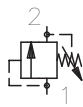
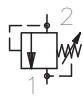
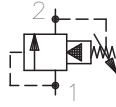
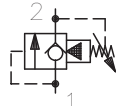
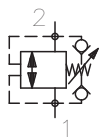
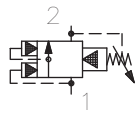
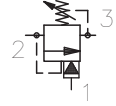
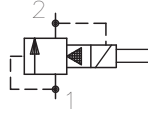
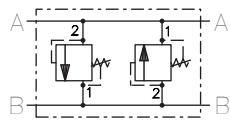
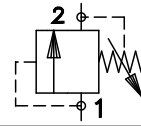


Relief Valves

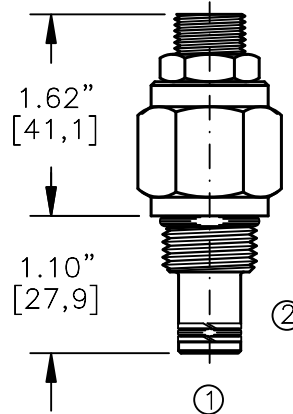
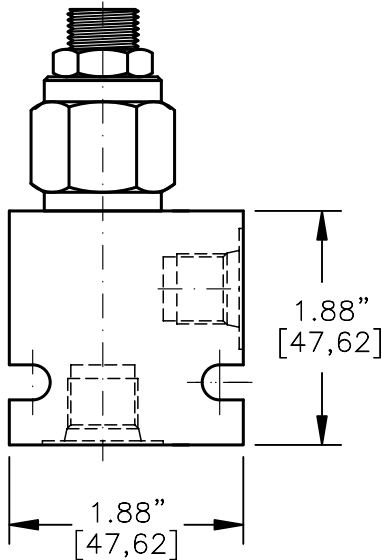
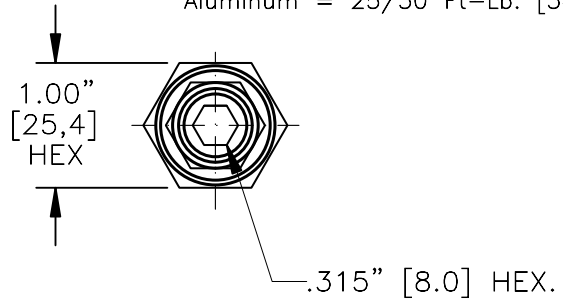
	MODEL	DESCRIPTION	FLOW	CAVITY	PAGE NO.
	RVPD-08	DIRECT ACTING PILOT CONTROL	2 GPM	C0820	3-011.0
	RVPD-10	DIRECT ACTING PILOT CONTROL	2 GPM	C1020	3-012.0
	RVDI-10	DIRECT ACTING POPPET TYPE	10 GPM	C1020	3-062.0
	RVDA-08	DIFFERENTIAL AREA POPPET TYPE	10 GPM	C0820	3-021.0
	RVDA-10		20 GPM	C1020	3-022.0
	RVPS-08	PILOT OPERATED SPOOL TYPE	15 GPM	C0820	3-031.0
	RVPS-10		26 GPM	C1020	3-032.0
	RVPS-12		60 GPM	C1220	3-033.0
	RVPP-10	PILOT OPERATED POPPET TYPE	26 GPM	C1020	3-042.0
	RVPP-12		60 GPM	C1220	3-043.0
	RVBD-08	BI-DIRECTIONAL POPPET TYPE	10 GPM	C0820	3-051.0
	RVBD-10		20 GPM	C1020	3-052.0
	RVBD-12		40 GPM	C1220	3-053.0
	RVBS-10	BREAKER PILOT OPERATED SPOOL TYPE	25 GPM	C1020	3-072.0
	PUVA-10	DIFFERENTIAL AREA UNLOADING RELIEF VALVE	1 GPM	C1030	3-082.0
	ESRV-10	SOLENOID VENTED RELIEF VALVE, N.O.	26 GPM	C1020	3-092.0
	CPRV-10	CROSS PORT RELIEF VALVE	20 GPM	C1020	3-102.0

RELIEF VALVE DIRECT ACTING,
LOW FLOW, PILOT CONTROL



TORQUE:

Steel = 35/40 Ft-Lb. [47/54 Nm]
Aluminum = 25/30 Ft-Lb. [34/41 Nm]



FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-011.1

RVPD-08-X-X-X-XX

BASIC
SIZE
08 = 3/4"-16 UNF

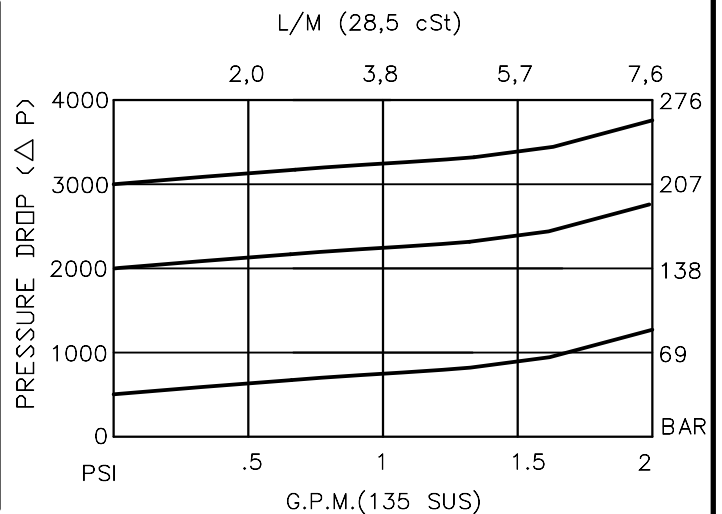
SEALS
N = BUNA "N"
V = VITON

ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0

PRESSURE RANGE
15 = 0 TO 1500 PSI
30 = 0 TO 3000 PSI
50 = 0 TO 5000 PSI

PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSPP
06TX = SAE - #6
"A" - ALUM. HOUSING
"S" - STEEL HOUSING



**RELIEF VALVE DIRECT ACTING,
LOW FLOW, PILOT CONTROL.****DESCRIPTION**

This unit is a DIRECT ACTING, REMOTE CONTROL FOR VALVES WITH LOW PILOT FLOW, cartridge type, steel ball, low leakage, screw in type, adjustable, pressure control valve.

OPERATIONS

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

This cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of valve.

Overset protection – spring can not go solid.

Hardened precision steel ball & seat 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: 2.0 GPM [7.6 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-0822 for Buna "N".

SKV-0822 for Viton.

WEIGHT: 0.30 lb [.14 kg] cartridge only.

VALVE CAVITY: #C0820, See Page 0-011.0.

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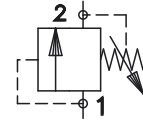
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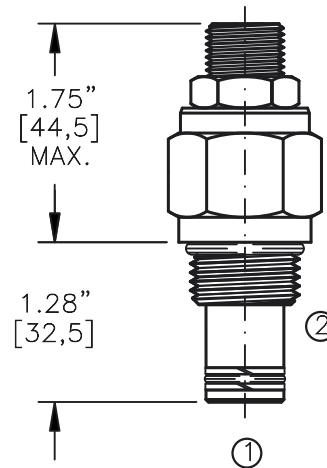
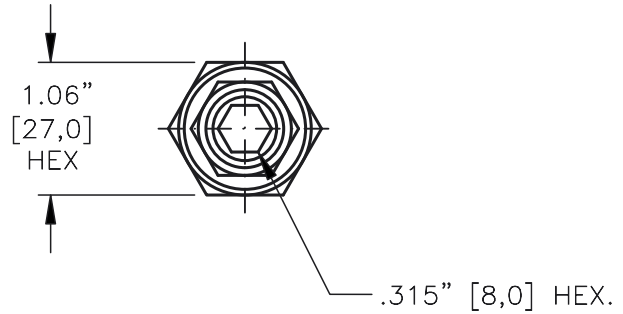
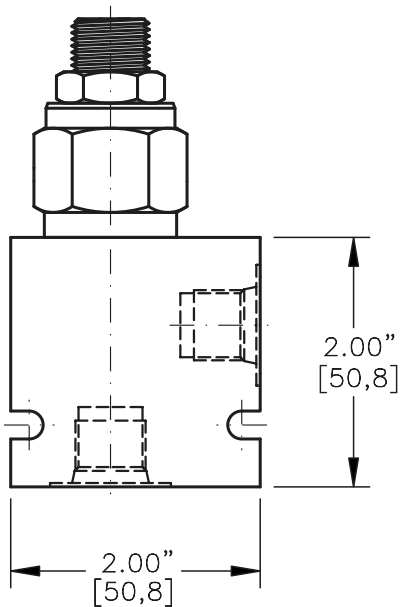
RELIEF VALVE DIRECT ACTING,
LOW FLOW, PILOT CONTROL



Pat.#5,546,980

TORQUE:

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



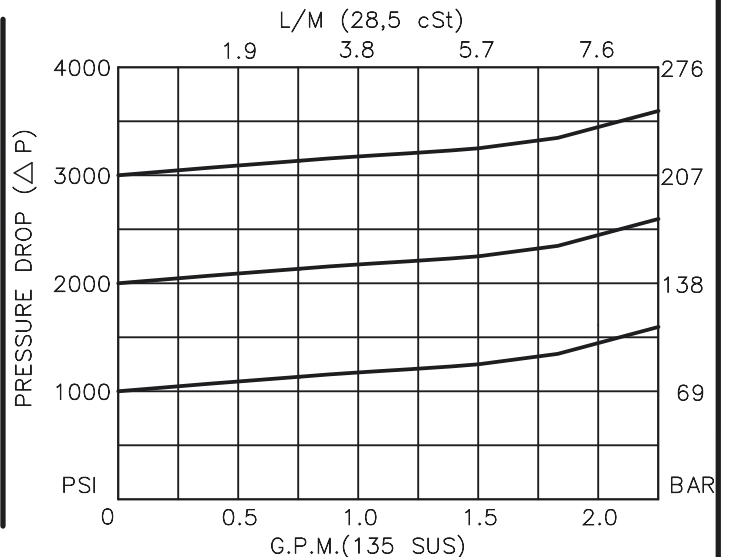
FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-012.1

RVPD-10-X-X-X-XX

- BASIC _____
- SIZE _____
10 = 7/8"-14 UNF
- SEALS _____
N = BUNA "N"
V = VITON
- ADJUSTMENT _____
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

- PRESSURE RANGE
15 = 0 TO 1500 PSI
30 = 0 TO 3000 PSI
50 = 0 TO 5000 PSI
- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



**RELIEF VALVE DIRECT ACTING,
LOW FLOW, PILOT CONTROL.****DESCRIPTION**

This unit is a DIRECT ACTING, REMOTE CONTROL FOR VALVES WITH LOW PILOT FLOW, cartridge type, steel ball, low leakage, screw in type, adjustable, pressure control valve.

OPERATIONS

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

This cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) will add to the bias spring setting, and is limited to 2000 PSI.

Adjustment screw can not be backed out of valve.

Overset protection – spring can not go solid.

Hardened precision steel ball & seat 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: 2.0 GPM [7.6 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-1022 for Buna "N".

SKV-1022 for Viton.

