

1H{15N-31P} 5 mm PFG AutoX Indirect Detection Probe, VT, 400 NB

Description: Probe of choice for automatable experiments where 1H sensitivity and indirect detect experiments with excellent RF homogeneity and/or salt tolerance are key. Capability for irradiation at frequencies within the range of 15N to 31P. Optimized for highest 1H sensitivity. Capable of automated probe tune and match when equipped with ProTune optional accessory. High performance actively shielded linear z-axis gradient produces rectangular gradient without ECC for best dephasing per unit time.

Part Number: 0199004066 Revision K

Specifications:

These specifications are valid only for a new **400-MR**. Probe performance on older systems may be lower.

Resolution and Lineshape:

		Spinning	Non-spinning
¹ H	<i>CHCl3</i>		
	50%	≤ 0.45 Hz	≤ 0.65 Hz
	.55%	≤ 5.0 Hz	≤ 8.0 Hz
	.11%	≤ 10.0 Hz	≤ 16.0 Hz
	Sidebands	≤ 1%(NT=4)	

Signal/Noise:

¹H Sensitivity ≥ 575:1
¹H Sensitivity ≥ 650:1

Sample Tube
0.1% Ethylbenzene
0.1% Ethylbenzene

Wilmad 535-PP
Wilmad 545-PP

Pulse Performance:

Channel 90° Pulse Width

¹H ≤ 8 μsec w/ 50W Amp
¹³C ≤ 13 μsec w/ 300W Amp
¹⁵N ≤ 28 μsec w/ 300W Amp

RF Homogeneity

810°/90° ≥ 70% 450°/90° ≥ 80%
720°/0° ≥ 70% 360°/0° ≥ 80%
720°/0° ≥ 65% 360°/0° ≥ 70%

Sample

0.1% Ethylbenzene
1% ¹³C-Iodomethane
2% ¹⁵N-Benzamide

Gradient Strength:

Maximum Z-gradient strength ≥ 18 G/cm

Gradient Recovery:

≤ 250 μsec @ 10 G/cm

Variable Temperature Range:

-80° C to +130° C

Sample Volume:

600 μL (recommended)

Notes:

Probe performance demonstrated during installation with standards in Wilmad 535-PP sample tube or equivalent.