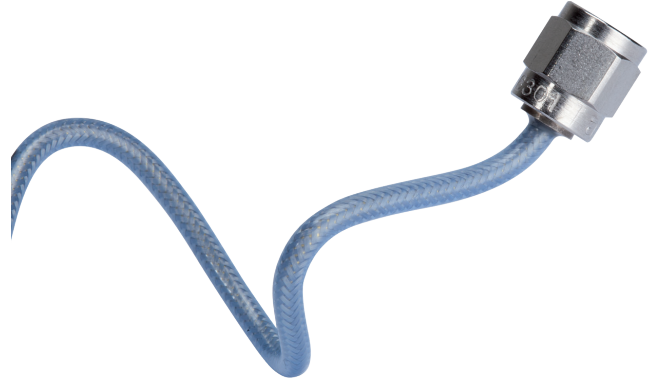


Minibend

High performance/high pull strength microwave coaxial cable assembly

Product description

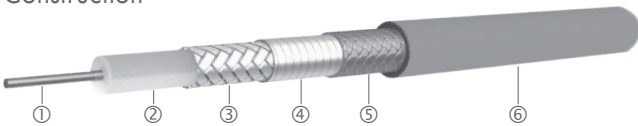
Minibend is a truly flexible coaxial cable assembly which is designed for use in low profile, internal, point-to-point interconnections between RF modules within communications systems. Minibend replaces 0.086 inch custom semi-rigid cables with standard flexible cables, eliminating the need for predefined 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

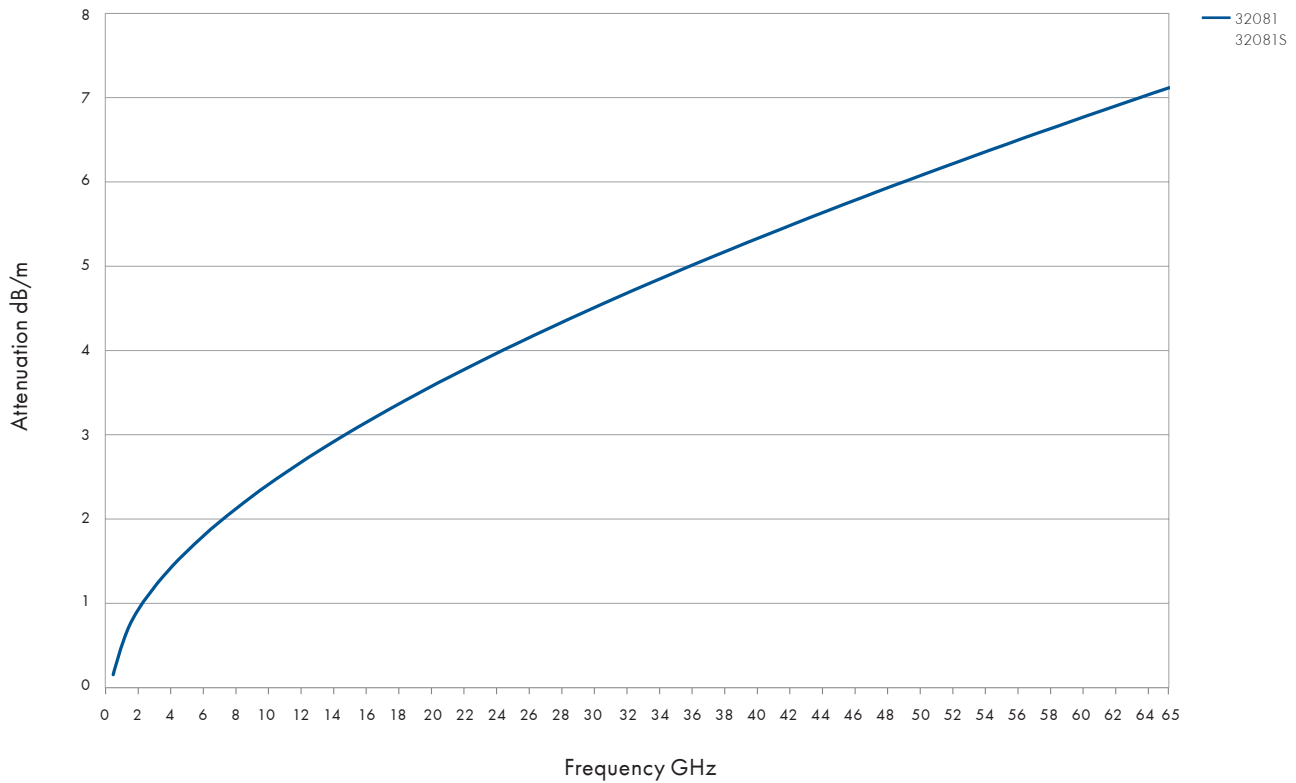
Cable	Operating frequency GHz	Velocity %	Weight g/m	Min. bending radius for ± 180° mm	Temperature range ° C
32081/32081S	65	70.3	14.9	5.08	-55 to +200

