

Muncie's 17 Series solenoid operated control valves provide flexibility you have never had before. Mount the valve assembly anywhere available on the chassis and locate your controls elsewhere in a convenient location. The sectional parallel design allows numerous combinations to be stacked together. Various work port and spool options are available to meet all your application needs.

## **APPLICATIONS**

Snow & Ice Control Systems • Utility Equipment • Dump Bodies
Tow Recovery Vehicles • Lube Trucks And Cranes • Small Refuse Equipment

# **VALVE FEATURES**

- Stackable design allows for customizing the assembly to your specific needs.
- Compact size and lightweight design.
- Precision machined spools are hard chrome plated for maximum life and corrosion resistance.
- · Diamond lapped bores.
- 100% preassembled and pretested before shipping.
- Parallel circuit design permits all spools to be operated independently or simultaneously with the lightest load receiving priority.

## **TECHNICAL DATA**

Construction ...... Sectional

Circuit ...... Parallel / Closed Center with Inlet Unloader

0 500 DCI (040 Day)

Maximum System Pressure ... 3,500 PSI (242 Bar)

Maximum Tank Pressure ...... 150 PSI (10 Bar)

Filtration ...... 10 Micron

Spool Force ...... Pilot Operated 300 PSI (20 Bar) Minimum

**Temperature** ...... -20°F to 200°F (-29°C to 93°C)

Seal Type ...... Buna-N

Relief Valve ...... Pilot Operated Adjustable from 1,000 to 3,500 PSI (69 to 242 Bar)

[preset at 2,000 PSI (138 Bar)]

Coil Information ...... Continuous Duty Rating 1.25 Amps for Each Energized Coil

(9.8 Ohms Resistance @ 20°C, 12VDC), 8.50" Weatherpak Leads

# PERFORMANCE AND SPECIFICATIONS

### **OPEN CENTER PRESSURE DROP (INLET TO OUTLET)**

PRESSURE DROP TESTS WERE RUN AT 100 SSU (20.6 CS) AND AT 125°F (52°C)

					VALUES	IN PSI (BAR)
FLOW IN		N	IUMBER OF SECTIONS			
GPM (LPM)	1	2	3	4	5	6
5 (19)	6 (0.41)	8 (0.54)	10 (0.68)	12 (0.82)	18 (1.23)	25 (1.70)
10 (38)	20 (1.36)	27 (1.84)	40 (2.72)	62 (4.22)	75 (5.10)	82 (5.58)
15 (57)	42 (2.86)	60 (4.08)	95 (6.46)	125 (8.51)	160 (10.89)	175 (11.91)
20 (76)	70 (4.76)	120 (8.16)	163 (11.09)	212 (14.42)	250 (17.01)	300 (20.41)

### **INTERNAL PRESSURE DROP (INLET TO WORK PORT)**

PRESSURE DROP TESTS WERE RUN AT 100 SSU (20.6 CS) AND AT 125°F (52°C)

					VALUES	IN PSI (BAR)
FLOW IN	NUMBER OF SECTIONS					
GPM (LPM)	1	2	3	4	5	6
3 (11)	7 (0.48)	10 (0.68)	12 (0.82)	12 (0.82)	15 (1.02)	16 (1.09)
6 (23)	15 (1.02)	20 (1.36)	23 (1.57)	25 (1.70)	28 (1.91)	30 (2.04)
9 (34)	25 (1.70)	32 (2.18)	35 (2.38)	37 (2.52)	40 (2.72)	42 (2.86)
12 (45)	40 (2.72)	45 (3.06)	50 (3.40)	53 (3.61)	55 (3.74)	57 (3.88)

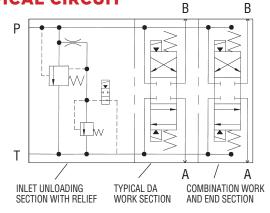
### **INTERNAL PRESSURE DROP (WORK PORT TO OUTLET)**

PRESSURE DROP TESTS WERE RUN AT 100 SSU (20.6 CS) AND AT 125°F (52°C)

