# Passive Magnetische Ring- und Rahmenantennen HFRA / HFRAE
## *Passive Magnetic Loop Antennas (Transmit / Receive) 0 - 400 MHz*

| Typ | Anwendung | Bild | Durchmesser | Frequenzbereich | Daten |
|---|---|---|---|---|---|
| *Model* | *Application* | *Drawg.* | *Diameter* | *Frequency range* | *Specifications* |
| HFRA 5148 | Transmit | B | 180 mm | | 1 turn |
| HFRA 5149 | Transmit 50 W | E | 500 mm | 9 k – 30 MHz | 1 turn |
| HFRA 5152 | Transmit 1 W | C | 250 mm * | 0 - 3 MHz | DIN / IEC cal. |
| HFRA 5153 | Transmit 5 W | B | 180 mm * | 0 - 20 (30) MHz | 1 turn, Rv 450 Ω |
| HFRA 5154 | Cal. Loop 0.5 W | B | 100 mm * | 0.1 - 30 MHz | 2 turns, 50 Ω** |
| HFRA 5155 | HF-VHF cal lp, 0.5 W | A | 50 mm * | 0.1 - 100 MHz | 1 turn, transf.** |
| HFRA 5156 | VLF-HF cal lp. 2 W | A | 50 mm * | 0 - 5 MHz | 10 turns,Rv 450Ω |
| HFRA 5157 | Cal. Loop 3 W | A | 100 mm * | 0 - 20 (30) MHz | 2 turns, Rv 450 Ω |
| HFRA 5158 | Cal. Loop 5 W | B | 180 mm * | 0 - 2 MHz | 10 turns, Rv 450Ω |
| HFRA 5159 | Cal. Loop 5 W | C | 250 mm * | 0 - 0.5 MHz | 28 turns, 1260 Ω |
| HFRA 5170 | Cal. Loop 3 W | B | 100 mm * | 0 - 30 MHz | 1 turn, 250 Ω |
| HFRA SF02G | Transmit | D | 500 mm | 10 kHz - 30 MHz | 1 turn |
| HFRAE 5160 | VHF RX Loop | F | 50 mm * | 2 - 300 MHz | 1 turn, transf. |
| HFRAE 5161 | HF RX Loop | G | 100 mm * | 70 k - 120 MHz | 1 turn, transf. |
| HFRAE 5162 | VLF-HF RX Loop | H | 250 mm * | 50 k - 30 MHz | 1 turn, transf. |
| HFRAE 5163 | VLF-VHF RX Loop | F | ..50 mm.. | 9 k – 400 MHz | 1 turn, transf. |

* Durchmesser des Schleifendrahtes (Mitte Rohr)

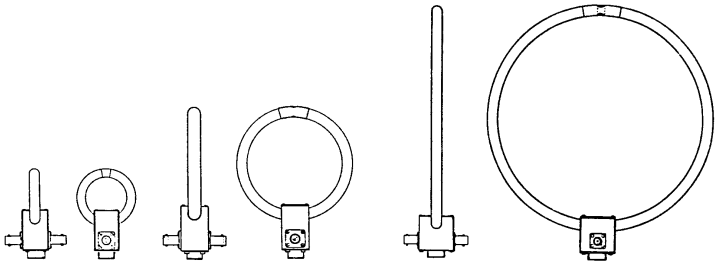
** HF-Ringkernübertrager für 50 Ω - Betrieb
Bitte beachten: aus organisatorischen Gründen wurde die erste Ziffer der Modellnummern von 9 auf 5 geändert, dies hat jedoch keinen Einfluss auf die technische Spezifikation. Beispiel: alte Bezeichnung HFRA 9170 wird zu HFRA 5170
Weitere Ausführungen nach vorgegebenen Spezifikationen sind möglich (EN, MIL u.a.).
Für homogene H-Felder s.a. "Helmholtz-Spulen" (kleine runde Kalibrierspulen u. quadr. Spulen bis 2m)

- N- / BNC-Buchsen
- 3/8" Kameragewinde zur Stativmontage

* *Diameter of Loop Wire (center tube)*

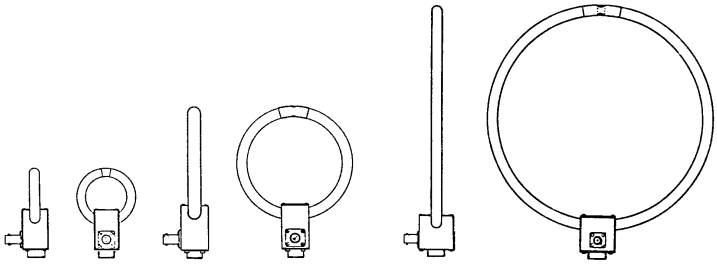
** *Toroid transformer for 50 Ω applications*
*Please note: because of administrative reasons the first digit of the model number was changed from 9 into 5. This change does not affect the technical specs. Example: the old name HFRA 9170 will be converted into HFRA 5170.*
*Other models can be realized on request (MIL, EN Standards)*
*For homogeneous H fields: Helmholtz Coil Sets, circular and square, up to 2m*

- *N- / BNC-female Connectors*
- *3/8" Camera thread for mounting on Tripods*

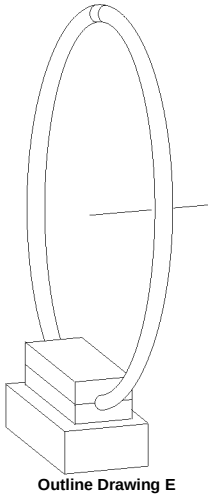


Outline Drawing A Outline Drawing B Outline Drawing C

Fig.D: HFRA SF02G



Outline Drawing F Outline Drawing G Outline Drawing H



Outline Drawing E

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