



DO NOT
SCALE FROM
THIS PRINT

TABLE 1: ASSEMBLY LENGTH LIMITS [cm]										
FIBER TYPE	MIN						MAX			
	END OPTION						HEAT SINK			
	-01	-02	-07	-0A	-0C	-0E	-1	-2	-3	-4
-5	11	11	10	9	9	8	100	100	50	100
-6	11	11	10	9	9	8	100	100	50	100
-7	14	14	12	11	13	10	300	300	300	300
-8	12	12	10	9	11	8	300	300	300	300

TABLE 2: LENGTH TOLERANCE	
ASSEMBLY LENGTH (cm)	TOLERANCE (cm)*
000-016	±0.16
017-999	±1%

* ROUNDED UP TO 2 DECIMAL PLACES

ETUO-X12-XX-XXX-0-X-1-X-XX

TYPE
-T12: x12 Tx
-R12: x12 Rx

DATA RATE
-10: 10.3125 Gbps
-12: 12.5 Gbps

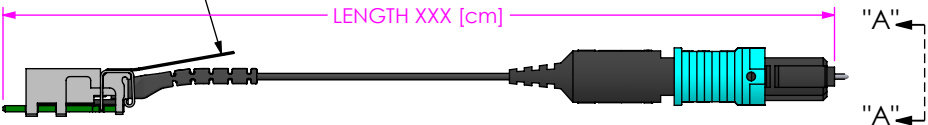
ASSEMBLY LENGTH
-XXX: LENGTH (cm)
(SEE TABLES 1 & 2)

END OPTION
-01: MTP® MALE
-02: MTP® FEMALE
-07: MXC® INTERNAL PLUG
-0A: VITA 66.1/66.4 READY
(SEE NOTE 8)
-0C: MT38999 MALE
(SEE NOTE 9)
-0E: MPO PLUS® BAYONET MALE

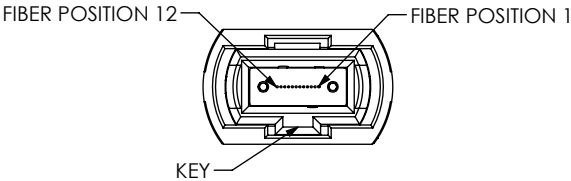
FIBER TYPE
-5: BLACK JACKETED RIBBON WITH BOOT
-6: BLACK JACKETED RIBBON
-7: BLACK LOOSE TUBE WITH BOOT
-8: BLACK LOOSE TUBE

HEAT SINK
-1: FLAT
-2: PIN FIN
-3: FLAT WITH GROOVE (SEE NOTE 2)
-4: PCIe® PIN FIN

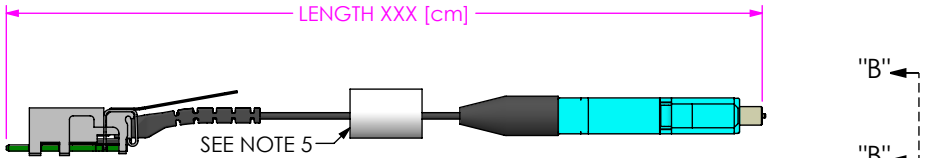
ORANGE TAB INDICATES T12
BLUE TAB INDICATES R12



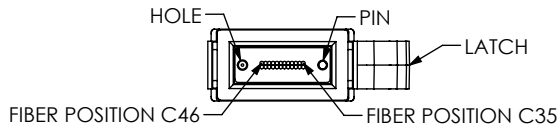
ETUO-X12-XX-XXX-0-1-1-5-01 SHOWN



VIEW "A"- "A"
END OPTIONS -01/-02/-0E



ETUO-X12-XX-XXX-0-1-1-5-07 SHOWN



VIEW "B"- "B"
END OPTION -07
(SEE NOTE 1)

- NOTES:
1. QUANTITY OF LENSES PRESENT MAY VARY.
FIBER POSITION DOES NOT CHANGE REGARDLESS OF THE NUMBER OF LENSES PRESENT.
 2. GROOVE ALLOWS ONE JACKETED RIBBON (FIBER TYPE -5/-6) OF CABLE LENGTH MAX 50 CM OR TWO CABLES OF JACKETED LOOSE TUBE (FIBER TYPE -7/-8) TO PASS ABOVE HEAT SINK AND UNDER COLD PLATE.
 3. FIREFLY MUST BE INSTALLED IN A NO-TENSION STATE FREE FROM DYNAMIC FLEXING.
 4. ALL MTP®/MPO ARE INTERMATEABLE WITH CONNECTOR ADHERING TO TIA-604-5.
 5. ALL CABLES WITH A LENGTH GREATER THAN 50 cm ARE LABELED.
LABEL TO CONTAIN PART NUMBER AND SERIAL NUMBER INFORMATION
 6. DUST CAPS REMOVED FROM ALL VIEWS FOR CLARITY
 7. YELLOW LATCH PINS NOT SHOWN FOR CLARITY. SEE FIREFLY INSTALLATION INSTRUCTIONS FOR MORE DETAILS.
 8. FOR USE WITH TE VITA 66.1 (2000974-1) AND VITA 66.4 (2226881-1) DAUGHTER CARD PART NUMBERS.
 9. ASSEMBLIES SHIPPED WITH AMPHENOL PART NUMBER CF-594711-01S INSTALLED.
 10. DIMENSIONED FROM THE CENTER OF THE ALIGNMENT PIN HOLE AS SHOWN ON THE UEC5/UCC8 CONNECTOR FOOTPRINT.
 11. DUE TO THE COMPLIANT NATURE OF FIBER CABLE AND THE MOLDED FIBER BOOT COMPONENTS, THE DIMENSIONS SHOWN ARE FOR GUIDANCE ONLY.
EACH APPLICATION IS UNIQUE AND MAY RESULT IN UNIQUE CLEARANCE DIMENSIONS FOR THE CABLE ESCAPE.

