



Multipin

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Operating Conditions

The electrical and thermal ratings specified are safe operating limits determined by various factors including material properties, mechanical design, and the intended operating environment. All electrical ratings are based on operation with one side in dry atmosphere and the other side in vacuum of 1×10^{-4} Torr maximum pressure. Temperature ratings for various mounting options may reduce the operating range of an assembly. All assemblies have a maximum thermal gradient of 25°C per minute and may be damaged if this limit is exceeded.

MULTIPIN

Multipin is the description for electrical feedthroughs which have two or more conductor paths, and include connectors for one or both sides. This series is typically used for transmission of low power or electrical signals. Multipin feedthroughs are ideal for instrumentation applications such as microscopy, mass spectrometry, surface analysis, and semiconductor process control.

MPF offers several mounting options for multipin feedthroughs: Weldable, Quick Flange (QF), and Conflat Flange (CF). Most designs are also configured for Baseplate and NPT style adapters. Custom adapters, plates and flange configurations are available by request.

Type C and Type D

Subminiature instrumentation feedthroughs are very compact and allow for designs with extremely high pin density. Both types utilize a straight through pin-to-pin design with gold plated pins that are hermetically sealed and electrically isolated using the latest glass-ceramic bonding technology.

Type D subminiatures are constructed with pin arrangements to meet MIL-C-24308 specifications, and are available in 9, 15, 25, and 50 pin designs. Type C subminiatures are based on a circular 9 pin arrangement according to MIL-C-26482, and allow for even more compact designs which can be mounted on 1.33 inch CF flanges or ISO-NW16 quick flanges.



Multipin and MS Multipin

Traditional multipin designs are provided with threaded circular connectors which allow moderate pin density. These feedthroughs are offered in 3, 5 and 7 pin versions, and are rated to 500 volts and 3.5 amps per pin.

MS multipin is provided with industry standard threaded connectors which meet MIL-C-5015 specification, and are designed to meet similar applications. These feedthroughs are offered in 4 to 35 pin versions, and are rated for 700 volts and 10 amps per pin. Single ended versions offer a connector for the air side. Double ended versions offer both air and vacuum side connectors.



MS High Current and High Voltage

These multipin designs provide higher electrical performance combined with the convenience of MS threaded circular connectors. High current multipin feedthroughs are offered in 2 to 8 pin versions, and are rated 23 amps per pin. High voltage multipin feedthroughs provide an extremely compact design offered in 2, 4 and 7 pin versions, and are rated to 12,000 volts pin-to-pin and pin-to-shell. These designs are available in double ended versions upon request.

