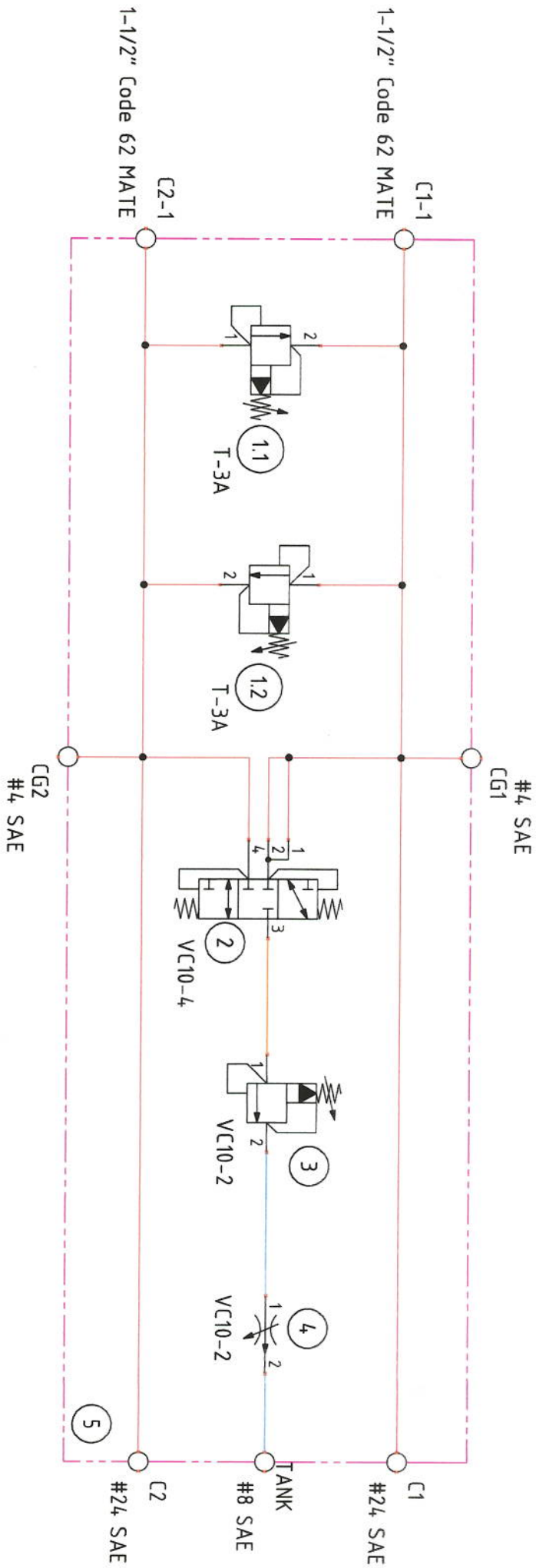


18095

HJV

QRSPT $\frac{1}{2}$ " AH

Air Head Motor Manifold



ITEM ID	QTY	MODEL CODE	DESCRIPTION	MANUFACTURER
1.1	1	RPGE-LCV	PILOT OPERATED PRESSURE RELIEF VALVE	SUN HYDRAULICS
1.2	1	RPGE-LCV	PILOT OPERATED PRESSURE RELIEF VALVE	SUN HYDRAULICS
2	1	HSS0-43-O-P	SHUTTLE VALVE	HYDRAFORCE
3	1	RVPS-10-**	RELIEF VALVE	BUCHER HYDRAULICS
4	1	04.02.02-*85-*	FLOW CONTROL VALVE	BOSCH REXROTH
5	1	PME-6833S	MANIFOLD	PREMACH ENGINEERING

**FLOW CONTROL, 2-WAY PRESSURE COMPENSATED
FULLY ADJUSTABLE
COMMON CAVITY**

VRFB-10A

SIZE 10

04.02.02 - X - 85 - Z

A constant flow rate, regardless of system pressures, is established from 1 to 2 while a minimum pressure differential of 200 psi exists between the two ports. Output flow can be varied from closed to the nominal maximum rating for the valve. Flow from 2 to 1 is limited by the diameter of the selected control orifice and is not pressure compensated.