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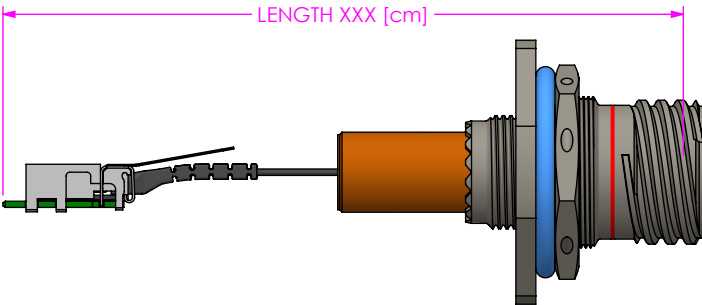
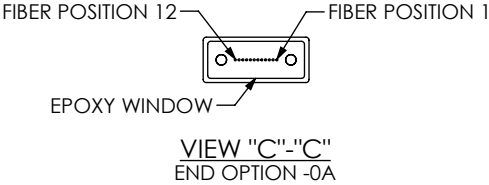
DO NOT SCALE DRAWING
SHEET SCALE: 1:1

DESCRIPTION:
EXTENDED TEMPERATURE OPTICAL FIREFLY ASM
DWG. NO.
ETUO-X12-XX-XXX-0-X-1-X-XX
BY: AARON B. 04/17/2020 SHEET 1 OF 11



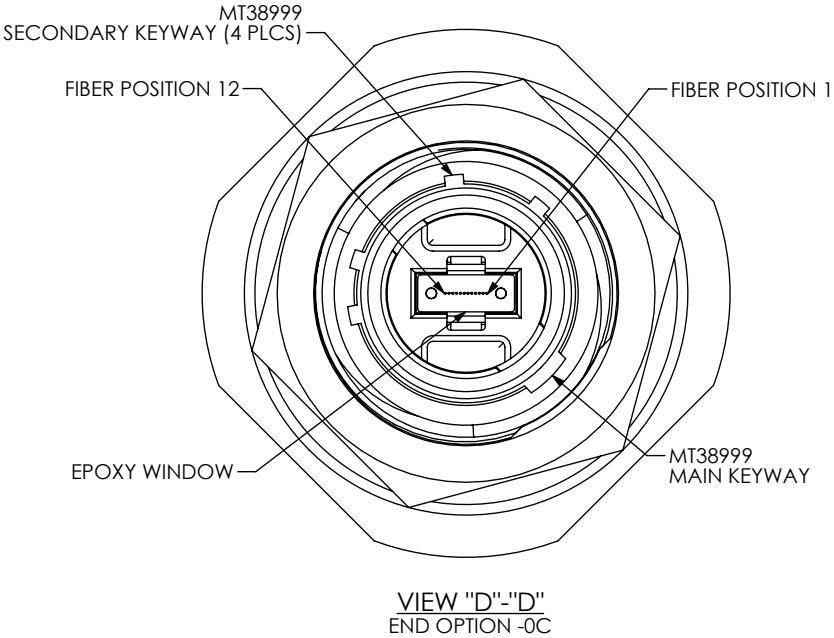
ETUO-X12-XX-XXX-0-1-1-5-0A SHOWN

"C"
"C"



ETUO-X12-XX-XXX-0-1-1-5-0C SHOWN

"D"
"D"



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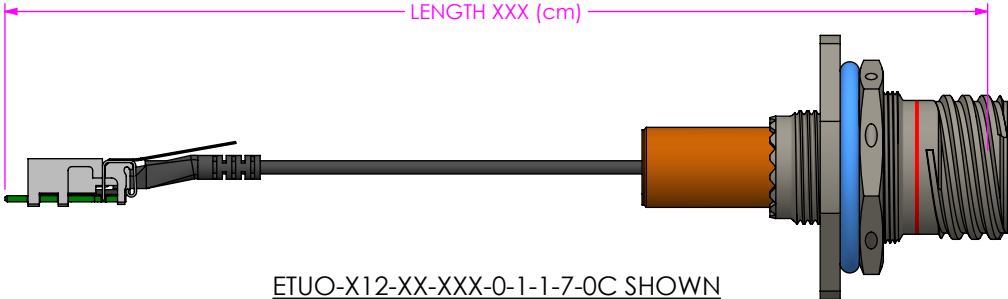
BY: AARON B. 04/17/2020 SHEET 2 OF 11



