

INTEGRATED AMPLIFIER NMR PROBES

- Range : 0.043 to 13.7 Tesla
- External amplifier not required
- Easier to handle, more economical

- TO BE USED WITH PT 2025 or PT 4025 TESLAMETER MAIN UNIT

The 1062 integrated amplifier probes combine the function of the 1030 amplifier and the 1060 NMR probes in the same housing as the 1060 probes.

The ^1H probes are built with a solid sample containing a large amount of hydrogen.

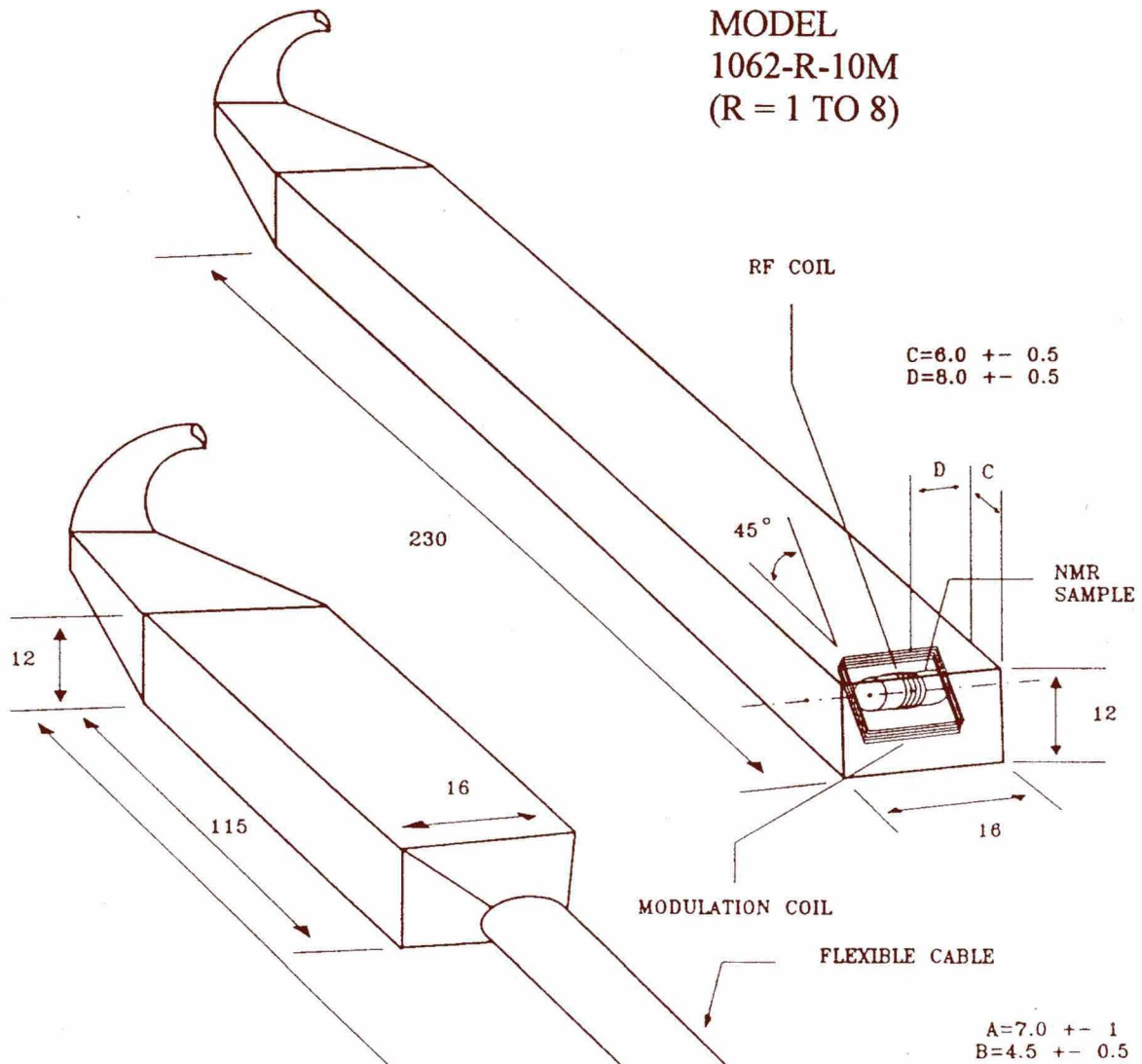
The ^2H probes are built with a sample of D_2O (heavy water) and consequently should not be exposed below freezing point.

Specifications :

Amplifier	:	built-in.
Probe identification	:	automatic.
Housing	:	beryllium copper.
External dimensions	:	16.5 x 12.5 x 230 mm, fits in 19 mm diameter.
Cable length	:	10 meters, special length available.
Connectors	:	one 8-pin LEMO and one BNC.
Multiplexed configurations	:	up to 8 probes can be connected to the 2030 multiplexer (or up to 64 with multiplexers 2032 and 2030).
Field direction	:	transverse and axial.
Absolute accuracy	:	better than ± 5 ppm.
Relative accuracy	:	0.1 ppm RMS.
Temperature coefficient	:	better than 0.05 ppm/ $^{\circ}\text{C}$.
Temperature range	:	+5 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$.
Storage temperature	:	-20 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$, except for heavy water probes (ranges: 6 to 8).

Probe ranges [Tesla]	Active sample [mm]	Required field homogeneity [ppm/cm]
R = 1 ^1H from 0.043 to 0.13	8 (dia.) 4.5 (L)	600
R = 2 ^1H from 0.09 to 0.26	5 (dia.) 4.5 (L)	1200
R = 3 ^1H from 0.17 to 0.52	4 (dia.) 4.5 (L)	1200
R = 4 ^1H from 0.35 to 1.05	4 (dia.) 4.5 (L)	1500
R = 5 ^1H from 0.7 to 2.1	4 (dia.) 4.5 (L)	250
R = 6 ^2H from 1.5 to 3.4	4 (dia.) 4.5 (L)	240
R = 7 ^2H from 3.0 to 6.8	4 (dia.) 4.5 (L)	300
R = 8 ^2H from 6.0 to 13.7	4 (dia.) 4.5 (L)	50

**MODEL
1062-R-10M
(R = 1 TO 8)**



**MODEL
1082-R-10M
(R = 3 TO 8)**

DIMENSIONS IN MM.
DRAWING NOT ON SCALE.

NMR SAMPLE DIMENSIONS (R=FIELD RANGE)
DIAM=8 (R=1)
DIAM=6 (R=2)
DIAM=4 (R=3 TO 8)
LENGTH=4.5 (R=1 TO 8)