Technical drawing showing a cross-section of the valve and a detailed view of the top. Dimensions are provided in inches and millimeters.

- Top view dimensions:
 - dia 1.18 (30)
 - dia 1.5 (38)
 - Hex 1.06 (27)
 - 7/8-14 UNF-2A
 - dia .63 (15.87)
- Height dimensions:
 - 1.28 (32.5)
 - 2 (51)
 - 2.17 (55)

TECHNICAL DATA

Pressure min-max: 200-5000 psi (14-350 bar)

Flow range: see below

Cavity : CA-10A-2N (see page CT.A.001.U)

Installation torque : 30-35 ft-lb (41-47 Nm)

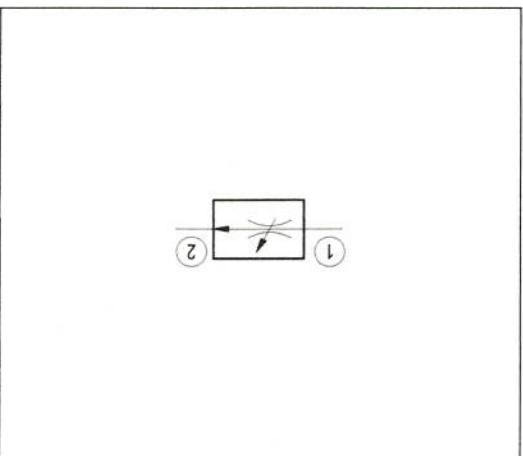
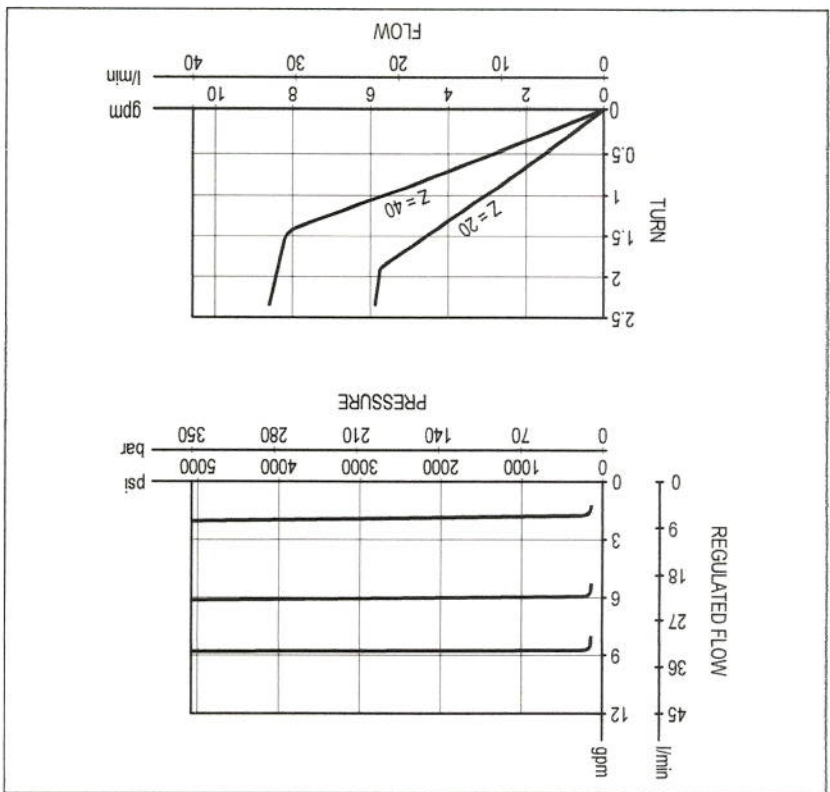
Weight: 0.595 lbs (0.270 Kg)

ADJUSTMENTS

40	Calibrated handknob	
04	Handknob	

Z REGULATED FLOW RANGE

20	0.01-5.28 gpm	0.05-20 l/min
40	0.03-7.93 gpm	0.10-30 l/min



**RELIEF VALVE PILOT OPERATED,
SLIDING SPPOOL**

DESCRIPTION

This unit is a PILOT OPERATED, BALANCED SLIDING SPPOOL, 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.

info.ell@bucherhydraulics.com

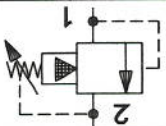
www.bucherhydraulics.com/commoncavity

© 2015 by Bucher Hydraulics, Inc., 2545 Northwest Parkway, Elgin, Illinois 60124, USA

All rights reserved.

