

Plug-in Signal Conditioners M-UNIT

SELF-SYNCH TRANSMITTER

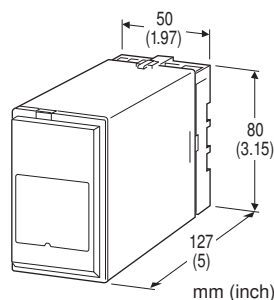
(field-programmable)

Functions & Features

- Converting position signal from a self-synchronizing motor into DC signal proportional to the rotating shaft position
- Micro-processor based
- Linearization
- Loop testing via hand-held programmer PU-2x
- Offset adjustable via front multi-turn screwdriver adjustment
- High-density mounting

Typical Applications

- Position indicator using self-synch
- Tank gauge
- Sounding level meter



MODEL: JS-1[1]-[2][3]

ORDERING INFORMATION

- Code number: JS-1[1]-[2][3]
- Specify a code from below for each [1] through [3]. (e.g. JS-1A-B/Q)
- Input range (e.g. 270°)
- Special output range (For codes Z & 0)
- Use Ordering Information Sheet (No. ESU-1669) to specify linearization data when the I/O signals are nonlinear.
- Specify the specification for option code /Q (e.g. /C01/S01)

INPUT

1: Self-synch signal

[1] OUTPUT

Current

- A: 4 - 20 mA DC (Load resistance 750 Ω max.)
- B: 2 - 10 mA DC (Load resistance 1500 Ω max.)
- C: 1 - 5 mA DC (Load resistance 3000 Ω max.)

- D: 0 - 20 mA DC (Load resistance 750 Ω max.)
- E: 0 - 16 mA DC (Load resistance 900 Ω max.)
- F: 0 - 10 mA DC (Load resistance 1500 Ω max.)
- G: 0 - 1 mA DC (Load resistance 15 k Ω max.)
- Z: Specify current (See OUTPUT SPECIFICATIONS)

Voltage

- 1: 0 - 10 mV DC (Load resistance 10 k Ω min.)
- 2: 0 - 100 mV DC (Load resistance 100 k Ω min.)
- 3: 0 - 1 V DC (Load resistance 1000 Ω min.)
- 4: 0 - 10 V DC (Load resistance 10 k Ω min.)
- 5: 0 - 5 V DC (Load resistance 5000 Ω min.)
- 6: 1 - 5 V DC (Load resistance 5000 Ω min.)
- 4W: -10 - +10 V DC (Load resistance 10 k Ω min.)
- 5W: -5 - +5 V DC (Load resistance 5000 Ω min.)
- 0: Specify voltage (See OUTPUT SPECIFICATIONS)

[2] POWER INPUT

AC Power

- B: 100 V AC
- C: 110 V AC
- D: 115 V AC
- F: 120 V AC
- G: 200 V AC
- H: 220 V AC
- J: 240 V AC

[3] 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.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

TERMINAL SCREW MATERIAL

- /S01: Stainless steel

RELATED PRODUCTS

- JX configurator connection kit (model: JXCON)
- Programming Unit (model: PU-2x)

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals

Screw terminal: Chromated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output to power

Offset adjustment: 0 to 360°(front)



幸託有限公司
XIN TOP CORPORATION

TEL : (02)2598-1199

FAX : (02)2596-2331

E-mail : info@xintop.com

Website : www.xintop.com

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

Linearization: 16 points max. within the range of -15.00 - +115.00 % input or output; represented as percentage of full-scale

Adjustments: Programming Unit (model: PU-2x); input range, offset, linearization data, zero and span, input angle & coordinates, etc.

(Refer to the users manual of JXCON for the adjustments configurable with JXCON.)

INPUT SPECIFICATIONS

Input: Self-synch signal

Measurement range: 0 - 360°

Input range: 60 - 360° (270° for default)

Input resistance: 1 MΩ min.

Rated input voltage: 90 V AC

OUTPUT SPECIFICATIONS

■ **DC Current:** 0 - 20 mA DC

Minimum span: 1 mA

Offset: Max. 1.5 times span

Load resistance: Output drive 15 V max.

