

Minibend

High performance/high pull strength microwave coaxial cable assembly

Product description

Minibend is a truly flexible coaxial cable assembly which is designed for use in low profile, internal, point-to-point interconnections between RF modules within communications systems. Minibend replaces 0.086 inch custom semi-rigid cables with standard flexible cables, eliminating the need for predefined custom lengths and bend configurations. Minibend provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths and connector configurations.



Product features

- Impedance 50 Ω
- Applicable up to 65 GHz
- Direct replacement for 0.086 inch semi-rigid cables
- Stock delivery on standard lengths

Construction



Recommended connectors

| | |
|----------|---------------------------------------|
| Minibend | SMA, SSMA, SK, SMP, 2.4 mm, 1.85 mm |
| | Other connectors available on request |

| Cable | Inner conductor ① | Dielectric ② | Outer conductor ③ | Barrier ④ | Outer braid ⑤ | Jacket ⑥ | Outer diameter mm |
|--------|----------------------|-----------------|----------------------|------------------------------|------------------|-------------|----------------------|
| 32081 | CuAg wire | PTFE | CuAg flat wire braid | aluminium/ polyimide tape | stainless steel | FEP | 2.5 |
| 32081S | StCuAg wire | PTFE | CuAg flat wire braid | aluminium/ polyimide tape | stainless steel | FEP | 2.5 |

Technical data

| Cable | Operating frequency GHz | Velocity % | Weight g/m | Min. bending radius for ± 180° mm | Temperature range ° C |
|--------------|----------------------------|---------------|---------------|---|--------------------------|
| 32081/32081S | 65 | 70.3 | 14.9 | 5.08 | -55 to +200 |

| Assembly | Minibend | Minibend A | Minibend E | Minibend K | Minibend KS | Minibend KV | Minibend QG |
|-------------|----------|------------|---------------------------|------------|-------------|----------------------------|--------------------------------|
| Connector A | SMA (m) | SSMA (m) | SMA (m), fully captivated | SK (m) | SK (m) | 2.4 mm (m)/ 1.85 mm (m) | 2.4 mm (m) gold plated BeCu |
| Connector B | SMA (m) | SSMA (m) | SMA (m), fully captivated | SK (m) | SMP (f) | SK (m) | 2.4 mm (m) gold plated BeCu |

| Assembly | Minibend S | Minibend 2S | Minibend V | Minibend VG | Minibend WR |
|-------------|------------|-------------|--------------------|------------------------------|-------------|
| Connector A | SMA (m) | SMP (f) | 2.4 mm/1.85 mm (m) | 1.85 mm (m) gold plated BeCu | SMA (m) |
| Connector B | SMP (f) | SMP (f) | 2.4 mm/1.85 mm (m) | 1.85 mm (m) gold plated BeCu | SMA (m) |

Minibend

Attenuation (nominal values at +25 °C ambient temperature)



Power handling (maximum values at 25 °C ambient temperature and sea level)



Low profile assemblies

Minibend

Minibend is a flexible coaxial cable assembly which is designed for use in low profile, internal point-to-point interconnections between RF modules within communications systems. Minibend replaces 0.086 inch custom semi-rigid cables with standard flexible cables eliminating the need for predefined custom lengths and bend configurations. Minibend provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.

- Frequency range up to 24 GHz
- Precision stainless steel SMA plug connectors
- Ruggedised version available "R"



| Length mm | Minibend | Item no. | Minibend R | Item no. |
|--------------|--------------|----------|----------------|----------|
| 63.5 | minibend-2.5 | 80337902 | minibend R-2.5 | 80337536 |
| 76.2 | minibend-3 | 80337926 | minibend R-3 | 80337569 |
| 88.9 | minibend-3.5 | 80337929 | minibend R-3.5 | 80337570 |
| 101.6 | minibend-4 | 80337942 | minibend R-4 | 80337585 |
| 114.3 | minibend-4.5 | 80337947 | minibend R-4.5 | 80337587 |
| 127 | minibend-5 | 80337959 | minibend R-5 | 80337606 |
| 139.7 | minibend-5.5 | 80337960 | minibend R-5.5 | 80337607 |
| 152.4 | minibend-6 | 80337969 | minibend R-6 | 80337616 |
| 165.1 | minibend-6.5 | 80337972 | minibend R-6.5 | 80337617 |
| 177.8 | minibend-7 | 80337981 | minibend R-7 | 80337625 |
| 203.2 | minibend-8 | 80337990 | minibend R-8 | 80337631 |
| 228.6 | minibend-9 | 80337999 | minibend R-9 | 80337637 |
| 254 | minibend-10 | 80337853 | minibend R-10 | 80337509 |
| 279.4 | minibend-11 | 80337859 | minibend R-11 | 80337512 |
| 304.8 | minibend-12 | 80337864 | minibend R-12 | 80337515 |
| 330.2 | minibend-13 | 80337873 | minibend R-13 | 80337520 |
| 355.6 | minibend-14 | 80337877 | minibend R-14 | 80337522 |
| 381 | minibend-15 | 80337881 | minibend R-15 | 80337525 |
| 406.4 | minibend-16 | 80337886 | minibend R-16 | 80337526 |