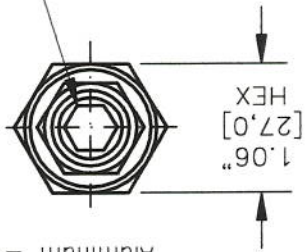
Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.

**RELIEF VALVE PILOT OPERATED,
SLIDING SPPOOL**

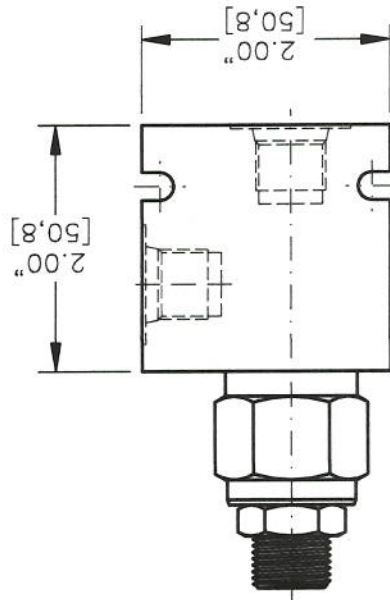
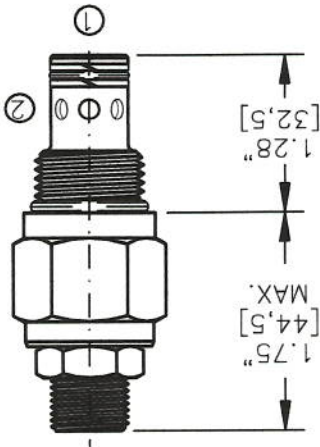


TORQUE:

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



.315" [8,0] HEX.



