



DP18 Series

Models DP18- P1 /-P2 /-P3 /-P4 /-P5 /-P6

Process Indicator

INSTRUCTION SHEET

M2112/0297



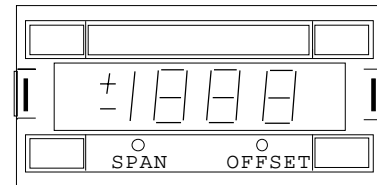
SPECIFICATIONS

DISPLAYS	3 1/2 digits, 7 segment, red LED.
HEIGHT	14.2 mm, (0.56")
DECIMAL POINTS	Selectable by jumpers.
OVERRANGE INDICATION	Display flashes: 1999.
INPUT CONFIGURATION	Bipolar single.
ZERO	Automatic.
CONVERTER	Dual slope, average value.
POLARITY	Automatic ±.
SIGNAL INTEGRATION PERIOD	80 ms.
READ RATE	3.12 / sec.
RANGES	See table fig.3.
HOLD	Optional.
NOISE REJECTION N.M.R.R.	50 dB.
ACCURACY	0.15% ± 1 count.
WARMUP TO RATED ACCURACY	2 minutes.
SPAN TEMPCO	100 p.p.m.
ZERO TEMPCO	2.5 μV / °C.
OPERATING TEMPERATURE	0 to 50°C. (32 to 122°F)
STORAGE TEMPERATURE	-40 to 80°C. (-40 to 176°F)
WEIGHT	310 gr. (0.68 lb)
CASE MATERIAL	ABS, black color, DIN 43700.
STANDARD POWER	115 Vac., ±10% 50/60 Hz.
POWER CONSUMPTION	5.5 VA in AC. / 3.5 W in DC.
ELECTRICAL CONNECTIONS	Screw-clamp connectors.
BURN-IN	48 hours.
RECALIBRATION	12 months.
EXCITATION OUTPUT:	Adjustable from 10 to 24 Vdc.
-OUTPUT CURRENT	50 mA. max.
-RIPPLE AT 50/60 Hz	0.2% max.

INSTRUMENT FOR READING PROCESS SIGNALS IN D.C. WITH AN EXCITATION OUTPUT FOR TRANSDUCERS AND TRANSMITTERS. THE AVAILABLE INPUTS ARE:

IN VOLTAGE : 0-1 Vdc, 0-5 Vdc, 1-5 Vdc.
 IN CURRENT : 0-1 mA, 0-5 mA, 1-5 mA, 0-20 mA, 4-20 mA, 0-50 mA, 10-50 mA dc.

FIG. 1 FRONT VIEW



SPAN: ADJUST THE MAXIMUM READING.
OFFSET: ZERO BALANCE

SPAN AND OFFSET ADJUSTMENT ARE ACCESSIBLE BEHIND THE LOW DOOR.

FIG. 2 REAR VIEW

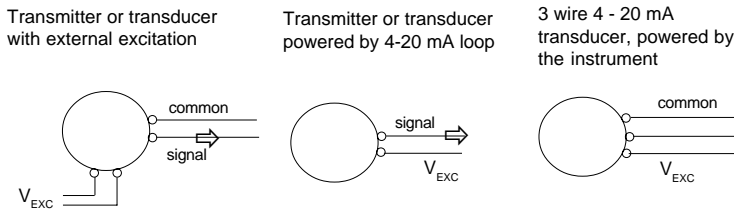
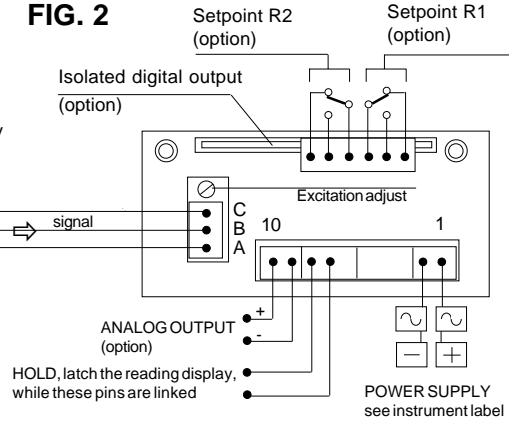
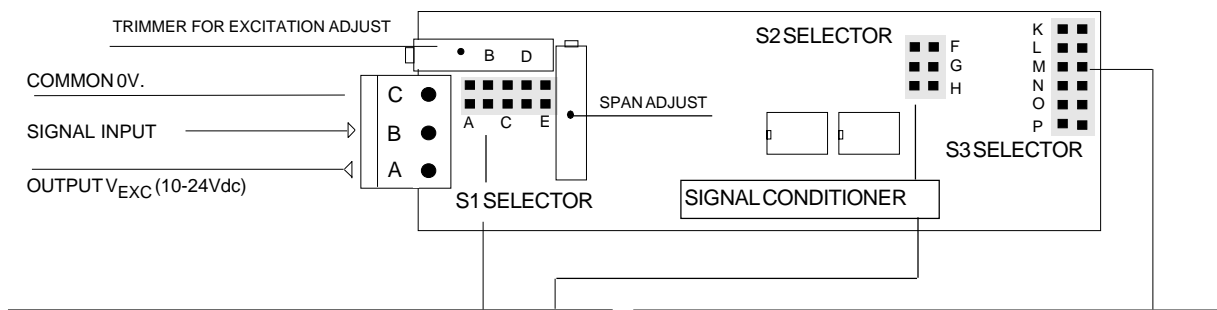


FIG. 3

INPUT, SPAN AND OFFSET SELECTIONS.