Minibend A

Minibend A has all the benefits of the original Minibend but with precision stainless steel SSMA connectors on each end. Minibend A is available in a standard 26.5 GHz max. frequency or an optional 40 GHz max. configuration. Minibend A flexible coaxial cable assemblies are cost-effective replacements for .086 inch semi-rigid cables in point-to-point interconnections between RF modules. Minibend A eliminates the need for custom pre-defined lengths and bend configurations.

- Frequency range up to 40 GHz
- Precision stainless steel SSMA plug connectors
- Ruggedised version available "R"



| Length mm | Minibend A | Item no. |
|--------------|----------------|----------|
| 63.5 | minibend A-2.5 | 80336959 |
| 76.2 | minibend A-3 | 80336961 |
| 88.9 | minibend A-3.5 | 80336963 |
| 101.6 | minibend A-4 | 80336965 |
| 114.3 | minibend A-4.5 | 80366167 |
| 127 | minibend A-5 | 80336969 |
| 139.7 | minibend A-5.5 | 80370925 |
| 152.4 | minibend A-6 | 80336971 |
| 165.1 | minibend A-6.5 | 80370926 |
| 177.8 | minibend A-7 | 80336973 |
| 203.2 | minibend A-8 | 80336974 |
| 228.6 | minibend A-9 | 80365469 |
| 254 | minibend A-10 | 80336954 |
| 279.4 | minibend A-11 | 80336955 |
| 304.8 | minibend A-12 | 80336956 |
| 330.2 | minibend A-13 | 80365470 |
| 355.6 | minibend A-14 | 80336957 |
| 381 | minibend A-15 | 80370927 |
| 406.4 | minibend A-16 | 80336958 |

Minibend E

Minibend E is a fully captivated (contact, dielectric and body), ruggedised version of the original Minibend that is suitable for use in spacecraft applications, severe environments and high density packages. The Minibend E contact will not shift more than 0.005 inch when subjected to 10 lbs push force (cabled) or 5 lbs push force uncabled. All materials used in Minibend E assemblies meet or exceed NASA TML and CVCM requirements for use in spacecraft applications.

- Frequency range up to 18 GHz
- Precision stainless steel SMA plug connectors
- Automatically ruggedised by design



| Length mm | Minibend E | Item no. |
|--------------|----------------|----------|
| 63.5 | minibend E-2.5 | 80369350 |
| 76.2 | minibend E-3 | 80337037 |
| 88.9 | minibend E-3.5 | 80337040 |
| 101.6 | minibend E-4 | 80337046 |
| 114.3 | minibend E-4.5 | 80337047 |
| 127 | minibend E-5 | 80337051 |
| 139.7 | minibend E-5.5 | 80337052 |
| 152.4 | minibend E-6 | 80337056 |
| 165.1 | minibend E-6.5 | 80337057 |
| 177.8 | minibend E-7 | 80337061 |
| 203.2 | minibend E-8 | 80337063 |
| 228.6 | minibend E-9 | 80370929 |
| 254 | minibend E-10 | 80337020 |
| 279.4 | minibend E-11 | 80337023 |
| 304.8 | minibend E-12 | 80337025 |
| 330.2 | minibend E-13 | 80366191 |
| 355.6 | minibend E-14 | 80337028 |
| 381 | minibend E-15 | 80337030 |
| 406.4 | minibend E-16 | 80363369 |

Minibend K

Minibend K is a 40 GHz version of the Minibend flexible coaxial cable assembly which is designed for use in low profile, internal point-to-point interconnections between RF modules within communications systems. Minibend K replaces small custom semi-rigid cables with standard flexible cables, eliminating the need for predefined custom lengths and bend configurations. Minibend K provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.

