

SUCOTEST CABLE ASSEMBLIES FOR THE HIGHEST STANDARD OF MEASUREMENT



TEST + MEASUREMENT WITH SUCOTES



TTM - PRECISION ON A CONSTANT HIGH

Unique handling performance – dimensionally stable and robust

Benefit

- Precise and constant measurement result due to excellent electric performance
- Unique handling due to newly designed N Nut, short taper sleeve and cable without any bounding effect
- Low measurement costs thanks to all SUCOTEST performances

Applications

- Test labs
- Test procedures in components and assembly
- Automatic test equipment

SUCOTEST 18 assemblies are especially designed for high volume applications where a permanent use is key (repeated connection/disconnection procedures) and where measurement cable wear normally quickly appears.





Comprehensive assortment for every application



| Product Assortment | Order No. |
|----------------------|-----------|
| ST-18/SMAm/SMA/m/36" | 84002060 |
| ST-18/Nm/Nm/36" | 84002061 |
| ST-18/SMAm/Nm/36" | 84004594 |
| ST-18/SMAm/SMAm/48" | 84003372 |
| ST-18/Nm/Nm/48" | 84003373 |
| ST-18/SMAm/Nm/48" | 84004006 |
| ST-18/SMAm/SMAm/72" | 84004070 |
| ST-18/Nm/Nm/72" | 84004007 |
| ST-18/SMAm/Nm/72" | 84004595 |



SUCOTEST Precision Adaptors Series N / Stainless Steel

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|-----------------------|-----------|--|
| Within-series adapte | or: | |
| jack (female) - jack | (female) | |
| | | |
| H+S Type | Order No. | |

22652112



Series SMA / Stainless Steel

31 N-50-0-51/199 NE

Within-series adaptor: jack (female) - jack (female)

| H+S Type | Order No. |
|-----------------------|-----------|
| 31_SMA-50-0-51/199_NE | 22641486 |

Return Loss

| dB | up to 2 GHz | 2.01 - 4.0 GHz | 4.01 - 6.0 GHz | 6.01 - 12.0 GHz | 12.01 - 18.0 GHz |
|-----|-------------|----------------|----------------|-----------------|------------------|
| N | >32 | >29 | >27 | >23 | >20 |
| SMA | >30 | >29 | >28 | >25 | >23 |

Outstanding Features

- Applicable up to 18.0 GHz
- Lowest insertion loss
- Lowest VSWR
- Excellent stability
- The cable bounds not back during the measurement procedure, the assembly keeps the position

Electrical specifications

| Impedance | 50 Ohm |
|------------------------------|--------------------------------|
| Operating frequency | 18 GHz |
| Velocity of propagation | 77 % |
| Capacitance | 87 pF/m / 26.5 pF/ft |
| Time delay | 4.3 ns/m / 1.31 ns/ft |
| Insulation resistance | > 5 x 10 ³ Mega Ohm |
| Dielectric withstand voltage | 2500 V rms |
| Screening effectiveness | > 90 dB |
| | |

| | up to 2.0 | 2.01 - 4.0 | 4.01 - 6.0 | 6.01 - 12.0 | 12.01 - 18.0 |
|---|-----------|------------|------------|-------------|--------------|
| | GHz | GHz | GHz | GHz | GHz |
| Power handling, 25°C, sea level (W) | > 391 | > 277 | > 225 | > 160 | > 131 |
| Return loss (dB) | > 30 | >28 | > 25 | > 21 | > 19 |
| Insertion loss (dB) | see table | see table | see table | see table | see table |
| Insertion loss stability vs. shaking (dB) | < 0.03 | < 0.03 | < 0.03 | < 0.03 | < 0.03 |
| Insertion loss stability vs. bending (dB) | < 0.03 | < 0.04 | < 0.04 | < 0.05 | < 0.05 |
| Insertion loss stability vs. torsion (dB) | < 0.03 | < 0.04 | < 0.04 | < 0.05 | < 0.05 |

General specifications

| Assembly length | see table | Materials and finishes | |
|-------------------------------|--------------------------------|------------------------|---------------------------------|
| Cable diameter | 4.6 mm / 0.181 inch | Cable jacket | FEP, blue |
| Temperature range | -55+105 °C | Cable dielectric | Low density PTFE |
| Prefered bending radius | 100 mm / 4.0 inch | Taper sleeve | Santoprene / black |
| Connector retention force | > 200 N | Marking sleeve | Crosslinked polyolefin / white |
| Recommended mating torque SMA | 0.8 1.1 Nm / 7.1 9.7 in.lbs | Connector contacts | Beryllium - copper, gold plated |
| Recommended mating torque N | 0.68 1.13 Nm / 6.0 10.0 in.lbs | Connector insulation | PTFE |
| Durability | > 500 matings | Connector body | Stainless steel, passivated |
| Connector interface SMA | MIL-STD-348A/310 | Connector nut | Stainless steel, passivated |
| Connector interface N | MIL-STD-348A/304 | Gasket | Silicon rubber |
| Weight | see table | | |

Product specific data

| | Assembly length | Weight | | | Insertion loss | | |
|--------------------|-------------------|------------------|-----------|------------|----------------|-------------|--------------|
| | (ref.plane to | 400 | up to 2.0 | 2.01 - 4.0 | 4.01 - 6.0 | 6.01 - 12.0 | 12.01 - 18.0 |
| | ref. plane) | 10 7 | GHz | GHz | GHz | GHz | GHz |
| ST-18/SMAm/SMAm/36 | 914 mm / 36 inch | 68 gram | < 0.48 dB | < 0.68 dB | < 0.84 dB | < 1.21 dB | < 1.51 dB |
| ST-18/Nm/Nm/36 | 914 mm / 36 inch | 110 gram | < 0.48 dB | < 0.68 dB | < 0.84 dB | < 1.21 dB | < 1.51 dB |
| ST-18/SMAm/Nm/36 | 914 mm / 36 inch | 90 gram | < 0.48 dB | < 0.68 dB | < 0.84 dB | < 1.21 dB | < 1.51 dB |
| ST-18/SMAm/SMAm/48 | 1219 mm / 48 inch | 80 gram | < 0.61 dB | < 0.88 dB | < 1.09 dB | < 1.57 dB | < 1.95 dB |
| ST-18/Nm/Nm/48 | 1219 mm / 48 inch | 122 gram | < 0.61 dB | < 0.88 dB | < 1.09 dB | < 1.57 dB | < 1.95 dB |
| ST-18/SMAm/Nm/48 | 1219 mm / 48 inch | 101 gram | < 0.61 dB | < 0.88 dB | < 1.09 dB | < 1.57 dB | < 1.95 dB |
| ST-18/SMAm/SMAm/72 | 1829 mm / 72 inch | 108 gram | < 0.89 dB | < 1.28 dB | < 1.58 dB | < 2.29 dB | < 2.85 dB |
| ST-18/Nm/Nm/72 | 1829 mm / 72 inch | 1 <i>57</i> gram | < 0.89 dB | < 1.28 dB | < 1.58 dB | < 2.29 dB | < 2.85 dB |
| ST-18/SMAm/Nm/72 | 1829 mm / 72 inch | 134 gram | < 0.89 dB | < 1.28 dB | < 1.58 dB | < 2.29 dB | < 2.85 dB |



HUBER+SUHNER group is certified according to ISO 9001 and ISO 14001.

Waiver

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