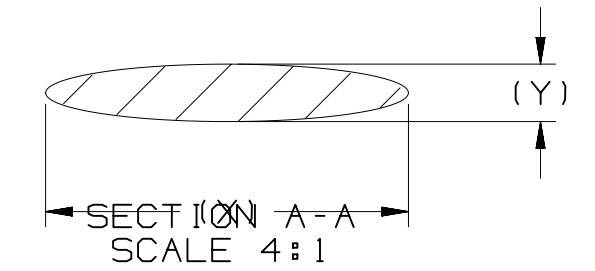
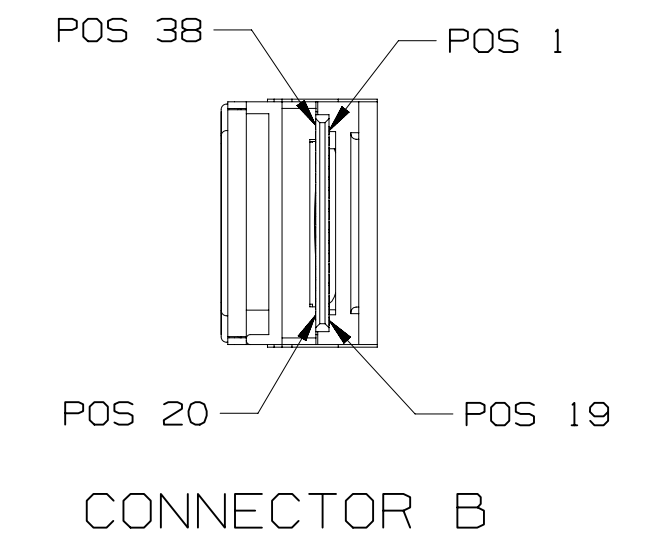
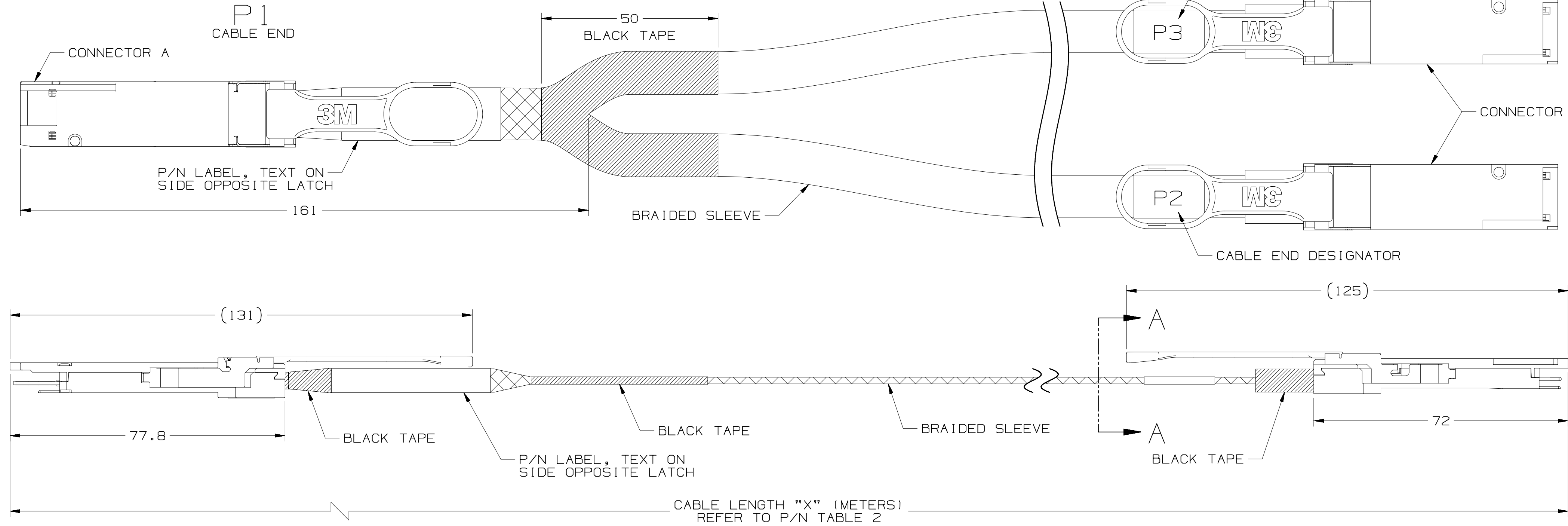
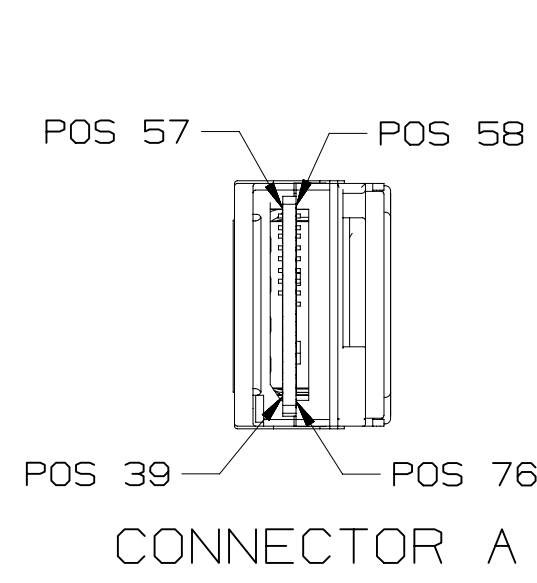


