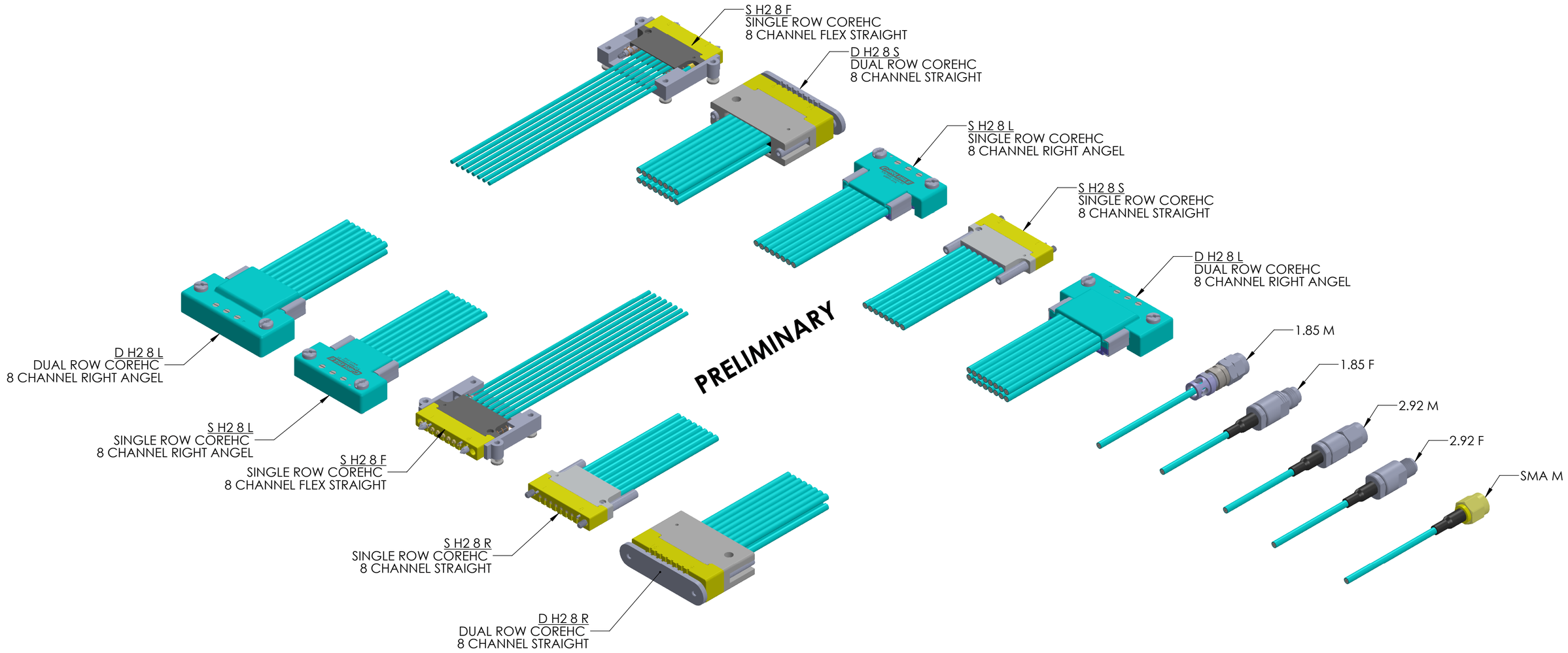
REVISION HISTORY					
ECO	REV.	DESCRIPTION	DRAWN BY	APPROVAL	DATE
	00	INITIAL RELEASE	R BEDIENT		3/27/2024

COREHC 2.5mm STD OFFERING



CABLE END A | CABLE END B

TM 4S X S H2 8 L H2 R 050 C

- CABLE CODE: 4S-0.047" / 7S-0.079"
- STRAIN RELIEF: S- HEATSHRINK SHORT / M-HEATSHRINK MEDIUM / L-HEATSHRINK LONG / X-NO HEATSHRINK
- NO. OF ROWS: S- SINGLE ROW / D-DOUBLE ROW
- CONNECTOR TYPE: H2-COREHC CPW / T2-COREHC STRIPLINE
- # OF CHANLES PER ROW: 2 , 4 , 6 , 8 , 10
- CONNECTOR ORIENTATION: R-RUGGED STRAIGHT / F-FLEX STRAIGHT / L-RT ANGLE
- LENGTH (cm): 050=500mm / 100=1000mm / ....
- PHASE MATCHING: C ± 2ps (PAIR) (AS STANDARD) / D ± 1ps (PAIR) / E ± 0.5ps (PAIR) / F ± 2ps (LOT) / G ± 1ps (LOT) / H ± 0 .5ps (LOT)

1. FOOTPRINTS...
   - TM13-0236-XX - DUAL ROW STRIPLINE
   - TM13-0240-XX - DUAL ROW CPW
   - TM13-0239-XX - SINGLE ROW STRIPLINE
   - TM13-0238-XX - SINGLE ROW CPW

NOTES: UNLESS OTHERWISE SPECIFIED...

RoHS 3 Compliant EU 2015/863

DIMENSIONS ARE IN MILLIMETERS/INCHES
± TOLERANCES UNLESS OTHERWISE NOTED

.XXX	.XXXX	ANGLE	FRACTIONS
0.076 [0.003]	0.013 [0.0005]	0.5	

NEXT ASSY. | USED ON

APPLICATION

THIRD ANGLE PROJECTION

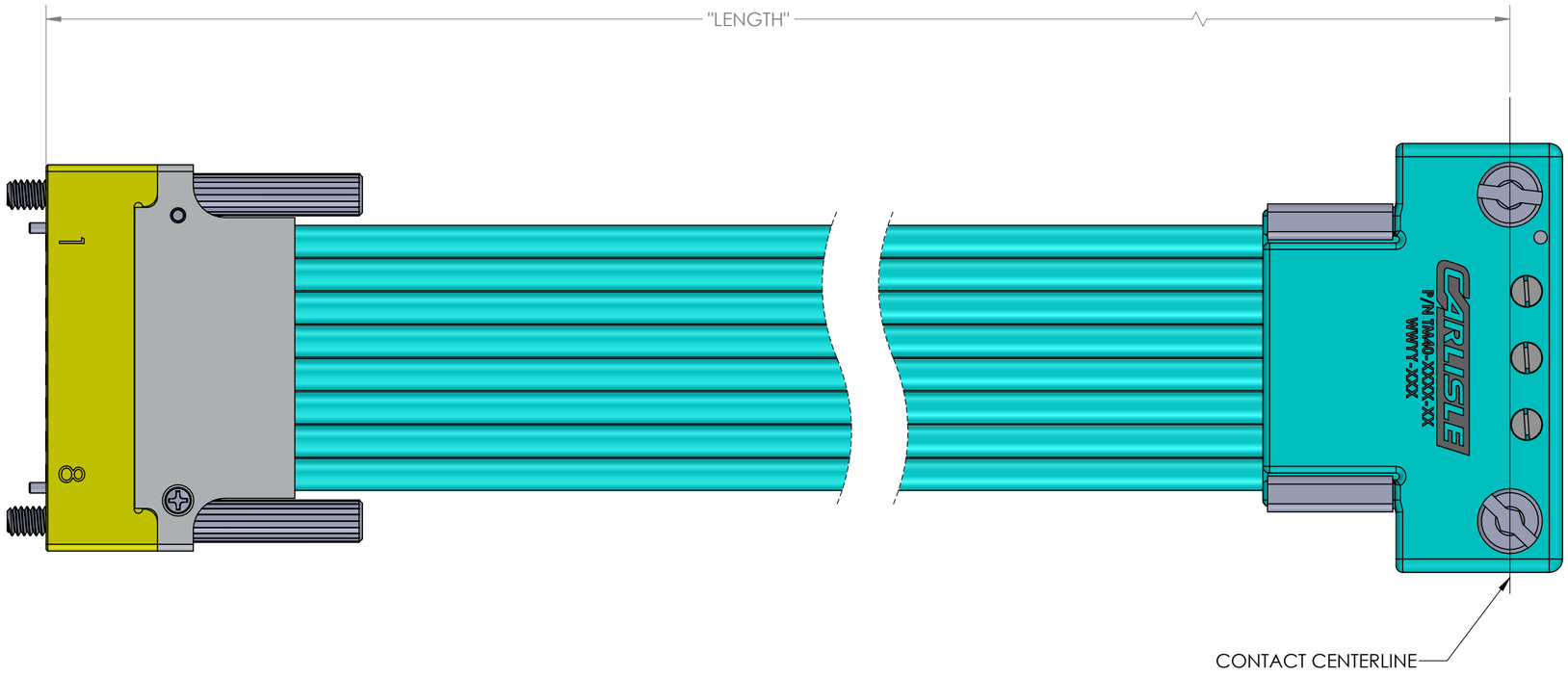
DESIGN ENGR:	R BEDIENT	03/26/2024
DESIGNED BY:	R BEDIENT	03/26/2024
PRODUCT:		
QUALITY:		
MFG:		