- Frequency range up to 40 GHz
- Precision SK Minibend plug connectors
- Ruggedised version available "R"



| Length mm | Minibend K | Item no. | Minibend KR | Item no. |
|--------------|----------------|----------|-----------------|----------|
| 63.5 | minibend K-2.5 | 80337108 | minibend KR-2.5 | 80337144 |
| 76.2 | minibend K-3 | 80337117 | minibend KR-3 | 80337149 |
| 88.9 | minibend K-3.5 | 80337119 | minibend KR-3.5 | 80366984 |
| 101.6 | minibend K-4 | 80337121 | minibend KR-4 | 80337152 |
| 114.3 | minibend K-4.5 | 80337122 | minibend KR-4.5 | 80362898 |
| 127 | minibend K-5 | 80362456 | minibend KR-5 | 80337154 |
| 139.7 | minibend K-5.5 | 80337128 | minibend KR-5.5 | 80370656 |
| 152.4 | minibend K-6 | 80337129 | minibend KR-6 | 80337156 |
| 165.1 | minibend K-6.5 | 80365648 | minibend KR-6.5 | 80370930 |
| 177.8 | minibend K-7 | 80337130 | minibend KR-7 | 80337157 |
| 203.2 | minibend K-8 | 80337132 | minibend KR-8 | 80337160 |
| 228.6 | minibend K-9 | 80337134 | minibend KR-9 | 80337161 |
| 254 | minibend K-10 | 80337097 | minibend KR-10 | 80337138 |
| 279.4 | minibend K-11 | 80337098 | minibend KR-11 | 80363429 |
| 304.8 | minibend K-12 | 80337099 | minibend KR-12 | 80337139 |
| 330.2 | minibend K-13 | 80337100 | minibend KR-13 | 80369274 |
| 355.6 | minibend K-14 | 80337101 | minibend KR-14 | 80337140 |
| 381 | minibend K-15 | 80337102 | minibend KR-15 | 80365529 |
| 406.4 | minibend K-16 | 80337103 | minibend KR-16 | 80337141 |

Minibend KS

Minibend KS is the 40 GHz version of the original Minibend with a SK plug connector on one end and an SMP female connector that is DSCC and MIL-STD-348 compliant on the other. Minibend KS replaces custom length, predefined bend configuration 0.086 inch semi-rigid cables with standard, COTS, flexible coax cables for use as internal, point-to-point interconnections between RF modules.

- Frequency range up to 40 GHz
- Precision SK Minibend plug connector
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Ruggedised version available "R"



| Length mm | Minibend KS | Item no. |
|--------------|-----------------|----------|
| 63.5 | minibend KS-2.5 | 80365556 |
| 76.2 | minibend KS-3 | 80367753 |
| 88.9 | minibend KS-3.5 | 80374003 |
| 101.6 | minibend KS-4 | 80368776 |
| 114.3 | minibend KS-4.5 | 80374004 |
| 127 | minibend KS-5 | 80337165 |
| 139.7 | minibend KS-5.5 | 80374005 |
| 152.4 | minibend KS-6 | 80337166 |
| 165.1 | minibend KS-6.5 | 80374006 |
| 177.8 | minibend KS-7 | 80374007 |
| 203.2 | minibend KS-8 | 80362863 |
| 228.6 | minibend KS-9 | 80365458 |
| 254 | minibend KS-10 | 80362038 |
| 279.4 | minibend KS-11 | 80374008 |
| 304.8 | minibend KS-12 | 80337162 |
| 330.2 | minibend KS-13 | 80374009 |
| 355.6 | minibend KS-14 | 80374010 |
| 381 | minibend KS-15 | 80367162 |
| 406.4 | minibend KS-16 | 80363850 |

Minibend KV

Minibend KV is a 40 GHz version of the original Minibend with a SK plug connector on one end and a 2.4 mm/1.85 mm compatible plug connector on the other. Minibend KV replaces custom lengths, predefined bend configuration 0.086 semi-rigid cable assemblies for use as internal, point-to-point interconnections between RF modules and in high bandwidth switching systems.

