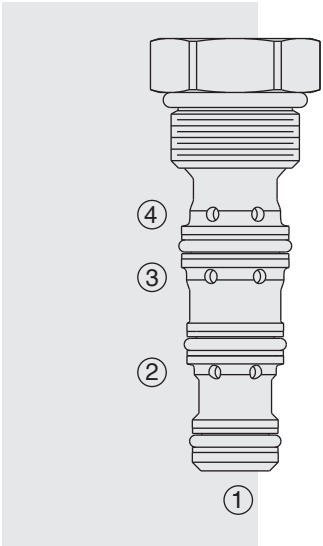


# DC08-40 Pilot Operated Check Valve



## DESCRIPTION

A dual pilot-operated check valve for use in blocking or load-holding circuits.

## OPERATION

The **DC08-40** will block flow from 1 to 2, and from 4 to 3. Flow is allowed in the opposite direction when pressure is applied to port 2 and/or port 3.

The valve has a 3:1 pilot ratio, so at least 1/3 of the load pressure at port 1 or 4 is required at the pilot lines (ports 2 or 3) to open the flow passage to allow flow from ports 1 or 4.

The check is spring-biased to assure holding in a static or no load condition.

**Note:** Orifice disc cannot be used with this product.

## FEATURES

- Hardened seat for long life and low leakage.
- Low pressure drop.
- Three spring sizes available - 25, 85 and 135.
- Sealed spool option available with 135 psi spring only.

## RATINGS

**Operating Pressure:** Inlet: 240 bar (3500 psi)

**Flow:** Rated Inlet Flow: 19 lpm (5 gpm); see performance chart

**Pilot Ratio:** 3:1

**Check Spring Bias:** 1.7 bar (25 psi); Optional 9.3 bar (135 psi)

**Leakage:** 5 drops per minute (0.25 ml per minute) at 3000 psi

**Temperature:** -40 to 100°C (-40 to 212°F) with Buna N seals;

-26 to 204°C (-15 to 400°F) with fluorocarbon seals;

-54 to 107°C (-65 to 225°F) with polyurethane and urethane seals.

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of

7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

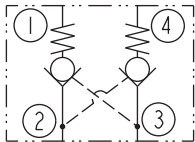
**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC08-4; See page 9.108.1

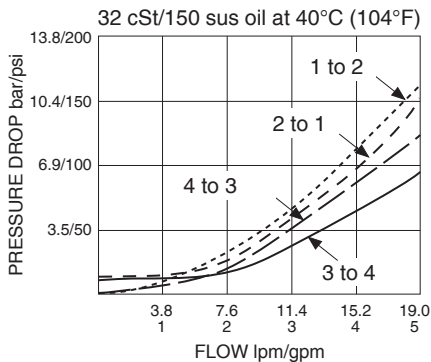
**Cavity Tool:** CT08-4XX-X-X; See page 8.600.1

