



SMA - Sub- Miniature Coaxial Connectors in Precision Quality for Microwave Applications up to 18 GHz

SMA connectors satisfy high quality standards and are characterized by high durability, high mechanical stability, long life and optimum electrical properties, especially low VSWR. The reliable screw coupling mechanism with defined maximum torque, at butted contact, allows RF- applications up to 18 GHz.

The connectors are available in various classes for different applications - with outer conductors in different materials and therefore with different price levels:

- Standard quality in copper beryllium, gold plated
- Stainless steel passivated
- Economy version in brass, gold plated / white bronze plated.

Product Features

- Interface according to IEC 60169- 15, EN 122 110, MIL- STD- 348A, Fig. 310
- Quality tested according to US MIL- STD 202
- Frequency range up to 18 GHz
- VSWR (straight connector): ≤ 1.05 typ.
- Optimal electrical characteristics
- High quality standard
- Reliable and long service life.

Product Range

- Cable connectors (straight and right angle) for flexible, semi- flex and semi- rigid cables
- PCB connectors (straight and right angle) as solder, SMD, press- fit and edge mount versions
- Panel connectors in various flanges for solder, stripline and microstrip types
- Hermetically sealed versions
- Terminations
- Adaptors
- Tools and Accessories.

Further connectors are available on request, also as MIL- PRF 39012 qualification.

Application Examples

Worldwide spread coaxial connector series for various common applications like telecom and mobile communications, test and measurement equipment and instruments.

SMA - Sub- Miniatur Koaxialsteckverbinder in Präzisionsausführung für Mikrowellenanwendungen bis 18 GHz

SMA- Steckverbinder besitzen einen hohen, anspruchsvollen Qualitätsstandard und zeichnen sich durch Zuverlässigkeit, große mechanische Festigkeit, lange Lebensdauer und optimale elektrische Eigenschaften, insbesondere niedriges VSWR, aus. Die zuverlässige Schraubkupplung mit definiertem Anzugsdrehmoment, bei Außenleiterstirnkontakt, ermöglicht Hochfrequenz- Anwendungen bis 18 GHz.

Für differenzierte Einsatzfälle in verschiedenen Qualitätsstufungen und Preisabstufungen, werden die Steckverbinder in unterschiedlichen Materialien für die Außenleiterteile angeboten:

- Standard- Ausführung in Kupfer- Beryllium, vergoldet
- Edelstahl passiviert
- Economy- Ausführung in Messing vergoldet / weißbronzebeschichtet.

Produkteigenschaften

- Interface gemäß IEC 60169- 15, EN 122 110, MIL- STD- 348A, Fig. 310
- Qualitätsprüfung gemäß US MIL- STD 202
- Frequenzbereich max. bis zu 18 GHz
- VSWR (gerader Steckverbinder): $\leq 1,05$ typ.
- Optimale elektrische Eigenschaften
- Hoher Qualitätsstandard
- Zuverlässigkeit und lange Lebensdauer.

Produktspektrum

- Kabelsteckverbinder (gerade und gewinkelt) für flexible, halbstarre und Semi- Rigid- Kabel
- Leiterplatten- Steckverbinder (gerade und gewinkelt), in Löt-, SMD-, Press- fit- und Edge- mount- Ausführungen
- Gehäuse- Steckverbinder in verschiedenen Flanschen für Löt-, Strip- line- und Microstrip- Bauformen
- Hermetisch dichte Versionen
- Abschlusswiderstände
- Adapter
- Werkzeuge und Zubehör.

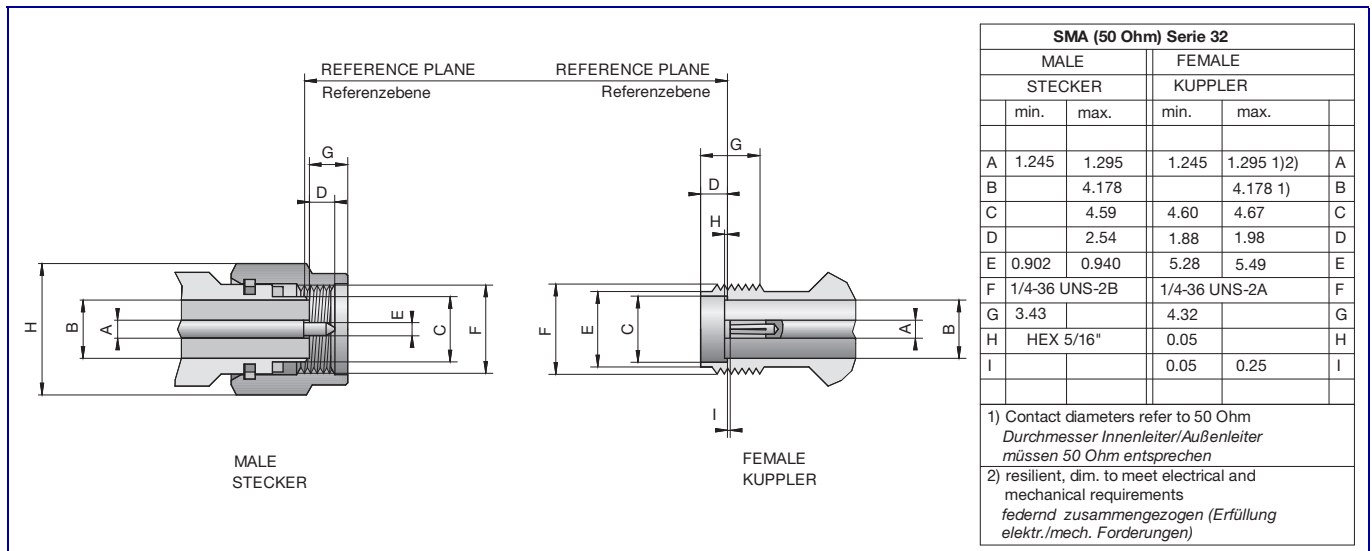
Weitere Steckverbinder, auch nach MIL- PRF 39012, auf Anfrage erhältlich.

Anwendungsbeispiele

Weltweit verbreitetste Koaxial- Steckverbinderreihe mit vielfältigen Einsatzmöglichkeiten wie z. B. in der Telekommunikation, im Mobilfunk, in der Messtechnik, in der industriellen Fertigung und weiteren Anwendungsfeldern.

