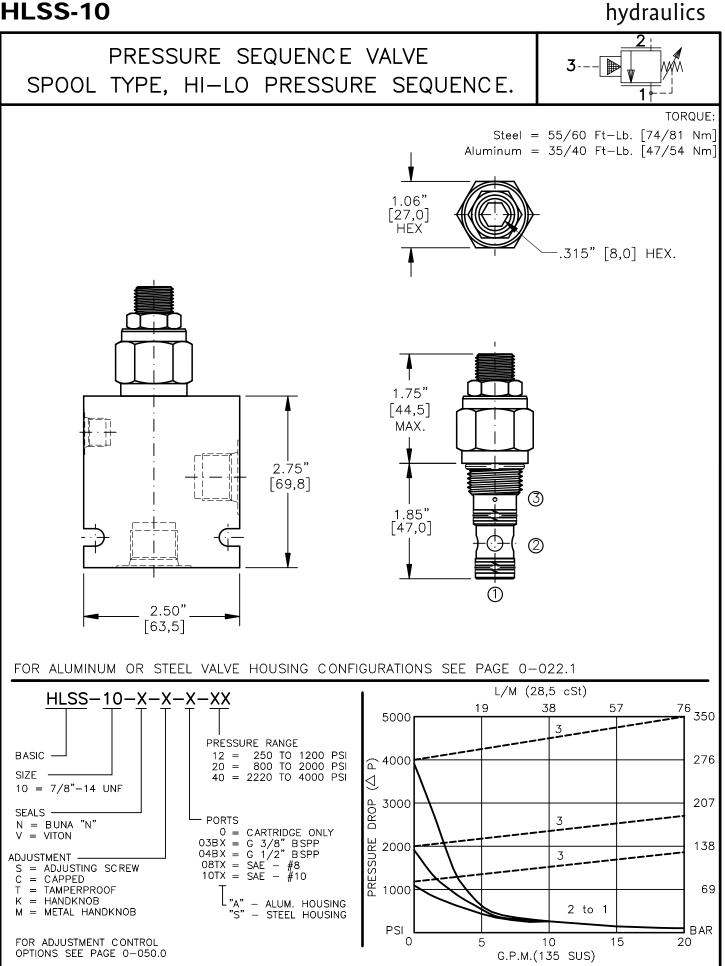
BUCHER hydraulics



Pressure Sequence Valves

	MODEL	DESCRIPTION	FLOW	CAVITY	PAGE NO.
3-	HLSS-10	HI-LO SPOOL TYPE	20 GPM	C1025	6-012.0
3-10-1-1	HLSV-10	HI-LO POPPET TYPE SOFT SHIFT	20 GPM	C1025	6-022.0
	PSXS-08 PSXS-10	PILOT OPERATED SPOOL TYPE	6 GPM 12 GPM	C0830 C1030	6-031.0 6-032.0
	PSOS-08 PSOS-10	PILOT OPERATED SPOOL TYPE	6 GPM 12 GPM	C0830 C1030	6-041.0 6-042.0
	PSCS-08 PSCS-10	PILOT OPERATED SPOOL TYPE	6 GPM 12 GPM	C0830 C1030	6-051.0 6-052.0
	PSVP-10	PRESSURE SEQUENCE POPPET TYPE	20 GPM	C1025	6-072.0
	PBVP-10	BREAKER SEQUENCE POPPET TYPE	20 GPM	C1025	6-112.0
	BSXS-08 BSXS-10	BREAKER SEQUENCE SPOOL TYPE	6 GPM 12 GPM	C0830 C1030	6-131.0 6-132.0
	BSOS-08 BSOS-10	BREAKER SEQUENCE SPOOL TYPE	6 GPM 12 GPM	C0830 C1030	6-141.0 6-142.0
	BSCS-08 BSCS-10	BREAKER SEQUENCE SPOOL TYPE	6 GPM 12 GPM	C0830 C1030	6-151.0 6-152.0

HLSS-10



BUCHER



PRESSURE SEQUENCE VALVE SPOOL TYPE, HI-LO PRESSURE SEQUENCE.

DESCRIPTION

This unit is a DIRECT ACTING, SCREW IN CARTRIDGE STYLE, SPOOL TYPE, ADJUSTABLE, SOFT SHIFT (shock free), HYDRAULIC HI-LO PRESSURE SEQUENCE VALVE.

OPERATIONS

This valve blocks flow from port #2 to port #1 until sufficient pressure is present at port #3 to force the diffirential area spool to shift thus opening the valve very gradually and without any shock. This valve is used in a two pump circuit to load and unload low press. high volume pump, from a high press. low volume pump pressure signal.

FEATURES AND BENEFITS

Leakproof screw adjustment. Adjustment screw can not be backed out of the valve. Overset protection – spring can not go solid. Hardened precision fitted spool & cage provides reliable, long life. A unibody cage construction provides very low hysteresis, dependable and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. 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: 20.0 GPM [76 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [85 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated. 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-1027 for buna "N". SKV-1027 for viton. WEIGHT: 0.46 Ib [.21 kg] cartridge only. VALVE CAVITY: #C1025, See Page 0-022.0.

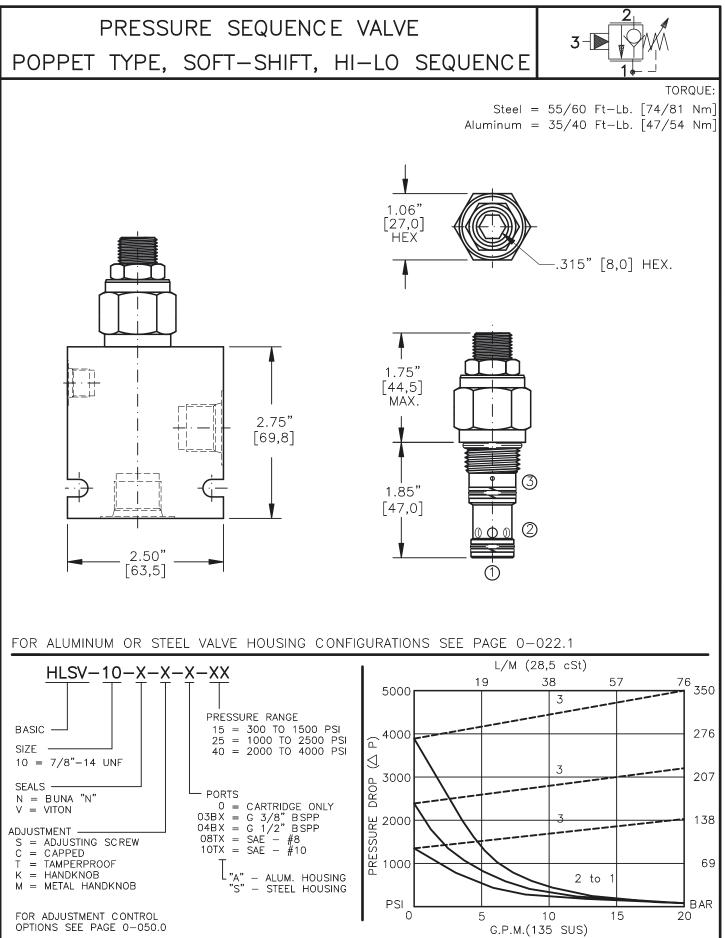
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HLSV-10

