

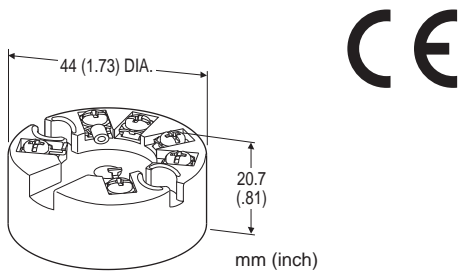
Head-mounted Two-wire Signal Conditioners 27-UNIT

POTENTIOMETER TRANSMITTER

(PC programmable)

Functions & Features

- I/O range programming via PC Configurator
- Self diagnostics
- Low temperature drift



MODEL: 27PM-0[1]

ORDERING INFORMATION

- Code number: 27PM-0[1]
- Specify a code from below for [1].
(e.g. 27PM-0/M)

SAFETY APPROVAL

0: None

[1] OPTIONS

Function Monitor LED

Blank: Without

/M: With

RELATED PRODUCTS

- USB interface Bell202 modem (model: COP-HU)
Usable in 'non-hazardous' area only.
- PC configurator software (model: 27MCFG)
Downloadable at M-System's web site.

GENERAL SPECIFICATIONS

Construction: Sensor head-mounting
Connection: M3 screw terminals (torque 0.5 N·m)
Screw terminal: Nickel-plated brass
Isolation: Input to output
Housing material: Flame-resistant resin (black)
Function monitor LED: Input status and error status are displayed by blinking mode.

User-configurable items: PC and the transmitter are connected with the COP-HU.

- Input range
- Burnout
- Output limits (Upper / Lower)
- Damping time
- Linearization
- Output calibration
- Loop test output

INPUT SPECIFICATIONS

■ **Potentiometer:** 100 Ω - 10 kΩ
Minimum span: 10 % of total resistance
Excitation: 2.5 V DC (43.2 kΩ connected in serial)

OUTPUT SPECIFICATIONS

Output range: 4 - 20 mA DC
Operational range: 3.75 - 23 mA
Load resistance vs. supply voltage:
 Load Resistance (Ω) = (Supply Voltage (V) - 9 (V)) ÷ 0.023 (A) (including leadwire resistance)
Burnout: 3.75 - 3.8 mA or 21.5 - 23 mA (factory set to 23 mA)
Upper output limit proportional to the input:
 20 - 21.5 mA (factory set to 21.5 mA)
Lower output limit proportional to the input:
 3.8 - 4 mA (factory set to 3.8 mA)
Update time: 440 msec.

INSTALLATION

Supply voltage
 • DC: 9 - 35 V DC
Operating temperature: -40 to +85°C (-40 to +185°F)
Operating humidity: 0 to 95 %RH (non-condensing)
Mounting: Head-mounting (DIN type B head)
Weight: 50 g (1.76 oz)

PERFORMANCE in percentage of span

Accuracy: 0.05 % × 100 % of full scale / Input range (%)
Temp. coefficient: 0.0075 %/°C (0.004 %/°F)
Response time: ≤ 2 sec. (0 - 90 %) with damping time set to 0
Burnout response time: ≤ 2 sec.
Supply voltage effect: ±0.01 % of span/V
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength: 1500 V AC @1 minute (input to output)

STANDARDS & APPROVALS

CE conformity:
 EMC Directive (2004/108/EC)



幸託有限公司
XIN TOP CORPORATION

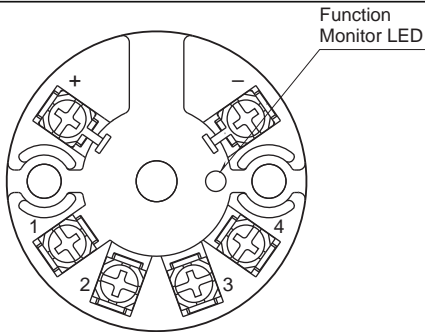
TEL : (02)2598-1199
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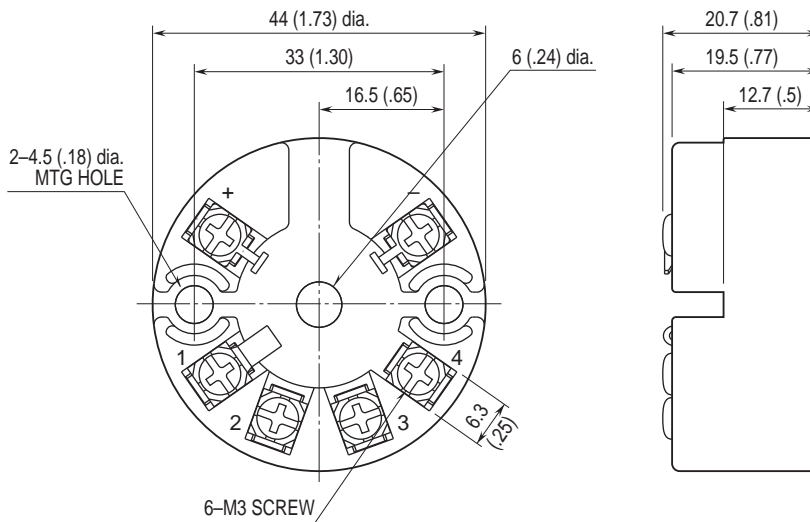
EMI EN 61000-6-4: 2007/A1: 2011

EMS EN 61000-6-2: 2005

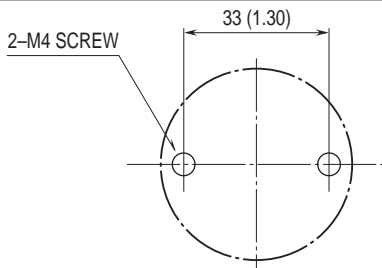
FUNCTION MONITOR LED (option /M)



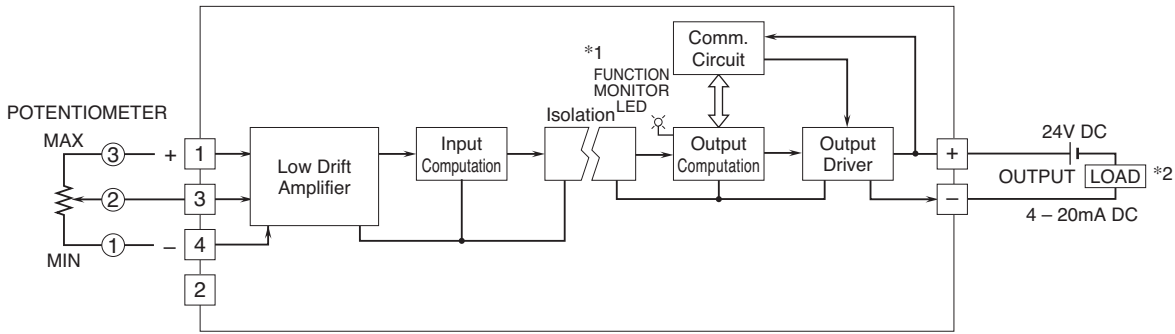
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



MOUNTING REQUIREMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1. Option /M

*2. Limited to 250 – 500Ω when using the communication to configure the module.



Specifications are subject to change without notice.