WEIGHT: 0.38 lb [.17 kg] cartridge only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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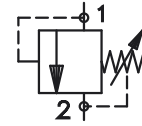
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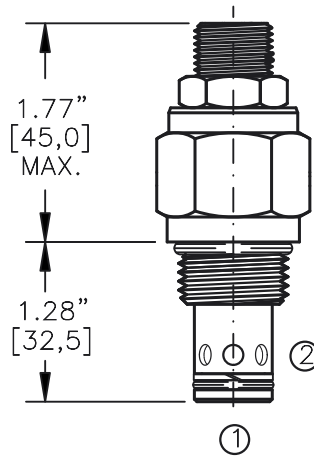
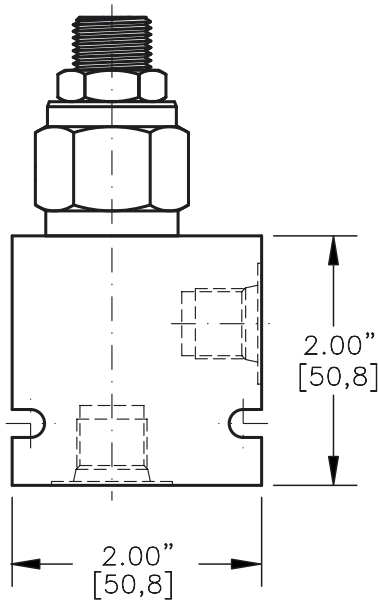
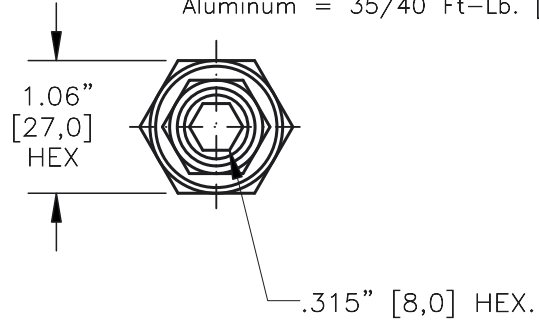
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RELIEF VALVE DIRECT ACTING,
POPPET TYPE



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

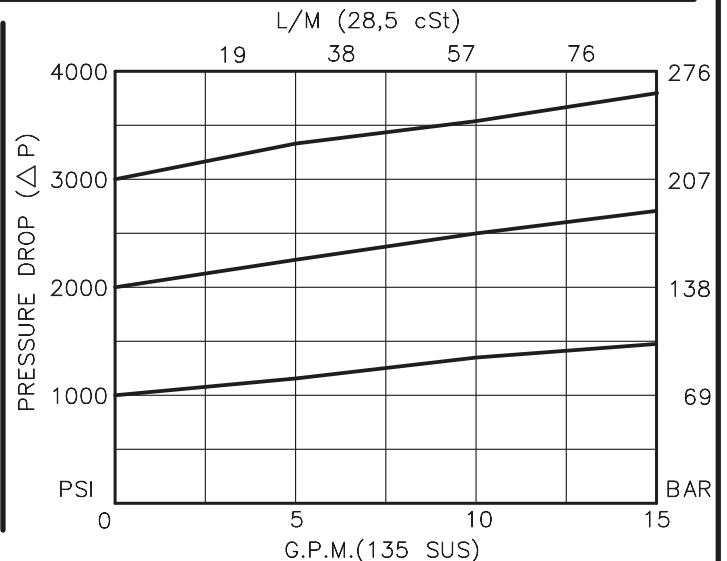
RVDI-10-X-X-X-XX

- BASIC
- SIZE
10 = 7/8"-14 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 300 TO 3000 PSI
50 = 500 TO 5000 PSI

- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



**RELIEF VALVE DIRECT ACTING,
POPPET TYPE****DESCRIPTION**

This unit is a DIRECT ACTING RELIEF VALVE, cartridge type, poppet type, low leakage, screw in type, adjustable, pressure control valve.

OPERATIONS

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

This cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Adjustment screw can not be backed out of valve.

Overset protection – spring can not go solid.

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

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: 10.0 GPM [38 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-1021 for Buna "N".

SKV-1021 for Viton.

WEIGHT: 0.38 lb [.17 kg] cartridge only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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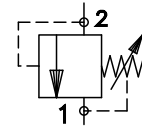
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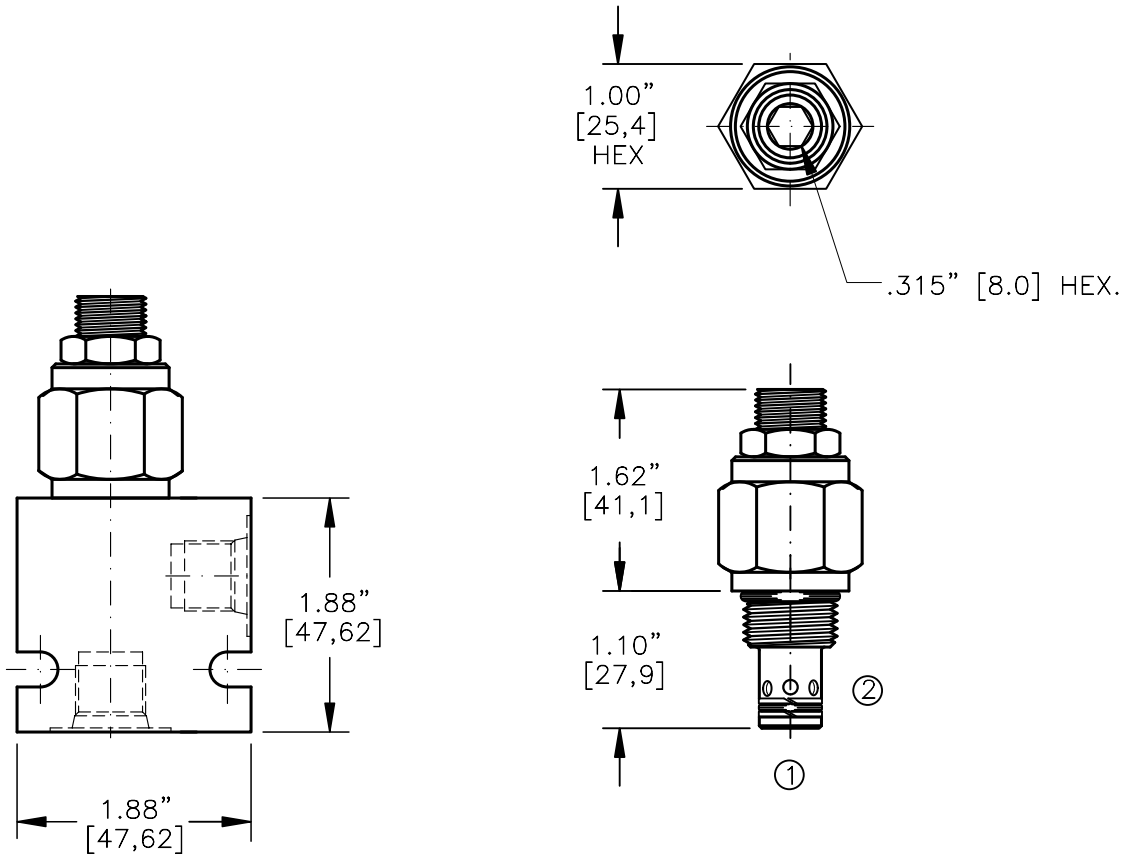
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RELIEF VALVE
DIFFERENTIAL AREA, POPPET TYPE



TORQUE:

Steel = 35/40 Ft-Lb. [47/54 Nm]
Aluminum = 25/30 Ft-Lb. [34/41 Nm]



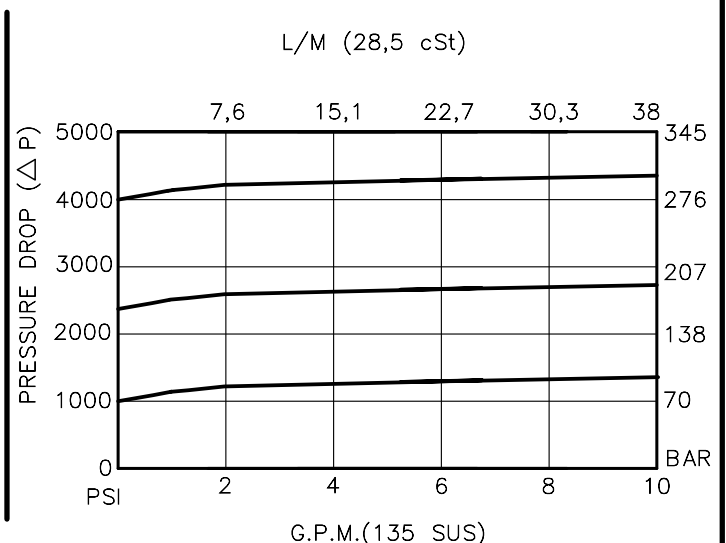
FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-011.1

RVDA-08-X-X-X-XX

- BASIC
- SIZE
08 = 3/4"-16 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 750 TO 3000 PSI
50 = 1500 TO 5000 PSI
- PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSPP
06TX = SAE - #6
- "A" - ALUM. HOUSING
"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



DIFFERENTIAL AREA, POPPET TYPE

DESCRIPTION

This unit is a DIFFERENTIAL AREA RELIEF VALVE, cartridge type, direct acting, poppet type, low leakage, screw in type, adjustable, pressure control valve.

OPERATIONS

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

This cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Adjustment screw can not be backed out of valve.

Overset protection – spring can not go solid.

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

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: 10.0 GPM [38 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-0822 for Buna "N".

SKV-0822 for Viton.

WEIGHT: 0.26 lb [.12 kg] cartridge only.

VALVE CAVITY: #C0820, See Page 0-011.0.

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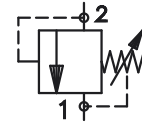
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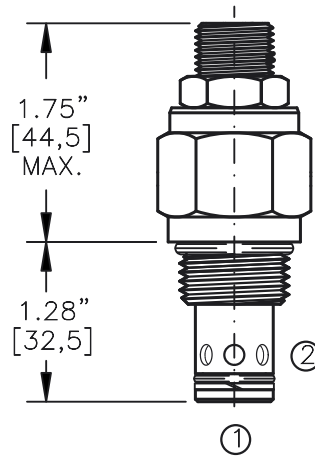
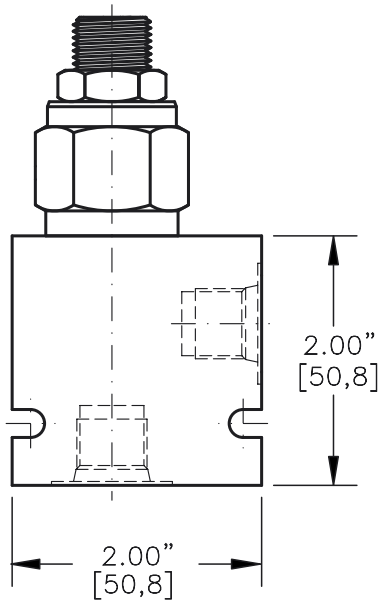
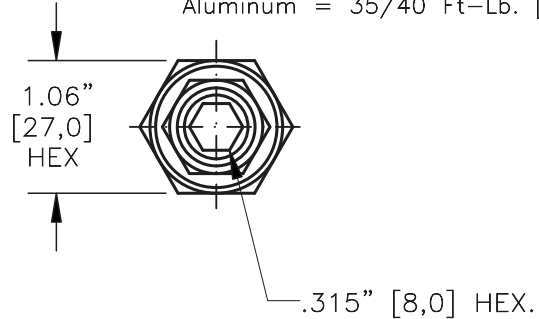
RELIEF VALVE DIFFERENTIAL AREA,
POPPET TYPE



Pat.#5,546,980

TORQUE:

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

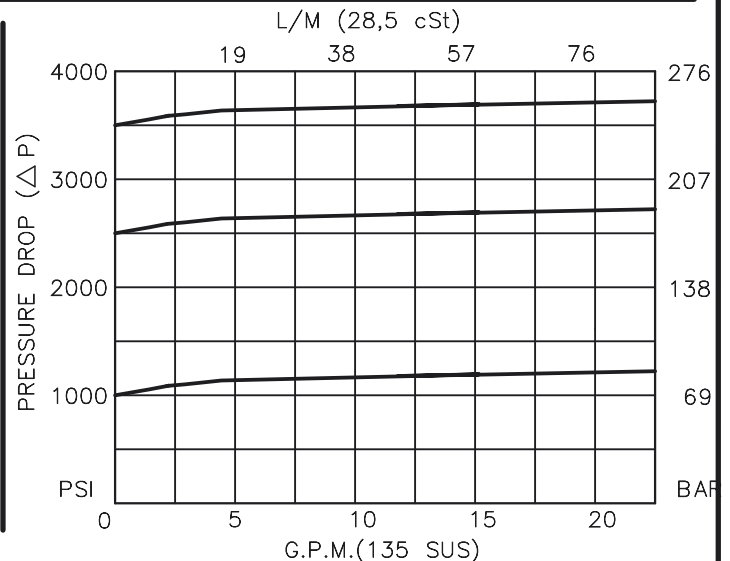


FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-012.1

RVDA-10-N-S-0-XX

- BASIC
- SIZE
10 = 7/8"-14 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 300 TO 3000 PSI
50 = 500 TO 5000 PSI
- PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSP
03BX = G 3/8" BSP
06TX = SAE - #6
08TX = SAE - #8
- "A" - ALUM. HOUSING
"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE DIFFERENTIAL AREA, POPPET TYPE

DESCRIPTION

This unit is a DIFFERENTIAL AREA RELIEF VALVE, cartridge type, direct acting, poppet type, low leakage, screw in type, adjustable, pressure control valve.

OPERATIONS

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

This cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Adjustment screw can not be backed out of valve.

Overset protection – spring can not go solid.

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

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-1021 for Buna "N".

SKV-1021 for Viton.

WEIGHT: 0.38 lb [.17 kg] cartridge only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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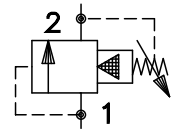
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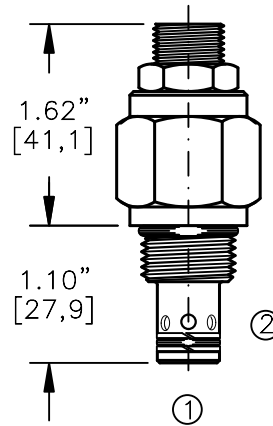
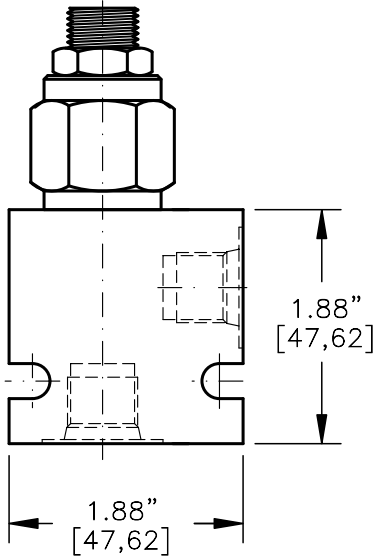
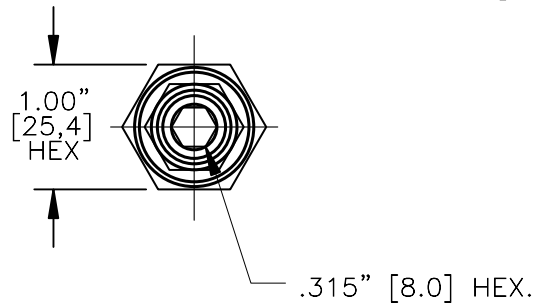
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RELIEF VALVE
PILOT OPERATED, SLIDING SPOOL



TORQUE:

Steel = 35/40 Ft-Lb. [47/54 Nm]
Aluminum = 25/30 Ft-Lb. [34/41 Nm]

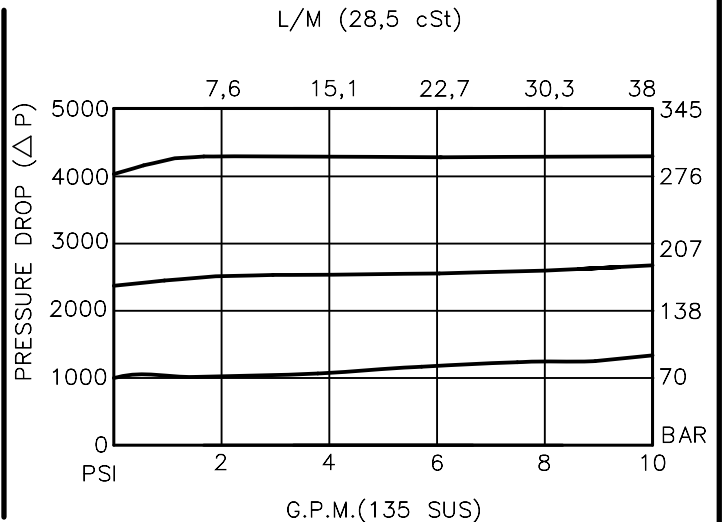


FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-011.1

RVPS-08-X-X-X-XX

- BASIC
- SIZE
08 = 3/4"-16 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
- PRESSURE RANGE
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI
- PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSPP
06TX = SAE - #6
- "A" - ALUM. HOUSING
"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE

PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, BALANCED SLIDING SPOOL, PRESSURE RELIEF, cartridge valve for accurate and smooth pressure regulation.

OPERATIONS

This valve (RVPS) 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 cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) 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: 15.0 GPM [57 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 cu.in/min [85 cc/m] @ 95% 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-0822 for Buna "N".

SKV-0822 for Viton.

WEIGHT: 0.26 lb [.12 kg] cartridge only.

VALVE CAVITY: #C0820, See Page 0-011.0.

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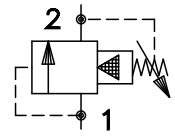
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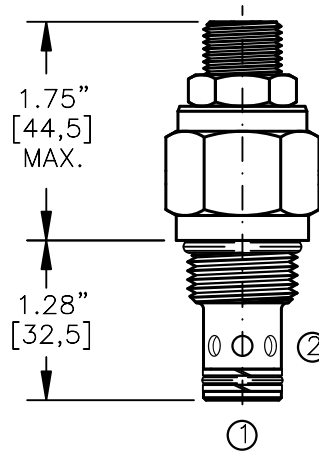
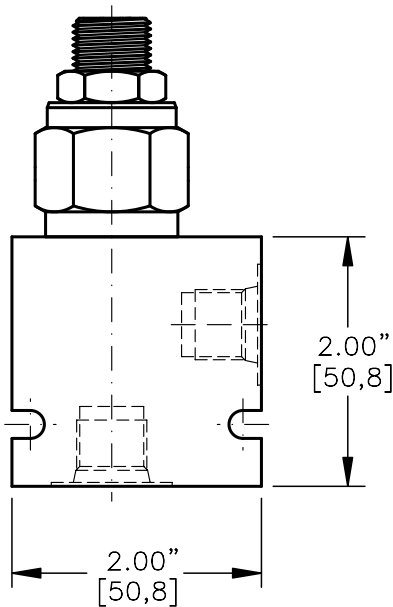
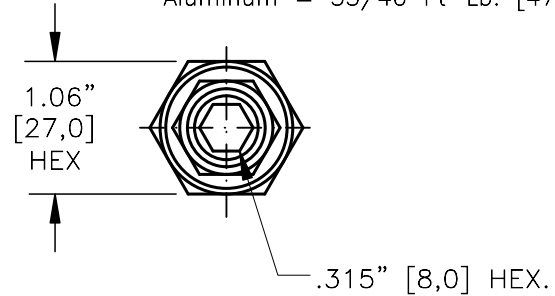
RELIEF VALVE PILOT OPERATED,
SLIDING SPOOL



Pat.#5,546,980

TORQUE:

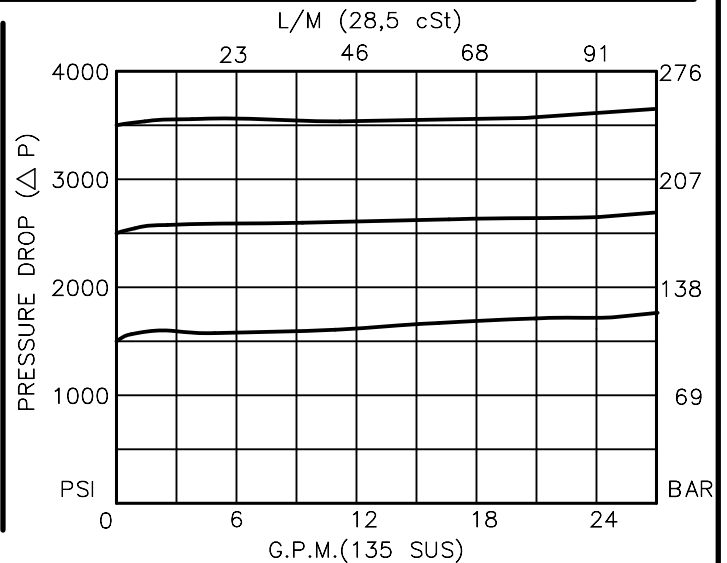
Steel = 55/60 Ft-Lb. [74/81 Nm]
Aluminum = 35/40 Ft-Lb. [47/54 Nm]



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

- RVPS-10-X-X-X-XX**
- BASIC
 - SIZE
10 = 7/8"-14 UNF
 - SEALS
N = BUNA "N"
V = VITON
 - ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
 - PRESSURE RANGE
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI
 - 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



**RELIEF VALVE PILOT OPERATED,
SLIDING SPOOL****DESCRIPTION**

This unit is a PILOT OPERATED, BALANCED SLIDING SPOOL, PRESSURE RELIEF, cartridge valve for accurate and smooth pressure regulation.

OPERATIONS

This valve (RVPS) 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 cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) 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: 26.0 GPM [100 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 cu.in/min [85 cc/m] @ 95% 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-1022 for Buna "N".

