

## **DP18 Series** Model DP18-P8

## **Process Indicator for Potentiometric**

Transducers

INSTRUCTION SHEET

M2116/1294



INSTRUMENT FOR USE WITH POTENTIOMETRIC TRANSDUCERS. THE READING CAN BE MODIFIED IN ENGINEERING UNITS. THEREFORE THE DISPLAY WILL SHOWS THE VALUE DESIRED.

THE NECCESARY REGULATED VOLTAGE (5 Vdc) FOR THE TRANSDUCER IS SUPPLIED FROM THE INSTRUMENT (FIG. 3), MAY BE USED POTENTIOMETERS WITH A RESISTANCE VALUE BETWEEN 200  $\Omega$  MINIMUM AND 10.000  $\Omega$  MAXIMUM.

#### **SPECIFICATIONS**

DISPLAYS...... 3 ½ digits, 7 segment, red LED

HEIGHT . . . . . . . . . . . 0.56" (14.2 mm.) SYMBOLS. ..... ± 1.8.8.8

..... Selectable by jumpers

DECIMAL POINTS . . . . . . . . . . . . . . . . . . Selectable by jumpers OVERRANGE INDICATION . . . . . . Display flashes 1999

INPUTCONFIGURATION . . . . . . Bipolar single ZERO ..... Automatic

CONVERTER . . . . . Dual-slope, average value

POLARITY..... ..... Automatic ± SIGNALINTEGRATION PERIOD ..... 80 ms.

READRATE ..... 3.12 / sec. HOLD ..... Optional

NOISE REJECTION NMR ..... 50 dB. 50/60 Hz.

WARMUP TO RATED ACCURACY 2 minutes
SPANTEMPCO

SPANTEMPCO ..... 100 ppm. ZEROTEMPCO . . . . . . . . . . . 2.5 μV/°C.

OPERATINGTEMPERATURE ...... 0 to 50 °C (32 to 122 °F) STORAGETEMPERATURE ..... -40 to 80 °C (-40 to 176 °F)

..... 310 gr. (0.68 lb)

ELECTRICALCONNECTIONS ...... Push-in cable connectors

BURN-IN . . . . . . . . . . . . . . . . . . 24 h. RECALIBRATION ..... 12 months.

 EXCITATIONOUTPUT
 5 Vdc.

 -OUTPUTCURRENT
 50 mA. max.

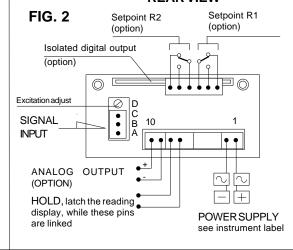
 -RIPPLE AT 50/60 Hz.
 0.2 % max.

# **FRONT VIEW** FIG. 1 I SPAN OFFSET

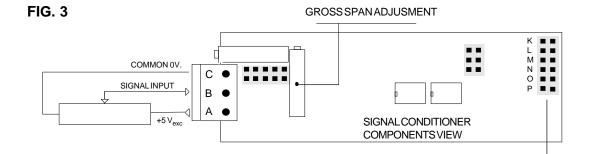
SPAN: ADJUST THE MAXIMUM READING. **OFFSET**: ZEROBALANCE

SPAN AND OFFSET ADJUSTMENT ARE ACCESSIBLE BEHIND THE LOW DOOR.

**REAR VIEW** 



## TRANSDUCER WIRING - SPAN AND OFFSET SELECTION



## SPAN AND OFFSET ADJUSTS (S3 SELECTOR)

CLOSE THE APPROPRIATE DECIMAL POINT JUMPER (FIG.5), CORRESPONDING TO THE READING DESIRED. FOR READING 14.50, PLACE THE JUMPER ON THE D2 POSITION.

SPANRANGE		OFFSETRAN	OFFSET		
DISPLAY	CLOSE JUMPER	COUNTS	CLOSE JUMPER	+	
0 to 1.000	К	0 to 500	Р		
1.000 to 2.000		500 to 1.000		0	М
2.000 to 4.000	L	1.000 to 1.999	N		



#### **OPTIONS AND POWER SUPPLIES AVAILABLE FOR DP18 Series**

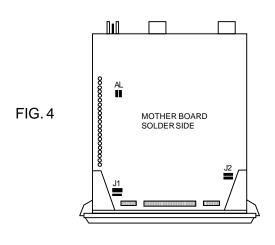
#### CONTROLOUTPUT/COMMUNICATIONSOPTIONS Select a maximum of one option from each column

OPTION	DESCRIPTION	OPTION	DESCRIPTION
BCD R1 R2 APH1 232	PARALLEL BCD, OPTOISOLATED SINGLE SETPOINT, 3 Amp. Relay DUAL SETPOINT, 3 Amp: Relays ANALOG PEAK HOLD ISOLATED SERIAL OUTPUT RS-232	A01 A02 A03 APH2	ANALOG OUTPUT, MA SINK ANALOG OUTPUT, MA SOURCE ANALOG OUTPUT, VOLTAGE ANALOG PEAK HOLD

#### **POWER SUPPLY OPTIONS**

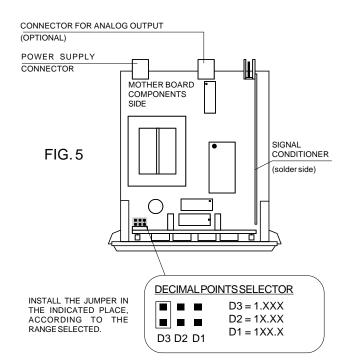
OPTION	POWER	OPTION	POWER
230 STD 24 48	230 Vac 50/60 Hz 115 Vac 50/60 Hz 24 Vac 50/60 Hz 48 Vac 50/60 Hz	15/30 Vdc 24/65 Vdc	1530 Vdc10% (3.5 W) isolated 2465 Vdc (4 W) isolated

#### **SELECTION OF: DECIMAL POINTS AND SPECIAL OPTIONS**



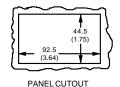
#### JUMPERS SELECTION FOR SPECIAL OPTIONS

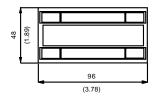
- $\begin{array}{lll} \textbf{AL:} \ OPEN \ ONLY \ WHEN \ ALARM \ SETPOINT \ CARD \ OPTION \ IS \ ADDED \\ \textbf{J1:} \ OPEN \ TO \ ELIMINATE \ THE \ LEAST-SIGNIFICANT \ DIGIT(LSD) \\ \textbf{J2:} \ OPEN \ TO \ ELIMINATE \ THE \ INDICATION \ \pm \end{array}$

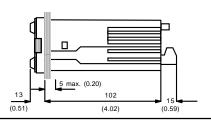


#### **MECHANICAL DIMENSIONS mm (in)**









### WARRANTY/DISCLAIMER

OMEGA warrants this unit to be free of defects in materials and workmanship and to give OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 13 months from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current; heat; moisture or vibration; improper specification; misasplication; misuse or other operating conditions outside of OMEGA's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses and triacs.

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# **MEGA**

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#### RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. P.O. number under which the product was PURCHASED.
- Model and serial number of the product
- under warranty, and Repair instructions and/or specific prob-lems relative to the product.
- FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
- P.O. number to cover the COST of the
- Model and serial number of product, and Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is

OMEGA's point yis to make turning changes, internote changes, wherever armiprovements possible. This affords our customers the latest in technology and engineering.

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