- Frequency range up to 40 GHz
- Precision SK Minibend plug connector
- Precision 2.4 mm/1.85 mm compatible plug connector
- Ruggedised version available "R"



| Length mm | Minibend KV | Item no. |
|--------------|-----------------|----------|
| 63.5 | minibend KV-2.5 | 80337175 |
| 76.2 | minibend KV-3 | 80337177 |
| 88.9 | minibend KV-3.5 | 80360466 |
| 101.6 | minibend KV-4 | 80337180 |
| 114.3 | minibend KV-4.5 | 80337181 |
| 127 | minibend KV-5 | 80337182 |
| 139.7 | minibend KV-5.5 | 80337183 |
| 152.4 | minibend KV-6 | 80337184 |
| 165.1 | minibend KV-6.5 | 80370931 |
| 177.8 | minibend KV-7 | 80337185 |
| 203.2 | minibend KV-8 | 80337187 |
| 228.6 | minibend KV-9 | 80337188 |
| 254 | minibend KV-10 | 80337169 |
| 279.4 | minibend KV-11 | 80370094 |
| 304.8 | minibend KV-12 | 80337170 |
| 330.2 | minibend KV-13 | 80370932 |
| 355.6 | minibend KV-14 | 80337171 |
| 381 | minibend KV-15 | 80370933 |
| 406.4 | minibend KV-16 | 80337172 |

Minibend QG

Minibend QG is a 50 GHz version of the original Minibend with a 2.4 mm plug connector on each end that contains a gold plated BeCu contact for applications that require repeated mates/demates of the interface. This flexible coaxial cable assembly is designed for use in low profile, internal point-to-point interconnections between RF modules within communications systems. Minibend QG replaces small custom semi-rigid cables with standard flexible cables, eliminating the need for predefined custom lengths and bend configurations. Minibend QG provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.

- Frequency range up to 50 GHz
- Precision 2.4 mm compatible plug connectors
- Automatically ruggedised by design



Minibend S

Minibend S is a special version of the original Minibend that provides all the benefits of the original Minibend but with a precision DSCC and MIL-STD-348 compliant SMP female connector on one end and an SMA plug connector on the other. Minibend S replaces custom length, predefined bend configuration cable for use as internal, point-to-point interconnections between RF modules within communications and switching systems.

- Frequency range up to 24 GHz
- Precision stainless steel SMA plug connectors
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Ruggedised version available "R"



| Length mm | Minibend QG | Item no. |
|-----------|-----------------|----------|
| 63.5 | minibend QG-2.5 | 80370934 |
| 76.2 | minibend QG-3 | 80361835 |
| 88.9 | minibend QG-3.5 | 80370203 |
| 101.6 | minibend QG-4 | 80337502 |
| 114.3 | minibend QG-4.5 | 80367704 |
| 127 | minibend QG-5 | 80365999 |
| 139.7 | minibend QG-5.5 | 80370935 |
| 152.4 | minibend QG-6 | 80362867 |
| 165.1 | minibend QG-6.5 | 80366000 |
| 177.8 | minibend QG-7 | 80371525 |
| 203.2 | minibend QG-8 | 80337503 |
| 228.6 | minibend QG-9 | 80371780 |
| 254 | minibend QG-10 | 80363167 |
| 279.4 | minibend QG-11 | 80367645 |
| 304.8 | minibend QG-12 | 80362486 |
| 330.2 | minibend QG-13 | 80370936 |
| 355.6 | minibend QG-14 | 80370937 |
| 381 | minibend QG-15 | 80370938 |
| 406.4 | minibend QG-16 | 80370939 |

| Length mm | Minibend S | Item no. | Minibend SR | Item no. |
|-----------|----------------|----------|-----------------|----------|
| 63.5 | minibend S-2.5 | 80337655 | minibend SR-2.5 | 80337687 |
| 76.2 | minibend S-3 | 80337657 | minibend SR-3 | 80337692 |
| 88.9 | minibend S-3.5 | 80370940 | minibend SR-3.5 | 80337693 |
| 101.6 | minibend S-4 | 80337658 | minibend SR-4 | 80337698 |
| 114.3 | minibend S-4.5 | 80337660 | minibend SR-4.5 | 80337699 |
| 127 | minibend S-5 | 80337661 | minibend SR-5 | 80337704 |
| 139.7 | minibend S-5.5 | 80337662 | minibend SR-5.5 | 80365201 |
| 152.4 | minibend S-6 | 80337663 | minibend SR-6 | 80337707 |
| 165.1 | minibend S-6.5 | 80367381 | minibend SR-6.5 | 80370944 |
| 177.8 | minibend S-7 | 80337665 | minibend SR-7 | 80337710 |
| 203.2 | minibend S-8 | 80337666 | minibend SR-8 | 80337712 |
| 228.6 | minibend S-9 | 80337670 | minibend SR-9 | 80362779 |
| 254 | minibend S-10 | 80337641 | minibend SR-10 | 80337678 |
| 279.4 | minibend S-11 | 80337642 | minibend SR-11 | 80337680 |
| 304.8 | minibend S-12 | 80337644 | minibend SR-12 | 80337681 |
| 330.2 | minibend S-13 | 80365405 | minibend SR-13 | 80370945 |
| 355.6 | minibend S-14 | 80337646 | minibend SR-14 | 80337682 |
| 381 | minibend S-15 | 80337647 | minibend SR-15 | 80370946 |
| 406.4 | minibend S-16 | 80337649 | minibend SR-16 | 80337683 |

