

# MTL5521 SOLENOID/ ALARM DRIVER

loop-powered, IIC

The MTL5521 is a loop-powered module which enables a device located in the hazardous area to be controlled from the safe area. The MTL5521 can drive a certified intrinsically safe low-power load, as well as non-energy-storing simple apparatus such as an LED.

## SPECIFICATION

See also common specification

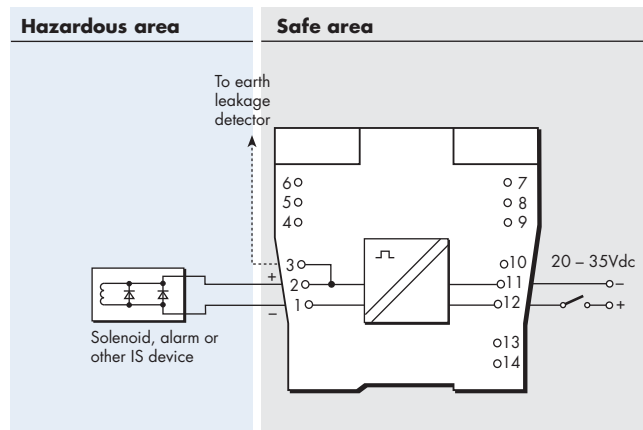
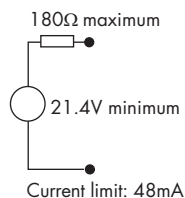
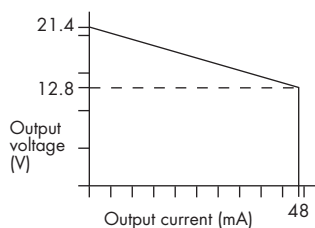
### Number of channels

One

### Location of load

Zone 0, IIC, T4--6 hazardous area if suitably certified  
Div. 1, Group A hazardous location

### Minimum output voltage      Equivalent output circuit



Terminal	Function
1	Output -ve
2	Output +ve
3	To earth leakage detector*
11	Supply -ve
12	Supply +ve

\* Signal plug HAZ1-3 is required for access to this function

### LED indicator

Yellow: output status, on when output circuit is active

### Maximum current consumption

90mA at 24V

### Power dissipation within unit

1.4W at 24V

### Safety description

$V_o=25V$   $I_o=147mA$   $P_o=919mW$   $U_m = 253V$  rms or dc

### Input voltage

20 to 35V dc

### Hazardous-area output

Minimum output voltage: 12.8V at 48mA  
Maximum output voltage: 24V from 180Ω  
Current limit: 48mA

### Output ripple

< 0.5% of maximum output, peak to peak

### Response time

Output within 10% of final value within 100ms

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

# MTL5500 SERIES COMMON SPECIFICATION

Please go to our website at [www.mtl-inst.com](http://www.mtl-inst.com) for the latest information regarding safety approvals, certificates and entity parameters.

## Connectors

Each MTL5500 unit is supplied with signal connectors, as applicable.

When using crimp ferrules for the hazardous and non-hazardous (safe) signal connectors the metal tube length should be 12mm and the wire trim length 14mm.

## Isolation

250V rms, tested at 2200V rms minimum, between safe-area, hazardous-area and power supply terminals

50V ac or dc between safe-area circuits where applicable.

## Supply voltage

20 – 35V dc

## Location of units

Safe area

## Terminals

Accepts conductors of up to 2.5mm<sup>2</sup> stranded or single-core

## Mounting

MTL5500 series backplanes

## Ambient temperature limits

-20 to +60°C (-6 to +140°F) operating

-40 to +80°C (-40 to +176°F) storage

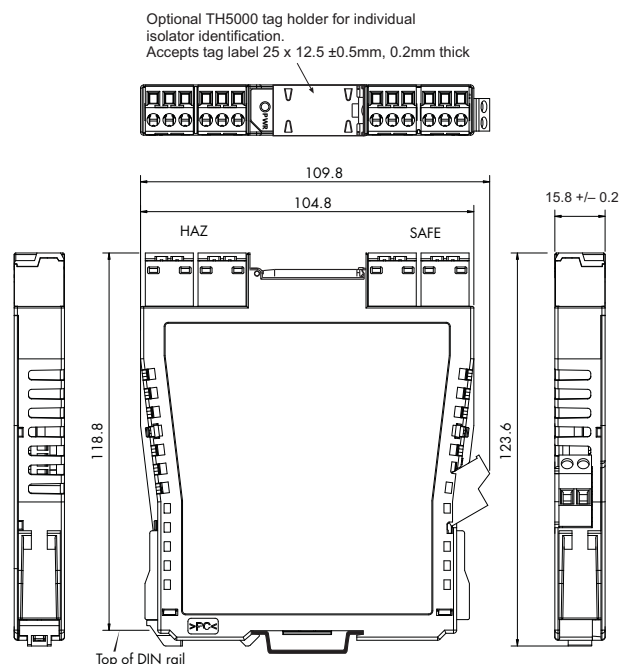
## Humidity

5 to 95% relative humidity

## Weight

110g approximately (except where indicated)

## DIMENSIONS (mm)



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