ETUO-X12-XX-XXX-0-1-1-7-0A SHOWN



ETUO-X12-XX-XXX-0-1-1-7-01 SHOWN



ETUO-X12-XX-XXX-0-1-1-7-0C SHOWN



ETUO-X12-XX-XXX-0-1-1-7-02 SHOWN



ETUO-X12-XX-XXX-0-1-1-7-0E SHOWN



ETUO-X12-XX-XXX-0-1-1-7-07 SHOWN

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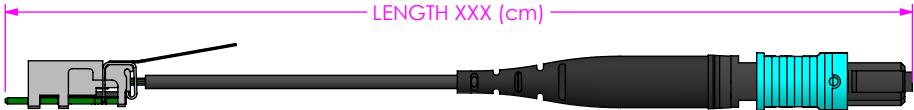
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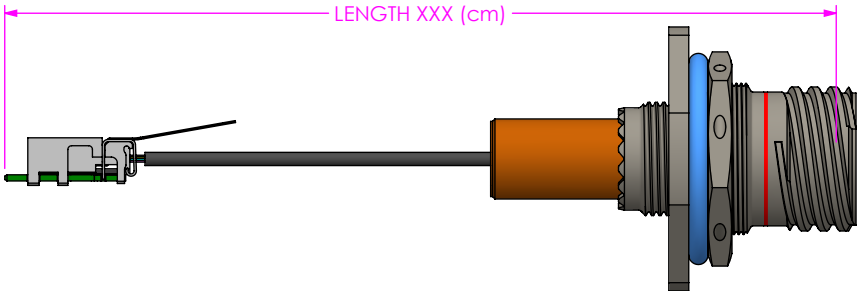
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ETUO-X12-XX-XXX-0-1-1-8-0C SHOWN



ETUO-X12-XX-XXX-0-1-1-8-07 SHOWN



ETUO-X12-XX-XXX-0-1-1-8-0E SHOWN

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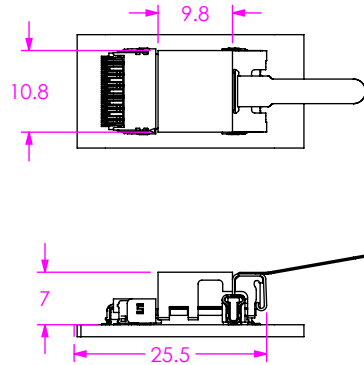
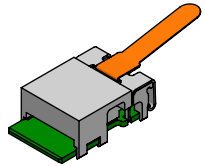


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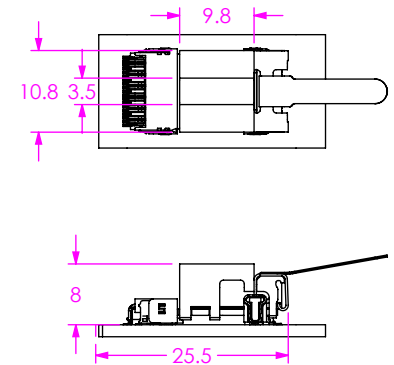
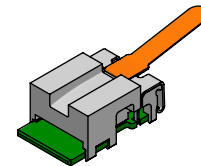
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DWG. NO.
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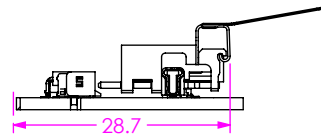
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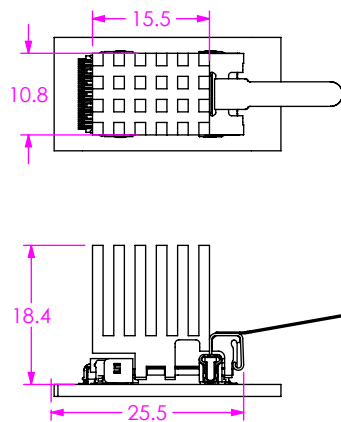
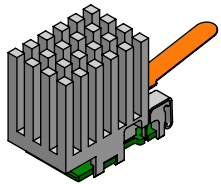
-1 FLAT HEAT SINK



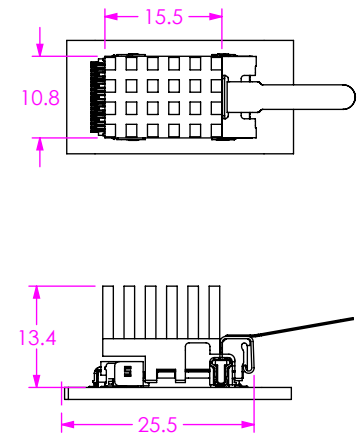
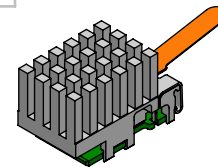
-3 FLAT HEAT SINK WITH PASS THROUGH



KEEP OUT AREA FOR DE-MATING
TYPICAL FOR HEAT SINKS -1/-2/-3/-4
REFER TO UEC5 FOOTPRINT DRAWING
FOR DETAILED KEEPOUT AREAS