BUCHER hydraulics





PRESSURE SEQUENCE VALVE

POPPET TYPE, SOFT-SHIFT, HI-LO SEQUENCE.

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, POPPET TYPE, ADJUSTABLE, SOFT SHIFT (shock free), HYDRAULIC HI-LO PRESSURE SEQUENCE VALVE.

OPERATIONS

This valve blocks flow from port #2 to port #1 until sufficient pressure is present at port #3 to force the diffirential area poppet to shift thus opening the valve very gradually and without any shock. This valve is used in a two pump circuit to load and unload low press. high volume pump, from a high press. low volume pump pressure signal.

FEATURES AND BENEFITS

Leakproof screw adjustment. Adjustment screw can not be backed out of the valve. Overset protection — spring can not go solid. Hardened precision fitted poppet & cage provides reliable, long life. A unibody cage construction provides very low hysteresis, dependable and reliable operation. All external carbon steel parts are plated for longer life against the elements.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. 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: 20.0 GPM [76 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 10 cu.in./min [164 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated. 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-1027 for buna "N". SKV-1027 for viton. WEIGHT: 0.46 Ib [.21 kg] cartridge only. VALVE CAVITY: #C1025, See Page 0-022.0.

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BASIC -

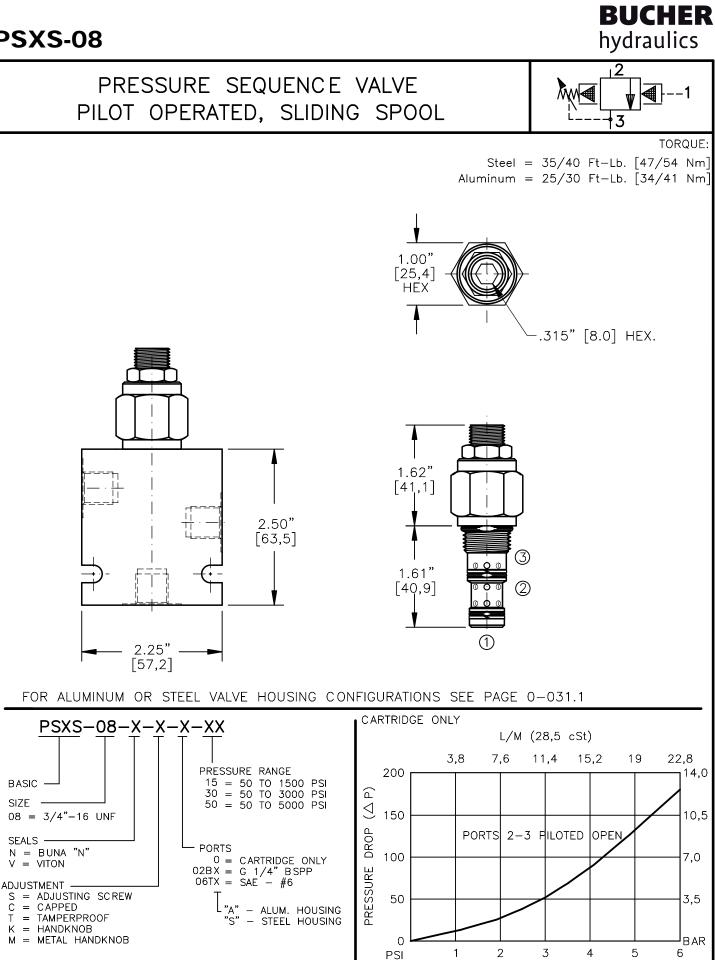
SIZE -

SEALS -

FOR ADJUSTMENT CONTROL

OPTIONS SEE PAGE 0-050.0

Т Κ



G.P.M.(135 SUS)



PRESSURE SEQUENCE VALVE

PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, EXTERNAL PILOT, HYDRAULIC PRESSURE SEQUENCE VALVE.

OPERATIONS

This value is a normally closed sequence value, blocking flow from port 2 to port 3. Port 1 is an external pilot port. When pressure in port 1 exceeds bias spring setting the spool will shift allowing flow to pass from port 2 to port 3.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of the valve.

Overset protection-pilot spring can not go solid.

Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested. Industry common cavity.

SPECIFICATIONS

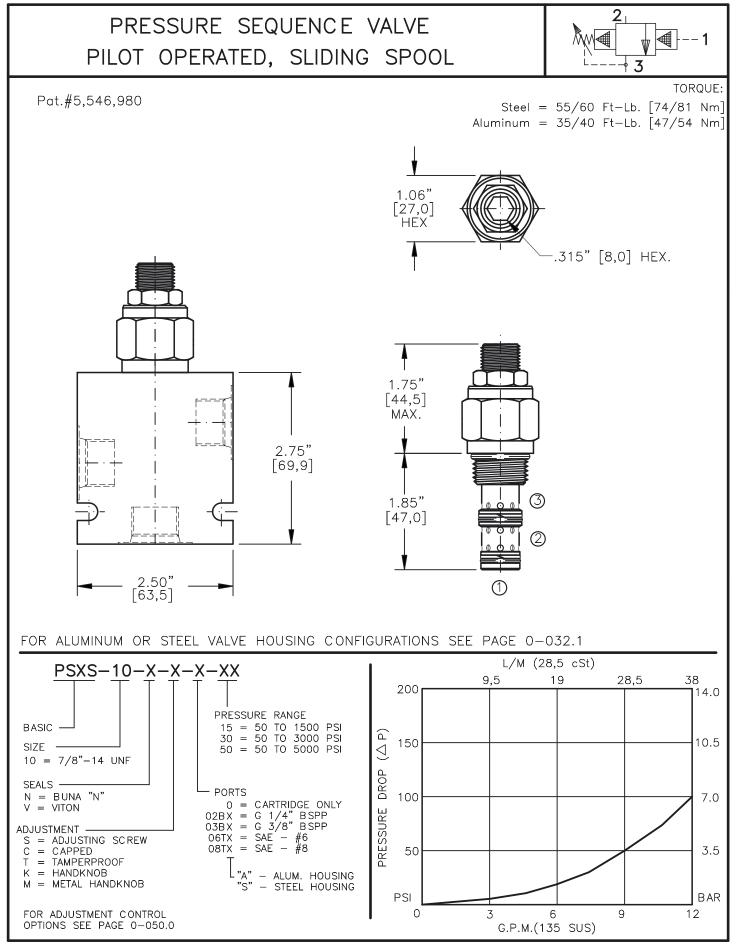
OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 6.0 GPM [23 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-0831 for bung "N". SKV-0831 for viton. WEIGHT: 0.30 lb [.14 kg] cartridge only. VALVE CAVITY: #C0830, See Page 0-031.0.