SKV-1022 for Viton.

WEIGHT: 0.38 lb [.17 kg] cartridge only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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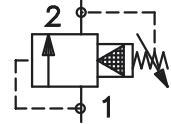
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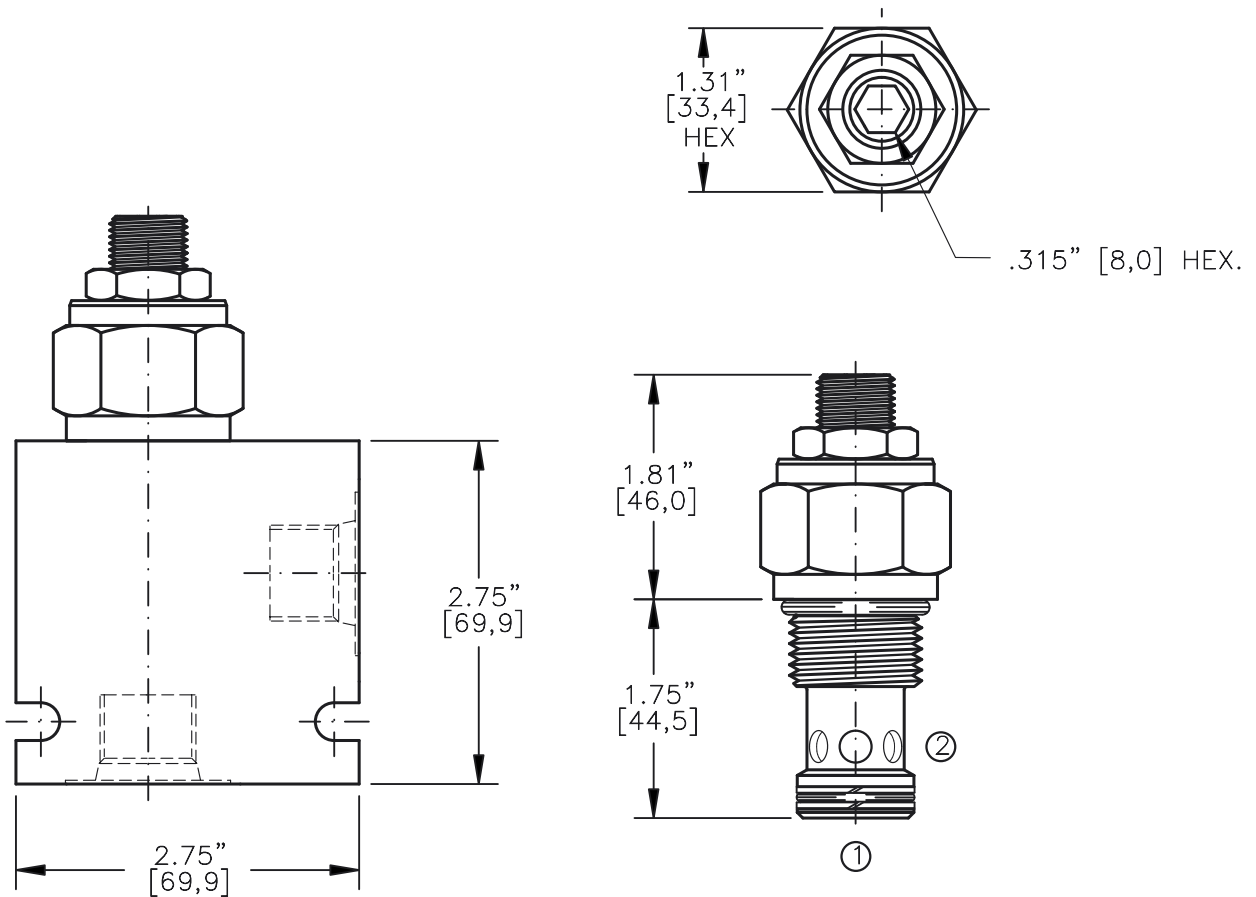
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RELIEF VALVE
PILOT OPERATED, SLIDING SPOOL



Pat, # 5,546,980

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

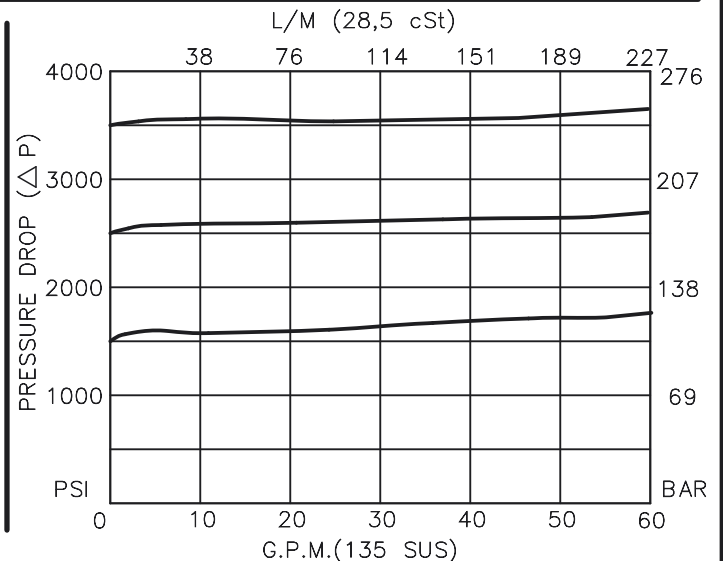


FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-013.1

RVPS-12-X-X-X-XX

- BASIC
- SIZE
12 = 1.062"-12 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 300 TO 3000 PSI
50 = 500 TO 5000 PSI
- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE PILOT OPERATED, SLIDING SPOOL

DESCRIPTION

This unit is a PILOT OPERATED, BALANCED SLIDING SPOOL, PRESSURE RELIEF, cartridge valve for accurate and smooth pressure regulation.

OPERATIONS

This valve 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 cartridge relief valve offers a smooth transition in response to a load change in a hydraulic circuit.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) 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.

SPECIFICATIONS

OPERATING PRESSURE: 5,000 PSI [350 Bar]

PROOF PRESSURE: 10,000 PSI [700 Bar]

FLOW: 60.0 GPM [227 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 cu.in/min [85 cc/m] @ 95% 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-1222 for Buna "N".

SKV-1222 for Viton.

WEIGHT: 0.63 lb [.25 kg] cartridge only.

VALVE CAVITY: #C1220, See Page 0-013.0.

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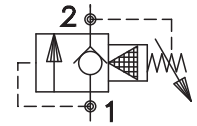
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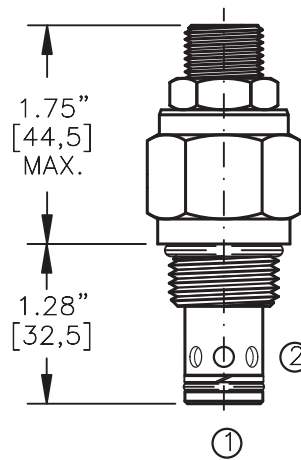
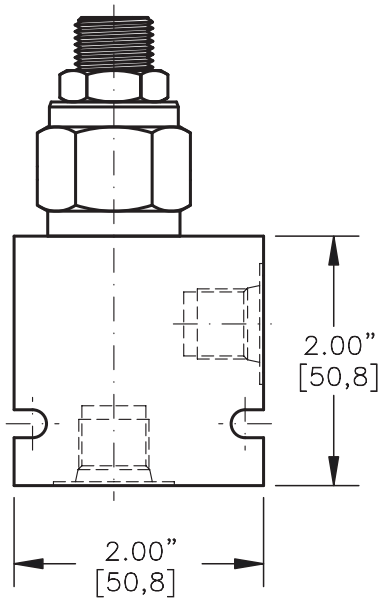
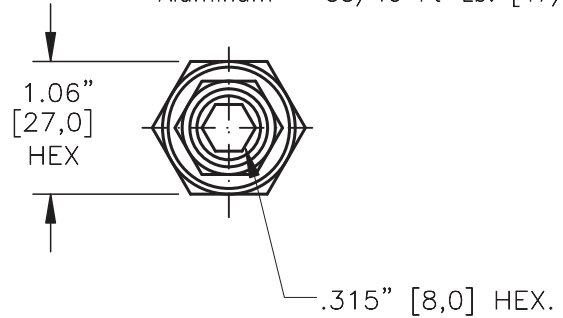
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RELIEF VALVE PILOT OPERATED,
POPPET TYPE, FREE REVERSE FLOW



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

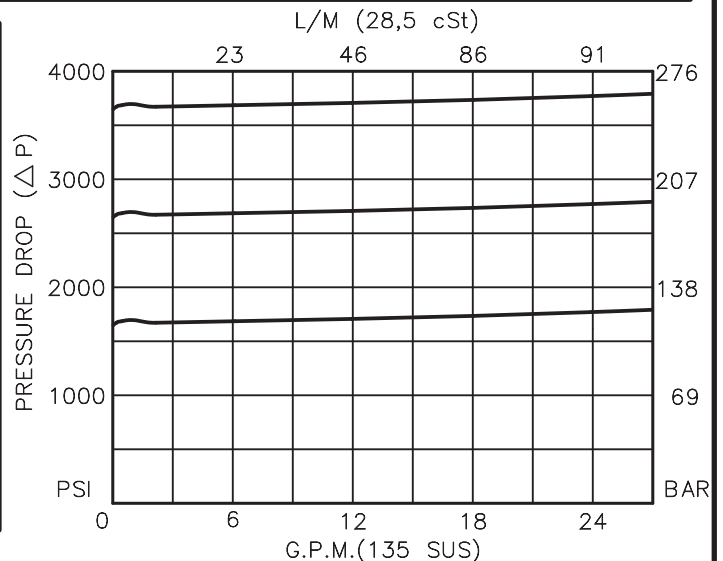
RVPP-10-X-X-X-XX

- BASIC
- SIZE
10 = 7/8"-14 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

- PRESSURE RANGE
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI

- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE PILOT OPERATED, POPPET TYPE, FREE REVERSE FLOW

DESCRIPTION

This unit is a PILOT OPERATED, POPPET TYPE, ADJUSTABLE, HYDRAULIC PRESSURE RELIEF WITH FREE REVERSE FLOW, screw in cartridge valve.

OPERATIONS

This valve (RVPP) 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 cartridge relief valve offers a free reverse flow suitable for anti-cavitation and it has a very fast response and low hysteresis.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) 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: 26.0 GPM [100 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 drops/min (.25 cc/m) @ 90% 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-1021 for Buna "N".

SKV-1021 for Viton.

