

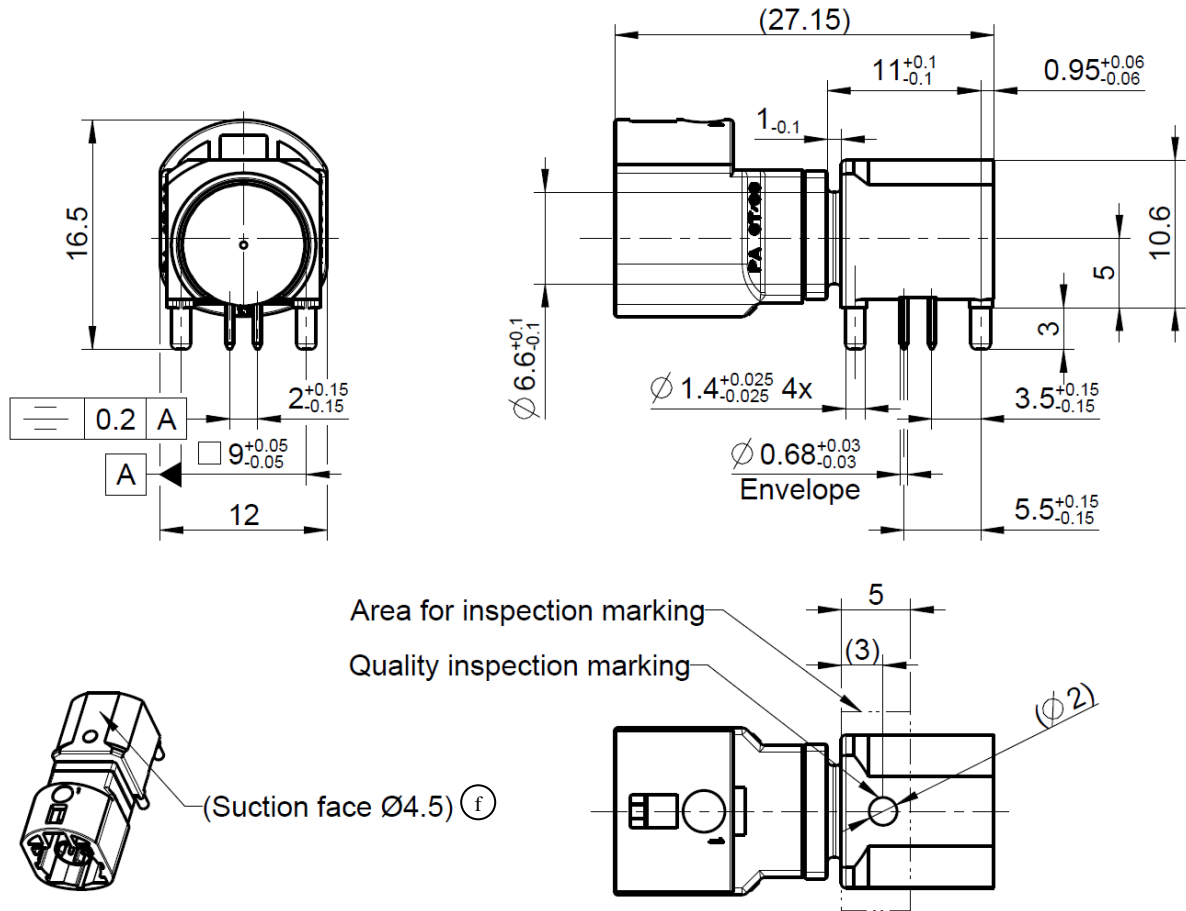
# Technical Data Sheet

# Rosenberger

Rosenberger  
HSD®

RIGHT ANGLE PLUG  
FOR PCB

## D4S20G-400A5-Y



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	D4V013
Panel piercing	MB_261
Pinning instruction	RN_053-01
Test specification	RN_061-01

**Material and plating**

**Connector parts**

	<b>Material</b>	<b>Plating</b>
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 1-5 µm
Cover	Alpaca	
Dielectric	LCP	
Housing	PA 6T/66	

**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, DC to ≤ 1 GHz ≥ 17 dB, > 1 GHz to ≤ 2 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 <sup>3</sup> 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
RoHS	compliant

**Packing**

Standard

175 pcs in tape & reel








1050 pcs (175 pcs in tape & reel, 6 reels in box) g

Weight

8.6 g

**Coding**


Part number has to be accomplished by codification

Coding	Plug	Colour	RAL	Part-Number
A		black	sim. 9005	D4S20G-400A5-A
B		white	sim. 9001	D4S20G-400A5-B
C		blue	sim. 5005	D4S20G-400A5-C
D		bordeaux	sim. 4004	D4S20G-400A5-D
E		green	sim. 6002	D4S20G-400A5-E
F		brown	sim. 8011	D4S20G-400A5-F
Z		waterblue	sim. 5021	D4S20G-400A5-Z

**Coding for special use**

Part number has to be accomplished by codification

**Control box manufacturer is responsible for pinning**

Coding	Plug	Colour	RAL	Part-Number
G		grey	sim. 7031	D4S20G-400A5-G
H		violet	sim. 4003	D4S20G-400A5-H
J		beige	sim. 1001	D4S20G-400A5-J
O		light green	sim. 6027	D4S20G-400A5-O

**Change History**

Rev.	Date	Change
f00	09.05.16	Note "Suction face Ø4.5" changed to "(Suction face Ø4.5)"
g00	02.06.16	Bundle size changed from "1200 pcs in box (6 X 200 pcs in blister tray)" To "1050 pcs in box (6 x 175 pcs/reel)"
h00	07.12.20	Coding J added

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
R. Bippus	11.06.07	T. Georg	07.12.20	h00	20-2333	M. Jacobs	07.12.20

RF\_35/09.14/6.2