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

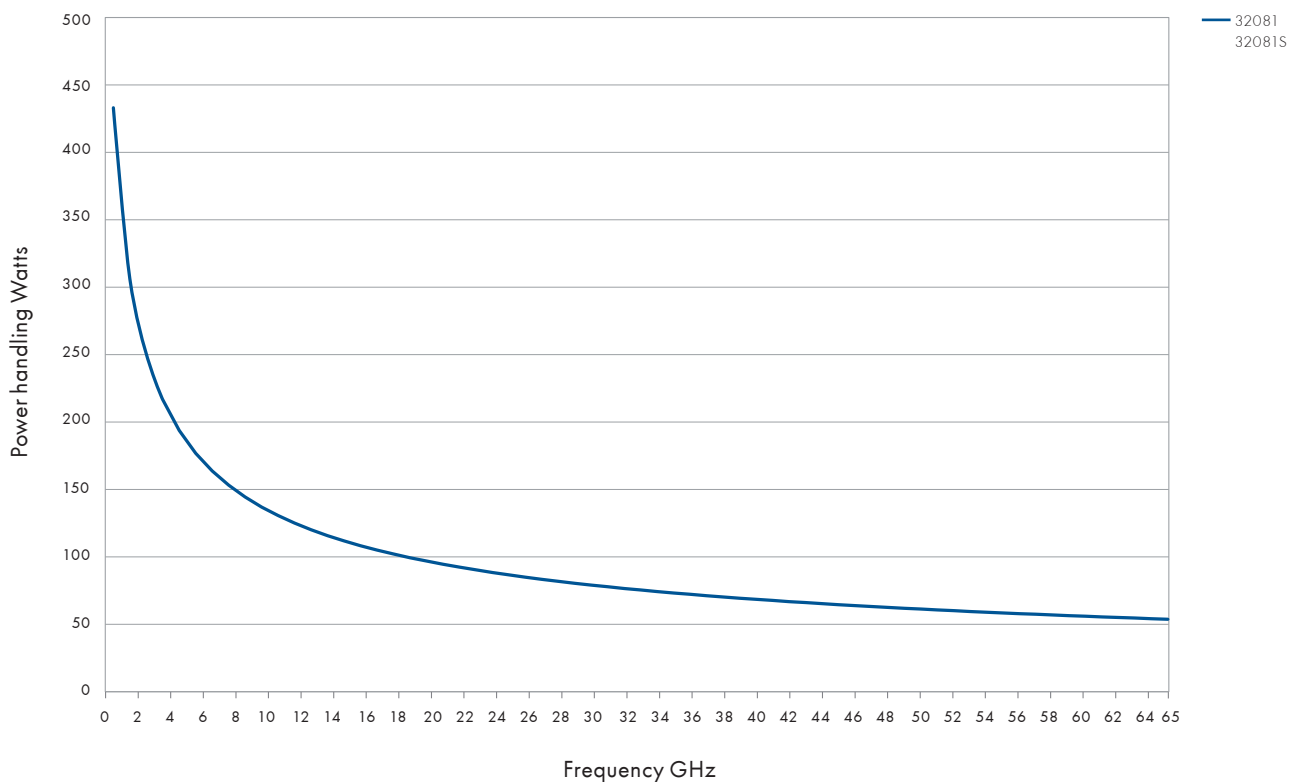
Assembly	Minibend S	Minibend 2S	Minibend V	Minibend VG	Minibend WR
Connector A	SMA (m)	SMP (f)	2.4 mm/1.85 mm (m)	1.85 mm (m) gold plated BeCu	SMA (m)
Connector B	SMP (f)	SMP (f)	2.4 mm/1.85 mm (m)	1.85 mm (m) gold plated BeCu	SMA (m)

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