

# FAKRA Technical Data (Code 59)

## Applicable Standards

Interface according to	ISO 20860-1, SAE/USCAR-18
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## Electrical Data

Impedance	50 $\Omega$
Frequency range (depends on cable), connector, assembling, testing	DC up to 6 GHz
Return loss	$\geq 18$ dB
Insertion loss	$\leq 0.1 \times \sqrt{f(\text{GHz})}$ dB
Insulation resistance	$\geq 1 \times 10^9 \Omega$
Center contact resistance	$\leq 5$ m $\Omega$
Outer contact resistance	$\leq 5$ m $\Omega$
Test voltage	750 V DC
Working voltage	60 V DC
Contact current (depending on cable size, connector and housing)	$\leq 4$ A DC
RF-leakage	$\geq 65$ dB

## Mechanical Data

Mating cycles (standard)	$\geq 25$
Mating cycles (waterproof)	$\geq 5$
Engagement force (single, standard)	$\leq 25$ N
Engagement force (waterproof)	$\leq 45$ N
Disengagement force	$\geq 2$ N
Retention force latch	$\geq 110$ N
Retention force primary lock	$\geq 80$ N
Retention force secondary lock	$\geq 60$ N

## Environmental Data

Temperature range	-40 °C – +105 °C
Vibration	DIN EN 60068-2-64
Mechanical shock	DIN EN 60068-2-27
Thermal shock	DIN EN 60068-2-14 Na
Temperature humidity cycling	DIN EN 60068-2-30 variante 2
High temperature exposure	DIN EN 60068-2-2

## Materials

Outer contact	CuZn, CuSn, Zn, Stainless steel
Center contact	CuZn, CuBe, CuSn
Dielectric	PTFE, PA, LCP, PBT
Gasket	Silicone, Rubber
Crimping ferrule	CuZn, CuSn
Plastic housings	PBT, PA, PPE, POM
Secondary lock	PBT, PA, PPE

## Platings

Outer contact	Au, Ni, Sn, Stainless steel
Center contact	Au

Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.

# FAKRA Interface Dimensions

