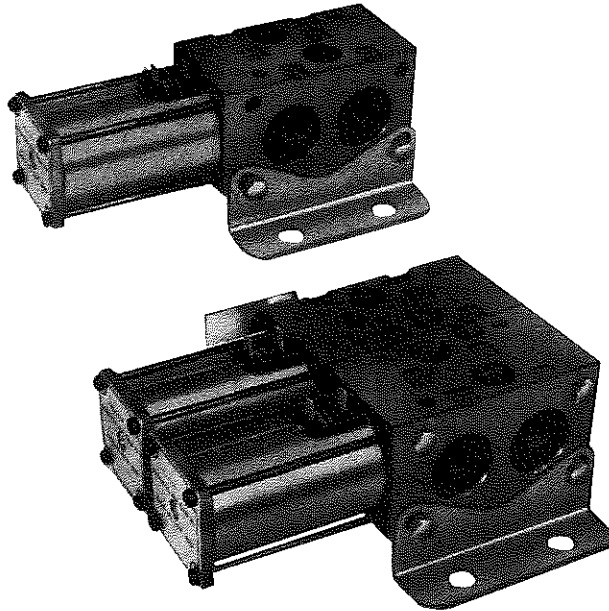


# GRESEN®



## Engineering Data



### DIRECTIONAL CONTROLS

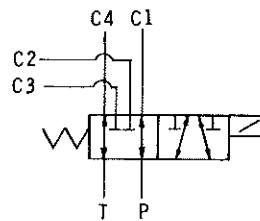
### SELECTOR VALVE SIX PORTED

3/8"

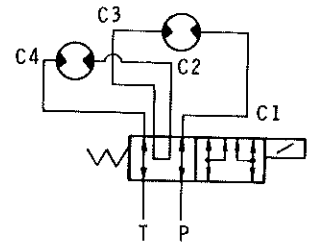
3000 PSI  
8 THRU  
14 GPM

CIRCUIT SELECTOR  
AND  
SERIES — PARALLEL SELECTOR

STACKABLE



CIRCUIT SELECTOR



SERIES PARALLEL

### SYMBOL

### SPECIFICATIONS

**PRESSURE RATING**-- 3000 psi (207 bar, 20,700 kPa) all ports.

**FLOW RATINGS**-- 8 gpm (30.3 l/min.) @ 3000 psi (207 bar, 20,700 kPa)  
10 gpm (37.8 l/min.) @ 2000 psi (138 bar, 13,800 kPa)  
14 gpm (52.9 l/min.) @ 1000 psi (69 bar, 6,900 kPa)

**SOLENOID VOLTAGE OPTIONS**-- 9, 12, 24, 36, & 48 VDC and AC Rectified 115 Volts.

**RESPONSE TIME**-- Solenoid Energized ----- .080 seconds.  
Spring Return ----- .030 seconds.

**FLUID RECOMMENDATIONS**-- Premium grade hydraulic fluid which matches the viscosity requirements of the pump.

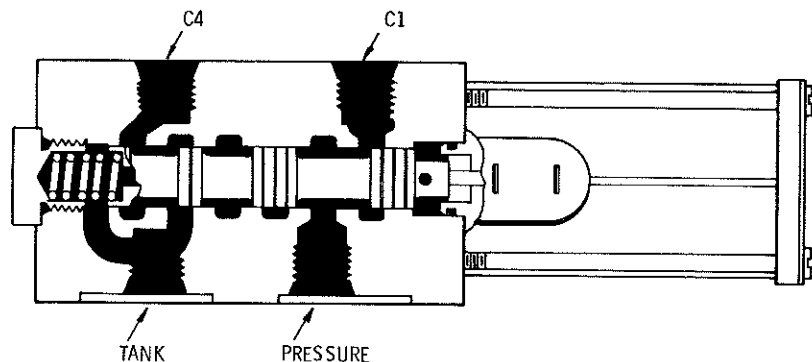
**TEMPERATURE**-- Maximum fluid temperature should be no higher than 200 F (93.3 C)

**MOUNTING**-- Valve mounting is unrestricted. Valve can be mounted as a single valve or stacked together as required.

**MATERIAL** -- Gray Iron Body. Hardened Steel Spool.

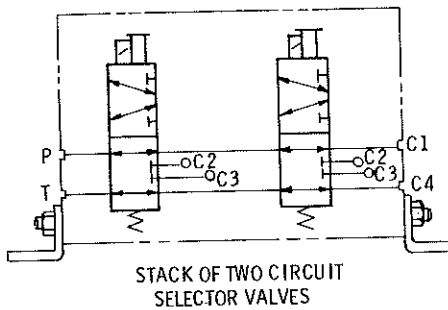
**WEIGHT** (Approx.) -- 8.75 lbs. (3.9 kg.)