-2 PIN-FIN HEAT SINK



-4 LOW-PROFILE PIN-FIN HEAT SINK

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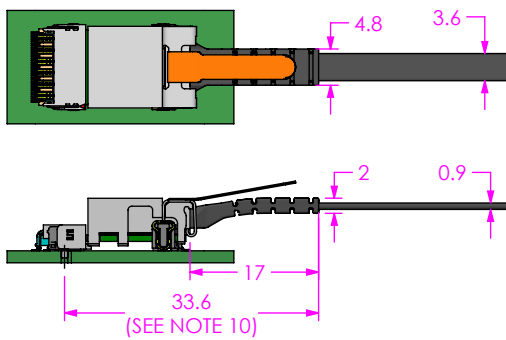
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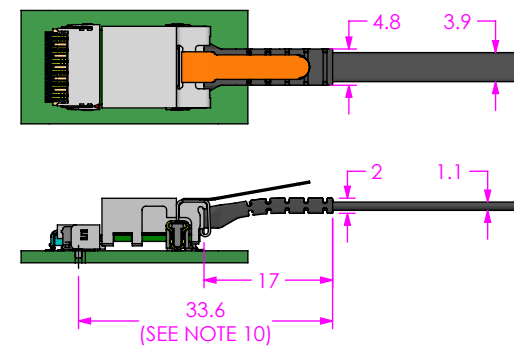
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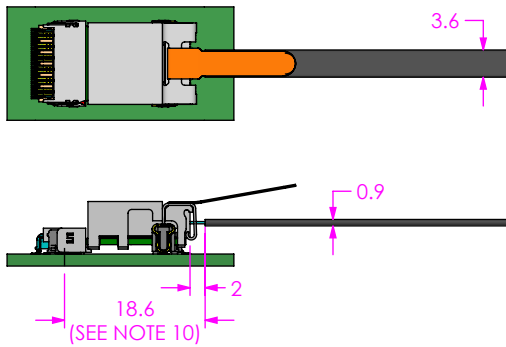
BY: AARON B. 04/17/2020 SHEET 5 OF 11