WEIGHT: 0.38 lb [.17 kg] cartridge only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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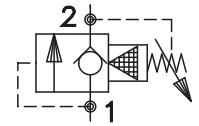
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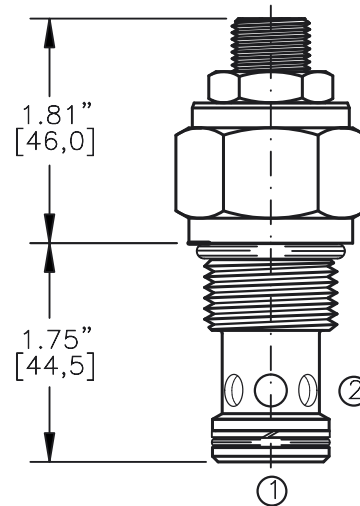
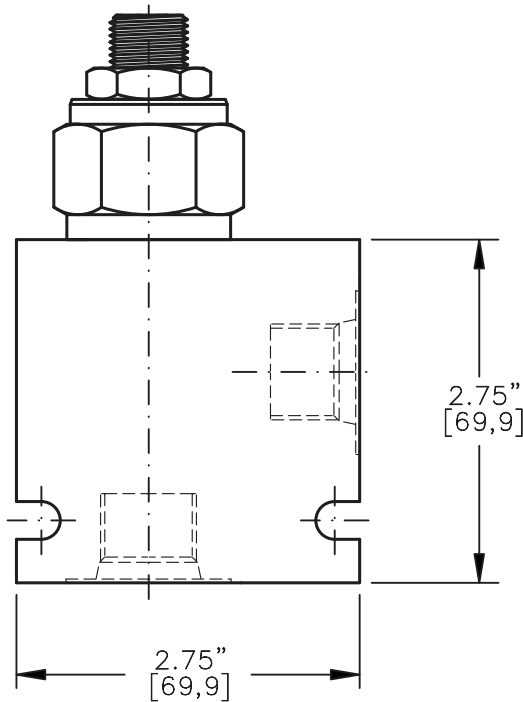
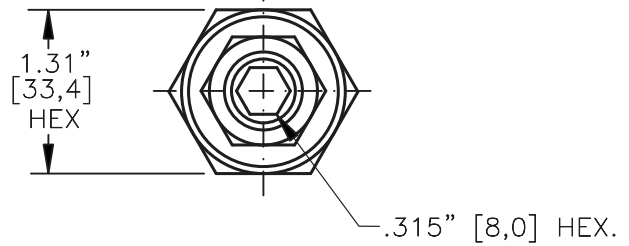
RELIEF VALVE PILOT OPERATED,
POPPET TYPE, FREE REVERSE FLOW



Pat, # 5,546,980

TORQUE:

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



FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-013.1

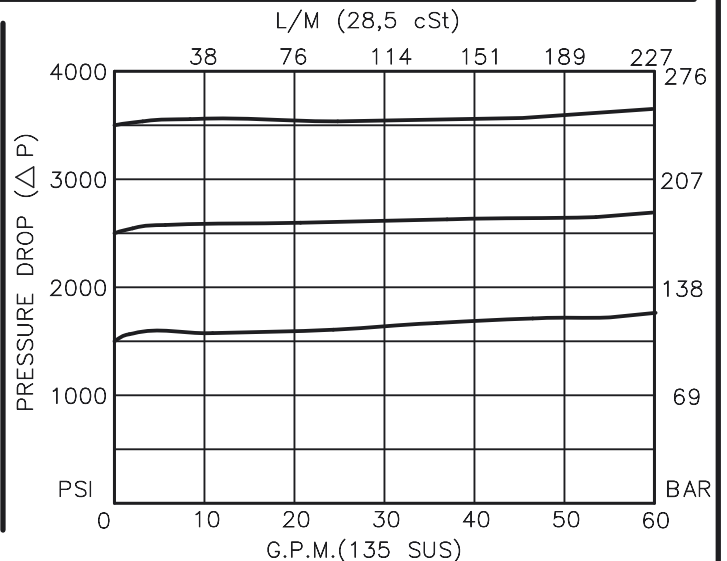
RVPP-12-X-X-X-XX

- BASIC
- SIZE
12 = 1.062"-12 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 300 TO 3000 PSI
50 = 500 TO 5000 PSI

- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE PILOT OPERATED, POPPET TYPE, FREE REVERSE FLOW

DESCRIPTION

This unit is a PILOT OPERATED, POPPET TYPE, ADJUSTABLE, HYDRAULIC PRESSURE RELIEF WITH FREE REVERSE FLOW, screw in cartridge valve.

OPERATIONS

This valve (RVPP) 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 cartridge relief valve offers a free reverse flow suitable for anti-cavitation and it has a very fast response and low hysteresis.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) 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: 60.0 GPM [230 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 drops/min (.25 cc/m) @ 90% 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-1221 for Buna "N".

SKV-1221 for Viton.

WEIGHT: 0.63 lb [.25 kg] cartridge only.

VALVE CAVITY: #C1220, See Page 0-013.0.

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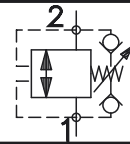
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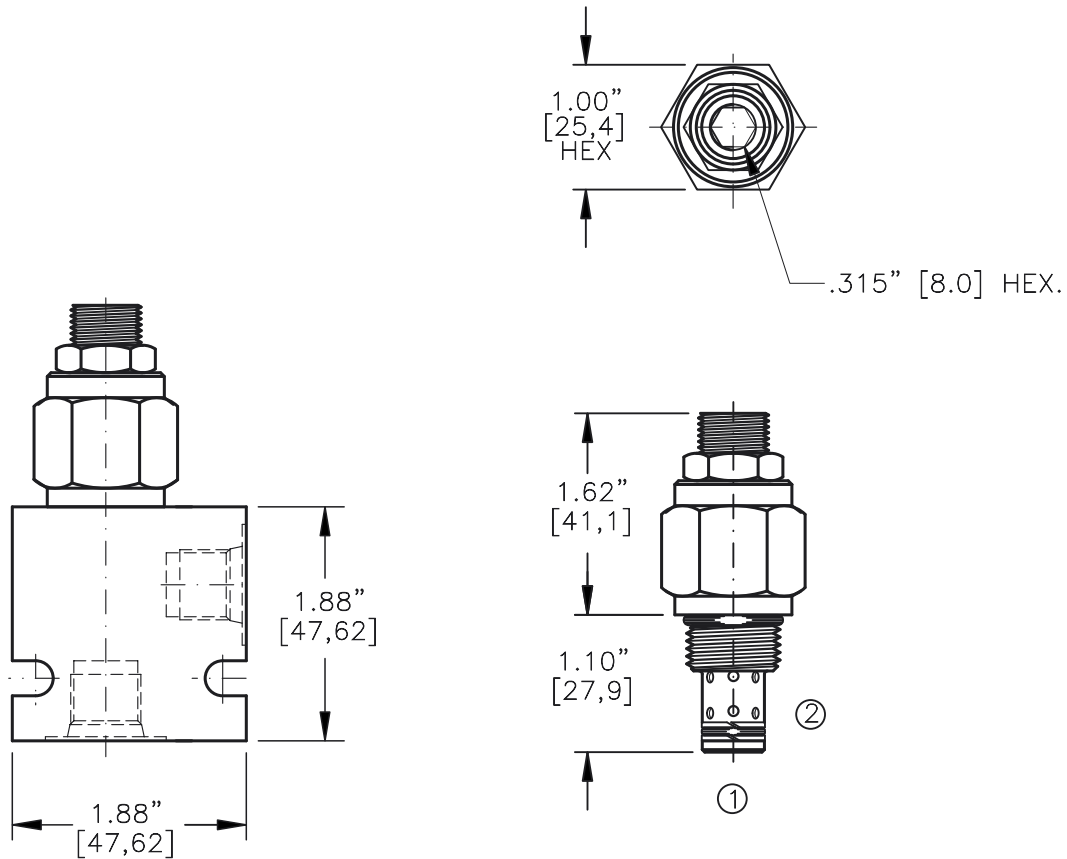
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RELIEF VALVE POPPET TYPE,
BI-DIRECTIONAL (CROSS-OVER)



TORQUE:

Steel = 35/40 Ft-Lb. [47/54 Nm]
Aluminum = 25/30 Ft-Lb. [34/41 Nm]

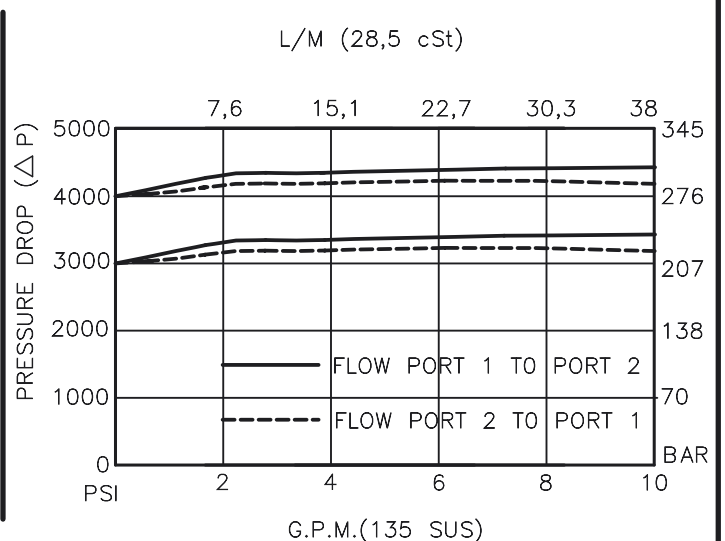


FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-011.1

RVBD-08-X-X-X-XX

- BASIC
- SIZE
08 = 3/4"-16 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 750 TO 3000 PSI
50 = 1500 TO 5000 PSI
- PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSPP
06TX = SAE - #6
"A" - ALUM. HOUSING
"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE POPPET TYPE, BI-DIRECTIONAL (CROSS-OVER)

DESCRIPTION

This unit is a DIFFERENTIAL AREA, POPPET TYPE, BI-DIRECTIONAL, ADJUSTABLE, HYDRAULIC PRESSURE RELIEF, cartridge valve.

OPERATIONS

This valve relieves from port 1 to port 2 and port 2 to port 1. This valve provides a fast response, rugged, dirt tolerant operation and has a good pressure vs. flow characteristics.

FEATURES AND BENEFITS

Leakproof screw adjustment is standard.
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.
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: 10.0 GPM [38 L/M] nominal. See performance chart.
INTERNAL LEAKAGE: 5 cu.in/min [85 cc/m] @ 80% 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-0822 for Buna "N".
SKV-0822 for Viton.
WEIGHT: 0.26 lb [.12 kg] cartridge only.
VALVE CAVITY: #C0820, See Page 0-011.0.