### PICTORIAL

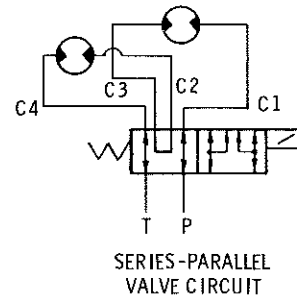


## OPERATIONAL DATA

**CIRCUIT SELECTOR VALVE**-- In normal position, Port "P" is connected to Port "C1" and Port "T" is connected to Port "C4". Ports "C2" and "C3" located at 90° from the "C1" and "C4" ports are blocked. When the solenoid is energized, "P" is connected to "C2" and Port "T" is connected to "C3". Ports "C1" and "C4" are blocked. When circuit selector valves are stacked, the "C1" and "C4" ports lead to "P" and "T" of the adjacent valve.



**SERIES-PARALLEL SELECTOR VALVE**-- Used to select either series operation or parallel operation of two actuators. In normal position, Port "P" is connected to "C1"; "C2" is connected to "C3", while "T" is connected to "C4" for series operation. When the solenoid is energized, "P" is connected to both "C1" and "C2", while "C3" and "C4" are both connected to "T" for parallel operation.



## PERFORMANCE CHARACTERISTICS

### TYPICAL LEAKAGE DATA

PRESSURE	MAXIMUM LEAKAGE PER PRESSURIZED PATH
1000 PSI	10 C I P M
2000 PSI	20 C I P M
3000 PSI	30 C I P M

DATA TAKEN WITH FLUID VISCOSITY  
OF 112 SUS (23.4 cSt) @ 120 F (48.8 C)

### SOLENOID DATA

	Series 9 Encapsulated DC Solenoid	Series 9 Encapsulated AC Rect. Solenoid
Duty	Continuous	30 Min. maximum in 1 Hour *
Wattage @ 70 F	48	55
Wattage After 10 Minutes Cont- inuous Duty	29	33

