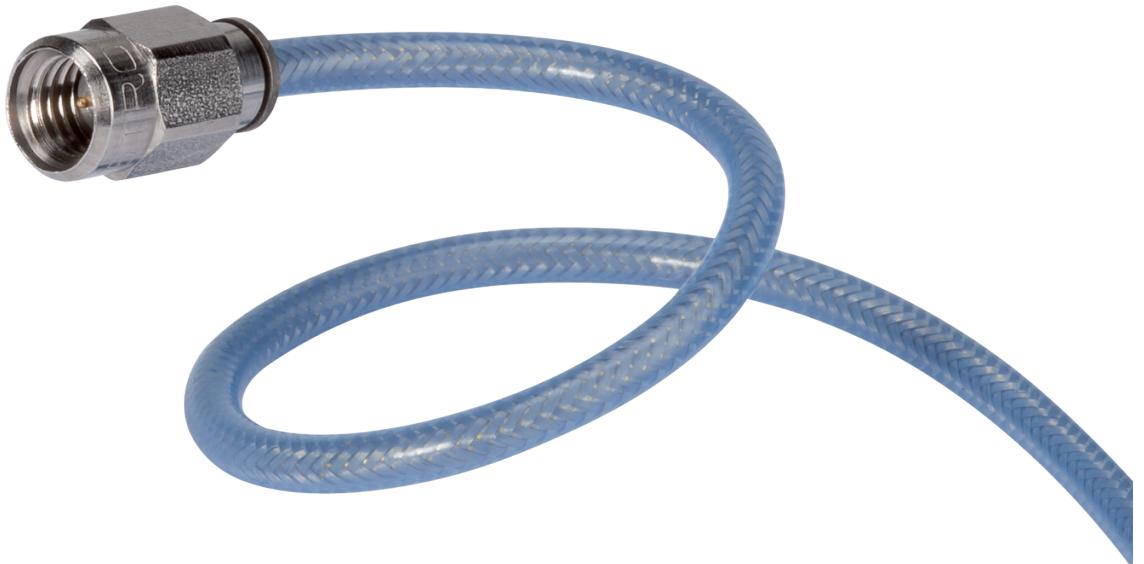


# Low profile assemblies

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## Qualified, low profile microwave cable assemblies

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 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.

MINIBEND R is designed for use in complex, congested environments where higher cable retention force is required. MINIBEND R's pull strength is more than 70 % greater than a standard MINIBEND. When installed and bent at the minimum bend radius, MINIBEND R will tolerate multiple 90° rotations at the cable/connector junction. The „R“ ruggedisation can be added to any MINIBEND connector style. All materials used in MINIBEND R assemblies meet or exceed NASA TML and CVCM requirements for use in spacecraft applications.

## **MINIBEND**

Low profile, high performance microwave coaxial cable assemblies

- Frequency range up to 65 GHz
- Triple shielded for high isolation
- Eliminates need for costly right angle connectors
- Direct replacement for 0.086 inch semi-rigid cables



## **MINIBEND L**

Low profile, high performance low loss microwave coaxial cable assemblies

- Frequency range up to 50 GHz
- Triple shielded for high isolation
- Microporous dielectric for 30 % lower insertion
- Direct replacement for 0.086 inch semi-rigid cables



## **MICROBEND**

Ultra low profile, high performance, microwave coaxial cable assemblies

- Frequency range up to 90 GHz
- Triple shielded for high isolation
- Direct replacement for 0.047 inch semi-rigid cables
- Guaranteed 10 lbs (45 N) pull force



## **MINI141**

Low profile, high performance ultra low loss microwave cable assemblies

- Frequency range up to 40 GHz
- Triple shielded for high isolation
- Eliminates need for costly right angle connectors
- Direct replacement for 0.141 inch semi-rigid cables

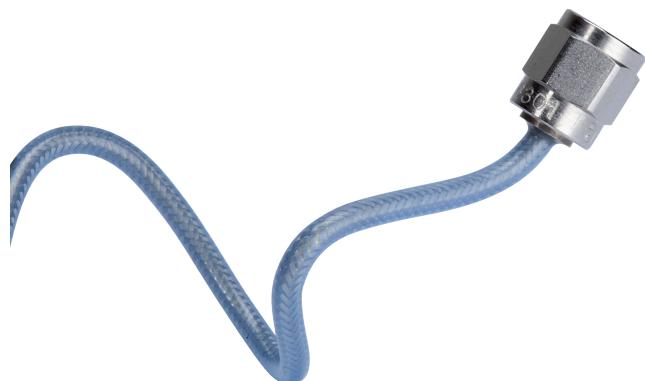


# MINIBEND™

## 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.



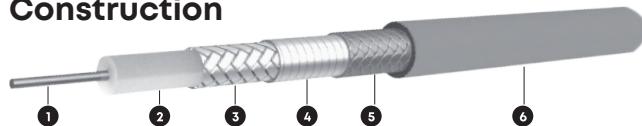
### Product features

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

### Recommended connectors

MINIBEND	SMA, SSMA, SK, SMP, 2.4 mm, 1.85 mm
	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							
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

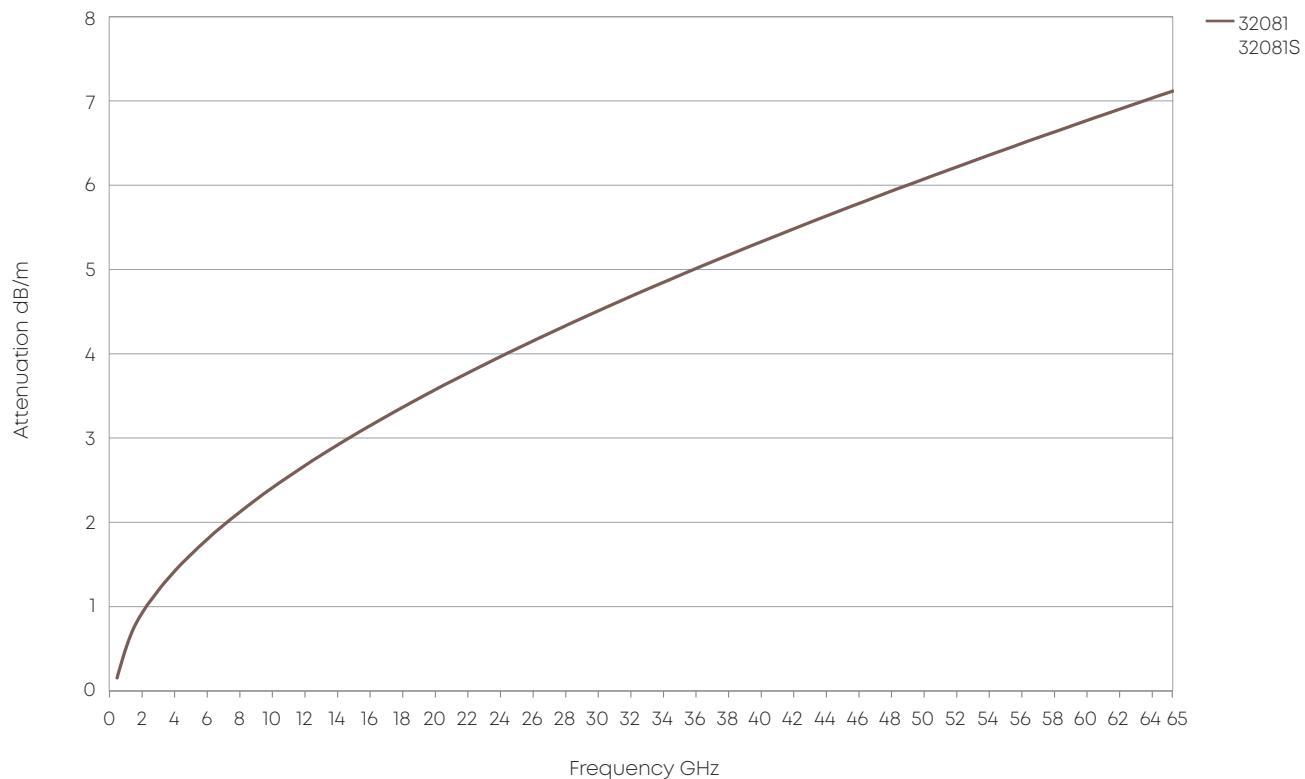
Cable	Operating frequency	Velocity	Weight	Min. bending radius for ± 180°	Temperature range
	GHz	%	g /m	mm	° C
32081/32081S	65	70.3	14.9	5.08	-55 to +200

