves are 2-way switching elements that are spring-biased closed. Pressure at either work port 1 or 2 will further bias the valve to the closed position while pressure at port 3 will tend to open it. The force generated at port 3 must be greater than the sum of the forces acting at port 1 and port 2 plus the spring force for the valve to open. NOTE: The pilot area (port 3) is 1.8 times the area at port 1 and 2.25 times the area at port 2.

**TECHNICAL DATA**

|   |                           |
|---|---------------------------|
| Maximum Operating Pressure                | 5000 psi                  |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 10 drops/min. @1000 psi   |
| Pilot Volume Displacement                 | .06 in <sup>3</sup>       |
| Pilot Passage into Valve                  | .035 in.                  |
| Area Ratio, A3 to A1                      | 1.8:1                     |
| Area Ratio, A3 to A2                      | 2.25:1                    |
| Seal kit - Cartridge                      | Buna: 990-202-007         |
| Seal kit - Cartridge                      | Polyurethane: 990-002-002 |
| Seal kit - Cartridge                      | Viton: 990-202-006        |

**CONFIGURATION OPTIONS**

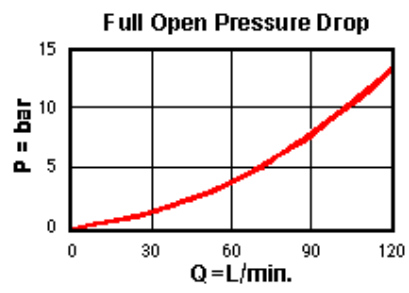
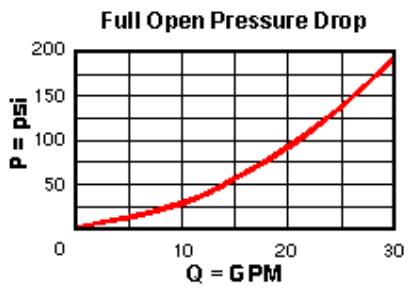
Model Code Example: LKFCXDN

| CONTROL          | (X) | MINIMUM PILOT PRESSURE | (D) | SEAL MATERIAL                 | (N) | MATERIAL/COATING   |
|------------------|-----|------------------------|-----|-------------------------------|-----|--|
| X Not Adjustable |     | D 50 psi (3,5 bar)     |     | N Buna-N<br>E EPDM<br>V Viton |     | Standard Material/Coating<br>/AP Stainless Steel, Passivated |

**TECHNICAL FEATURES**

- These valves have positive seals between port 2 and the pilot area.
- Because these valves are unbalanced, operation is pressure dependent. Opening and closing of the poppet are functions of the force balances on three areas: Port 1 = 100%, Port 2 = 80%, and the Pilot Area = 180%.
- These valves are pressure responsive at all ports, therefore it is essential to consider all aspects of system operation through a complete cycle. Pressure changes at any one port may cause a valve to switch from a closed to an open position, or vice versa. All possible pressure changes in the complete circuit must be considered to assure a safe, functional system design.
- All ports will accept 5000 psi (350 bar).
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.
- 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**



## RELATED MODELS

- [LKFCZ](#) Pilot-to-open, spring biased closed, unbalanced poppet logic element with position switch