



Competence in Connectors

PRODUCT INFORMATION

FAKRA 180° CONNECTORS



- FAKRA RF connectors are used as standardized interfaces for high-frequency applications, such as:
 - Radio antennas (radio reception)
 - GPS telematics or navigation
 - GSM mobile communication
 - RF Bluetooth applications
 - RF remote control
 - Car2Car communication
- Approved for applications up to 6 GHz
- 360° rotatable housing avoids cable torsion
- Different codings for error free mating
- Available for coax cables
 - RG 174 / 316 & similar
 - Low-loss 3.3 mm
- Single & twin housings available (8 mm pitch)
- Automated assembly by crimp-crimp technology
- In compliance with DIN 72594 / ISO 20860 as well as with the high requirements of leading car manufacturers

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ELECTRICAL SPECIFICATIONS

Impedance	50 Ω
Frequency range	DC ... 6 GHz
Return loss at 1 GHz	≥ 18 dB
Return loss at 4 GHz	≥ 14 dB
Insulation resistance	> 1000 MΩ
Electrical strength	500 V _{eff} / 50 Hz
Working current	1,0 A DC
Contact resistance (inner contact)	≤ 5 mΩ
Contact resistance (outer contact)	≤ 5 mΩ
Insertion loss at 1 GHz	≤ 0,15 dB
Insertion loss at 4 GHz	≤ 0,3 dB

MECHANICAL SPECIFICATIONS

Mating force	max. 25 N
Separating force	min. 5 N
Inner contact's firm seat	≥ 10 N
Cable's pull out force	≥ 100 N
Lifetime (mating cycles)	min. 50
Temperature range	-40° C to +105° C

ROKA No. RG 174/316

ROKA No. low-loss 3.3

510 752 0	510 730 1	Male connector incl. crimping ferrule, UOP 1k box	
520 752 0	520 730 1	Female connector incl. crimping ferrule, UOP 1k box	
510 669 1	510 668 1	Male inner contact, ~1k reel	
510 669 5	510 668 5	Male inner contact, ~20k reel	
520 675 1	520 674 1	Female inner contact, ~1k reel	
520 675 5	520 674 5	Female inner contact, ~20k reel	
510 677 x - 510 678 x (coded in A - Z)		Male plastic housing, single, different codings, UOP 1k box	
510 688 x (coded in A - Z)		Male plastic housing, twin, different codings, UOP 500 pcs box	
520 677 x - 520 678 x (coded in A - Z)		Female plastic housing, single, different codings, UOP 1k box	
520 688 x - 520 689 x (coded in A - Z)		Female plastic housing, twin, different codings, UOP 500 pcs box	