

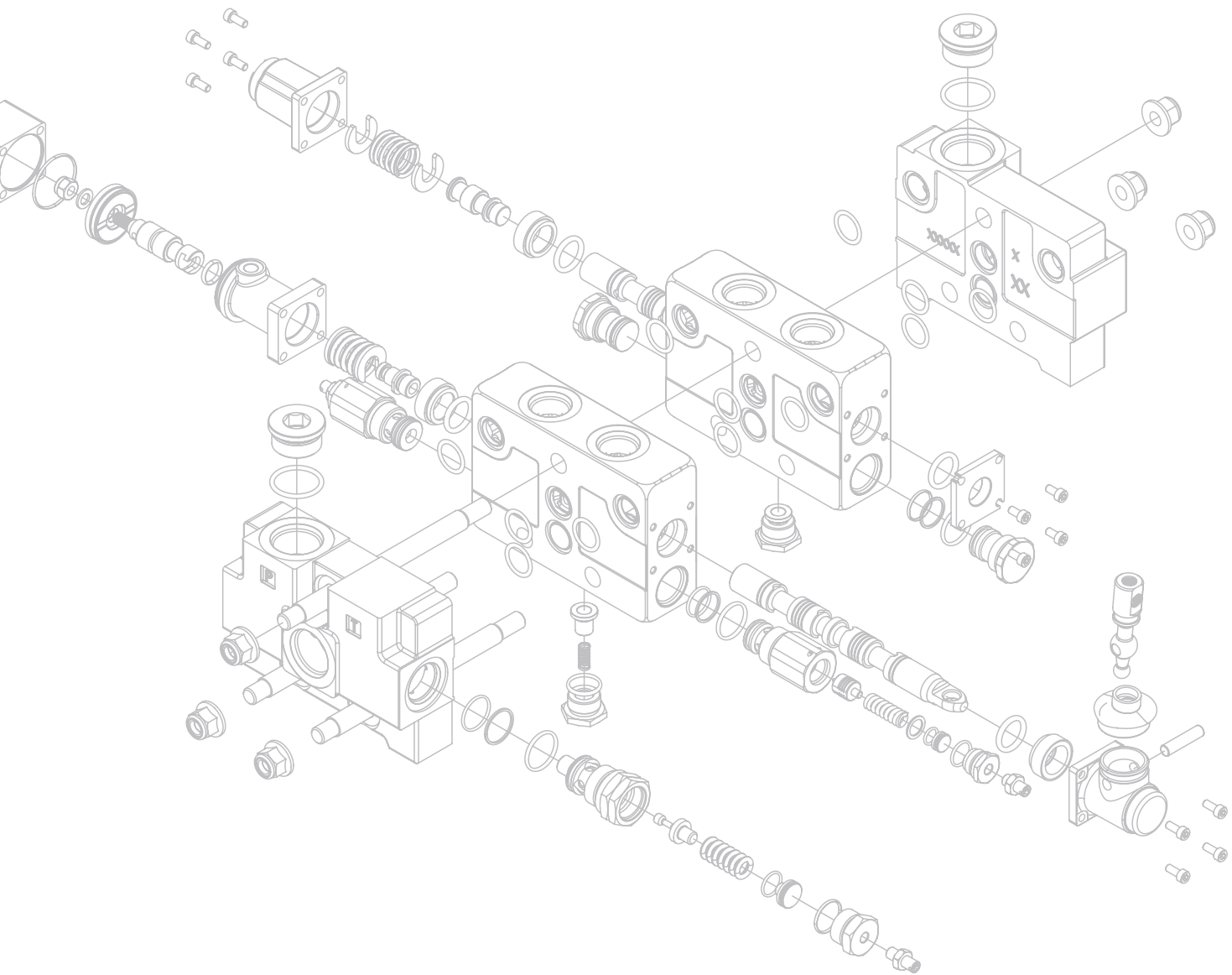


V130 SERIES

DIRECTIONAL CONTROL VALVE



www.munciepower.com/valves



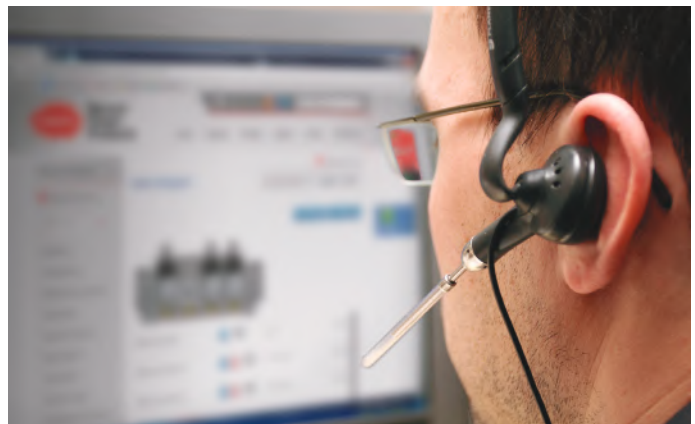
TAKE CONTROL

Take control with Muncie Power Products' V080 directional control valve. The V080 is constructed with high grade iron castings and nickel-plated spools for use in high pressure applications and can be configured with many different spool, control and positioner options.

The V080 is designed for flow rates up to 30 GPM (114 LPM), and offers superior performance in a compact package. Muncie Power Products takes pride in supplying the highest quality products along with outstanding service & support.

Muncie Power Products offers a full line of valve options and accessories. If you don't see what you need here, give our customer service department a call for your specific application needs.

(800) 367-7867





V130 SERIES

DIRECTIONAL CONTROL VALVE

FEATURES

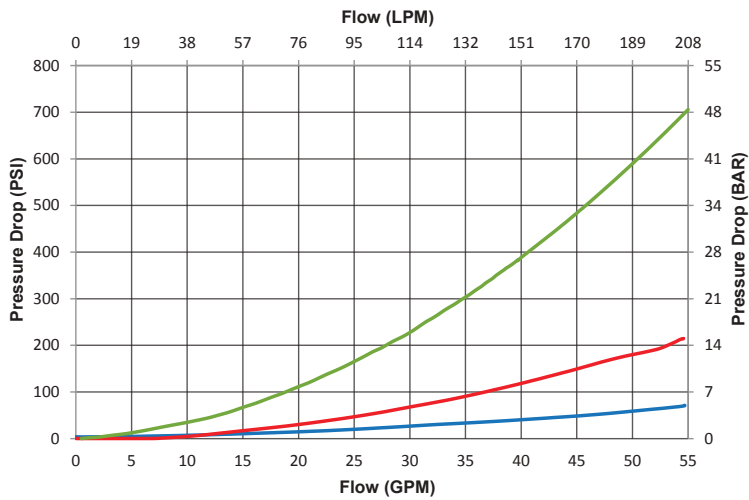
- High grade iron castings allow for high pressure capabilities for the most extreme applications
- Nickel plated spools resist wear allowing for long life under high pressure conditions
- Tight tolerances and precision machining keep internal, spool leakages low
- Internal oil core design allows for higher flow rates and low pressure drops, all in a smaller package
- High pressure carry over (power beyond) and closed center options available
- Load-checks are standard on all work sections
- Work port relief valves, anti-cavitation valves, combination relief/anti-cavitation valves and pilot operated check valves (lock valves) are available for your individual work section protection needs.
- Inlet relief valve is standard
- Parallel, series, tandem and metered spools available (lead times apply to non-standard options)
- Very versatile design can be configured with many different spool, control, positioner and accessory options
- Work sections are pre-assembled and 100% tested prior to shipping

