



DM7010

FREQUENCY INPUT

FIELD RANGEABLE ISOLATED TRANSMITTER

FEATURES

- Spans from 10 Hz to 50 KHz
- Selectable Response Time & Filter
- Plug-In Terminal Blocks
- Standard DIN-Rail Mount with Easy Snap-On Snap-Off
- User-Settable Input and Output Ranges
- Fully Labeled Jumper Positions for Easy Range Settings
- User Write-On Label
- Connections and Ranging Readily Accessible from the Front
- Choice of Power Options
- Permanent Warranty

DESCRIPTION

The DM7010 provides an isolated voltage or current output proportional to the frequency of an AC voltage input.

The wide input voltage range allows the product to be used with low level magnetic pickups, for flow or speed applications, as well as digital signals or direct power line monitoring.

A selectable pull-up resistor allows the product to be driven from a switch closure or open collector transistor. It will also accept CMOS or TTL inputs.

All Wilkerson products are designed with RFI filters and lightning to reduce susceptibility to electrical noise and damage by lightning. It utilizes a feedback VCO to develop a pulse train with a duty cycle proportional to the

input signal amplitude. This pulse train is coupled through a pulse transformer to the output circuitry, where the duty cycle data is converted to a proportional DC output level.

TYPICAL APPLICATIONS

Useful for measuring and controlling flow motor speed and conveyer speed.

SPECIFICATIONS

INPUT

SPAN ADJUSTMENT

+5% to -55% of selected range

ZERO ADJUSTMENT

± 30% of selected span

PULL-UP RESISTOR (Selectable)

4.7 kilohm (+5 V)

INPUT IMPEDANCE

100 kilohm

INPUT TO INPUT LINEARITY

±0.01% of span

VOLTAGE RANGE

50 mV p-p to 700 V p-p

FREQUENCY RANGE

10 Hz to 50 kHz

OUTPUT

Voltage

0/.25

0/1

1/5

0/5

0/10

-5/+5

-10/+10

Current (mA)

0/1

0/4

4/20

0/20

OUTPUT LOGIC

Normal or Reverse Acting

DRIVE CAPABILITY

Voltage

5 mA max.

Current

>24 V compliance

OUTPUT RIPPLE (Peak-to-Peak)

<0.1% of full scale

ISOLATION

Resistance

>500 megohms

Voltage Rating

>1000 VAC rms sinewave

ACCURACY

±0.1% of span

COMMON MODE REJECTION

>100 dB, DC to 60 Hz

OPERATING TEMPERATURE

14 to 140 °F/-10 to +60 °C

TEMPERATURE STABILITY

±0.01% of span /°C

POWER

Wattage

2.5 W maximum

(Standard)

115 VAC ±10%, 50/60 Hz

230 VAC ±10%, 50/60 Hz

24 VAC ±10%, 50/60 Hz

(Optional)

24 VDC (21 to 32 VDC)

ORDERING INFORMATION

POWER

- 115 VAC, 50/60 Hz Power
- 230 VAC, 50/60 Hz Power
- 24 VAC, 50/60 Hz Power
- 24 VDC Power Transformer Isolated

INPUT

Select Units

- Hz KHz

Enter Input

Zero Scale

Full Scale

OUTPUT

Select Units

- VDC mADC

Enter Output

Zero Scale

Full Scale

Select Output Logic

- Normal Acting
- Reverse Acting

OPTIONS

- Conformal Coating

TAGS

Specify Tag Numbers
Tag number is typed on product label at no charge.

Enter Tag Number(s)

ACCESSORIES

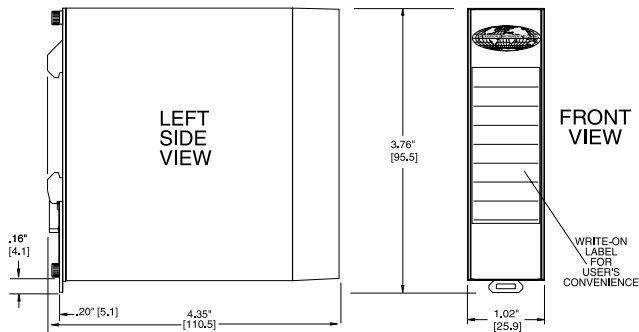
DM7010

DR1 DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)

QTY _____

DIMENSIONS

Inches [mm]



CONNECTIONS

- | | |
|-----------|---------------------|
| Input + | Input + |
| Input - | Input - |
| SHLD | Shield |
| TERM 4 | No Connection |
| Output + | Output + |
| Output - | Output - |
| TERM L1 + | Power AC L1 or DC + |
| TERM L2 - | Power AC L2 or DC - |