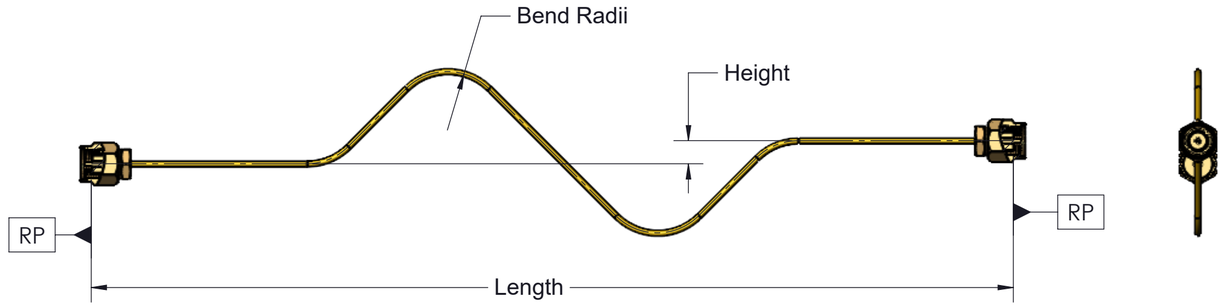
Table I: PN Matrix: TM XX XX X XXXX X XXXX X X

1	2	3	4	5	6	7	8	9
Prefix: TM	**Cable Type: XX**	**Bend Type: XX**	**Connector 1: X**	**Length (mm): XXXX**	**Connector 2: X**	**Height (mm): XXXX**	**Bend Radii (mm): X**	**Phase Matched (in pairs) (pS): X**
TM	See Table II	See Table IV (see sh 2)	See Table III	Examples: 1016 = 101.6 6350 = 635.0	See Table III	Examples: 0205 = 20.5 1016 = 101.6	R: 6.35 [.25] S: 12.7 [.50] T: 19.05 [.75]	C: ±2 D: ±1 E: ±0.5

REVISIONS				
ECO	**REV.**	**DESCRIPTION**	**DATE**	**APPROVED**
NA	05	Revised Figures	11/10/2025	PV
205314	A	Production Release	1/28/2026	PV



Ref PN: TM xx 1A A xxxx A xxxx x x

NOTE(S):

1. CABLE PN IS DEFINED IN TABLES I THRU IV.
   1. Example: TM4M1AA2000A0010C
2. BEND CONFIGURATIONS DEFINED IN TABLE IV.
   1. CODE XA IS GENERIC BEND CONFIGURATION SCALED TO LENGTH.
   2. CONTACT ACDI FOR CUSTOMIZED CONFIGURATION.
3. CABLE LENGTH TOLERANCE: ≤250, ±1.0; >250 and ≤999, ±2.5
4. CABLE BEND TOLERANCE (TABLE IV): ±0.5
5. SOLDER PER IPC J-STD-001, USING LEAD FREE SOLDER.
6. ELECTRIC TESTING IAW AMPHENOL CDI INTERNAL STD.
7. VSWR AND IL PERFORMANCE DATA SHOWN IN TABLE V IS GENERAL PERFORMANCE RESPONSE. ACTUAL PERFORMANCE VARIES DEPENDING ON CABLE, CONNECTOR TYPE, BEND CONFIGURATION AND CABLE LENGTH.

Table V: VSWR and IL (reference)

Description	VSWR (max)	IL, dB (max)
SMA (M) both ends, Cu-Ni cable, Z-bend, 12in length	1.3:1	-3.5
SMA (F) both ends, Cu-Ni cable, Z-bend, 12in length	1.3:1	-3.5
SMP (F) both ends, Cu-Ni cable, Z-bend, 12in length	1.3:1	-4.0
SMPM (F) both ends, Cu-Ni cable, Z-bend, 12in length	1.3:1	-4.0

MATERIAL(S):

Cable:
- Cu: CC and Outer Conductor; Dielectric PTFE
- Cu-Ni: CC and Outer Conductor Cu-Ni Alloy per ASTM B466; Dielectric PTFE