TECH SPECS

Design Type	Sectional
Maximum Work Sections	10
Circuit Types	Open center parallel, series, tandem and closed center
Flow Capacity	Nominal: 34 GPM (13 0LPM) Maximum: 55 GPM (208 LPM)
Maximum Pressure	1 – 3 sections: 5,440 PSI (375 BAR) 4 – 6 sections: 5,075 PSI (350 BAR) 7 – 10 sections: 4,710 PSI (325 BAR)
Maximum Back Pressure	365 PSI (25 BAR)
Recommended Filtration	20 / 18 / 15 (ISO 4406:1999)
Oil Viscosity Range	60 to 1,950 SUS (10 to 400 cSt)
Oil Temperature Range	-20 to 180 °F (-29 to 82 °C)
Recommended Oil Temperature	85 to 140 °F (30 to 60 °C)
Approximate Weights (Standard Options)	Inlet: 13.2 lbs. (6 Kg) Outlet: 10.6 lbs. (4.8 Kg) Work Section: 12.8 lbs. (5.8 Kg)

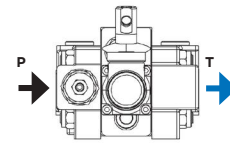
PRESSURE DROP CURVES

Open Center, Pressure to Tank (P-T)

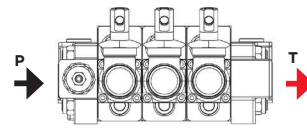


tested using 46cSt oil @ 100 °F (38 °C)

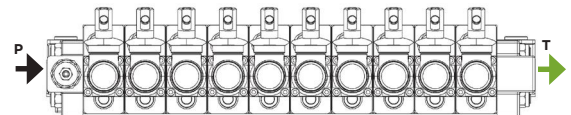
P-T, 1 Work Section



P-T, 3 Work Sections

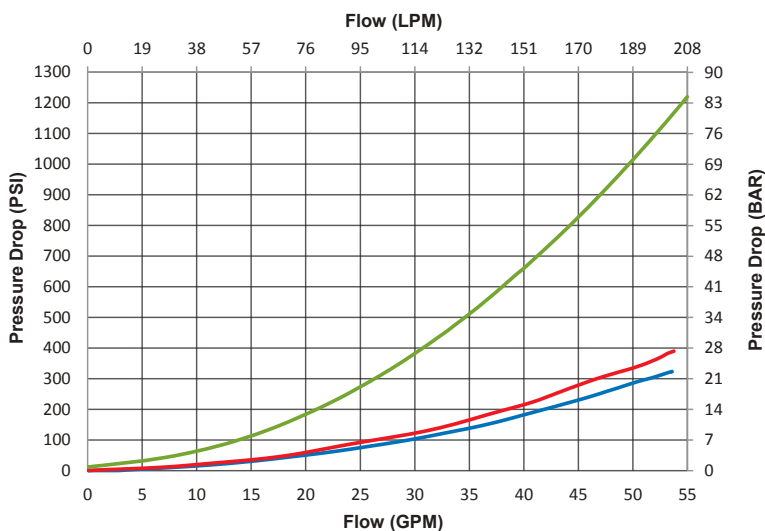


P-T, 10 Work Sections



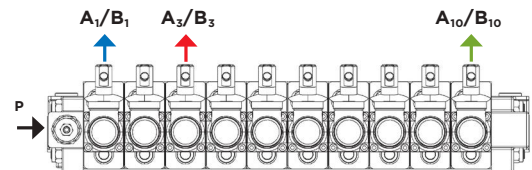
— 1 WS
— 3 WS
— 10 WS

Pressure to Work Ports (P - A_x/B_x)

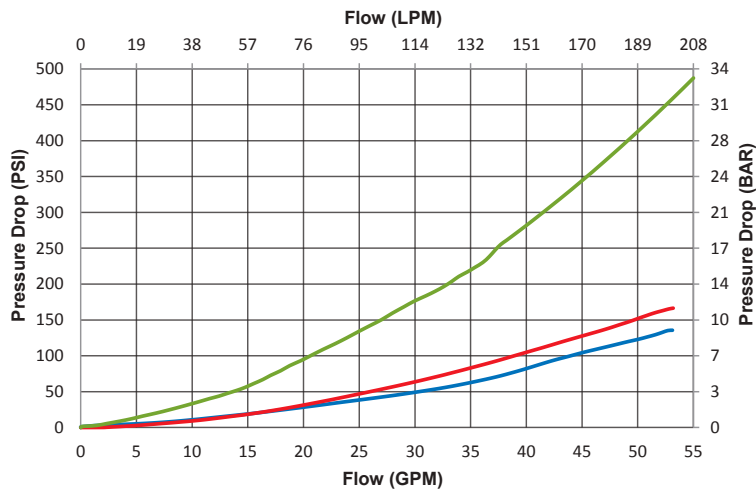


tested using 46cSt oil @ 100 °F (38 °C)

