



DESIGNED AND DIMENSIONED IN MILLIMETERS
ALL DIMENSIONS REFERENCE EXCEPT AS SHOWN

DO NOT
SCALE FROM
THIS PRINT

TABLE 1: ASSEMBLY LENGTH LIMITS [cm]									
		MIN				MAX			
		END OPTION				HEAT SINK			
		-21	-22	-27	-2E	-1	-2	-3	-4
FIBER TYPE	-4	17	17	15	13	999	999	999	999
	-5	13	13	12	10	100	100	50	100
	-6	13	13	12	10	100	100	50	100
	-7	16	16	14	12	300	300	300	300
	-8	14	14	12	10	300	300	300	300

TABLE 2: LENGTH TOLERANCE	
ASSEMBLY LENGTH (cm)	TOLERANCE (cm)*
009-016	±0.16
017-999	±1%

* ROUNDED UP TO 2 DECIMAL PLACES

ECUO-Y12-XX-XXX-0-X-X-X-XX

DATA RATE

-14: 14 Gbps
-16: 16.1 Gbps

END OPTION

-21: MTP® MALE
-22: MTP® FEMALE
-27: MXC® INTERNAL PLUG
-2E: MPO PLUS® BAYONET MALE

ASSEMBLY LENGTH

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

FIBER TYPE

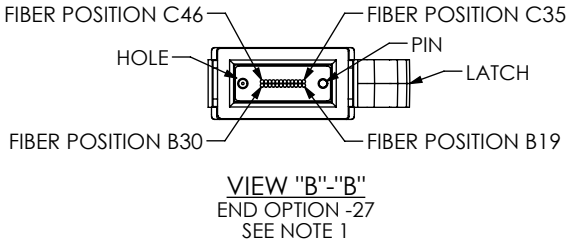
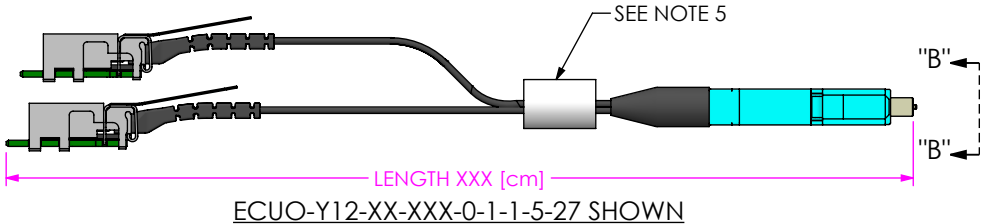
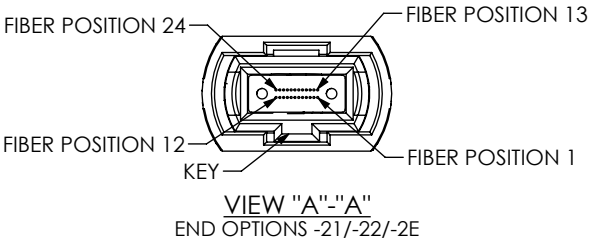
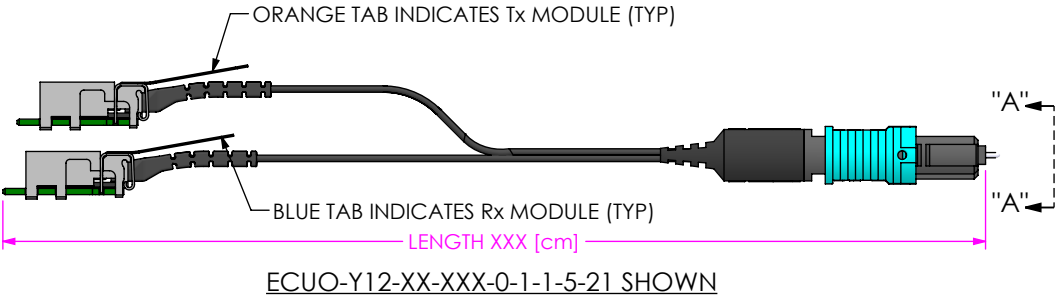
-4: AQUA LOOSE TUBE WITH BOOT
-5: BLACK JACKETED RIBBON WITH BOOT
-6: BLACK JACKETED RIBBON
-7: BLACK LOOSE TUBE WITH BOOT
-8: BLACK LOOSE TUBE

HEAT SINK

-1: FLAT
-2: PIN FIN
-3: FLAT WITH GROOVE (SEE NOTE 2)
-4: PCIe® PIN FIN (-14 DATA RATE ONLY)

FIRMWARE REVISION

-1: SPLIT PIN



- 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 ADAPTERS 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. DIMENSIONED FROM THE CENTER OF THE ALIGNMENT PIN HOLE AS SHOWN ON THE UEC5/UCC8 CONNECTOR FOOTPRINT
 9. 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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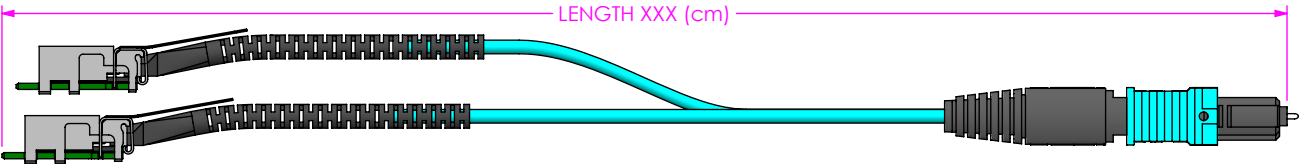
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code 55322

