



PULSE GENERATOR

TYPE 112-52

- Variable frequency output
- Optional relay or open collector outputs
- Local or remote set-point

The 112-52 provides a pulsed output signal for testing, simulation and other applications requiring a variable set-point frequency.

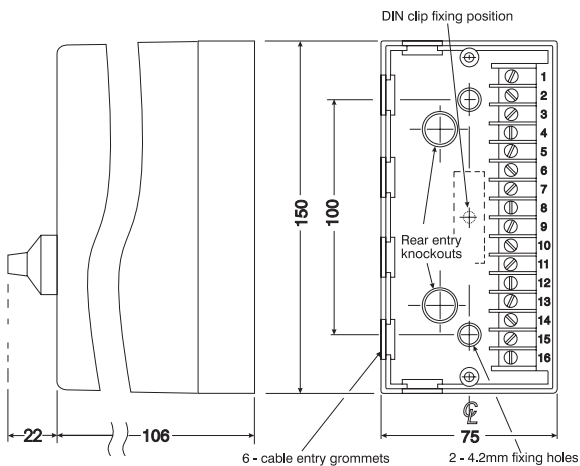
The pulse rate of the output signal is set by a ten-turn front panel dial. As an option, the pulse rate may be controlled by a remote potentiometer.

TYPICAL APPLICATIONS

- Set-points for vibration test rigs
- Simulation of metering pulses
- Dosing pump and sampling applications



DIMENSIONS



Ordering information

- Type of output (see specification overleaf)
- Output full scale pulse rate
- Desired output pulse width
- Supply voltage and frequency

SPECIFICATION

SET-POINT CONTROL

Potentiometer with ten-turn dial graduated 0-100 (% of FSD) with locking mechanism. Optionally the instrument can be configured for use with a remotely mounted set-point potentiometer.

OUTPUT OPTIONS

The type required must be specified at the time of order. (Other pulse output voltages (e.g. 5V) and pulse widths available to order.)

- a) Optically isolated open collector transistor.
- b) 24 Volt pulse of duration 60ms
- c) Relay change-over contact. (FSD=10Hz Max)

Notes (i) Only one output type is normally available. It is possible, however, to have concurrently both a relay output and 24V pulse output. (ii) The relay output is not available with remote set-point option.

PULSE RATE

Calibrated as required within the following full scale limits:

- Minimum: 0.0012 pulses per second
- Maximum: 5000 pulses per second

CALIBRATED ACCURACY

Set at 100% to be within $\pm 0.1\%$ FSD.

LINEARITY ERROR

$\leq \pm 0.35\%$ FSD.

STABILITY

Over 24 hours $\pm 0.05\%$ FSD.
Over 1 year $\pm 0.1\%$ FSD.

TEMPERATURE COEFFICIENTS

Zero: $\pm 0.02\%$ span/ $^{\circ}\text{C}$
Span: $\pm 0.02\%$ span/ $^{\circ}\text{C}$

TEMPERATURE RANGE

Operating: -10°C to $+60^{\circ}\text{C}$
Storage: -20°C to $+70^{\circ}\text{C}$

SUPPLY VOLTAGE REJECTION

Output change $< 0.01\%$ span / % supply change.

ISOLATION

The output is isolated from the power supply.
Maximum voltage 250V RMS or 400V DC.
Resistance $\geq 50 \times 10^6$ ohms measured at 1000VDC.

POWER SUPPLY

AC 110/220/240V $\pm 10\%$ 50/60Hz 5VA
DC 12/24v -10% $+20\%$ 3.5W

SAFETY & EMC

Safety: EN61010-1 Immunity: EN50082-1
Emissions: EN50081-1 CE certified

WEIGHT

Approx. 670 grams.

TERMINAL CONNECTIONS

Terminal

- 1, 4 no internal connection (nc)
- 2, 3 reserved

Remote set-point option (not available with relay output)

- 5 Pot. at maximum
- 6 Wiper
- 7 Pot. at minimum

Outputs

- 5 Normally Closed
- 6 Common
- 7 Normally Open
- 8 (nc)
- 9 (nc)
- 10 +V
- 11 0/p
- 12 0V
- 13 (nc)

Relay Output Option* Not available with remote set-point pot

Voltage pulse*

Transistor Output* (Open Collector)

Supply

- 14 Earth
- 15 Neutral
- 16 Line

DC Supply Option

- Earth
- Negative (-)
- Positive (+)

Please Note: Options are only available if specified at time of order. * see notes under Output Options



THIS UNIT CAN BE MAINS POWERED, AND ALL INPUTS TO IT MUST BE ISOLATED FROM DANGEROUS VOLTAGES BEFORE THE FRONT COVER IS REMOVED. LIVE TERMINALS WILL BE EXPOSED.

Continuous development may necessitate changes in these details without notice

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