— P-A1/B1
— P-A3/B3
— P-A10/B10

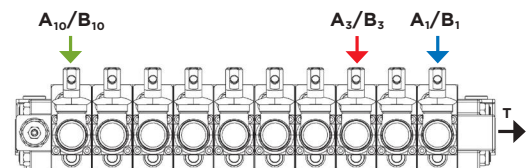


Work Ports to Tank (A_x/B_x - T)

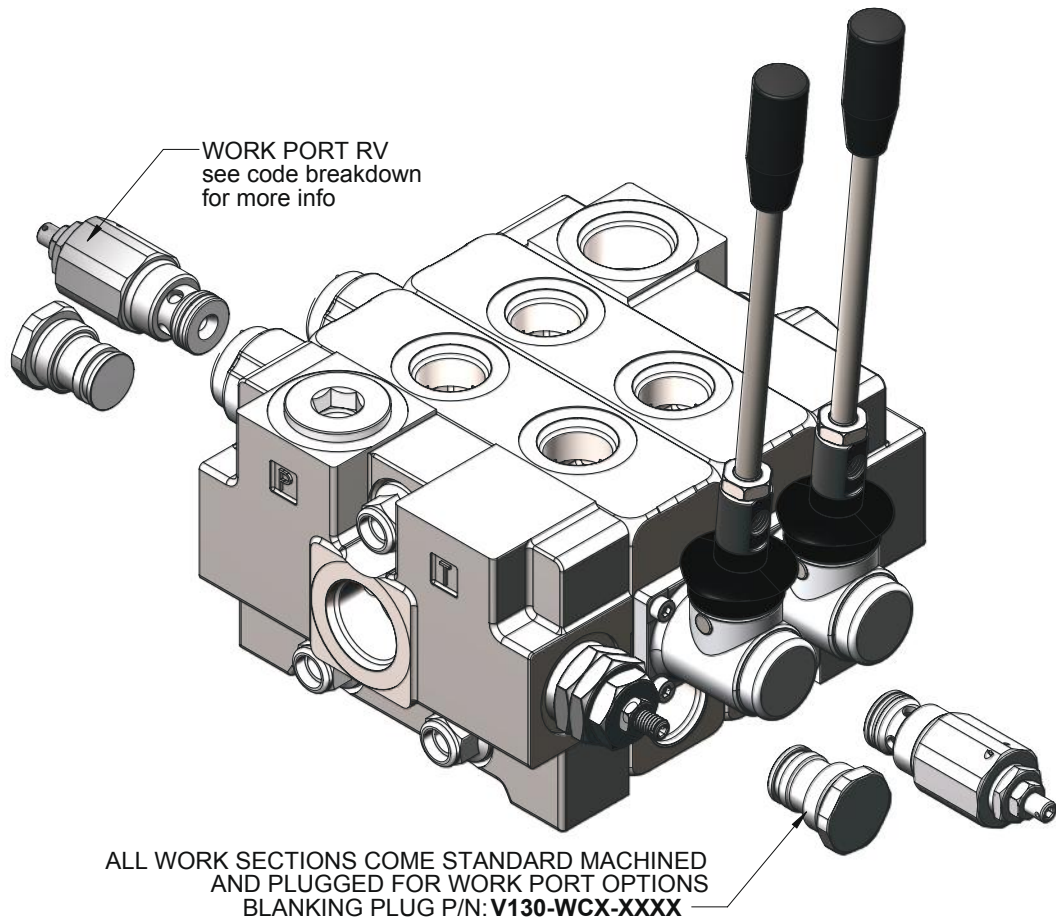


tested using 46cSt oil @ 100 °F (38 °C)

— A1/B1-T
— A3/B3-T
— A10/B10-T



WORK PORT OPTIONS



V130-W30-N125

V130 Valve Series

Work Port Option:

- W30 = Work Port RV
- W33 = Work Port RV + Anti-Cav
- W04 = Work Port Anti-Cav Only
- WCX = Blanking Plug

RV Setting in BAR:

Use "XXX" for anti-cav only & plug options

Standard Settings:

- B070 = 1,015 PSI (70 BAR)
- N125 = 1,810 PSI (125 BAR)
- N170 = 2,465 PSI (170 BAR)

RV Spring Code:

- B = Adjustable from 145-1,160 PSI (10-80 BAR)
- N = Adjustable from 1,175-2,900 PSI (81-200 BAR)
- R = Adjustable from 2,915-5,510 PSI (201-380 BAR)
- X = for plug and anti-cav only options

ORDER EXAMPLE

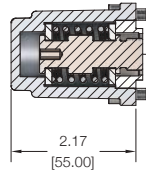
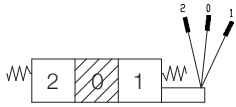
If you would like to order a valve assembly, you will have to order each item separately. The order in which parts are entered is how the valve will be built from left to right. On the right is an example of a 3 work section valve order:

Part Number	Qty.	Description
V130-A-GI-7SX-N150	1	Inlet with relief valve
V130-AC-AA-01-GI-02-X	2	Work section 1 & 2
V130-AC-AJ-01-GI-05-X	1	Work section 3
VLVH-01A-210	2	8.25" (210mm) handle kits for WS 1 & 2
V130-C-GI-3DX-XXX	1	Standard outlet
V130-T03	1	Stud kit for 3 section assembly

BACK-CAP OPTIONS

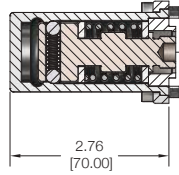
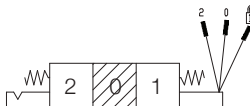
V130-BC-01

STANDARD 3 POSITION, SPRING RETURN



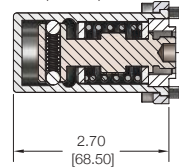
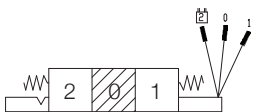
V130-BC-06

DETENT SPOOL "IN" (POS. 1), SPRING SPOOL "OUT" (POS. 2)



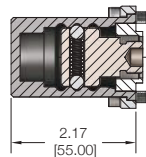
V130-BC-07

SPRING SPOOL "IN" (POS. 1), DETENT SPOOL "OUT" (POS. 2)



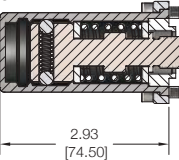
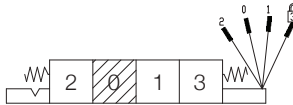
V130-BC-08

