

# 2 WIRE TRANSMITTERS

## AC CURRENT



### SELECTION GUIDE

M700-AL1 2 Wire transmitter, ave. sensing, RMS calibrated.

### TYPICAL APPLICATIONS

The M700 series are 2 wire transmitters.

The M700-AL1 converts the A.C. Input current signal to a 4-20mA D.C. Output. The output is directly proportional to the input signal.

2 Wire transmitters like the M700-AL1, obtain the power to operate from the 4-20mA output circuit to which they are connected, and therefore require no separate auxiliary supply. The M700-AL1 is average sensing RMS calibrated current transmitter.

2 Wire transmitters have an advantage over conventional auxiliary powered transducer, because no separate auxiliary is required, savings in the cost of providing a separate auxiliary supply and wiring are made.

The above units are used to measure current in energy management systems, switchboards, generator and telemetry controls. Isolation of 4kV is provided between the input and output signal, allowing the output to be fed to conventional analogue meters, digital meters, PLC, and computer systems.

### ORDERING INFORMATION

Product Code	Input	In	Output	Options
M700-AL1	5A		4-20mA	

### OPTIONS

1. Calibration at temperature other than 23°C

### TECHNICAL SPECIFICATION

#### INPUT

Rated value In	1 or 5 Amp C.T. connected 0.5-10 Amp direct connected
Working range	10-125% In
Rated Frequency	40- 400 Hz
Frequency influence	0.005 % / Hz
Overload continuous	4 x In
Overload for 1 sec.	50 x In

Accuracy	0.2%
Linearity	<0.1%
Repeatability	± 0.05% of span
Common mode rejection	130dB
Input impedance	0.1 Ohm
Response time	<250mSec 0-90% at full load

#### OUTPUT

DC current	4-20mA
Drive voltage	24 volts (max. 35 volts)
DC volt drop	12 volts dc max.
Output load change effect	0.1% up to RL max.
Max. loop load (Ohms)	$\frac{V_{supply} - 12V}{0.02}$

#### ADJUSTMENT

Zero	± 1%
Span	± 10%

#### ISOLATION

Between input & output	4kV RMS 50Hz for 1 minute
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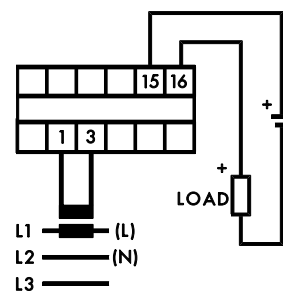
#### ENVIRONMENTAL

Working temperature	0 to +60 deg C
Functional temperature	-25 to +70 deg C
Storage temperature	-55 to +85 deg c (100 ppm / °C)
Relative humidity	95% non condensing
Class of climate	HSE complying with DIN 40040 -3 complying with VDE/VDI 3540

#### WEIGHT & CASE

M700-AL1	Approx. 0.2 kg. 55mm case
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### CONNECTION DIAGRAM



M700AL1