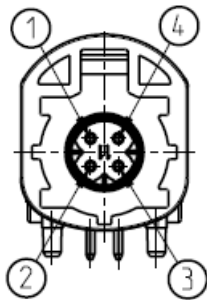
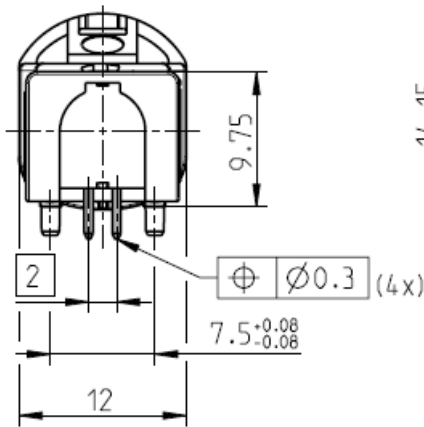
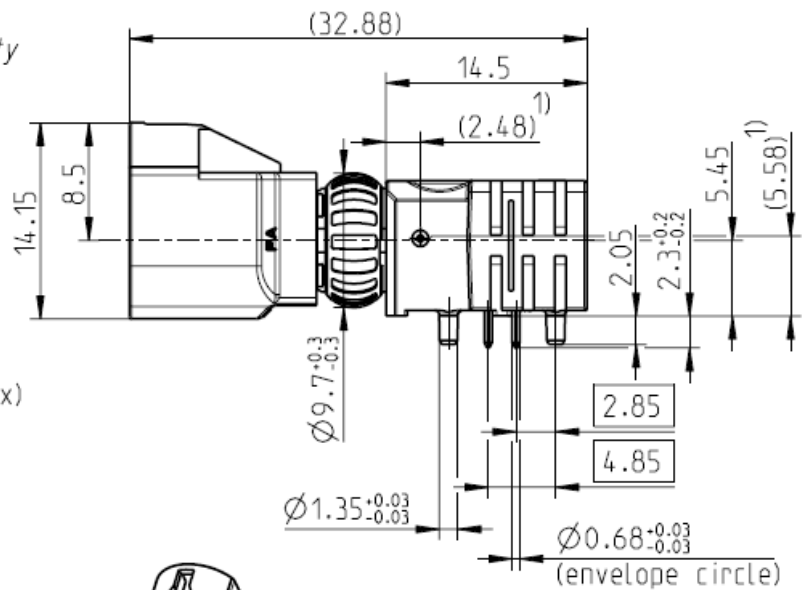


1) Lage des Schwerpunkts
position of center of gravity



○ Pinbelegung / *pinning*



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	D4V019
PCB layout	MB_322
Pinning instruction	RN 053-01
Test specification	RN 061-01
Tape&reel packing	VG 186.19000

Material and plating

Connector parts

	Material	Plating
Center contact	Spring bronze	Gold, 0.15 µm (Interface) Tin, 0.5-2 µm (PCB)
Outer contact (Interface)	Brass	Nickel, 3-6 µm
Outer contact (PCB)	Zinc alloy	Tin, 2-5 µm over Nickel 1-5µm
Dielectric	LCP	
Housing	HTN	
Spring washer	Spring bronze	Nickel, 2.5-5 µm

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	≤ 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

HSD RIGHT ANGLE PLUG FOR PCB

D4S20Y-40MA5-Y

Tooling

N/A

Suitable cables


N/A

Packing

Standard 190 pcs on tape&reel
Weight 8.3 g/pce

Coding

Part number has to be accomplished by codification

Coding	Plug	Color	RAL	Part-Number
A		black	sim. 9005	D4S20Y-40MA5-A
B		white	sim. 9001	D4S20Y-40MA5-B
C		blue	sim. 5005	D4S20Y-40MA5-C
D		bordeaux	sim. 4004	D4S20Y-40MA5-D
E		green	sim. 6002	D4S20Y-40MA5-E
F		brown	sim. 8011	D4S20Y-40MA5-F
Z		water blue	sim. 5021	D4S20Y-40MA5-Z

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
Thomas Höfling	24/02/11	Thomas Höfling	01/03/12	a00	11-s505	C. Biermann	01/03/12