

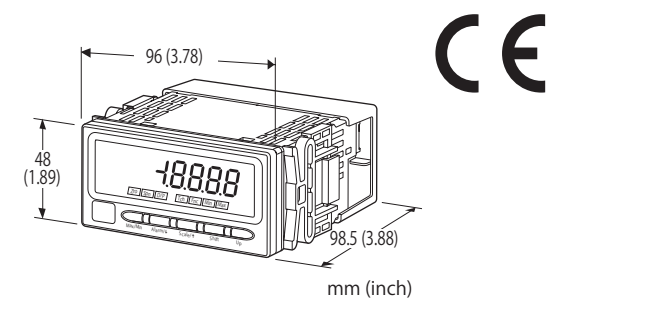
Digital Panel Meters 47 Series

DC INPUT DIGITAL PANEL METER

(4 1/2 digit, process meter, LED display type)

Functions & Features

- 4 ½ digit DC input digital panel meter
- 1/8 DIN size
- Moving average function to suppress the display flickering
- Scaling, forced zero, low-end cutout
- Max. and Min. value display
- Safety terminal cover tethered to the device with a strap
- IP66 front panel
- Separable terminal block



MODEL: 47LYV-[1][2]-[3][4]

ORDERING INFORMATION

- Code number: 47LYV-[1][2]-[3][4]
- Specify a code from below for each of [1] through [4].
(e.g. 47LYV-AR-M2/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01/SET)

[1] INPUT

Current

A: 4 - 20 mA DC (Input resistance approx. 10 Ω)

D: 0 - 20 mA DC (Input resistance approx. 10 Ω)

Voltage

5: 0 - 5 V DC (Input resistance 1 MΩ min.)

6: 1 - 5 V DC (Input resistance 1 MΩ min.)

4W: -10 - +10 V DC (Input resistance 1 MΩ min.)

5W: -5 - +5 V DC (Input resistance 1 MΩ min.)

[2] DISPLAY COLOR

R: Red

YR: Orange

[3] POWER INPUT

AC Power

M2: 100 - 240 V AC (Operational voltage range 85 - 264 V, 50/60 Hz)

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

P: 110 V DC

(Operational voltage range 85 - 150 V, ripple 10 %p-p max.)

[4] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to M-System's web site.)

Moving parts and indicators are not coated.

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

TERMINAL SCREW MATERIAL

/S01: Stainless steel

EX-FACTORY SETTING

/SET: Preset according to the Ordering Information Sheet

(No. ESU-9514)

GENERAL SPECIFICATIONS

Construction: Panel flush mounting

Degree of protection: IP66; applicable to the front of the panel meter mounted according to the specified panel cutout

Connection: M3 separable screw terminal (torque 0.6 N·m)

Screw terminal: Nickel-plated steel (standard) or stainless steel

Housing material: Flame-resistant resin (gray)

Isolation: Input to power

Setting: (Front button)

- Scaled range
- Moving average
- Others

(Refer to the instruction manual for details)

Read rate: 40 times/sec. (25 msec.)

Averaging: None or moving average

Lockout setting: Prohibiting certain operations; protecting settings

DISPLAY

Display: 16 mm (.63) high, 4 ½ digits, 7-segment LED

Display range: -19999 to 19999

Decimal point position: 10⁻¹, 10⁻², 10⁻³, 10⁻⁴ or none

Zero indication: Higher-digit zeros are suppressed.

Over-range indication: '-19999' or '19999' blinking for display values out of the display range.

'S.ERR' and 'Min' or 'Max' blinking when the input signal is

out of the usable range.

Finger protection (VDE 0660-514)

Function indicators:

Zro, Spn, D/P, Tch, Fnc, Min, Max

Display mode status and operation status, amber ON or blink

Engineering unit indication: Sticker label attached

DC, AC, mV, V, kV, μ A, mA, A, kA, mW, W,
kW, var, kvar, Mvar, VA, Hz, Ω , k Ω , M Ω ,
cm, mm, m, m/sec, mm/min, cm/min, m/min,
m/h, m/s², inch, l, l/s, l/min, l/h, m³, m³/sec,
m³/min, m³/h, Nm³/h, N·m, N/m², g, kg, kg/h,
N, kN, Pa, kPa, MPa, t, t/h, °C, °F, %RH, J,
kJ, MJ, rpm, sec, min, min⁻¹, pH, %, ppm, etc.

INPUT SPECIFICATIONS

■ **DC Current:** Input resistor incorporated

Measurable range: -10 - +110 %

■ **DC Voltage**

Measurable range: -10 - +110 %

INSTALLATION

Power consumption

•AC: Approx. 4 VA

•DC: Approx. 2 W

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Panel flush mounting

Weight: 250 g (0.55 lb)

PERFORMANCE

Accuracy: $\pm 0.1\%$ ± 1 digit

Temp. coefficient: $\pm 0.015\%$ /°C ($\pm 0.008\%$ /°F)