■ **DC Voltage:** -10 - +20 V DC

Span: Min. 5 mV, max. 20 V

Offset: Max. 1.5 times span

Load resistance: Output drive 1 mA max.; at ≥ 0.5 V

INSTALLATION

Power input

•**AC:** Operational voltage range: rating ±10 %, 50/60 ±2 Hz, approx. 3 VA

Operating temperature: -5 to +55°C (23 to 131°F)

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

Mounting: Surface or DIN rail

Weight: 350 g (0.77 lb)

PERFORMANCE in percentage of span

Accuracy: ±0.2 % or ±0.5°, whichever is greater (gain ≤ 1)
accuracy = [±0.2 % (±0.5°) × gain] with the gain ≥ 1

Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

Response time: Approx. 2 sec. (0 - 90 %)

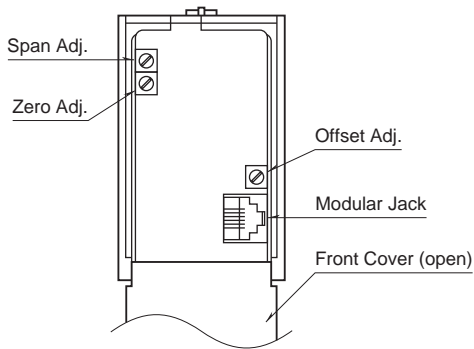
Line voltage effect: ±0.1 % over voltage range

Insulation resistance: ≥ 100 MΩ with 500 V DC

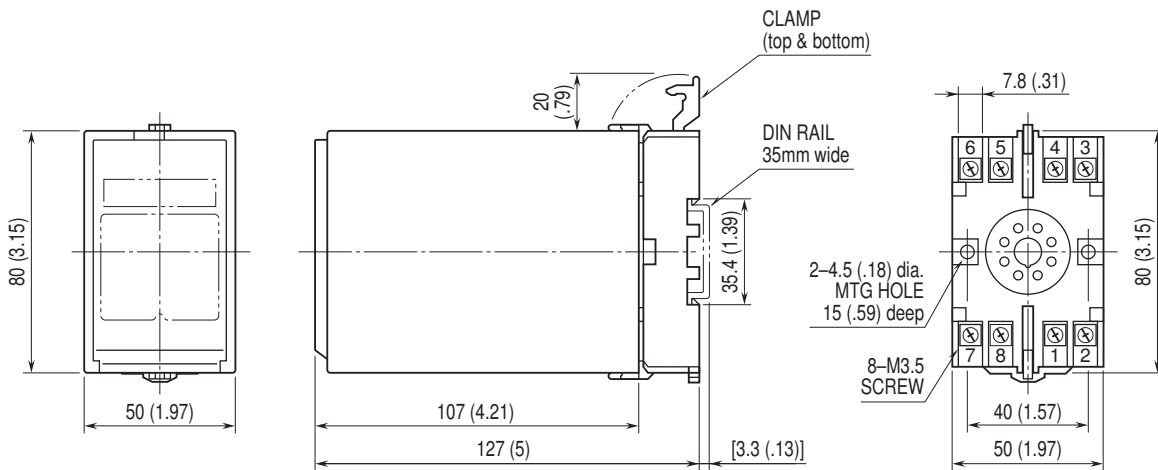
Dielectric strength: 2000 V AC @1 minute (input to output to power to ground)



EXTERNAL VIEW

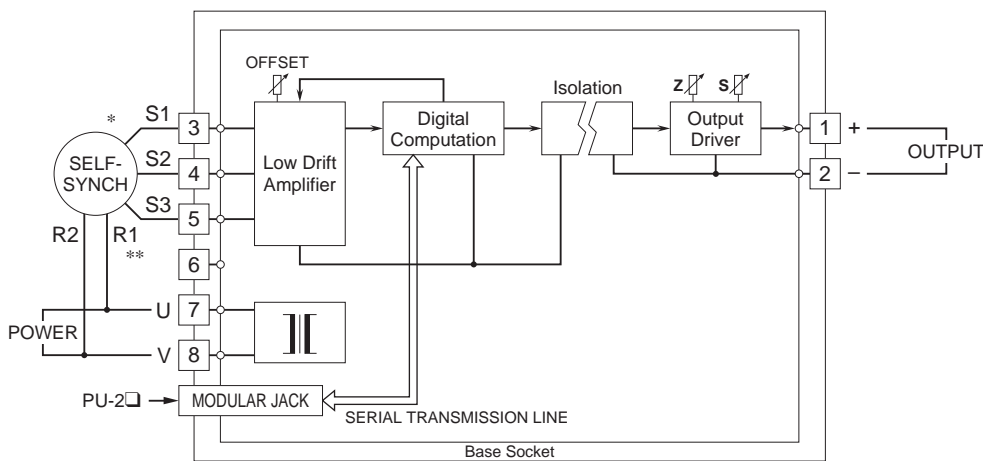


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



• When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



- * The output increases when the self-synch rotates clockwise. For changing the operation to counterclockwise, replace the connection of the S2 and S3.
- **Be sure that the polarity of the power input to the JS matches to the self-synch input polarity. When the connection is reversed, the JS output will be shifted by 180°.



Specifications are subject to change without notice.



幸託有限公司
XIN TOP CORPORATION

TEL : (02)2598-1199
FAX : (02)2596-2331

E-mail : info@xintop.com
Website : www.xintop.com