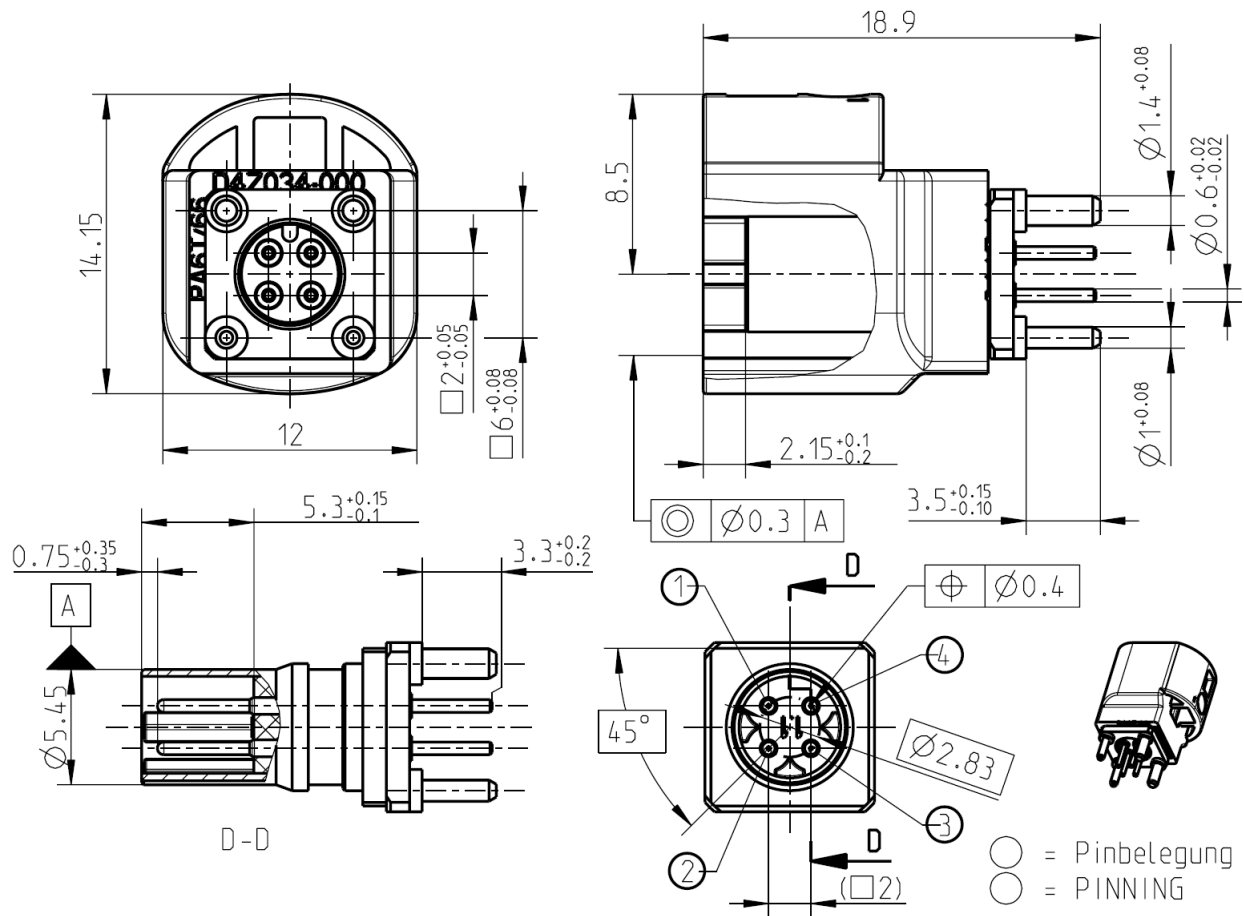




All dimensions are in mm; tolerances according to ISO 2768 m-H

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 | D4V012    |
| PCB layout           | MB_214    |
| Pinning instruction  | RN 053-01 |
| Test specification   | RN 061-01 |

### Material and plating

#### Connector parts

|                 |          |
|-----------------|----------|
| Center contacts | Brass    |
| Outer contact   | Brass    |
| Dielectric      | LCP      |
| Housing         | PA 6T/66 |

#### Plating

|                    |
|--------------------|
| Gold, 0.15 $\mu$ m |
| Gold, 0.15 $\mu$ m |

**Electrical data**

|                                        |                                                                                      |
|----------------------------------------|--------------------------------------------------------------------------------------|
| Impedance, differential mode           | 100 $\Omega$ differential signalling, for one pair or quad cable shielded            |
| Frequency                              | DC to 2.0 GHz                                                                        |
| Return loss                            | $\geq 20$ dB to 1.0 GHz<br>$\geq 17$ dB to 2.0 GHz                                   |
| Insertion loss                         | $\leq 0.1$ dB @ 1.0 GHz                                                              |
| Skew (between signal contacts)         | $\leq 5$ psec.                                                                       |
| Nearend-Crosstalk                      | $\leq 30$ dB                                                                         |
| Farend-Crosstalk                       | $\leq 35$ dB                                                                         |
| Insulation resistance                  | $\geq 1 \times 10^3$ M $\Omega$                                                      |
| Signal contact resistance              | $\leq 10$ m $\Omega$                                                                 |
| Outer contact resistance               | $\leq 7.5$ m $\Omega$                                                                |
| Test voltage                           | 250 V rms                                                                            |
| Working voltage                        | 100 V rms                                                                            |
| Power current                          | $\leq 1.5$ A DC                                                                      |
| RF-leakage ( shielding effectiveness ) | $\geq 75$ dB up to 1 GHz (IEC 62153-4-7)<br>$\geq 65$ dB up to 2 GHz (IEC 62153-4-7) |

**Mechanical data**

|                       |              |
|-----------------------|--------------|
| Mating cycles         | $\geq 25$    |
| Engagement force      | $\leq 30$ N  |
| Disengagement force   | $\geq 5$ N   |
| Retention force latch | $\geq 110$ N |
| Coding efficiency     | $\geq 80$ 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 | 125 pcs on tape & reel |
| Weight   | 2.9 g/pce              |

**Coding**

Part Number has to be accomplished by codification

| Coding | Plug                                                                                | Colour    | RAL       | Part-Number    |
|--------|-------------------------------------------------------------------------------------|-----------|-----------|----------------|
| A      |    | black     | sim. 9005 | D4S10A-400L5-A |
| B      |    | white     | sim. 9001 | D4S10A-400L5-B |
| C      |    | blue      | sim. 5005 | D4S10A-400L5-C |
| D      |    | bordeaux  | sim. 4004 | D4S10A-400L5-D |
| E      |    | green     | sim. 6002 | D4S10A-400L5-E |
| F      |   | brown     | sim. 8011 | D4S10A-400L5-F |
| Z      |  | waterblue | sim. 5021 | D4S10A-400L5-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          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|------|--------------------------------------------------------------------------------------------------------------------|-----------|---------------|
| M. Zebhauser                                                                                                                                           | 30/01/06 | W.Lankes | 05/05/11 | 902  | 11-0400                                                                                                            | L.Perschl | 05/05/11      |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany<br><a href="http://www.rosenberger.de">www.rosenberger.de</a> |          |          |          |      | Tel.: +49 8684 18-0<br>Fax: +49 8684 18-499<br>email: <a href="mailto:info@rosenberger.de">info@rosenberger.de</a> |           | Page<br>3 / 3 |