Assembly	MINI-BEND	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

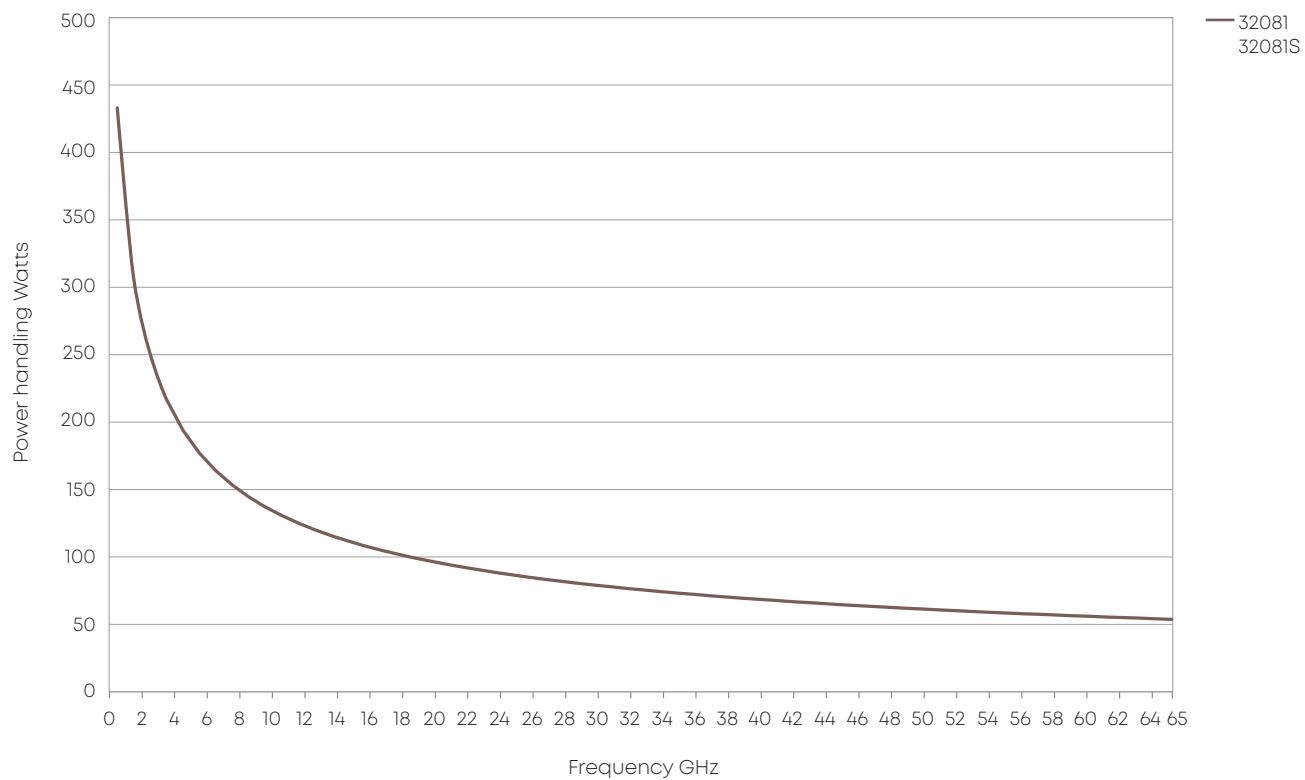
Assembly	MINIBEND S	MINIBEND 2S	MINIBEND V	MINIBEND VG	MINIBEND WR
Connector A	SMA (m)	SMP (f)	2.4 mm/1.85 mm (m)	1.85 mm (m) gold plated BeCu	SMA (m)
Connector B	SMP (f)	SMP (f)	2.4 mm/1.85 mm (m)	1.85 mm (m) gold plated BeCu	SMA (m)

# MINIBEND™

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



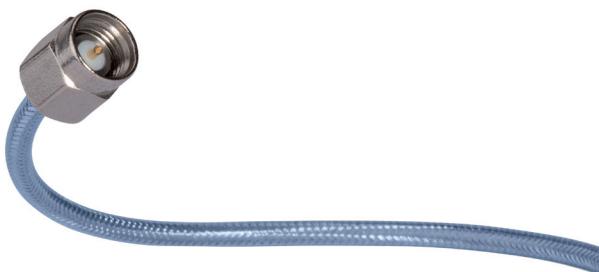
**Power handling** (maximum values at 25 °C ambient temperature and sea level)



# 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“

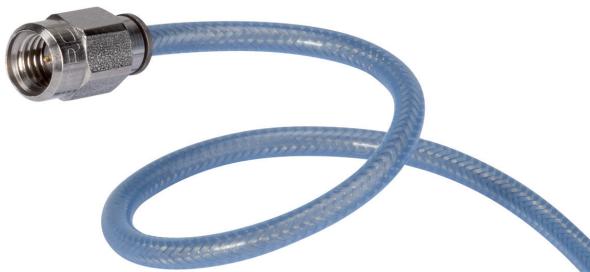


<b>Length</b>	<b>MINIBEND</b>	<b>Item no.</b>	<b>MINIBEND R</b>	<b>Item no.</b>
<b>mm</b>				
63.5	minibend-2.5	80337902	minibend R-2.5	80337536
76.2	minibend-3	80337926	minibend R-3	80337569
88.9	minibend-3.5	80337929	minibend R-3.5	80337570
101.6	minibend-4	80337942	minibend R-4	80337585
114.3	minibend-4.5	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“



<b>Length</b>	<b>MINIBEND A</b>	<b>Item no.</b>
<b>mm</b>		
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 pre-assembled 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 <b>mm</b>	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 <b>mm</b>	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



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

# 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"

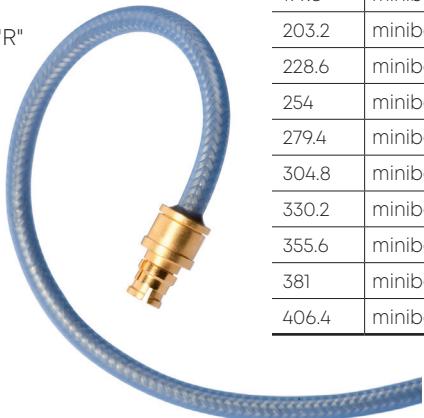


Length mm	MINIBEND S	Item no.	MINIBEND SR	Item no.
63.5	minibend S-2.5	80337655	minibend SR-2.5	80337687
76.2	minibend S-3	80337657	minibend SR-3	80337692
88.9	minibend S-3.5	80370940	minibend SR-3.5	80337693
101.6	minibend S-4	80337658	minibend SR-4	80337698
114.3	minibend S-4.5	80337660	minibend SR-4.5	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 matedable with Corning Gilbert GPO®
- Ruggedised version available "R"



<b>Length</b>	<b>MINIBEND S</b>	<b>Item no.</b>	<b>MINIBEND SR</b>	<b>Item no.</b>
<b>mm</b>				
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



<b>Length</b>	<b>MINIBEND V</b>	<b>Item no.</b>
<b>mm</b>		
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 <b>mm</b>	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 <b>mm</b>	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

