



This valve is a spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

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

Cavity	T-163A
Series	0
Capacity	10 gpm
Maximum Operating Pressure	5000 psi
Pilot Ratio	3.4:1
Maximum Valve Leakage at 110 SUS (24 cSt)	1 drops/min.
Valve Internal Hex Size	5/16 in.
Valve Installation Torque	20 - 25 lbf ft
Model Weight	.20 lb
Seal kit - Cartridge	Buna: 990-163-007
Seal kit - Cartridge	Polyurethane: 990-163-002
Seal kit - Cartridge	Viton: 990-163-006

## OPTION SELECTION EXAMPLE: COBGXCNV

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
X Not Adjustable, Standard Hydraulic Pilot	C 30 psi (2 bar)	N Buna-N	Standard Material/Coating
	D 50 psi (3,5 bar)	V Viton	IAP Stainless Steel, Passivated
	E 75 psi (5 bar)		
	F 100 psi (7 bar)		

### TECHNICAL FEATURES

- Features hardened steel seats for excellent wear characteristics and contamination tolerance.
- Product is not available with A and B spring ranges (4 and 15 psi (0,3 and 1 bar)).
- Nominal pilot ratio is 1.8:1. This means that a pressure of 1000 psi (70 bar) at the pilot port will close a valve against a pressure of 1800 psi (125 bar) at port 1. Any decay or loss of pilot pressure could allow the valve to open, even if it is a momentary decay or loss.
- Pressure at the port 2 area directly opposes pilot pressure.
- Reverse flow through the valve from port 2 to port 1 is not possible under any condition.
- 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