**Seal Kit:** SK08-4X-MMM; See page 8.650.1

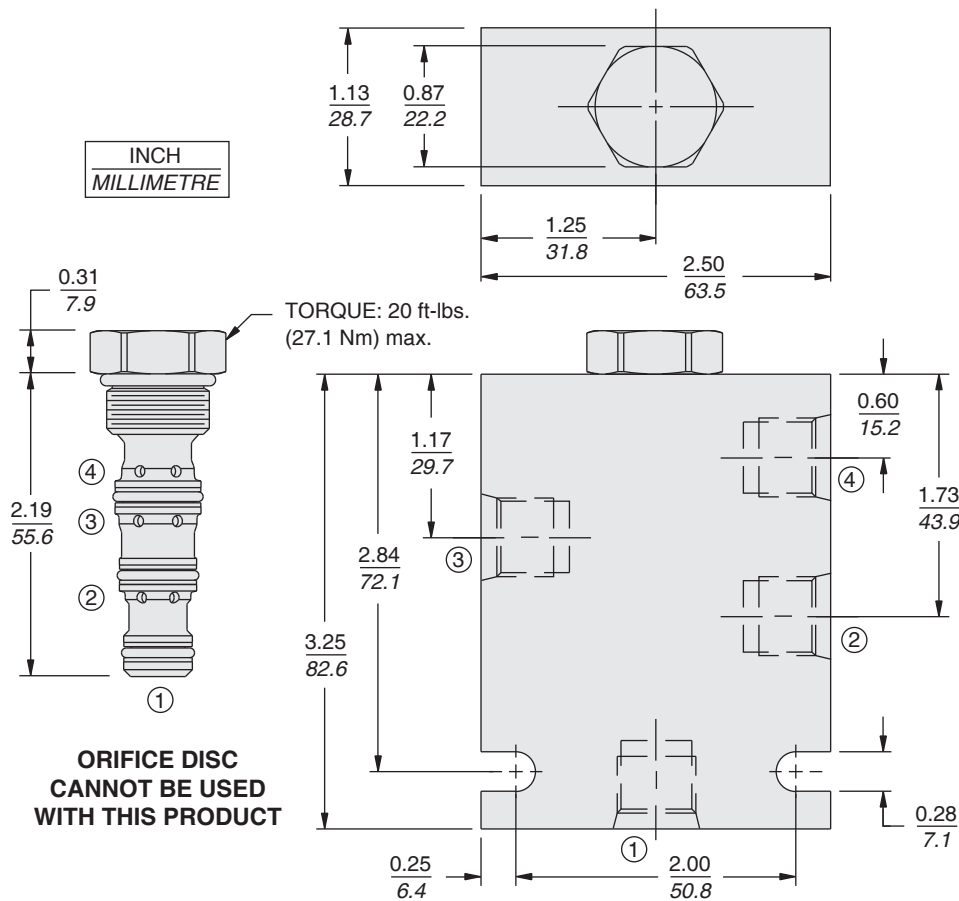
## ISO SYMBOLS



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.07 kg. (0.16 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

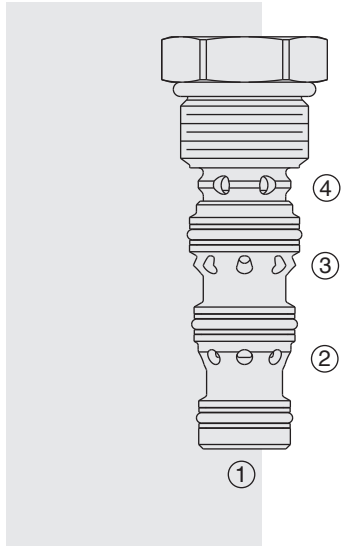
**Standard Ported Body:** Weight: 0.18 kg. (0.40 lbs.) Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.008.1

**TO ORDER**

<b>DC08-40 -</b>		<b>Bias Spring</b>	
<b>Porting</b>		<b>25</b>	1.7 bar (25 psi) Standard
Cartridge Only	<b>0</b>	<b>85</b>	5.9 bar (85 psi)
SAE 6	<b>6T</b>	<b>135</b>	9.3 bar (135 psi)
1/4 in. BSP*	<b>2B</b>		
3/8 in. BSP*	<b>3B</b>		
		<b>Seals</b>	
		<b>N</b>	Buna N (Std.)
		<b>V</b>	Fluorocarbon
		<b>P</b>	Polyurethane
		<b>U</b>	Urethane
		<b>NS*</b>	Buna N with sealed spool
		<b>VS*</b>	Fluorocarbon with sealed spool
		<b>US*</b>	Urethane with sealed spool
		<b>PS*</b>	Polyurethane with sealed spool

\* Note: NS, Vs, PS and US seal options require 9.3 bar (135 psi) spring minimum.

# DC10-40 Pilot Operated Check Valve



## DESCRIPTION

A dual pilot operated check valve for use in blocking or load-holding circuits. This valve has an optional thermal relief from port 4 to port 3.

## OPERATION

The DC10-40 will block flow from 1 to 2, and from 4 to 3. Flow is allowed in the opposite direction when pressure is applied to port 2 and/or port 3.

The valve has a 3:1 pilot ratio, so at least 1/3 of the load pressure at port 1 or 4 is required at the pilot lines (ports 2 or 3) to open the flow passage to allow flow from ports 1 or 4.

The check is spring-biased at 25 psi to assure holding in a static or no load condition.

**Note:** Orifice disc cannot be used with this product.

## FEATURES

- Hardened seat for long life and low leakage.
- Low pressure drop.
- Optional thermal relief.