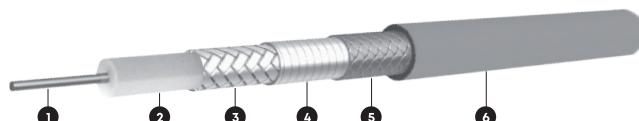
- Impedance 50 Ω
- Applicable up to 50 GHz
- Direct replacement for 0.086 inch semi-rigid cables
- Stock delivery on standard lengths
- Microporous dielectric for 30 % lower insertion loss, improved phase stability and higher power handling



### 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
32024	CuAg wire	PTFE micro-porous	CuAg flat wire braid	aluminium/polyimide tape	stainless steel	FEP	2.7 mm

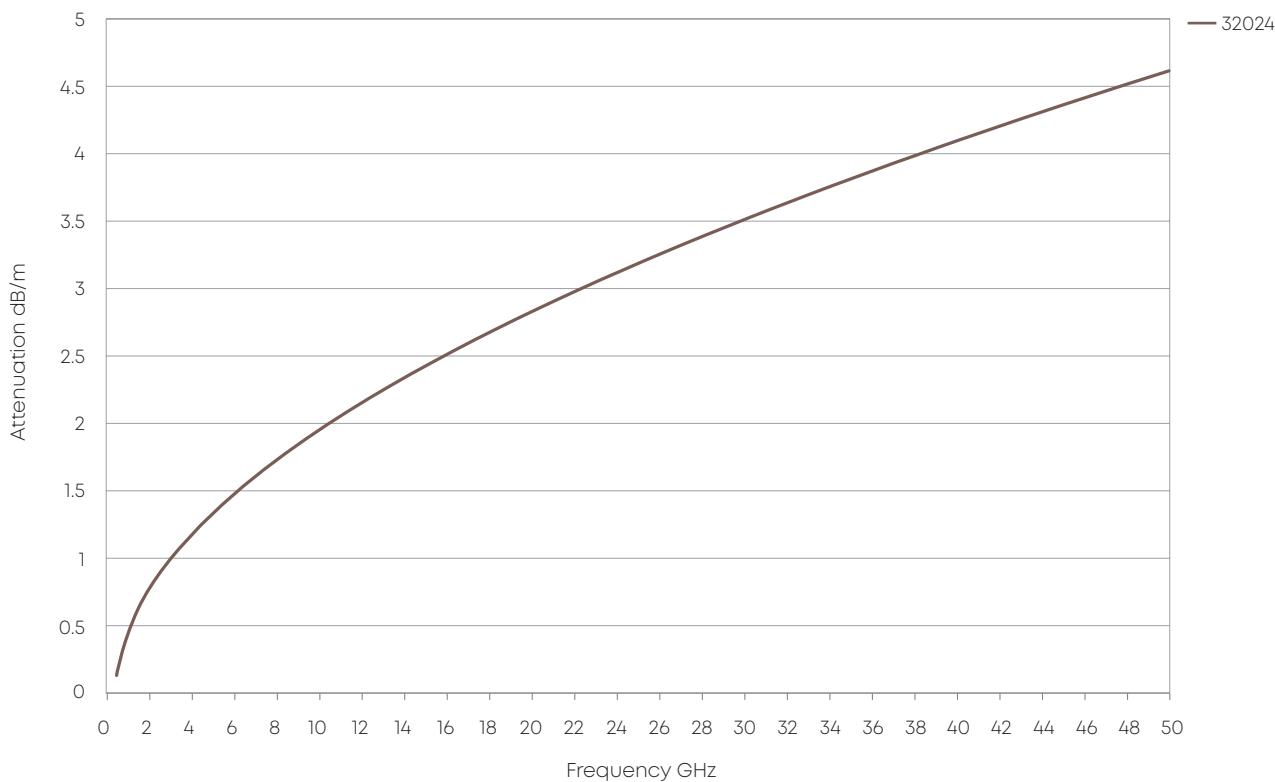
### Technical data

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

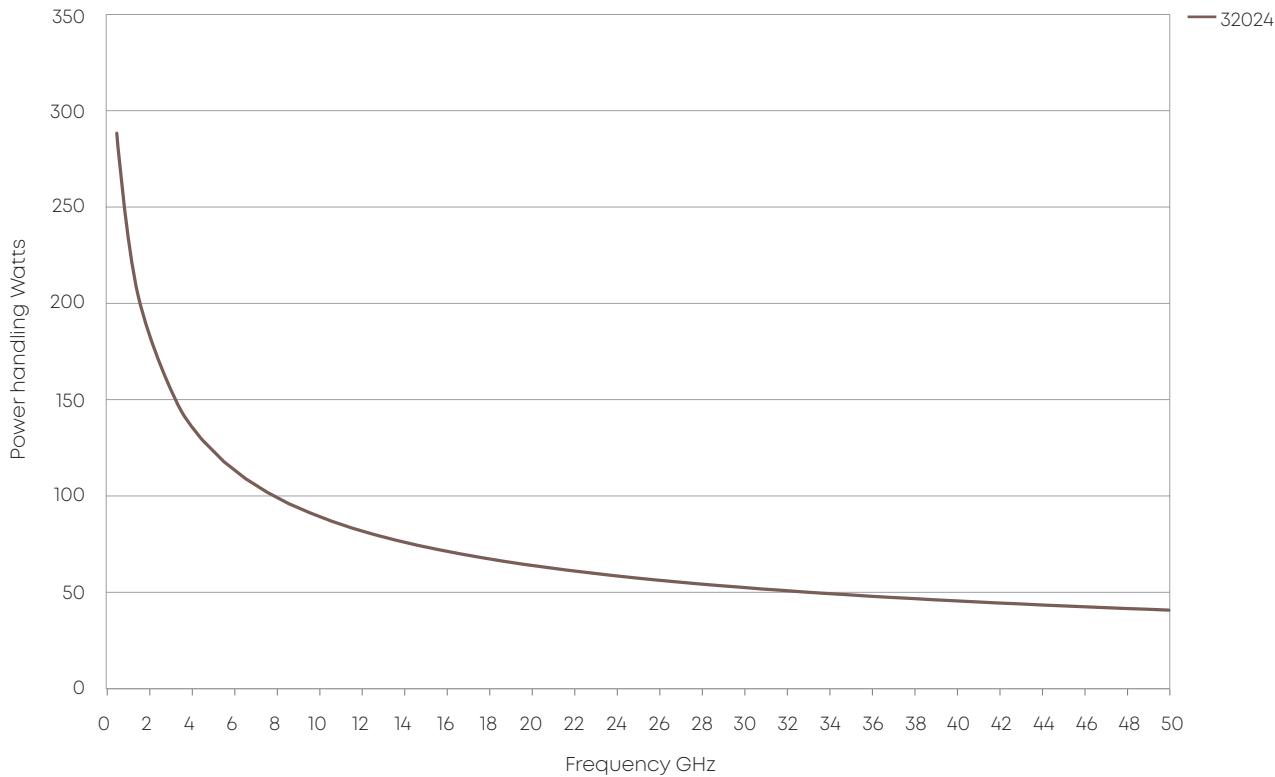
Assembly	MINIBEND L	MINIBEND LS	MINIBEND L2S	MINIBEND LA
Connector A	SMA (m)	SMA (m)	SMP (f)	SSMA (m)
Connector B	SMA (m)	SMP (f)	SMP (f)	SSMA (m)

# MINIBEND™ L

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



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



# 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	MINIBEND L	Item no.	MINIBEND LR	Item no.
<b>mm</b>				
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	MINIBEND LS	Item no.
<b>mm</b>		
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"



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

# 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 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

# MICROBEND™

## High performance/high pull strength microwave coaxial cable assembly

### Product description

MICROBEND assemblies provide you with a standard preassembled and tested high performance, cost-effective truly flexible alternative to 0.047 inch custom semi-rigid cable assemblies, eliminating the need for predefined custom lengths and bend configurations. MICROBEND features include 35 % lower loss than 0.047 inch semi-rigid cable, a minimum bend radius of 1.52 mm (0.060 inch) and triple shielding for high isolation. MICROBEND assemblies are available with a wide range of connector interfaces. All MICROBEND assemblies are available only in a ruggedised version.