Input resolution: 16 bits

Line voltage effect: $\pm 0.1\%$ over voltage range

Insulation resistance: $\geq 100\text{ M}\Omega$ with 500 V DC

Dielectric strength: 2000 V AC @ 1 minute

(input to power to ground)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

Low Voltage Directive

EN 61010-1

Installation Category II

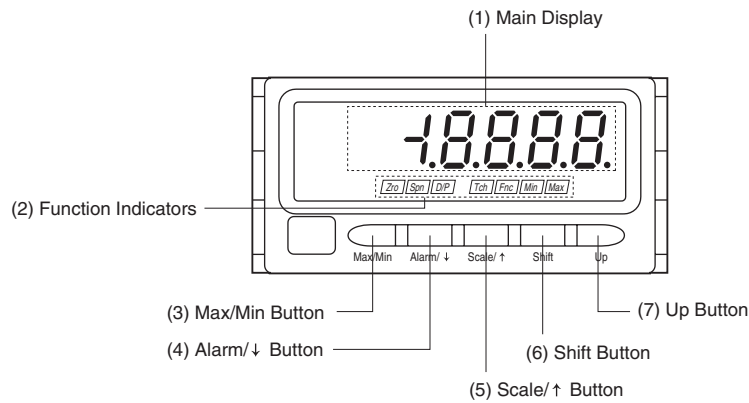
Pollution Degree 2

Input to power: Reinforced insulation (300 V)

RoHS Directive

Protection against access to the terminal blocks:

EXTERNAL VIEW



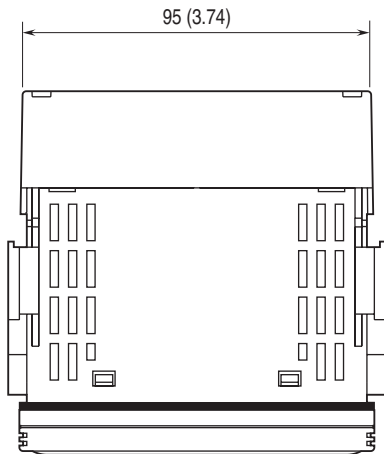
• COMPONENT IDENTIFICATION

No.	COMPONENT	FUNCTION
(1)	Main display	Indicates present values, setting values and status of the unit.
(2)	Function indicators	Indicate setting modes and status.
(3)	Max/Min button	Used to switch the main display to show present values, maximum values or minimum values.
(4)	Alarm/↓ button	Used to shift through setting items in each setting mode.
(5)	Scale/↑ button	Used to move on to the scaling and other setting modes; or to shift through setting items in each setting mode.
(6)	Shift button	Used to move on to the setting standby status and shift through display digits in each setting mode.
(7)	Up button	Used to execute/cancel Forced Zero, or to choose setting value in each setting mode.

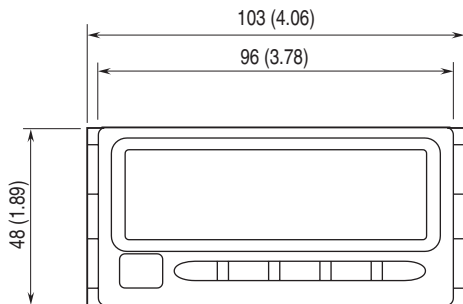
Note: Refer to the operating manual for details on each function.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)

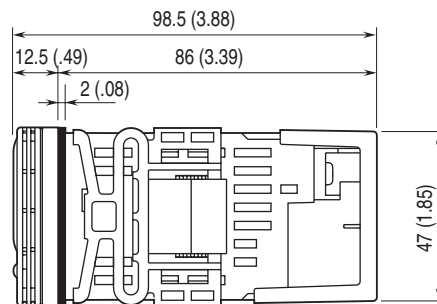
■ TOP VIEW



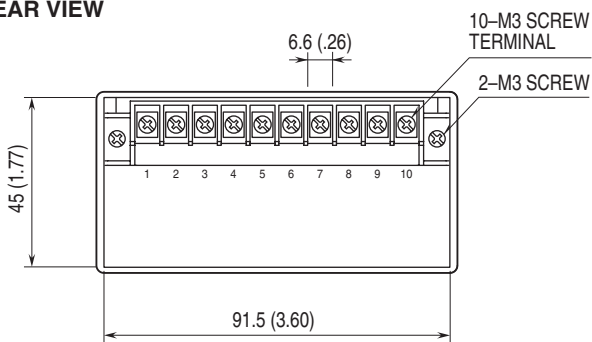
■ FRONT VIEW



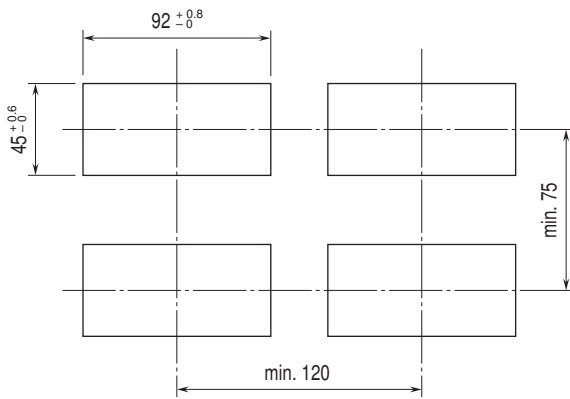
■ SIDE VIEW



■ REAR VIEW

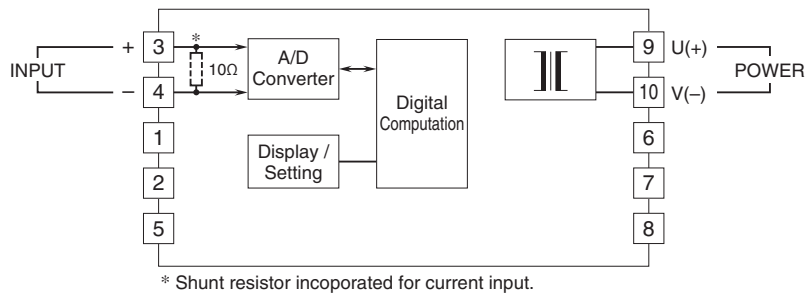


MOUNTING REQUIREMENTS unit: mm



Panel thickness: 1.6 to 8.0 mm

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.