PILOT OPERATED CHECK VALVE POPPET TYPE,
PILOT TO OPEN, 3 TO 1 PILOT RATIO.

POCX-12-X-X-XX-XXX

BASIC
SIZE
12 = 1.062"-12 UNF
SEALS
N = BUNA "N"
V = VITON
PORTS
0 = CARTRIDGE ONLY
04BX = G 1/2" BSPP
06BX = G 3/4" BSPP
10TX = SAE - #10
12TX = SAE - #12
"A" = ALUM. HOUSING
"S" = STEEL HOUSING

"P" PILOT PORT

CRACK PRESSURE
030 = 30 PSI
060 = 60 PSI
120 = 120 PSI

"P" PILOT PORT
2B = G 1/4" BSPP
4T = SAE - #4

PRESSURE DROP (ΔP)

L/M (28.5 cSt)

Steel = 70/75 Ft-Lb. [95/102 Nm]
Aluminum = 55/60 Ft-Lb. [74/81 Nm]

NOTE: CAVITY BOTTOM HOLE MUST ALLOW FOR POPPET EXTENSION (.630 DIAM.).
FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-013.1

Reference: 520-P-011130-EN-00/09.2015
# PILOT OPERATED CHECK VALVE

POPPET TYPE, PILOT TO OPEN, 3 TO 1 PILOT RATIO.

## DESCRIPTION

This unit is a SCREW IN, cartridge type, guided poppet, hydraulic pilot operated check valve, for use as a blocking or load holding device for high pressure applications.

## OPERATIONS

This valve allows free flow from port 2 to port 1 and blocks flow from port 1 to port 2 or holding a load. Flow will be allowed from port 1 to port 2 when sufficient pilot pressure is applied to port "P".

This pilot operated check valve has a 3 to 1 pilot ratio, meaning that it takes at least one-third of the load pressure held at port 1 that is required at pilot port "P" to open the valve.

We recommend to use an orifice to dampen the pilot signal (X) when used with an on/off (hard shifting) valve.

## FEATURES AND BENEFITS

Wide selection of bias springs allows flexibility for back-pressure application.
A low friction seal on pilot piston is standard.
All external carbon steel parts are plated for longer life against the elements.
All cartridge valves are 100% functionally tested.

Industry common cavity.

## SPECIFICATIONS

<table>
<thead>
<tr>
<th><strong>OPERATING PRESSURE:</strong></th>
<th>5,000 PSI [350 Bar]</th>
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<tbody>
<tr>
<td><strong>PROOF PRESSURE:</strong></td>
<td>10,000 PSI [700 Bar]</td>
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<tr>
<td><strong>FLOW:</strong></td>
<td>35.0 GPM [132.5 l/m] nominal. See performance chart.</td>
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<tr>
<td><strong>PILOT RATIO:</strong></td>
<td>3 TO 1</td>
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<tr>
<td><strong>INTERNAL LEAKAGE:</strong></td>
<td>5 drops per minute maximum @ 5,000 PSI [350 Bar]</td>
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<tr>
<td><strong>VALVE HOUSINGS:</strong></td>
<td>2500 PSI [175 Bar] = Aluminum – Anodized. 5000 PSI [350 Bar] = Steel – Unplated.</td>
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<tr>
<td><strong>OPERATING TEMPERATURE:</strong></td>
<td>-40° to +250° F. [−40° to +120° C.]</td>
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<tr>
<td><strong>OPERATING MEDIA:</strong></td>
<td>All general purpose hydraulic fluids such as MIL–H–5606, SAE–#10, SAE–#20, etc.</td>
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<tr>
<td><strong>INSTALLATION:</strong></td>
<td>No restrictions.</td>
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<tr>
<td><strong>SEAL KIT:</strong></td>
<td>SKN–1221 Buna &quot;N&quot; SKV–1221 Viton</td>
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<tr>
<td><strong>WEIGHT:</strong></td>
<td>0.31 lb [0.14 kg] cartridge only.</td>
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<tr>
<td><strong>VALVE CAVITY:</strong></td>
<td>#C1220, See Page 0–013.0.</td>
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</tbody>
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