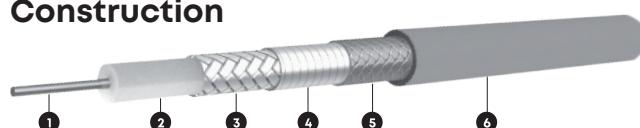
### Product features

- Impedance 50 Ω
- Applicable up to 67 GHz
- Stock delivery on standard lengths
- 35 % lower insertion loss than 0.047 inch semi-rigid cables

### Recommended connectors

MICROBEND	SMA, SSMA, SK, SMP, SMPM, SMPM-T, 1.85 mm
	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
32041	CuAg wire	PTFE	CuAg flat wire braid	aluminium/polyimide tape	stainless steel	FEP	2.0

### Technical data

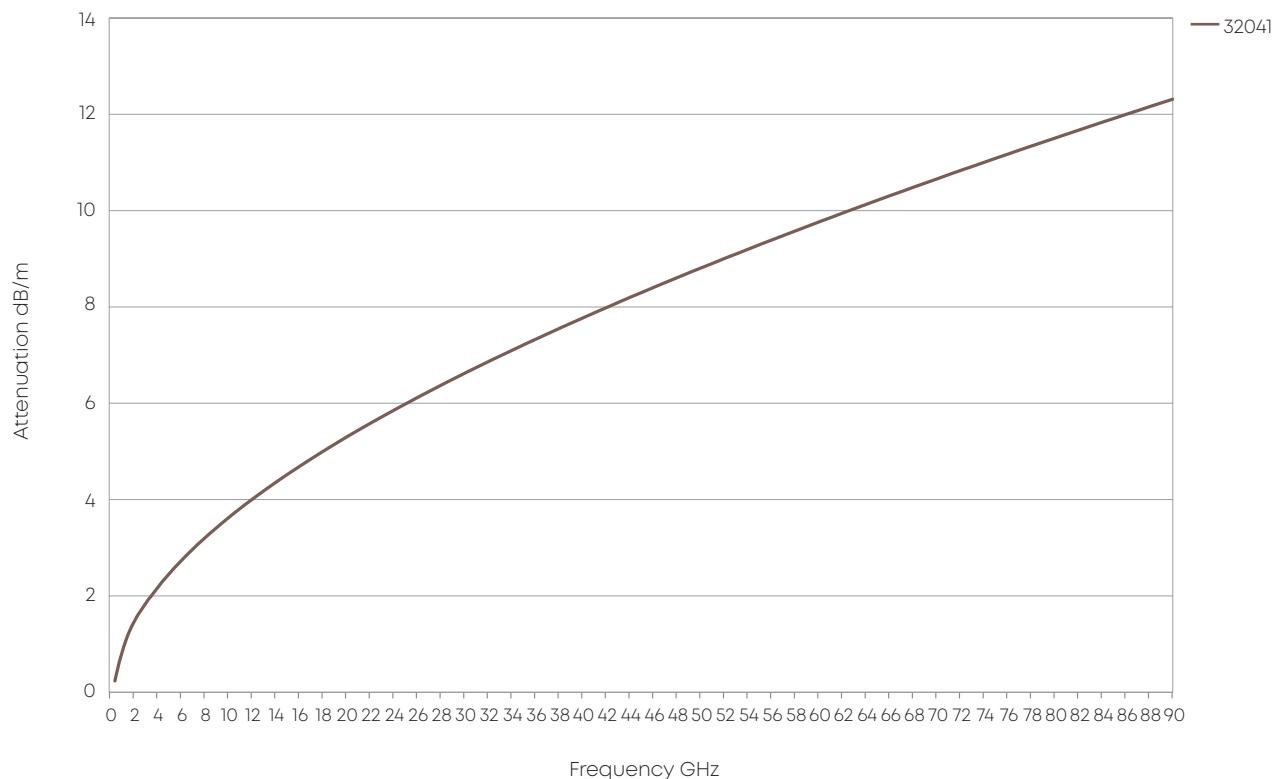
Cable	Operating frequency GHz	Velocity	Weight g /m	Min. bending radius for ± 180° mm	Temperature range °C
32041	90	70.3	11.9	1.50	-55 to +200

Assembly	MICRO-BEND R	MICRO-BEND AR	MICRO-BEND KR	MICRO-BEND KMR	MICROBEND KMTR	MICROBEND KV	MICRO-BEND MR
Connector A	SMA (m)	SSMA (m)	SK (m)	SK (m)	SK (m)	SK (m)	SMA (m)
Connector B	SMA (m)	SSMA (m)	SK (m)	SMPM (f)	SMPM -T(f)	1.85 mm (m) gold plated BeCu	SMPM (f)

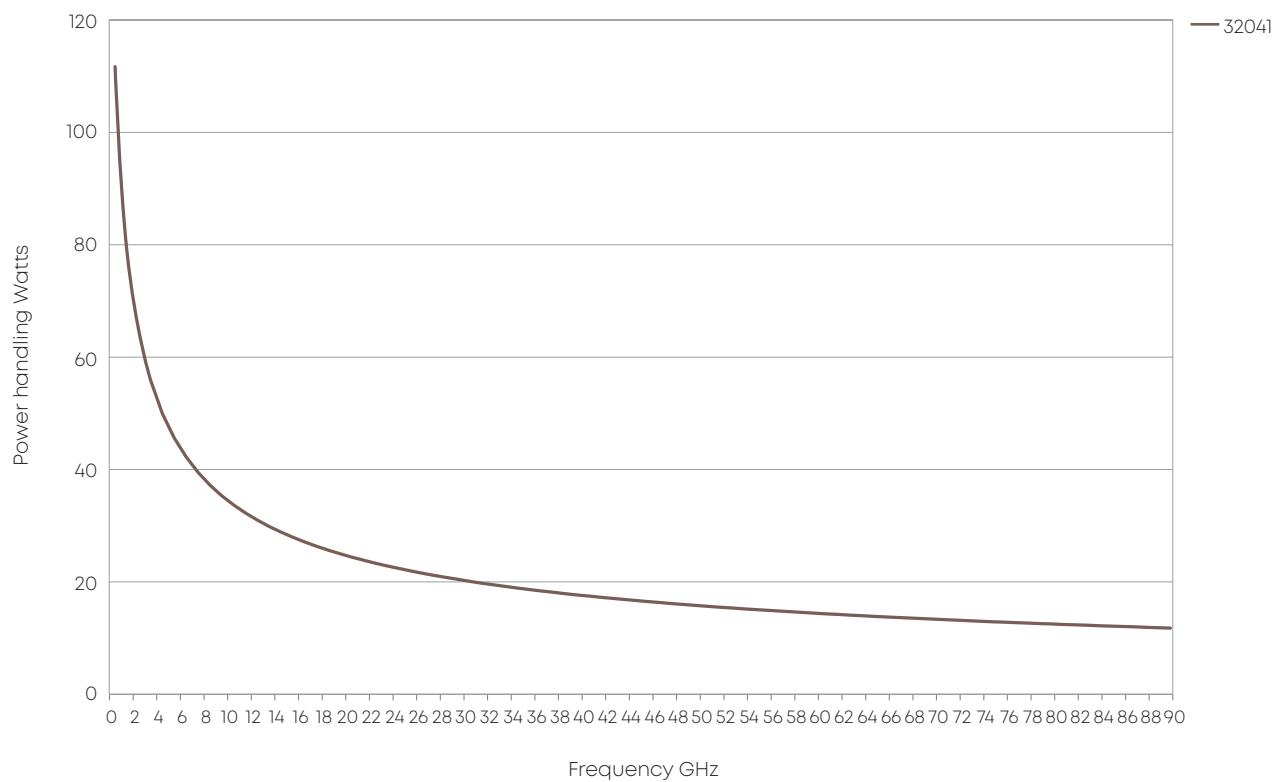
Assembly	MICROBEND 2MR	MICRO-BEND MTR	MICRO-BEND 2MTR	MICROBEND MVR	MICROBEND SR	MICRO-BEND 2SR	MICROBEND V
Connector A	SMPM (f)	SMA (m)	SMPM -T(f)	SMPM (f)	SMA (m)	SMP (f)	1.85 mm (m) gold plated BeCu
Connector B	SMPM (f)	SMPM -T(f)	SMPM -T(f)	1.85 mm (m) gold plated BeCu	SMP (f)	SMP (f)	1.85 mm (m) gold plated BeCu