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PRESSURE SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, EXTERNAL PILOT, HYDRAULIC PRESSURE SEQUENCE VALVE.

OPERATIONS

This value is a normally closed sequence value, blocking flow from port 2 to port 3. Port 1 is an external pilot port. When pressure in port 1 exceeds bias spring setting the spool will shift allowing flow to pass from port 2 to port 3.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection-pilot spring can not go solid.

Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis

and reliable operation.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested.

Industry common cavity.

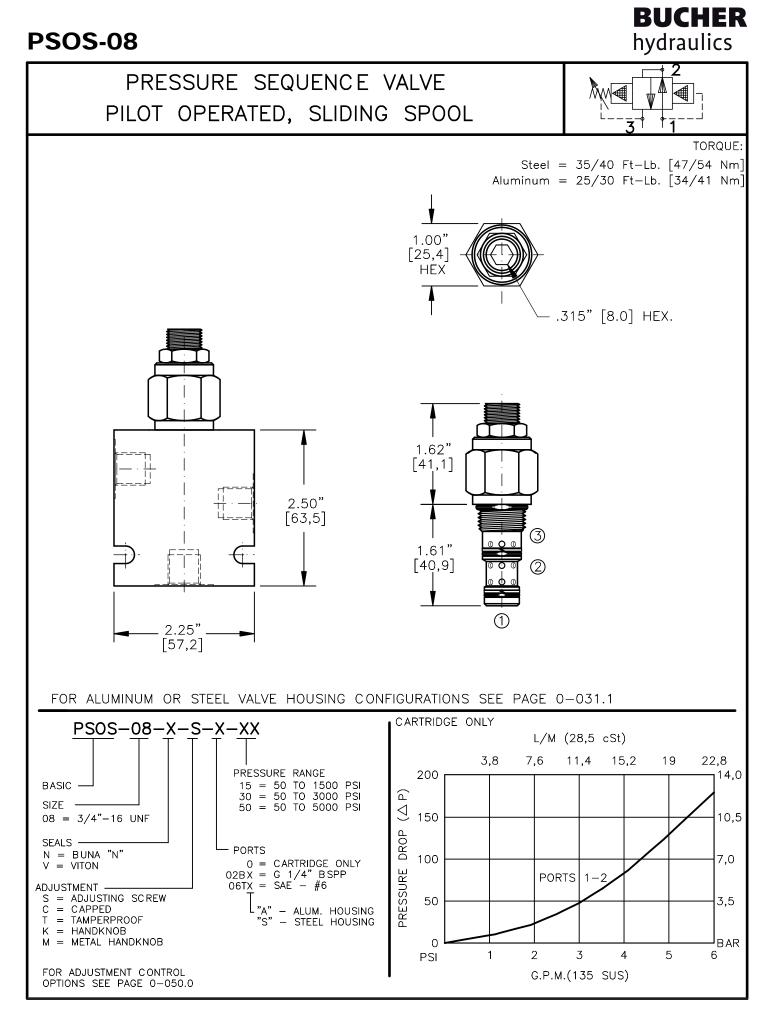
SPECIFICATIONS

OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 12.0 GPM [46 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1031 for buna "N". SKV-1031 for viton. WEIGHT: 0.42 lb [.19 kg] cartridge only. VALVE CAVITY: #C1030, See Page 0-032.0.

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PSOS-08



PRESSURE SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE SEQUENCE VALVE.

OPERATIONS

This value is a normally open sequence value, allowing flow from port 1 to port 2 and blocking flow in port 2 to port 3. When pressure in port 1 exceedes bias spring setting the spool will shift allowing no flow from port 1 to port 2 and pass flow from port 2 to port 3.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection-pilot spring can not go solid. Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested. Industry common cavity. SPEC IFIC ATIONS OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 6.0 GPM [23 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated. OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-0831 for bung "N". SKV-0831 for viton. WEIGHT: 0.30 lb [.14 kg] cartridge only. VALVE CAVITY: #C0830, See Page 0-031.0.

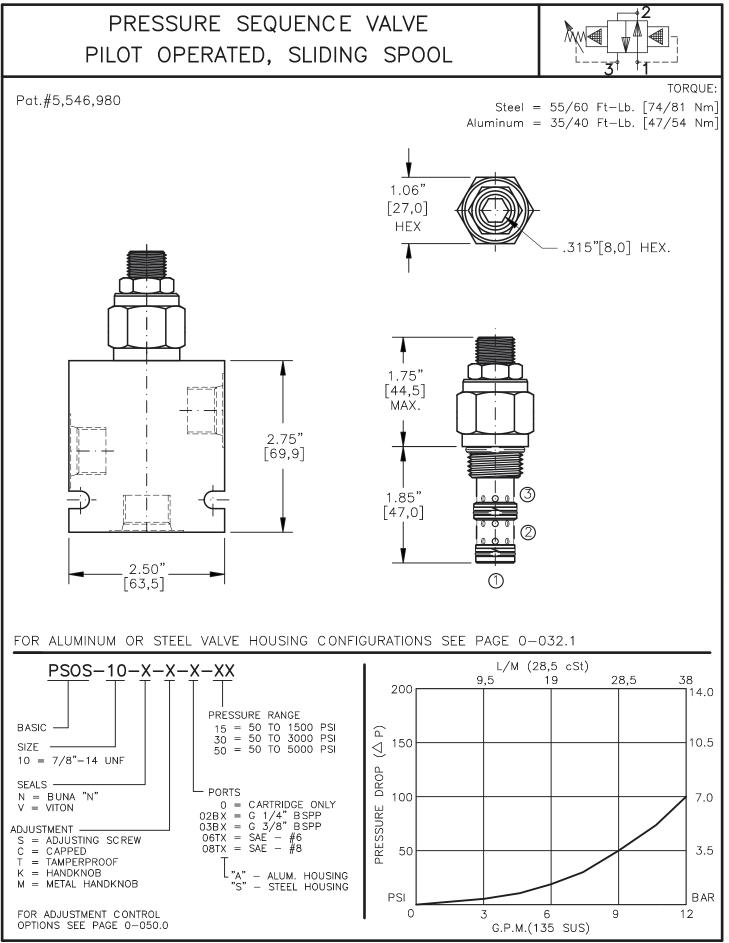
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PSOS-10





PSOS-10



PRESSURE SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE SEQUENCE VALVE.