Interface Dimensions

Anschlussmaße



Technical Data

Technische Daten

| Applicable standards | | Anwendbare Standards |
|-----------------------------|---|------------------------|
| Interface according to | IEC 60169- 15; EN 122110; MIL- STD- 348A, Fig. 310 | Interface gemäß |
| Quality tested according to | US MIL- STD 202 | Qualitätsprüfung gemäß |

| Electrical data | | Elektrische Daten |
|---------------------------------------|---|---|
| Impedance | 50 Ω | Wellenwiderstand |
| Frequency range (straight connectors) | 0 - 18 GHz | Frequenzbereich (gerade Steckverbinder) |
| VSWR | $\leq 1.1 + 0.02 \times f$ (GHz) | VSWR |
| Insertion loss | $\leq 0.04 \text{ dB} \times \sqrt{f}$ (GHz) [dB] | Dämpfung |
| Insulation resistance | $\geq 5 \times 10^3 \text{ M}\Omega$ | Isolationswiderstand |
| Center contact resistance | $\leq 3.0 \text{ m}\Omega$ | Übergangswiderstand Innenleiter |
| Outer contact resistance | $\leq 2.0 \text{ m}\Omega$ | Übergangswiderstand Außenleiter |
| Test voltage | 1000 V rms | Prüfspannung |
| Working voltage | 480 V rms | Betriebsspannung |
| Power handling | $\leq 200 \text{ W/2 GHz}$ | Leistungsbelastbarkeit |
| Rf- leakage | $\geq 100 \text{ dB}$ | Schirmdämpfung |

| Mechanical data | | Mechanische Daten |
|----------------------------|---|---------------------------|
| Mating cycles | Standard: ≥ 500 Economy: ≥ 100 | Steckzyklen |
| Coupling torque | Standard: St. Steel/BeCu, max. 1.70 Nm, rec. 0.9- 1.1 Nm Economy: CuZn, max. 0.6 Nm, rec. 0.5 Nm | Anzugsdrehmoment |
| Coupling nut retention | Standard: $\geq 270 \text{ N}$ Economy: $\geq 180 \text{ N}$ | Überwurfmutter Haltekraft |
| Center contact captivation | Standard: axial $\geq 27 \text{ N}$ radial $\geq 3 \text{ Ncm}$ Economy: axial $\geq 20 \text{ N}$ radial $\geq 1 \text{ Ncm}$ | Innenleiter Haltekraft |

| Environmental data | | Umweltdaten |
|----------------------|-------------------------------------|----------------------------|
| Temperature range | - 65°C - +165°C | Temperaturbereich |
| Vibration | US MIL- STD 202, Meth. 204, Cond. D | Vibration |
| Shock | US MIL- STD 202, Meth. 213, Cond. I | Schock |
| Moisture resistance | US MIL- STD 202, Meth. 106 | Feuchtigkeitsbeständigkeit |
| Corrosion resistance | US MIL- STD 202, Meth. 101, Cond. B | Korrosionsbeständigkeit |
| Climatic class | IEC 60068 55/155/21 | Klimaklasse |
| Thermal shock | US MIL- STD 202, Meth. 107, Cond. B | Temperaturzyklen |

| Materials | | Materialien |
|----------------|---|----------------|
| Body | CuZn | Gehäuse |
| Outer contact | Standard: CuBe/Stainless steel Economy: CuZn | Außenleiter |
| Center contact | CuBe/CuZn | Innenleiter |
| Coupling nut | Standard: Stainless steel Economy: CuZn | Überwurfmutter |
| Dielectric | PTFE | Dielektrikum |


| Materials | | Materialien |
|------------------------|---|---------------------------|
| Gasket | Silicon Rubber | Dichtung |
| Plating Body | Standard: Au or passivated Economy: Au or white bronze | Oberfläche Gehäuse |
| Plating Outer contact | Standard: Au or passivated Economy: Au or white bronze | Oberfläche Außenleiter |
| Plating Center contact | Au | Oberfläche Innenleiter |
| Plating Coupling nut | Standard: Au or passivated Economy: Au or white bronze | Oberfläche Überwurfmutter |

Rosenberger- connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.

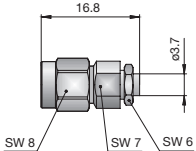
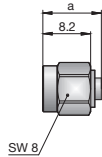
Rosenberger- Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem Rosenberger- Ansprechpartner.

Cable Connectors Semi- Rigid Cable

Straight Plug, solder
without pin, without dielectric*Kabelsteckverbinder Semi- Rigid- Kabel*
Stecker gerade, löt
ohne Pin, ohne Dielektrikum Semi- Rigid

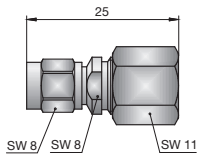
| Ordering Number | Remarks | Cable Group | Assembly Instruction | Packing Unit | |
|-----------------|--|-------------|----------------------|--------------|---|
| 32 S 101- 272 E | Outer contact CuBe gold plated, coupling nut steel gold plated a = 8.4 | 72 | 32 A1 / 32 A22 | 100 |  |
| 32 S 121- 272 S | Outer contact CuBe gold plated, coupling nut steel gold passivated a = 8.4 | 72 | 32 A1 / 32 A22 | 100 | |

Straight Plug, solder
soldered center contact*Stecker gerade, löt*
gelöteter Innenkontakt Semi- Rigid

| Ordering Number | Version | Remarks | Cable Group | Assembly Instruction | Packing Unit | |
|------------------|---------|---|-------------|----------------------|--------------|--|
| 32 S 101- 270 E3 | | CuBe, gold plated | 70 | 32 A11 | 1 |  |
| 32 S 102- 271 E3 | | CuBe, gold plated, a = 11.2 MIL- PRF 39012: 79- 4005 | 71 | 32 A6 / 32 A20 | 300 | |
| 32 S 102- 272 E3 | | CuBe, gold plated, a = 11.2 MIL- PRF 39012: 79- 4006 | 72 | 32 A3 / 32 A23 | 300 |  |
| 32 S 122- 271 S3 | | CuBe, gold plated, a = 11.2 MIL- PRF 39012: 79- 3005 | 71 | 32 A6 / 32 A20 | 300 | |
| 32 S 122- 272 S3 | | CuBe, gold plated, a = 11.2 MIL- PRF 39012: 79- 3006 | 72 | 32 A3 / 32 A23 | 300 | |
| 32 S 142- 271 E3 | economy | brass, gold plated, a = 11.2 | 71 | 32 A6 / 32 A20 | 300 | |
| 32 S 142- 272 E3 | economy | brass, gold plated, a = 11.2 | 72 | 32 A3 / 32 A23 | 300 | |