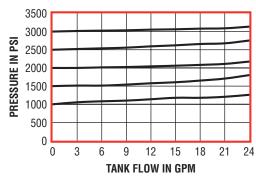
					VALUES	IN PSI (BAR)
FLOW IN	NUMBER OF SECTIONS					
GPM (LPM)	1	2	3	4	5	6
3 (11)	0.5 (0.03)	1 (0.07)	3 (0.20)	4 (0.27)	4.5 (0.31)	6 (0.41)
6 (23)	8 (0.54)	10 (0.68)	12 (0.82)	13 (0.89)	15 (1.02)	17 (1.16)
9 (34)	20 (1.36)	22 (1.50)	25 (1.70)	28 (1.91)	30 (2.04)	33 (2.25)
12 (45)	35 (2.38)	42 (2.86)	45 (3.06)	50 (3.40)	55 (3.74)	57 (3.88)

NOTE: ALL CURVES ARE FOR SHORT SECTIONS. ADD APPROX. 50 PSI (3.5 BAR) FOR TALL SECTIONS FOR USE WITH WORK PORT RELIEFS.

#### **TYPICAL CIRCUIT**



### **MAIN RELIEF VALVE**



## **PORT OPTIONS**

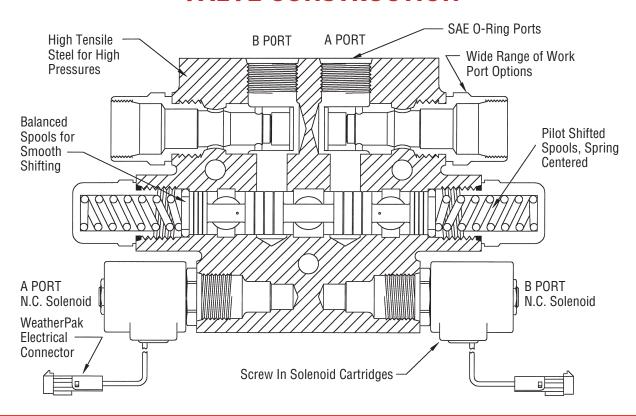
- Port Relief (Screw Adjustable)
- Pilot Operated Check Valve (Lock Valve)
- Conversion Kit for Spool Manual Override/Stroke Control Limiter (Kit #17V-36M)

# OTHER SYSTEM OPTIONS

• High Pressure Filter Assembly: PLFR-451-10C50S55

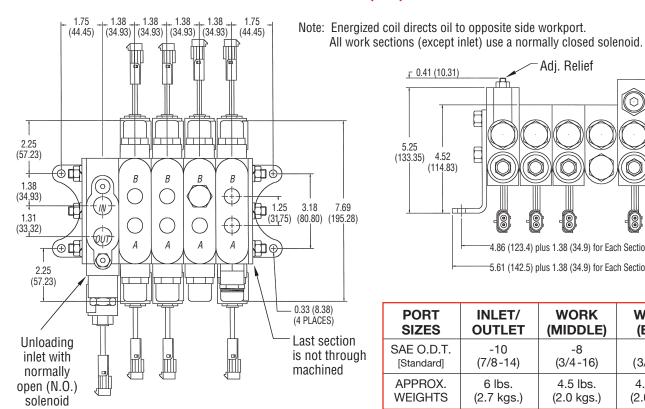
- Electrical Kit (for Central Hydraulic Systems) See pg.7
- Cross Over Relief Valves: CRV-30
- Plow Float Solenoid Valve: 49T37547 (For SA Plow)
- Plow Float Solenoid Valve: 49T37546 (For DA Plow)
- Port Restrictor (Restrict In)-8: 17V-83AFF (1-6) 1 Through 6 GPM

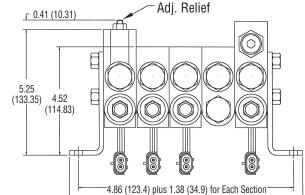
# **VALVE CONSTRUCTION**



## **DIMENSIONAL DATA**

IN INCHES (MM)