DO NOT SCALE DRAWING
SHEET SCALE: 1:1

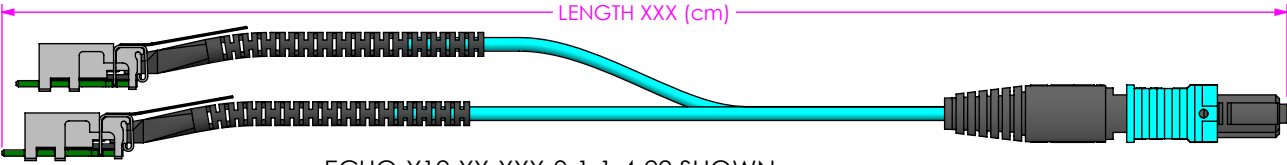
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OPTICAL FIREFLY ASSEMBLY

DWG. NO.
ECUO-Y12-XX-XXX-0-X-X-X-XX

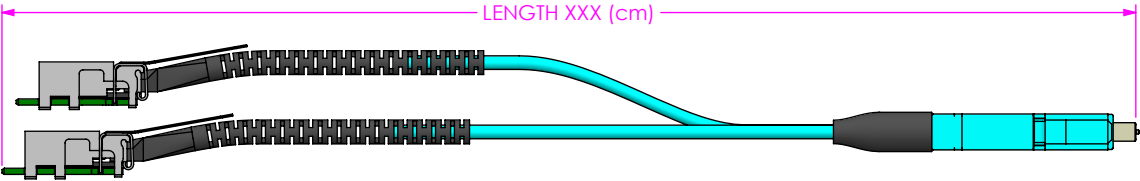
BY: AARON B. 07/21/2020 SHEET 1 OF 10



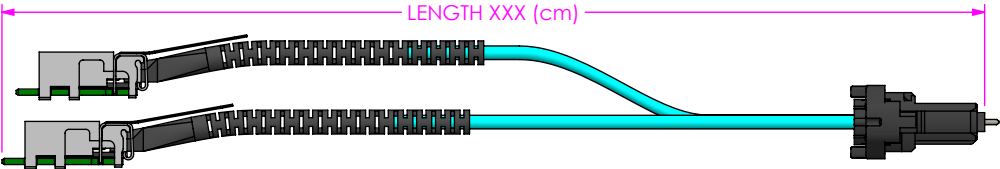
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ECUO-Y12-XX-XXX-0-1-1-4-22 SHOWN



ECUO-Y12-XX-XXX-0-1-1-4-27 SHOWN



ECUO-Y12-XX-XXX-0-1-1-4-2E SHOWN

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OPTICAL FIREFLY ASSEMBLY

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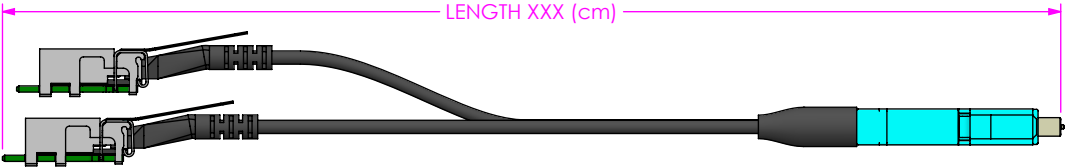
BY: AARON B. 07/21/2020 SHEET 2 OF 10



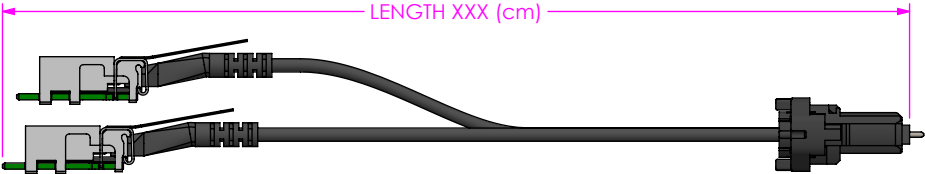
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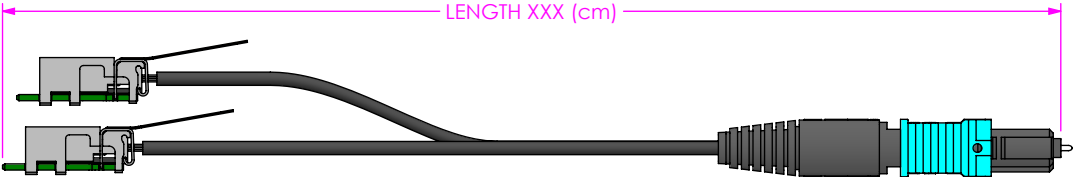


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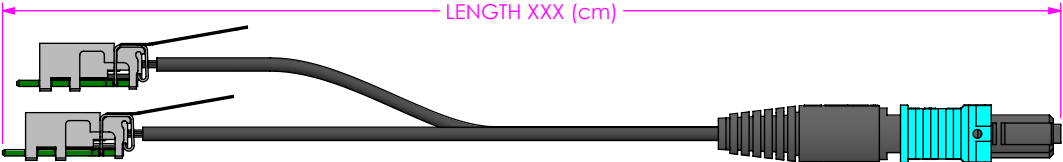


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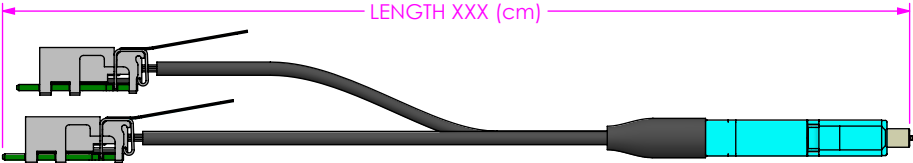
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	SHEET SCALE: 1:1	DWG. NO. ECUO-Y12-XX-XXX-0-X-X-X-XX
	BY: AARON B. 07/21/2020	SHEET 3 OF 10



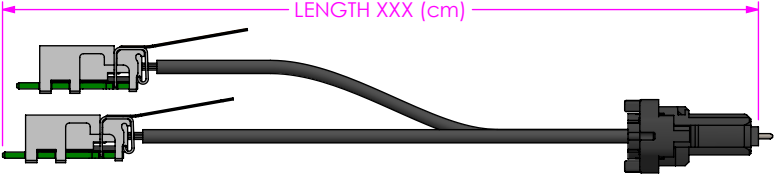
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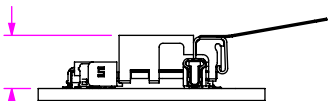
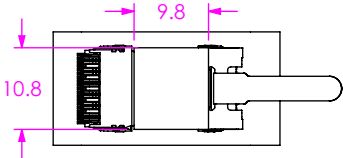
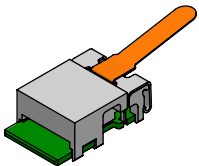


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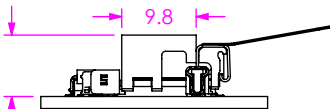
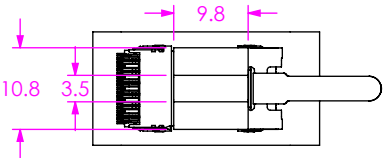
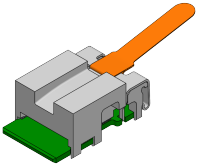
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	DO NOT SCALE DRAWING	DESCRIPTION: OPTICAL FIREFLY ASSEMBLY
	SHEET SCALE: 1:1	DWG. NO. ECUO-Y12-XX-XXX-0-X-X-X-XX
	BY: AARON B. 07/21/2020	SHEET 4 OF 10



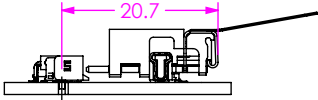
7 NO LOAD ON HEAT SINK
6.9 LOAD > 16N ON HEAT SINK

-1 FLAT HEAT SINK

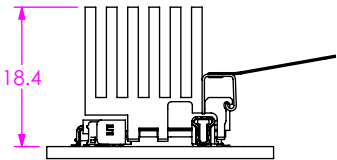
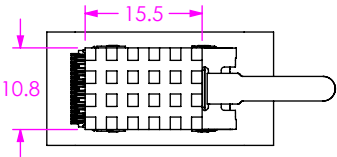
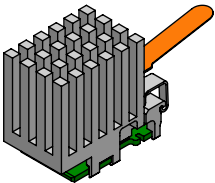


8.1 NO LOAD ON HEAT SINK
8 LOAD > 16N ON HEAT SINK

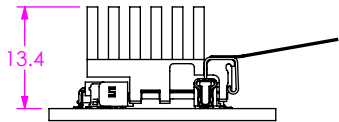
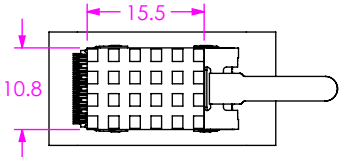
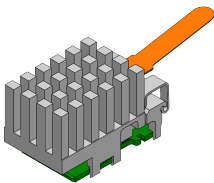
-3 FLAT HEAT SINK WITH PASS THROUGH



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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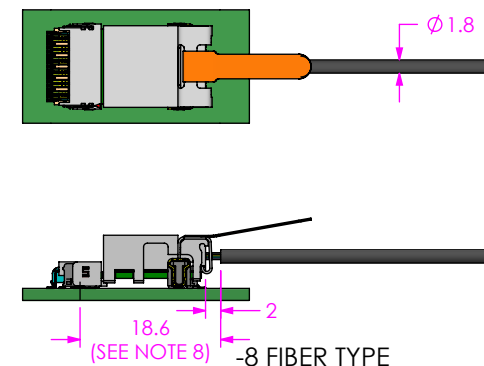
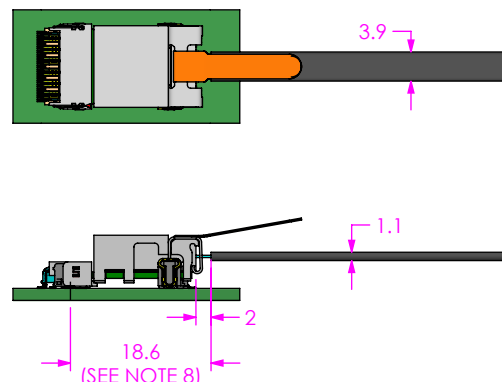
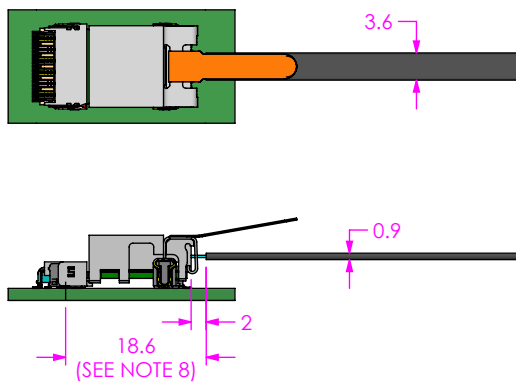
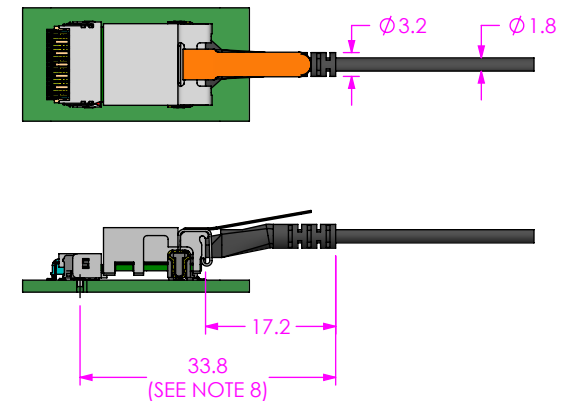
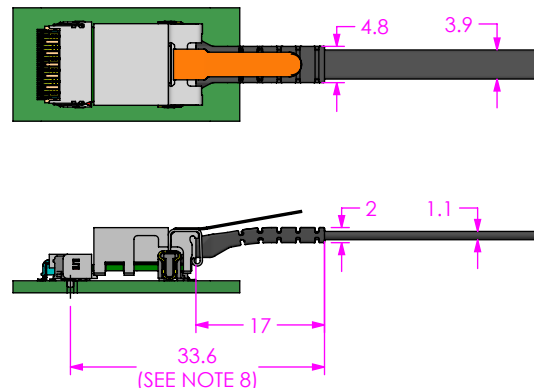
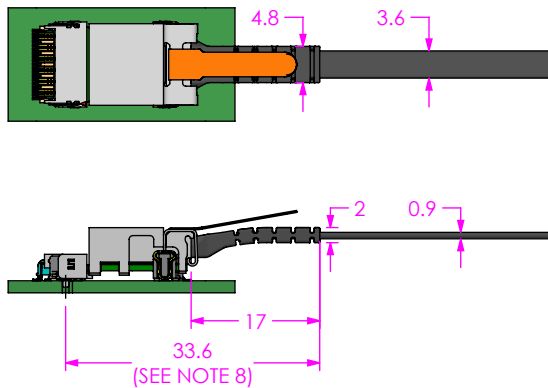
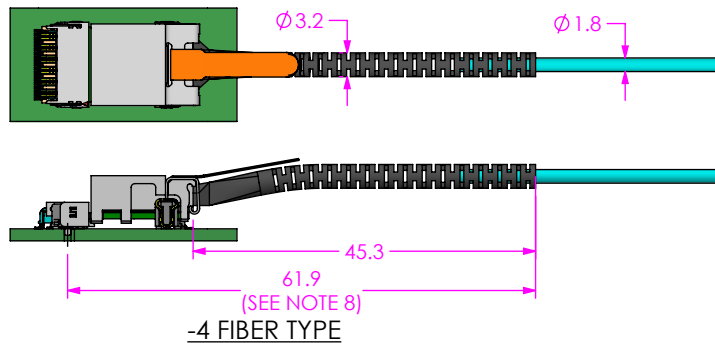
SHEET SCALE: 1:1

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DESCRIPTION:
OPTICAL FIREFLY ASSEMBLY

DWG. NO.
ECUO-Y12-XX-XXX-0-X-X-X-XX

BY: AARON B. 07/21/2020 SHEET 5 OF 10



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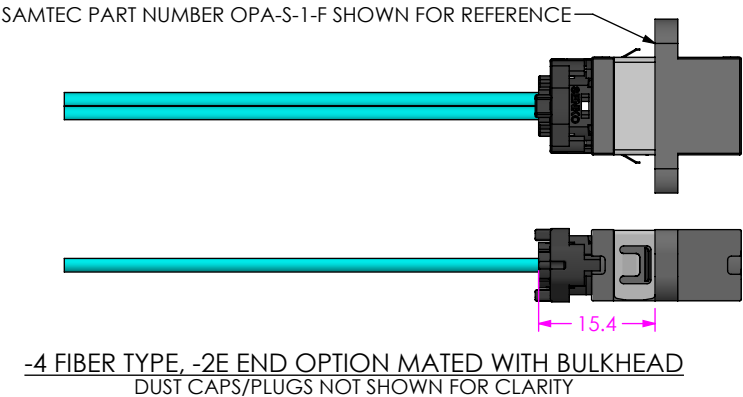
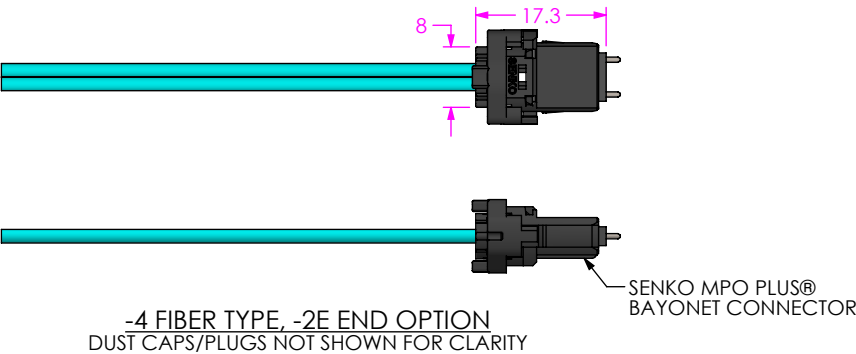
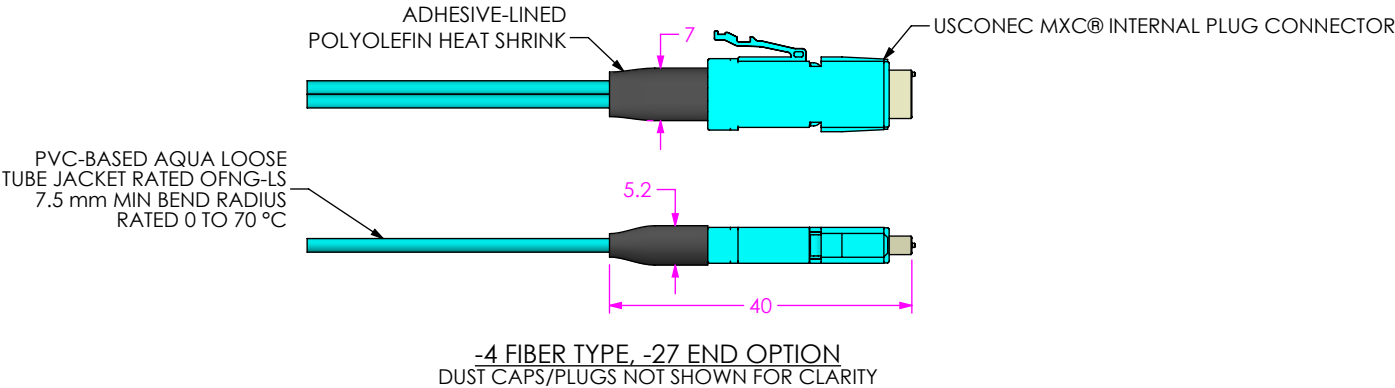
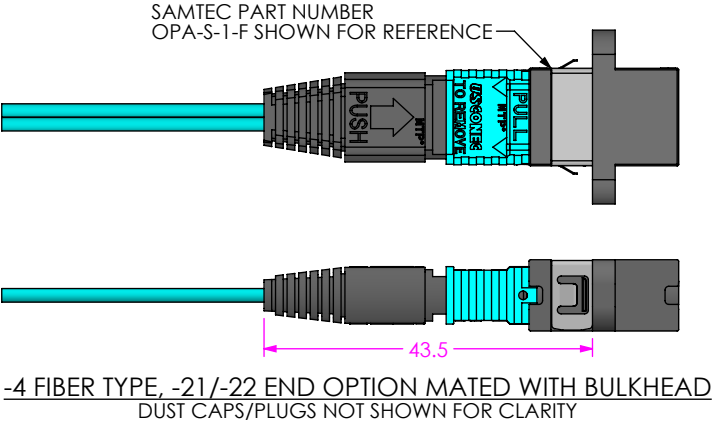
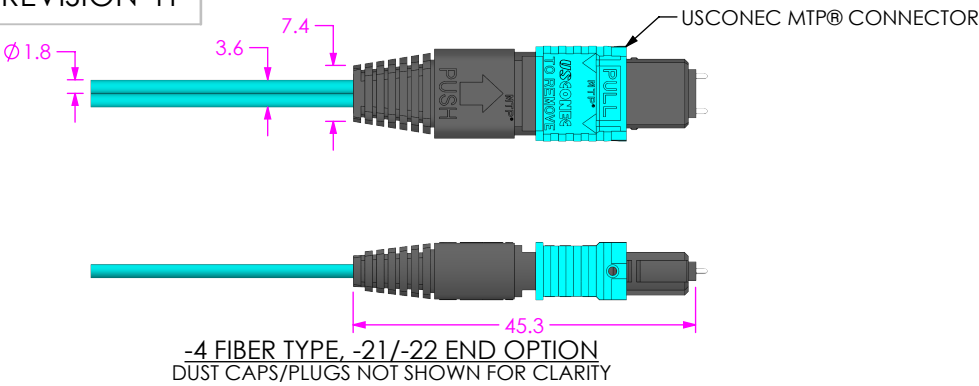
samtec

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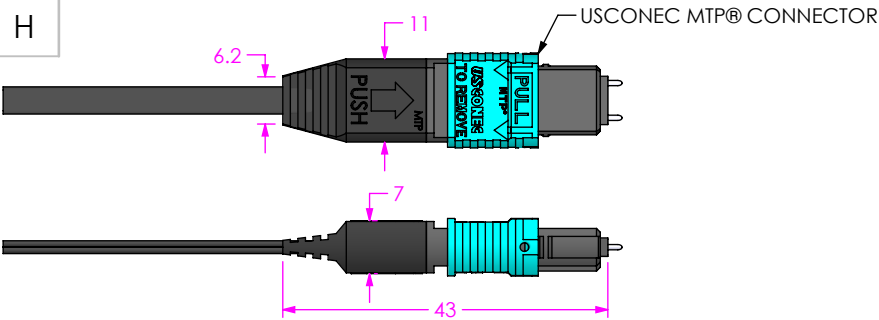
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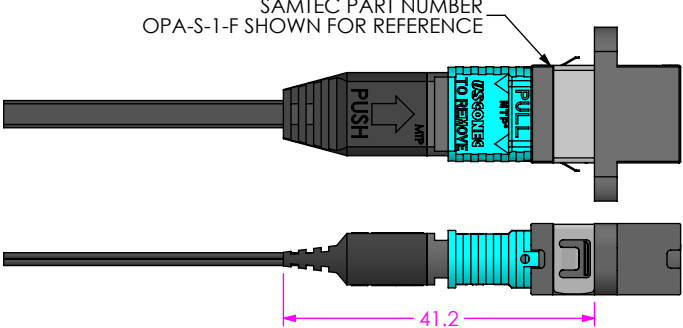
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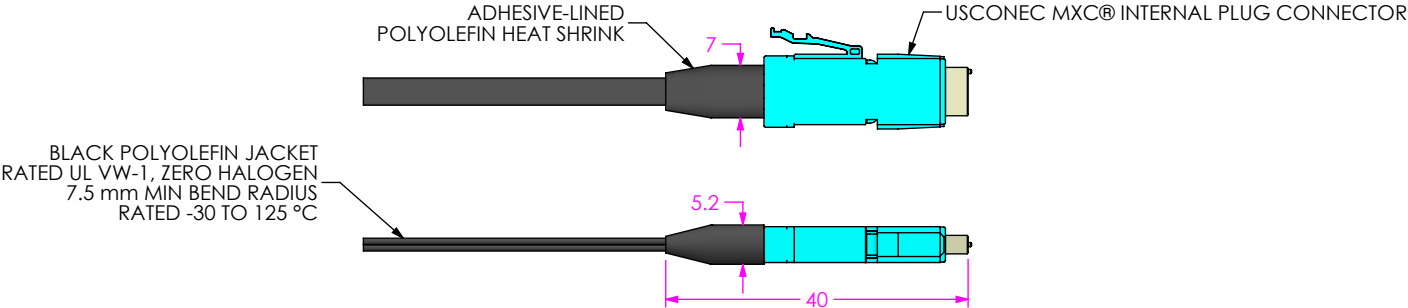
BY: AARON B. 07/21/2020 SHEET 7 OF 10



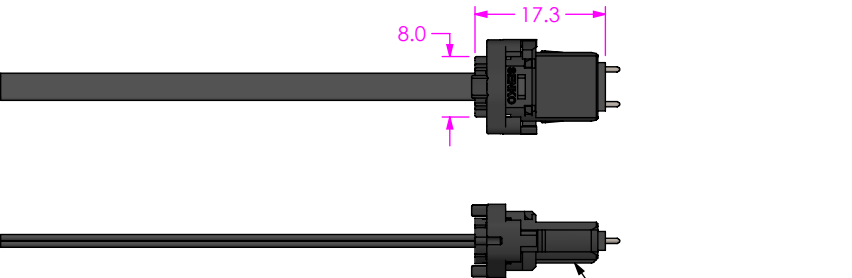
-5/-6 FIBER TYPE, -21/-22 END OPTION
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY



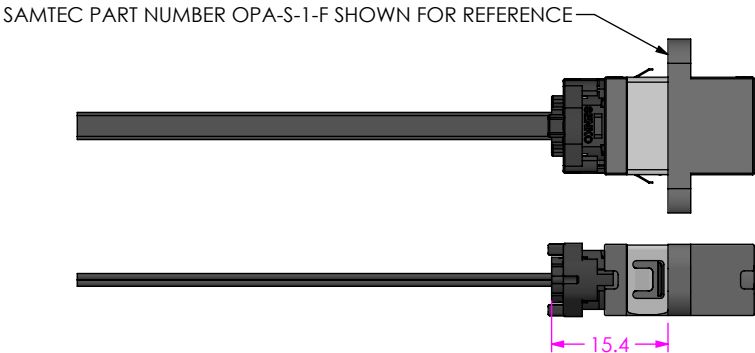
-5/-6 FIBER TYPE, -21/-22 END OPTION MATED WITH BULKHEAD
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY



-5/-6 FIBER TYPE, -27 END OPTION
DUST CAPS/PLUGS NOT SHOWN FOR CLARITY

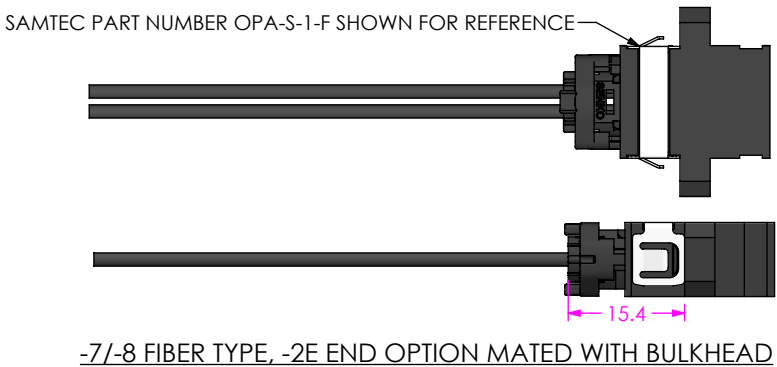
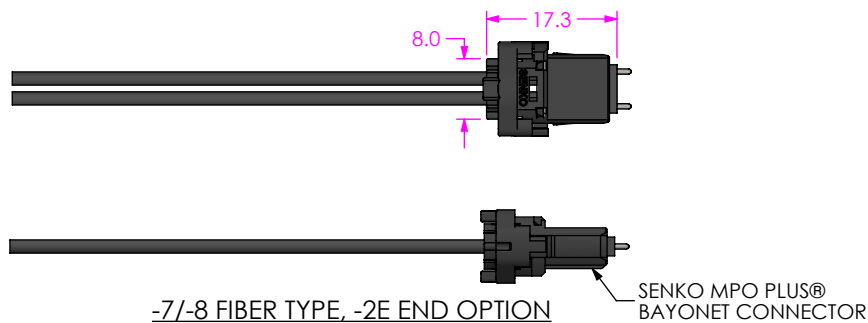
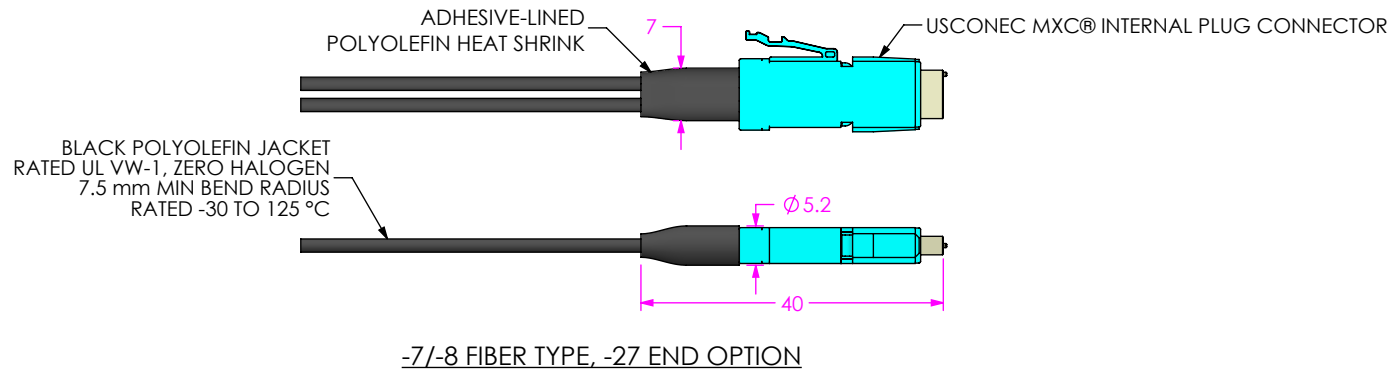
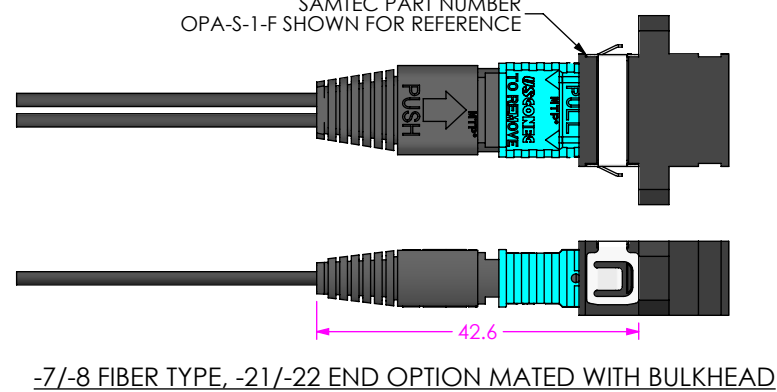
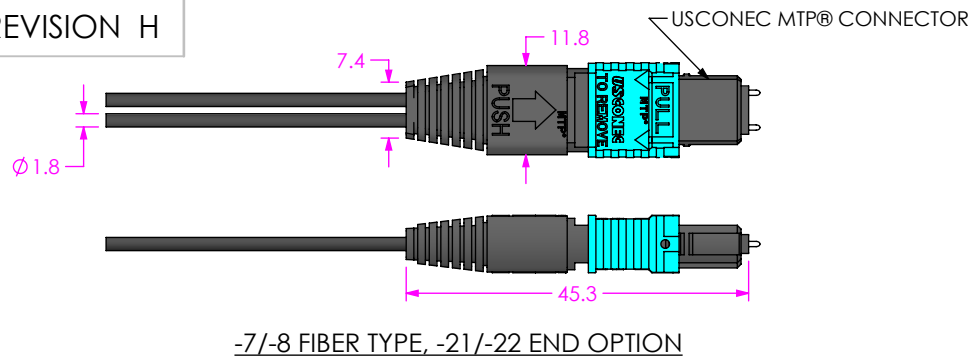


-5/-6 FIBER TYPE, -2E END OPTION
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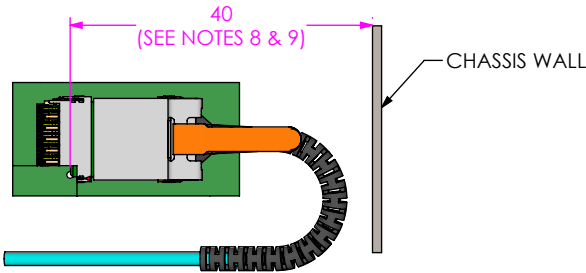


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DUST CAPS/PLUGS NOT SHOWN FOR CLARITY

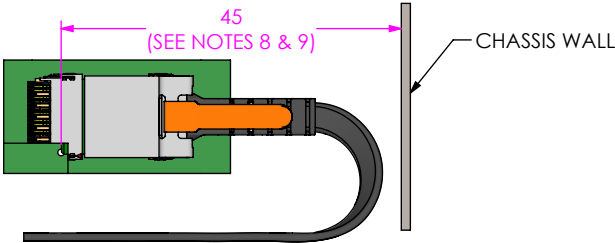
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DO NOT SCALE DRAWING SHEET SCALE: 1:1	DESCRIPTION: OPTICAL FIREFLY ASSEMBLY DWG. NO. ECUO-Y12-XX-XXX-0-X-X-X-XX BY: AARON B. 07/21/2020 SHEET 8 OF 10



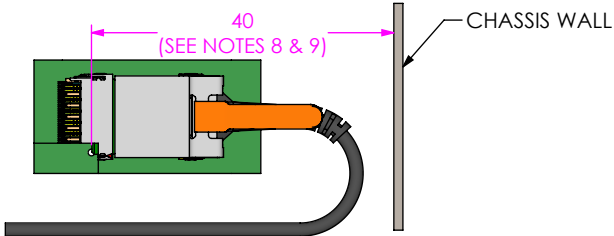
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DO NOT SCALE DRAWING	520 PARK EAST BLVD, NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail info@SAMTEC.com code 55322
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SHEET SCALE: 1:1	BY: AARON B. 07/21/2020 SHEET 9 OF 10



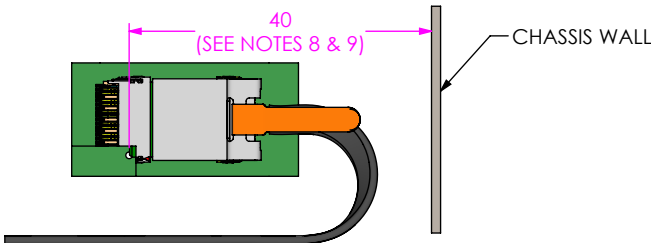
-4 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



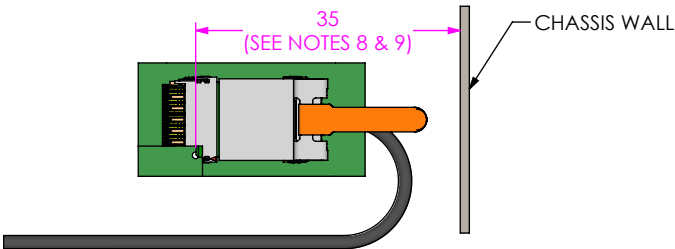
-5 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-7 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-6 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-8 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE

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BY: AARON B. 07/21/2020 SHEET 10 OF 10	