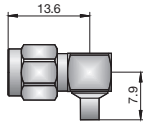
Straight Plug, clamp

Stecker gerade, klemm Semi- Rigid

| Ordering Number | Remarks | Cable Group | Assembly Instruction | Packing Unit | |
|------------------|---------------------------|-------------|----------------------|--------------|---|
| 32 S 106- 073 E3 | captivated center contact | 73 | 32 C1 | 1 |  |

Right Angle Plug, solder

Winkelstecker, löt Semi- Rigid

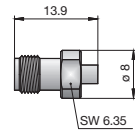
| Ordering Number | Version | Remarks | Cable Group | Assembly Instruction | Packing Unit | |
|------------------|---------|---------------------------|-------------|----------------------|--------------|---|
| 32 S 206- 271 E3 | | captivated center contact | 71 | 32 E1 | 100 |  |
| 32 S 206- 272 E3 | | captivated center contact | 72 | 32 E1 | 100 | |
| 32 S 246- 271 F3 | economy | brass, gold plated | 71 | 32 E1 / 32 E20 | 100 | |
| 32 S 246- 272 F3 | economy | brass, gold plated | 72 | 32 E1 / 32 E20 | 100 | |

Straight Jack, solder

Kuppler gerade, löt

Semi- Rigid

| Ordering Number | Remarks | Cable Group | Assembly Instruction | Packing Unit |
|-----------------|--------------------------|-------------|----------------------|--------------|
| 32 K 101-271 E3 | MIL- PRF 39012: 81- 4005 | 71 | 32 A4 / 32 A21 | 100 |
| 32 K 101-272 E3 | MIL- PRF 39012: 81- 4006 | 72 | 32 A5 / 32 A26 | 100 |

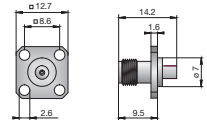


Panel Jack, solder, 4- hole flange

Gehäusekuppler, löt, 4- Loch- Flansch

Semi- Rigid

| Ordering Number | Remarks | Cable Group | Assembly Instruction | Panel Piercing / PCB Layout | Packing Unit |
|-----------------|--------------------------|-------------|----------------------|-----------------------------|--------------|
| 32 K 401-271 E3 | MIL- PRF 39012: 82- 4005 | 71 | 32 A4 / 32 A21 | B 55 | 100 |
| 32 K 401-272 E3 | MIL- PRF 39012: 82- 4006 | 72 | 32 A5 / 32 A26 | B 55 | 1 |

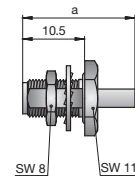


Panel Jack, solder, hexagonal flange

Gehäusekuppler, löt, 6- kant- Flansch

Semi- Rigid

| Ordering Number | Version | Remarks | Cable Group | Assembly Instruction | Panel Piercing / PCB Layout | Packing Unit |
|-----------------|------------|------------------------------------|-------------|----------------------|-----------------------------|--------------|
| 32 K 601-271 E3 | rear mount | a = 15 MIL- PRF 39012: 83- 4005 | 71 | 32 A4 / 32 A21 | B 56 | 100 |
| 32 K 601-272 E3 | rear mount | a = 15 MIL- PRF 39012: 83- 4006 | 72 | 32 A5 / 32 A26 | B 56 | 1, 100 |



Cable Connectors - Flexible Cables

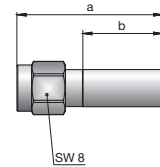
Kabelsteckverbinder Flexible Kabel

Straight Plug, solder- crimp

Stecker gerade, löt- crimp

Flexible Cables

| Ordering Number | Version | Remarks | Cable Group | Assembly Instruction | Packing Unit | Crimp Inserts |
|------------------|---------|--|-------------|----------------------|--------------|---------------|
| 32 S 107- 302 E3 | | stainless steel, gold plated, a = 18.2; b = 7 | 02 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 107- 303 E3 | | stainless steel, gold plated, a = 18.2; b = 7 | 03 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 107- 306 E3 | | stainless steel, gold plated, a = 24.5; b = 13.5 | 06 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 107- 307 E3 | | stainless steel, gold plated, a = 24.5; b = 13.5 | 07, 08 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 127- 302 S3 | | stainless steel, passivated, a = 18.2, b = 7 | 02 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 127- 303 S3 | | stainless steel, passivated, a = 18.2, b = 7 | 03 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 127- 306 S3 | | stainless steel, passivated, a = 24.5, b = 13.5 | 06 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 127- 307 S3 | | stainless steel, passivated, a = 24.5, b = 13.5 | 07, 08 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 147- 302 N3 | economy | brass white bronze plated, a = 18.2, b = 7 | 02 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 147- 303 N3 | economy | brass, white bronze plated, a = 18.2, b = 7 | 03 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 147- 306 N3 | economy | brass, white bronze plated, a = 24.5, b = 13.5 | 06 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 147- 307 N3 | economy | brass, white bronze plated, a = 24.5, b = 13.5 | 07, 08 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 147- 302 F3 | economy | brass, gold plated, a = 18.2, b = 7 | 02 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 147- 303 F3 | economy | brass, gold plated, a = 18.2, b = 7 | 03 | 32 B5 | 100 | 11 W 150- 102 |
| 32 S 147- 306 F3 | economy | brass, gold plated, a = 24.5, b = 13.5 | 06 | 32 B8 | 100 | 11 W 150- 108 |
| 32 S 147- 307 F3 | economy | brass, gold plated, a = 24.5, b = 13.5 | 07, 08 | 32 B8 | 100 | 11 W 150- 108 |