OPERATIONS

This value is a normally open sequence value, allowing flow port 1 to port 2 and blocking flow port 2 to port 3. When pressure in port 1 exceedes bias spring setting the spool will shift allowing no flow from port 1 to port 2 and pass flow from port 2 to port 3.

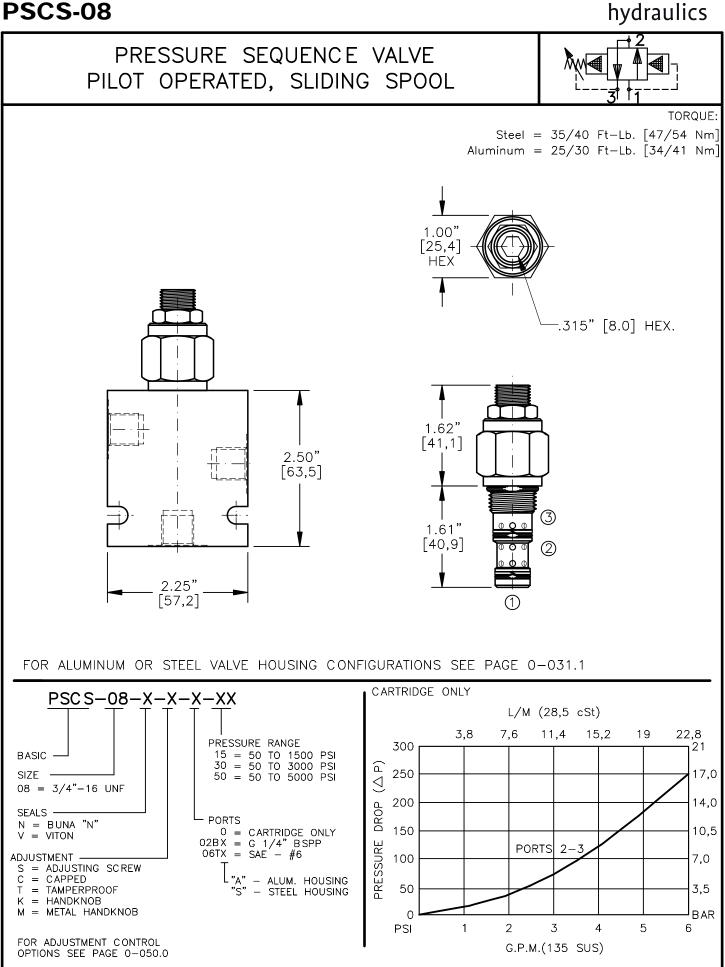
FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection-pilot spring can not go solid. Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. 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: 12.0 GPM [46 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: $-\overline{40}^{\circ}$ to $+\overline{250}^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1031 for buna "N". SKV-1031 for viton. WEIGHT: 0.42 lb [.19 kg] cartridge only. VALVE CAVITY: #C1030, See Page 0-032.0.

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PRESSURE SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE SEQUENCE VALVE.

OPERATIONS

This value is a normally closed sequence value, blocking flow from port 1 to port 2. When pressure in port 1 exceeds bias spring setting the spool will shift allowing flow from port 1 to port 2 and blocking flow from port 2 to port 3.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection-pilot spring can not go solid. Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested. Industry common cavity. SPEC IFIC ATIONS OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 6.0 GPM [23 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized.

5000 PSI [350 Bar] = Steel - Unplated. 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-0831 for buna "N".

SKV-0831 for viton. WEIGHT: 0.30 Ib [.14 kg] cartridge only.

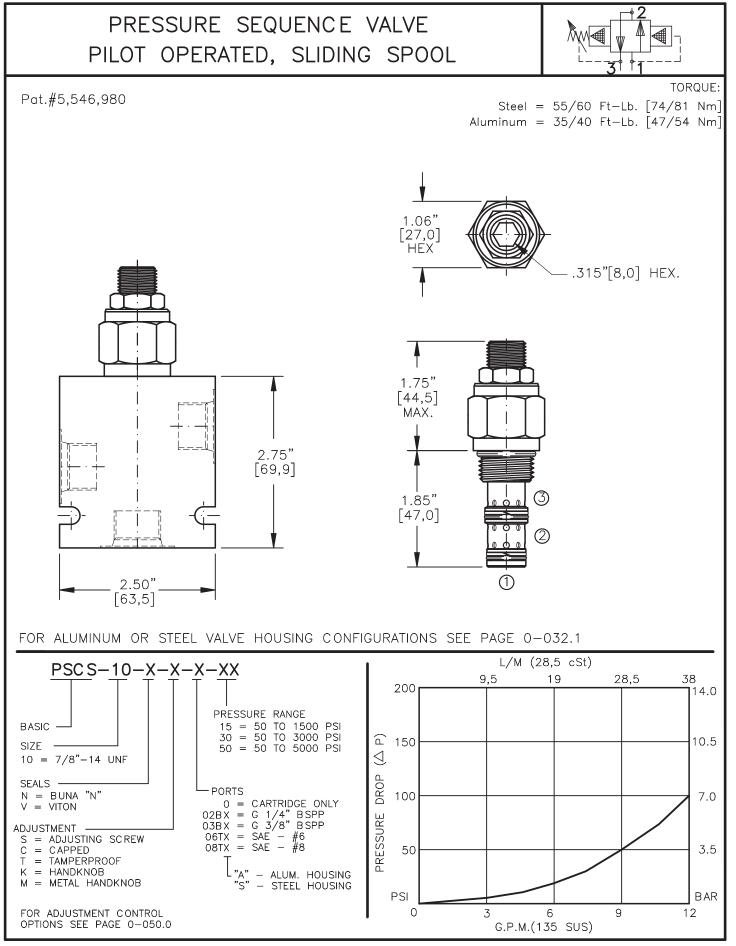
VALVE CAVITY: #C0830, See Page 0-031.0.

