

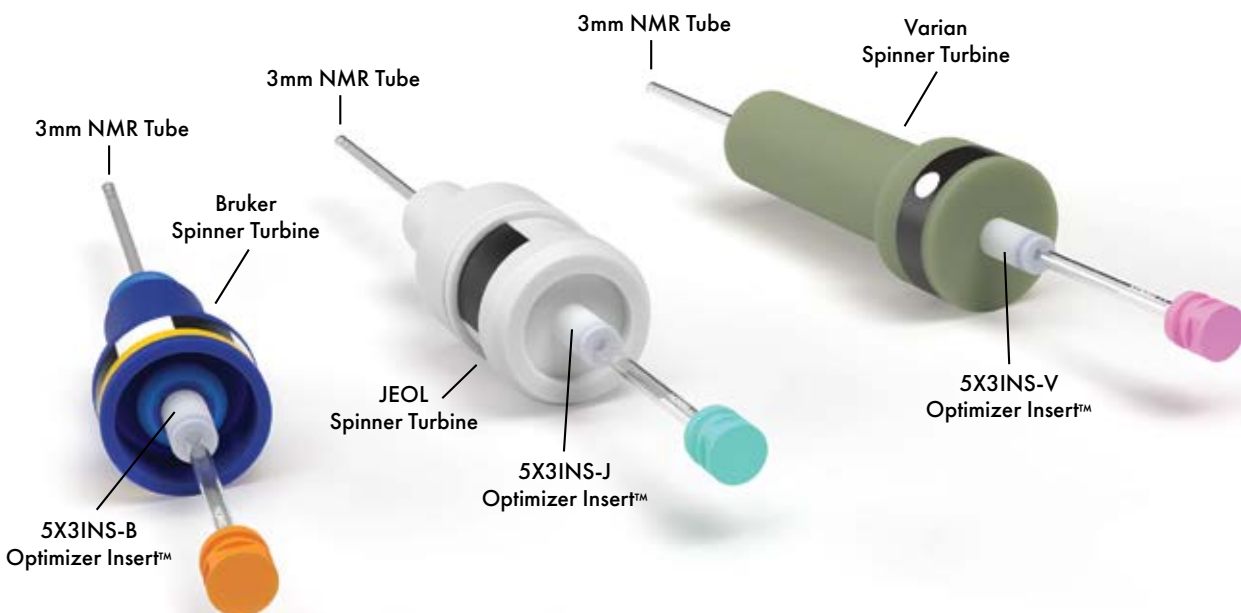
# OPTIMIZER INSERTS

## Optimizer Inserts™ for 5mm Spinner Turbines

Precision adapter, made from a proprietary formulation of acetal homopolymer resin, holds 1.5mm, 1.7mm, 2.0mm, 2.5mm, 3mm, 4mm or 4.25mm NMR tubes in 5mm spinner turbine. Available for Agilent/Varian, Bruker & Jeol spectrometers. Does not include spinner turbine. U.S. Patent #7,728,593.

- Individual precision adapters hold 1.5mm, 1.7mm, 2.0mm, 2.5mm, 3mm, 4mm or 4.25mm NMR tubes in 5mm spinner turbine
- Suited for method development to optimize sensitivity and resolution of NMR Spectra
- Ideal for analyzing biological samples or buffered solutions with high salt concentration
- Run sample in seven NMR tube sizes to determine optimal sample volume without purchase of new Spinner Turbines
- Available for Agilent/Varian, Bruker and Jeol Spinner Turbines
- Inserts are suitable for near room temperature use from 0° - 65°C

Item No.	Tube Size (mm)	Spinner Type
5X1.5INS-B	1.50	Bruker
5X1.5INS-J	1.50	JEOL
5X1.5INS-V	1.50	Agilent/Varian
5X1.7INS-B	1.70	Bruker
5X1.7INS-J	1.70	JEOL
5X1.7INS-V	1.70	Agilent/Varian
5X2INS-B	2.00	Bruker
5X2INS-J	2.00	JEOL
5X2INS-V	2.00	Agilent/Varian
5X2.5INS-B	2.50	Bruker
5X2.5INS-J	2.50	JEOL
5X2.5INS-V	2.50	Agilent/Varian
5X3INS-B	3.00	Bruker
5X3INS-J	3.00	JEOL
5X3INS-V	3.00	Agilent/Varian
5X4INS-B	4.00	Bruker
5X4INS-J	4.00	JEOL
5X4INS-V	4.00	Agilent/Varian
5X4.25INS-B	4.25	Bruker
5X4.25INS-J	4.25	JEOL
5X4.25INS-V	4.25	Agilent/Varian
10X1.5INS-AV	1.50	Agilent/Varian
10X1.7INS-AV	1.70	Agilent/Varian



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**E-MAIL:** [customerservice@nmrtubes.com](mailto:customerservice@nmrtubes.com)

**WEBSITE:** [nmrtubes.com](http://nmrtubes.com)

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# OPTIMIZER INSERTS

## Optimizer Inserts™ for 5mm Spinner Turbines

5mm O.D. Insert for  
use with a Bruker  
Spinner Turbine



5mm O.D. Insert for  
use with a JEOL  
Spinner Turbine



5mm O.D. Insert for  
use with a Varian  
Spinner Turbine



5mm O.D. Inserts for Bruker, JEOL & Varian Spinner Turbines also available for  
1.5mm, 1.7mm, 2mm, 2.5mm, 3mm, 4mm & 4.25mm NMR Sample Tubes.



Fluoroelastomer  
O-Ring provides  
a frictional grip to  
retain the NMR sam-  
ple tube in place



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