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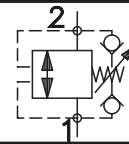
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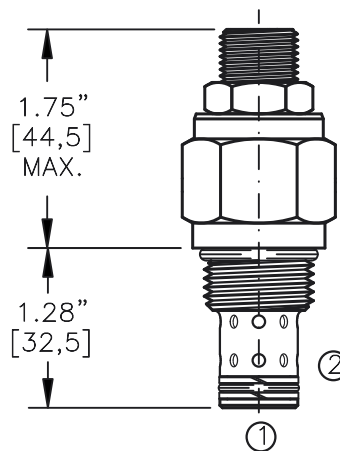
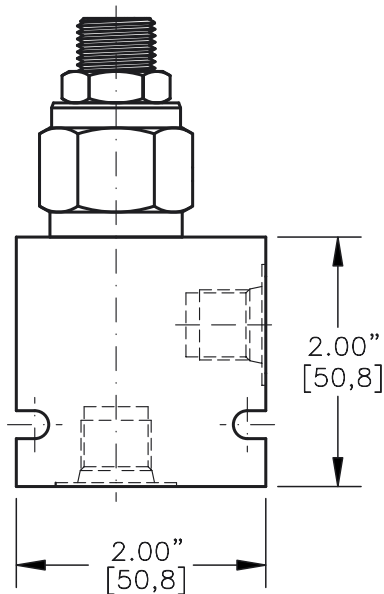
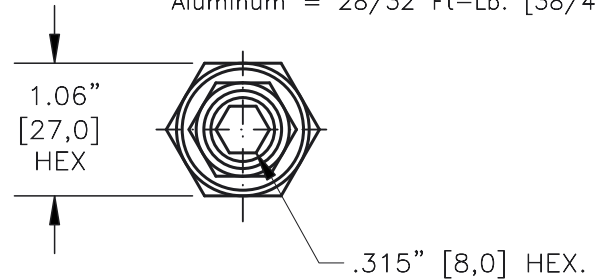
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RELIEF VALVE
POPPET TYPE, BI-DIRECTIONAL (CROSS-OVER)



TORQUE:

Steel = 55/60 Ft-Lb. [74/81 Nm]
Aluminum = 28/32 Ft-Lb. [38/43 Nm]



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

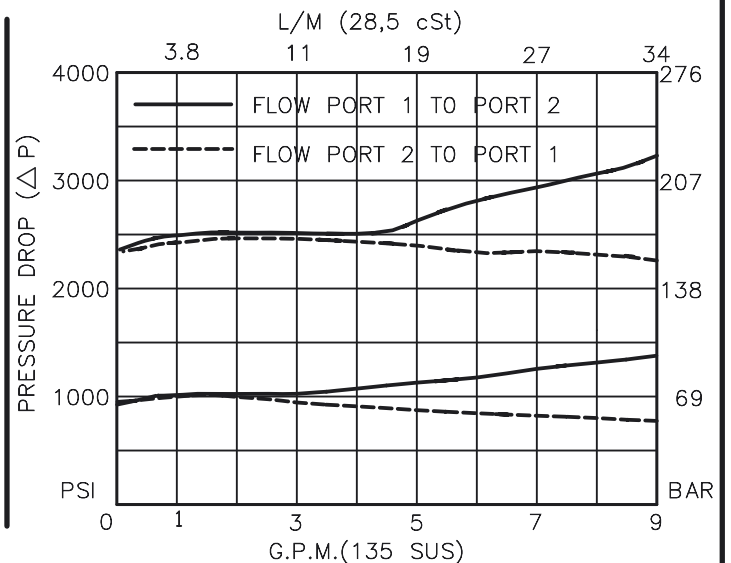
RVBD-10-X-X-X-XX

- BASIC
- SIZE
10 = 7/8"-14 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 300 TO 3000 PSI
50 = 500 TO 5000 PSI

- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE

POPPET TYPE, BI-DIRECTIONAL (CROSS-OVER)

DESCRIPTION

This unit is a DIFFERENTIAL AREA, POPPET TYPE, BI-DIRECTIONAL, ADJUSTABLE, HYDRAULIC PRESSURE RELIEF, cartridge valve.

OPERATIONS

This valve relieves from port 1 to port 2 and port 2 to port 1. This valve provides a fast response, rugged, dirt tolerant operation and has a good pressure vs. flow characteristics.

FEATURES AND BENEFITS

Leakproof screw adjustment is standard.
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.
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-1022 for Buna "N".
SKV-1022 for Viton.
WEIGHT: 0.38 lb [.17 kg] cartridge only.
VALVE CAVITY: #C1020, See Page 0-012.0.

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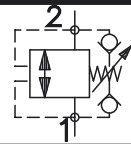
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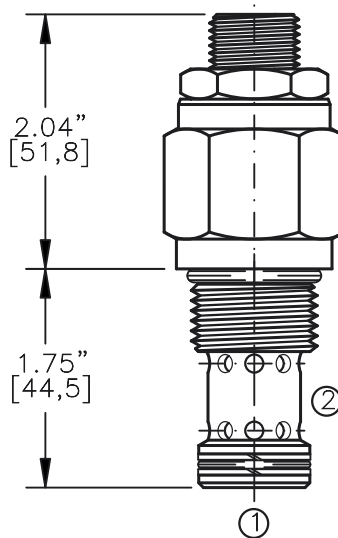
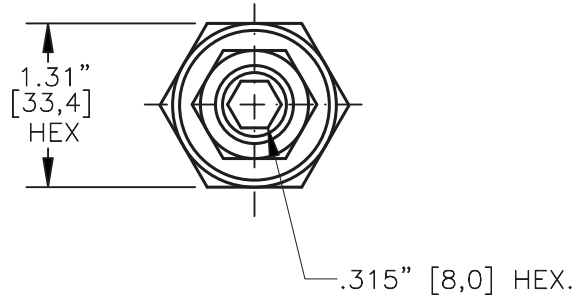
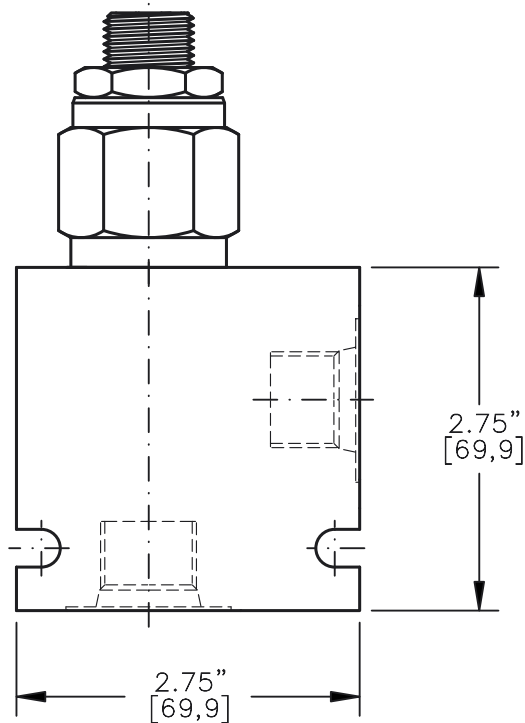
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RELIEF VALVE
POPPET TYPE, BI-DIRECTIONAL (CROSS-OVER)



TORQUE:

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



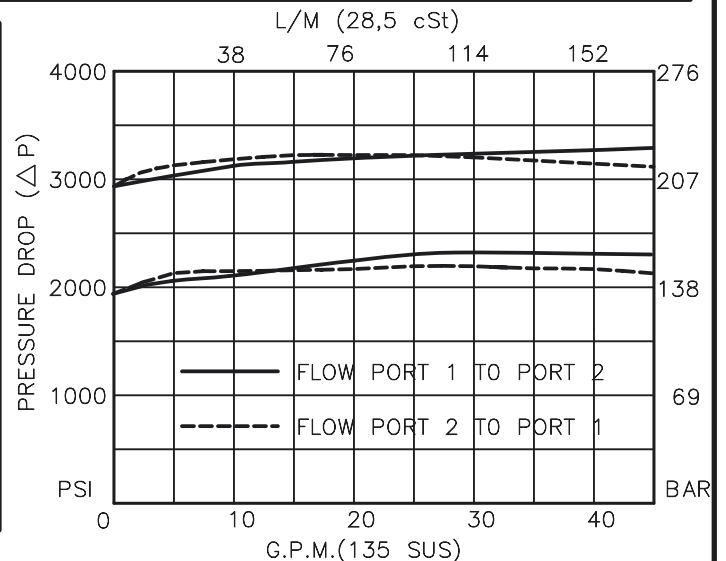
FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-013.1

RVBD-12-X-X-X-XX

- BASIC
- SIZE
12 = 1.062"-12 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF

- PRESSURE RANGE
15 = 100 TO 1500 PSI
30 = 300 TO 3000 PSI
50 = 500 TO 5000 PSI
- 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

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



RELIEF VALVE

POPPET TYPE, BI-DIRECTIONAL (CROSS-OVER)

DESCRIPTION

This unit is a CARTRIDGE STYLE, DIFFERENTIAL AREA, POPPET TYPE, BI-DIRECTIONAL, ADJUSTABLE, HYDRAULIC PRESSURE RELIEF VALVE.

OPERATIONS

This valve relieves from port 1 to port 2 and port 2 to port 1. This valve provides a fast response, rugged, dirt tolerant operation and has a good pressure vs. flow characteristics.

FEATURES AND BENEFITS

Leakproof screw adjustment is standard.
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.
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: 40.0 GPM [152 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-1222 for buna "N".
SKV-1222 for viton.
WEIGHT: 0.68 lb [.34 kg] cartridge only.
VALVE CAVITY: #C1220, See Page 0-013.0.

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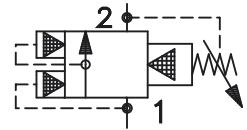
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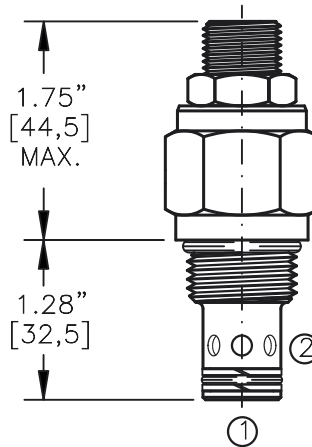
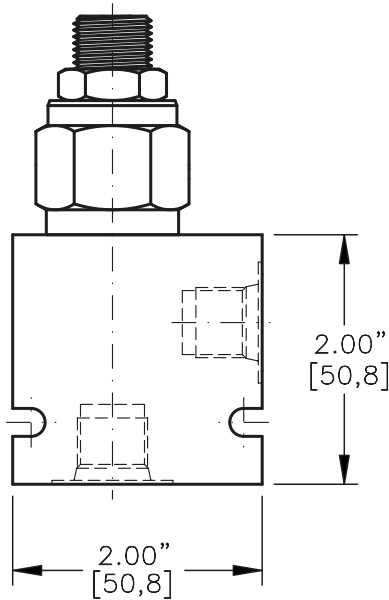
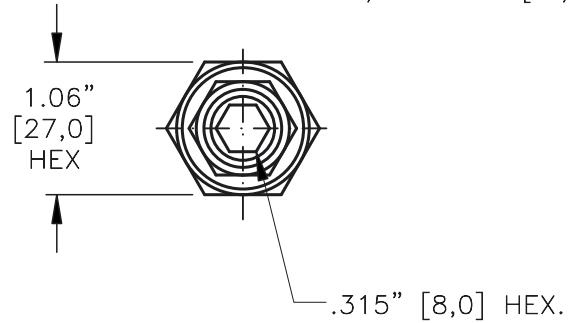
BREAKER RELIEF VALVE PILOT OPERATED,
SLIDING SPOOL, KICK-DOWN VALVE.