30AWG BRAIDED CABLE BUNDLE SHOWN



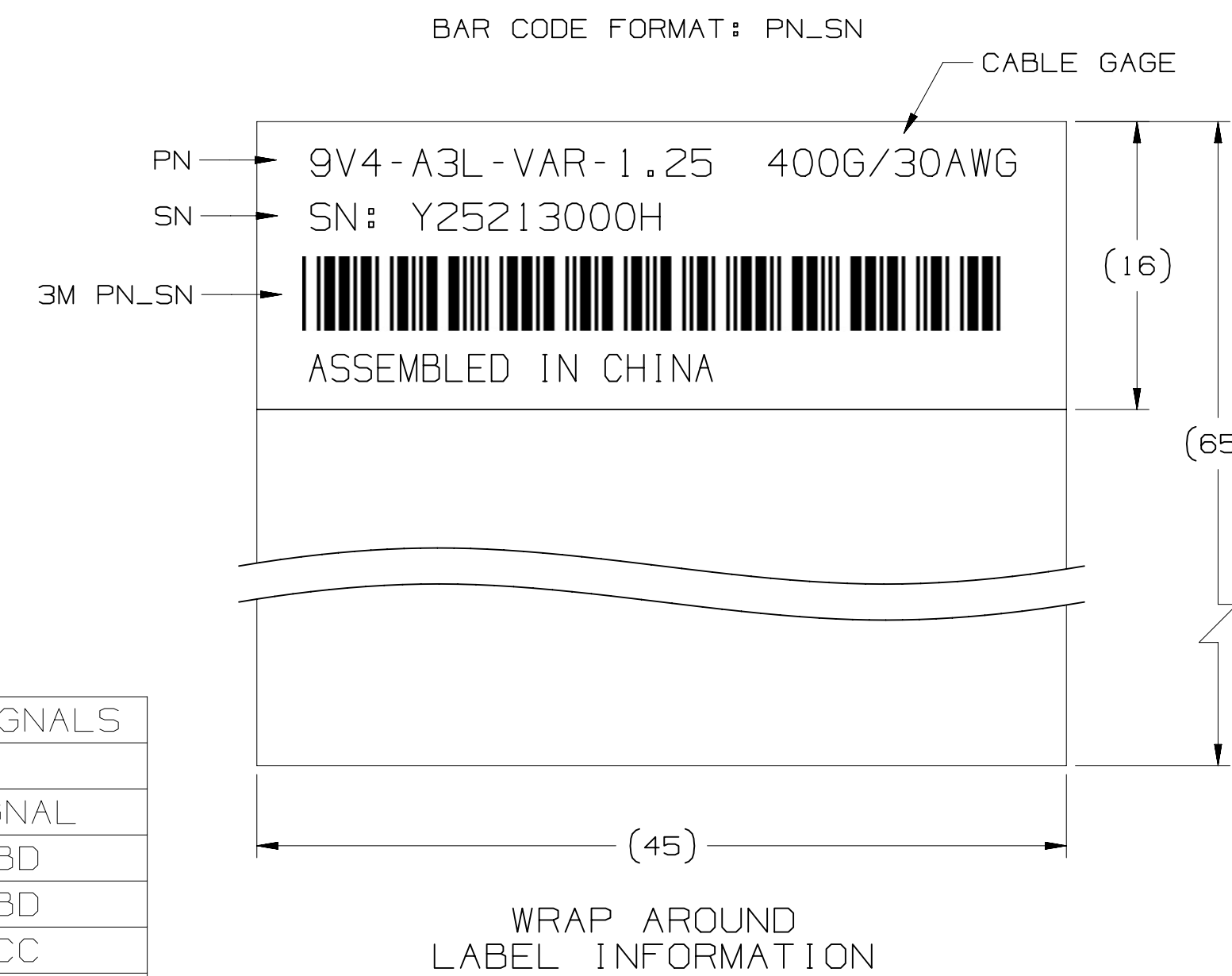
	X	Y
32AWG	9.0	1.5
30AWG	12.0	1.9
28AWG	15.0	2.3

