6.3 Pulse and Vibration modules

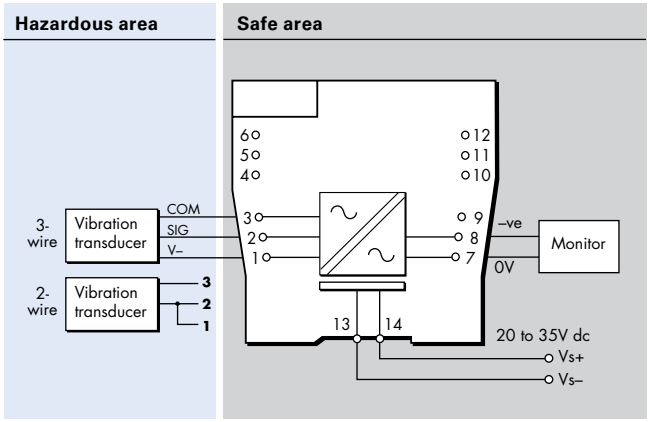
Single and dual channel modules are available to transfer vibration probe signals from a hazardous area to a safe one. Similarly, pulses from a switch, proximity detector, current pulse transmitter or voltage pulse transmitter, located in the hazardous area, can be safely transferred to the safe area.

6.3.1 MTL4531 - Vibration Transducer Interface

Single channel

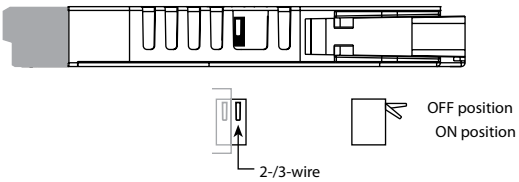
The MTL4531 repeats a signal from a vibration sensor in a hazardous area, providing an output for a monitoring system in the safe area. The interface is compatible with 3-wire, eddy-current probes and accelerometers or 2-wire current sensors, and selection of the mode is made with a switch located on the side of the module.

Figure 6.21: Top label for MTL4531



Terminal	Function
1	Transducer power V–
2	Signal
3	Common
7	Signal output 0V
8	Signal output –ve
13	Supply –ve
14	Supply +ve

2-/3-wire transducer setting switch



Mode	SW
2-wire (3.3mA)*	OFF
3-wire (20mA)	ON

* **Note**: When using 2-wire sensors, ensure that terminals 1 and 2 are linked as shown in the wiring diagram above.

WARNING! - Revision status 05 and below*

To enable optimum heat dissipation the recommended orientation for mounting is with the module vertical, i.e. with the vents in the case at the top and bottom.
This enables air to flow through the module.
In any other orientation, i.e. with the module horizontal, then the maximum ambient temperature is limited to:

- Close packed = 45°C
- Minimum of one module spacing = 55°C

*Revision status is the 2 digits after the +++ in the barcode