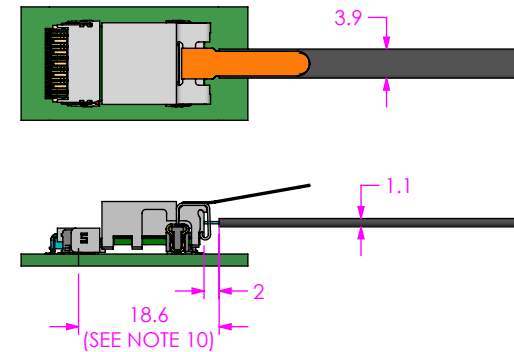
-5 FIBER TYPE, ≤ 50 cm LENGTH



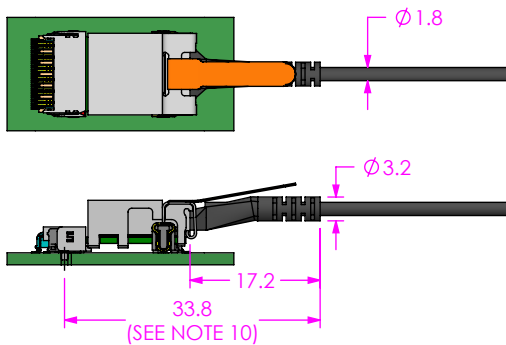
-5 FIBER TYPE, > 50 cm LENGTH



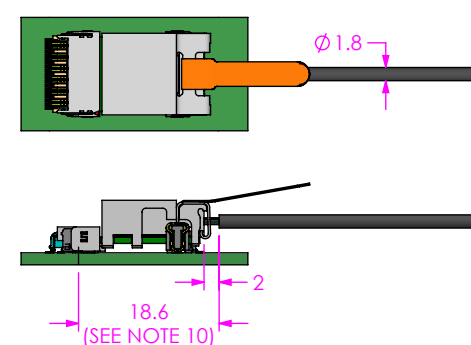
-6 FIBER TYPE, ≤ 50 cm LENGTH



-6 FIBER TYPE, > 50 cm LENGTH



-7 FIBER TYPE



-8 FIBER TYPE

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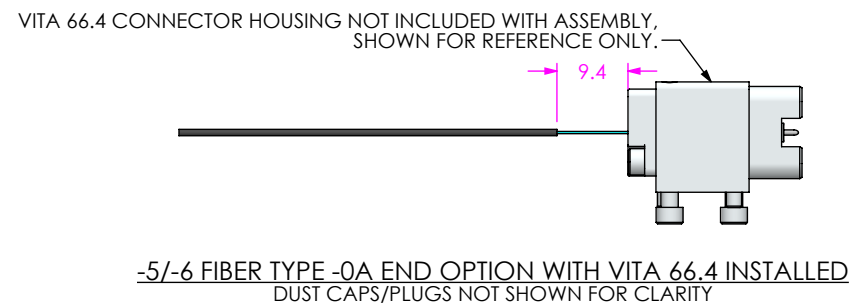
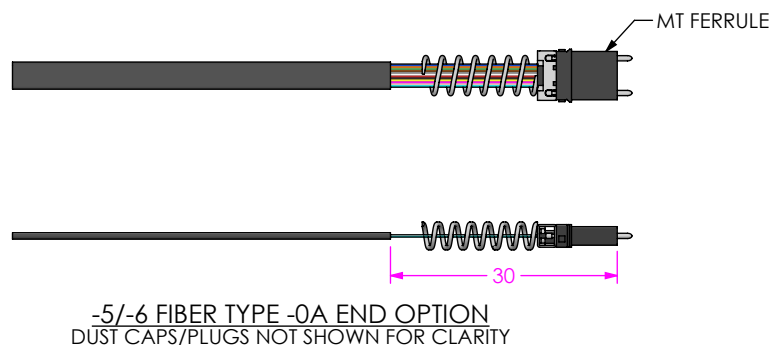
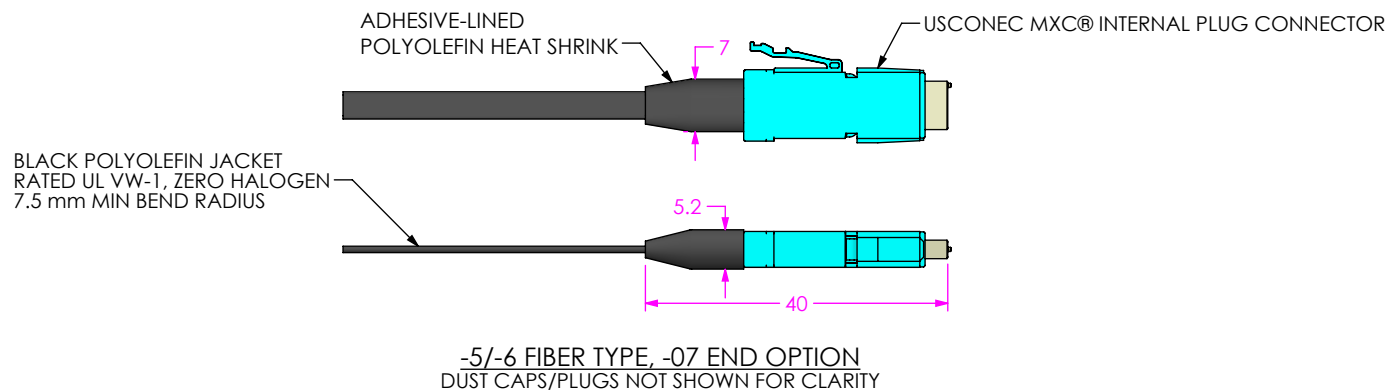
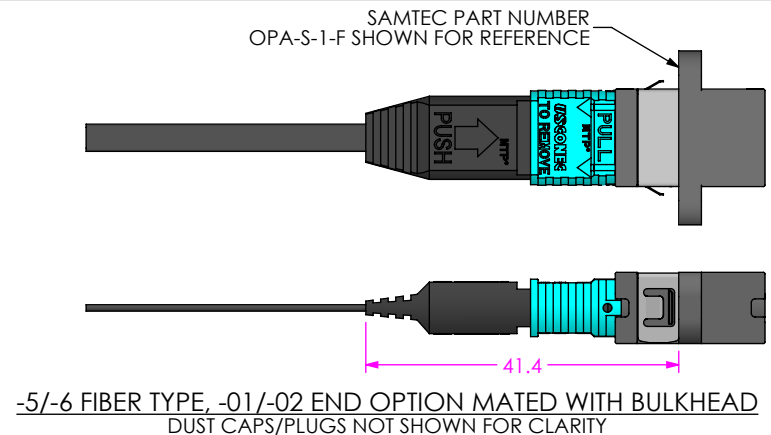
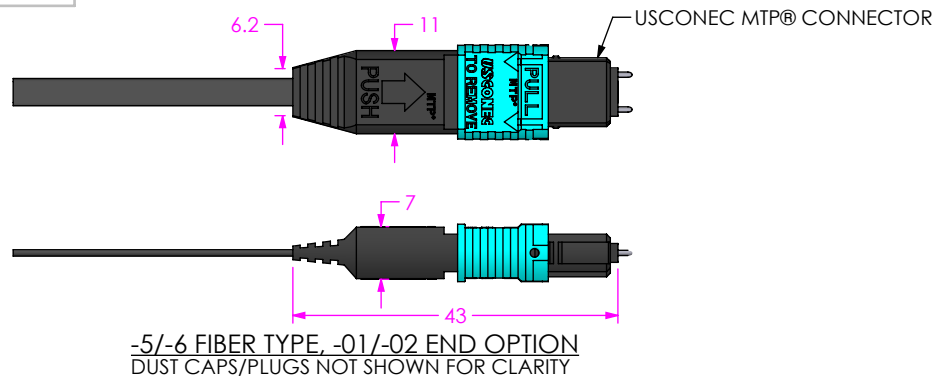
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EXTENDED TEMPERATURE OPTICAL FIREFLY ASM

DWG. NO.
ETUO-X12-XX-XXX-0-X-1-X-XX

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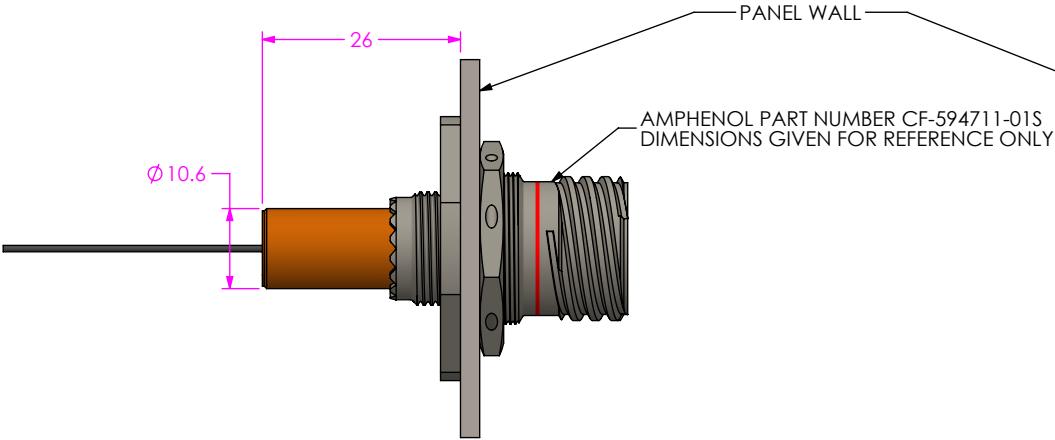
SHEET SCALE: 1:1
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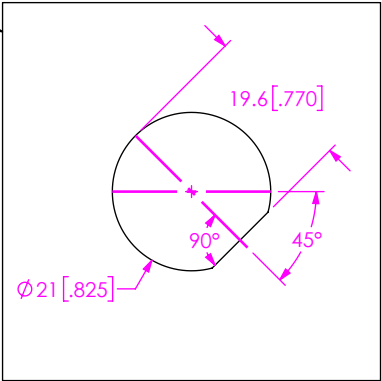
DESCRIPTION:
EXTENDED TEMPERATURE OPTICAL FIREFLY ASM

