

VDC/mADC INPUT, 3½ DIGIT LCD DPM
 "Flat Pack" No Panel Cut Out Required
 (NEMA 3 or NEMA 4X)

MODEL
 518



FLAT PACK

Features

- 1000 Meg. Input Impedance
- Auto Zero-Auto Polarity
- Single IC Construction
- Single Ended/Differential
- Low Power
- 50mV = 1000 Counts for DC Current Shunts
- 0.5" LCD
- MTBF: 80,000 Hours



SANITARY

D.C. VOLTS/AMPS

DESCRIPTION: The 518 contains only 13 components total. Its low power consumption makes it ideal for portable and high ambient light applications. The 518 uses a reflective type LCD Display with sharp black segments. Full scale adjustment has a range of ± 500 counts on its 12 turn potentiometer.

HOUSING: Otek's Flat Pack requires no panel cut out. Just drill a 10mm (3/8") \varnothing hole, pass the wires through, attach the provided double-sided tape (to prevent rotation), align the flat pack, tighten the nut and make the connections to the wires. No connector or tools required! No behind the panel space needed! The case is U.L. approved ABS Polycarbonate 94VO rated. **NEMA 4X housing option does not have access to the adjustments. If other than Otek's standard setting is required, please specify at the time of ordering.** Sanitary Housing is Wall, Pipe or Panel Mount and can have up to 2 flat packs installed, please specify.

POWER SUPPLIES: Externally mounted. Two types are available, the "Open Frame" style accepts 120/240VAC and delivers 5VDC at up to 400mADC. The "Power Pack" is a wall plug in module available only for 120VAC input and delivers 5VDC at up to 100mADC.

BACKLIGHT: Optional. When ordered the segments are black over an illuminated colored background (Positive Image).

SPECIFICATIONS AT 25°C

Accuracy and Linearity	$\pm 0.5\% \pm 1$ Digit
Maximum Input, Any Voltage Range	1000VDC
Maximum Input, Any Current Range	200%
Drift vs. Temperature	$\pm 0.05\% \text{ } ^\circ\text{C}$
Samples/Second	4 Nominal
Input Bias Current	5 pA
Input Impedance	1000 Meg. Nominal
Common Mode Voltage	2 Volts (Diff. Type)
Operating/Storage Temp	-10° to $+60^\circ\text{C}$ / -20° to $+70^\circ\text{C}$
Power Requirement	5VDC $\pm 10\%$ at 0.5mA
Decimal Points	Selectable
Display	3½ Digit 0.5" Reflective LCD
Backlight Power Requirement	20mA at 5VDC
MTBF	80,000 Hours
Sanitary Case	NEMA 4X up to 250°F Steam Cleaning

LEAD COLOR

TERMINAL DESCRIPTION

YELLOW	+ IN: Connect the most positive side of the signal input to indicate a positive reading with respect to -IN.
RED	+5VDC IN: Connect a +5VDC $\pm 10\%$ power supply with a 20mA source capability.
WHITE	- INPUT: Connect the most negative side of the input signal.
BLACK	GROUND: Return for +5VDC power source.
GREEN	SIGNAL COMMON: Connect to -IN for differential input; otherwise, do not connect to any other terminal.
VIOLET	DECIMAL POINT 1.XXX: This decimal point will illuminate when connected to Orange.
GRAY	DECIMAL POINT 1X.XX: This decimal point will illuminate when connected to Orange.
BROWN	DECIMAL POINT 1XX.X: This decimal point will illuminate when connected to Orange.
ORANGE	DECIMAL POINT COMMON: This terminal energizes the desired decimal point.
BLUE	DECIMAL POINT BACKPLANE: Connect undesired decimal points to this terminal.
NOTES:	
1.	Undesired decimal points must be connected to Blue.
2.	Desired decimal point must be connected to Orange.

ORDERING INFORMATION (11/1/00)

MODEL 5 1 8 - - - - 0 -

INPUT RANGE

- 0 200mV
 - 1 2V
 - 2 20V
 - 3 200V
 - 4 500V
 - 6 200µA
 - 7 2mA
 - 8 20mA
 - 9 200mA
 - \$ 50mV
- (50mV=1000 Counts)

BACKLIGHT

- 0 No Backlight
- 1 Red Backlight
- 2 Green Backlight

POWER INPUT (2)

- 0 5VDC
- 1 Open Frame 120/240VAC
- 2 Power Pack 120VAC(2)
- 3 7-32VDC

(1) See NEMA 4X note in "Housing" section above.

