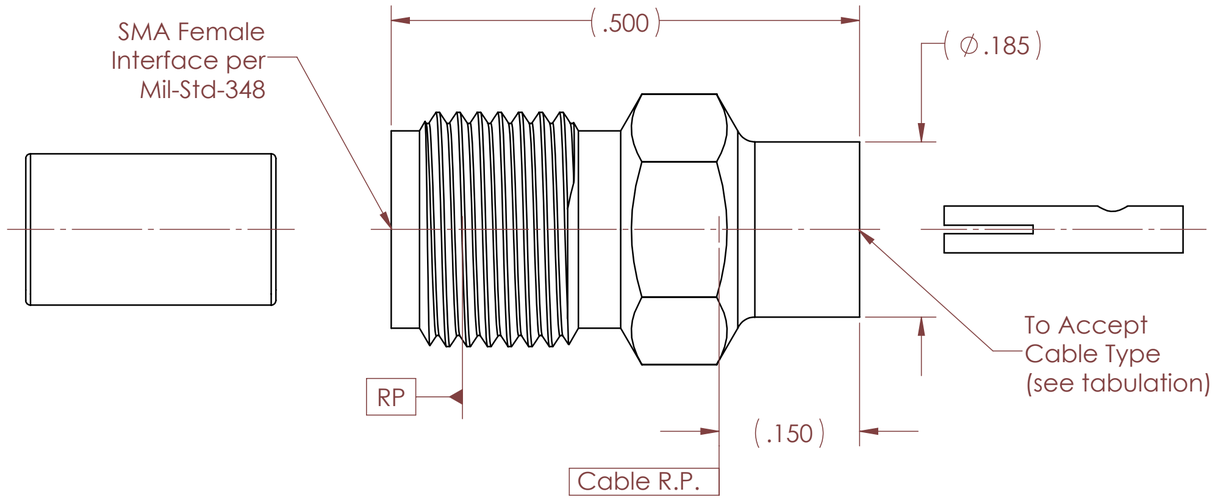
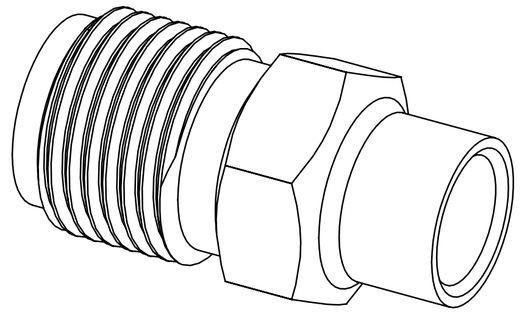
PART NO.	Ø A	CABLE TYPE
-1	.143 MIN	Ø .141 SEMI-RIGID
-1SF	.143 MIN	Ø .141 SEMI-RIGID
-1NP	.143 MIN	Ø .141 SEMI-RIGID
-2	.088 MIN	Ø .085 SEMI-RIGID
-2SF	.088 MIN	Ø .085 SEMI-RIGID
-2NP	.088 MIN	Ø .085 SEMI-RIGID
-3	.143 MIN	Ø .141 MICROPOROUS
-3SF	.143 MIN	Ø .141 MICROPOROUS
-3NP	.143 MIN	Ø .141 MICROPOROUS
-4	.088 MIN	Ø .085 MICROPOROUS
-4SF	.088 MIN	Ø .085 MICROPOROUS
-4NP	.088 MIN	Ø .085 MICROPOROUS

RoHS 3 Compliant EU 2015/863

REVISION HISTORY				
ECO	REV.	DESCRIPTION	DRAWN BY	DATE
	A	ECO 19233	DKN	04/18/2006
	B	ECO 23436 (ADD -4)	K.NG	08/11/2010
204093	C	REDRAW WITH CHANGE	DKN	7/21/2025





NOTE(S) :
1. ALL ITEMS TO BE PACKAGED & SHIPPED UNASSEMBLE.