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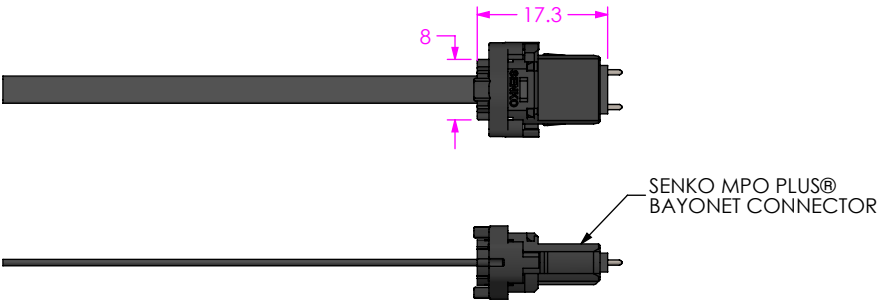
BY: AARON B. 04/17/2020 SHEET 7 OF 11



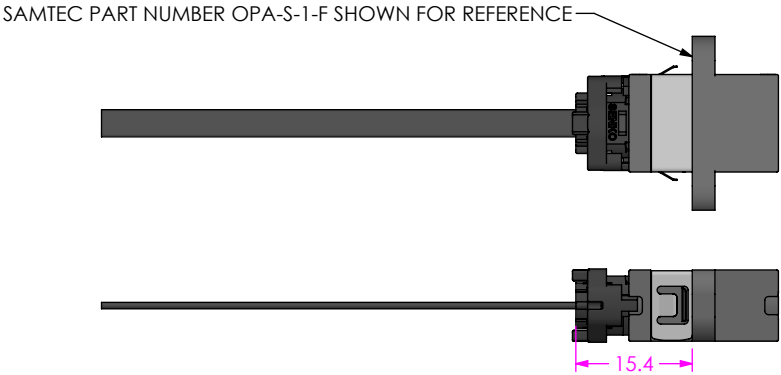
-5/-6 FIBER TYPE -0C END OPTION



-0C END OPTION RECOMMENDED PANEL CUTOUT
mm[in]



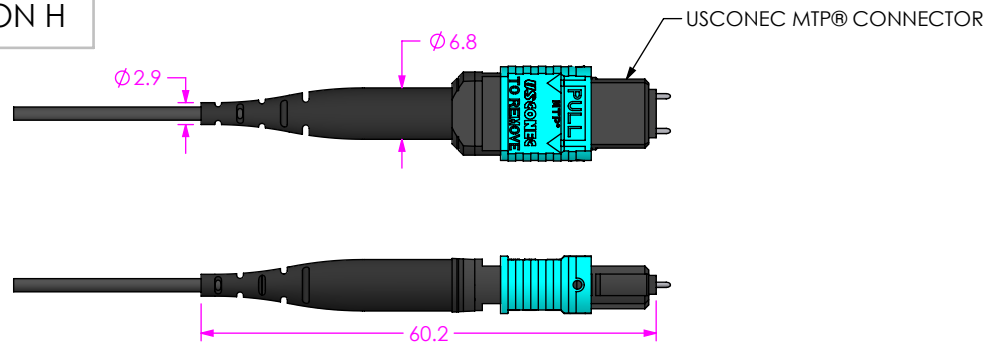
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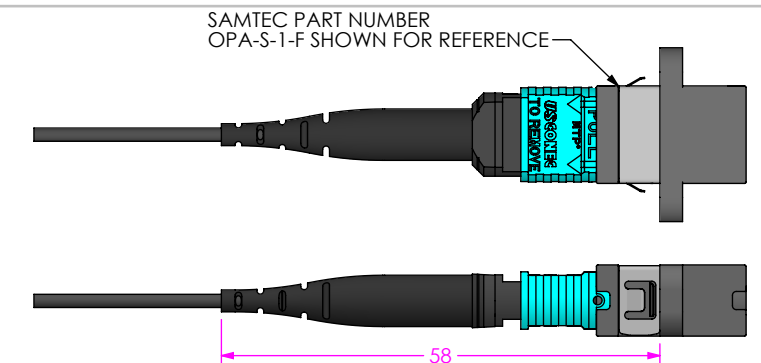
-5/-6 FIBER TYPE -0E END OPTION MATED WITH BULKHEAD

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	SHEET SCALE: 1:1 DO NOT SCALE DRAWING	
	DESCRIPTION: EXTENDED TEMPERATURE OPTICAL FIREFLY ASM DWG. NO. ETUO-X12-XX-XXX-0-X-1-X-XX BY: AARON B. 04/17/2020 SHEET 8 OF 11	

