

## PRODUCT INFORMATION

**Accelerometer:** Side Integral Cable  
Dual Output Temperature

**Model No:**  
MIL518

**Part Number:**  
M5181000206005

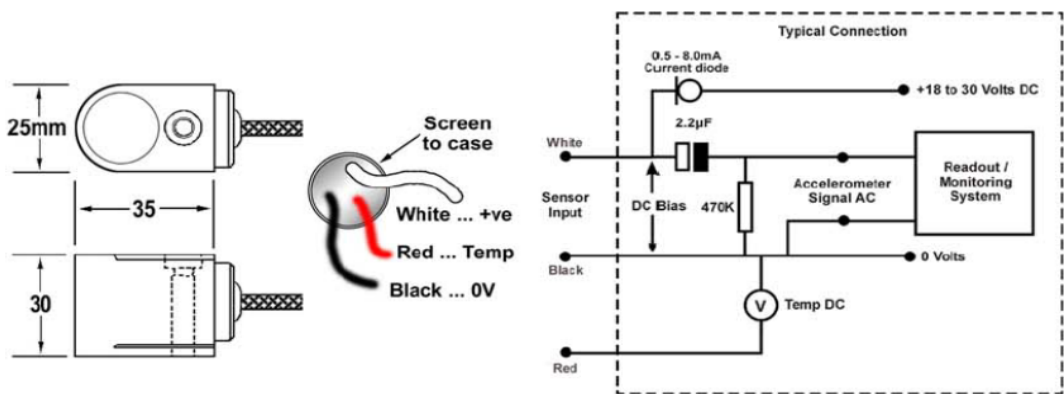
The Mechanalysis model MIL504 is a dual output accelerometer for measuring vibration on industrial rotating machinery with temperature output. This high precision sensor is primarily used for on-line applications. Its side exit with integrated braided cable and with low profile housing protects the sensor and cable from damage and is ideal for locations where space is limited. The optimum signal quality is achieved by the mounting bolt that does not create base strain. The bolt enables easy sensor removal before machine maintenance avoiding sensor damage.



**Applications:** Applies to most Process Plants using Compressors, Blowers, Conveyors, Cooling Tower Fans, ID, FD, PA Fans, CW Pumps, Gear Boxes, Motors, Paper Machinery, Turbines etc.

Supplied Accessories	Qty	Part Number	Optional Accessories	Qty	Part No.
Sensor Mounting Stud, M6	1	M60154			
Calibration Certificate	1	CCMIL518			

### Dimensions & Connections



### Technical Performance

Mounted Base Resonance	22 kHz (nominal)
Sensitivity	100 mVg ± 5% Nominal 80 Hz at 22°C
Frequency Response	2 Hz to 10 kHz ± 5% 0.8 Hz to 15 kHz ± 3 dB
Isolation	Base isolated
Measurement Range	± 80g
Temperature	10 mV/°C Standard 100°C, Option 140°C
Transverse Sensitivity	Less than 5%

### Electrical

Electrical Noise	0.1 mg max
Current Range	0.5 mA to 8 mA
Bias Voltage	10 – 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max
Case Isolation	>10 <sup>8</sup> Ohms at 500 Volts