CARLISLE INTERCONNECT TECHNOLOGIES

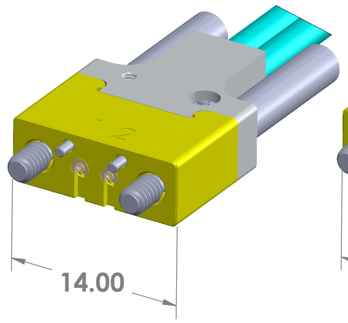
TITLE: CORE HC 2.5mm CABLE BUILDER ASSY

SIZE	CAGE CODE	CARLISLE NUMBER	REV
C	7M294	XXXXXX	00

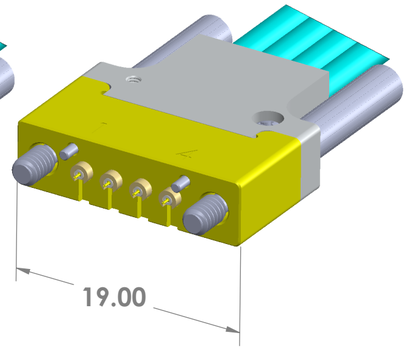
SCALE: 1:1 | DO NOT SCALE DRAWING | 1 OF 7



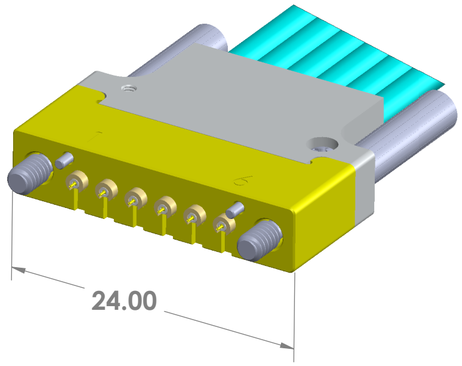
CARLISLE INTERCONNECT TECHNOLOGIES	CORE HC 2.5mm CABLE BUILDER ASSY	SIZE C	CAGE CODE 7M294	DRAWING NUMBER XXXXXX / REV 00
		SCALE: 3:1	PART NUMBER: XXXXXX	2 OF 7



2 POSITION



4 POSITION



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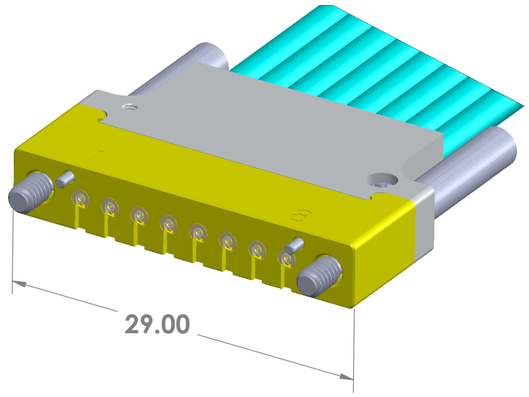
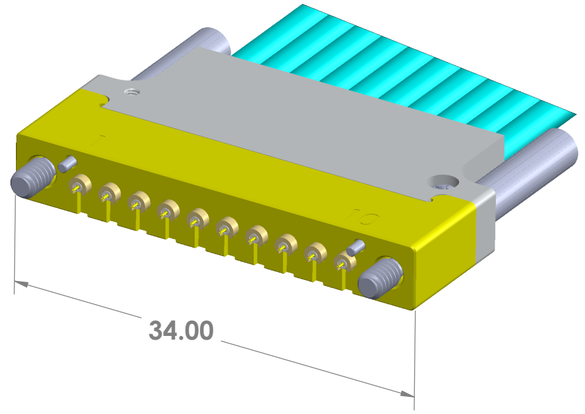
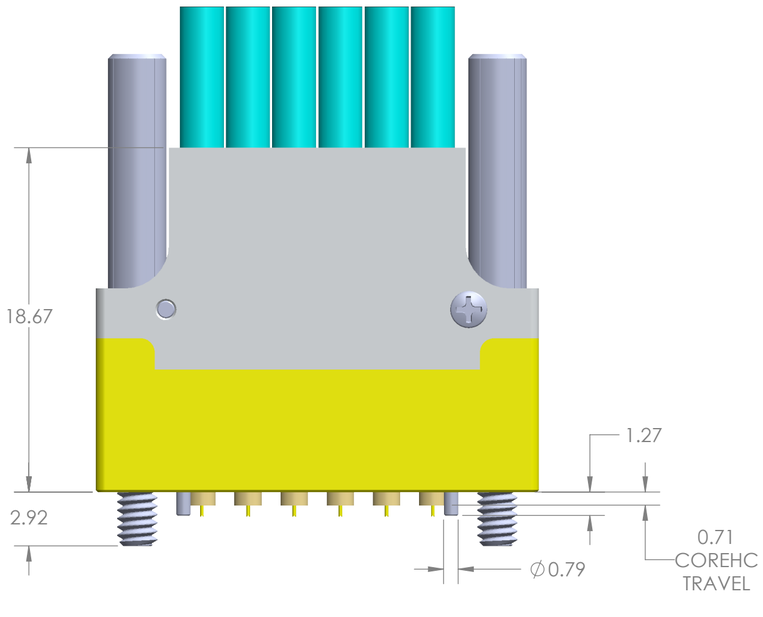
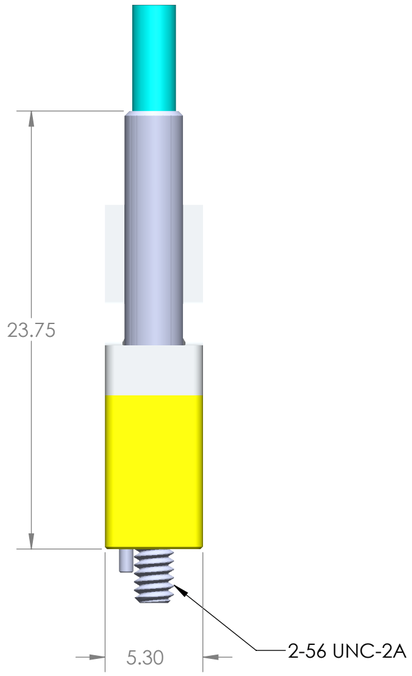


