

Series "MS" Micro Reactors

## **Assembly Instructions**



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## Series "MS" Micro Reactors

## Description:

The Micro Reactors shown are designed for numerous applications including small volume testing of components and miniature scale reaction tests.

Standard material of construction is Type 316 stainless steel.

Operation at temperatures up to 800°F is made possible by the metal to metal seal construction. Working pressures should be reduced by approximately 15% at the maximum 800°F temperature level.

Connections are for 1/4" O.D. high pressure coned and threaded tubing (HF4). One connection is provided at each end. Other sizes or types of connections can be provided. Thermocouples can easily be installed with the use of thermocouple adapters.

Catalog No.	Capacity	Working Pressure psi	(C) Inside Diameter	(D) Outside Diameter	(A) Inside Depth	(B) Overall Length	Coupling
MS-1 MS-2 MS-3 MS-4 MS-5	2 mL 3 mL 4 mL 5 mL 6 mL	60,000	<sup>3</sup> / <sub>16</sub> "	9/ <sub>16</sub> "	4" 6" 8" 10" 12"	7" 9" 11" 13" 15"	Collar Gland
MS-11 MS-12 MS-13 MS-14 MS-15	5 mL 7 <sup>1/2</sup> mL 10 mL 12 <sup>1/2</sup> mL 15 mL	20,000	<sup>5</sup> / <sub>16</sub> "	<sup>9</sup> / <sub>16</sub> "	4" 6" 8" 10" 12"	6 <sup>1</sup> /2" 8 <sup>1</sup> /2" 10 <sup>1</sup> /2" 12 <sup>1</sup> /2" 14 <sup>1</sup> /2"	Nipple $\rightarrow$ A $(0, (0) \rightarrow \rightarrow$
MS-16 MS-17 MS-18 MS-19	24 mL 41 mL 65 mL 81 mL	20,000	9/ <sub>16</sub> "	1"	6" 10" 16" 20"	9" 13" 19" 23"	Gland Collar Coupling
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"MS" Micro Reactor

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- 1. Remove the coupling from each end and lubricate gland nuts with process compatible lubricate.
- 2. Install one coupling and torque the gland nut to recommended torque value.
- 3. Load the product (catalyst, liquid, solid, etc.) in to the body (the nipple).
- 4. Apply process compatible lubricate to the gland, install coupling and torque to recommended value.
- 5. Reactor is ready to be pressurized.

Note: End connections on couplings can be used as pressure in, pressure out, or plugged if required.

Recommended Torque for Gland Nuts: