AIR OPERATED DIRECTIONAL CONTROL VALVE
N,0, DIRECT ACTING, SPOOL TYPE (2/2)

TORQUE:
Steel = 55/60 Ft-Lb. [74/81 Nm]
Aluminum = 35/40 Ft-Lb. [47/54 Nm]

FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-012.1

AODV-10-X-01-X-XX

BASIC
SIZE
10 = 7/8"-14 UNF

TYPE
N = BUNA "N"
V = VITON

SPOOL
O1=NORMALLY OPEN SPOOL
2-WAY, 2-POSITION

PILOT PORT
1P = 1/8" NPTF
1B = G 1/8" BSPP
4T = SAE - #4

PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSPP
03BX = G 3/8" BSPP
06TX = SAE - #6
08TX = SAE - #8

"A" – ALUM. HOUSING
"S" – STEEL HOUSING

PRESSURE DROP (ΔP)

L/M (28,5 cSt)

G.P.M.(135 SUS)

Reference: 520-P-092520-EN-00/09.2015
### DESCRIPTION

This unit is a NORMALLY OPEN, TWO POSITION, screw-in cartridge style, direct acting spool type, air or hydraulic operated, spring return, hydraulic directional control valve.

### OPERATIONS

When pilot piston is not actuated, this valve allows flow between ports 2 to 1.

When pilot piston is pressurized, the spool in this valve is shifted and allows no flow between ports 2 to 1.

Port #1 can be pressurized to 18.5 x PILOT PORT pressure.

### FEATURES AND BENEFITS

- Hardened precision fitted spool & sleeve provides reliable, long life.
- Corrosion free pilot piston assembly allows this valve to be operated by air or any type of hydraulic fluids.
- Pilot piston is isolated from hydraulic fluid with high pressure seals.
- 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>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>OPERATING PRESSURE</td>
<td>5,000 PSI [350 Bar]</td>
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<tr>
<td>PROOF PRESSURE</td>
<td>10,000 PSI [700 Bar]</td>
</tr>
<tr>
<td>FLOW</td>
<td>8.0 GPM [30 l/m]</td>
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<tr>
<td>INTERNAL LEAKAGE</td>
<td>5 cu.in/min [82 cc/m] @ 5,000 PSI [350 Bar]</td>
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<tr>
<td>VALVE HOUSINGS</td>
<td>2500 PSI [175 Bar] = Aluminum – Anodized.</td>
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<tr>
<td></td>
<td>5000 PSI [350 Bar] = Steel – Unplated.</td>
</tr>
<tr>
<td>OPERATING TEMPERATURE</td>
<td>–40° to +250° F. [–40° to +120° C.]</td>
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<tr>
<td>OPERATING MEDIA</td>
<td>All general purpose hydraulic fluids such as</td>
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<td></td>
<td>MIL-H-5606, SAE-#10, SAE-#20, etc.</td>
</tr>
<tr>
<td>PILOT OPERATING MEDIA</td>
<td>Air or hydraulic fluid.</td>
</tr>
<tr>
<td>PILOT PISTON AREA RATIO TO SYSTEM PRESSURE AREA IS</td>
<td>18.5 to 1.</td>
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<tr>
<td>PILOT OPERATING PRESSURE IS</td>
<td>50 PSI to 250 PSI air.</td>
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<td></td>
<td>50 PSI to 1000 PSI hydraulic.</td>
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<tr>
<td>SEAL KIT</td>
<td>SKN-1022 Buna &quot;N&quot;</td>
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<td></td>
<td>SKV-1022 Viton</td>
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<tr>
<td>INSTALLATION</td>
<td>No restrictions.</td>
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<tr>
<td>WEIGHT</td>
<td>0.54 lb [0.27 kg] cartridge only.</td>
</tr>
<tr>
<td>VALVE CAVITY</td>
<td>#C1020, See Page 0-012.0.</td>
</tr>
</tbody>
</table>

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