HOT OIL SHUTTLE VALVE
SPOOL TYPE, SPRINGLESS.

FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-042.1

HOSV-10-X-X-X

BASIC
SIZE
10 = 7/8"–14 UNF
SEALS
N = BUNA "N"
V = VITON
SPOOL
"C" = SPOOL (CLOSED CENTER SHIFT)

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
PORT 1 MUST BE PLUGGED.

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

NO SEAL IN THIS GROOVE.

NO SEAL IN THIS GROOVE.

L/M (28,5 cSt)

PRESSURE DROP (ΔP)

0 15 30 53 60
0 10.5 7.0 3.5
0 14.0 10.5 7.0 3.5
0 16 14 12 10

G.P.M.(135 SUS)

BAR

Reference: 520-P-040520-EN-00/09.2015
HOT OIL SHUTTLE VALVE  
SPOOL TYPE, SPRINGLESS.

**DESCRIPTION**  
This unit is a DIRECT ACTING, SCREW IN CARTRIDGE STYLE, SPOOL TYPE, HYDRAULIC 3-WAY, 2-POS. DIRECTIONAL SHUTTLE VALVE, which may be used on a hydrostatic transmission to direct charge pump oil to heat exchanger or to tank.

**OPERATIONS**  
This valve with its internal pilots at port 2 or port 4 will allow flow to port 3 from the opposite port which is piloted with high pressure, thus removing oil from low pressure side for cooling or filtration purposes. This valve is springless therefore relying solely on the internal pressure signal to shift it to either side. This valve shifts in closed transition.

**FEATURES AND BENEFITS**  
Hardened precision fitted spool & cage provides reliable, long life. A unibody cage construction provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. All cartridge valves are 100% functionally tested. Industry common cavity.

**SPECIFICATIONS**  
| OPERATING PRESSURE: 5,000 PSI [350 Bar] |
| PROOF PRESSURE: 10,000 PSI [700 Bar] |
| FLOW: 16.0 GPM [60 L/M] nominal. See performance chart. |
| INTERNAL LEAKAGE: 5 cu.in./min. [85 cc/m]. |
| DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] |
| OPERATING TEMPERATURE: -40° to +250° F. [-40° to +120° C.] |
| OPERATING MEDIA: All general purpose hydraulic fluids such as MIL-H-5606, SAE-#10, SAE-#20, etc. |
| INSTALLATION: No restriction. |
| FILTRATION: 25 microns or better. |
| SEAL KIT NUMBER: SKN-1042 for buna “N”. SKV-1042 for Viton. |
| WEIGHT: 0.42 lb [.19 kg] cartridge only. |
| VALVE CAVITY: #C1040, See Page 0-042.0. |

Reference: 520-P-040520-EN-00/09.2015

© 2015 by Bucher Hydraulics, Inc., 2545 Northwest Parkway, Elgin, Illinois 60124, USA  
All rights reserved.  
Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.