Minibend 2S

Minibend 2S is the SMP version of the original Minibend that provides all the benefits of the original Minibend but with precision DSCC and MIL-STD-348 compliant SMP female connections on each end. Minibend flexible coaxial cable assemblies are designed for use in low profile, internal point-to-point interconnections between RF modules. Minibend 2S is a cost-effective replacement for 0.086 inch semi-rigid cable and eliminates the need for predefined custom lengths and bend configurations.

- Frequency range up to 40 GHz
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Ruggedised version available "R"



| Length mm | Minibend S | Item no. | Minibend SR | Item no. |
|-----------|-----------------|----------|------------------|----------|
| 63.5 | minibend 2S-2.5 | 80336924 | minibend 2SR-2.5 | 80362615 |
| 76.2 | minibend 2S-3 | 80336925 | minibend 2SR-3 | 80369626 |
| 88.9 | minibend 2S-3.5 | 80336926 | minibend 2SR-3.5 | 80364002 |
| 101.6 | minibend 2S-4 | 80336927 | minibend 2SR-4 | 80369628 |
| 114.3 | minibend 2S-4.5 | 80370941 | minibend 2SR-4.5 | 80365267 |
| 127 | minibend 2S-5 | 80336928 | minibend 2SR-5 | 80336948 |
| 139.7 | minibend 2S-5.5 | 80336929 | minibend 2SR-5.5 | 80370947 |
| 152.4 | minibend 2S-6 | 80336931 | minibend 2SR-6 | 80336949 |
| 165.1 | minibend 2S-6.5 | 80336932 | minibend 2SR-6.5 | 80370948 |
| 177.8 | minibend 2S-7 | 80336934 | minibend 2SR-7 | 80369627 |
| 203.2 | minibend 2S-8 | 80336937 | minibend 2SR-8 | 80365390 |
| 228.6 | minibend 2S-9 | 80336938 | minibend 2SR-9 | 80336951 |
| 254 | minibend 2S-10 | 80336918 | minibend 2SR-10 | 80363144 |
| 279.4 | minibend 2S-11 | 80336919 | minibend 2SR-11 | 80370949 |
| 304.8 | minibend 2S-12 | 80336920 | minibend 2SR-12 | 80360902 |
| 330.2 | minibend 2S-13 | 80370942 | minibend 2SR-13 | 80370950 |
| 355.6 | minibend 2S-14 | 80370943 | minibend 2SR-14 | 80370951 |
| 381 | minibend 2S-15 | 80365859 | minibend 2SR-15 | 80365860 |
| 406.4 | minibend 2S-16 | 80336921 | minibend 2SR-16 | 80363112 |

Minibend V

Minibend V is the millimeter wave version of the original Minibend, designed for use in high-speed (40 GB/sec.), low dispersion applications. Minibend V has a HUBER+SUHNER designed plug connector that mates with standard 1.85 mm and 2.4 mm connections.

- Frequency range up to 65 GHz
- Precision 2.4 mm/1.85 mm compatible plug connectors
- Automatically ruggedised by design



| Length mm | Minibend V | Item no. |
|-----------|----------------|----------|
| 63.5 | minibend V-2.5 | 80337735 |
| 76.2 | minibend V-3 | 80337738 |
| 88.9 | minibend V-3.5 | 80337740 |
| 101.6 | minibend V-4 | 80337743 |
| 114.3 | minibend V-4.5 | 80337745 |
| 127 | minibend V-5 | 80337748 |
| 139.7 | minibend V-5.5 | 80337750 |
| 152.4 | minibend V-6 | 80337753 |
| 165.1 | minibend V-6.5 | 80363214 |
| 177.8 | minibend V-7 | 80337756 |
| 203.2 | minibend V-8 | 80337760 |
| 228.6 | minibend V-9 | 80337763 |
| 254 | minibend V-10 | 80337721 |
| 279.4 | minibend V-11 | 80337722 |
| 304.8 | minibend V-12 | 80337723 |
| 330.2 | minibend V-13 | 80370952 |
| 355.6 | minibend V-14 | 80337727 |
| 381 | minibend V-15 | 80363018 |
| 406.4 | minibend V-16 | 80337729 |

Minibend VG

Minibend VG is an enhanced version of the Minibend V with a 1.85 mm plug connector that contains a gold plated BeCu contact for applications that require repeated mates/demates of the interface. The Minibend VG will tolerate up to 500 mates/demates without applicable degradation. Minibend VG is designed for use in high bandwidth and high-speed (40 GB/sec) applications.

