

○ = Pinbelegung / pinning

All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to RN 059-03

Documents

Assembly instruction D4V009
 Pinning instruction RN 053-01
 Test Specification RN 061-01

Material and plating

Connector parts

Center contact	Spring bronze
Outer contact	Brass
Contact sleeve	Spring bronze
Dielectric	PA 12
Crimping ferrule	Spring bronze
Housing	PBT
Secondary Lock	PBT

Material

Plating

Gold, min. 0.15 µm, over chemical nickel
 Nickel, 2.5-5 µm
 Nickel, 2.5-5 µm
 Tin, 0.5-2 µm

Preliminary

Electrical data

Impedance, differential mode	100 Ω differential signalling, for one pair or quad cable shielded
Frequency	DC to 2.0 GHz
Return loss	≥ 20 dB to 1.0 GHz ≥ 17 dB to 2.0 GHz
Insertion loss	≤ 0.1 dB @ 1.0 GHz
Skew (between signal contacts)	≤ 5 psec.
Nearend-Crosstalk	≤ 30 dB
Farend-Crosstalk	≤ 35 dB
Insulation resistance	≥ 1x10 ³ MΩ
Signal contact resistance	≤ 10 mΩ
Outer contact resistance	≤ 7.5 mΩ
Test voltage	250 V rms
Working voltage	100 V rms
Power current	≤ 1.5 A DC
RF-leakage (shielding effectiveness)	≥ 75 dB up to 1 GHz (IEC 62153-4-7) ≥ 65 dB up to 2 GHz (IEC 62153-4-7)

Mechanical data

Mating cycles	≥ 25
Engagement force	≤ TBD
Disengagement force	≥ TBD
Retention force latch	≥ 110 N
Retention force primary lock	≥ 80 N
Coding efficiency	≥ 80 N

Preliminary

Environmental data

Temperature range	-40°C to +105°C
Thermal shock	DIN IEC 60068-2-14 Test NA
Temperature and humidity	USCar 2 – 4 5.6.2
Vibration (Random)	DIN IEC 60068-2-64
Mechanical Shock	DIN IEC 60068-2-27
High-Temp. Exposure	DIN IEC 60068-2-2
Soldering profile	acc. to IEC 60068-2-58; Group 3&4
2002/95/EC (RoHS)	compliant

Tooling

Crimping tool	on request
Crimp insert	on request

Suitable cables

Cable type	Dacar 535
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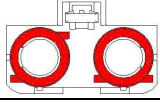
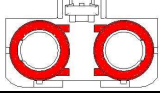
Packing

Standard	tbd pcs in box
Weight	12.75 g/pce

Coding

Part Number has to be accomplished by codification

Standard coding	Plug	Colour	RAL	Part-Number
B (B + A)		creme	sim. 9001	D4K20B-1D5A5-B
C (C + D)		light blue	sim. 5012	D4K20B-1D5A5-C
E (E + F)		may green	sim. 6017	D4K20B-1D5A5-E
Z (Z + Z)		waterblue	sim. 5021	D4K20B-1D5A5-Z

Additional coding	Plug	Colour	RAL	Part-Number
A (A + B)		graphite black	sim. 9011	D4K20B-1D5A5-A
D (D + C)		bordeauxviolet	sim. 4004	D4K20B-1D5A5-D
F (F + E)		nut brown	sim. 8011	D4K20B-1D5A5-F

Preliminary

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Lankes Wolfgang	31/08/09	Lankes Wolfgang	02/02/11	100	11-v025	Volker Pangritz	02/02/11
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