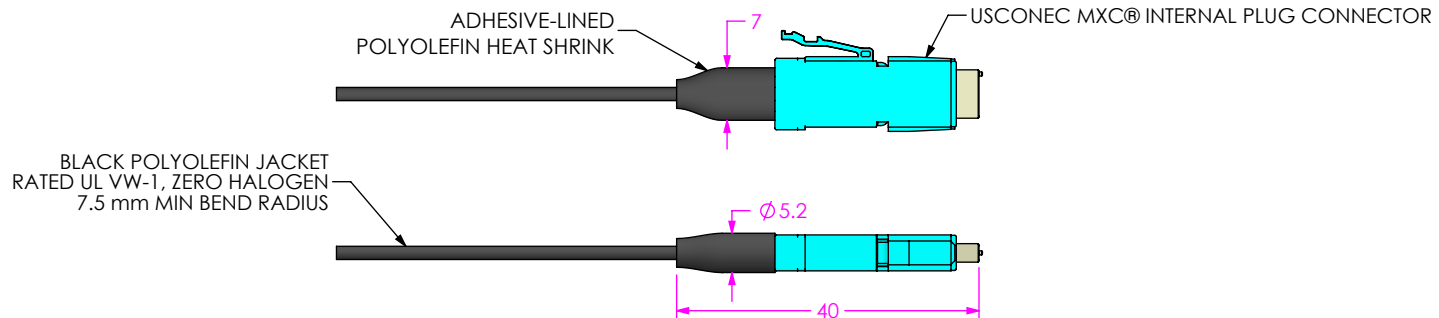
REVISION H



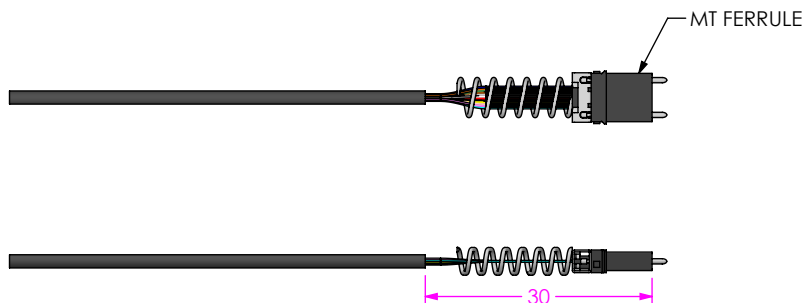
-7/-8 FIBER TYPE, -01/-02 END OPTION
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY



-7/-8 FIBER TYPE, -01/-02 END OPTION MATED WITH BULKHEAD
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY

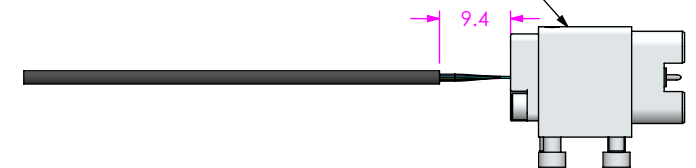


-7/-8 FIBER TYPE, -07 END OPTION
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY



-7/-8 FIBER TYPE, -0A END OPTION
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY

VITA 66.4 CONNECTOR HOUSING NOT INCLUDED WITH ASSEMBLY, SHOWN FOR REFERENCE ONLY.



-7/-8 FIBER TYPE, -0A END OPTION WITH VITA 66.4 INSTALLED
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY

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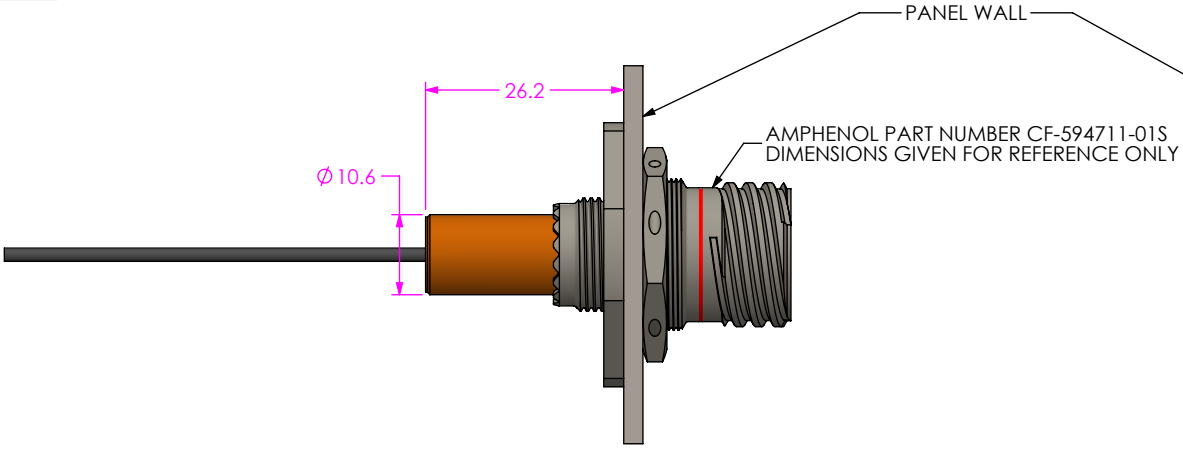
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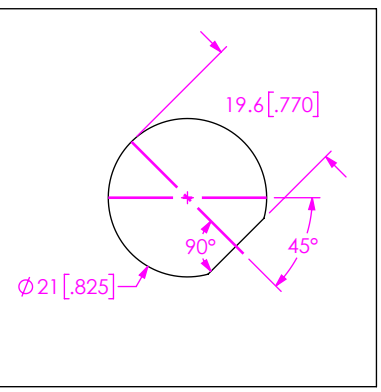
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ETUO-X12-XX-XXX-0-X-1-X-XX