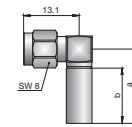


Right Angle Plug, solder- crimp

Winkelstecker, löt- crimp

Flexible Cables

| Ordering Number | Version | Remarks | Cable Group | Assembly Instruction | Packing Unit | Crimp Inserts |
|------------------|---------|--|-------------|----------------------|--------------|---------------|
| 32 S 207- 302 E3 | | CuBe, gold plated, a=12.1; b=7 | 02 | 32 B6 | 100 | 11 W 150- 102 |
| 32 S 207- 303 E3 | | CuBe, gold plated, a=12.1; b=7 | 03 | 32 B6 | 100 | 11 W 150- 102 |
| 32 S 207- 306 E3 | | CuBe, gold plated, a = 18.5; b = 13.5 | 06 | 32 B9 | 100 | 11 W 150- 108 |
| 32 S 207- 307 E3 | | CuBe, gold plated, a = 18.5; b = 13.5 | 07, 08 | 32 B9 | 100 | 11 W 150- 108 |
| 32 S 247- 302 N3 | economy | brass, white bronze plated, a = 12.1, b = 7 | 02 | 32 B6 | 100 | 11 W 150- 102 |
| 32 S 247- 303 N3 | economy | brass, white bronze plated, a = 12.1, b = 7 | 03 | 32 B6 | 100 | 11 W 150- 102 |
| 32 S 247- 306 N3 | economy | brass, white bronze plated, a = 18.5, b = 13.5 | 06 | 32 B9 | 100 | 11 W 150- 108 |
| 32 S 247- 307 N3 | economy | brass, white bronze plated, a = 18.5, b = 13.5 | 07, 08 | 32 B9 | 100 | 11 W 150- 108 |
| 32 S 247- 302 F3 | economy | brass, gold plated, a = 12.1, b = 7 | 02 | 32 B6 | 100 | 11 W 150- 102 |
| 32 S 247- 303 F3 | economy | brass, gold plated, a = 12.1, b = 7 | 03 | 32 B6 | 100 | 11 W 150- 102 |
| 32 S 247- 306 F3 | economy | brass, gold plated, a = 18.5, b = 13.5 | 06 | 32 B9 | 100 | 11 W 150- 108 |
| 32 S 247- 307 F3 | economy | brass, gold plated, a = 18.5, b = 13.5 | 07, 08 | 32 B9 | 100 | 11 W 150- 108 |

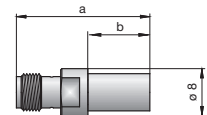


Straight Jack, solder- crimp

Kuppler gerade, löt- crimp

Flexible Cables

| Ordering Number | Remarks | Cable Group | Assembly Instruction | Packing Unit | Crimp Inserts |
|------------------|--|-------------|----------------------|--------------|---------------|
| 32 K 107- 302 E3 | stainless steel, gold plated, a = 20; b = 7 | 02 | 32 B5 | 100 | 11 W 150- 102 |
| 32 K 107- 303 E3 | stainless steel, gold plated, a = 20; b = 7 | 03 | 32 B5 | 100 | 11 W 150- 102 |
| 32 K 107- 306 E3 | stainless steel, gold plated, a = 25.5; b = 13.5 | 06 | 32 B8 | 1 | 11 W 150- 108 |
| 32 K 107- 307 E3 | stainless steel, gold plated, a = 25.5; b = 13.5 | 07, 08 | 32 B8 | 100 | 11 W 150- 108 |

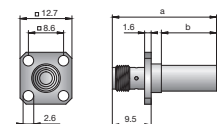


Panel Jack, solder- crimp, 4- hole flange

Gehäusekuppler, löt- crimp, 4- Loch- Flansch

Flexible Cables

| Ordering Number | Remarks | Cable Group | Assembly Instruction | Panel Piercing / PCB Layout | Packing Unit | Crimp Inserts |
|------------------|--|-------------|----------------------|-----------------------------|--------------|---------------|
| 32 K 407- 302 E3 | stainless steel, gold plated, a = 20; b = 7 | 02 | 32 B5 | B 55 | 100 | 11 W 150- 102 |
| 32 K 407- 303 E3 | stainless steel, gold plated, a = 20; b = 7 | 03 | 32 B5 | B 55 | 100 | 11 W 150- 102 |
| 32 K 407- 306 E3 | stainless steel, gold plated, a = 25.5; b = 13.5 | 06 | 32 B8 | B 55 | 100 | 11 W 150- 108 |
| 32 K 407- 307 E3 | stainless steel, gold plated, a = 25.5; b = 13.5 | 07, 08 | 32 B8 | B 55 | 100 | 11 W 150- 108 |

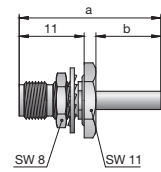


Panel Jack, solder- crimp, hexagonal flange

Gehäusekuppler, löt- crimp, 6- kant- Flansch

Flexible Cables

| Ordering Number | Version | Remarks | Cable Group | Assembly Instruction | Panel Piercing / PCB Layout | Packing Unit | Crimp Inserts |
|------------------|---------------------|--|-------------|----------------------|-----------------------------|--------------|---------------|
| 32 K 607- 302 E3 | rear mount | CuBe, gold plated, a = 20; b = 7 | 02 | 32 B5 | B 57 | 100 | 11 W 150- 102 |
| 32 K 607- 303 E3 | rear mount | CuBe, gold plated, a = 20; b = 7 | 03 | 32 B5 | B 57 | 100 | 11 W 150- 102 |
| 32 K 607- 306 E3 | rear mount | Stainless steel, gold plated, a = 26.5; b = 13.5 | 06 | 32 B8 | B 57 | 1 | 11 W 150- 108 |
| 32 K 607- 307 E3 | rear mount | Stainless steel, gold plated, a = 26.5; b = 13.5 | 07, 08 | 32 B8 | B 57 | 1 | 11 W 150- 108 |
| 32 K 647- 302 N3 | rear mount, economy | brass, white bronze plated, a = 20, b = 7 | 02 | 32 B5 | B 57 | 100 | 11 W 150- 102 |
| 32 K 647- 303 N3 | rear mount, economy | brass, white bronze plated, a = 20, b = 7 | 03 | 32 B5 | B 57 | 100 | 11 W 150- 102 |



Panel Connectors - Solder End

Gehäuse-Steckverbinder - Lötkegel

Panel Plug, 4- hole flange

Gehäusestecker, 4- Loch- Flansch

Solder End

| Ordering Number | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|-----------------|-----------------------------|--------------|--|
| 32 S 421- 200 S3 | stainless steel | B 55a | 100 | |

