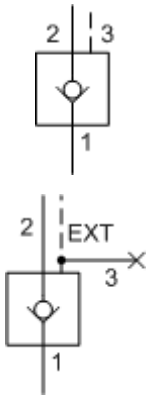

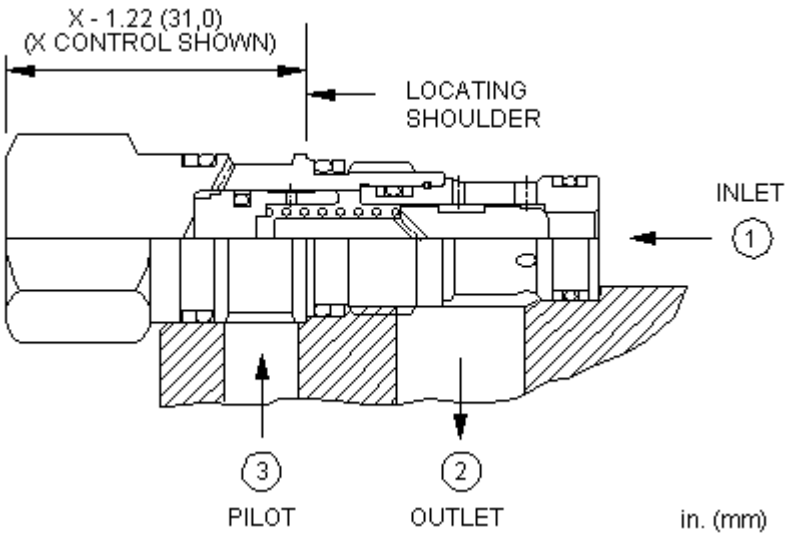

This valve is a spring biased closed, pilot-to-close check cartridge that has a 3:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 3:1. This valve is most often used in regeneration circuits.

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	3:1
Maximum Valve Leakage at 110 SUS (24 cSt)	1 drops/min.
Valve Hex Size	3/4 in.
Valve Installation Torque	20 - 25 lbf ft
Model Weight	.20 lb
Seal kit - Cartridge	Buna: 990-163-007
Seal kit - Cartridge	EPDM: 990-163-014
Seal kit - Cartridge	Polyurethane: 990-163-002
Seal kit - Cartridge	Viton: 990-163-006

OPTION SELECTION EXAMPLE: COBAXCNV

CONTROL	(X)
X	Standard Pilot

CRACKING PRESSURE	(C)
C	30 psi (2 bar)
D	50 psi (3,5 bar)
E	75 psi (5 bar)
F	100 psi (7 bar)

SEAL MATERIAL	(V)
V	Viton
E	EPDM
N	Buna-N

MATERIAL/COATING	
	Standard Material/Coating
/AP	Stainless Steel, Passivated
/LH	Mild Steel, Zinc-Nickel

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)).
- 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.
- Nominal pilot ratio is 3:1. This means that a pressure of 1000 psi (70 bar) at the pilot port will close a valve against a pressure of 3000 psi (205 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.
- 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.
- 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