3 POSITION DETENT



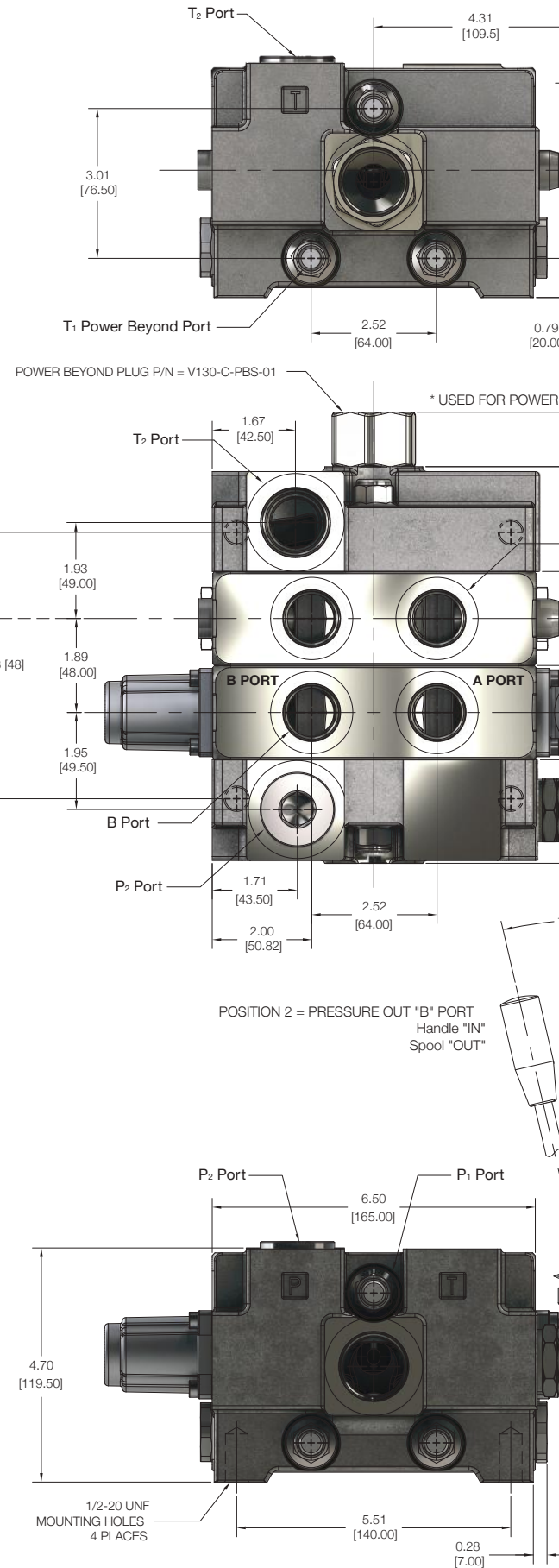
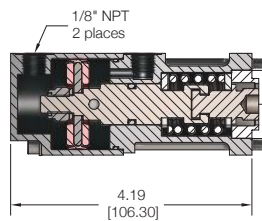
V130-BC-12

3 POSITION, SPRING RETURN WITH 4th POSITION DETENT



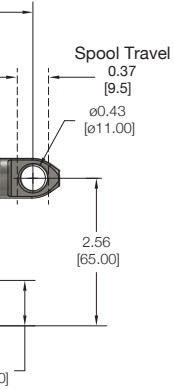
V130-BC-33

PNEUMATIC SHIFT (use w/ control type AA, AE or AJ)



1.57 [40] + # of W.S. x 1.88 [48]

CONTROL OPTIONS



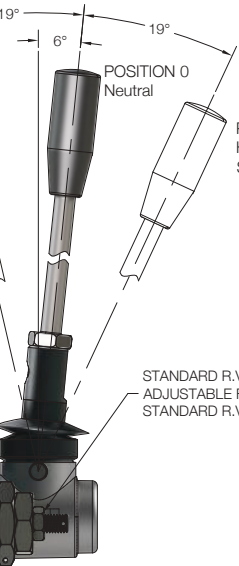
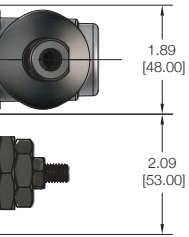
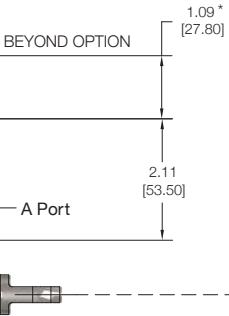
PORT SIZE AND TYPE

INLET PORTS = -16SAE
 WORK PORTS = -12SAE (standard)
 OUTLET PORTS = -16SAE
 POWER BEYOND PORT = -12SAE (standard)

Note: other ports sizes are available upon special request (lead times may apply)

STANDARD LEVER HANDLE KIT

P/N: VLVH-01A-210
 LENGTH: 8.25" (210mm)



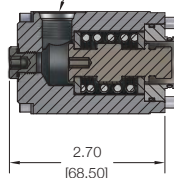
STANDARD R.V. SET @ 2175 PSI (150 BAR)
 ADJUSTABLE FROM 1175-2900 PSI (81-200 BAR)
 STANDARD R.V. P/N IS V130-AB-N150

150 = RV Setting in BAR
 N = Spring code (see table below)
 AB = Inlet / mid-section RV

