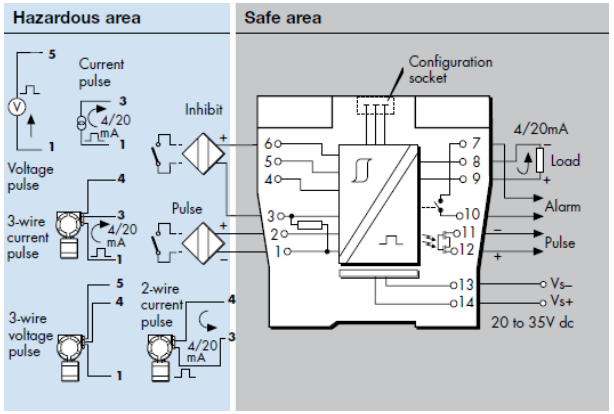
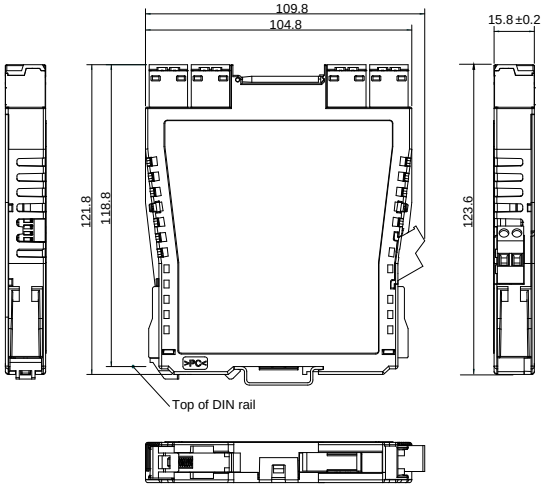
SPECIFICATION

Number of channels
One, fully floating
Sensor type
Switch or proximity detector (NAMUR/BS EN 60947-5-6:2001)
2- or 3-wire voltage or pulse transmitter
Location of switch
Zone 0, IIC, T6 hazardous area
Div. 1, Group A hazardous location
Location of proximity detector or transmitter
Zone 0, IIC, T4-T6 If suitably certified
Div. 1, Group A hazardous location
Input
Switch input:
Output ON if switch is closed
Proximity detector input:
Excitation: 7.0 to 9.0V dc from 1kΩ norminal
Output ON if input ＞2.1mA* (＞2kΩ)
Output OFF if input ＜1.2mA* (＞10kΩ)
Switching hysteresis: 0.2mA (650Ω) norminal
*NAMUR and BS EN 60947-5-6:2001standards
Current pulse input:
Transmitter supply: 16.5V dc at 20mA
Short circuit current: 24mA
Output: I_{in} ＞9.0mA = ON, I_{in} ＞7.0mA = OFF
Switching hysteresis: 0.5mA
Voltage pulse input:
Input impedance: ＞10kΩ
Switching point voltage(V_{sp}):3, 6, or 12V nominal
(User selectable by switches on the side of the module)
Output: V_{in}＞V_{sp}=ON, V_{in}＜V_{sp}=OFF
Switching hysteresis: 100mV + (0.1 x V_{sp}) typical
Safe-area pulse output
Maximum delay: 10μs
Maximum off-state voltage: 35V
Maximum off-state leakage current: 10μA
Maximum on-state resistance: 25Ω
Maximum on-state current: 50mA
Output OFF if supply fails
Note: LFD signal is Zener-diode protected against inductive loads

Wiring





Safe-area current output
Input capture delay: 2 signal periods (5ms min.)
Signal range: 4 to 20mA
Under/over range: 0 to 22mA
Load resistance: 0 to 450Ω@20mA
Output resistance: ＞1MΩ
Ripple: ＜50μA peak-to-peak
Accuracy: better than 20μA at 20℃
Temperature drift: ＜1μA/℃
Risetime(10%-90%, after step change): 60ms
Alarm output
Relay ON in alarm, 0.5A @ 35Vdc max.
Pulse width
High: 10μs min
Low: 10μs min
Frequency range
0-50kHz - pulse output mode
0-10kHz - for analogue output
LED indicator
Green: power indication
Yellow: on when output circuit is on
Red: flashing when line fault or error
Power requirement
65mA at 24V dc
70mA at 20V dc
55mA at 35V dc
Power dissipation within unit
1.35W maximum at 24V
1.75W maximum at 35V

Safety description (Um=253V rms or dc)
Terminals 2 to 1 and 6 to 1
Uo=10.5V Io=14mA Po=37m
Terminals 4 to 3 and 1
Uo=28V Io=93mA Po=651mW
Terminals 3 to 1
Non-energy-storing apparatus ≤1.5V, ≤0.1A and ≤25mW ; can be connected without further certification into any IS loop with an open-circuit voltage ＜28V
Terminals 5 to 4 and 1
Vmax ≤ 28V, Imax ≤ 94mA, Pmax ≤ 0.66W
Configurator
A personal computer running MTL PCS45 software with a PCL45USB serial interface

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	MTL5532		
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: 2014/07/17				SS-MTL5532	-
	Ref no.:	CHKD T.IWANE	DRAWN I.S	SCALE N/A		SHEET 1 / 1	