Panel Jack, 4- hole flange

Gehäusekuppler, 4- Loch- Flansch

Solder End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|---------|--|-----------------------------|--------------|--|
| 32 K 421- 200 E3 | | stainless steel, gold plated MIL- PRF 39012: 60- 3001 | B 55a | 100 | |
| 32 K 40A- 200 E3 | economy | stainless steel, gold plated | B 55a | 100 | |
| 32 K 441- 200 N3 | | brass, white bronze plated | B 55a | 100 | |

Right Angle Panel Jack, 4- hole flange

Gehäuse- Winkelkuppler, 4- Loch- Flansch

Solder End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|---------|-----------------------------|-----------------------------|--------------|--|
| 32 K 221- 200 S3 | | stainless steel, passivated | B 55a | 50 | |
| 32 K 241- 200 E3 | economy | brass, white bronze plated | B 55a | 100 | |

Panel Jack, 2- hole flange

Gehäusekuppler, 2- Loch- Flansch

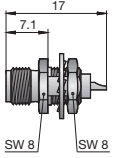
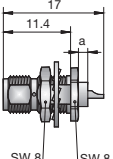
Solder End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|---------|---|-----------------------------|--------------|--|
| 32 K 701- 200 E3 | | CuBe gold plated MIL- PRF 39012: 60- 4002 | B 55h | 100 | |
| 32 K 721- 200 S3 | | stainless steel, passivated MIL- PRF 39012: 60- 3002 | B 55h | 100 | |
| 32 K 741- 200 N3 | economy | brass, white bronze plated | B 55h | 100 | |

Panel Jack, hexagonal flange

Gehäusekuppler, 6- kant- Flansch

Solder End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|-------------|---|-----------------------------|--------------|---|
| 32 K 622- 200 S3 | front mount | stainless steel, passivated MIL- PRF 39012: 61- 3002 | B 56 | 1 |  |
| 32 K 603- 200 E3 | rear mount | CuBe, gold plated, a = 1.6 | B 56 | 100 |  |

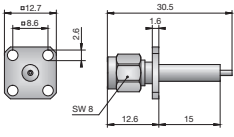
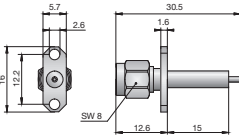
Panel Connectors - Coaxial End

Gehäuse- Steckverbinder - Koaxiales Ende

Panel Plug Straight Terminal

Gehäusestecker mit Durchführung

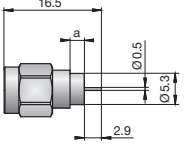
Coaxial End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|----------------|-----------------------------|-----------------------------|--------------|---|
| 32 S 422- 500 S3 | 4- hole flange | stainless steel | B 55a | 1 |  |
| 32 S 722- 500 S3 | 2- hole flange | stainless steel, passivated | B 55a | 1 |  |

Panel Plug, solder mount

Gehäusedurchführung zum Einlöten

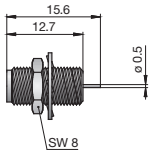
Coaxial End

| Ordering Number | Version | Remarks | Packing Unit | |
|------------------|-----------------|---|--------------|---|
| 32 S 102- 5H0 E3 | hermetic sealed | a = 2.4; sealed with a glass feedthru matched to 50 Ω. Leakage rate < 10 ⁻⁸ cc/sec. Pressure max. 2 N/mm ² | 1 |  |

Panel Jack, spark plug

Gehäusedurchführung, Spark Plug

Coaxial End

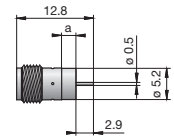
| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|-----------------|--|-----------------------------|--------------|---|
| 32 K 101- 5H0 E3 | hermetic sealed | sealed with a glass feedthru matched to 50 Ω. Leakage rate < 10 ⁻⁸ cc/sec. Pressure max. 2 N/mm ² | 1/4- 36 UNS- 2B | 1 |  |

Panel Jack, solder mount

Gehäusedurchführung zum Einlöten

Coaxial End

| Ordering Number | Version | Remarks | Packing Unit |
|------------------|-----------------|---|--------------|
| 32 K 103- 5H0 E3 | hermetic sealed | $\varnothing 5.2$; $a = 3.2$; sealed with a glass feedthru matched to 50Ω . Leakage rate $< 10^{-8}$ cc/sec. Pressure max. 2 N/mm^2 | 1 |

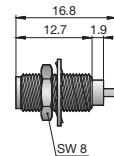


Panel Jack Straight Terminal

Gehäusekuppler mit Durchführung

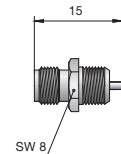
Coaxial End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit |
|------------------|---------|---------------------|-----------------------------|--------------|
| 32 K 141- 500 N3 | economy | white bronze plated | 1/4- 36 UNS | 100 |
| 32 K 141- 500 E3 | economy | gold plated | 1/4- 36 UNS | 100 |

Panel Jack Straight Terminal
hexagonal flangeGehäusekuppler mit Durchführung
6- kant- Flansch

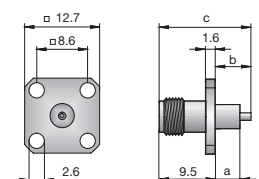
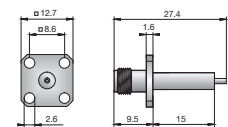
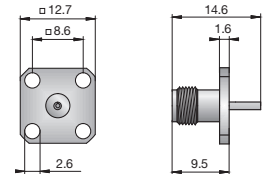
Coaxial End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit |
|------------------|---------|--------------------|-----------------------------|--------------|
| 32 K 644- 500 E3 | economy | brass, gold plated | 1/4- 36 UNS | 100 |

Panel Jack Straight Terminal
4- hole flangeGehäusekuppler mit Durchführung
4- Loch- Flansch

