

MTL4706+

FOR TWO TRANSMITTERS

- 2-wire 4/20mA and 'smart'



The MTL4706+ is a 2-channel electronic, over-volt protected barrier. It is designed primarily for energising conventional and smart 2-wire 4/20mA hazardous-area transmitters. As each loop is typically powered by a single channel, the barrier is capable of driving two hazardous-area devices. The novel patented circuit design is notable for extreme accuracy of $\pm 2\mu\text{A}$ under all conditions. A floating dc power supply is built-in to provide a high voltage output to power the transmitters. The MTL4706+ is capable of operating from bussed power.

SPECIFICATION

(See also common specification)

Channel numbers

1 and 2

Safety description

28V, 300 Ω , 93mA

Polarity

Positive input to safe-area load

Note that the output voltage to the transmitter is negative with respect to earth.

Output current

4/20mA

Voltage for Tx & lines

$\geq 16\text{V}$ at 20mA

Load resistance

250 $\Omega \pm 5\%$

Accuracy

$\pm 2\mu\text{A}$

Fuse rating

50mA

Matched power

0.65W

Supply current (total)

100mA maximum at 20mA with 20V supply

80mA typical at 20mA with 24V supply

Supply voltage range

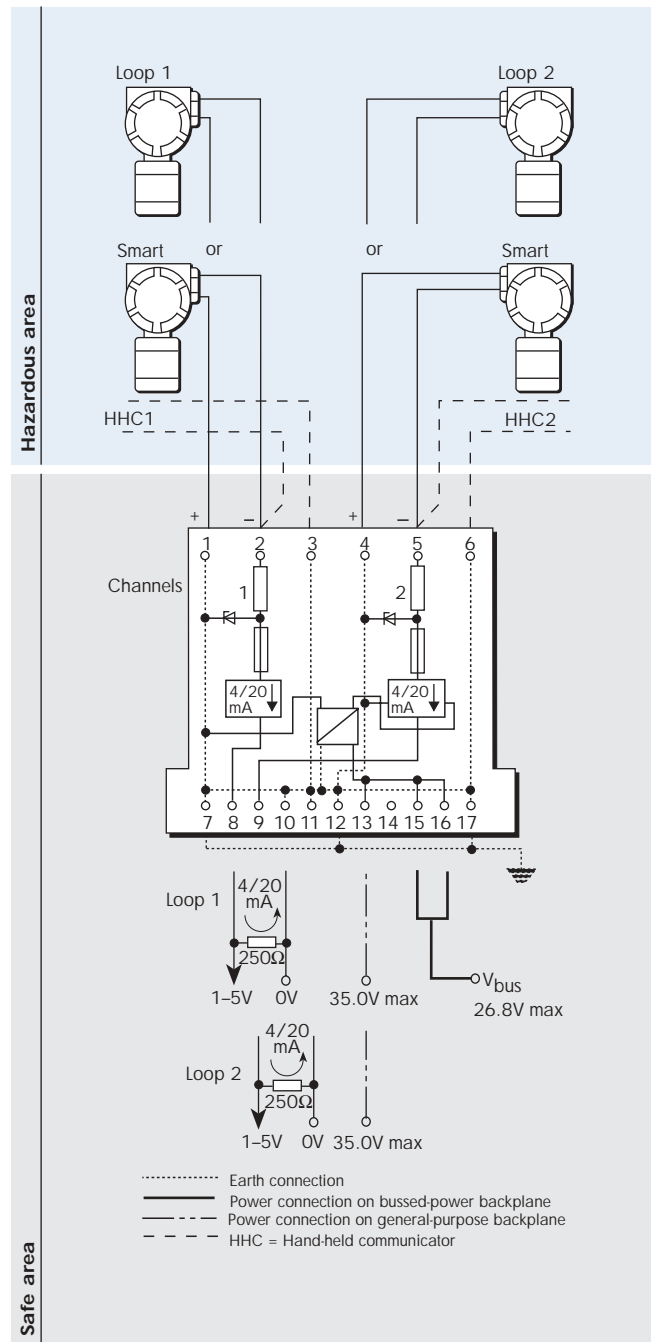
20 to 26.8V on bussed-power backplanes limited by on-board protection circuit

20 to 35.0V on general-purpose or custom backplanes

Power supply fuse

250mA

ANALOGUE INPUTS (HIGH LEVEL)



UK Patent No. 2205699

USA Patent No. 4967302

European Patent (Germany, France, Italy)

No. EP0294139BI

MAXIMUM CABLE PARAMETERS

(for single channel with earth return)

BASEEFA (group IIC)			FM (groups A & B)	
Capacitance (μF)	Inductance (mH) or L/R ratio ($\mu\text{H}/\Omega$)		Capacitance (μF)	Inductance (mH)
0.13	4.2	55	0.14	4.23



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