P1 END		P2 END	
POS	SIGNAL	POS	SIGNAL
1	GND (TX)	20	GND (RX)
2	TX2n	21	RX2n
3	TX2P	22	RX2p
4	GND (TX)	23	GND (RX)
5	TX4n	24	RX4n
6	TX4P	25	RX4p
7	GND (TX)	26	GND (RX)
13	GND (RX)	32	GND (TX)
14	RX3p	33	TX3p
15	RX3n	34	TX3n
16	GND (RX)	35	GND (TX)
17	RX1p	36	TX1p
18	RX1n	37	TX1n
19	GND (RX)	38	GND (TX)
20	GND (RX)	1	GND (TX)
21	RX2n	2	TX2n
22	RX2p	3	TX2P
23	GND (RX)	4	GND (TX)
24	RX4n	5	TX4n
25	RX4p	6	TX4P
26	GND (RX)	7	GND (TX)
32	GND (TX)	13	GND (RX)
33	TX3p	14	RX3p
34	TX3n	15	RX3n
35	GND (TX)	16	GND (RX)
36	TX1p	17	RX1p
37	TX1n	18	RX1n
38	GND (TX)	19	GND (RX)

P1 END		P3 END	
POS	SIGNAL	POS	SIGNAL
39	GND (TX)	20	GND (RX)
40	TX6n	21	RX2n
41	TX6P	22	RX2p
42	GND (TX)	23	GND (RX)
43	TX8n	24	RX4n
44	TX8P	25	RX4p
45	GND (TX)	26	GND (RX)
51	GND (RX)	32	GND (TX)
52	RX7p	33	TX3p
53	RX7n	34	TX3n
54	GND (RX)	35	GND (TX)
55	RX5p	36	TX1p
56	RX5n	37	TX1n
57	GND (RX)	38	GND (TX)
58	GND (RX)	1	GND (TX)
59	RX6n	2	TX2n
60	RX6p	3	TX2P
61	GND (RX)	4	GND (TX)
62	RX8n	5	TX4n
63	RX8p	6	TX4P
64	GND (RX)	7	GND (TX)
70	GND (TX)	13	GND (RX)
71	TX7p	14	RX3p
72	TX7n	15	RX3n
73	GND (TX)	16	GND (RX)
74	TX5p	17	RX1p
75	TX5n	18	RX1n
76	GND (TX)	19	GND (RX)

POS	SIGNAL
8	ModSelL
9	ResetL
10	VccRx
11	SCL
12	SDA
27	ModPrsL
28	IntL
29	VccTx
30	VccI
31	LPMODE