Coaxial End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit |
|------------------|---------|--|-----------------------------|--------------|
| 32 K 441- 500 F3 | economy | gold plated | B 55h | 100 |
| 32 K 402- 500 E3 | | captivated center contact, stainless steel, gold plated | B 55a | 50 |
| 32 K 422- 500 S3 | | captivated center contact, stainless steel, passivated | B 55a | 50 |
| 32 K 449- 500 E3 | economy | captivated center contact, brass, gold plated | B 55a | 50 |
| 32 K 44R- 500 E3 | economy | gold plated, $a = 4.5$; $b = 6$; $c = 15.5$ | B 55a | 100 |
| 32 K 482- 500 N3 | economy | white bronze, gold plated, $a = 8$; $b = 12$; $c = 21.5$ | B 55a | 100 |
| 32 K 486- 500 E3 | economy | gold plated, $a = 5$; $b = 7.5$; $c = 17$ | B 55a | 100 |



**Panel Jack Straight Terminal
2- hole flange**

**Gehäusekuppler mit Durchführung
2- Loch- Flansch**

Coaxial End

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|---------|--|-----------------------------|--------------|--|
| 32 K 722- 500 E3 | | captivated center contact, stainless steel gold plated | B 55a | 50 | |
| 32 K 722- 500 S3 | | captivated center contact, stainless steel, passivated | B 55a | 50 | |
| 32 K 752- 500 N3 | economy | white bronze plated | B 55h | 100 | |

**Panel Connectors - Stripline
according MIL M83517**

**Gehäuse- Steckverbinder - Stripline
according MIL M83517**

Panel Jack, 4- hole flange

Gehäusekuppler, 4- Loch- Flansch

Stripline

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|---------|----------------------------|-----------------------------|--------------|--|
| 32 K 421- 600 S3 | | stainless steel | B 55 | 100 | |
| 32 K 441- 600 N3 | economy | brass, white bronze plated | B 55 | 100 | |
| 32 K 441- 600 E3 | economy | brass, gold plated | B 55 | 100 | |
| 32 K 424- 600 S3 | | stainless steel | B 55g | 100 | |

Panel Jack, 2- hole flange

Gehäusekuppler, 2- Loch- Flansch

Stripline

| Ordering Number | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|-----------------|-----------------------------|--------------|--|
| 32 K 724- 600 S3 | stainless steel | B 55g | 100 | |

**Panel Connectors - Microstrip
according to MIL M83517**
**Gehäuse-Steckverbinder - Microstrip
according to MIL M83517**
Panel Plug, 4- hole flange
Gehäusestecker, 4- Loch- Flansch
Microstrip

| Ordering Number | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|-----------------|--------------------------------------|-----------------------------|--------------|--|
| 32 S 421-700 S3 | stainless steel, passivated, s = 0.3 | B 55 | 100 | |
| 32 S 422-700 S3 | stainless steel, passivated, s = 0.5 | B 55 | 100 | |

Panel Jack, 4- hole flange
Gehäusekuppler, 4- Loch- Flansch
Microstrip

| Ordering Number | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|-----------------|--------------------------------------|-----------------------------|--------------|--|
| 32 K 421-700 S3 | stainless steel, passivated, s = 0.3 | B 55 | 100 | |

PCB Connectors - SMD

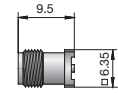
Straight Jack

Leiterplatten-Steckverbinder - SMD

Kuppler gerade

SMD

| Ordering Number | Panel Piercing / PCB Layout | Packing | Packing Unit |
|------------------|-----------------------------|-------------|-----------------|
| 32 K 10A- 40M E3 | B 163 | VG 08.50000 | 500 tape & reel |

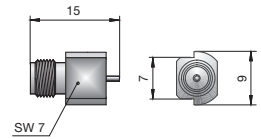


Right Angle Jack

Winkelkuppler

SMD

| Ordering Number | Panel Piercing / PCB Layout | Packing Unit |
|------------------|-----------------------------|------------------------------|
| 32 K 242- 40M L5 | on request | 100 blister, 500 tape & reel |

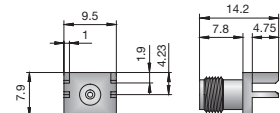
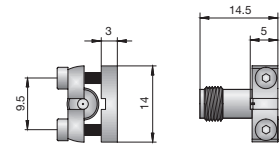


Right Angle Panel Jack, edge mount

Gehäuse- Winkelkuppler, edge mount

SMD

| Ordering Number | Remarks | Packing Unit |
|------------------|-----------------------------|--------------|
| 32 K 243- 40M E3 | for various PCB's 0- 2.5 mm | 50 blister |
| 32 K 145- 400 E3 | for panel thickness 1.8 mm | 1 |



PCB Connectors - Solder Pin

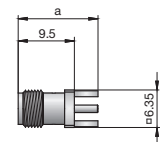
Straight Jack

Leiterplatten-Steckverbinder - Löt- Pin

Kuppler gerade

Solder Pin

| Ordering Number | Remarks | Panel Piercing / PCB Layout | Packing Unit |
|------------------|----------|-----------------------------|--------------|
| 32 K 101- 400 E3 | a = 13.5 | B 30b | 100 blister |

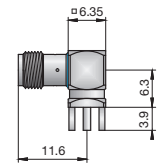


Right Angle Jack

Winkelkuppler

Solder Pin

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit |
|------------------|---------|---------|-----------------------------|--------------|
| 32 K 201- 400 E3 | | | B 30b | 200 blister |
| 32 K 249- 400 F3 | economy | | B 30b | 200 blister |

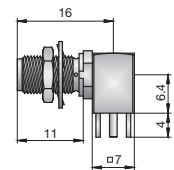


Right Angle Panel Jack

Gehäuse- Winkelkuppler

Solder Pin

| Ordering Number | Version | Panel Piercing / PCB Layout | Packing Unit |
|------------------|------------|-----------------------------|--------------|
| 32 K 246- 400 E3 | rear mount | B 66b / B 168 | 100 blister |



PCB Connectors - Press- fit

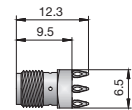
Leiterplatten- Steckverbinder - Press- fit