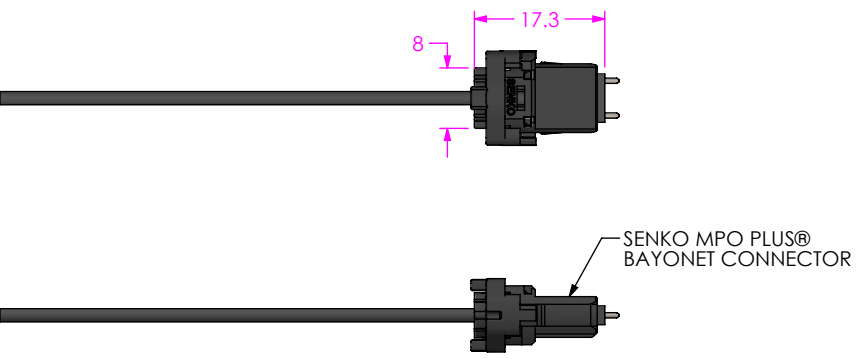
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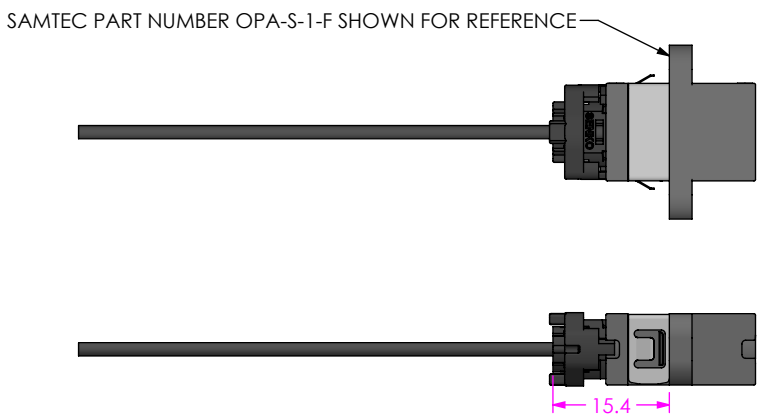
-7/-8 FIBER TYPE -0C END OPTION (SHOWN WITH PANEL)



-0C END OPTION RECOMMENDED PANEL CUTOUT
mm[in]



-7/-8 FIBER TYPE -0E END OPTION



-7/-8 FIBER TYPE -0E END OPTION MATED WITH BULKHEAD

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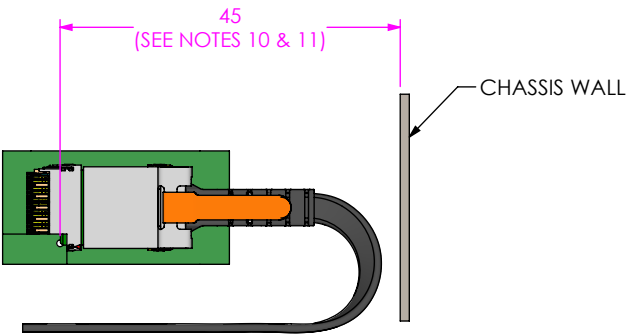


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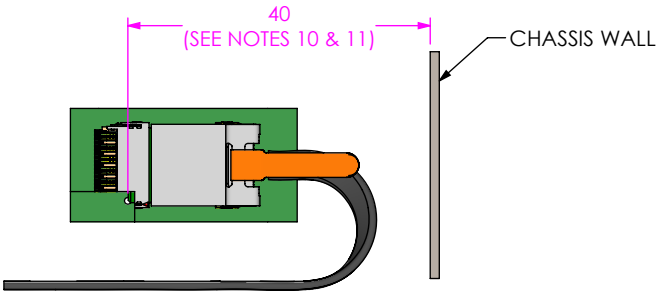
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EXTENDED TEMPERATURE OPTICAL FIREFLY ASM
DWG. NO.

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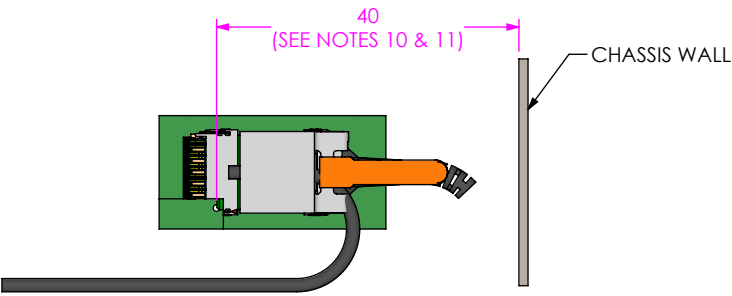
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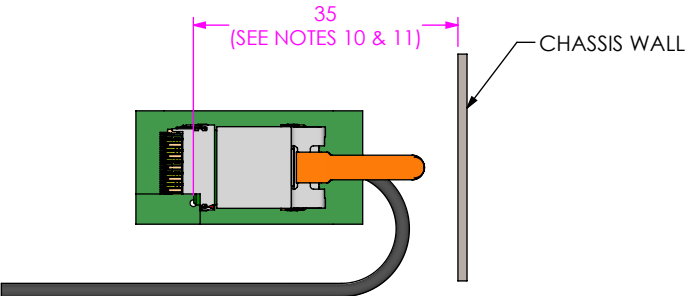
-5 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-6 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-7 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-8 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE

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