## RATINGS

**Operating Pressure:** Inlet: 240 bar (3500 psi)

**Flow:** Rated Inlet Flow: 30.3 lpm (8 gpm); See performance chart.

**Pilot Ratio:** 3:1

**Check Spring Bias:** 1.7 bar (25 psi)

**Thermal Relief Crack Pressure Range:** 310 to 386 bar (4500 to 5600 psi)

**Thermal Relief Valve Leakage:** 5 drops per minute (0.25 ml per minute) at up to 85% of crack pressure.

**Maximum Check Valve Leakage:** 5 drops per minute (0.25 ml per minute) at 240 bar (3500 psi).

**Temperature:** -40 to 120°C with Buna N seals

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

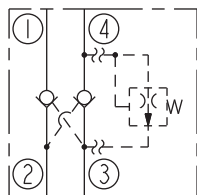
**Cavity:** VC10-4; See page 9.110.1

**Cavity Tool:** CT10-4XX-X-X; See page 8.600.1

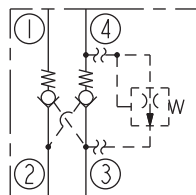
**Seal Kit:** SK10-4X-MMM; See page 8.650.1

## SYMBOLS

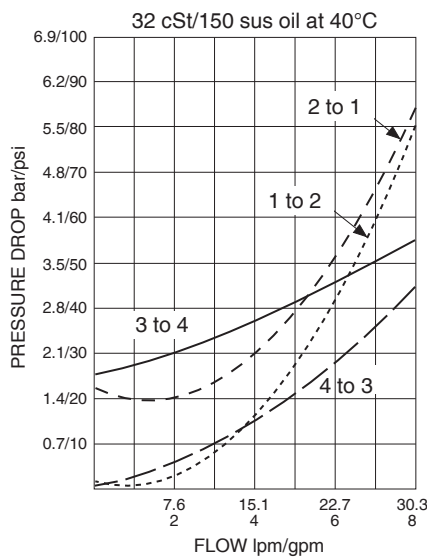
### USASI:



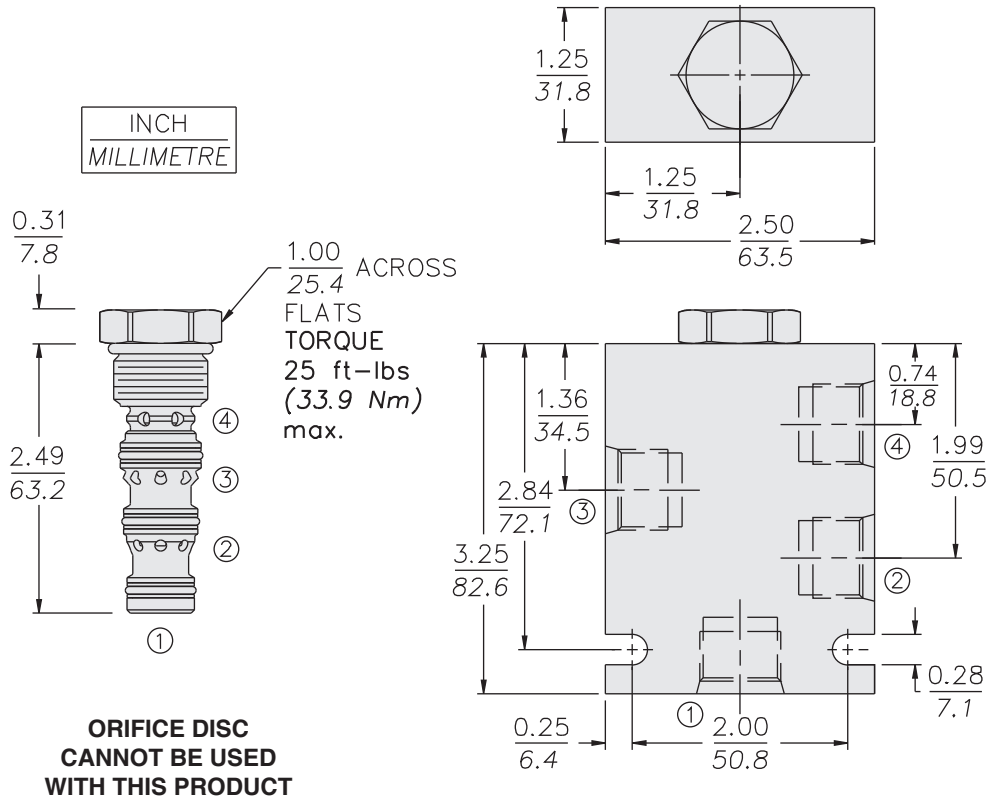
### ISO:



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.13 kg. (0.28 lbs.)  
Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and polyester elastomer back-ups standard.

**Standard Ported Body:** Weight: 0.34 kg. (0.75 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

**TO ORDER**