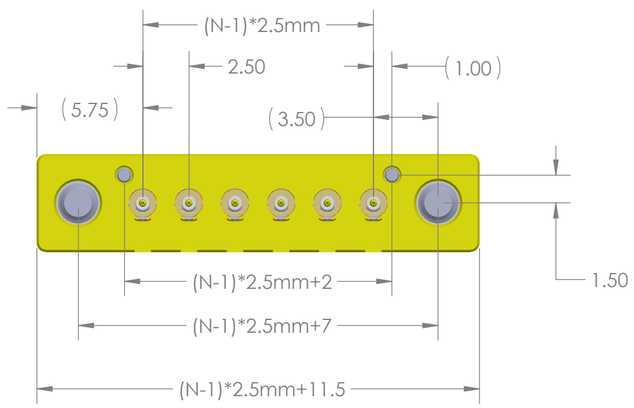
8 POSITION



10 POSITION







S H2 X R
SINGLE ROW COREHC
X CHANNELS STRAIGHT

MATERIAL(S):
Housing body:
Brass Alloy, UNS No. C36000 PER ASTM B-16
Top body:
6061-T651 Aluminum Alloy

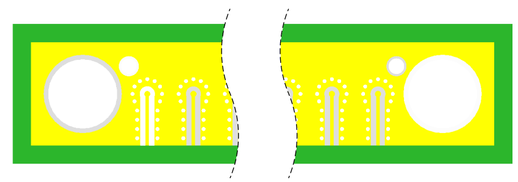
Core HC2 connector:
Spring Pin:
BeCu Alloy/Brass Alloy C3604B/ Phosphor Bronze
Ground Slider & Nut:
Brass Alloy C3604B
Insulator: TPX / PTFE
Dielectric: Ultem/ TPX
Spring: Music Wire
Dowel Pin, Screw:Stainless Steel.

Cable: TM20-7S

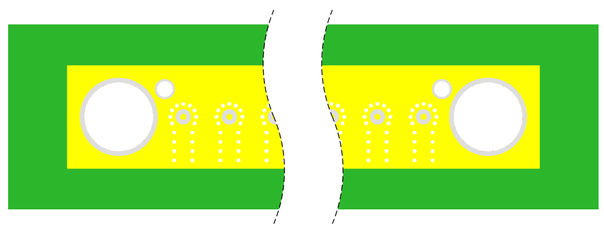
MECHANICAL(S):
Mating Characteristics:
1.85 Interface per MIL-STD-348
CORE HC2 Interface per CarlisleIT
Force to Engage:
1.85: 2 In-lbs max
CoreHC2 (Individual): .5 Lbs Typ.
Connector Durability:
1.85: 500 Cycles @ 12 cycles/min. max
CoreHC2: 20,000 Cycles @ 12 cycles/min. max
Permeability: Less than 2.0 mu.
Coupling Proof Torque:
1.85: 15 in-lb

ELECTRICAL(S):
Impedance: 50 Ohms Nominal
Frequency Range: DC to 65 GHz
VSWR: 1.50:1 DC to 26 GHz
1.78:1 26 to 40 GHz
2.10:1 40 to 65 GHz
Insertion Loss:
2.00 dB DC to 26 GHz
2.64 dB 26 to 40 GHz
3.75 dB 40 to 65 GHz
Working Voltage:
335 Vrms max @ Sea Level
Test Voltage: 500 Vrms
Insulation Resistance: 5000 MegOhms min.
Contact Current: 1A DC max.
Contact Resistance:
Center Contact: 100 m Ω
Phase: Matched In Pairs : ±1.0 pS.

ENVIRONMENTAL(S):
Temperature Range: -65°C to +150°C
Thermal Shock:
MIL-STD-202, Method 107, Test Condition F
Moisture Resistance:
MIL-STD-202, Method 106, Insulation resistance at least 200 MegaOhms within 5 minutes after removal from humidity.
Corrosion:
MIL-STD-202, Method 101, Test Condition C
Vibration:
MIL-STD-202, Method 204, Test Condition A, except 5g Peak
Shock:
MIL-STD-202, Method 213, Test Condition I, except 10g Peak



SEE TM13-0238-XX - SINGLE ROW CPW

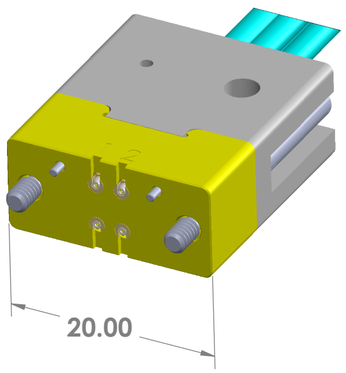


SEE TM13-0239-XX - SINGLE ROW STRIPLINE

CARLISLE INTERCONNECT TECHNOLOGIES

CORE HC 2.5mm CABLE BUILDER ASSY

SIZE	CAGE CODE	DRAWING NUMBER	REV
C	7M294	XXXXXX	00
SCALE: 4:1		PART NUMBER: XXXXXX	3 OF 7



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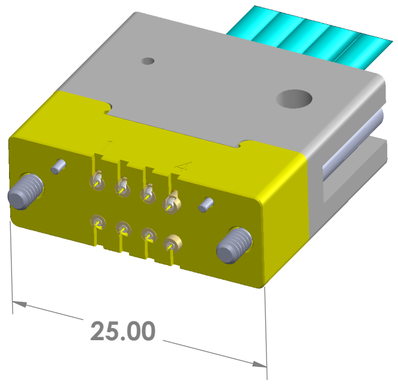
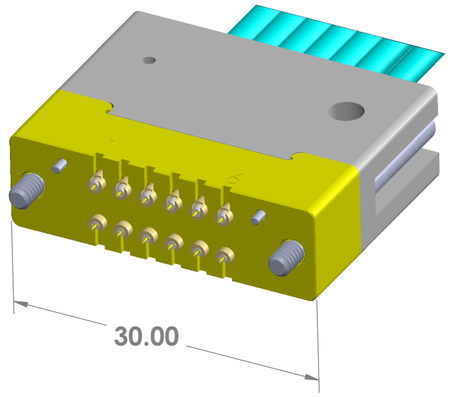


4 POSITION



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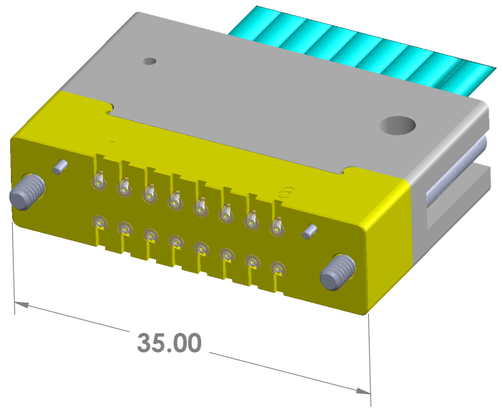

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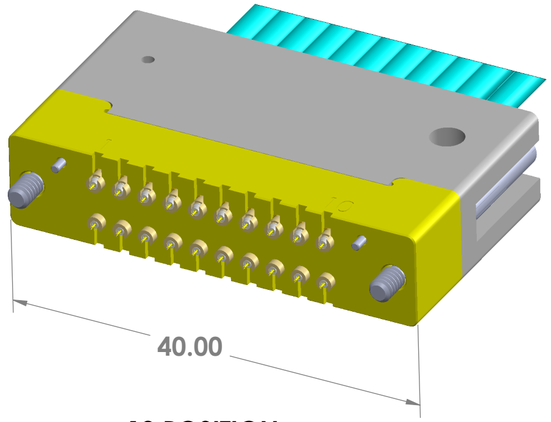

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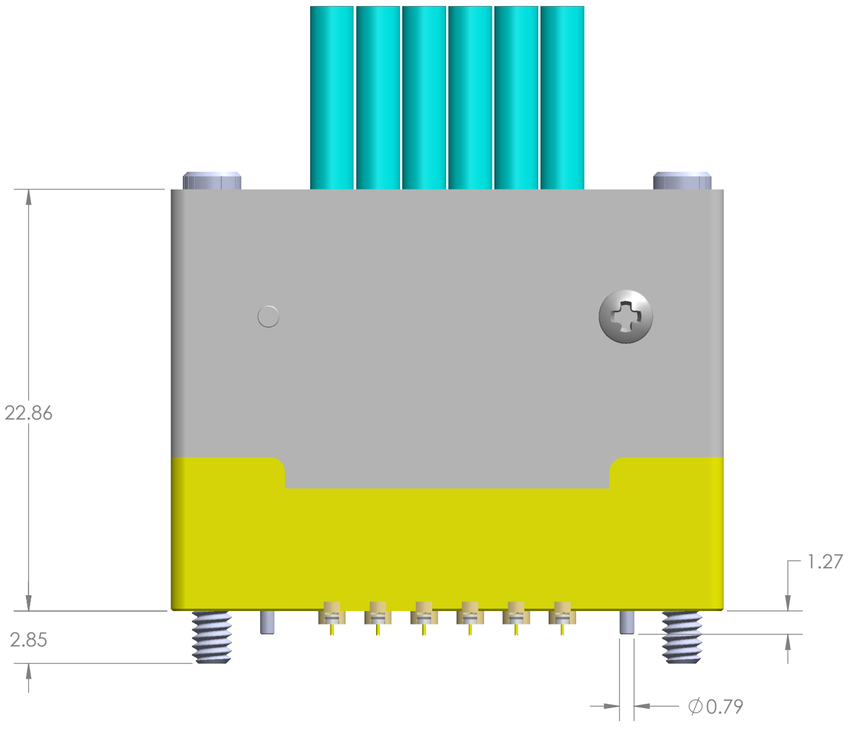
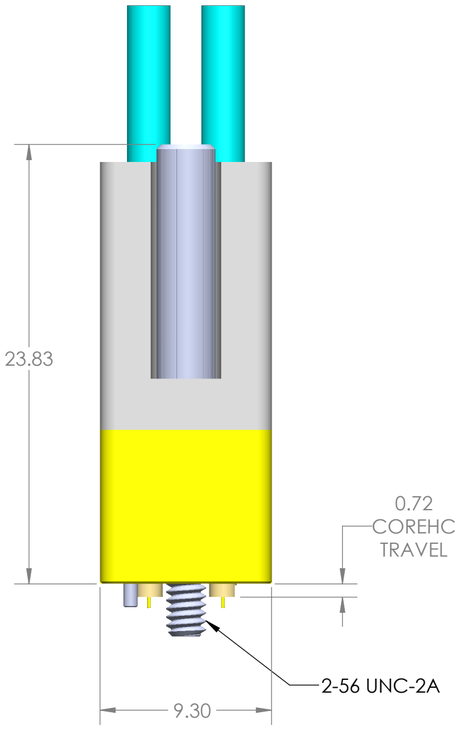
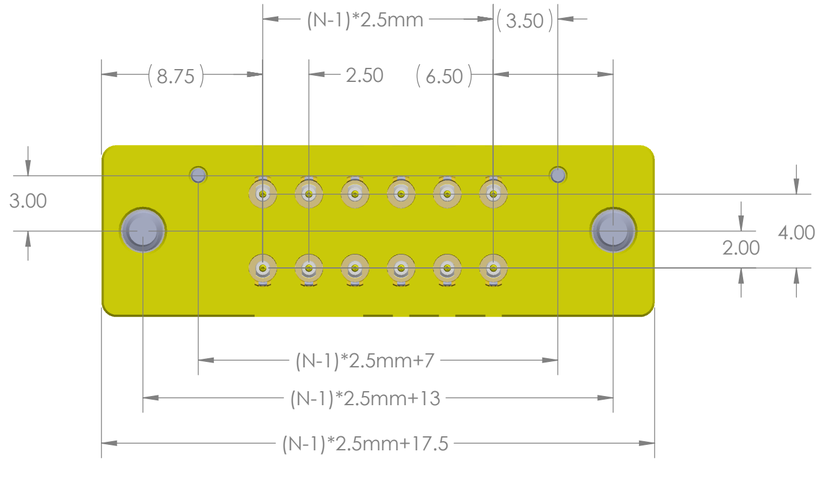






D H2 X R
DUAL ROW COREHC
X CHANNELS STRAIGHT

MATERIAL(S):
Housing body:
Brass Alloy, UNS No. C36000 PER ASTM B-16
Top body:
6061-T651 Aluminum Alloy

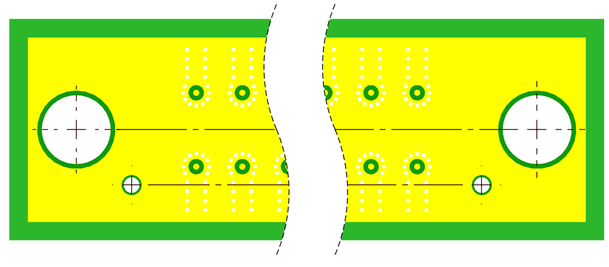
Core HC2 connector:
Spring Pin:
BeCu Alloy/Brass Alloy C3604B/ Phosphor Bronze
Ground Slider & Nut:
Brass Alloy C3604B
Insulator: TPX / PTFE
Dielectric: Ultem/ TPX
Spring: Music Wire
Dowel Pin, Screw:Stainless Steel.

Cable: TM20-7S

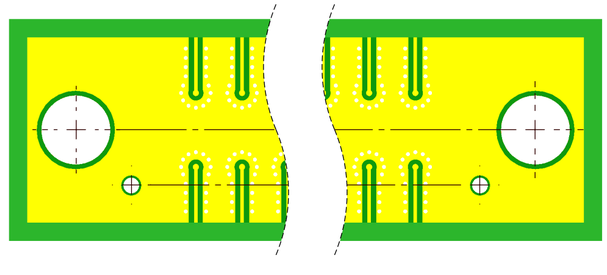
ELECTRICAL(S):
Impedance: 50 Ohms Nominal
Frequency Range: DC to 65 GHz
VSWR: 1.50:1 DC to 26 GHz
1.78:1 26 to 40 GHz
2.10:1 40 to 65 GHz
Insertion Loss:
2.00 dB DC to 26 GHz
2.64 dB 26 to 40 GHz
3.75 dB 40 to 65 GHz
Working Voltage:
335 Vrms max @ Sea Level
Test Voltage: 500 Vrms
Insulation Resistance: 5000 MegOhms min.
Contact Current: 1A DC max.
Contact Resistance:
Center Contact: 100 m Ω
Phase: Matched In Pairs : ±1.0 pS.

MECHANICAL(S):
Mating Characteristics:
1.85 Interface per MIL-STD-348
CORE HC2 Interface per CarlisleIT
Force to Engage:
1.85: 2 In-lbs max
CoreHC2 (Individual): .5 Lbs Typ.
Connector Durability:
1.85: 500 Cycles @ 12 cycles/min. max
CoreHC2: 20,000 Cycles @ 12 cycles/min. max
Permeability: Less than 2.0 mu.
Coupling Proof Torque:
1.85: 15 in-lb

ENVIRONMENTAL(S):
Temperature Range: -65°C to +150°C
Thermal Shock:
MIL-STD-202, Method 107, Test Condition F
Moisture Resistance:
MIL-STD-202, Method 106, Insulation resistance at least 200 MegaOhms within 5 minutes after removal from humidity.
Corrosion:
MIL-STD-202, Method 101, Test Condition C
Vibration:
MIL-STD-202, Method 204, Test Condition A, except 5g Peak
Shock:
MIL-STD-202, Method 213, Test Condition I, except 10g Peak



SEE TM13-0236-XX - DUAL ROW STRIPLINE

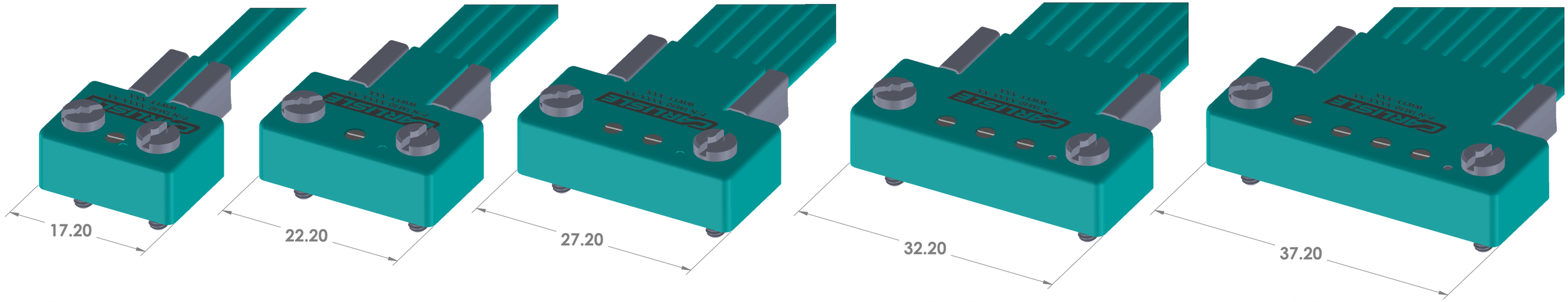


SEE TM13-0240-XX - DUAL ROW CPW

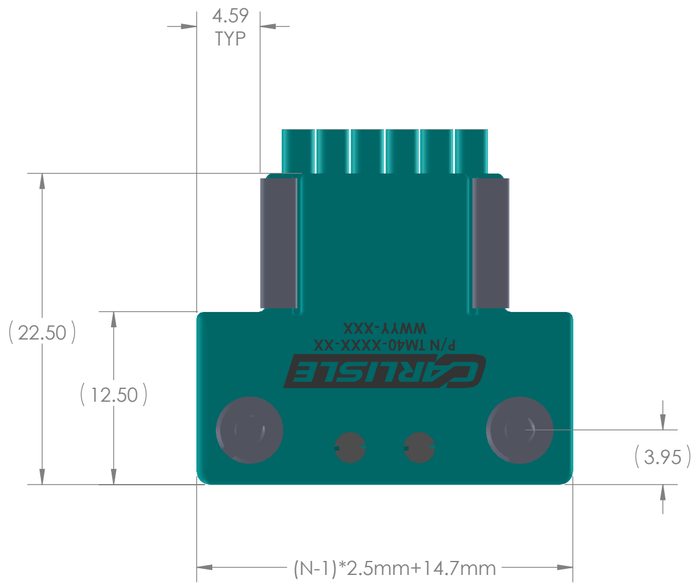
CARLISLE INTERCONNECT TECHNOLOGIES

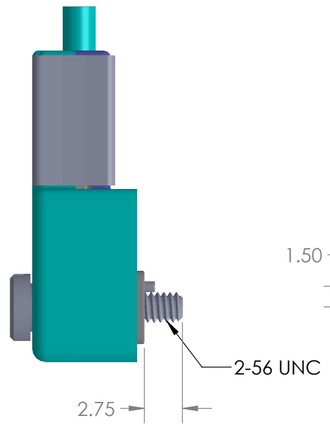
CORE HC 2.5mm CABLE BUILDER ASSY

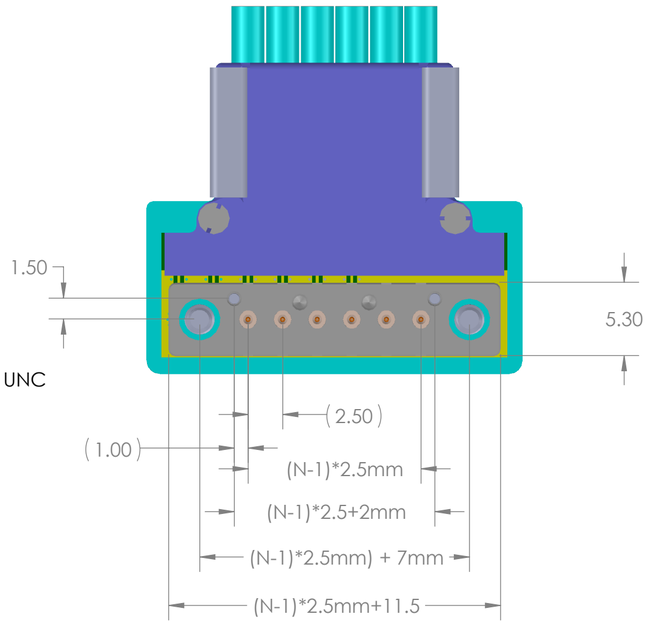
SIZE	CAGE CODE	DRAWING NUMBER	REV
C	7M294	XXXXXX	00
SCALE: 4:1		PART NUMBER: XXXXXX	4 OF 7



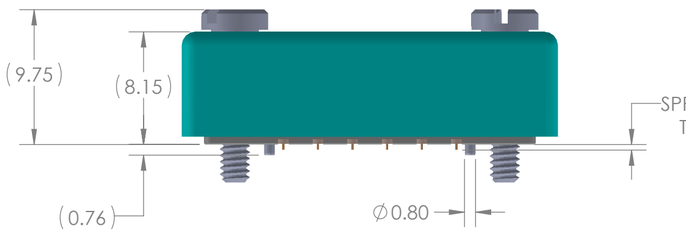
2 POSITION **4 POSITION** **6 POSITION** **8 POSITION** **10 POSITION**



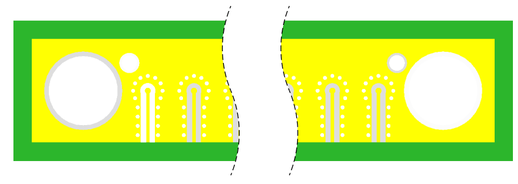




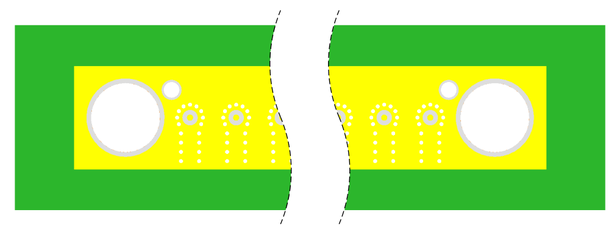
MATERIAL(S):	**ELECTRICAL(S):**
Housing body: Brass Alloy, UNS No. C36000 PER ASTM B-16 Top body: 6061-T651 Aluminum Alloy Core HC2 connector: Spring Pin: BeCu Alloy/Brass Alloy C3604B/ Phosphor Bronze Ground Slider & Nut: Brass Alloy C3604B Insulator: TPX / PTFE Dielectric: Ultem/ TPX Spring: Music Wire Dowel Pin, Screw:Stainless Steel. Cable: TM20-7S	Impedance: 50 Ohms Nominal Frequency Range: DC to 65 GHz VSWR: 1.50:1 DC to 26 GHz 1.78:1 26 to 40 GHz 2.10:1 40 to 65 GHz Insertion Loss: 2.00 dB DC to 26 GHz 2.64 dB 26 to 40 GHz 3.75 dB 40 to 65 GHz Working Voltage: 335 Vrms max @ Sea Level Test Voltage: 500 Vrms Insulation Resistance: 5000 MegOhms min. Contact Current: 1A DC max. Contact Resistance: Center Contact: 100 m Ω Phase: Matched In Pairs : ±1.0 pS.
MECHANICAL(S):	**ENVIRONMENTAL(S):**
Mating Characteristics: 1.85 Interface per MIL-STD-348 CORE HC2 Interface per CarlisleIT Force to Engage: 1.85: 2 In-lbs max CoreHC2 (Individual): .5 Lbs Typ. Connector Durability: 1.85: 500 Cycles @ 12 cycles/min. max CoreHC2: 20,000 Cycles @ 12 cycles/min. max Permeability: Less than 2.0 mu. Coupling Proof Torque: 1.85: 15 in-lb	Temperature Range: -65°C to +150°C Thermal Shock: MIL-STD-202, Method 107, Test Condition F Moisture Resistance: MIL-STD-202, Method 106, Insulation resistance at least 200 MegaOhms within 5 minutes after removal from humidity. Corrosion: MIL-STD-202, Method 101, Test Condition C Vibration: MIL-STD-202, Method 204, Test Condition A, except 5g Peak Shock: MIL-STD-202, Method 213, Test Condition I, except 10g Peak



S H2 X L
SINGLE ROW COREHC
X CHANNEL RIGHT ANGEL



SEE TM13-0238-XX - SINGLE ROW CPW

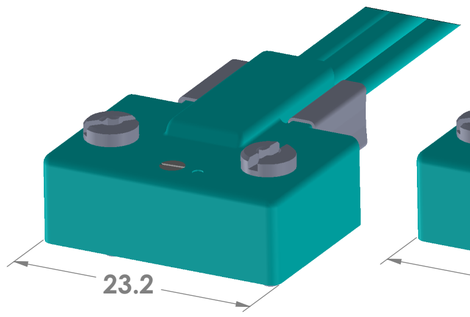


SEE TM13-0239-XX - SINGLE ROW STRIPLINE

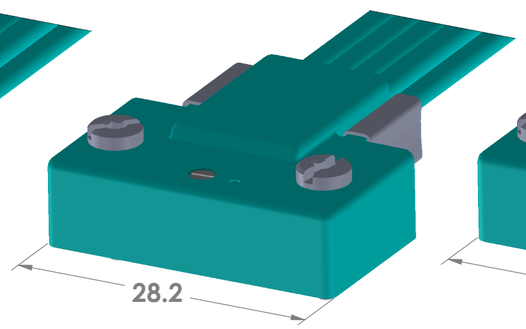
CARLISLE INTERCONNECT TECHNOLOGIES

CORE HC 2.5mm CABLE BUILDER ASSY

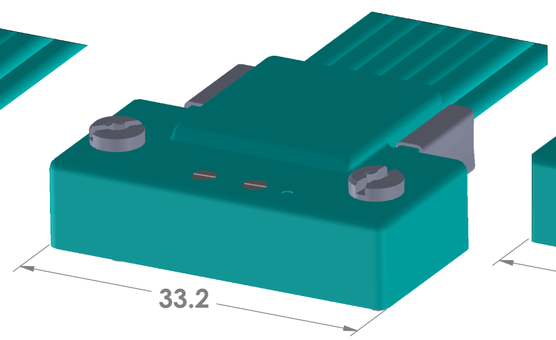
SIZE	CAGE CODE	DRAWING NUMBER	REV
C	7M294	XXXXXX	00
SCALE: 3:1		PART NUMBER: XXXXXX	5 OF 7