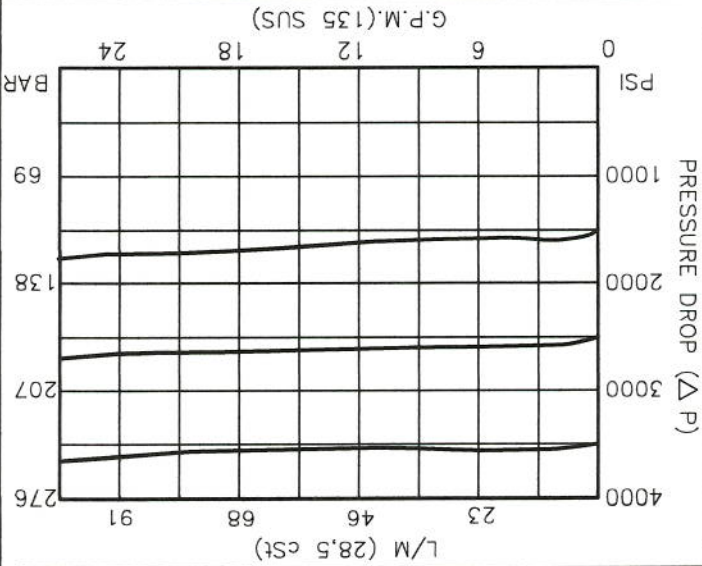
Pat.#5,546,980

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

RVPS-10-X-X-X-XX

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

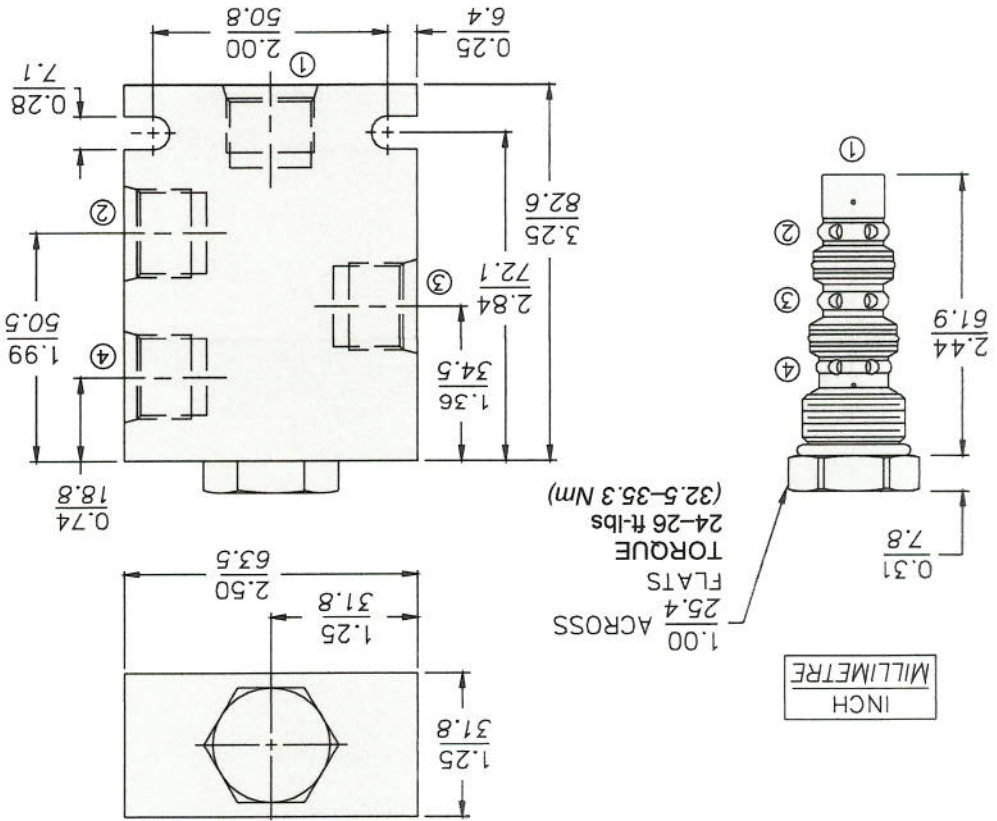
FOR ADJUSTMENT CONTROL
 OPTIONS SEE PAGE 0-050.0



HS50-43

Spring Centered

DIMENSIONS

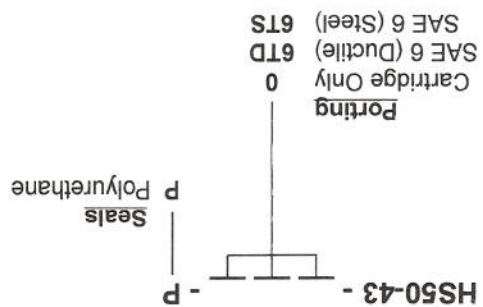


MATERIALS

Cartridge: Weight: 0.12 kg. (0.27 lbs.)
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces.
 Polyurethane seals and polyester elastomer back-ups standard.

Ported Body: Weight: 0.68 kg. (1.51 lbs.); Ductile Iron (code "D") standard; consult factory for weight. dimensions may differ. Rated to 345 bar (5000 psi).
 See page 8.010.1.

TO ORDER



HS50-43 Low Side (Hot Oil) Shuttle,

Blue rectangles are links to other catalog pages.

DESCRIPTION

A spring-centered, spool-type, closed-in-neutral, 2-position, 3-way hot oil shuttle valve, which may be used on hydrostatic transmissions to direct charge pump oil to a heat exchanger or to tank.

OPERATION

With internal piloting at port ①, ② or ④, the HS50-43 will direct oil from the port opposite of the piloted port to port ③, thus removing oil from the low-pressure side for cooling or filtration purposes. The valve has a spring-centered spool, and is closed in neutral position.