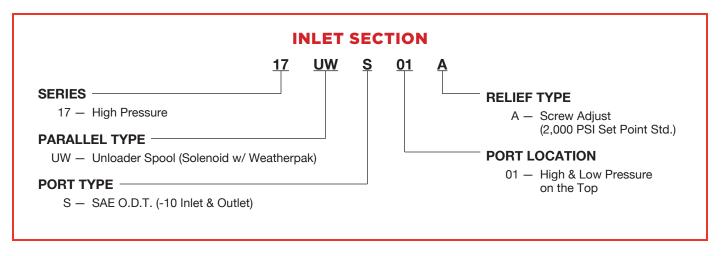


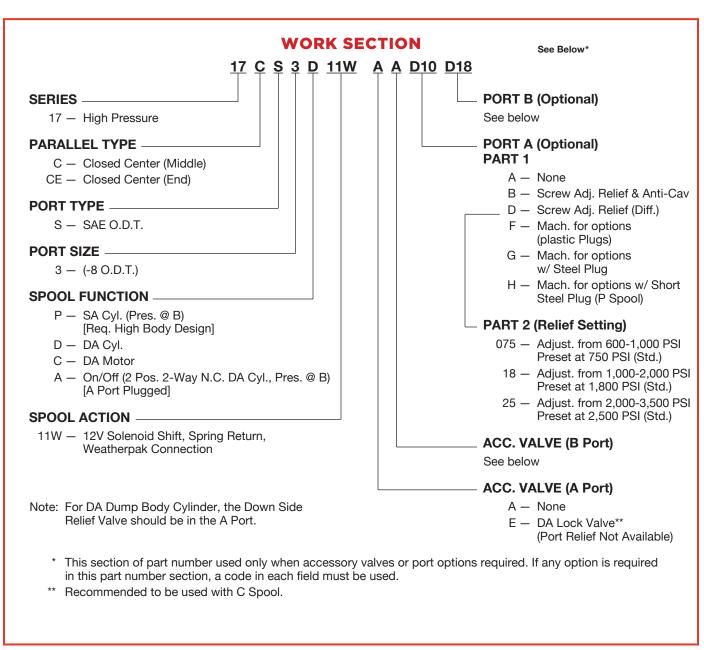


PORT	INLET/	WORK	WORK
SIZES	OUTLET	(MIDDLE)	(END)
SAE O.D.T.	-10	-8	-8
[Standard]	(7/8-14)	(3/4-16)	(3/4-16)
APPROX.	6 lbs.	4.5 lbs.	4.5 lbs.
WEIGHTS	(2.7 kgs.)	(2.0 kgs.)	(2.0 kgs.)