Connector:
- Body; Center Conductor, Retaining Ring, Coupling nut and Anti-rock Ring: BeCu Alloy per ASTM B-196
- Insulator: PTFE per ASTM D-1710
- Dielectric Stop: PEI per ASTM D5205
- Gasket: Silicone per A-A-59588

Solder:
- Solder per IPC J-STD-001 with lead free solder

ELECTRICAL(S):

Impedance: 50 Ohms Nominal
Frequency Range: DC to 18 GHz
VSWR: See Table V
Insertion Loss: See Table V
Working Voltage: (Vrms max @ Sea Level)
- SMA: 335; SMP: 335; SMPM: 217

Dielectric Withstand Voltage: (Vrms min)
- SMA: 1000; SMP: 500; SMPM: 325

Insulation Resistance: 5000 MΩ min
Contact Resistance: (mΩ max)
- Center Contact: SMA 3.0; SMP 3.0; SMPM 6.0
- Outer Contact: SMA 2.0; SMP 2.0; SMPM 2.0

MECHANICAL(S):

Mating Characteristics:
- Connector Interface per MIL-STD-348

Force to Engage / Disengage (max):
- SMA (torque): 2in-lb
- SMP (lb): FD: 15 / 5; LD: 10 / 2; SB: 2 / 0.5
- SMPM (lb): FD: 6.5 / 4.0; SB: 2.5 / 1.5
- Connector Durability (cycles):
- SMA: 500
- SMP / SMPM: FD:100 / 100
  - LD: 500 / NA
  - SB: 1000 / 500

SMA Coupling nut recommended torque: 3-5inlb

ENVIROMENTAL(S):

Temperature Range: -273°C to +85°C
Thermal Shock:
- MIL-STD-202, Method 107, Test Cond A

Moisture Resistance:
- MIL-STD-202, Method 106, IR <= 200 MΩ within 5 minutes after removal from humidity.

Corrosion:
- MIL-STD-202, Method 101, Test Cond B

Vibration:
- MIL-STD-202, Method 204, Test Cond A

FINISH(ES):

Cable:
- CC silver plate

Connector:
- Body, Center Conductor, Coupling nut and Anti-rock Ring: Gold plate per ASTM B-488 over Copper plate per ASTM B734

REACH

RoHS 3 Compliant EU 2015/863

DIMENSIONS ARE IN MILLIMETERS [INCHES]
± TOLERANCES UNLESS OTHERWISE NOTED
.X ± 0.3mm [.012"] .XX ± 0.15mm [.006"]
.XXX ± 0.050mm [.002"] .XXXX ± 0.010mm [.0004"]
ANGLE ± 0.5°

NEXT ASSY. | USED ON
APPLICATION
THIRD ANGLE PROJECTION

MATERIAL		
APPROVAL	INITIALS	DATE
DRAWN BY	P.V.	10/09/25
CHECKED BY	-	-
TEST ENG	-	-
QUALITY	-	-
DESIGN ENG	P.V.	10/09/25
MFG ENG	-	-
ECO APPRV	P.V.	1/28/26

-	-	-
MATERIAL	SPECIFICATION	PROCUREMENT

Amphenol CDI
12900 Alondra Blvd.
Cerritos, CA 90703

TITLE: CABLE ASSY, .047 DIA, SEMI-RIGID

SCALE	SUB-DIRECTORY/	SHEET	OF
1:1	NA	1	2

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	OL_TM99-0146-00	A

Table II: Cable Type	
Code	**Description**
4C	Cable, Cu-Ni
4M	Cable, Cu

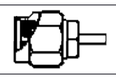
Table III: Connector		
Code	**Description**	**Image (ref)**
A	SMA (M) Straight	
B	SMA (F) Straight	
C	SMP (F) Straight	
D	SMPM (F) Straight	

Table IV: Bend Type			
Figure 1: Z-bend			
Code	Dim A	Dim B	Example
1A	Length * 0.1	135°	Length = 200 Dim A = 20 Dim B = 135°
1X	Customer supplied		
Figure 2: C-bend			
Code	Dim A	Dim B	Example
2A	Length * 0.15	120°	Length = 200 Dim A = 30 Dim B = 120°
2X	Customer supplied		
Figure 3: L-bend			
Code	Dim A	-	Example
3A	45°	-	Length = 200 Dim A = 45°
3X	Customer supplied		

