



JK7000A1 JK7000A2

Isolated analog transmitters for potentiometer JK7000A1, JK7000A2 are designed to provide simple solution for all transmissions problems and signals isolation.

This transducers range is designed in JM Concept unit unplugged from its rail DIN base.

Use of components that are efficient in a wide temperature ensures a very high level of reliability and very low thermal drift.



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JK7000A

To provide solutions for potentiometer isolation and transmission problems, JM Concept has designed 2 potentiometer analogue transmitters :

- JK7000A1 : Input potentiometer transmitter, 1 current or voltage output.
- JK7000A2 : Input potentiometer transmitter, 2 separated non isolated current and/or voltage output.

TECHNICAL CHARACTERISTICS

INPUT CHARACTERISTICS

POTENTIOMETER INPUT

Value range All potentiometers from 0-100 Ohms to 0-100 kOhms

OUTPUT CHARACTERISTICS

OUTPUT 1 IN CURRENT 0/20 mA ; 4/20 mA

OUTPUT 1 IN VOLTAGE 0/10V

OUTPUT 2 IN CURRENT (JK7000A2) 0/20 mA ; 4/20mA

OUTPUT 2 IN VOLTAGE (JK7000A2) 0/10V ; +/-10V

OTHER CHARACTERISTICS

INPUT IMPEDANCE

Potentiometer input 2,5Vdc

OUTPUT IMPEDANCE

Current output 1 < 900Ω

Voltage output 1 4.7KΩ

Output 2 in current (JK7000A2) < 650Ω

Output 2 in Voltage (JK7000A2) > 4.7KΩ

TECHNICAL CHARACTERISTICS

Precision class < 0.10

Current output residual ripple < 20μA

Voltage output residual ripple < 20mV

Response time < 20ms – other on demand

Thermal drift < 50ppm

ISOLATION

Power supply / input 2500Vac - 1mn - 50Hz

Power supply / output 1 2500Vac - 1mn - 50Hz

Power supply / output (JK7000A2) 2500Vac - 1mn - 50Hz

Input / Output 1 2500Vac - 1mn - 50Hz

Input / Output 2 (JK7000A2) 2500Vac - 1mn - 50Hz

Output / Output 2 (JK7000A2) no isolation

AUXILIARY SOURCE

Universal Auxiliary source 20Vdc/370Vdc & 80Vac/256Vac

Option 20Vac/60Vac



TECHNICAL CHARACTERISTICS

CONSUMPTION

Maximal consumption < 4VA < 4VA

TEMPERATURE

Operating temperature -10°C / +60°C
Storage temperature -25°C / +80°C

PROTECTION

Protection index IP20 IP20

CASE

Case Self extinguishable black polyamide ULV0

OPTIONS REFERENCES

| OPTIONS | PRODUCT CODE |
|--|--------------------------|
| Passive output option 15V < U < 36V - 0/4/20mA | JKPASS1 - 2 |
| Varnish option | JK700XAX-T ou JK700XAX-T |
| Supply option 20Vac/60Vac | JK7009AX ou JK7009AX |

CONFIGURATION - WIRING - DIMENSIONS

OUTPUTS ADJUSTEMENT

- On front face, output 1 is marked S1, output 2 is marked S2 (version JK7000A2).
- Outputs are independent one from the other, then beginning and full scale of each output are independently adjustable.

Outputs selection :

- Select with output switch (JK7000A2), chosen output type.

Adjustment principle :

- Wire on input terminals, a potentiometer value between 0-100 Ohms to 0-100 kOhms.
- Wire on output terminals to adjust, a multimeter in current or in voltage, according to chosen output.
- Set input potentiometer on low position.
- Adjust with potentiometer called « OFFSET » bottom output scale.
- Set input potentiometer on high position.
- Adjust with potentiometer « SCALE » top output scale.

Start again successively these 2 operations as much as it is necessary until you have low and high right scale values.

Factory configuration :

- JK7000A1 transmitters are configured exit factory : Output : 4/20mA.
- JK7000A2 transmitters are configured exit factory : Ouptut 1 /Output 2 : 4/20mA.

CONFIGURATION - WIRING - DIMENSIONS

OUTPUT 2 CONFIGURATION SWITCH

A switch located under the transmitter allows output 2 configuration.

| | INPUT SWITCH | | | |
|----------------|--------------|---|---|---|
| | 1 | 2 | 3 | 4 |
| OFF | | | ● | |
| ON | | | ● | |
| 0/20mA Current | | | ● | |
| 4/20mA Current | | | ● | |
| 0/10V Voltage | | ● | | |
| +/-10 Voltage | ● | | | |

POTENTIOMETER INPUT WIRINGS



OUTPUT WIRING



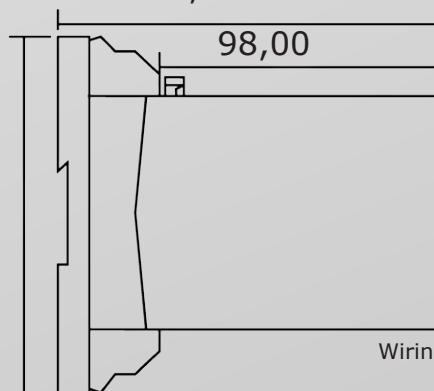
DIMENSIONS AND TERMINALS

BASELINE
screw or spring

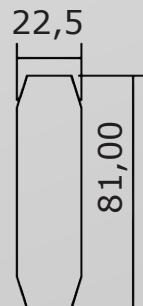


121,50

133,50



22,5mm CASE



Wiring base has to be separately ordered.

TA14-ENG- Non contractual datasheet.
Subject to change without notice