# MICROBEND™

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



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



# MICROBEND™ R

MICROBEND R eliminates the need for predefined custom lengths and bend configurations. MICROBEND R was designed for use as internal point-to-point interconnections between modules in microwave and fiber optic switching systems. MICROBEND R features include lower loss than 0.047 inch semi-rigid cable and a minimum bend radius of 1.52 mm (0.060 inch).

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



<b>Length</b>	<b>MICROBEND R</b>	<b>Item no.</b>
<b>mm</b>		
63.5	microbend R-2.5	80336652
76.2	microbend R-3	80336654
88.9	microbend R-3.5	80336655
101.6	microbend R-4	80336658
114.3	microbend R-4.5	80336659
127	microbend R-5	80336662
139.7	microbend R-5.5	80336664
152.4	microbend R-6	80336665
165.1	microbend R-6.5	80363961
177.8	microbend R-7	80336667
203.2	microbend R-8	80336668
228.6	microbend R-9	80336669
254	microbend R-10	80336646
279.4	microbend R-11	80336648
304.8	microbend R-12	80336649

# MICROBEND™ AR

MICROBEND AR is the SSMA plug version of the of the MICROBEND. MICROBEND AR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible coax cable in standard lengths.

- Frequency range up to 40 GHz
- Precision stainless steel SSMA plug connectors
- Automatically ruggedised by design



<b>Length</b>	<b>MICROBEND AR</b>	<b>Item no.</b>
<b>mm</b>		
63.5	microbend AR-2.5	80370830
76.2	microbend AR-3	80370831
88.9	microbend AR-3.5	80370832
101.6	microbend AR-4	80336531
114.3	microbend AR-4.5	80370833
127	microbend AR-5	80363838
139.7	microbend AR-5.5	80370834
152.4	microbend AR-6	80336532
165.1	microbend AR-6.5	80370835
177.8	microbend AR-7	80370836
203.2	microbend AR-8	80336533
228.6	microbend AR-9	80370837
254	microbend AR-10	80336529
279.4	microbend AR-11	80370838
304.8	microbend AR-12	80362731

# MICROBEND™ KR

MICROBEND KR offers all the benefits of the MICROBEND cable assembly but with a solderless SK plug connector on each end for performance up to 40 GHz. MICROBEND KR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with standard length, truly flexible coax cable for use as internal interconnections between RF modules in communications and high bandwidth switching systems.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connectors
- Automatically ruggedised by design



Length <b>mm</b>	<b>MICROBEND KR</b>	<b>Item no.</b>
63.5	microbend KR-2.5	80336568
76.2	microbend KR-3	80336570
88.9	microbend KR-3.5	80336571
101.6	microbend KR-4	80336573
114.3	microbend KR-4.5	80360390
127	microbend KR-5	80336574
139.7	microbend KR-5.5	80336575
152.4	microbend KR-6	80336576
165.1	microbend KR-6.5	80367544
177.8	microbend KR-7	80336578
203.2	microbend KR-8	80336579
228.6	microbend KR-9	80336580
254	microbend KR-10	80336562
279.4	microbend KR-11	80336563
304.8	microbend KR-12	80336564

# MICROBEND™ KMR

MICROBEND KMR offers all the benefits of the MICROBEND but with a solderless SK plug on one end and an SMPM female connector compliant with MIL-STD-348 on the other. MICROBEND KMR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with standard length truly flexible coax cable.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connector
- Precision SMPM female connector mateable with Corning Gilbert GPO®
- Automatically ruggedised by design



Length <b>mm</b>	<b>MICROBEND KMR</b>	<b>Item no.</b>
63.5	microbend KMR-2.5	80336550
76.2	microbend KMR-3	80336552
88.9	microbend KMR-3.5	80336553
101.6	microbend KMR-4	80336554
114.3	microbend KMR-4.5	80336555
127	microbend KMR-5	80336556
139.7	microbend KMR-5.5	80336557
152.4	microbend KMR-6	80336558
165.1	microbend KMR-6.5	80362862
177.8	microbend KMR-7	80336559
203.2	microbend KMR-8	80336560
228.6	microbend KMR-9	80336561
254	microbend KMR-10	80336545
279.4	microbend KMR-11	80336546
304.8	microbend KMR-12	80336547

# MICROBEND™ KMTR

MICROBEND KMTR offers all the benefits of the MICROBEND in a 40 GHz, high bandwidth cable assembly that features an SMPM-T female connector compliant with MIL-STD-348 on one end and a SK plug connector on the other. MICROBEND KMTR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching. It is also used extensively in space applications.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connector
- Precision SMPM-T female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length mm	MICROBEND KMTR	Item no.
63.5	microbend KMTR-2.5	80370885
76.2	microbend KMTR-3	80370886
88.9	microbend KMTR-3.5	80370887
101.6	microbend KMTR-4	80370312
114.3	microbend KMTR-4.5	80370888
127	microbend KMTR-5	80371852
139.7	microbend KMTR-5.5	80370889
152.4	microbend KMTR-6	80362186
165.1	microbend KMTR-6.5	80370890
177.8	microbend KMTR-7	80370891
203.2	microbend KMTR-8	80365259
228.6	microbend KMTR-9	80370892
254	microbend KMTR-10	80369837
279.4	microbend KMTR-11	80370893
304.8	microbend KMTR-12	80362144

# MICROBEND™ KV

MICROBEND KV offers all the benefits of the MICROBEND in a 40 GHz, high bandwidth cable assembly with an SK plug connector on one end and a 1.85 mm plug connector containing a gold plated BeCu contact for those applications that require repeated mates/demates of the interface, on the other. MICROBEND KV replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching systems.

- Frequency range up to 40 GHz
- 1.85 mm plug connector
- Precision stainless steel SK plug connector
- Automatically ruggedised by design



Length mm	MICROBEND KV	Item no.
63.5	microbend KV-2.5	80336581
76.2	microbend KV-3	80370869
88.9	microbend KV-3.5	80370870
101.6	microbend KV-4	80363709
114.3	microbend KV-4.5	80370871
127	microbend KV-5	80370872
139.7	microbend KV-5.5	80370873
152.4	microbend KV-6	80336582
165.1	microbend KV-6.5	80370874
177.8	microbend KV-7	80370875
203.2	microbend KV-8	80370876
228.6	microbend KV-9	80370877
254	microbend KV-10	80370878
279.4	microbend KV-11	80370879
304.8	microbend KV-12	80369706

# MICROBEND™ MR

MICROBEND MR offers the benefits of the MICROBEND but with an SMA plug connector on one end and an SMPM female connector compliant with MIL-STD-348 on the other. MICROBEND MR replaces custom length, pre-defined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length cable.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMPM female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length <b>mm</b>	<b>MICROBEND MR</b>	<b>Item no.</b>
63.5	microbend MR-2.5	80336593
76.2	microbend MR-3	80336595
88.9	microbend MR-3.5	80336596
101.6	microbend MR-4	80336598
114.3	microbend MR-4.5	80370842
127	microbend MR-5	80336599
139.7	microbend MR-5.5	80336600
152.4	microbend MR-6	80336603
165.1	microbend MR-6.5	80370843
177.8	microbend MR-7	80365284
203.2	microbend MR-8	80336605
228.6	microbend MR-9	80365285
254	microbend MR-10	80360212
279.4	microbend MR-11	80336588
304.8	microbend MR-12	80336590

# MICROBEND™ 2MR

MICROBEND 2MR offers all the benefits of the MICROBEND but with SMPM female connectors on each end that are fully compliant with MIL-STD-348. MICROBEND 2MR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible coax cable in standard lengths.