Pat.#5,546,980

TORQUE:

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

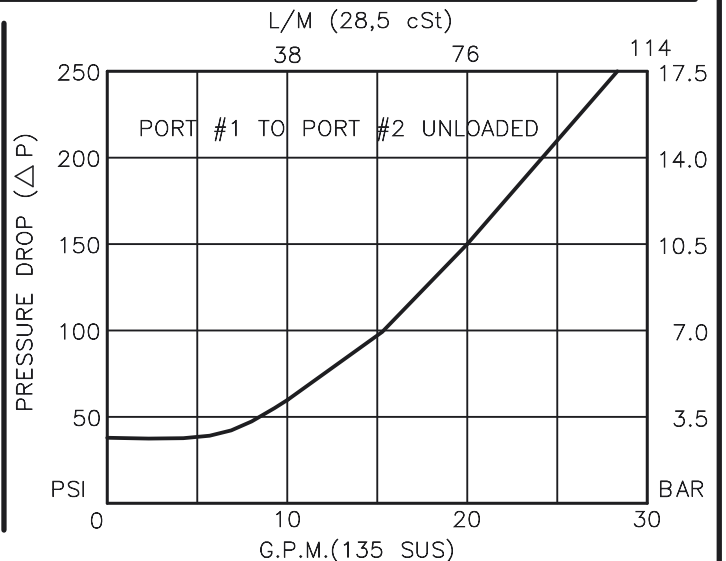


FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-012.1

RVBS-10-X-X-X-XX

- BASIC
- SIZE
10 = 7/8"-14 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
- PRESSURE RANGE
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI
- PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSP
03BX = G 3/8" BSP
06TX = SAE - #6
08TX = SAE - #8
- "A" - ALUM. HOUSING
"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0



BREAKER RELIEF VALVE

PILOT OPERATED, SLIDING SPOOL, KICK-DOWN VALVE.

DESCRIPTION

This unit is a PILOT OPERATED, SLIDING SPOOL, PRESSURE BREAKER RELIEF VALVE, cartridge style, screw in type valve.

OPERATIONS

This valve (RVBS) 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.

After the flow and pressure is removed from the valve the valve will re-set itself to the original pressure setting.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Pressure in tank port (2) 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: 25.0 GPM [95 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 cu.in./min [85 cc/m] @ 95% 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-1022 for Buna "N".

SKV-1022 for Viton.

WEIGHT: 0.38 lb [.17 kg] cartridge only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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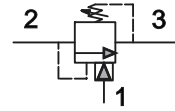
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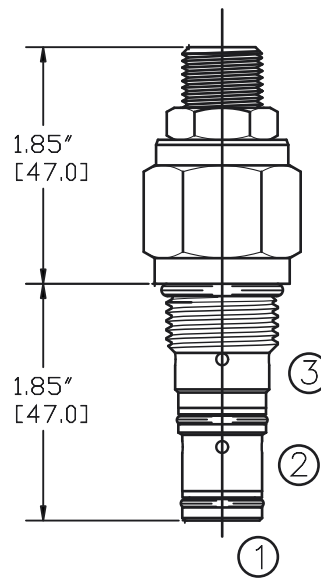
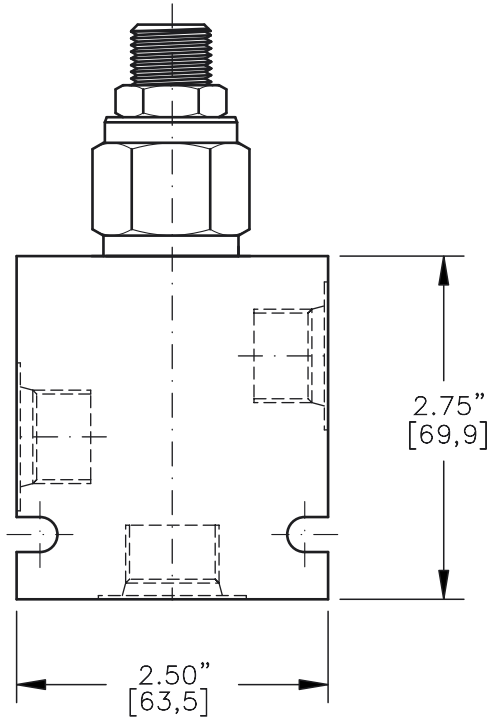
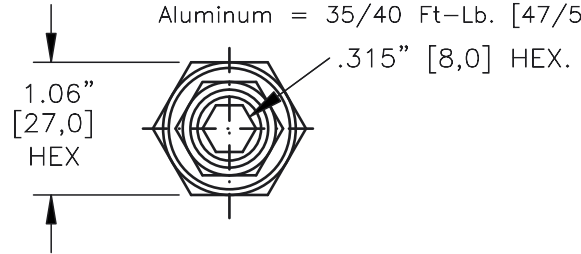
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DIFFERENTIAL AREA
UNLOADING RELIEF VALVE



TORQUE:

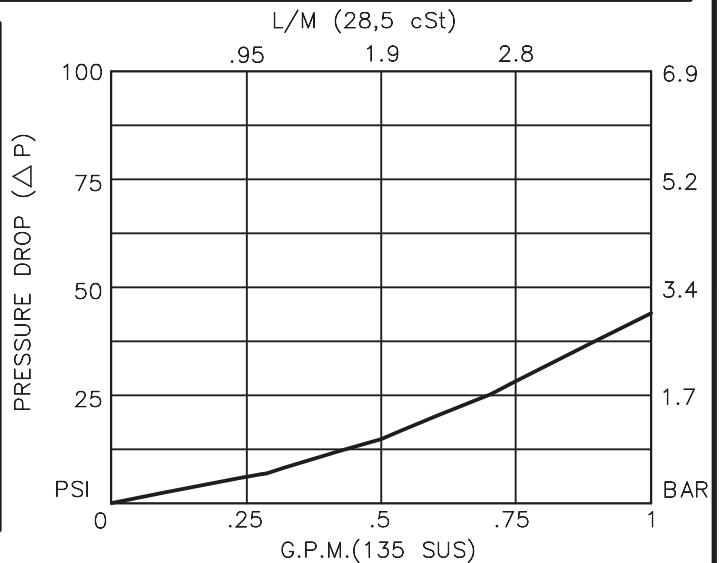
Steel = 55/60 Ft-Lb. [74/81 Nm]
Aluminum = 35/40 Ft-Lb. [47/54 Nm]



FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-032.1

PUVA-10-N-X-X-X-XX

- BASIC
- SIZE
10 = 7/8"-14 UNF
- SEALS
N = BUNA "N"
V = VITON
- ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB
- FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0-050.0
- PRESSURE RANGE
20 = 50 TO 2000 PSI
40 = 50 TO 4000 PSI
- RATIO
7 = 70%
8 = 80%
9 = 90%
- 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



DIFFERENTIAL AREA UNLOADING RELIEF VALVE

DESCRIPTION

This unit is a DIRECT ACTING, SCREW IN CARTRIDGE STYLE, HYDRAULIC 3-WAY, 2 POS. UNLOADING VALVE, which can be dumped or unloaded via a remote pilot signal. This valve is used as the pilot stage of a two-stage unloading valve.

OPERATIONS

This valve provides a fixed percentage between load and unload pressures. The fixed differential area is provided by the pilot spool which has a greater area than the pilot seat. When pressure at the pilot port 1 reaches the spring setting, the valve opens and unloads pressure port 2 to tank port 3. The greater area of the spool holds the pilot poppet off its seat until pressure at pilot port 1 drops to the RATIO percentage of the spring setting, at which point the valve closes. This valve to be used as a pilot valve in hydraulic unloading valve applications.

FEATURES AND BENEFITS

Hardened precision fitted spool and 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: 1.0 GPM [3,8 L/M] nominal. See performance chart.
 INTERNAL LEAKAGE: 5 drops/min [.25 cc/m] @ PORT1.
 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-1022 for Buna "N".
 SKV-1022 for Viton.
 WEIGHT: 0.42 lbs [0,19 kg] cartridge only.
 VALVE CAVITY: #C1030, See Page 0-032.1.

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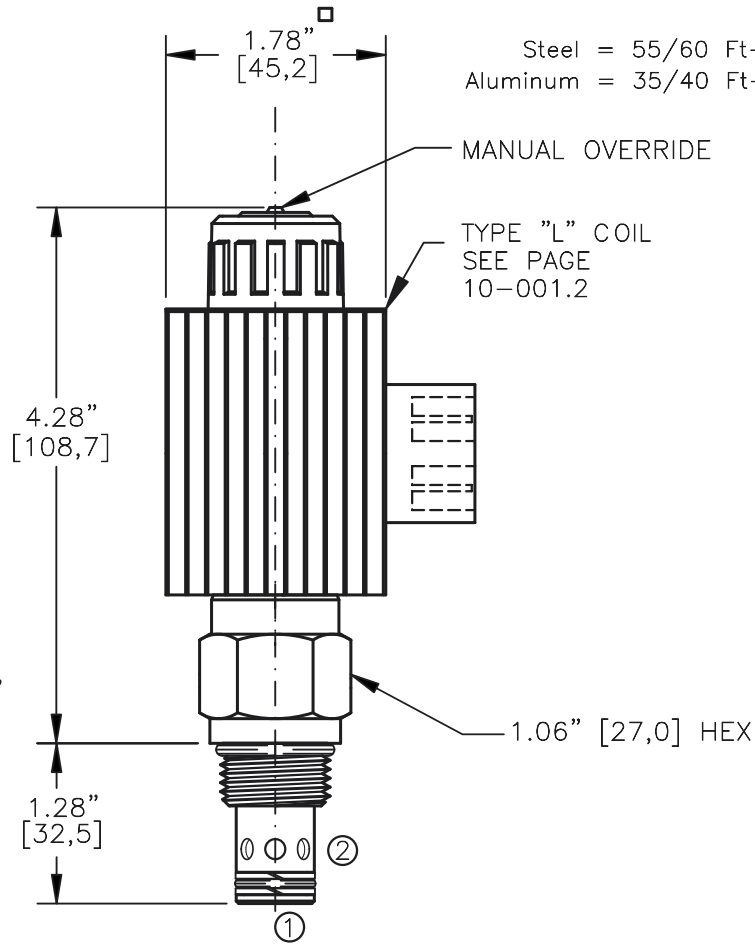
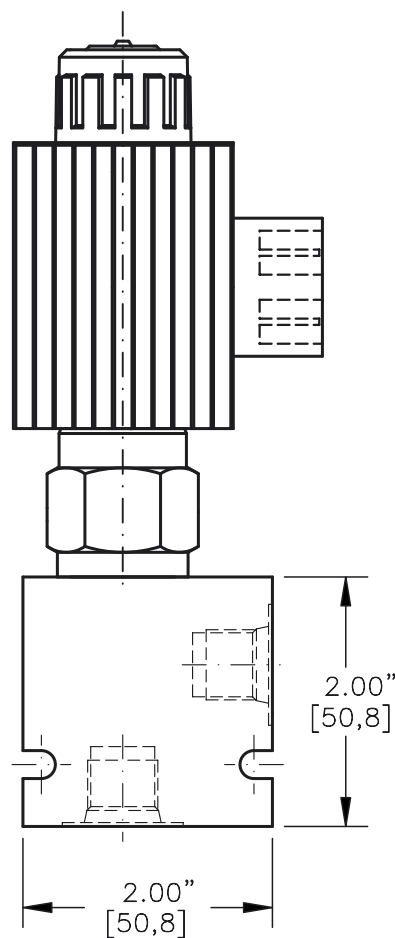
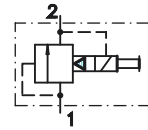
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NORMALLY OPEN SOLENOID VENTED RELIEF VALVE, PILOT OPERATED, SPOOL TYPE (2/2)