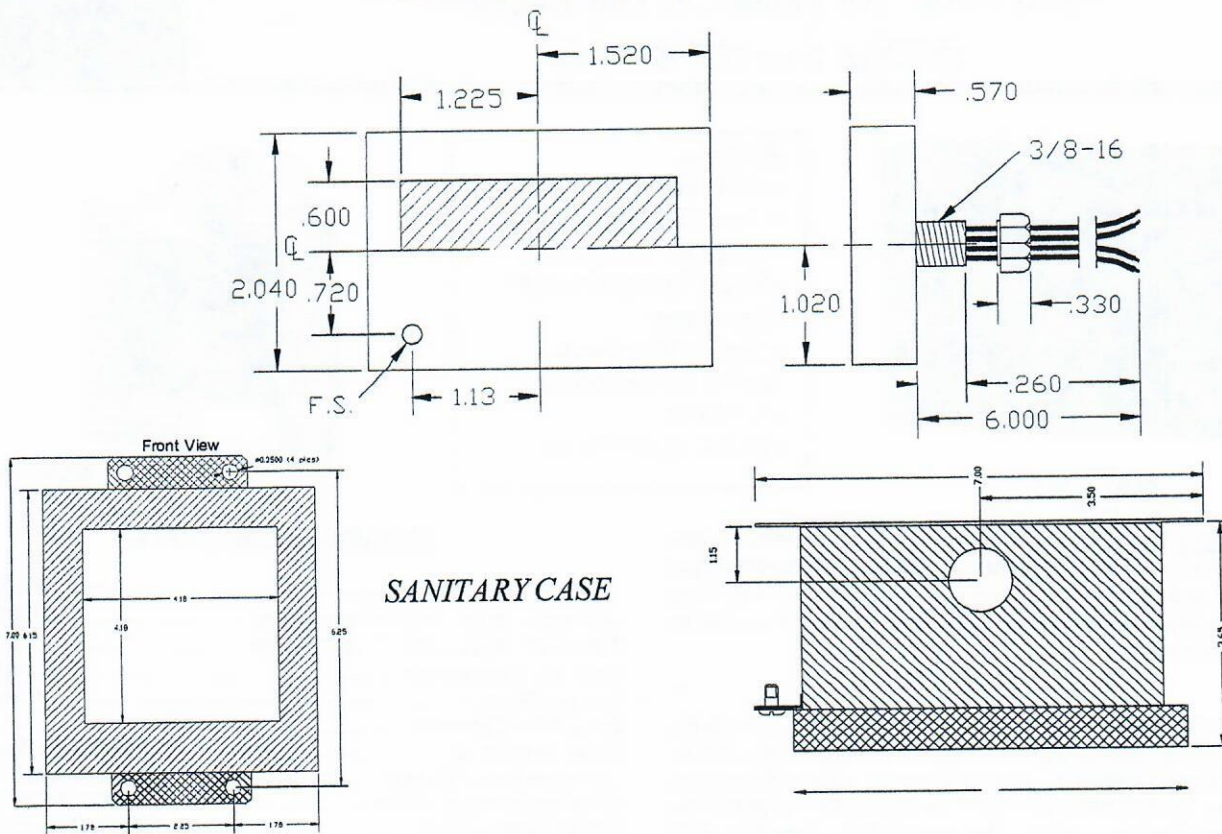
(2) See "Power Supplies" section above.

HOUSING (1)

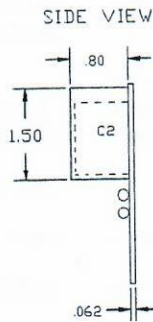
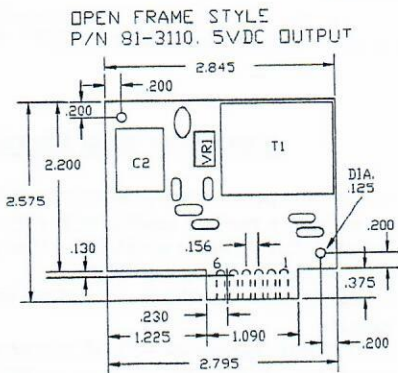
- 0 NEMA 3
- 1 NEMA 4X
- 2 Sanitary Case

518 FLATPACK MECHANICALS & TYPICAL CONNECTIONS

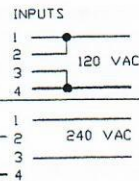
FLAT PACK W/WIRES



MECHANICALS FOR POWER SUPPLIES

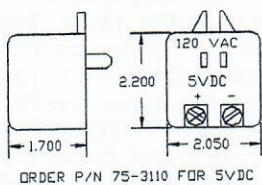


OPEN FRAME POWER SUPPLY TYPICAL CONNECTIONS

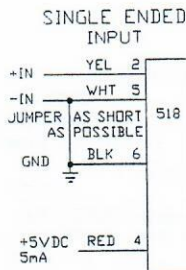


OUTPUTS P/N 81-3110, 5VDC OUT
5 - GROUND
6 +VCC

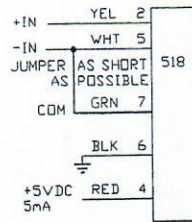
POWER PACK STYLE



518 TYPICAL CONNECTIONS



DIFFERENTIAL INPUT CMV ≤ 2 VOLTS



F#87MC518.DWG

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