



CONFIGURATION

| | | |
|--------|---------------------|----------------|
| X | Control | Standard Pilot |
| H | Spool Configuration | Open Center |
| N | Seal Material | Buna-N |
| (none) | Material/Coating | |

Three-position, 4-way directional cartridges are spring-centered, 6-port directional valves that can be configured from a choice of spool options. The supply port is port 3 and all ports will accept 5000 psi (350 bar). Capacity for these pilot-to-shift valves is dependent on the spool type specified.

TECHNICAL DATA

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

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|--|------------------------------------|
| Cavity | T-63A |
| Series | 3 |
| Capacity | 25 - 100 gpm |
| Maximum Operating Pressure | 5000 psi |
| Minimum Pilot Pressure Required to Shift Valve | 125 psi |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 2 in ³ /min. @ 1000 psi |
| Pilot Volume Displacement | .17 in ³ |
| Valve Hex Size | 1 1/4 in. |
| Valve Installation Torque | 150 - 160 lbf ft |
| Seal kit - Cartridge | Buna: 990063007 |
| Seal kit - Cartridge | EPDM: 990063014 |
| Seal kit - Cartridge | Polyurethane: 990063002 |
| Seal kit - Cartridge | Viton: 990063006 |
| Model Weight | 1.86 lb. |

CONFIGURATION OPTIONS

Model Code Example: DCECArray

| CONTROL | (X) SPOOL CONFIGURATION | (H) SEAL MATERIAL | (N) MATERIAL/COATING |
|------------------|--|-------------------------------|--|
| X Standard Pilot | H Open Center A A to T Center B B to T Center C Blocked Center N P to A and B to T Center R Regen Center T Tandem Center W A and B Bleed to T Center Y A and B to T Center | N Buna-N E EPDM V Viton | Standard Material/Coating /AP Stainless Steel, Passivated |

TECHNICAL FEATURES

- All ports will accept 5000 psi (350 bar), including the x and y pilot ports (port 5 and port 6).
- The reason for the different capacities, or performance limits, for the different spool configurations are flow forces. Flow forces are proportional to flow and pressure drop. Typically, they resist the opening of a passage. Spool configurations that open passages as they spring center are the most susceptible. If the flow forces due to the flow and pressure conditions exceed the centering spring force the valve may not shift completely. Higher flows may be used at lower pressures.
- Leakage listed in technical data is for each path.
- The pilot ports, 5 and 6, are positively sealed from the work ports.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- Hardened spool and sleeve provide consistent and low spool leakage rates and excellent wear characteristics.
- 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