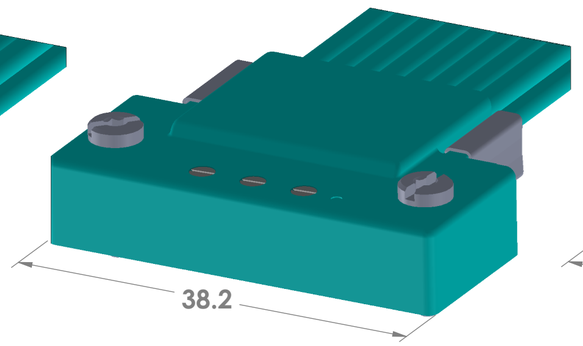
2 POSITION



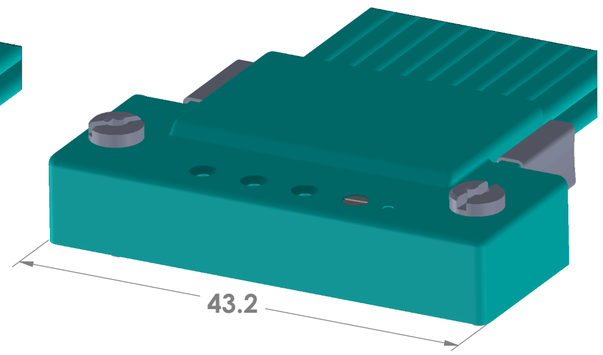
4 POSITION



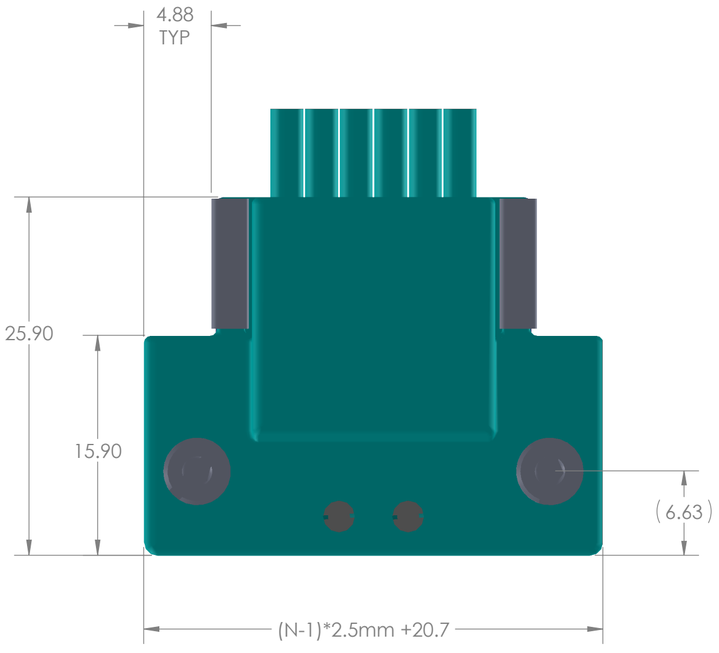
6 POSITION

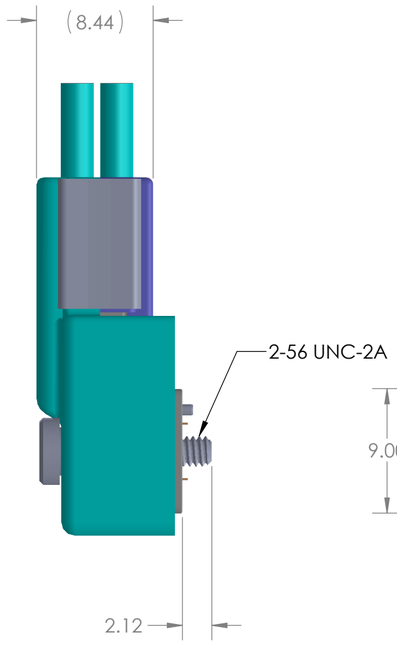


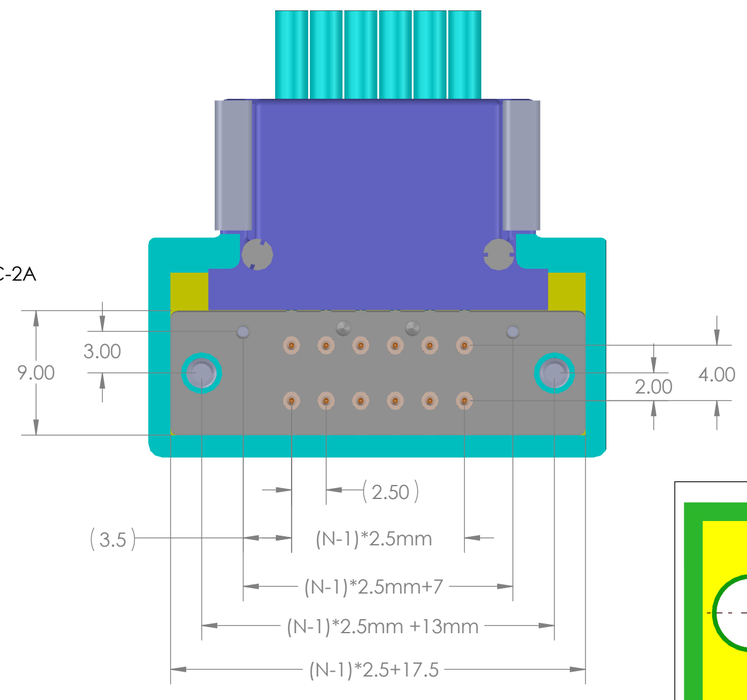
8 POSITION

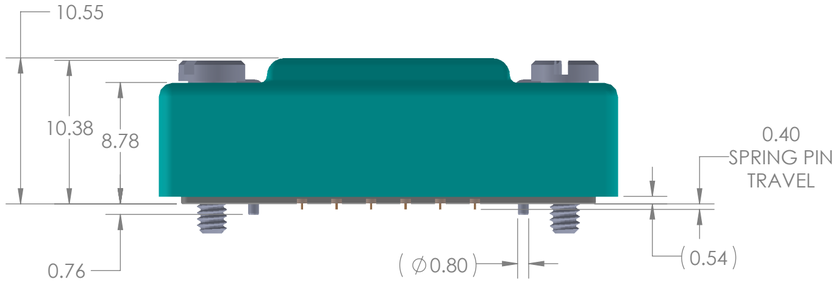


10 POSITION



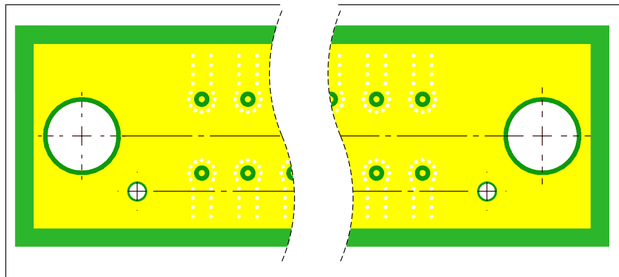




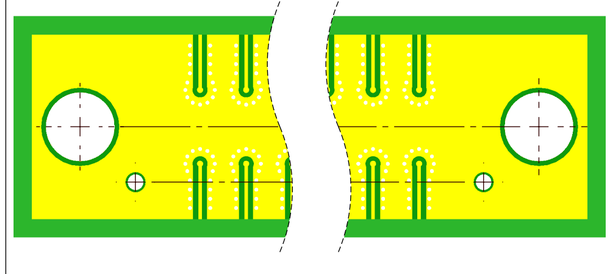


D H2 X L
DUAL ROW COREHC
X CHANNEL RIGHT ANGEL

MATERIAL(S):	**ELECTRICAL(S):**
Housing body: Brass Alloy, UNS No. C36000 PER ASTM B-16 Top body: 6061-T651 Aluminum Alloy Core HC2 connector: Spring Pin: BeCu Alloy/Brass Alloy C3604B/ Phosphor Bronze Ground Slider & Nut: Brass Alloy C3604B Insulator: TPX / PTFE Dielectric: Ultem/ TPX Spring: Music Wire Dowel Pin, Screw:Stainless Steel. Cable: TM20-7S	Impedance: 50 Ohms Nominal Frequency Range: DC to 65 GHz VSWR: 1.50:1 DC to 26 GHz 1.78:1 26 to 40 GHz 2.10:1 40 to 65 GHz Insertion Loss: 2.00 dB DC to 26 GHz 2.64 dB 26 to 40 GHz 3.75 dB 40 to 65 GHz Working Voltage: 335 Vrms max @ Sea Level Test Voltage: 500 Vrms Insulation Resistance: 5000 MegOhms min. Contact Current: 1A DC max. Contact Resistance: Center Contact: 100 m Ω Phase: Matched In Pairs : ±1.0 pS.
MECHANICAL(S):	**ENVIRONMENTAL(S):**
Mating Characteristics: 1.85 Interface per MIL-STD-348 CORE HC2 Interface per CarlisleIT Force to Engage: 1.85: 2 In-lbs max CoreHC2 (Individual): .5 Lbs Typ. Connector Durability: 1.85: 500 Cycles @ 12 cycles/min. max CoreHC2: 20,000 Cycles @ 12 cycles/min. max Permeability: Less than 2.0 mu. Coupling Proof Torque: 1.85: 15 in-lb	Temperature Range: -65°C to +150°C Thermal Shock: MIL-STD-202, Method 107, Test Condition F Moisture Resistance: MIL-STD-202, Method 106, Insulation resistance at least 200 MegaOhms within 5 minutes after removal from humidity. Corrosion: MIL-STD-202, Method 101, Test Condition C Vibration: MIL-STD-202, Method 204, Test Condition A, except 5g Peak Shock: MIL-STD-202, Method 213, Test Condition I, except 10g Peak



SEE TM13-0236-XX - DUAL ROW STRIPLINE

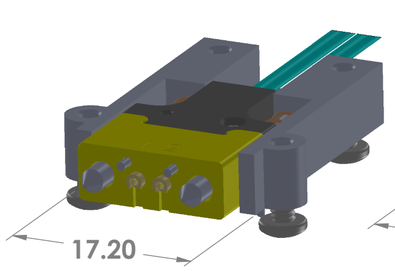


SEE TM13-0240-XX - DUAL ROW CPW

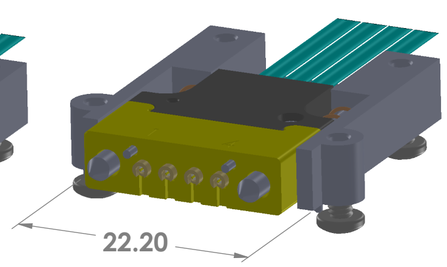
CARLISLE INTERCONNECT TECHNOLOGIES

CORE HC 2.5mm CABLE BUILDER ASSY

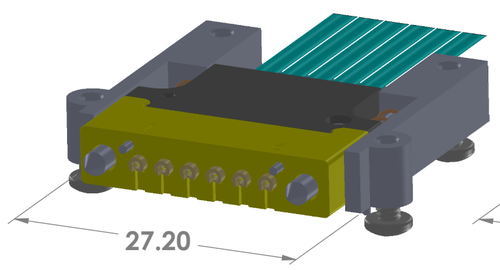
SIZE	CAGE CODE	DRAWING NUMBER	REV
C	7M294	XXXXXX	00
SCALE: 3:1		PART NUMBER: XXXXXX	6 OF 7



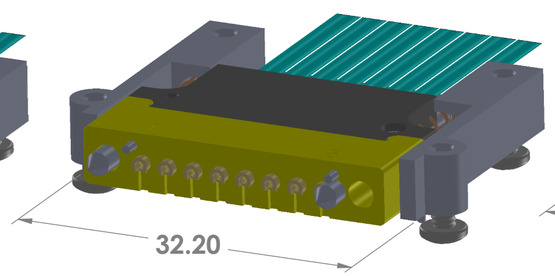
2 POSITION



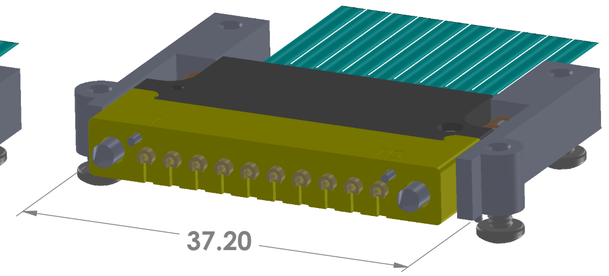
4 POSITION



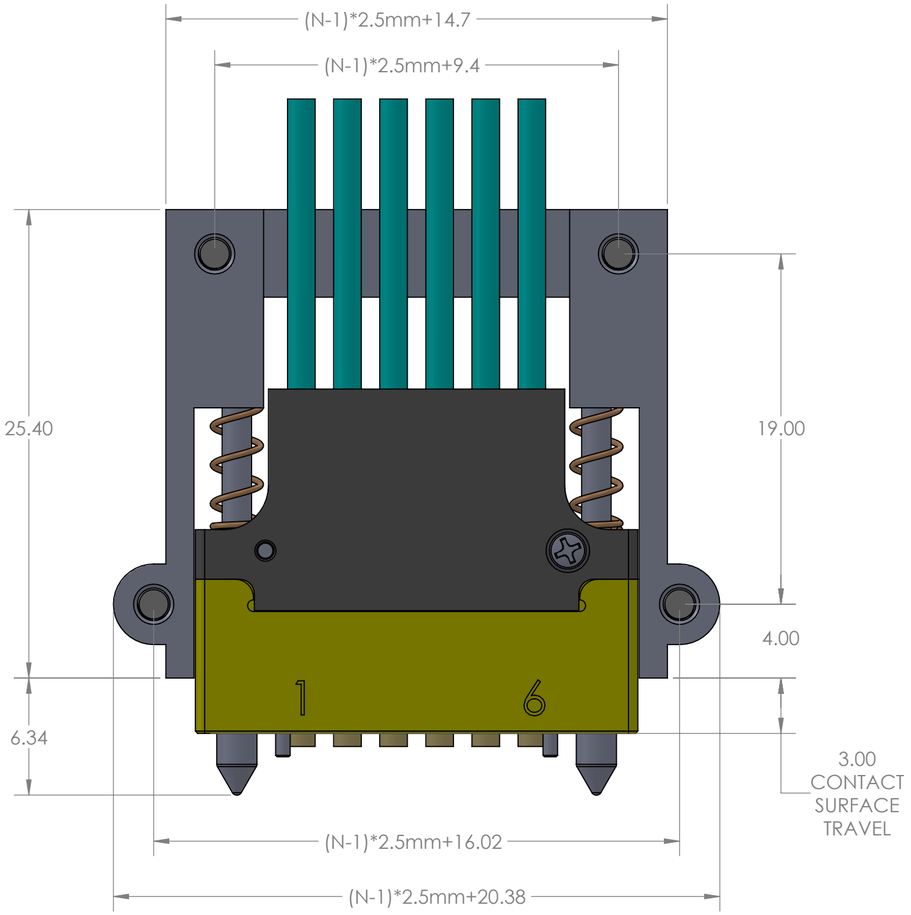
6 POSITION

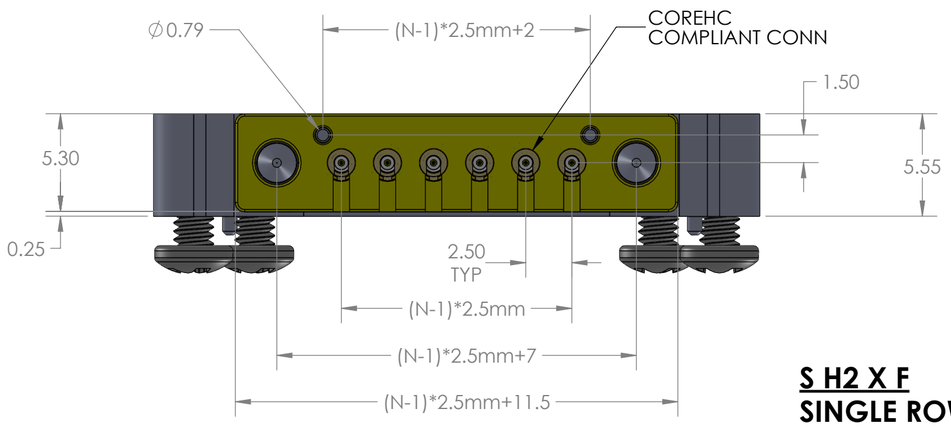


8 POSITION



10 POSITION





S H2 X F
SINGLE ROW COREHC
X CHANNEL FLEX STRAIGHT

MATERIAL(S):
Housing body:
Brass Alloy, UNS No. C36000 PER ASTM B-16
Top body:
6061-T651 Aluminum Alloy

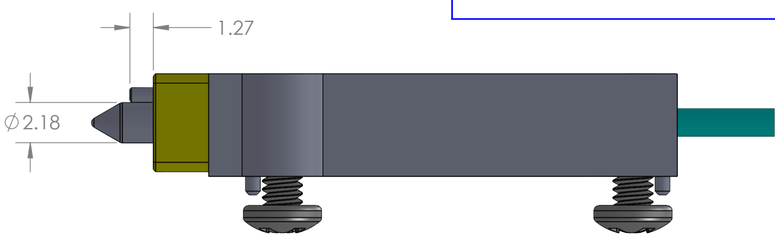
Core HC2 connector:
Spring Pin:
BeCu Alloy/Brass Alloy C3604B/ Phosphor Bronze
Ground Slider & Nut:
Brass Alloy C3604B
Insulator: TPX / PTFE
Dielectric: Ultem/ TPX
Spring: Music Wire
Dowel Pin, Screw:Stainless Steel.

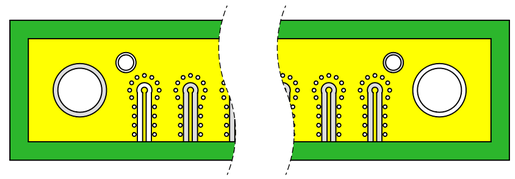
Cable: TM20-7S

ELECTRICAL(S):
Impedance: 50 Ohms Nominal
Frequency Range: DC to 65 GHz
VSWR: 1.50:1 DC to 26 GHz
1.78:1 26 to 40 GHz
2.10:1 40 to 65 GHz
Insertion Loss:
2.00 dB DC to 26 GHz
2.64 dB 26 to 40 GHz
3.75 dB 40 to 65 GHz
Working Voltage:
335 Vrms max @ Sea Level
Test Voltage: 500 Vrms
Insulation Resistance: 5000 MegOhms min.
Contact Current: 1A DC max.
Contact Resistance:
Center Contact: 100 m Ω
Phase: Matched In Pairs : ±1.0 pS.

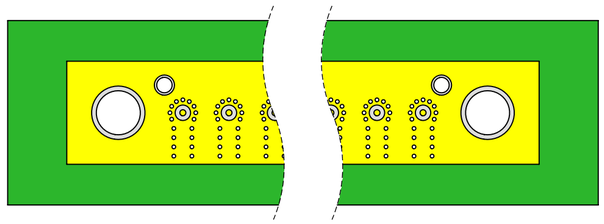
MECHANICAL(S):
Mating Characteristics:
1.85 Interface per MIL-STD-348
CORE HC2 Interface per CarlisleIT
Force to Engage:
1.85: 2 In-lbs max
CoreHC2 (Individual): .5 Lbs Typ.
Connector Durability:
1.85: 500 Cycles @ 12 cycles/min. max
CoreHC2: 20,000 Cycles @ 12 cycles/min. max
Permeability: Less than 2.0 mu.
Coupling Proof Torque:
1.85: 15 in-lb

ENVIRONMENTAL(S):
Temperature Range: -65°C to +150°C
Thermal Shock:
MIL-STD-202, Method 107, Test Condition F
Moisture Resistance:
MIL-STD-202, Method 106, Insulation resistance at least 200 MegaOhms within 5 minutes after removal from humidity.
Corrosion:
MIL-STD-202, Method 101, Test Condition C
Vibration:
MIL-STD-202, Method 204, Test Condition A, except 5g Peak
Shock:
MIL-STD-202, Method 213, Test Condition I, except 10g Peak





SEE TM13-0243-XX - SINGLE ROW CPW



SEE TM13-0244-XX - SINGLE ROW STRIPLINE

CARLISLE INTERCONNECT TECHNOLOGIES

CORE HC 2.5mm CABLE BUILDER ASSY

SIZE	CAGE CODE	DRAWING NUMBER	REV
C	7M294	XXXXXX	00
SCALE: 4:1		PART NUMBER: XXXXXX	7 OF 7