

SPECIFICATION

Number of channels

One

Sensor type

2- or 3-wire vibration transducer

Location of signal source

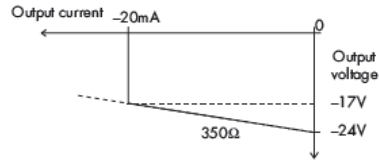
Zone 0, IIC, T4-6 hazardous area if suitably certified
Div. 1, Group A hazardous location

Hazardous-area input

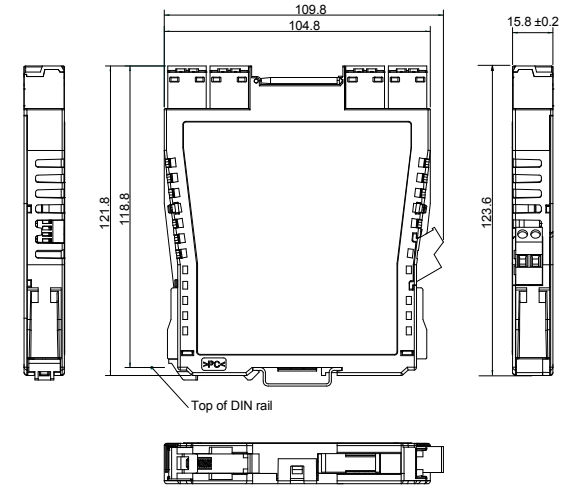
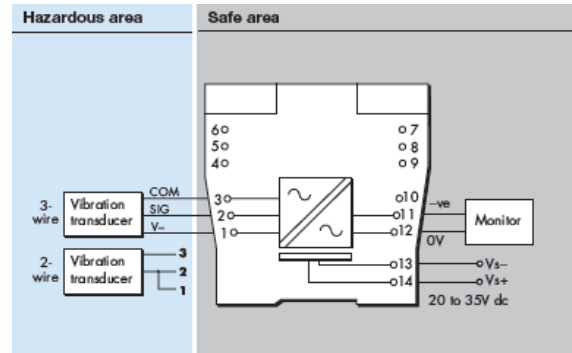
Input impedance

(terminals 2 & 3): 10kΩ

Transducer supply voltage, 3-wire (terminals 3 & 1)



Wiring



Transducer supply current, 2-wire

3.3mA (nom.) for 2-wire sensors, user selectable by switch

Signal range

Minimum -20V, maximum -0.5V

DC transfer accuracy at 20° C

< ±50mV

AC transfer accuracy at 20° C

0Hz to 1kHz: ±1%
1kHz to 10kHz: -5% to +1%
10kHz to 20kHz: -10% to +1%

Temperature coefficient

±50ppm/° C (10 to 65° C)
±100ppm/° C (-20 to 10° C)

Voltage bandwidth

-3dB at 47kHz (typical)

Phase response

<14μs, equivalent to:
-1° at 200Hz
-3° at 600Hz
-5° at 1kHz
-50° at 10kHz
-100° at 20kHz

Safe-area output impedance

<20Ω

LED indicator

Green: power indication

Supply voltage

20 to 35V dc

Maximum current consumption (10mA transducer load)

96mA at 24V

Maximum power dissipation within unit

2W

Safety description

Terminals 3 to 1

V₀=26.6V I₀=94mA P₀=0.66W U_m= 253V rms or dc

Terminals 3 to 2

Non-energy-storing apparatus ≤1.5V, ≤0.1A and ≤25mW

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 to +60° C (-6 to +140° F) operating

-40 to +80° C (-40 to +176° F) storage

Humidity

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 and the wire trim length 14mm.

REV.	PROJECT NAME:	Cooper Industries Japan K.K.	Model name		MTL5531	
REV.	USER NAME :	TEL: +81-(0)3-5420-1281 FAX: +81-(0)3-5420-2405	SIZE	FSCM NO	Drawing No.	rev
REV.	JOB NAME :	DATE: 2011/May/25			SS-MTL5531	-
	Ref no.:	CHKD T.IWANE	DRAWN K.KUSAKABE	SCALE	N/A	SHEET 1 / 1