

## Application Note 3001 Comparison of the MX2A and MX4A Active Gauges

## Description

Historically the 2A thermocouple sensor had a measurement range up to only 20 Torr and the 4A convection sensor was used to measure pressures up to 1000 Torr. Software and drive signal enhancements incorporated into the MX2A active thermocouple gauge now allow the 2A thermocouple sensor to measure pressures up to 1000 Torr. This has raised questions about the differences between the MX2A thermocouple active gauge and the MX4A active convection gauge as almost all of their specifications are now identical. This document outlines the differences between the two active gauges.

## Differences Between the MX2A and MX4A

Description	MX2A	MX4A
Sensor Type	Thermocouple	Convection
Filament Diameter	Thicker	Thinner
Contamination Resistance	Higher	Lower
Response Time	< 2 seconds	< 1 second
Accuracy	±30% (10 to 100 Torr)	±10% (10 to 100 Torr)
Materials Exposed to Vacuum	NiMnSi Alloy, CuNiMn Alloy	NiCr Alloy, CuNi Alloy
Cost	Lowest	Low

All other specifications for the MX2A and MX4A are equivalent.

## **Contact Us**

If you have any questions, please feel free to contact us:

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