- Frequency range up to 65 GHz
- Precision SMPM female connectors mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length <b>mm</b>	<b>MICROBEND 2MR</b>	<b>Item no.</b>
63.5	microbend 2MR-2.5	80336485
76.2	microbend 2MR-3	80336490
88.9	microbend 2MR-3.5	80362597
101.6	microbend 2MR-4	80336496
114.3	microbend 2MR-4.5	80370033
127	microbend 2MR-5	80336500
139.7	microbend 2MR-5.5	80370844
152.4	microbend 2MR-6	80336501
165.1	microbend 2MR-6.5	80370845
177.8	microbend 2MR-7	80362973
203.2	microbend 2MR-8	80336507
228.6	microbend 2MR-9	80336509
254	microbend 2MR-10	80336477
279.4	microbend 2MR-11	80336478
304.8	microbend 2MR-12	80336480

# MICROBEND™ MTR

MICROBEND MTR offers all the benefits of the MICROBEND in a 26.5 GHz, high bandwidth cable assembly that features an SMPM-T female connector compliant with MIL-STD-348 on one end and a SMA plug connector on the other. MICROBEND MTR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching. It is also used extensively in space applications.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMPM-T female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length	MICROBEND MTR	Item no.
<b>mm</b>		
63.5	microbend MTR-2.5	80370846
76.2	microbend MTR-3	80371995
88.9	microbend MTR-3.5	80370847
101.6	microbend MTR-4	80366736
114.3	microbend MTR-4.5	80370848
127	microbend MTR-5	80366725
139.7	microbend MTR-5.5	80370849
152.4	microbend MTR-6	80361103
165.1	microbend MTR-6.5	80370850
177.8	microbend MTR-7	80366726
203.2	microbend MTR-8	80396610
228.6	microbend MTR-9	80362047
254	microbend MTR-10	80366737
279.4	microbend MTR-11	80370851
304.8	microbend MTR-12	80362145

# MICROBEND™ 2MTR

MICROBEND 2MTR offers all the benefits of the MICROBEND MTR in a 40 GHz, high bandwidth cable assembly that features an SMPM-T female connector compliant with MIL-STD-348 on each side. MICROBEND 2MTR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching. It is also used extensively in space applications.

- Frequency range up to 65 GHz
- Precision SMPM-T female connectors mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length	MICROBEND 2MTR	Item no.
<b>mm</b>		
63.5	microbend 2MTR-2.5	80370855
76.2	microbend 2MTR-3	80366641
88.9	microbend 2MTR-3.5	80367802
101.6	microbend 2MTR-4	80370856
114.3	microbend 2MTR-4.5	80366674
127	microbend 2MTR-5	80367803
139.7	microbend 2MTR-5.5	80370857
152.4	microbend 2MTR-6	80365945
165.1	microbend 2MTR-6.5	80370858
177.8	microbend 2MTR-7	80367804
203.2	microbend 2MTR-8	80360654
228.6	microbend 2MTR-9	80367805
254	microbend 2MTR-10	80367172
279.4	microbend 2MTR-11	80370859
304.8	microbend 2MTR-12	80362560

# MICROBEND™ MVR

MICROBEND MVR offers all the benefits of the MICROBEND in a 65 GHz, high bandwidth cable assembly that features an SMPM female connector compliant with MIL-STD-348 on one end and a 1.85 mm plug connector containing a gold plated BeCu contact for those applications that require repeated mates/demates of the interface on the other. MICROBEND MVR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching systems.

- Frequency range up to 65 GHz
- 1.85 mm plug connector
- Precision SMPM female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length mm	MICROBEND MVR	Item no.
63.5	microbend MVR-2.5	80336620
76.2	microbend MVR-3	80336623
88.9	microbend MVR-3.5	80336626
101.6	microbend MVR-4	80336633
114.3	microbend MVR-4.5	80370862
127	microbend MVR-5	80336638
139.7	microbend MVR-5.5	80370863
152.4	microbend MVR-6	80336640
165.1	microbend MVR-6.5	80370864
177.8	microbend MVR-7	80336641
203.2	microbend MVR-8	80336643
228.6	microbend MVR-9	80336645
254	microbend MVR-10	80336613
279.4	microbend MVR-11	80370865
304.8	microbend MVR-12	80336614

# MICROBEND™ SR

MICROBEND SR offers the benefits of the standard MICROBEND with an SMA plug connector on one end and a DSCC and MIL-STD-348 compliant SMP female connector on the other. MICROBEND SR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, cost-effective, standard length coax cables for use as internal interconnections between RF modules of communications systems.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Automatically ruggedised by design

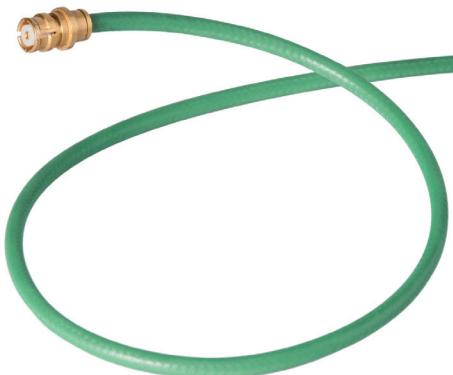


Length mm	MICROBEND SR	Item no.
63.5	microbend SR-2.5	80336674
76.2	microbend SR-3	80366686
88.9	microbend SR-3.5	80336676
101.6	microbend SR-4	80336677
114.3	microbend SR-4.5	80363639
127	microbend SR-5	80336679
139.7	microbend SR-5.5	80363701
152.4	microbend SR-6	80336681
165.1	microbend SR-6.5	80366676
177.8	microbend SR-7	80336684
203.2	microbend SR-8	80336685
228.6	microbend SR-9	80336686
254	microbend SR-10	80370899
279.4	microbend SR-11	80370900
304.8	microbend SR-12	80336671

# MICROBEND™ 2SR

MICROBEND 2SR offers all of the benefits of the standard MICROBEND but with DSCC and MIL-STD-348 compliant SMP female connectors on each end. MICROBEND 2SR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length, cost-effective coax cable for use as internal interconnections between RF modules in communications systems.

- Frequency range up to 40 GHz
- Precision SMP female connectors mateable with Corning Gilbert GPO®
- Automatically ruggedised by design



Length <b>mm</b>	<b>MICROBEND 2SR</b>	<b>Item no.</b>
63.5	microbend 2SR-2.5	80336515
76.2	microbend 2SR-3	80336518
88.9	microbend 2SR-3.5	80365453
101.6	microbend 2SR-4	80336521
114.3	microbend 2SR-4.5	80366525
127	microbend 2SR-5	80336522
139.7	microbend 2SR-5.5	80336523
152.4	microbend 2SR-6	80336524
165.1	microbend 2SR-6.5	80365939
177.8	microbend 2SR-7	80365452
203.2	microbend 2SR-8	80336525
228.6	microbend 2SR-9	80365455
254	microbend 2SR-10	80363819
279.4	microbend 2SR-11	80365454
304.8	microbend 2SR-12	80362685

# MICROBEND™ V

MICROBEND V is the millimeter wave version of the MICROBEND and was designed for use in high-speed (40 Gb/sec.) switching applications such as in fiber optic communications. MICROBEND V has precision 1.85 mm plug connectors on each end that contain a gold plated BeCu contact for applications that require repeated mates/demates of the interface. MICROBEND V replaces custom length, predefined bend configuration 0.047 inch semi-rigid cables with truly flexible, cost-effective, standard lengths.