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PRESSURE SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE SEQUENCE VALVE.

OPERATIONS

This value is a normally closed sequence value, blocking flow from port 1 to port 2. When pressure in port 1 exceeds bias spring setting the spool will shift allowing flow from port 1 to port 2 and blocking flow from port 2 to port 3.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of the valve.

Overset protection-pilot spring can not go solid.

Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested. Industry common cavity.

SPECIFICATIONS

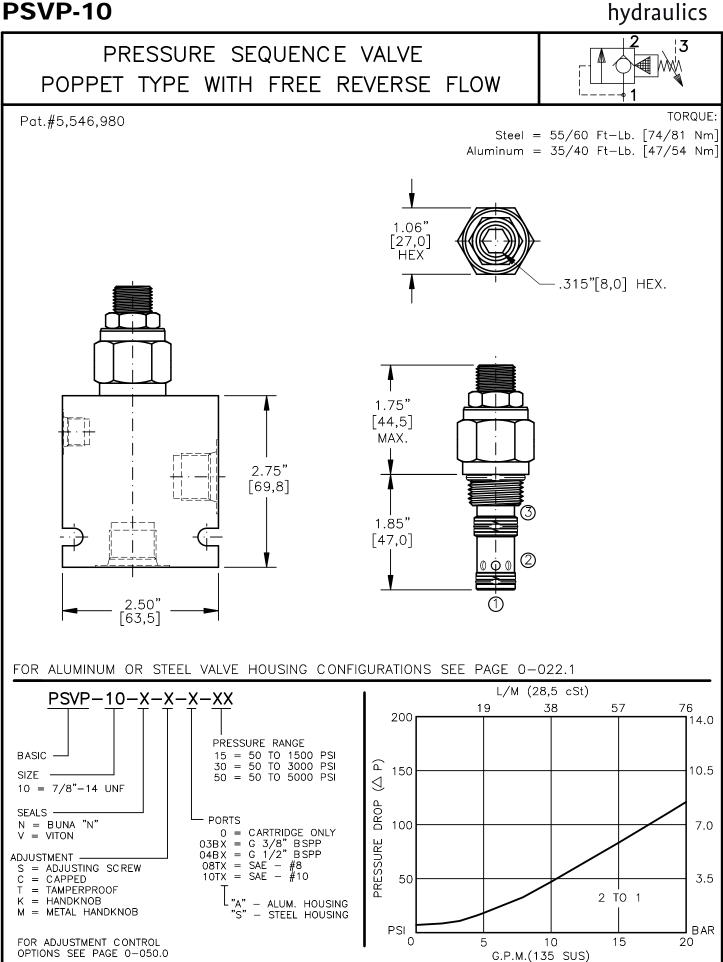
OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 12.0 GPM [46 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1031 for buna "N". SKV-1031 for viton. WEIGHT: 0.42 lb [.19 kg] cartridge only. VALVE CAVITY: #C1030, See Page 0-032.0.

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PSVP-10



BUCHER

PSVP-10



PRESSURE SEQUENCE VALVE

POPPET TYPE WITH FREE REVERSE FLOW

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, POPPET TYPE WITH BUILT IN FREE REVERSE FLOW CHECK, HYDRAULIC PRESSURE SEQUENCE VALVE,

OPERATIONS

This valve (PSVP) blocks flow from port #1 to port #2 until sufficient pressure is present at port #1 to force the pilot poppet from its seat thus opening the valve.

This sequence cartridge valve offers a free reverse flow from port 2 to port 1.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of the valve.

Overset protection-pilot spring can not go solid.

Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. 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: 20.0 GPM [76 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 drops/min (.25 cc/m) @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM (0.25 LPM) VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated. OPERATING TEMPERATURE: $-\overline{40}^{\circ}$ to $+\overline{250}^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1028 for buna "N". SKV-1028 for viton. WEIGHT: 0.42 lb [.19 kg] cartridge only. VALVE CAVITY: #C1025, See Page 0-022.0.

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BUCHER **PBVP-10** hydraulics 3 PRESSURE BREAKER/SEQUENCE VALVE <u>-</u> POPPET TYPE WITH FREE REVERSE FLOW TORQUE: Pat.#5,546,980 Steel = 55/60 Ft-Lb. [74/81 Nm] Aluminum = 35/40 Ft-Lb. [47/54 Nm] 1.06" [27,0] HEX -.315" [8,0] HEX. 1.75" [44,5] MAX. 2.75" [69,8] 3 1.85" [47,0] 2 С П M (1)2.50" [63,5] FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-022.1 L/M (28,5 cSt) PBVP-10-X-X-XX 19 57 38 76 200 14.0 PRESSURE RANGE BASIC a 10.5 150 9 SIZE · 50 = 50 TO 5000 PSI10 = 7/8" - 14 UNF DROP SEALS -PORTS N = BUNA "N"100 7.0 0 = CARTRIDGE ONLY 03BX = G 3/8" BSPP 04BX = G 1/2" BSPPPRESSURE V = VITON2 TO ADJUSTMENT -′— #8 — #10 08TX = SAE= ADJUSTING SCREW S 10TX = SAE50 3.5 C = CAPPED= TAMPERPROOF Т TO 2 PILOTED OPEN Κ = HANDKNOB L "A" ALUM. HOUSINGSTEEL HOUSING = METAL HANDKNOB "ŝ" м PSI BAR FOR ADJUSTMENT CONTROL 0 5 10 15 20 OPTIONS SEE PAGE 0-050.0 G.P.M.(135 SUS)

PBVP-10



PRESSURE BREAKER/SEQUENCE VALVE POPPET TYPE WITH FREE REVERSE FLOW

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, POPPET TYPE WITH BUILT IN FREE REVERSE FLOW CHECK, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This valve (PBVP) blocks flow from port #1 to port #2 until sufficient pressure is present at port #1 to force the pilot poppet from its seat thus opening the valve and unloads the system to a low pressure. Acts as a circuit breaker in a hydraulic system. This sequence cartridge valve offers a free reverse flow from port 2 to port 1.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of the valve.

Overset protection-pilot spring can not go solid.

Hardened precision fitted poppet & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested.

Industry common cavity.