FEATURES

- Hardened spool and cage for long life.
- Industry common cavity.

RATINGS

Operating Pressure: 345 bar (5000 psi) when used in steel body

Flow Rate: See Performance Chart

Bias Spring Value: 4.1 bar (60 psi)

Internal Leakage: 541 ml/minute (33 cu. in./minute) max. at 345 bar (5000 psi)

Temperature: -40 to 120°C with standard polyurethane seals

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

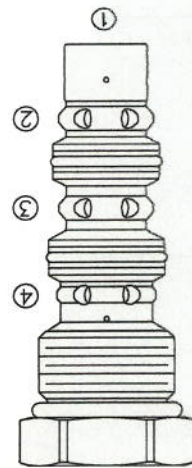
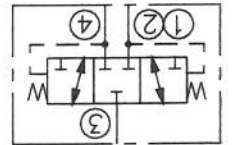
Cavity: VC10-4; See page 9.110.1

Cavity Tool: CT10-4XX; See page 8.600.1

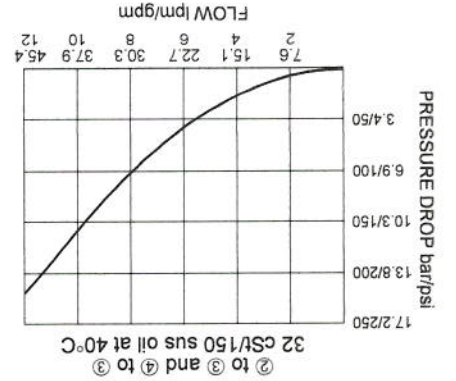
Seal Kit: SK10-4X-MM; See page 8.650.1

SYMBOLS

USAS/ISO



PERFORMANCE (Cartridge Only)