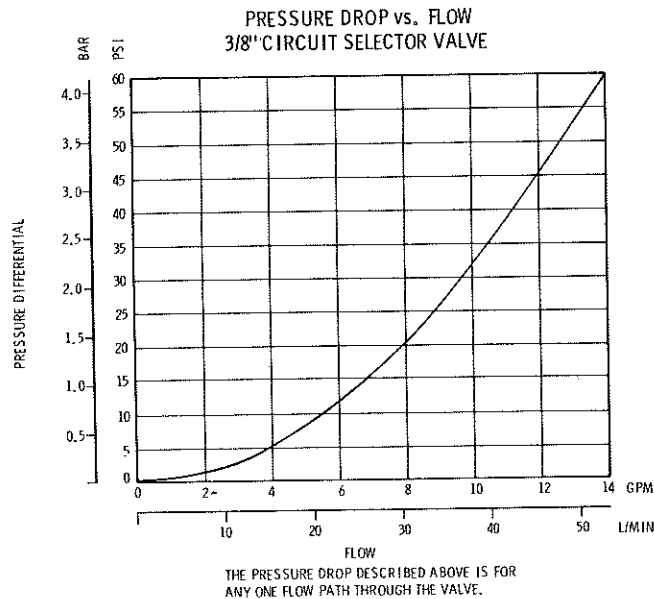
### RESPONSE TIME

SOLENOID ENERGIZED - 80 Milliseconds  
SPRING RETURN - 30 Milliseconds

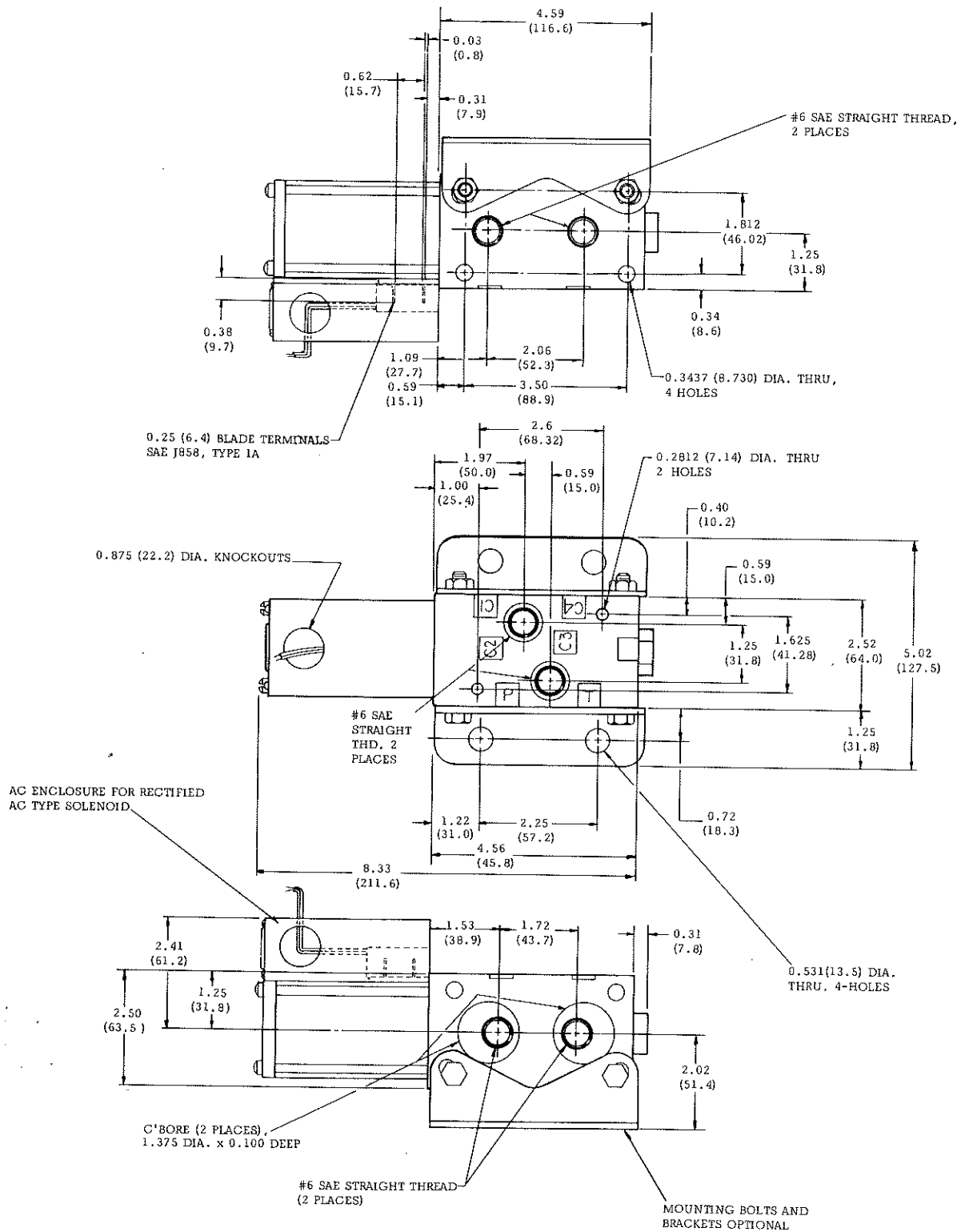
Response time is the elapsed time between initiation or interruption of the electrical signal to the solenoid and the first indication of pressure changes in the affected ports.

NOTE: DC SOLENOIDS AVAILABLE WITH  
9, 12, 24, 36, & 48 VDC COILS.  
CONSULT FACTORY FOR OTHER VOLTAGES

\*High Temperature May Cause Rectifier  
Failure. Hot Fluid, High Ambient  
Temperature And/Or Extended Use May  
Combine To Cause Overheating.