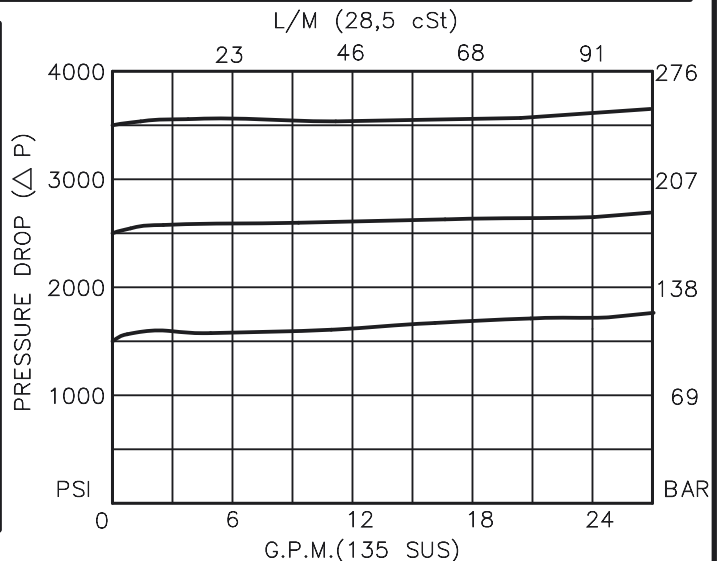
TORQUE:
Steel = 55/60 Ft-Lb. [74/81 Nm]
Aluminum = 35/40 Ft-Lb. [47/54 Nm]

NOTES:

1. FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-012.1
2. SOLENOIDS AVAILABLE WITH DIODES - CONSULT FACTORY.
3. ALL A.C. COILS ARE INTERNALLY A.C. TO D.C. RECTIFIED...
4. FOR CONTINUOUS ENERGIZED OR HIGH AMBIENT TEMPERATURE (>120°F) APPLICATION CONSULT FACTORY FOR FURTHER DETAILS

ESRV-10-X-XX-X-XXX X

BASIC	TERMINALS
SIZE	L = 18GA. 24" LEADS
10 = 7/8"-14UNF	T = SPADE TERM.
SEALS	B = BOLT TERM.
N = BUNA "N"	G = DIN43650
V = VITON	W = WEATHER-PACK
REGULATED PRESSURE	D = DEUTSCH-DT04-2P
10 = 1000 PSI	M = METRI-PACK CONN.
15 = 1500 PSI	
20 = 2000 PSI	VOLTAGE AMPS
25 = 2500 PSI	12D = 12 VDC 3.00
30 = 3000 PSI	24D = 24 VDC 1.50
35 = 3500 PSI	36D = 36 VDC 1.00
* FOR CUSTOM	48D = 48 VDC 0.75
SETTINGS	110D = 110 VDC 0.33
CONSULT	115A = 115 VAC 0.32
FACTORY	230A = 230 VAC 0.16
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	



NORMALLY OPEN SOLENOID VENTED RELIEF VALVE, PILOT OPERATED, SPOOL TYPE (2/2)

DESCRIPTION

This unit is a NORMALLY OPEN, TWO POSITION, cartridge type, spool type, pilot operated, screw in type, solenoid operated, hydraulic relief valve.

OPERATIONS

When the solenoid coil is de-energized, this valve allows flow from port 1 to port 2 (tank). When the solenoid coil is energized this valve blocks flow from port 1 to port 2. When the solenoid coil is energized and the pressure at port 1 exceeds the relief pressure setting, this valve will open and allow flow from port 1 to port 2.

Manual Operator Standard: Push in and hold a small plunger on top of the valve with a screw driver or a similar plunger smaller than .188" dia.

FEATURES AND BENEFITS

Continuous-duty, very low heat rise & waterproof solenoid coil.

Interchangeable solenoid coils & terminations options available.

Pressure in tank port (2) will add to the bias spring setting, and is limited to 2000 PSI.

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

A unique self aligning (floating) cage provides very low hysteresis and reliable operation.

Very efficient, wet-armature solenoid core tube construction.

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: 5000 PSI [350 Bar]

PROOF PRESSURE: 10,000 PSI [700 Bar]

FLOW: 26.0 GPM [100 L/M] nominal. See performance chart.

INTERNAL LEAKAGE: 5 cu.in/min [85 cc/m] @ 95% of crack pressure.

INTERNAL PILOT FLOW: 60 cu.in/min [1,0 l/m] @ 3000 PSI [210 Bar]

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.

SEAL KIT: SKN-1022 Buna "N"

SKV-1022 Viton

INSTALLATION: No restrictions.

WEIGHT: 1.90 lb [0,86 kg] cartridge with coil only.

VALVE CAVITY: #C1020, See Page 0-012.0.

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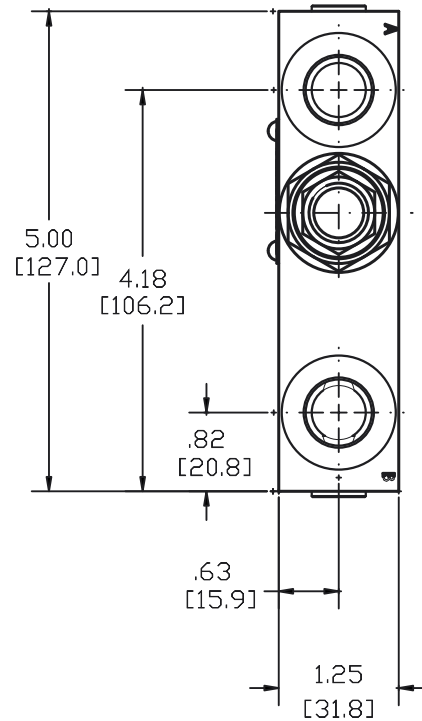
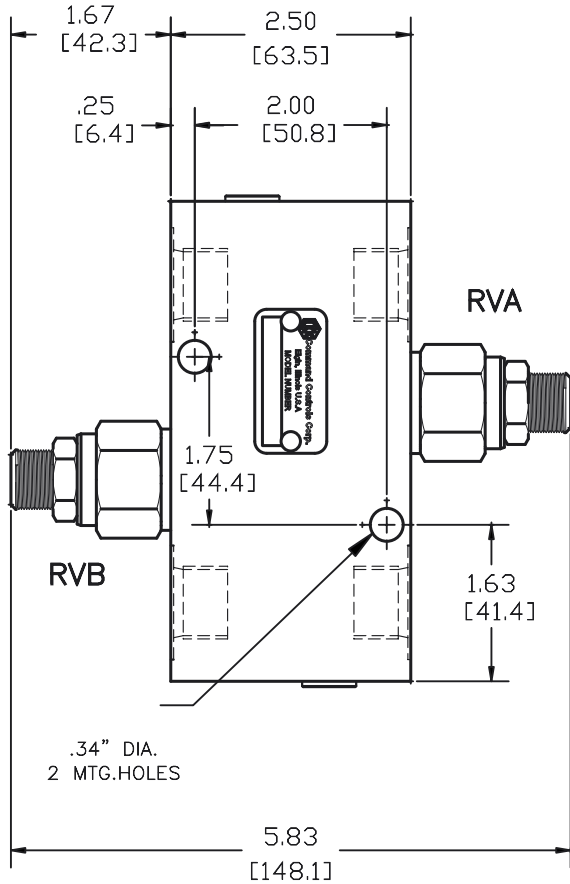
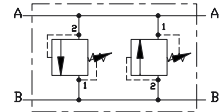
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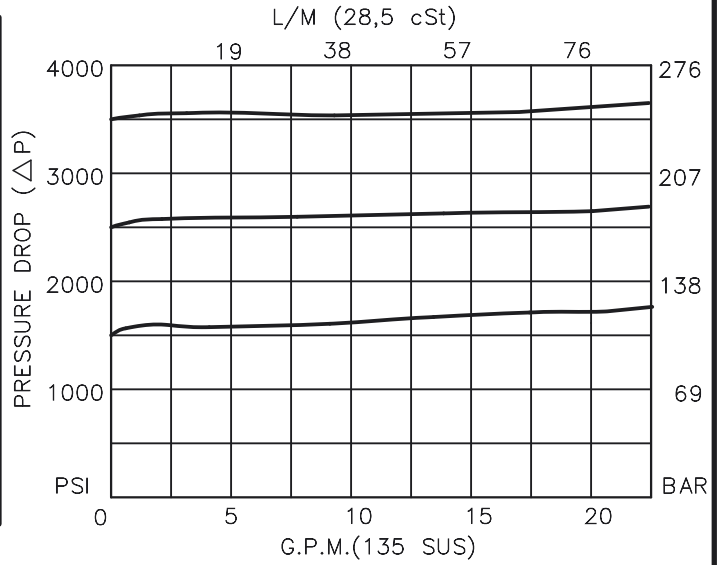
CROSS PORT RELIEF VALVE, DIRECT ACTING
DIFFERENTIAL AREA, POPPET TYPE



CPRV-10-X-X-0-RVA-RVB-RVA-RVB

BASIC _____
 SIZE _____
 10 = 7/8"-14 UNF
 SEALS _____
 N = BUNA "N"
 V = VITON
 ADJUSTMENT _____
 S = ADJUSTING SCREW
 C = CAPPED
 T = TAMPERPROOF
 K = HANDKNOB
 M = METAL HANDKNOB
 FOR ADJUSTMENT CONTROL
 OPTIONS SEE PAGE 0-050.0

OPTIONAL PRESSURE
 SETTING
 (PRESSURE/100)
 Ex.: 42.5 = 4250 PSI
 PRESSURE RANGE
 15 = 100 TO 1500 PSI
 30 = 300 TO 3000 PSI
 50 = 500 TO 5000 PSI
 PORTS
 08TX = SAE - #8
 "A" - ALUM. HOUSING
 "S" - STEEL HOUSING



CROSS PORT RELIEF VALVE, DIRECT ACTING, POPPET TYPE**DESCRIPTION**

This unit consists of two RVDA cartridges in an inline housing. The cartridges are differential area, poppet type, bi-directional, adjustable, hydraulic pressure relief valves.

OPERATIONS

This manifold (CPRV) allows flow with minimal pressure drop through normally separated A and B thru ports. If pressure in either port exceeds its valve setting, flow will cross over to the other port.

FEATURES AND BENEFITS

Leakproof screw adjustment.
Adjustment screw can not be backed out of valve.
Overset protection – spring can not go solid.
Hardened precision fitted poppet & cage provides reliable, long life.
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-1021 for Buna "N".

SKV-1021 for Viton.

WEIGHT: 2.65 lbs [1,21 kg] Aluminum. 5.25 lbs [2,38 kg] Steel.

VALVE CAVITY: #C1020, See Page 0-012.0.

NOTE: A 100 PSI pressure differential must be present between the two relief valve settings. If same setting is needed, use RVBD-10 cartridge.

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