

Product: **Bruker 10 mm DUL 400 MHz Z-Gradient high resolution probe**

Description: An observe high resolution probe for 10 mm sample diameters and 400 MHz standard bore magnets. The inner NMR coil is tuned to observe ^2H . The outer NMR coil is tuned for ^1H decoupling. The probe is fitted with a ^{19}F lock channel. It is equipped with automatic tuning and matching accessory (ATM).

Specification:

Signal/Noise		
^2H sensitivity	$\geq 14000:1$	(10% D ₂ O; 50ppm noise; LB=0 Hz) ¹
Pulse Widths		
^2H pulse width	$\leq 22 \mu\text{s}$	
^1H pulse width	$\leq 27 \mu\text{s}$	
^{19}F pulse width	$\leq 220 \mu\text{s}$	
Lineshape		
^2H lineshape	$\leq 1.1 \text{ Hz}$	(50%, 10% D ₂ O)
Z-Gradient		
Gradient strength	$\geq 0.2 \text{ T/m}$	(max current 10 A) ²
Variable Temperature Range		
Standard Range	-130°C to $+150^\circ\text{C}$ ^{2,3}	

Model: **Z136603**, PA DUL 400S1 2H-H-F-10 Z (non-standard probe)

Specifications with a new *Avance™ III* spectrometer fitted with a BOSS1-SB shim system (or higher).
 Technical data and specifications subject to change without notice.
 2018-09-05/FRT, Bruker BioSpin AG Probe Department.

1) s = wall thickness of sample tube

2) Specifications verified at production, not at installation

3) The shim system temperature must not be allowed to exceed $+80^\circ\text{C}$. At low temperatures, precautions must be taken to prevent the magnet dewar O-rings from freezing.