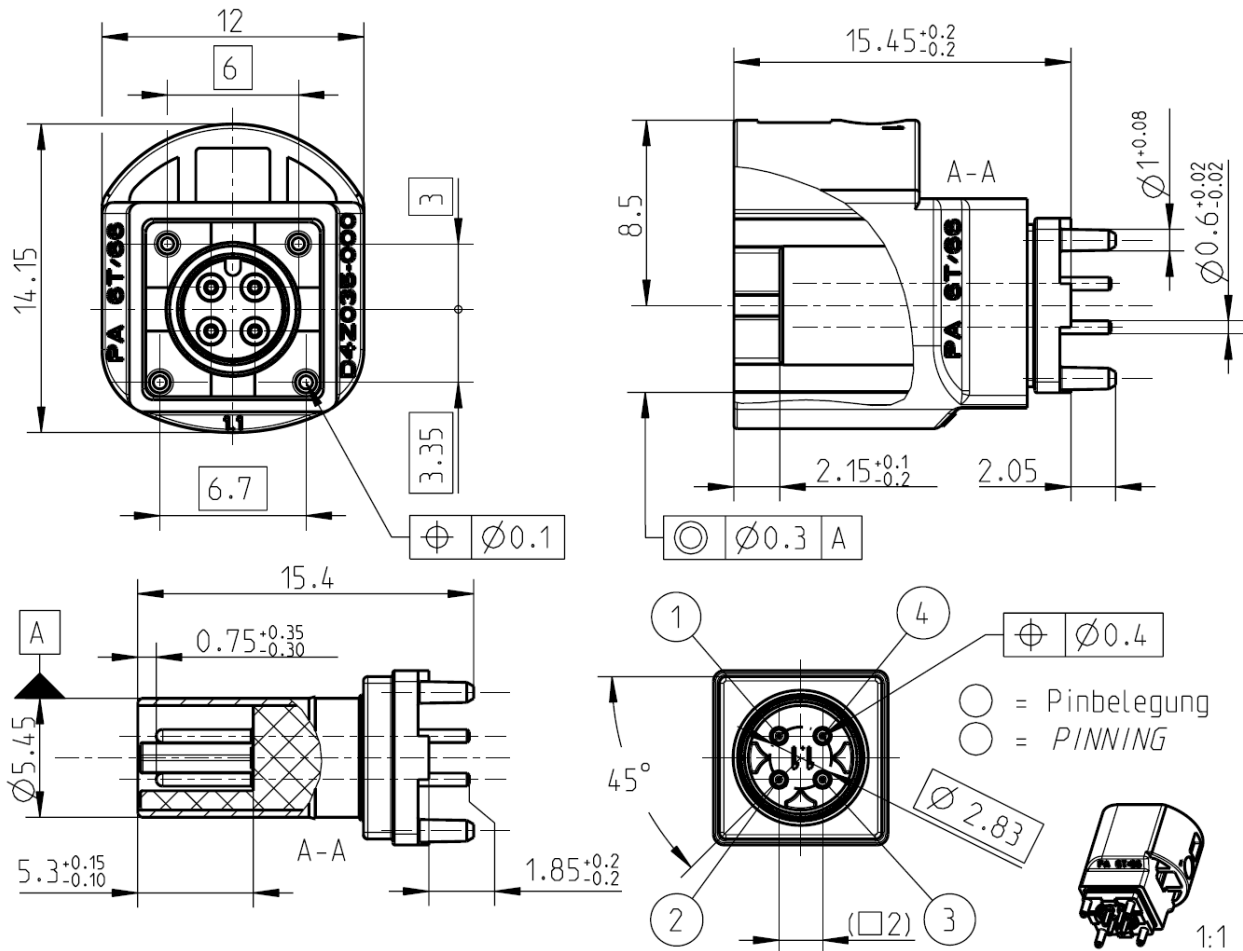




All dimensions are in mm; tolerances according to ISO 2768 m-H

EMC-screening must be assured by chassis compartment. Control box manufacturer is responsible for EMC-screening.

Interface

According to

RN 059-01

Documents

Assembly instruction

acc. D4V016

PCB layout

acc. MB_285

Pinning instruction

RN 053-01

Test specification

RN 061-01

Blister packaging

Pick&Placeable (shape tbd)

Material and plating

Connector parts

Center contacts

Material

Brass

Outer contact (Interface)

Brass

Outer contact (PCB)

Zinc Alloy

Dielectric

LCP

Housing

PA 6T/66

Plating

Gold, 0.15 μ m

Nickel, 2.5-5 μ m

Tin, 2-5 μ m

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	$\geq 1 \times 10^3$ M Ω
Signal contact resistance	≤ 10 m Ω
Outer contact resistance	≤ 7.5 m Ω
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	≤ 30 N
Disengagement force	≥ 5 N
Retention force latch	≥ 110 N
Coding efficiency	≥ 80 N

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

N/A

Suitable cables

N/A

Packing

Standard	150 pcs on tape&reel
Weight	2.7 g/

Coding

Part Number has to be accomplished by codification

Coding	Plug	Colour	RAL	Part-Number
A		black	sim. 9005	D4S12H-40MA5-A
B		white	sim. 9001	D4S12H-40MA5-B
C		blue	sim. 5005	D4S12H-40MA5-C
D		bordeaux	sim. 4004	D4S12H-40MA5-D
E		green	sim. 6002	D4S12H-40MA5-E
F		brown	sim. 8011	D4S12H-40MA5-F
Z		waterblue	sim. 5021	D4S12H-40MA5-Z

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Thomas Höfling	20/04/11	Thomas Höfling	11/08/11	a00	11-s358	A.Kott	11/08/11

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