	WHITE SPRING	BLACK SPRING	RED SPRING
SPRING CODE	B	N	R
PRESS. RANGE	145 - 1160 PSI 10 - 80 BAR	1175 - 2900 PSI 81 - 200 BAR	2915 - 5510 PSI 201 - 380 BAR

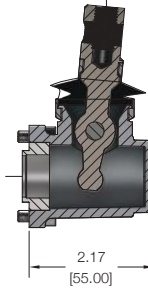
Note: B & R springs/ settings are not standard stock items

-6SAE, 9/16-18 UN2B
 2 places



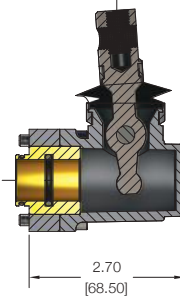
V130-CT-AA STANDARD LEVER CAP

NOTE: LEVER HANDLE NOT INCLUDED

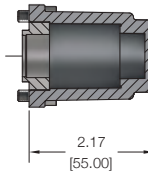


V130-CT-AB LEVER CAP FOR FLOAT SPOOL (4th POS. DETENT)

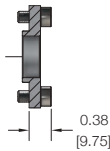
NOTE: LEVER HANDLE NOT INCLUDED



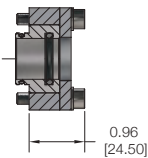
V130-CT-AE SPOOL COVER FOR BACK-CAP CONTROL



V130-CT-AJ SPOOL EYE ONLY FOR DIRECT CONNECTION

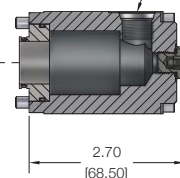


V130-CT-AK SPOOL EYE ONLY FOR FLOAT SPOOL (4th POS. DETENT)



V130-CT-BG LOW PRESSURE, HYDRAULIC CONTROL

-6SAE, 9/16-18 UN2B
 2 places



MODEL NUMBER CONSTRUCTION

WORK SECTIONS

V130-AB-AA-01-FX-02-X

V130 Valve Series

Spool Type:

- AB = 3P3W, Single acting cylinder, pressure out B port
- AC = 3P4W, Double acting cylinder
- AJ = 3P4W, Bi-rotational motor, work ports connected to tank in neutral
- AM = 4P4W, Double acting cylinder w/ float (4th position detent)

Control Type:

- AA = Lever cap (handle not included)*
- AB = Lever cap for float spool "AM" (handle not included)*
- AE = Spool cover for back-cap controls
- AJ = Spool eye only for direct connection
- AK = Spool eye only for direct connection with float spool "AM"
- BG = Low pressure hydraulic control

Back-cap Positioners & Controls:

- 00 = No positioner, use with BG control type
- 01 = 3 position, spring return
- 06 = Detent spool IN, spring spool OUT
- 07 = Detent spool OUT, spring spool IN
- 08 = 3 position detent
- 12 = 3 position, spring return with 4th position detent
- 33 = Pneumatic positioning (on/off or proportional)

Special Features:

- X = No option (standard)

Work Port Options:

- 02 = Machined w/steel plugs (standard)

RV Set @ 1,000 PSI (70 BAR)

adjustable from 435-1,160 PSI (30-80 BAR)

- 03 = RV on A port, set at 1,000 PSI (70 BAR)
- 04 = RV on B port, set at 1,000 PSI (70 BAR)
- 05 = RV on A & B port, set at 1,000 PSI (70 BAR)

RV Set @ 1,800 PSI (125 BAR)

adjustable from 1,175-2,900 PSI (81-200 BAR)

- 14 = RV on A port, set at 1,800 PSI (125 BAR)
- 15 = RV on B port, set at 1,800 PSI (125 BAR)
- 16 = RV on A & B port, set at 1,800 PSI (125 BAR)

Anti-Cavitation Valves

- 11 = Anti-cav on A port
- 12 = Anti-cav on B port
- 13 = Anti-cav on A & B port

* - Additional options available on request (lead times may apply)

Work Port Size & Type (both A & B):

- FX = -12 SAE (standard)

