

A.S.P. Electro-Technology Ltd

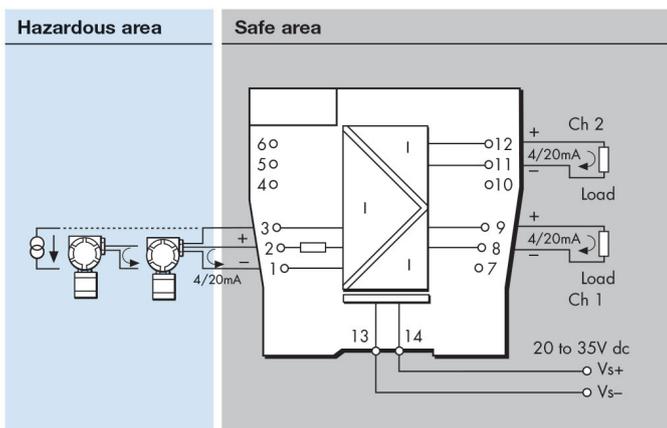
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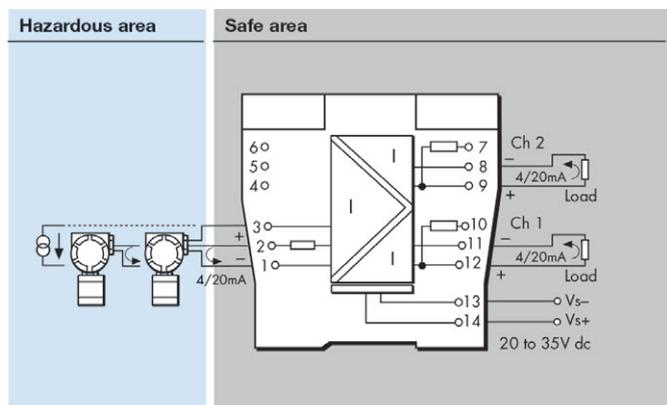
**MTL4544D – MTL5544D**  
**REPEATER POWER SUPPLY**  
 single channel, 4/20mA, HART®  
 for 2- or 3-wire transmitters, two outputs

The MTLx544D provides a fully-floating dc supply for energising a conventional 2- or 3-wire 4/20mA transmitter located in a hazardous area, and repeats the current in other circuits to drive two safe-area loads. For HART 2-wire transmitters, the unit allows bi-directional transmission of digital communication signals superimposed on the 4/20mA loop current. Separately powered current sources, such as 4-wire transmitters, can be connected but will not support HART communication.

**MTL4544D**



**MTL5544D**



**SPECIFICATION**

See also common 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 360Ω @ 20mA: 0 to 450Ω  Safe-area circuit output resistance: > 1MΩ
Safe-area circuit ripple	< 50μA 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 15μA
Temperature drift	< 0.8μA/°C
Response time	Settles to within 10% of final value within 50μs
Communications supported	HART (terminals 1 & 2, output Ch 1 only)
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	<b>Terminals 2 to 1 and 3:</b> $U_o=28V$ $I_o=93mA$ $P_o=651mW$ $U_m = 253V$ rms or dc  <b>Terminals 1 to 3:</b> 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 <28V
SIL capable	These models have been assessed for use in IEC 61508 functional safety applications. See data on MTL web site.