- Frequency range up to 65 GHz
- Precision 1.85 mm compatible plug connectors
- Automatically ruggedised by design

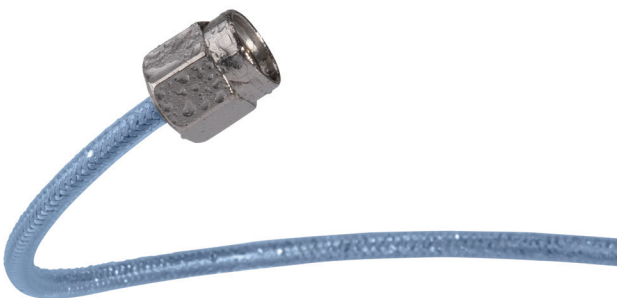


| Length mm | Minibend V | Item no. |
|--------------|----------------|----------|
| 63.5 | minibend V-2.5 | 80337735 |
| 76.2 | minibend V-3 | 80337738 |
| 88.9 | minibend V-3.5 | 80337740 |
| 101.6 | minibend V-4 | 80337743 |
| 114.3 | minibend V-4.5 | 80337745 |
| 127 | minibend V-5 | 80337748 |
| 139.7 | minibend V-5.5 | 80337750 |
| 152.4 | minibend V-6 | 80337753 |
| 165.1 | minibend V-6.5 | 80363214 |
| 177.8 | minibend V-7 | 80337756 |
| 203.2 | minibend V-8 | 80337760 |
| 228.6 | minibend V-9 | 80337763 |
| 254 | minibend V-10 | 80337721 |
| 279.4 | minibend V-11 | 80337722 |
| 304.8 | minibend V-12 | 80337723 |
| 330.2 | minibend V-13 | 80370952 |
| 355.6 | minibend V-14 | 80337727 |
| 381 | minibend V-15 | 80363018 |
| 406.4 | minibend V-16 | 80337729 |

Minibend WR

Minibend WR is the "all weather" version of the Minibend family environments with high humidity and moisture. Minibend WR meets the moisture resistance requirements of MIL-STD-202, method 106. It is designed for use in low profile, internal or external, point-to-point interconnections between RF modules within communications systems. Minibend WR provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connectors
- Automatically ruggedised and weatherproof by design



| Length mm | Minibend WR | Item no. |
|--------------|-----------------|----------|
| 63.5 | minibend WR-2.5 | 80365802 |
| 76.2 | minibend WR-3 | 80337821 |
| 88.9 | minibend WR-3.5 | 80337822 |
| 101.6 | minibend WR-4 | 80337824 |
| 114.3 | minibend WR-4.5 | 80370956 |
| 127 | minibend WR-5 | 80337826 |
| 139.7 | minibend WR-5.5 | 80363605 |
| 152.4 | minibend WR-6 | 80337827 |
| 165.1 | minibend WR-6.5 | 80370957 |
| 177.8 | minibend WR-7 | 80360521 |
| 203.2 | minibend WR-8 | 80337830 |
| 228.6 | minibend WR-9 | 80337832 |
| 254 | minibend WR-10 | 80360440 |
| 279.4 | minibend WR-11 | 80363606 |
| 304.8 | minibend WR-12 | 80337814 |
| 330.2 | minibend WR-13 | 80337815 |
| 355.6 | minibend WR-14 | 80360441 |
| 381 | minibend WR-15 | 80363222 |
| 406.4 | minibend WR-16 | 80367832 |

Minibend L

High performance/high pull strength, low loss microwave coaxial cable assembly

Product description

Minibend L is an enhanced, low loss version of the Minibend flexible coaxial cable assembly with increased phase stability and power handling capacity which is designed for use in low profile, internal, point-to-point interconnections between RF modules within communications systems. Minibend L replaces 0.086 inch custom semi-rigid cables with standard flexible cables providing 30 % lower attenuation and eliminating the need for predefined custom lengths and bend configurations. Minibend L provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.