CONFIGURATION OPTIONS

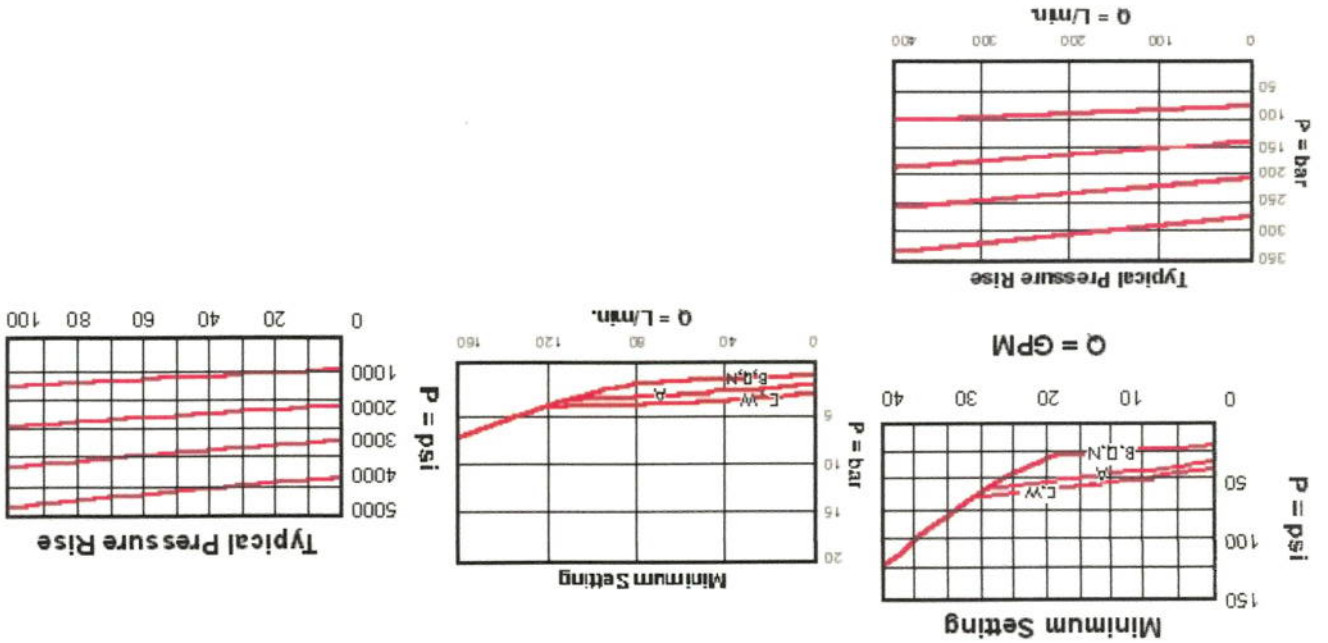
Model Code Example: RPGLCV

CONTROL	(L) ADJUSTMENT RANGE	(C) SEAL MATERIAL	(V) MATERIAL/COATING
L Standard Screw Adjustment C Tamper Resistant - Factory Set K Handknob O Handknob with Panel Mount	C 150 - 6000 psi (10.5 - 420 bar), 1000 psi (70 bar) Standard Setting A 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting B 50 - 1500 psi (3.5 - 105 bar), 1000 psi (70 bar) Standard Setting D 25 - 800 psi (1.7 - 55 bar), 400 psi (28 bar) Standard Setting E 25 - 400 psi (1.7 - 28 bar), 200 psi (14 bar) Standard Setting W 150 - 4500 psi (10.5 - 315 bar), 1000 psi (70 bar) Standard Setting	V Viton E EPDM N Buna-N	AP Stainless Steel, Passivated Standard Material/Coating

TECHNICAL FEATURES

- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Not suitable for use in load holding applications due to spool leakage.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES



NOTES

For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

Cavity	T-3A
Series	2
Capacity	50 gpm
Factory Pressure Settings Established at	4 gpm
Maximum Operating Pressure	5000 psi
Response Time - Typical	2 ms
Maximum Valve Leakage at 110 SUS (24 cSt)	3 in ³ /min. @1000 psi
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	EPDM: 990203014
Seal kit - Cartridge	Polyurethane: 990003002
Seal kit - Cartridge	Viton: 990203006
Model Weight	0.57 lb.

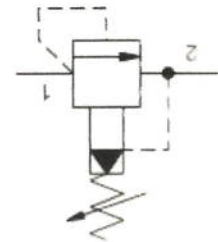
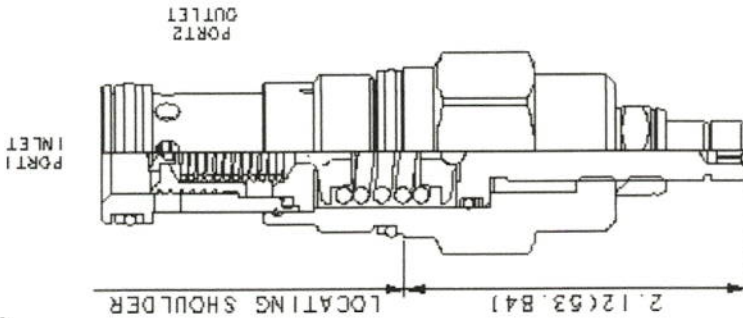
(none) Material/Coating	Standard Material/Coating
V Seal Material	Viton
C Adjustment Range	150 - 6000 psi (10.5 - 420 bar), 1000 psi (70 bar) Standard Setting
L Control	Standard Screw Adjustment

CONFIGURATION

Fast-acting, pilot-operated, balanced piston relief cartridges are normally closed, pressure-limiting valves used to protect hydraulics components from pressure transients. Fast opening and closing is gained at the expense of smoothness. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to limit the pressure rise. These valves have low pressure rise vs. flow and are very fast.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.



Fast-acting, pilot operated, balanced piston relief valve
SERIES 2 / CAPACITY: 50 gpm / CAVITY: T-3A

MODEL
RPGE



snhy.com/RPGE

patrick.t@lenco-harvesters.com

From: Drew, Scott <sdrew@dtsfluidpower.com>
Sent: Wednesday, January 30, 2019 3:14 PM
To: patrick.t@lenco-harvesters.com
Cc: Bucholtz, Brandon; Lynn Maggert Jr (lynn.m@lenco-harvesters.com)
Subject: RE: V2010
Attachments: 850077-7.pdf

Pat

Attached is the spec sheet for the V2010 with B pad 13t shaft, hopefully the port orientation works.