Straight Jack

Kuppler gerade

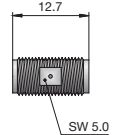
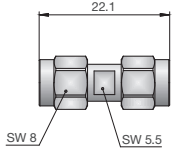
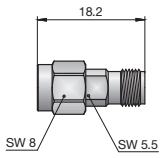
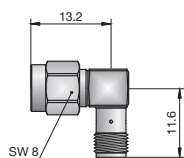
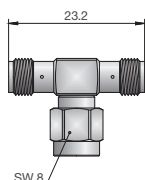
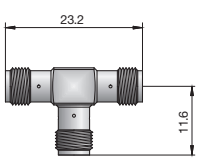
Press- fit

| Ordering Number | Remarks | Panel Piercing / PCB Layout | Packing Unit |
|------------------|--|-----------------------------|--------------|
| 32 K 102- 40P E3 | Coupling torque: recommended: 0.5 Nm max: 0.6 Nm | B 79 | 100 |



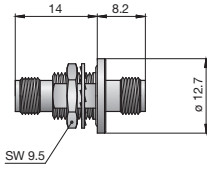
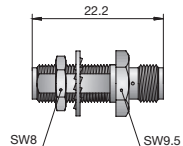
Adaptors (In- Serie)

Adapter (In- Serie)

| Ordering Number | Version | Remarks | VSWR max. | Packing Unit | |
|------------------|-------------|---|--------------------------------------|--------------|---|
| 32 K 101- K00 E3 | straight | SMA female - female; stainless steel, gold plated | | 1 |  |
| 32 K 121- K00 S3 | straight | SMA female - female; stainless steel, passivated | | 1 | |
| 32 S 103- S00 E3 | straight | male - male, stainless steel, gold plated | | 1 | |
| 32 S 123- S00 S3 | straight | male - male, stainless steel, passivated, 1.05 + 0.005 x f GHz | | 1 |  |
| 32 S 105- K00 E3 | straight | male - female, stainless steel, gold plated | | 1 | |
| 32 S 125- K00 S3 | straight | male - female, stainless steel, passivated, 1.05 + 0.005 x f GHz | | 1 |  |
| 32 S 221- K00 E3 | right angle | SMA male - female, stainless steel, gold plated | DC - 18 GHz, VSWR max. 1.25 | 1 | |
| 32 S 221- K00 S3 | right angle | SMA male - female, stainless steel, passivated | DC - 18 GHz, VSWR max. 1.25 | 1 |  |
| 32 S 301- K00 E3 | T-Adapter | SMA female - male - female, This connector is a non- matched 3 dB divider for LF applications | VSWR ≥ 2.0 when terminated with 50 Ω | 1 |  |
| 32 K 301- K00 E3 | T-Adapter | SMA female - female - female; This connector is a non- matched 3 dB divider for LF applications | VSWR ≥ 2.0 when terminated with 50 Ω | 1 |  |

Panel Adaptor

Gehäuse- Adapter

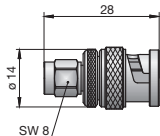
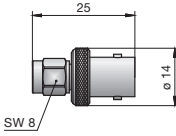
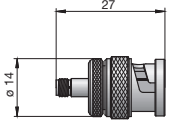
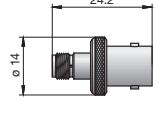
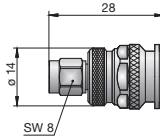
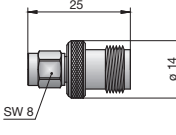
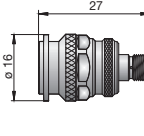
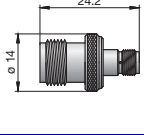
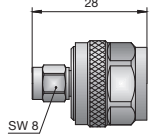
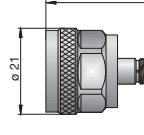
| Ordering Number | Version | Remarks | VSWR max. | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|----------|--|-----------------------------|-----------------------------|--------------|---|
| 32 K 101- KH0 E3 | straight | SMA female - female; round flange, panel thickness max. 4.8 mm, hermetic sealed | DC - 18 GHz VSWR max. 1.3 | B 58 | 1 |  |
| 32 K 621- K00 E3 | straight | SMA female - female; hexagonal flange, panel thickness max. 6.4 mm, stainless steel, tool width 9.5 mm | DC - 18 GHz, VSWR max. 1.25 | B 56 | 1 |  |

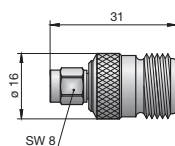
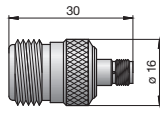
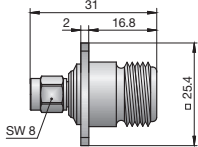
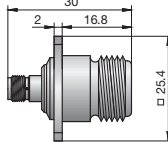
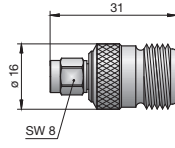
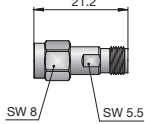
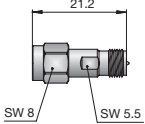
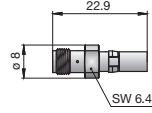
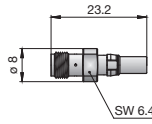
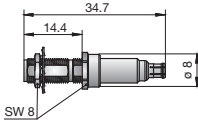
Adaptors (Between Series)

Adapter (serienübergreifend)

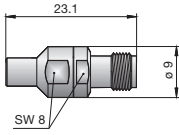
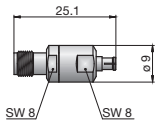
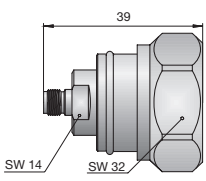
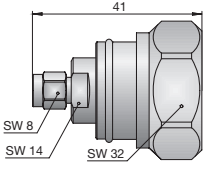
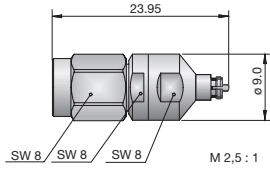
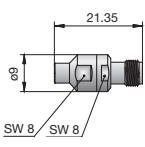
SMA

SMA

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|----------|-------------------------|-----------------------------|--------------|---|
| 32 S 151- S00 E3 | straight | SMA male - BNC male | | 1 |  |
| 32 S 151- K00 E3 | straight | SMA male - BNC female | | 1 |  |
| 32 K 151- S00 E3 | straight | SMA female - BNC male | | 1 |  |
| 32 K 151- K00 E3 | straight | SMA female - BNC female | | 1 |  |
| 32 S 156- S00 E3 | straight | SMA male - TNC male | | 1 |  |
| 32 S 156- K00 E3 | straight | SMA male - TNC female | | 1 |  |
| 56 S 132- K00 E3 | straight | TNC male - SMA female | | 1 |  |
| 56 K 132- K00 E3 | straight | TNC female - SMA female | | 1 |  |
| 32 S 153- S00 E3 | straight | SMA male - N male | | 1 |  |
| 53 S 132- K00 E3 | straight | N male - SMA female | | 1 |  |