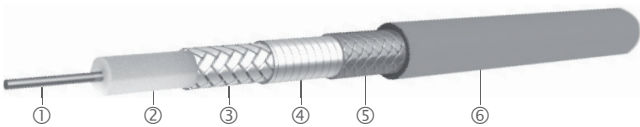
Product features

- Impedance 50 Ω
- Applicable up to 50 GHz
- Direct replacement for 0.086 inch semi-rigid cables
- Stock delivery on standard lengths
- Microporous dielectric for 30 % lower insertion loss, improved phase stability and higher power handling

Recommended connectors

| | |
|------------|---------------------------------------|
| Minibend L | SMA, SSMA, SMP |
| | Other connectors available on request |

Construction



| Cable | Inner conductor ① | Dielectric ② | Outer conductor ③ | Barrier ④ | Outer braid ⑤ | Jacket ⑥ | Outer diameter mm |
|-------|----------------------|------------------|----------------------|------------------------------|------------------|-------------|----------------------|
| 32024 | CuAg wire | PTFE microporous | CuAg flat wire braid | aluminium/ polyimide tape | stainless steel | FEP | 2.7 |

Technical data

| Cable | Operating frequency GHz | Velocity % | Weight g/m | Min. bending radius for ± 180° mm | Temperature range ° C |
|-------|----------------------------|---------------|---------------|---|--------------------------|
| 32024 | 50 | 76.0 | 16.4 | 5.08 | -55 to +200 |

| Assembly | Minibend L | Minibend LS | Minibend L2S | Minibend LA |
|-------------|------------|-------------|--------------|-------------|
| Connector A | SMA (m) | SMA (m) | SMP (f) | SSMA (m) |
| Connector B | SMA (m) | SMP (f) | SMP (f) | SSMA (m) |

Minibend L

Attenuation (nominal values at +25 °C ambient temperature)



Power handling (maximum values at 25 °C ambient temperature and sea level)



Low profile assemblies

Minibend L

Minibend L is an enhanced, low loss version of the Minibend flexible coaxial cable assembly which is designed for use in low profile, internal, point-to-point interconnections between RF modules within communications systems. Minibend L eliminates the need for predefined custom lengths and bend configurations. Minibend L provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connectors
- Ruggedised version available "R"



| Length mm | Minibend L | Item no. | Minibend LR | Item no. |
|-----------|----------------|----------|-----------------|----------|
| 63.5 | minibend L-2.5 | 80360176 | minibend LR-2.5 | 80337368 |
| 76.2 | minibend L-3 | 80337272 | minibend LR-3 | 80337390 |
| 88.9 | minibend L-3.5 | 80337273 | minibend LR-3.5 | 80337392 |
| 101.6 | minibend L-4 | 80337285 | minibend LR-4 | 80337409 |
| 114.3 | minibend L-4.5 | 80337286 | minibend LR-4.5 | 80337412 |
| 127 | minibend L-5 | 80337292 | minibend LR-5 | 80337423 |
| 139.7 | minibend L-5.5 | 80337293 | minibend LR-5.5 | 80337427 |
| 152.4 | minibend L-6 | 80337298 | minibend LR-6 | 80337433 |
| 165.1 | minibend L-6.5 | 80337299 | minibend LR-6.5 | 80337435 |
| 177.8 | minibend L-7 | 80337304 | minibend LR-7 | 80337443 |
| 203.2 | minibend L-8 | 80337313 | minibend LR-8 | 80337449 |
| 228.6 | minibend L-9 | 80337318 | minibend LR-9 | 80337451 |
| 254 | minibend L-10 | 80337198 | minibend LR-10 | 80337344 |
| 279.4 | minibend L-11 | 80337201 | minibend LR-11 | 80337348 |
| 304.8 | minibend L-12 | 80337202 | minibend LR-12 | 80337351 |
| 330.2 | minibend L-13 | 80337207 | minibend LR-13 | 80337355 |
| 355.6 | minibend L-14 | 80337209 | minibend LR-14 | 80337356 |
| 381 | minibend L-15 | 80337212 | minibend LR-15 | 80337357 |
| 406.4 | minibend L-16 | 80337213 | minibend LR-16 | 80337358 |