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



Length <b>mm</b>	<b>MICROBEND V</b>	<b>Item no.</b>
63.5	microbend V-2.5	80336690
76.2	microbend V-3	80336692
88.9	microbend V-3.5	80336693
101.6	microbend V-4	80336695
114.3	microbend V-4.5	80336696
127	microbend V-5	80366545
139.7	microbend V-5.5	80365644
152.4	microbend V-6	80336700
165.1	microbend V-6.5	80370906
177.8	microbend V-7	80370907
203.2	microbend V-8	80366953
228.6	microbend V-9	80365792
254	microbend V-10	80336689
279.4	microbend V-11	80370908
304.8	microbend V-12	80362488

# MINI141™

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

### Product description

MINI141 is an enhanced, low loss version of the MIN-IBEND 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. MINI141 replaces 0.141 inch custom semi-rigid cables with standard flexible cables providing 20 % lower attenuation and eliminating the need for predefined custom lengths and bend configurations. MINI141 provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.



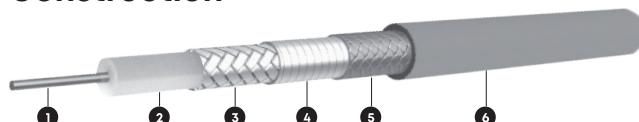
### Product features

- Impedance 50 Ω
- Applicable up to 40 GHz
- Direct replacement for 0.141 inch semi-rigid cables
- Stock delivery on standard lengths
- Microporous dielectric for 20 % lower insertion loss, improved phase stability and higher power handling

### Recommended connectors

mini141	SMA, N, TNCA, SK
	Other connectors available on request

### Construction



Cable	Inner conductor ①	Dielectric ②	Outer conductor ③	Barrier ④	Outer braid ⑤	Jacket ⑥	Outer diameter
32022	CuAg wire	PTFE microporous	CuAg flat wire braid	aluminium/polyimide tape	stainless steel	FEP	3.7 mm

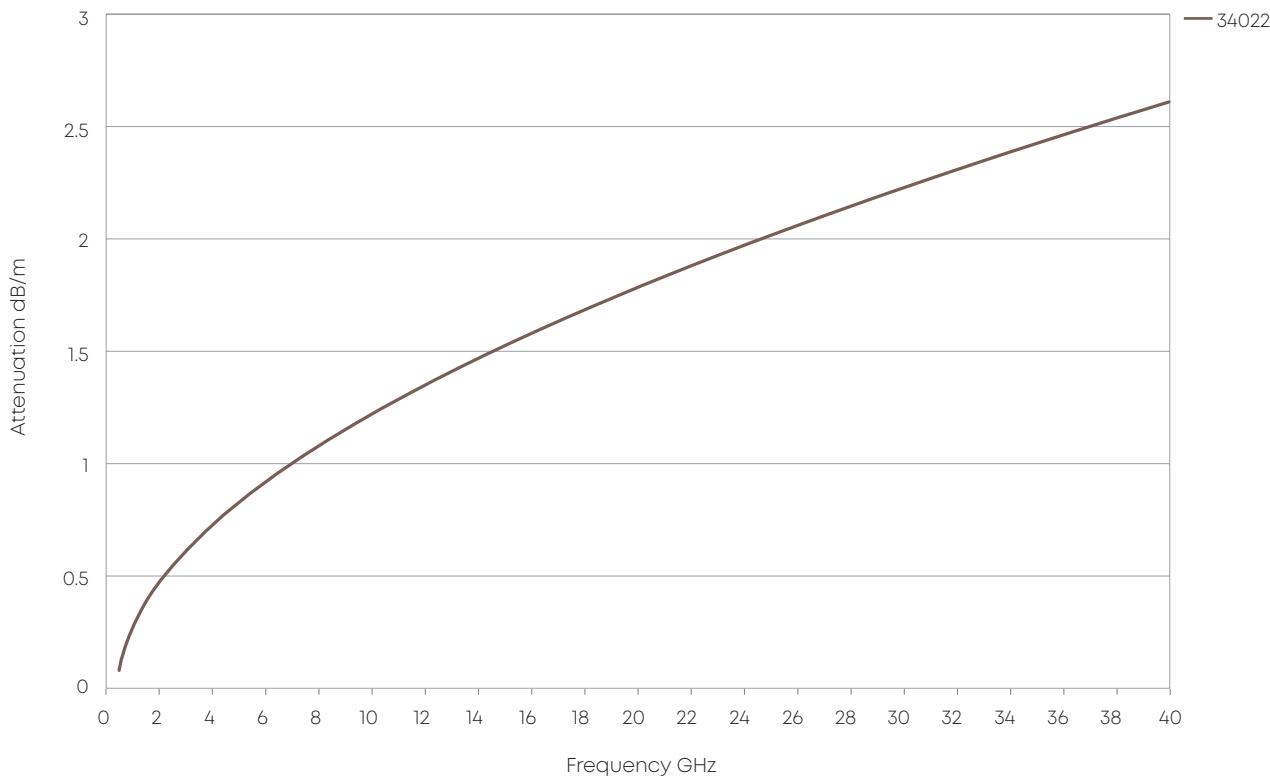
### Technical data

Cable	Operating frequency	Velocity	Weight	Min. bending radius for ± 180°	Temperature range
32022	40 GHz	%	g /m	mm	°C

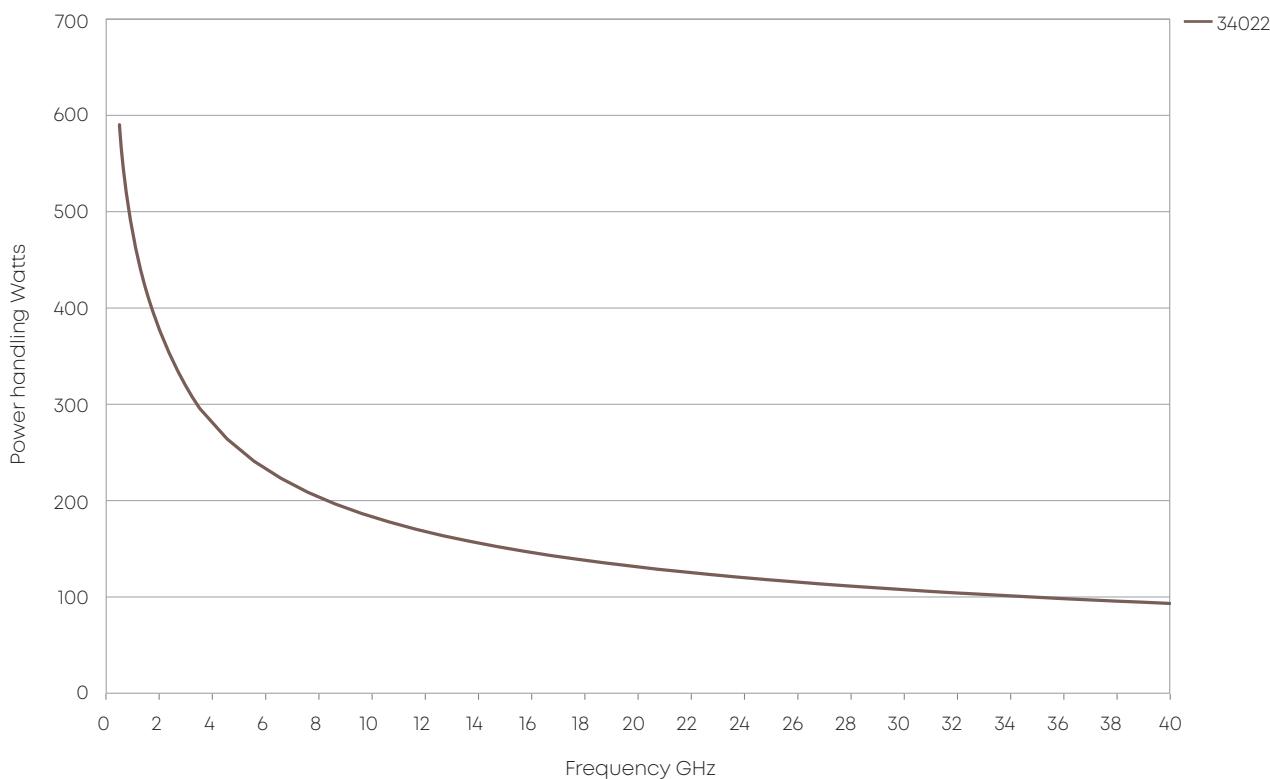
Assembly	MINI141	MINI141 K	MINI141 N	MINI141 T	MINI141 W
Connector A	SMA (m)	SK (m)	N (m)	ATNC (m)	SMA (m)
Connector B	SMA (m)	SK (m)	N (m)	ATNC (m)	SMA (m)

