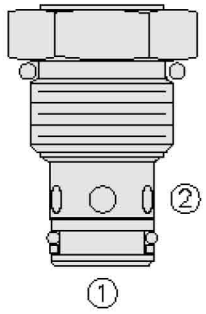
Part number:

HYDROMA HYDRAULICKÉ SYSTÉMY | HIDROMA SISTEMS UKŁADY HYDRAULICZNE | HYDROMA ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

CV50-20

CHECK VALVE

Overview



Description

The CV50-20 is a screw-in, cartridge style, hydraulic check valve for use as a blocking or load-holding device.

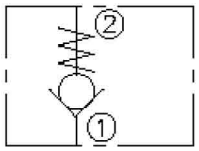
Operation

The cartridge valve allows flow from port 1 to 2, while normally blocking flow in the opposite direction. The cartridge valve has a fully guided check which is spring biased closed until sufficient pressure is applied at port 1 to open to port 2.

Features

- Hardened seat for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- Fully guided check assembly.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	345 bar (5000 psi)

Flow Ratings

Flow rating	75.7 lpm (20 gpm)	
Maximum internal leakage	0.10 ml/min (2 drops/min)	**- Note:** At 345 bar (5000 psi)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	**- Note:** With buna N seals
	-26 to 204 °C (-15 to 400 °F)	**- Note:** With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	**- Note:** With polyurethane seals
	-54 to 107 °C (-65 to 225 °F)	**- Note:** With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

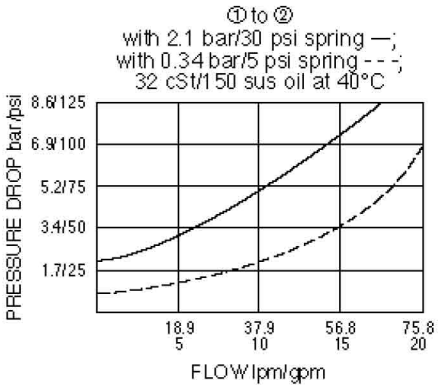
Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

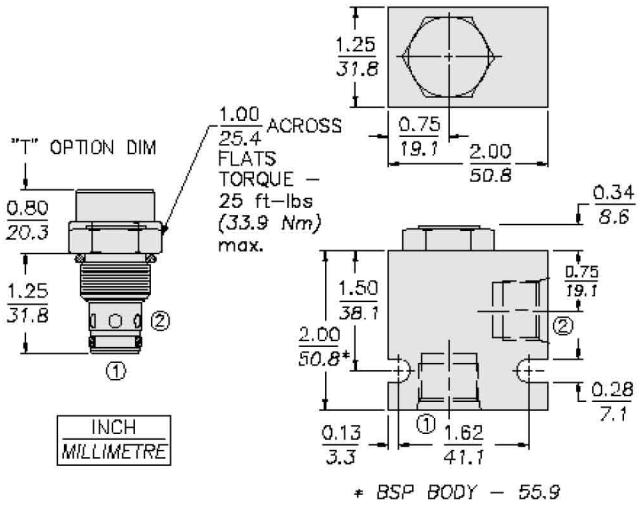
Properties

Unit weight	0.08 kg (0.18 lb)	**- Note:** CV50-20
	0.12 kg (0.27 lb)	**- Note:** CV50-20T
Internal wetted surface area	74 cm² (11.5 in²)	**- Note:** Cv5020
	97 cm² (15.1 in²)	**- Note:** Cv5020t

Performance



Dimensions



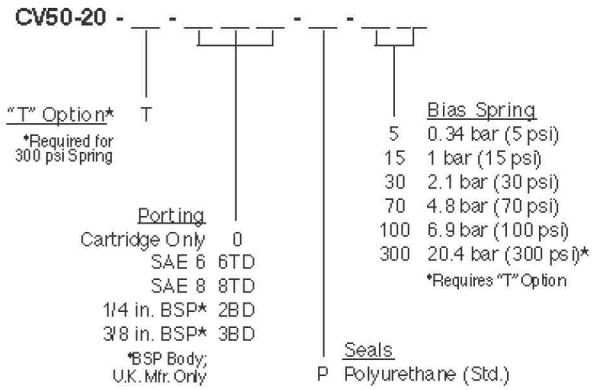
Installation Specifications

Cavity	VC10-2
Cartridge installation torque	32.6 to 35.4 N-m (24 to 26 ft-lb)
Maximum allowable torque	67.8 N-m (50 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-2N-T	**- Note:** Buna N
	SK10-2V-T	**- Note:** Fluorocarbon
	SK10-2HV-T	**- Note:** Fluorocarbon
	SK10-2P-T	**- Note:** Polyurethane
	SK10-2U-0	**- Note:** Urethane

Order Code



Model Options

CV50-20C-H-J-R

C Tall Cap

CODE	DESCRIPTION
BLANK	Standard Cap
T	Tall Cap

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)
4B	Aluminum BSPP 1/2" (4)
4BD	Ductile Iron BSPP 1/2" (4)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring

CODE	DESCRIPTION
2	2 psi Bias Spring
5	5 psi Bias Spring
15	15 psi Bias Spring
30	30 psi Bias Spring
70	70 psi Bias Spring
100	100 psi Bias Spring
300	300 psi Bias Spring