Minibend LS

Minibend LS has all of the benefits of the original Minibend but with a microporous dielectric for lower loss and improved phase stability. The assembly contains a DSCC and MIL-STD-348 compliant SMP female connector on one end and an SMA plug connector on the other. Minibend LS replaces custom length and predefined 0.086 inch semi-rigid cables with flexible coax cable assemblies for use as internal, point-to-point interconnections between RF modules.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Ruggedised version available "R"



| Length mm | Minibend LS | Item no. |
|-----------|-----------------|----------|
| 63.5 | minibend LS-2.5 | 80337463 |
| 76.2 | minibend LS-3 | 80337464 |
| 88.9 | minibend LS-3.5 | 80337465 |
| 101.6 | minibend LS-4 | 80337466 |
| 114.3 | minibend LS-4.5 | 80337467 |
| 127 | minibend LS-5 | 80337468 |
| 139.7 | minibend LS-5.5 | 80337469 |
| 152.4 | minibend LS-6 | 80337470 |
| 165.1 | minibend LS-6.5 | 80337471 |
| 177.8 | minibend LS-7 | 80337475 |
| 203.2 | minibend LS-8 | 80337477 |
| 228.6 | minibend LS-9 | 80360501 |
| 254 | minibend LS-10 | 80337455 |
| 279.4 | minibend LS-11 | 80337456 |
| 304.8 | minibend LS-12 | 80337457 |
| 330.2 | minibend LS-13 | 80337458 |
| 355.6 | minibend LS-14 | 80337459 |
| 381 | minibend LS-15 | 80337460 |
| 406.4 | minibend LS-16 | 80337461 |

Minibend L2S

Minibend L2S is the SMP female version of the original Minibend with a lower loss, microporous dielectric and DSCC and MIL-STD-348 compliant SMP female connectors on each end. Minibend L2S replaces custom length and bend configuration 0.086 inch semi-rigid cable with truly flexible coax cable assemblies for use as internal interconnections between RF modules.

- Frequency range up to 40 GHz
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Ruggedised version available "R"



Minibend LA

Minibend LA is the SSMA plug version of the original Minibend with a microporous dielectric for lower loss and improved phase stability. Minibend LA replaces custom length and predefined bend configuration 0.086 inch semi-rigid cables with truly flexible coax cable assemblies for use as internal point-to-point interconnections between RF modules.

- Frequency range up to 40 GHz
- Precision stainless steel SSMA plug connectors
- Ruggedised version available "R"



| Length mm | Minibend L2S | Item no. |
|--------------|------------------|----------|
| 63.5 | minibend L2S-2.5 | 80337249 |
| 76.2 | minibend L2S-3 | 80362626 |
| 88.9 | minibend L2S-3.5 | 80367351 |
| 101.6 | minibend L2S-4 | 80366004 |
| 114.3 | minibend L2S-4.5 | 80337250 |
| 127 | minibend L2S-5 | 80363891 |
| 139.7 | minibend L2S-5.5 | 80337251 |
| 152.4 | minibend L2S-6 | 80365111 |
| 165.1 | minibend L2S-6.5 | 80367341 |
| 177.8 | minibend L2S-7 | 80370924 |
| 203.2 | minibend L2S-8 | 80366005 |
| 228.6 | minibend L2S-9 | 80361796 |
| 254 | minibend L2S-10 | 80362894 |
| 279.4 | minibend L2S-11 | 80370911 |
| 304.8 | minibend L2S-12 | 80365427 |
| 330.2 | minibend L2S-13 | 80366870 |
| 355.6 | minibend L2S-14 | 80366871 |
| 381 | minibend L2S-15 | 80366872 |
| 406.4 | minibend L2S-16 | 80337248 |

| Length mm | Minibend L2S | Item no. |
|--------------|-----------------|----------|
| 63.5 | minibend LA-2.5 | 80370912 |
| 76.2 | minibend LA-3 | 80366857 |
| 88.9 | minibend LA-3.5 | 80370913 |
| 101.6 | minibend LA-4 | 80366135 |
| 114.3 | minibend LA-4.5 | 80370914 |
| 127 | minibend LA-5 | 80370915 |
| 139.7 | minibend LA-5.5 | 80370916 |
| 152.4 | minibend LA-6 | 80366858 |
| 165.1 | minibend LA-6.5 | 80365398 |
| 177.8 | minibend LA-7 | 80370917 |
| 203.2 | minibend LA-8 | 80366622 |
| 228.6 | minibend LA-9 | 80366841 |
| 254 | minibend LA-10 | 80370918 |
| 279.4 | minibend LA-11 | 80370919 |
| 304.8 | minibend LA-12 | 80370920 |
| 330.2 | minibend LA-13 | 80370921 |
| 355.6 | minibend LA-14 | 80370922 |
| 381 | minibend LA-15 | 80370923 |
| 406.4 | minibend LA-16 | 80365399 |