RVDA-10

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]

1.06” [27,0] HEX

1.28” [32,5] MAX.

.315” [8,0] HEX.

2.00” [50,8]

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0–050.0

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” BSPP
03BX = G 3/8” BSPP
06TX = SAE = #6
08TX = SAE = #8

“K” = ALUM. HOUSING
“S” = STEEL HOUSING

FOR ADJUSTMENT CONTROL
OPTIONS SEE PAGE 0–050.0

L/M (28,5 cSt)

PRESSURE DROP (ΔP)

4000
3000
2000
1000

276
207
138
69

4000
3000
2000
1000

G.P.M.(135 SUS)

0 5 10 15 20 25 30

PSI
BAR

Reference: S20-P-030220-EN-00/09.2015
# 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

<table>
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<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>OPERATING PRESSURE</td>
<td>5,000 PSI [350 Bar]</td>
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<tr>
<td>PROOF PRESSURE</td>
<td>10,000 PSI [700 Bar]</td>
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<tr>
<td>FLOW</td>
<td>20.0 GPM [76 L/M] nominal. See performance chart.</td>
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<td>INTERNAL LEAKAGE</td>
<td>5 drops/min [.25 cc/m] @ 85% of crack pressure.</td>
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<tr>
<td>DEFINITION OF CRACK</td>
<td>evident at 0.06 GPM [0.25 LPM]</td>
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<tr>
<td>OPERATING TEMPERATURE</td>
<td>-40° to +250° F. [-40° to +120° C.]</td>
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<tr>
<td>OPERATING MEDIA</td>
<td>All general purpose hydraulic fluids such as MIL-H-5606, SAE-#10, SAE-#20, etc.</td>
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<tr>
<td>INSTALLATION</td>
<td>No restriction.</td>
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<tr>
<td>FILTRATION</td>
<td>25 microns or better.</td>
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<td>SEAL KIT NUMBER</td>
<td>SKN-1021 for Buna “N”. SKV-1021 for Viton.</td>
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<td>WEIGHT</td>
<td>0.38 lb [.17 kg] cartridge only.</td>
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<tr>
<td>VALVE CAVITY</td>
<td>#C1020, See Page 0-012.0</td>
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</tbody>
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*Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.*

Reference: 520-P-030220-EN-00/09.2015