# **SPECIFICATION**

# Number of channels

One

## Location of transmitter

Zone 0, IIC, T4-6 hazardous area if suitably certified

Div. 1, Group A hazardous location

# Safe-area output

Signal range: 4 to 20mA Under/over-range: 0 to 24mA

Safe-area load resistance

@ 24mA: 0 to 360  $\Omega$ 

@ 20mA: 0 to  $450\,\Omega$ 

Safe-area circuit output resistance:  $> 1M\Omega$ 

# Safe-area circuit ripple < 50 μ A peak-to-peak

Hazardous-area input

Signal range: 0 to 24mA (including over-range)

Transmitter voltage: 16.5V at 20mA

# Transfer accuracy at 20° C

Better than 15 μ A

Temperature drift  $< 0.8 \,\mu$  A/° C

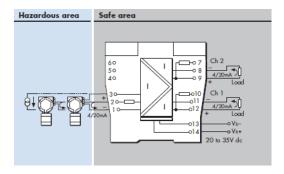
Response time

Settles to within 10% of final value within 50  $\mu$  s

# Communications supported

HART (terminals 1 & 2, output Ch 1 only)

# Wiring



# LED indicator

Green: power indication

Maximum current consumption (with 20mA signals)

96mA at 24V dc

Power dissipation within unit (with 20mA signals)

1.4W @ 24V dc

# Safety description

Terminals 2 to 1 and 3:

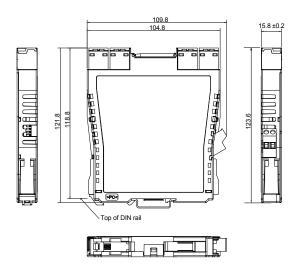
 $V_0=28V I_0=93mA P_0=651mW Um = 253V rms or dc$ 

#### Terminals 1 to 3:

Simple apparatus  $\leq\!1.5V, \leq\!0.1A$  and  $\leq\!25mW;$  can be connected without further certification into any IS loop with an open-circuit voltage  $\leq\!28V$ 

# SIL capable

These models have been assessed for use in IEC 61508 functional safety applications. See data on MTL web site.



## **Isolation**

250V rms, tested at 1500V rms minimum, between safe- and hazardous-area terminals.

50V between safe-area circuits and power supply

## Supply voltage

20 - 35V dc

# Location of units

Safe area

# **Terminals**

Accepts conductors of up to 2.5mm2 stranded or single-core Mounting

T-section 35mm DIN rail (7.5 or 15mm) to EN 50022

# Ambient temperature limits

 $-20 \text{ to } +60^{\circ} \text{ C } (-6 \text{ to } +140^{\circ} \text{ F}) \text{ operating}$ 

 $-40 \text{ to } +80^{\circ} \text{ C } (-40 \text{ to } +176^{\circ} \text{ F}) \text{ storage}$ 

# <u>Humidity</u>

5 to 95% relative humidity

## Weight

Approximate (except where indicated) MTL5500 150g

# Connectors

Each unit is supplied with signal connectors, as applicable. When using crimp ferrules for the hazardous or non-hazardous (safe) signal connectors the metal tube length should be 12mm

(safe) signal connectors the metal tube length should be 12mm and the wire trim length 14mm.

me MTL5544D

	REV.	PROJECT NAME:	Cooper Industries Japan K.K.			apan K.K.	Model name			
	REV.	IUSER NAME:	TEL: +81-(0)3-5420-1281 FAX: +81-(0)3-5420-2405		SIZE		FSCM NO	FSCM NO		
	REV.	JOB NAME:	DATE:	2	011/Ma	y/25				
		Ref no.:	CHKD T.IWA	ANE	DRAWN	K.KUSAKABE	SCALE	N/A		

ļ	SIZE	FSCM NO		Drawing No.				
				SS-MTL5544D				
E	SCALE	N/A			SHEET	1/1		