MATERIAL(S):

Body:
303 SST per ASTM A582
Center Conductor:
BeCu Alloy per ASTM B196
Insulator:
PTFE Teflon per ASTM D1710

ELECTRICAL(S):

Impedance: 50 Ohms Nominal
Frequency Range: DC to 18.0 GHz
VSWR: 1.25:1 max @ 18GHz
Insertion Loss: .20 dB max @ 3 - 6 GHz
Working Voltage: 335 Vrms max @ Sea Level
Dielectric Withstand Voltage: 1,000 Vrms min.
RF HiPot Voltage: 670 Vrms min. @ 5MHz
Corona Level: 375 Vrms @ 70,000 ft
Insulation Resistance: 5,000 MegOhms min.
RF Leakage: -60 dB min. @ 2 - 3 GHz
Contact Resistance:
Center Contact: 3.0 Milliohms max
Outer Contact: 2.0 Milliohms max

MECHANICAL(S):

Mating Characteristics:
Interface per MIL-STD-348
Force to Engage & Disengage:
Torque: 2 inch-lbs max
Longitudinal Force: NA
Center Contact Retention:
Axial Force: 6 lbs min.
Cable Retention force:
Axial: 60 pounds min.
Torque: 55 Inch-ounces
Connector Durability:
500 Cycles min. @ 12 cycles/minute max
Permeability: Less than 2.0 mu.

ENVIROMENTAL(S):

Temperature Range: -65°C to +165°C
Thermal Shock:
MIL-STD-202, Method 107, Test Condition B
Moisture Resistance:
MIL-STD-202, Method 106, Insulation resistance at least 200 MegOhms within 5 minutes after removal from humidity.
Corrosion:
MIL-STD-202, Method 101, Test Condition B
Vibration:
MIL-STD-202, Method 204, Test Condition D
Shock:
MIL-STD-202, Method 213, Test Condition I

FINISH(ES):

Center Conductor:
Gold plate per ASTM B488, Type II, Code C, Class 1.25, over Nickel plate per SAE AMS-QQ-N-290, Class 1.
Body:
(For SF's): Passivate per ASTM A967 or SAE AMS 2700
(For Basic): Gold plate per ASTM B488, Type II, Code C, Class 0.25, over Nickel plate per SAE AMS-QQ-N-290, Class 1.
(for NP's): Nickel plate per SAE AMS-QQ-N-290

APPLICABLE Amphenol CDI DOCUMENTS

WORK STANDARD	PROD INSTRUC	ASSY INSTRUC
NA	NA	AI-113

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AMPHENOL. AND SHALL IN NO WAY BE REPRODUCED OR DISCLOSED IN WHOLE OR IN PART OR USED FOR ANY DESIGN OR MANUFACTURE EXCEPT WHEN SUCH USER POSSESSES DIRECT, WRITTEN AUTHORIZATION FROM AMPHENOL.

TOLERANCES AND NOTES
EXCEPT AS NOTED
DIMENSIONS ARE IN INCHES.
LINEAR .XX ±.015 / .XXX ±.005
FRACTION ± 1/32 ANGULAR ± 1/2°
1. INTERPRET DRAWING PER ASME Y14.5 - 2018
2. MACHINE FINISH: 63 RMS
3. BREAK ALL SHARP EDGES .003 MAX.
4. MACHINED FILLETS .005 MAX.
5. MACHINED SURFACES SQUARE TO RESPECTIVE AXIS WITHIN .005 INCHES PER INCH.
6. MACHINED DIAMETERS CONCENTRIC WITHIN .002 T.I.R.
7. DIMENSIONS TO BE MET AFTER PLATING.
8. CHAMFER ALL THREADS 45°.
9. THREADS PER H-28
10. REMOVE FRAYED EDGES ON TEFLON.
11. REMOVE ALL BURRS.

MATERIAL		
APPROVAL	INITIALS	DATE
DRAWN BY	IMG	03/13/2002
CHECKED BY	-	-
TEST ENG	-	-
QUALITY	-	-
DESIGN ENG	HT	09/06/2011
MFG ENG	-	-
ECO APPRV	DNg	07/22/2025

-	-	-
MATERIAL	SPECIFICATION	PROCUREMENT

Amphenol CDI
12900 Alondra Blvd.
Cerritos, CA 90703

TITLE: SMA FEMALE STRAIGHT TO SEMI-RIGID CABLE

SCALE	SUB-DIRECTORY/	SHEET	OF
8:1	_OUTLINE/	1	1

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	OL_5286	C