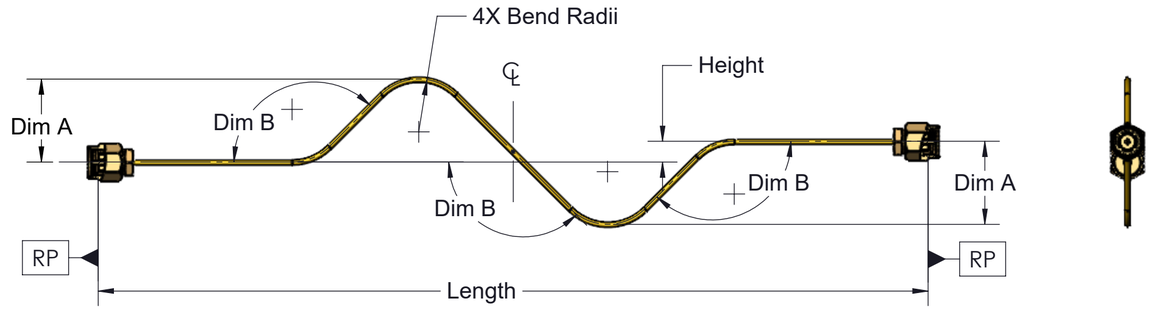


Figure 1: Z-bend
Ref PN: TM XX 1A A XXXX A XXXX S X

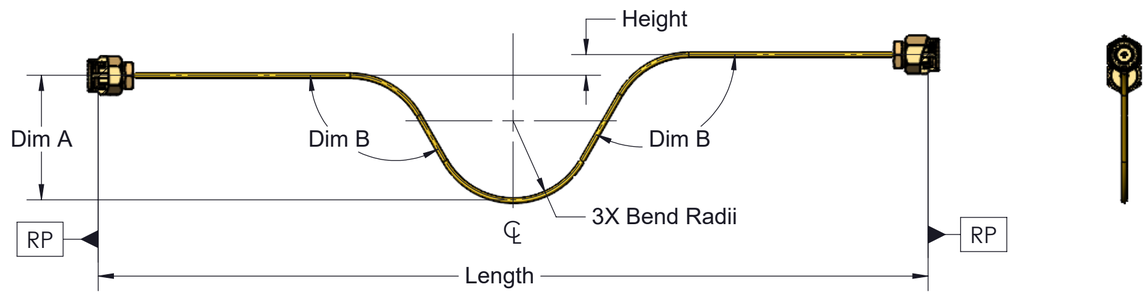


Figure 2: C-bend
Ref PN: TM XX 2A A XXXX A XXXX T X

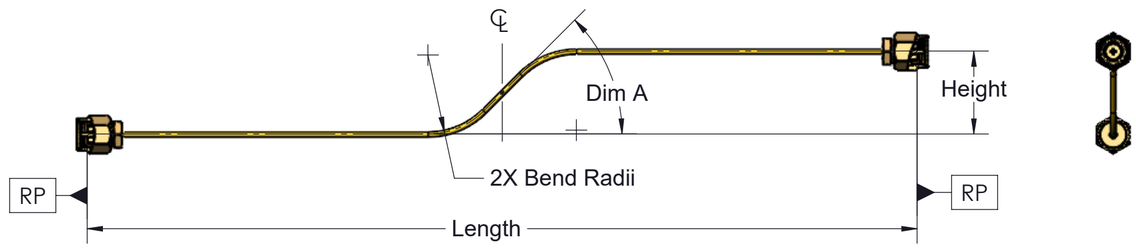


Figure 3: L-bend
Ref PN: TM XX 3A A XXXX A XXXX T X

Amphenol CDI	TITLE: CABLE ASSY, .047 DIA, SEMI-RIGID	SIZE: C	CAGE CODE: 30990	DRAWING NUMBER: OL_TM99-0146-00	REV: A
		SCALE: 5:1	DO NOT SCALE DRAWING		2 OF 2