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|-------------------|----------|--|-----------------------------|--------------|---|
| 32 S 153- K00 E3 | straight | SMA male - N female | | 1 |  |
| 53 K 132- K00 E3 | straight | N female - SMA female | | 1 |  |
| 32 S 453- K00 E3 | straight | SMA male - N female; 4- hole flange | B 12 | 1 |  |
| 32 K 453- K00 E3 | straight | SMA female - N female; 4- hole flange | B 12 | 1 |  |
| 32 RS 153- K00 E3 | straight | SMA reverse male - N Standard female | | 1 |  |
| 32 RS 132- K00 E3 | straight | SMA reverse male - SMA Standard female | | 1 |  |
| 32 RK 132- S00 E3 | straight | SMA reverse female - SMA Standard male | | 1 |  |
| 32 K 145- S00 E3 | straight | SMA female - DIN 41626 (1.0- 2.3) male | | 1 |  |
| 32 K 145- K00 E3 | straight | SMA female - DIN 41626 (1.0- 2.3) female | | 1 |  |
| 29 S 132- K01 N3 | straight | MCX male - SMA female | B 56 | 1 |  |

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|----------|-------------------------|-----------------------------|--------------|---|
| 59 S 132- K00 E3 | straight | SMB male - SMA female | | 1 |  |
| 59 K 132- K00 E3 | straight | SMB female - SMA female | | 1 |  |
| 59 K 132- S00 E3 | straight | SMB female - SMA male | | 1 |  |
| 59 S 132- S00 E3 | straight | SMB male - SMA male | | 1 |  |
| 39 S 132- S00 E3 | straight | SMC male - SMA male | | 1 |  |
| 39 S 132- K00 E3 | straight | SMC male - SMA female | | 1 |  |
| 39 K 132- S00 E3 | straight | SMC female - SMA male | | 1 |  |
| 39 K 132- K00 E3 | straight | SMC female - SMA female | | 1 |  |
| 19 S 132- S00 S3 | straight | SMP male - SMA male | | 1 |  |
| 19 K 132- S00 D3 | straight | SMP female - SMA male | | 1 |  |

| Ordering Number | Version | Remarks | Panel Piercing / PCB Layout | Packing Unit | |
|------------------|----------|-------------------------|-----------------------------|--------------|---|
| 19 S 132- K00 S3 | straight | SMP male - SMA female | | 1 |  |
| 19 K 132- K00 D3 | straight | SMP female - SMA female | | 1 |  |
| 32 K 160- S00 N3 | straight | SMA female - 7- 16 male | | 1 |  |
| 32 S 160- S00 N3 | straight | SMA male - 7- 16 male | | 1 |  |
| 16 S 132- S00 D3 | straight | FMC male - SMA male | | 1 |  |
| 16 K 132- K00 D3 | straight | FMC female - SMA female | | 1 |  |

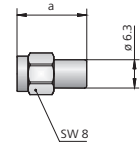
Terminations

Abschlusswiderstände

Termination Pug

Abschlusswiderstand Stecker

| Ordering Number | Remarks | Packing Unit |
|-----------------|--|--------------|
| 32 S 15R-0.5 E3 | 0.5 Watt, Frequency DC - 12.4 GHz, a = 15.5 VSWR < 1.05 @ DC to 2 GHz VSWR < 1.1 @ 2 to 8 GHz VSWR < 1.19 @ 8 to 12.4 GHz | 1 |
| 32 S 17R-0.5 E3 | 0.5 W; Frequency DC - 18 GHz, a = 15.5 VSWR < 1.05 @ DC to 2 GHz VSWR < 1.1 @ 2 to 8 GHz VSWR < 1.19 @ 8 to 12.4 GHz VSWR < 1.2 @ 12.4 to 18 GHz | 1 |
| 32 S 15R-1.0 E3 | 1 Watt, Frequency DC - 18 GHz, a = 15.5 VSWR < 1.08 @ DC to 4 GHz VSWR < 1.1 @ 4 to 6 GHz VSWR < 1.13 @ 6 to 10 GHz VSWR < 1.15 @ 10 to 12.4 GHz VSWR < 1.17 @ 12.4 to 14 GHz VSWR < 1.25 @ 14 to 18 GHz | 1 |
| 32 S 17B-1.0 E3 | 1 W; Frequency DC - 18 GHz, a = 10 VSWR < 1.10 @ DC to 1 GHz VSWR < 1.25 @ 1 to 18 GHz | 1 |



Termination Jack

Abschlusswiderstand Kuppler

| Ordering Number | Remarks | Packing Unit |
|-----------------|---|--------------|
| 32 K 15R-001 E3 | 1 Watt, Frequency DC - 12.4 GHz VSWR < 1.05 @ DC to 2 GHz VSWR < 1.1 @ 2 to 8 GHz VSWR < 1.19 @ 8 to 12.4 GHz | 1 |
| 32 K 17R-001 E3 | 1 Watt, Frequency DC - 18 GHz VSWR < 1.05 @ DC to 2 GHz VSWR < 1.1 @ 2 to 8 GHz VSWR < 1.19 @ 8 to 12.4 GHz VSWR < 1.2 @ 12.4 to 18 GHz | 1 |

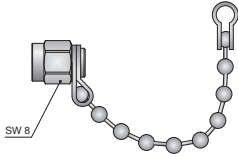


Accessories

Zubehör

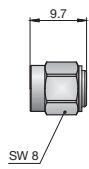
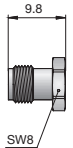
Protection Cap with chain

Schutzhappe mit Kette

| Ordering Number | Remarks | Packing Unit | |
|-----------------|----------------|--------------|---|
| 32 Z 112-000 F | male with seal | 1 |  |

Short

Kurzschluss

| Ordering Number | Remarks | Packing Unit | |
|-----------------|---------|--------------|---|
| 32 Z 111-000 E3 | male | 1 |  |
| 32 Z 114-000 E3 | female | 1 |  |

