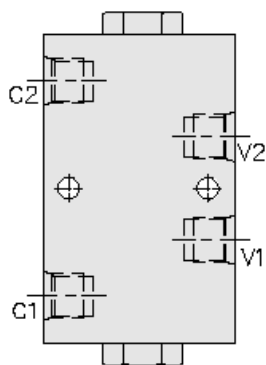
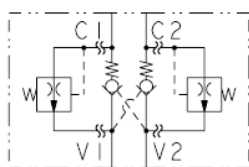




Overview



Symbol



Description

The DCV10 is a double pilot operated, hydraulic check valve for use in blocking or load holding circuits.

Operation

The valve allows flow from "V" ports to "C" ports, while normally blocking flow in the opposite direction. Flow will be allowed from "C" to "V" when pressure is applied to the opposite side "V" port. The valve has 4:1 pilot ratio, so at least 25% of the load pressure held at either "C" port is required at the opposite "V" port to open the flow passage. Optional thermal relief valves are available which CAN be on port "C1" or "C2" or on both ports "C1" and "C2".

Features

- Hardened seat for long life and low leakage.
- Optional sealed piston.
- Optional cartridge thermal relief(s).
- Optional spring ranges.
- Low pressure drop.
- Check section is serviceable as a cartridge.

Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Pilot ratio	4:1
Check valve spring value	2.1 bar (30 psi) - Note: Standard for seal codes "n" and "v" 6.9 bar (100 psi) - Note: Standard for seal codes "ns" and "vs" (sealed options)
Optional thermal relief	348 ±38 bar (5050 ±550 psi)
Thermal relief reseal	207 bar (3000 psi) - Note: Minimum

Temperature Ratings

Operating fluid temperature	-40 to 120 °C (-40 to 248 °F)
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Flow Ratings

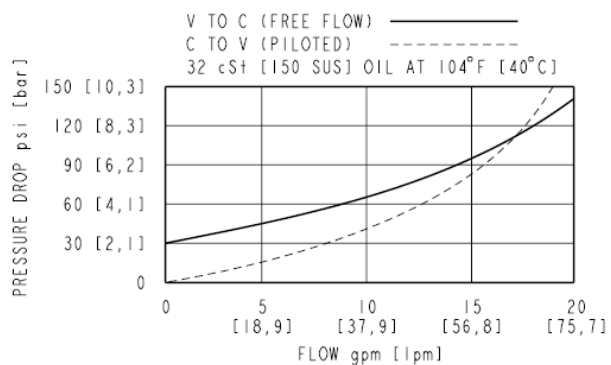
Maximum internal leakage	0.25 ml/min (5 drops/min) - Note: C to V at 241 bar (3500 psi) 328 ml/min (20 in ³ /min) (3500 psi) - Note: V1 to V2 without sealed piston at 241 bar
Flow performance	See graph

Properties

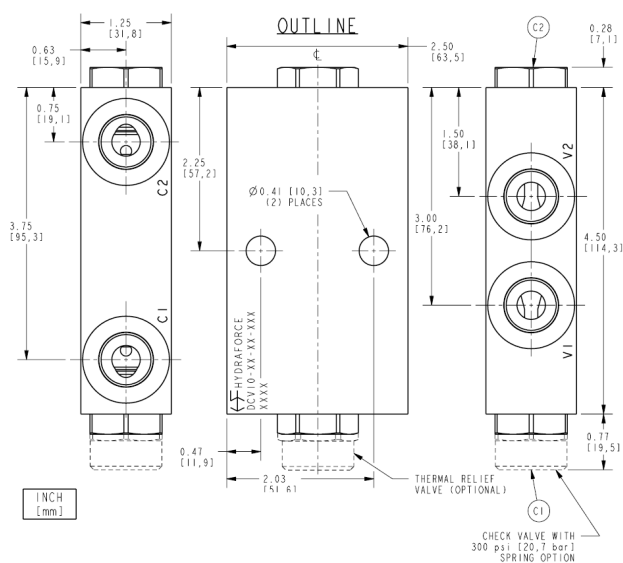
Materials	Body - anodized high strength aluminum alloy. Cartridges - steel with hardened work surfaces and zinc plated exposed surfaces. Pilot piston - hardened steel
Unit weight	0.68 kg (1.50 lb)



Performance



Dimensions



Accessories

Seal kit

SK10-2N-T
SK10-2V-T

- **Note:** Buna
- **Note:** Viton



Order Code

DCV10-XX-XX-X-XXX

PORTING CODE (TABLE 1)

- 1/4-18 NPTF - 2P
- 3/8-18 NPTF - 3P
- SAE 6 - 6T
- SAE 8 - 8T
- 3/8 BSP - 3B

SEAL CODE (TABLE 2)

- BUNA N - N
- VITON - V
- BUNA N WITH SEALED PISTON - NS
- VITON WITH SEALED PISTON - VS

CHECK VALVE SPRING CODE (TABLE 3)

BLANK - THERMAL RELIEF OPTION

- BLANK - 30 psi [2,1 bar] ("N" AND "V")
- BLANK - 100 psi [6,9 bar] ("NS" AND "VS")
- 40 - 40 psi [2,8 bar] ("N" AND "V")
- 70 - 70 psi [4,8 bar] ("N" AND "V")
- 100 - 100 psi [6,9 bar] ("N" AND "V")
- 200 - 200 psi [13,8 bar] ("N", "V", "NS" AND "VS")
- 300 - 300 psi [20,7 bar] ("N", "V", "NS" AND "VS")

THERMAL RELIEF CODE (TABLE 4)

BLANK - NONE

- 1 - THERMAL RELIEF ON "C1", CHECK VALVE ON "C2"
- 2 - THERMAL RELIEF ON "C2", CHECK VALVE ON "C1"
- 3 - THERMAL RELIEF ON "C1" AND "C2"

[THERMAL RELIEF SPRING VALUE: 65 psi [4,9 bar]
CHECK VALVE SPRING VALUE: 30 psi [2,1 bar]]

NOTES:

1. 30 psi [2,1 bar] MINIMUM ALLOWABLE CHECK VALVE SPRING VALUE FOR SEAL CODES "N" AND "V".
2. 100 psi [6,9 bar] MINIMUM ALLOWABLE CHECK VALVE SPRING VALUE FOR SEAL CODES "NS" AND "VS".
3. THERMAL RELIEFS ARE NOT TO BE USED WITH SEALED PISTONS (SEAL CODES "NS" AND "VS").
4. BOTH CHECK VALVES MUST HAVE SAME SPRING VALUE.

Model Options

DVC10-H-J-S-R

H Porting

CODE	DESCRIPTION
2P	1/4-18 NPTF
3P	3/8-18 NPTF
2B	1/4 BSP
3B	3/8 BSP
6T	SAE 6
8T	SAE 8

J Seal

CODE	DESCRIPTION
N	Buna N
V	Viton
BS	Buna with sealed piston
VS	Viton with sealed piston

R Spring

CODE	DESCRIPTION
BLANK	Thermal relief option
BLANK	2.1 bar (30 psi) N and V
BLANK	6.9 bar (100 psi) NS and VS
40	2.8 bar (40 psi) N and V
70	4.8 bar (70 psi) N and V
100	6.9 bar (100 psi) N and V
200	13.8 bar (200 psi) N, V, NS and VS
300	20.7 bar (300 psi) N, V, NS and VS

S Thermal relief

CODE	DESCRIPTION
1	Thermal relief on C1, check valve on C2
2	Thermal relief on C2, check valve on C1
3	Thermal relief on C1 and C2