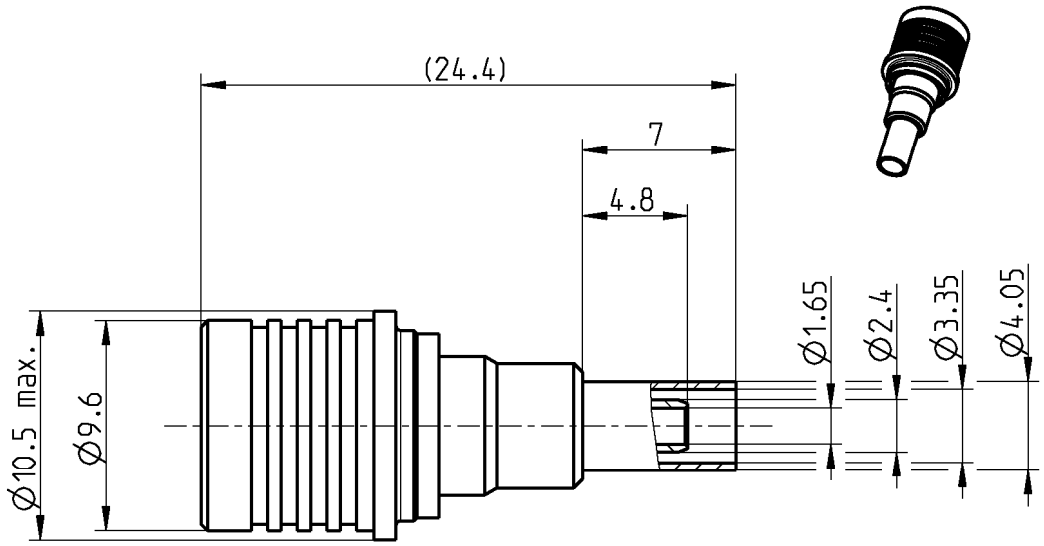
TECHNICAL DATA SHEET

Rosenberger

QMA STRAIGHT PLUG

# 28S107-303N5




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

## Interface

| | |
|---|---|
| According to | Rosenberger 28S000-000, series QMA<br>Rosenberger is an authorised QLF® manufacturer |

## Documents

| | |
|---|---|
| Assembly instruction | 28 D |

## Material and plating

| **Connector parts** | **Material** | **Plating** |
|---|---|---|
| Center contact | Brass | AuroDur®, gold plated |
| Outer contact | Spring bronze | White bronze(e.g. Optalloy®) |
| Body | Brass | Flash white bronze over silver(e.g. Optargen®) |
| Dielectric | PTFE | |
| Unlocking sleeve | Brass | White bronze(e.g. Optalloy®) |
| Crimping ferrule | Copper | Flash white bronze over silver(e.g. Optargen®) |





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|---|---|
| QMA STRAIGHT PLUG | **28S107-303N5** |

## Electrical data

| | |
|---|---|
| Impedance | 50 Ω |
| Frequency | DC to 18 GHz |
| Return loss | ≥ 32 dB, DC to 3 GHz<br>≥ 28 dB, 3 to 4 GHz<br>≥ 25 dB, 4 to 6 GHz |
| Insertion loss | $\leq 0.05 \times \sqrt{f(GHz)}$ dB, DC to 6 GHz |
| Insulation resistance | $\geq 5 \times 10^3$ MΩ |
| Center contact resistance | ≤ 3 mΩ |
| Outer contact resistance | ≤ 2.5 mΩ |
| Test voltage, at sea level, 50Hz | 750 V rms |
| Working voltage, at sea level, 50Hz | 350 V rms |
| RF-leakage | ≥ 95 dB up to 2 GHz<br>≥ 80 dB up to 4 GHz<br>≥ 70 dB up to 6 GHz |

*- Limitations are possible due to the used cable type -*

## Mechanical data

| | |
|---|---|
| Mating cycles | min. 100 |
| Center contact captivation: axial | ≥ 20 N |
| Engagement force | typ. 25 N |
| Disengagement force | typ. 20 N |
| Retention force for interface | 60 N min. |

## Environmental data

| | |
|---|---|
| Temperature range | -40°C to +85°C |
| Storage temperature | -40°C to +85°C |
| Thermal shock | IEC 60169-1 16.4 (-40 / +85°C) |
| Corrosion | IEC 60169-1 16.7 (48 hrs) |
| Vibration | IEC 60068-2-64 random |
| Damp heat, steady state | IEC 60169-1 16.3 (96 hrs) |
| RoHS | compliant |

## Tooling

| | |
|---|---|
| Crimping tool | 11W150-000 |
| Crimp insert | 11W150-102 |

## Suitable cables

RG 316 /U-d, K02252d

## Weight

| | |
|---|---|
| Weight | 5.3 g/pce |



| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|---|---|---|---|---|---|---|---|
| Inge Mühlauer | 19/09/07 | Sa. K. | 13.03.14 | c00 | 14-0352 | T. Krojer | 13.03.14 |

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