

16SQC Cable Assemblies

QPS Qualified Parts for Space Series

Features & Benefits

- Best Combination of Price & Performance
- Uses High Performance HP160S Cable
- Built with Solid Center Conductor & FEP Jacket
- 40 GHz Operation
- Passivated Stainless Steel M39012 Compliant Interfaces
- Standard Lengths Stocked by Distributors
- Custom Lengths Available
- Meets NASA Outgassing Requirements

Applications

- LEO Satellites
- Thermo-vacuum Chambers

Specifications

Electrical

| | |
|------------------------|--|
| Frequency of Operation | DC ~ 40 GHz |
| Impedance | 50 Ω (Nominal) |
| VSWR | 1.4 to 1.5 |
| Insertion Loss | cinch.com/design-tools/interactive-attenuation-calculator |

Material and Finish

| | |
|-------------------------------|--|
| Connector Body & Coupling Nut | Passivated Stainless Steel |
| Connector Contacts | Gold Plated Beryllium Copper |
| Cable | HP160S with Solid Center Conductor & FEP Jacket |
| Workmanship | Class 3 per IPC / WHMA-A-620 |
| Solder | Sn63 / Pb37 |
| Outgassing | All Materials TML< 1%, CVCM< 0.1%, per ASTM E595 |

Mechanical

| | |
|------------------------|---|
| Length Tolerance | -0.0 / +0.5 in for Lengths Up to 120 in |
| Durability | 500 Cycles (min.) |
| Inside min Bend Radius | 0.9 in min. |

Environmental

| | |
|-----------------------|---------------|
| Operating Temperature | -55°C ~ 145°C |
|-----------------------|---------------|



16SQC Cable Assemblies

Semflex Microwave Solutions™

QPS Qualified Parts for Space Series

Ordering Information

X1X2-16SQC-0012

Connector 1 Configuration Code

X1 = 2.92 mm Straight Male, 1.4 VSWR, max. @ 40 GHz
X2 = 2.92 mm Right Angle Male, 1.45** VSWR, max. @ 40 GHz
S1 = SMA Straight Male, 1.25 VSWR, max. @ 26 GHz
S2 = SMA Right Angle Male, 1.3* VSWR, max. @ 26 GHz

Connector 2 Configuration Code

X1 = 2.92 mm Straight Male, 1.4 VSWR, max. @ 40 GHz
X2 = 2.92 mm Right Angle Male, 1.45** VSWR, max. @ 40 GHz
S1 = SMA Straight Male, 1.25 VSWR, max. @ 26 GHz
S2 = SMA Right Angle Male, 1.3* VSWR, max. @ 26 GHz

* For S2S2-16SQC-xxxx configurations the VSWR is 1.35 max. @ 26 GHz.
** For X2X2-16SQC-xxxx configurations the VSWR is 1.50 max. @ 40 GHz.

Cable Length

0012 = 12 in
(Enter cable length in inches.
Custom lengths available, min. 6 in.)

Space Qualified Cable

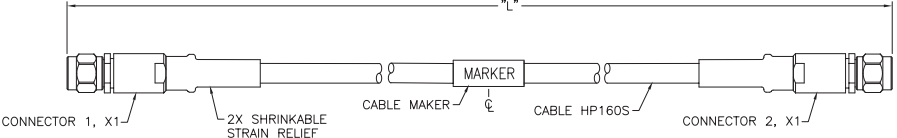

SQC

Cable Indicator

16 = HP160S Cable

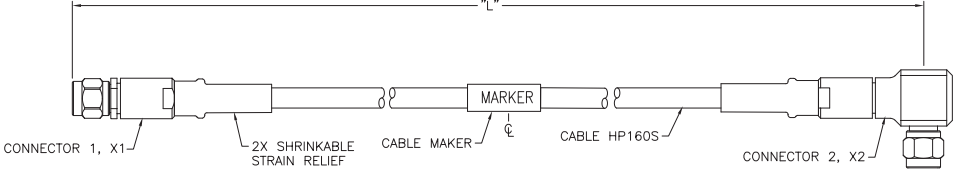

Standard part numbers available through distribution

2.92 mm Straight Male to 2.92 mm Straight Male



| Part Number | Connector 1 | Connector 2 | Cable Type | Length |
|-----------------|-----------------------|-----------------------|------------|--------|
| X1X1-16SQC-0012 | 2.92 mm Straight Male | 2.92 mm Straight Male | HP160S | 12 in |
| X1X1-16SQC-0018 | 2.92 mm Straight Male | 2.92 mm Straight Male | HP160S | 18 in |
| X1X1-16SQC-0024 | 2.92 mm Straight Male | 2.92 mm Straight Male | HP160S | 24 in |
| X1X1-16SQC-0036 | 2.92 mm Straight Male | 2.92 mm Straight Male | HP160S | 36 in |

2.92 mm Straight Male to 2.92 mm Right Angle Male



| Part Number | Connector 1 | Connector 2 | Cable Type | Length |
|-----------------|-----------------------|--------------------------|------------|--------|
| X1X2-16SQC-0012 | 2.92 mm Straight Male | 2.92 mm Right Angle Male | HP160S | 12 in |
| X1X2-16SQC-0018 | 2.92 mm Straight Male | 2.92 mm Right Angle Male | HP160S | 18 in |
| X1X2-16SQC-0024 | 2.92 mm Straight Male | 2.92 mm Right Angle Male | HP160S | 24 in |
| X1X2-16SQC-0036 | 2.92 mm Straight Male | 2.92 mm Right Angle Male | HP160S | 36 in |