# MINI141™

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



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



# MINI141™

MINI141 is a superior alternative to custom length, predefined bend configuration semi-rigid cable. MINI141 has a microporous dielectric for low loss and improved phase stability. MINI141 has precision stainless steel SMA plug connectors on each end.

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



<b>Length</b>	<b>MINI141</b>	<b>Item no.</b>
<b>mm</b>		
127	mini141-5	80336857
152.4	mini141-6	80336872
177.8	mini141-7	80336884
203.2	mini141-8	80336896
228.6	mini141-9	80336905
254	mini141-10	80336790
279.4	mini141-11	80336793
304.8	mini141-12	80336797
330.2	mini141-13	80336802
355.6	mini141-14	80336804
381	mini141-15	80336807
406.4	mini141-16	80336810

# MINI141™ K

MINI141 K is the 40 GHz version of the MINI141. MINI141 K replaces custom length, predefined bend configuration 0.141 inch Semi-rigid cable with truly flexible, low loss microporous dielectric, phase stable coax cable for use as interconnections between RF modules in microwave systems.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connectors
- Automatically ruggedised by design



<b>Length</b>	<b>MINI141 K</b>	<b>Item no.</b>
<b>mm</b>		
127	mini141 K-5	80336731
152.4	mini141 K-6	80336732
177.8	mini141 K-7	80336733
203.2	mini141 K-8	80336734
228.6	mini141 K-9	80336735
254	mini141 K-10	80336714
279.4	mini141 K-11	80362851
304.8	mini141 K-12	80336716
330.2	mini141 K-13	80336717
355.6	mini141 K-14	80336718
381	mini141 K-15	80362909
406.4	mini141 K-16	80336719

# MINI141™ N

MINI141 N offers all of the features and benefits of the MINI141 but with N plug connections. MINI141 N replaces custom length, predefined bend configuration 0.141 inch semi-rigid cable with truly flexible, low loss, phase stable microporous dielectric coax cable in standard lengths.

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



Length <b>mm</b>	MINI141 N	Item no.
127	mini141 N-5	80336745
152.4	mini141 N-6	80336747
177.8	mini141 N-7	80365109
203.2	mini141 N-8	80336748
228.6	mini141 N-9	80366643
254	mini141 N-10	80363841
279.4	mini141 N-11	80362163
304.8	mini141 N-12	80336736
330.2	mini141 N-13	80366110
355.6	mini141 N-14	80336737
381	mini141 N-15	80361505
406.4	mini141 N-16	80336738

# MINI141™ T

MINI141 T offers all of the features and benefits of the MINI141 but with ATNC plug connections. MINI141 T replaces custom length, predefined bend configuration 0.141 inch semi-rigid cable with truly flexible, low loss, phase stable microporous dielectric coax cable in standard lengths.

- Frequency range up to 18.5 GHz
- Precision stainless steel ATNC plug connectors compatible with TNC or TNC-A connectors per MIL-STD-348
- Automatically ruggedised by design



Length <b>mm</b>	MINI141 T	Item no.
127	mini141 T-5	80336751
152.4	mini141 T-6	80336752
177.8	mini141 T-7	80366192
203.2	mini141 T-8	80336753
228.6	mini141 T-9	80336912
254	mini141 T-10	80363433
279.4	mini141 T-11	80370800
304.8	mini141 T-12	80336911
330.2	mini141 T-13	80366954
355.6	mini141 T-14	80370801
381	mini141 T-15	80370802
406.4	mini141 T-16	80365426

# MINI141™ W

MINI141 W is the "all weather" version of the MINI141 for environments with high humidity and moisture. MINI141 W meets moisture-resistance requirements of MIL-STD-202, method 106. MINI141 W replaces custom length predefined bend configuration 0.141 inch semi-rigid cable with truly flexible coax cable for use in external or internal point-to-point interconnections between modules in microwave systems.

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



Length mm	MINI141 W	Item no.
127	mini141 W-5	80336781
152.4	mini141 W-6	80336784
177.8	mini141 W-7	80362734
203.2	mini141 W-8	80336785
228.6	mini141 W-9	80336786
254	mini141 W-10	80336765
279.4	mini141 W-11	80336766
304.8	mini141 W-12	80336767
330.2	mini141 W-13	80336768
355.6	mini141 W-14	80336769
381	mini141 W-15	80362735
406.4	mini141 W-16	80336772

# NANOBEND™

What is it? NANOBEND™ is a new and flexible, high-frequency coaxial cable assembly that is designed for use in low profile, internal, point-to-point interconnections between RF modules within communications systems. As the newest entrant found in the MINIBEND™ family of standard flexible cables, NANOBEND brings the same capabilities you depend on, but now in the smallest diameter available.

## Product features

- Impedance 50 Ω
- Applicable up to 110 GHz
- Stock delivery on standard lengths
- Connections available that are found nowhere else in our current product offerings, including: Size 12 SMPM, Size 16 SMPS, Nanominiature Connections (pictured at right), VITA 67.1/2 SMPM, VITA 67.3 SMPM and SMPS, and more



## Available Cable Connectors

Compatible connectors (other connectors may be made available upon request)

HUBER+SUHNER®-designed Nanominiature Connections, both Plug and Jack

SMA and SMA Bulkhead

SMPM

SMP

SK

Size 12 SMPM

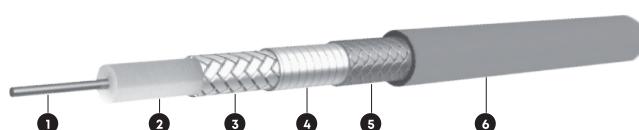
Size 16 SMPS

HUBER+SUHNER-designed and TE®-compatible NANO RF Connections, both Plug and Jack

VITA 67.1/2 and VITA 67.3 SMPM Connector

VITA 67.3 SMPS Connector

## Construction



Cable	Inner Conductor	Dielectric	Outer Conductor	Barrier	Outer Braid	Jacket	Outer Diameter
	1	2	3	4	5	6	
32061SE	CuAg (SPC) Wire	Extruded PTFE	CuAg (SPC) flat wire braid	Aluminum / Polyimide Tape	Stainless Steel Braid	FEP	1.6 mm

Cable	Operating Frequency	Velocity (nominal)	Weight (nominal)	Static Min. Bend Radius	Impedance	Temp. Range
	GHz	%	g/m	mm	Ω	°C
32061SE	110	70.3	14.9	5.08	50	-55 to +200

# NANOBEND™

**Attenuation** (dB/m) vs Frequency (GHz) of 32061SE