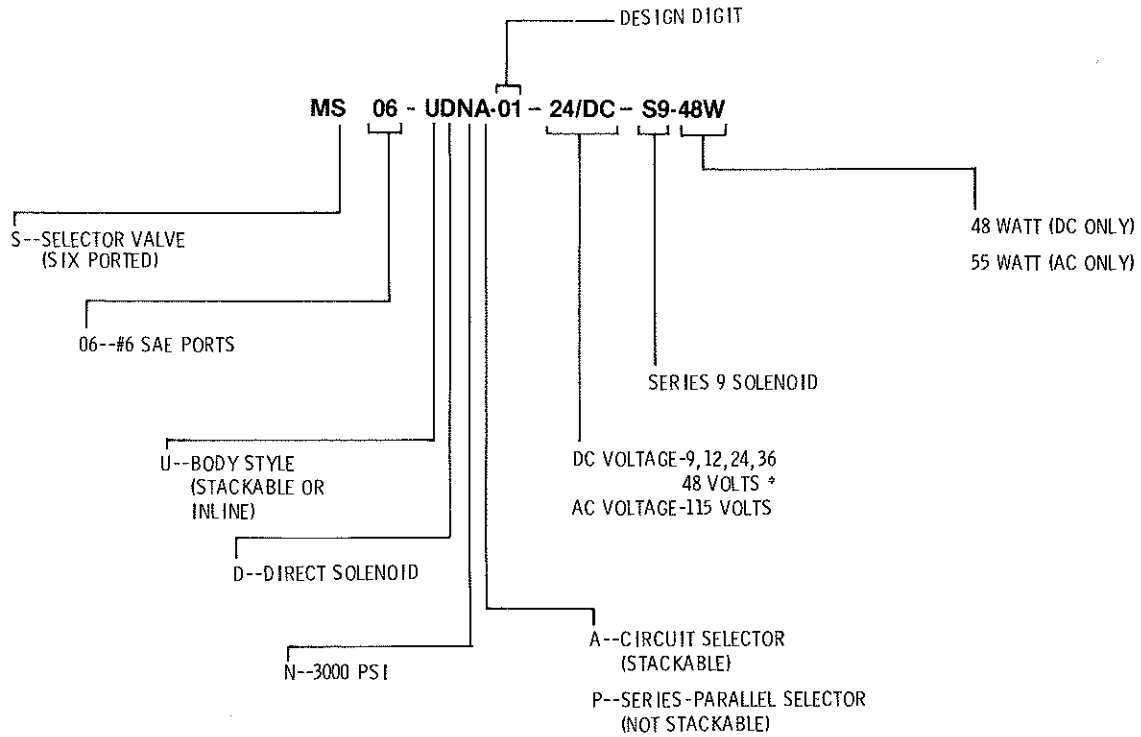


**DIMENSIONAL DATA**



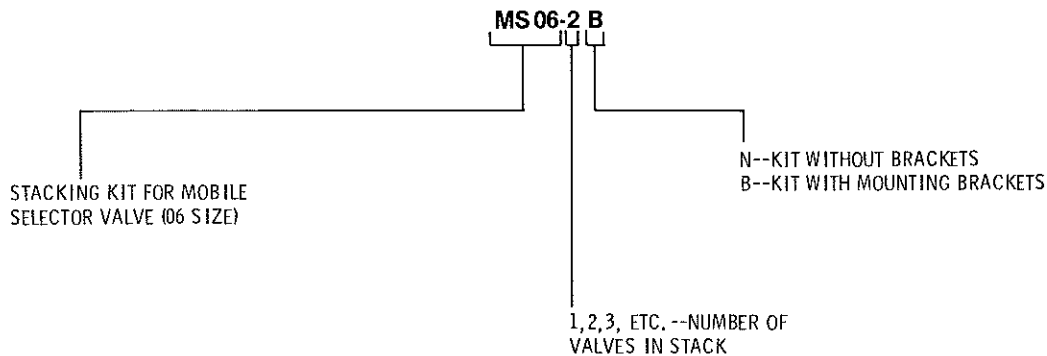
# HOW TO ORDER

## 3/8" CIRCUIT SELECTOR AND SERIES PARALLEL VALVE



\*EXTENDED MANUAL PUSH PINS & PALM BUTTONS ARE AVAILABLE

## STACKING KITS



STACKING KITS INCLUDE TIE BOLTS, ALL EXTERNAL & INTERNAL PLUGS AS NECESSARY. PORT FITTINGS AND ADAPTERS ARE NOT INCLUDED AND MUST BE ORDERED SEPARATELY.

**GRESEN®**



**GRESEN HYDRAULICS DIVISION • DANA CORPORATION**

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