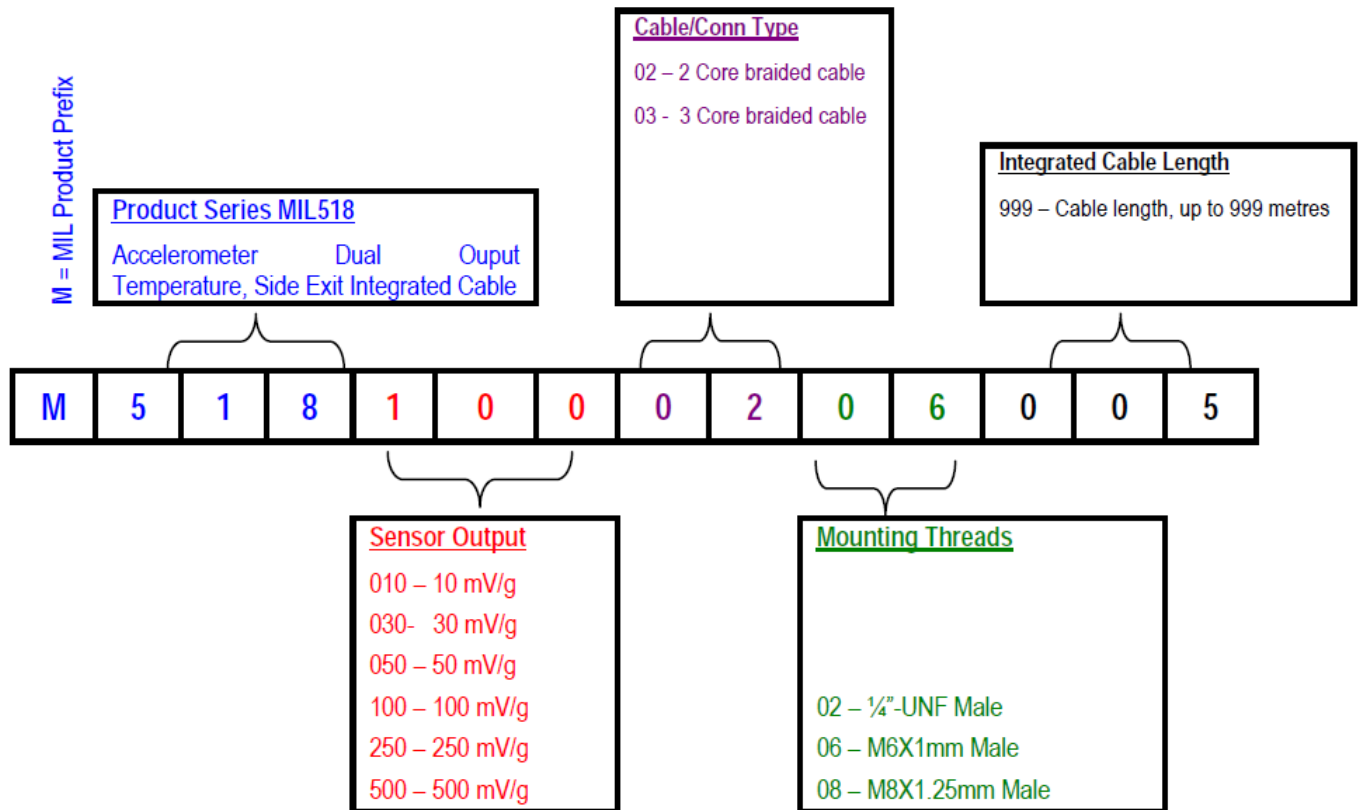
### Environmental

Operating Temperature Range	-55 to 140°C
Sealing	IP65
Maximum Shock	5000 g
Emissions	EN61000-6-4:2001
Immunity	EN61000-6-2:1999

### Mechanical

Case Material	Stainless Steel
Sensing Element /Construction	PZT / Compression
Mounting Torque	8 Nm
Mounting Bolt	M6 x 33mm long
Weight	170 gms (nom)
Maximum Cable length	1000 meters
Standard Cable Length	5 metres overbraided ETFE
Options	Mounting, Cable assemblies, Other sensitivities

# MIL Part Number Selector System



## Note on Sensor Output

- Most machinery applications are suitably covered by a sensor with a sensitivity of 100mV/g. However, you may wish specify different sensitivities because of the unique dynamic range of the particular machine to be monitored.
- A high sensitivity sensor, 500mV/g or 1V/g would be used for those machines operating at low speeds (say below 600 rpm) with high mass structures where vibration levels signals will inherently be of a low amplitude .
- For high dynamic ranges such as a high speed gearbox, you would use a low sensor sensitivity for example as low as 10mV/g, 50mVg etc.