V-850077-7 V2010-1F11S3S-11CC-12-L Double Vane Pump

1 pc: \$865.00
3 pc: \$700.00

Lead Time 4 Weeks

Scott Drew,CFPHS
ACCOUNT MANAGER



Office: 616-538-3759

Cell: 616-581-7905

Fax: 616-538-3798

sdrew@dtsfluidpower.com

From: patrick.t@lenco-harvesters.com <patrick.t@lenco-harvesters.com>
Sent: Wednesday, January 30, 2019 12:23 PM
To: Drew, Scott <sdrew@dtsfluidpower.com>
Subject: FW: V2010

Scott,

Did you ever check on this?

Regards,

Patrick Taylor

Hydraulic / Electrical /Service

Advanced Farm Equipment, LLC

Office: (989)-268-5711

Cell : (989)-506-2867

From: patrick.t@lenco-harvesters.com <patrick.t@lenco-harvesters.com>
Sent: Friday, January 4, 2019 9:04 AM
To: 'Drew, Scott' <sdrew@dtsfluidpower.com>
Subject: V2010

Scott,
 I was looking at ordering a V2010 6F11S35 --12-L for the Aux drive on the engine for the HJV harvester. The requirements of the mount is:
 B pad, 7/8" – 13 tooth, left hand rotation. Could you look into the complete part number for "Price and Availability" ?
 Thanks!

Regards,

Patrick Taylor
 Hydraulic / Electrical /Service
 Advanced Farm Equipment, LLC
 Office: (989)-268-5711
 Cell : (989)-506-2867

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 optout@appliedindpower.com

Shaft Max Torq	Aux Shaft	Shaft Max Torque	
17000	C 27T	7200	
6500	B 15T	2500	
2987	A 11T	735	

Shaft Max Torq	Aux Shaft	Shaft Max Torque	
5660	B 15T	2987	
2987	B 41T	2800	
2800	A 11T	735	

Circuit	Pump	Disp (Cu In)	
G Drive 1	DTS-80091	6.4	
G Drive 2		6.4	
Steering	421AK01121B	3.8	

Circuit	Pump	Disp (Cu In)	
Side/ Bin Fill	V-421AK00538B	4.88	
Dist Star / Cross	V-421AK0055B	3.8	
Multi Sep	V-421AK00868C	3.8	

V-421AK00538B will be used in place of V-421AK02266C now and going forward

Pumps used in place of V-421AK00767C
 V-421AK0055B
 V-421AK00868C

Lower Left					
Circuit	Pump	Disp (Cu In)	Pressure (PSI)	Torque (in-lbs)	Input
Air Head	DTS-80318	10.06	5500	8811	C 13T
Air Knife		6.4	5500	5605	C 27T
Secondary	72400-LKF-04	3.0	4000	1911	B 15T

Top Left					
Circuit	Pump	Disp (Cu In)	Pressure (PSI)	Torque (in-lbs)	Input
Lft Rt Star/Boom	V-421AK00538B	4.88	1200	932	C 14T
Primary	DTS-2809	3.0	4000	1911	B 15T
Primary		3.0	4000	1911	B 41T

Lower Right					
Pressure (PSI)	Torque (in-lbs)	Input	Shaft Max Torq	Aux Shaft	Shaft Max Torque
5500	5605	C 13T	17000	C 27T	7200
5500	5605	C 27T	6500	B 13T	2500
2000	1210	B 13T	3514	B 13T	1850

Top Right					
Pressure (PSI)	Torque (in-lbs)	Input	Shaft Max Torq	Aux Shaft	Shaft Max Torque
2000	1554	C 14T	5660	B 15T	2987
1600	968	B 15T	3514	B 13T	1850
2500	1513	B 13T	3514	A 9T	1850

Add Coupler 475134, 15T