* Handle kit to be ordered separately

Standard handle kit P/N: VLVH-01A-210
Length: 8.25" (210mm)

INLET SECTIONS

V130-A-GI-7SX-N150

V130 Valve Series

Section Type:

- A = Inlet

Port Size & Type:

- GI = -16 SAE top and end

Inlet Options:

- 7SX = Inlet with relief valve (standard)
- 8SX = Inlet without relief valve (plugged)

Relief Valve Setting:

XXXX = No relief valve option (use w/ 8SX option)

"N" Setting: RV Adjustable from 1,175-2,900 PSI (81-200 BAR)

N150 = 2,175 PSI (150 BAR) Standard Inlet RV

"R" Setting: RV Adjustable from 2,915-5,510 PSI (201-380 BAR)

R240 = 3,480 PSI (240 BAR)

INLET RELIEF VALVES

V130-AB-R250

V130 Valve Series

Section Type:

AB = Use with inlet and mid-section only

Relief Valve Plug Option:

XXXX = Steel plug (replaces relief valve)

N150 = RV set at 2,175 PSI (150 BAR)

R240 = RV set at 3,480 PSI (240 BAR)

(See "Inlet Sections, Relief Valve Setting" for relief valve adjustment ranges.)

MID SECTIONS

V130-B-GI-E53-N150

V130 Valve Series

Section Type:

B = Mid-section

Port Size & Type:

GI = -16 SAE top and side

Relief Valve Setting:

XXXX = No RV option (E51 only)

N150 = 2,175 PSI (150 BAR) (E53 only)

See above for additional options

Mid-section Type:

E51 = Split flow mid-outlet*

E53 = Combined flow mid-inlet with RV

* Split flow mid-outlets utilize 2 inlet sections on the valve assembly, and the mid-outlet acts as the outlet for each inlet.

OUTLETS

V130-C-GI-3DX-XXX

V130 Valve Series

Section Type:

C = Outlet

Port Size & Type:

GI = -16 SAE top and end (standard)

FY = -12SAE end P.B. port by -16SAE top port
(use w/ power beyond option 6DX)

Additional Outlet Options:

XXX = No options

Outlet Options:

3DX = Standard outlet

6DX = Outlet with power beyond

STUD KITS

V130-T01

V130 Valve Series

Number of Work Sections

Stud Length
In (mm)

T01 = 1 work section kit	5.6 (143)
T02 = 2 work section kit	7.5 (191)
T03 = 3 work section kit	9.4 (239)
T04 = 4 work section kit	11.3 (287)
T05 = 5 work section kit	13.2 (335)
T06 = 6 work section kit	15.1 (383)
T07 = 7 work section kit	17.0 (431)
T08 = 8 work section kit	18.9 (479)
T09 = 9 work section kit	20.7 (527)
T10 = 10 work section kit	22.6 (575)



WARRANTY

Muncie's V130 Valve Series is warranted against any defect in material and workmanship which existed at the time of sale by Muncie Power Products, according to the following provision, subject to the requirements that the valve must be used only in accordance with catalog and package instructions.

The valve is warranted for a period of one year from date of installation. If during the warranty period the valve fails to operate to Muncie Power Products' specifications due to a defect in any part in material or workmanship that existed at the time of sale by Muncie Power Products, the defective part will be repaired or replaced, at Muncie Power Products' election, at no charge, if the defective part is returned to Muncie Power Products with transportation prepaid.

WARNING: The warranty shall terminate if any alterations or repairs are made to the valve other than at a Muncie Power Products facility, or if the valve is used on any equipment other than the equipment upon which first installed.

The foregoing warranties are in lieu of all other obligations and liabilities, including negligence and all warranties of merchantability and suitability, expressed or implied and state Muncie Power Products' entire and exclusive liability and buyer's exclusive remedy for any claim of damages in connection with the sale, repair or replacement of above goods, their design, installation or operation. Muncie Power Products will in no event be liable for any direct, indirect, special, incidental or consequential damages whatsoever, and our liability under no circumstances will exceed the contract price for the goods for which liability is claimed.



W W W . M U N C I E P O W E R . C O M

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