ADJUSTS ACCORDING TO THE INPUT TYPE (S1-S2, SELECTORS)

MODEL	SIGNAL INPUT	CLOSE JUMPERS	INPUT IMPEDANCE	MAXIMUM CURRENT
DP18-P1	0-1 V.	E,G	1.1MΩ	----
DP18-P2	0-5 V.	E,F,G	1.1MΩ	----
	1-5 V.	E,F	1.1MΩ	----
DP18-P3	0-1 mA	A,D,G	100Ω	35 mA
DP18-P4	0-5 mA	A,D,F,G	100Ω	35 mA
	1-5 mA	A,D,F	100Ω	35 mA
DP18-P5	0-20 mA	A,C,F,G	24.9Ω	70 mA
	4-20 mA	A,C,F	24.9Ω	70 mA
DP18-P6	0-50 mA	A,B,F,G	10Ω	100 mA
	10-50 mA	A,B,F	10Ω	100 mA

SPAN AND OFFSET ADJUSTS (S3 SELECTOR)

SPAN RANGE		OFFSET RANGE		OFFSET	
DISPLAY	CLOSE JUMPER	COUNTS	CLOSE JUMPER	+	-
0 to 1.000	K	0 to 500	P	O	M
1.000 to 2.000	---	500 to 1.000	---		
2.000 to 4.000	L	1.000 to 1.999	N		

This signal conditioner can be configured for other signal inputs, which must be displayed in engineering units. An offset adjustment may be necessary.



OPTIONS AND POWER SUPPLIES AVAILABLE FOR DP18 Series

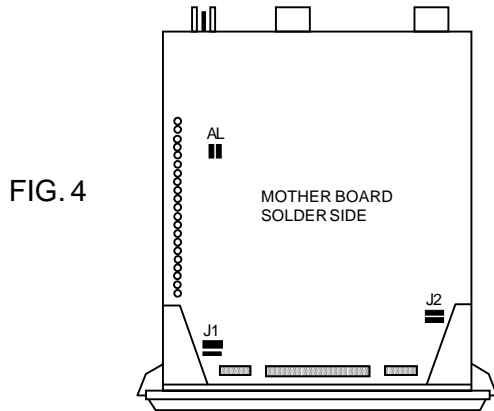
CONTROL OUTPUT/COMMUNICATIONS OPTIONS
Select a maximum of one option from each column

POWER SUPPLY OPTIONS

Table with 4 columns: OPTION, DESCRIPTION, OPTION, DESCRIPTION. Lists options like BCD, R1, R2, APH1, 232 and their descriptions.

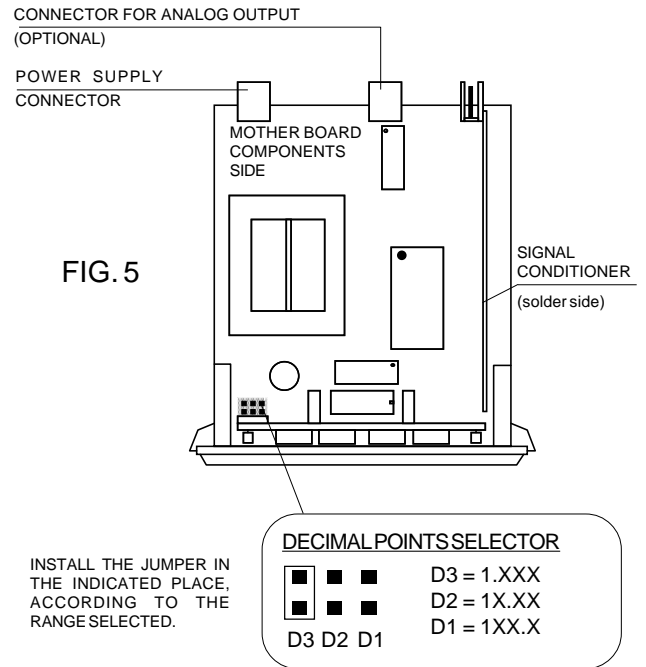
Table with 4 columns: OPTION, POWER, OPTION, POWER. Lists power supply options like 230, STD, 24, 48 and their specifications.

SELECTION OF : DECIMAL POINTS AND SPECIAL OPTIONS



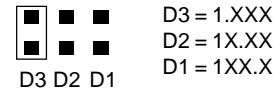
JUMPERS SELECTION FOR SPECIAL OPTIONS

AL: OPEN ONLY WHEN ALARM SETPOINT CARD OPTION IS ADDED
J1: OPEN TO ELIMINATE THE LEAST-SIGNIFICANT DIGIT (LSD)
J2: OPEN TO ELIMINATE THE INDICATION ±



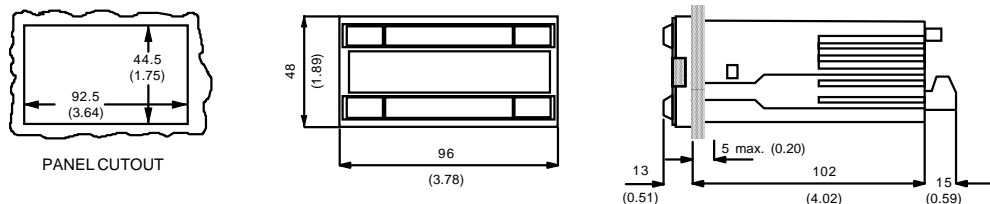
INSTALL THE JUMPER IN THE INDICATED PLACE, ACCORDING TO THE RANGE SELECTED.

DECIMAL POINTS SELECTOR



MECHANICAL DIMENSIONS mm (in)

FIG. 6



WARRANTY/DISCLAIMER

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 is pleased to offer suggestions on the use of its various products. However OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products.

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CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity;



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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.

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

- 1. P. O. number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

- 1. P. O. number to cover the COST of the repair,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

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