

SUBMINIATURE NMR PROBES

- **Range : 0.043 to 13.7 Tesla**
- **External amplifier required**
- **TO BE USED WITH PT 2025 or PT 4025 TESLAMETER MAIN UNIT**

The 1080 probes include 7m length standard cable connecting to the amplifier 1030 or the Multiplexer 2031.

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

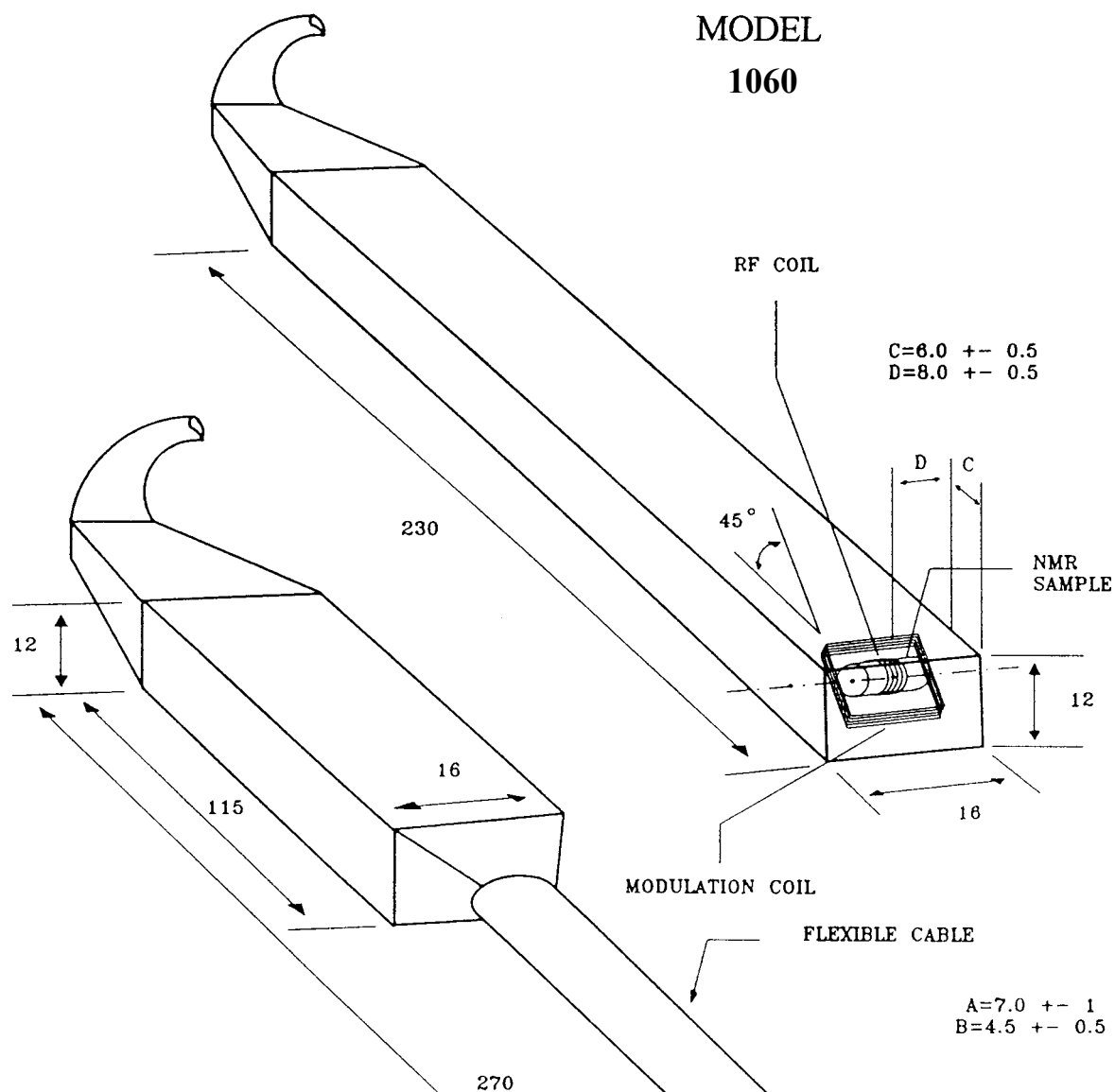
The ^2H probes are built with a sample of D_2O (heavy water) and consequently should not be exposed below freezing point.

Specifications :

| | | |
|----------------------------|---|--|
| Amplifier | : | Model 1030 required. |
| Probe identification | : | automatic. |
| Housing | : | beryllium copper. |
| External dimensions | : | 16.5 x 12.5 x 115 mm, + 9 X 6 X 155 mm fits in 10 mm diameter. |
| Cable length | : | 7 meters, special length available. |
| Connectors | : | one 5-pin LEMO and one BNC. |
| Multiplexed configurations | : | up to 8 probes can be connected to the 2031 multiplexer (or up to 64 with multiplexers 2032 and 2031). |
| Field direction | : | transverse. |
| Absolute accuracy | : | better than ± 5 ppm. |
| Relative accuracy | : | 0.1 ppm RMS. |
| Temperature coefficient | : | better than 0.05 ppm/°C. |
| Temperature range | : | +5 °C to +40 °C. |
| Storage temperature | : | -20 °C to 80 °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 0.05 | to 0.13 | 5 (dia.) | 4.5 (L) | 600 |
| R = 2 | ^1H | from 0.11 | 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 1060



MODEL 1080

DIMENSIONS IN MM.
DRAWING NOT ON SCALE.

NMR SAMPLE DIMENSIONS (R=FIELD RANGE)
DIAM=8 (R=1)
DIAM=5 (R=2)
DIAM=4 (R=3 TO 8)
LENGTH=4.5 (R=1 TO 8)