SPECIFICATIONS

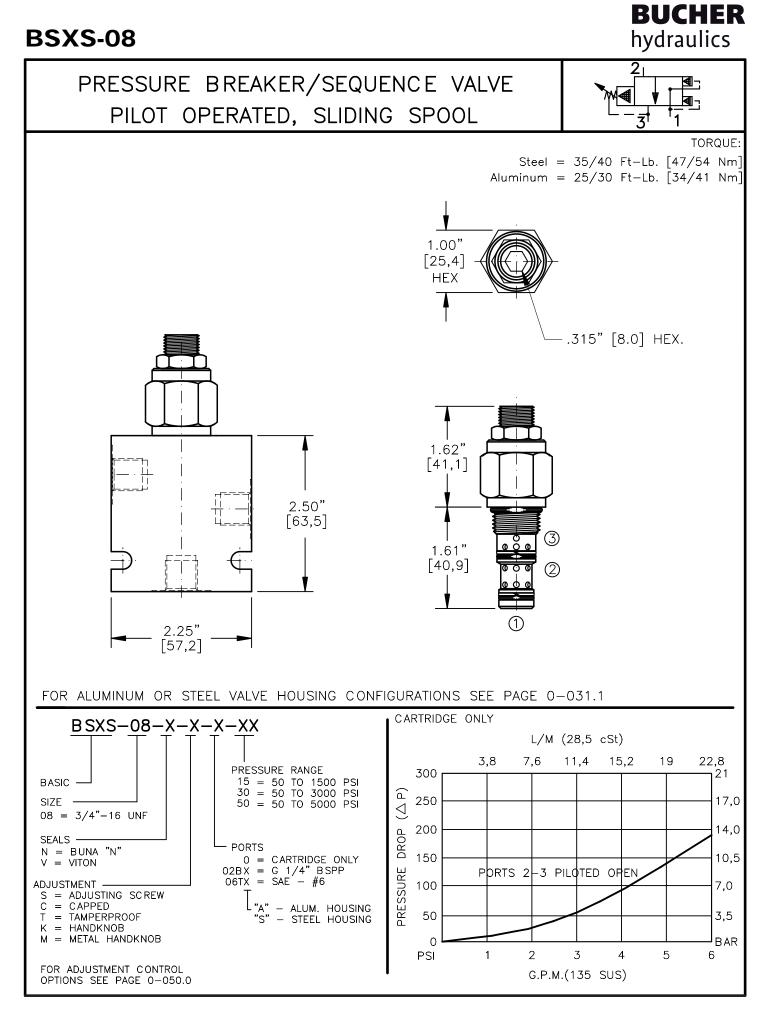
OPERATING PRESSURE: 5,000 PSI [350 Bar]
PROOF PRESSURE: 10,000 PSI [700 Bar]
FLOW: 20.0 GPM [76 L/M] nominal. See performance chart.
INTERNAL LEAKAGE: 5 drops/min (.25 cc/m) @ 85% of crack pressure.
DEFINITION OF CRACK: evident at 0.06 GPM (0.25 LPM)
VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.
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-1028 for buna "N". SKV-1028 for viton.
WEIGHT: 0.42 Ib [.19 kg] cartridge only.
VALVE CAVITY: #C1025, See Page 0-022.0.

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BSXS-08



PRESSURE BREAKER/SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This is a normally closed breaker/sequence valve, blocking flow from port 2 to port 3. Port 1 is as external pilot port. When pressure in port 1 exceeds spring bias setting, the spool will shift and stay shifted allowing flow from port 2 to port 3, until pressure at port 1 is removed. acts like a circuit breaker in a hydraulic system.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection - pilot spring can not go solid. Hardened precision fitted spool & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested. Industry common cavity. SPECIFIC ATIONS OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 6.0 GPM [23 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated. OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-0831 for buna "N". SKV-0831 for viton. WEIGHT: 0.30 Ib [.14 kg] cartridge only. VALVE CAVITY: #C0830, See Page 0-031.0.

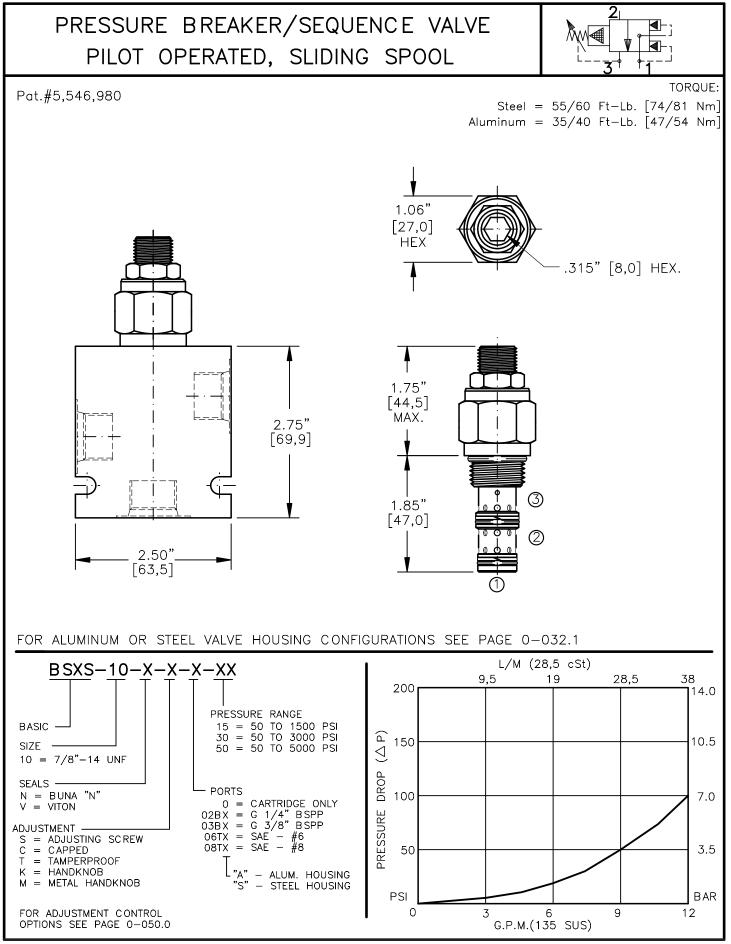
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BSXS-10





BSXS-10



PRESSURE BREAKER/SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, EXTERNAL PILOT, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This is a normally closed breaker/sequence valve, blocking flow port 2 to port 3. Port 1 is an external pilot port. When pressure in port 1 exceeds spring bias setting the spool will shift and stay shifted allowing flow from port 2 to port 3 until pressure at port 1 is removed. Acts like a circuit breaker in a hydraulic system.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of the valve.