-5.61 (142.5) plus 1.38 (34.9) for Each Section-

## MODEL NUMBER CONSTRUCTION

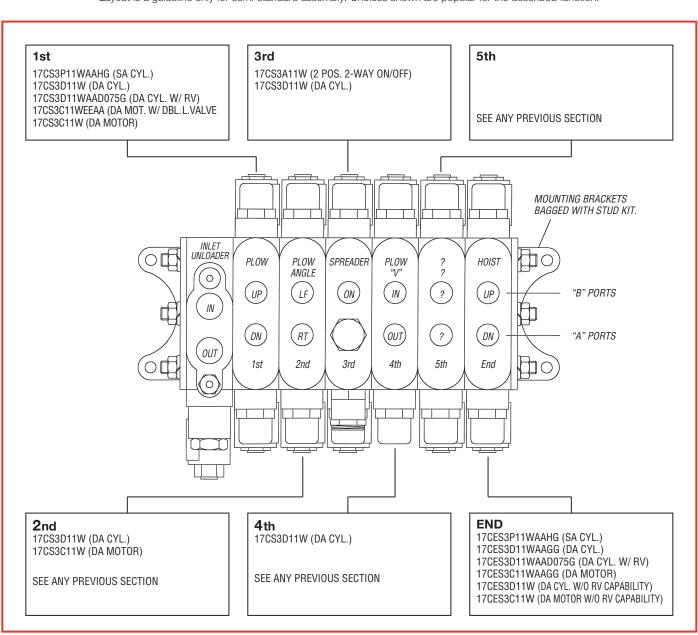




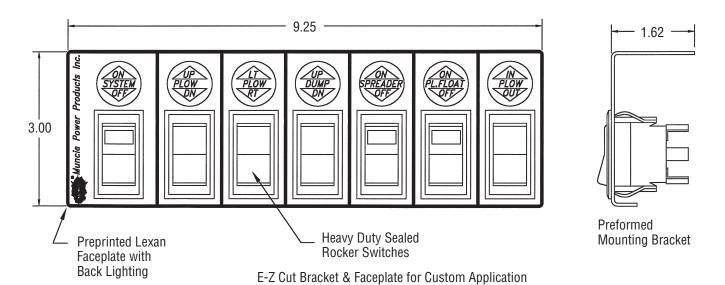
# 17 SERIES VALVE ASSEMBLY WORK SHEET

CUSTOMER:	VALVE SEC	TIONS:	MISCELLANEOUS:	
	INLET	17UWS01A		
	_ 1st	17CS3		
	2nd	17CS3		
	_ 3rd	17CS3		
	4th	17CS3		
ORIGINATOR:	5th	17CS3		
	END	17CES3		
ORDER NO:	_ STUD KIT	17V-STD-*(1-6)		
DATE				

Layout is a guideline only for semi-standard assembly. Choices shown are popular for the described function.

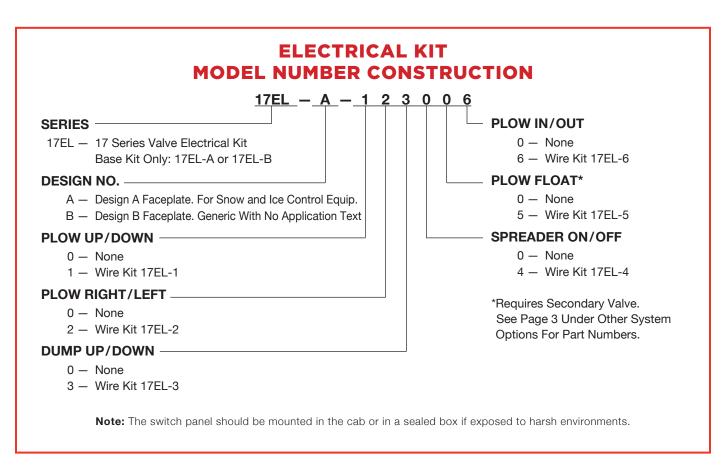


# ELECTRICAL KIT FOR CENTRAL HYDRAULICS SYSTEMS



#### KIT INCLUDES:

Mounting Bracket, Mounting Nuts & Bolts, Lexan Faceplate, Lamp & Lamp Holder, Appropriate Rocker Switches, Preassembled Wiring Harness with WeatherPak Connectors, Miscellaneous Wires and Diagrams.



# **VALVE WARRANTY**

The Muncie 17 Series Valve is warranted against any defect in material and workmanship which existed at the time of sale by Muncie, according to the following provisions, subject to the requirements that the Valve must be used only in accordance with catalogue 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's specifications due to a defect in any part in material or workmanship that existed at the time of sale by Muncie, the defective part will be repaired or replaced, at Muncie's election, at no charge, if the defective part is returned to Muncie with transportation prepaid.

**Warning.** The above warranty shall terminate if any alterations or repairs are made to the Valve other than at a Service Center owned by Muncie, or if the Valve is used upon any equipment other than the equipment upon which it is 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'S ENTIRE AND EXCLUSIVE LIABILITY AND BUYER'S EXCLUSIVE REMEDY FOR ANY CLAIM OF DAMAGES IN CONNECTION WITH THE SALE, REPAIR OR REPLACEMENT OF THE ABOVE GOODS, THEIR DESIGN, INSTALLATION OR OPERATION. MUNCIE 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.

## OTHER PRODUCTS

#### CALL TODAY FOR ADDITIONAL INFORMATION FOR ALL YOUR MOBILE POWER EQUIPMENT NEEDS



#### **Electric Solenoid Valve**

This compact hydraulic tank and valve package is designed especially for small underbody hoist and dump bodies, featuring a fully adjustable main relief valve and work port relief valves for double acting hoists.

\*Brochure MP96-06\*\*

#### **Steel Side Mount Hydraulic Oil Reservoirs**

Features a filler/breather assembly with a nylon strainer and 40 micron ¼ turn cap, a fluid level sight gauge with thermometer, internal baffle between outlet and return ports.

Brochure MP98-08

#### **FA Series Ford Automatic PTO**

By introducing a transmission driven PTO system for the optional Super Duty F-Series automatic transmission, the long requested need of an alternative to the fanbelt driven clutch pump for the automatic transmission has now been met.

Brochure MP98-01

