

Technical Data — Standard Circular Connectors

Environmental & Testing

Type	Performance	Standard
Tightness	IP 68 / 1m, IP 69K	IEC 60529 / MIL-STD-810F 512.4/5, DIN 40050-9
Sand & dust	Blowing sand and dust, settling dust	MIL-STD-810F 510.4/5 Procedure I / II, DIN 40050-9 / IP6kx
Operating temperature	-51°C up to +125°C	IEC 60512-6-11 i+j
Thermal shock	-65°C up to +150°C	EIA 364-32-E, IEC 60068-2-14
Humidity cyclic	85% up to 95%, 28 up to 71°C	MIL-STD-1344A Method 1002.2 Type III IEC 60068-2-38
Low pressure (rapid decompression)	59.1kPa to 18.8kPa	AECTP 300, 312 Procedure III (STANAG 4370)
Low pressure	57.2 kPa -55°C	MIL-STD-810F 500.4/5, IEC 60068-2-40
Icing	Rime ice 6 mm	MIL-STD-810F 521.2/3
Corrosion resistance	96 h salt mist, 5% salt solution, 35°C	EIA-364-26B, STANAG 4370, AECTP 300-309, MIL-STD-810F 509.4/5
Mold growth	European fungus	IEC 60068-2-10
Solar radiation		60068-2-5
Chemical endurance	Several substances, please refer to the list at airborn.com	ISO 16750-5

Mechanical data

Type	Performance	Standard
Mechanical endurance	5,000 mating cycles	IEC 60512-5-9-a, EIA-364-09
Vibration		MIL-STD 1344 Method 2005, EIA-364-28
Shock	100g amplitude, half sine pulse of 3ms, no discontinuity > 1μs	MIL-STD 1344 Method 2004, EIA-364-27

Electrical data

Type	Performance	Standard
Contact resistance (fig. 1) over 5,000 mating cycles	Contact diameter/ resistance ∅ 0.5 mm < 5 mOhm ∅ 0.7 mm < 4 mOhm ∅ 0.9 mm < 4 mOhm ∅ 1.3 mm < 3 mOhm ∅ 2.0 mm < 3 mOhm	IEC 60512-2-1
Shell resistance (fig. 2)	< 5 mOhm	IEC 60512-2-1
Insulation resistance	> 100 MOhm	IEC 60512-3-1
Shielding effectiveness (2)	> 65 dB	VG 95214-11

² P2, R2 connector pair

Fig. 1
Measurement
points

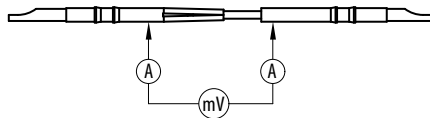
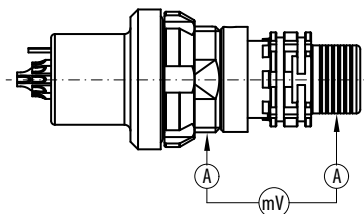


Fig. 2
Measurement
points



Please consult the AirBorn website for the latest revision of this document prior to beginning any design work.