POS	SIGNAL
46	TBD
47	TBD
48	VCC
49	TBD
50	TBD
65	NO CONNECT
66	TBD
67	VCC
68	VCC
69	TBD



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DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				MAR 13, 2024 REVISE NOTE 4	JNC	DLD
DIVISION		DIVISION CODE		DATE		
DO NOT SCALE DRAWING		EMSD		DATE		
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED		DATE		
INTERPRET PER ASME Y14.5 - 2018		INCHES		DATE		
MAX SURFACE ROUGHNESS		MILLIMETERS		DATE		
MARKED ONLY		0 ± 1		DATE		
		.00 ± 0.10		DATE		
		.000 ± .005		DATE		
		ANGLES ± 1°		DATE		

MODEL	OSFP-DD	REV.	A
CAGE NUMBER	D78-5100-2788-7	REV.	A
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TITLE 3M™ 400G QSFP-DD TO 2X QSFP56 DAC CABLE ASSEMBLIES			

178-5100-2788-7

3M™ 400G QSFP-DD to 2X QSFP56 Direct Attach Copper Cable Assemblies, 9V Series  
 Visit 3M.com/interconnect

NOTES:

- ORDERING INFORMATION: REFER TO TABLE 2 FOR DETAILS.
- REFER TO TABLE 2 FOR CABLE LENGTH AND WIRE AWG
- CABLE ASSEMBLY DESIGNED TO QSFP-DD MSA & IEEE 802.3cd SPECIFICATION
- MATERIALS:  
 BACKSHELLS: NICKEL PLATED ZINC DIE CAST  
 PULL TAB DELATCH: OVERMOLDED STAINLESS STEEL  
 BUNDLED CABLE: HALOGEN FREE<sup>1</sup>, RATED UL VW-1 PER UL STYLE 22504
- UNLESS OTHERWISE NOTED, REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.
- PRODUCT SPECIFICATION REFER TO 3M DOCUMENT: PS-0452
- CABLE RETURN LOSS PERFORMANCE IS VALID FOR CABLE ASSEMBLIES OF A MINIMUM OF 1.00 METER IN LENGTH. CABLE ASSEMBLIES LESS THAN 1.00 METER IN LENGTH MAY NOT ACHIEVE THE RETURN LOSS PERFORMANCE IN IEEE802.3cd. CABLE RETURN LOSS PERFORMANCE IS SUBJECT TO CHANGE WITH DIFFERENT CABLE ASSEMBLY LENGTHS. END USER WILL NEED TO DETERMINE WHETHER THIS PRODUCT IS SUITABLE FOR THEIR INTENDED APPLICATION.
- FOR CUSTOM LENGTHS CONTACT A 3M SALES REPRESENTATIVE
- EEPROM MAP FOLLOWS QSFP DD CMIS REV 4.0.
- REGULATORY INFORMATION:  
 VISIT 3M.com/regs

FOOT NOTE:

- CABLE IS UL HALOGEN FREE (HF) CERTIFIED IN ACCORDANCE WITH UL 2885, "OUTLINE OF INVESTIGATION FOR ACID GAS, ACIDITY AND CONDUCTIVITY OF COMBUSTED MATERIALS AND ASSESSMENT OF HALOGENS".

