



# 10MM SAPPHIRE TUBES

Daedalus has expanded its offering to include larger 10 mm sapphire NMR tubes. These tubes are a lower-cost alternative for those applications that do not require the robust capability of zirconia. The same manifold technology as our higher pressure manifolds has been employed to provide users with reliable and safe manifolds for these tubes. The dynamic manifolds (shown at right), which allows for pressure modulation while the cell is in the NMR, and our popular static manifolds with an integrated needle valve are available for these tubes.



The cell manifold easily assembles by threading the base piece to the main body component and tightening together to set the single-use seal. Modification of the NMR spectrometer or probe is not needed. High pressure tube assemblies compatible with either Bruker or Agilent probes are available.

The wetted parts are chemically compatible with most solvents making this cell useful for a wide array of applications in multiple research areas: biophysics, petroleum industry, chemical process monitoring, gas phase studies, materials science, geology, and deep-sea research.

Customized solutions to fit your specific application are possible.



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<b>Wetted parts</b>	Aluminum manifold, Sapphire (NMR tube), Viton
<b>Tube dimensions</b>	<b>Tube section:</b> 10 mm O.D. x 7 mm I.D. x 145 mm length <b>Head section:</b> 14 mm O.D. x 4 mm length
<b>Tube volume</b>	5.58 mL
<b>Temperature range</b>	5°C - 100°C using standard seals @ 300 bar Custom cells for higher temperature are available
<b>Pressure range</b>	Stock versions available to 300 bar
<b>Pressure connection</b>	<b>Dynamic manifold:</b> Manifold port is HiP HF2 (1/2"-20 UNF) for use with 1/8" tubing <b>Static manifold (with valve):</b> Manifold port is HiP AF1 (1/4"-28 UNF) for use with 1/16" tubing
<b>Allowed fluids</b>	All fluids compatible with the wetted parts can be used in the cell. Examples are water, alcohols, alkanes, carbon dioxide, and xenon.