Overset protection-pilot spring can not go solid.

Hardened precision fitted spool & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments.

All cartridge valves are 100% functionally tested.

Industry common cavity.

SPEC IFIC ATIONS

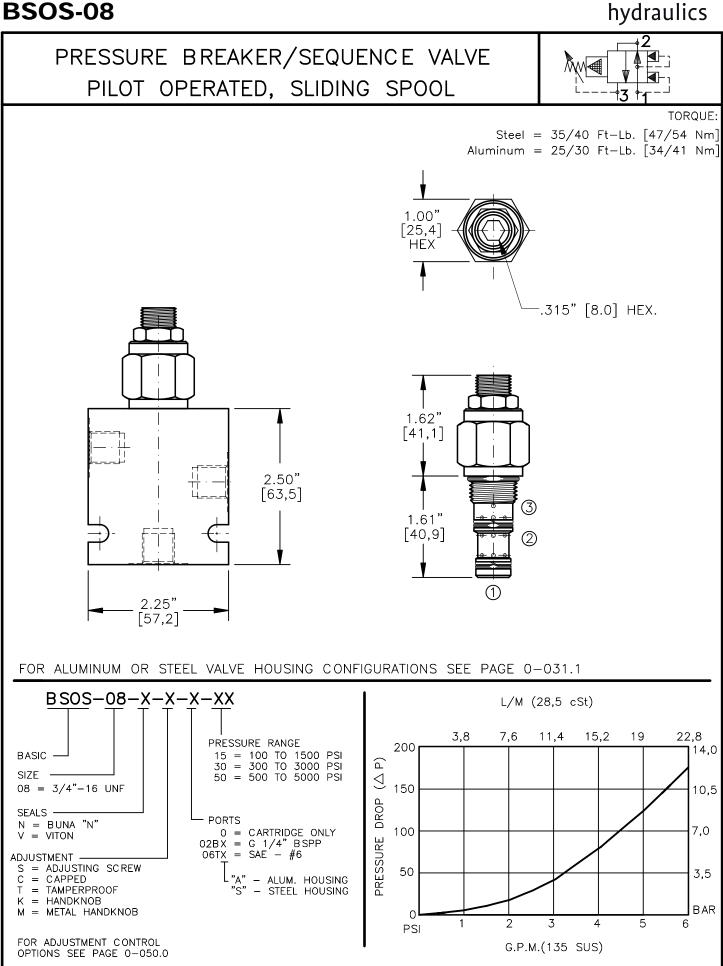
OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 12.0 GPM [46 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1031 for buna "N". SKV-1031 for viton. WEIGHT: 0.42 lb [.19 kg] cartridge only. VALVE CAVITY: #C1030, See Page 0-032.0.

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BSOS-08



BUCHER

BSOS-08



PRESSURE BREAKER/SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This is a normally open breaker/sequence valve, allowing flow from port 1 to port 2 and no flow from port 2 to port 3. When pressure in port 1 exceeds bias spring setting the spool will shift and stay shifted allowing no flow from port 1 to port 2 and pass flow from port 2 to port 3, until pressure at port 1 is removed. Acts like a circuit breaker in a hydraulic system.

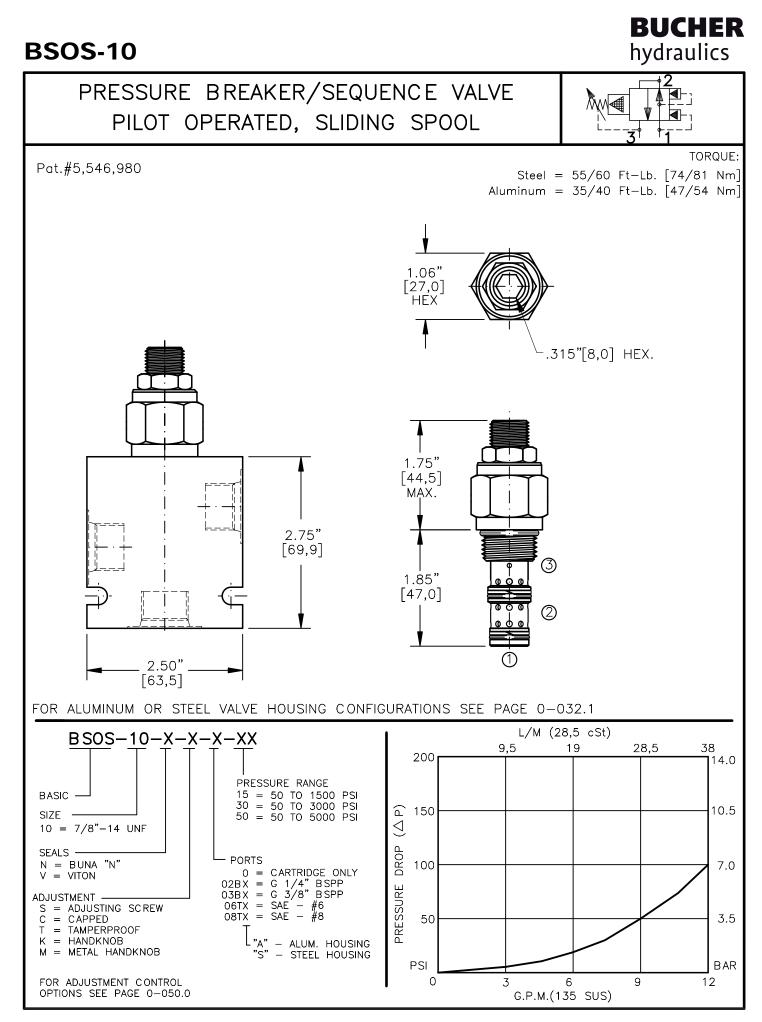
FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will and to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection - pilot spring can not go solid. Hardened precision fitted spool & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. 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: 6.0 GPM [23 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: $-\overline{40}^{\circ}$ to $+\overline{250}^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-0831 for buna "N". SKV-0831 for viton. WEIGHT: 0.30 lb [.14 kg] cartridge only. VALVE CAVITY: #C0830, See Page 0-031.0.

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BSOS-10



PRESSURE BREAKER/SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This is a normally open breaker/sequence valve, allowing flow from port 1 to port 2 and no flow from port 2 to port 3. When pressure in port 1 exceeds bias spring setting the spool will shift and stay shifted allowing no flow from port 1 to port 2 and pass flow from port 2 to port 3, until pressure at port 1 is removed. Acts like a circuit breaker in a hydraulic system.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of the valve.

Overset protection - pilot spring can not go solid.

Hardened precision fitted spool & cage provides reliable, long life.

A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested.

Industry common cavity.

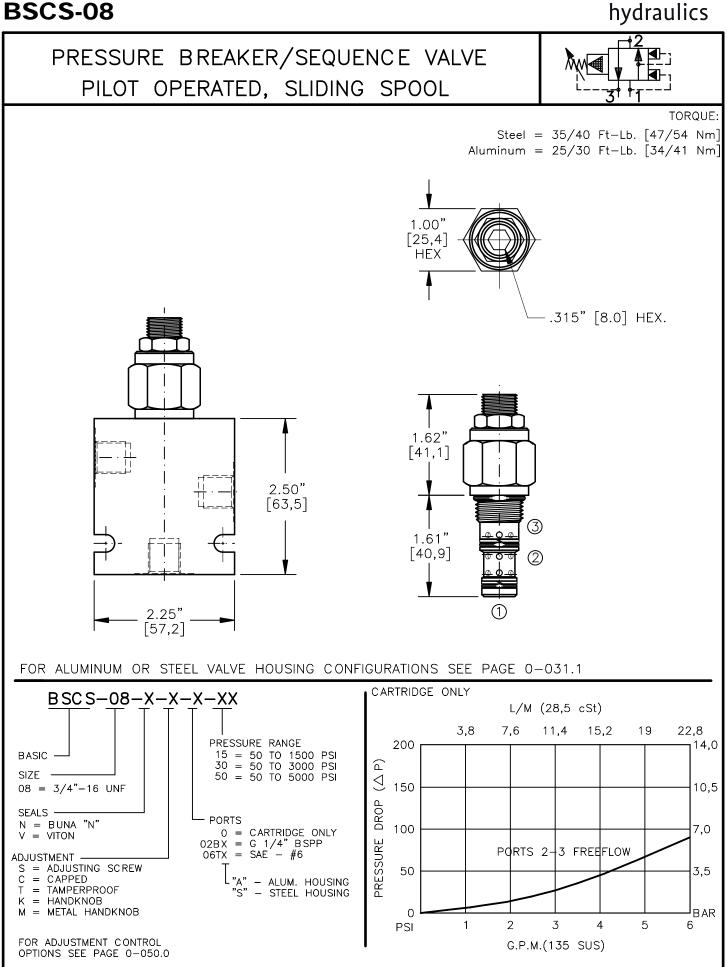
SPECIFICATIONS

OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 12.0 GPM [46 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI |175 Bar| = Aluminum – Anodized. 5000 PSI [350 Bar] = Steel - Unplated. OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1031 for buna "N". SKV-1031 for viton. WEIGHT: 0.42 Ib [.19 kg] cartridge only. VALVE CAVITY: #C1030, See Page 0-032.0.

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BUCHER

BSCS-08



PRESSURE BREAKER/SEQUENCE VALVE

PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This is a normally closed breaker/sequence valve, blocking flow from port 1 to port 2. When pressure in port 1 exceeds bias spring setting the spool will shift and stay shifted allowing flow from port 1 to port 2 and blocking flow from port 2 to port 3, until pressure at port 1 is removed. Acts like a circuit breaker in a hydraulic system.

FEATURES AND BENEFITS

Leakproof screw adjustment. Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection-pilot spring can not go solid. Hardened precision fitted spool & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. All cartridge valves are 100% functionally tested. Industry common cavity. SPEC IFIC ATIONS OPERATING PRESSURE: 5,000 PSI [350 Bar] PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 6.0 GPM [23,0 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-0831 for bung "N". SKV-0831 for viton. WEIGHT: 0.30 lb [.14 kg] cartridge only. VALVE CAVITY: #C0830, See Page 0-031.0.

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BUCHER **BSCS-10** hydraulics PRESSURE BREAKER/SEQUENCE VALVE PILOT OPERATED, SLIDING SPOOL TORQUE: Pat.#5,546,980 Steel = 55/60 Ft-Lb. [74/81 Nm] Aluminum = 35/40 Ft-Lb. [47/54 Nm] 1.06" [27,0] HEX .315"[8,0] HEX. 1.75" [44,5] MAX. 2.75" [69,9] (3) 1.85" [47,0] 2 2.50" [63,5] FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-032.1 L/M (28,5 cSt) BSCS-10-X-X-XX 9,5 19 28,5 38 200 14.0 PRESSURE RANGE BASIC -£ 10.5 150 SIZE · 50 = 50 TO 5000 PSI ⊴ 10 = 7/8" - 14 UNF DR0P 100 SEALS -PORTS N = BUNA "N"7.0 0 = CARTRIDGE ONLY 02BX = G 1/4" BSPP 03BX = G 3/8" BSPP 06TX = SAE - #6V = VITONPRESSURE ADJUSTMENT-′— #6 — #8 = ADJUSTING SCREW S 08TX = SAE3.5 C = CAPPED50 = TAMPERPROOF Т Κ = HANDKNOB L "_A" ALUM. HOUSINGSTEEL HOUSING "S" = METAL HANDKNOB м PSI BAR 0 FOR ADJUSTMENT CONTROL 3 6 9 12 OPTIONS SEE PAGE 0-050.0 G.P.M.(135 SUS)

BSCS-10



PRESSURE BREAKER/SEQUENCE VALVE

PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, SCREW IN CARTRIDGE STYLE, SLIDING SPOOL TYPE, ADJUSTABLE, INTERNAL PILOT, HYDRAULIC PRESSURE BREAKER/SEQUENCE VALVE.

OPERATIONS

This is a normally closed breaker/sequence valve, blocking flow from port 1 to port 2. When pressure in port 1 exceeds bias spring setting the spool will shift and stay shifted allowing flow from port 1 to port 2 and blocking flow from port 2 to port 3, until pressure at port 1 is removed. Acts like a circuit breaker in a hydraulic system.

FEATURES AND BENEFITS

Leakproof screw adjustment. Tank port (3) will add to the bias spring setting. and is limited to 2000 PSI. Adjustment screw can not be backed out of the valve. Overset protection-pilot spring can not go solid. Hardened precision fitted spool & cage provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof, capped and handknob adjustments. 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: 12.0 GPM [46 L/M] nominal. See performance chart. INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/m] @ 85% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ 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-1031 for buna "N". SKV-1031 for viton. WEIGHT: 0.42 lb |.19 kg| cartridge only. VALVE CAVITY: #C1030, See Page 0-032.0.

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