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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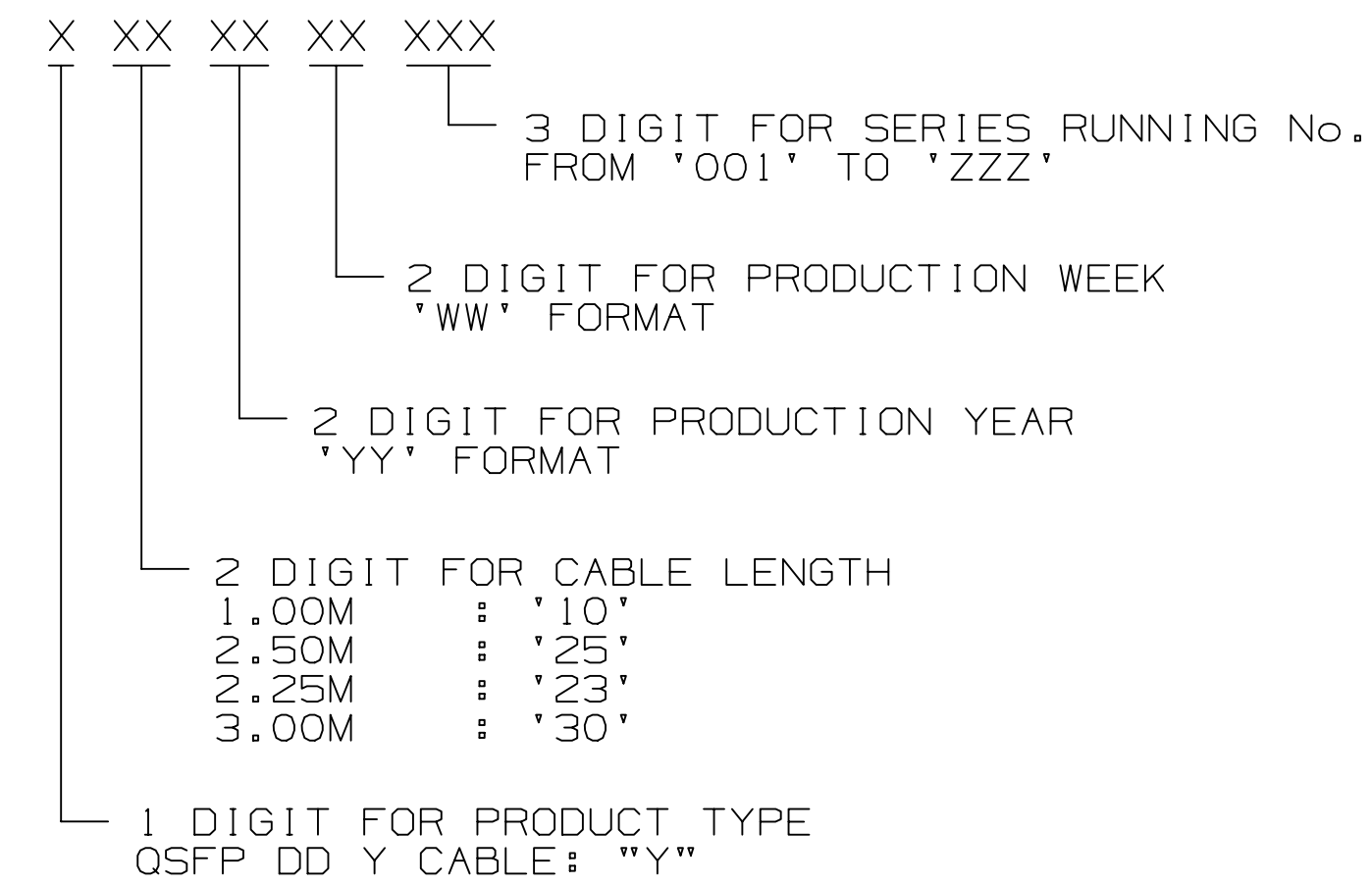
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 Austin, TX 78753-5380  
 1-800-225-5373  
[www.3M.com/interconnect](http://www.3M.com/interconnect)

ORDERING INFORMATION	CABLE GAUGE	ASSEMBLY LENGTH (m)	TOLERANCE +/- (mm)	CABLE BUNDLE SIZE (INCHES) EFFECTIVE DIAMETER MEASURED WITH OD TAPE
9V4-A2L-VAP-0.50	32AWG	0.50	15	0.26" +/- 0.02" OVAL BUNDLE
9V4-A2L-VAP-0.75		0.75		
9V4-A2L-VAP-1.00		1.00		
9V4-A3L-VAR-1.25	30AWG	1.25	25	0.31" +/- 0.02" OVAL BUNDLE
9V4-A3L-VAR-1.50		1.50		
9V4-A3L-VAR-1.75		1.75		
9V4-A3L-VAR-2.00		2.00		
9V4-A8L-VAS-2.25	28AWG	2.25	25	0.37" +/- 0.02" OVAL BUNDLE
9V4-A8L-VAS-2.50		2.50		
9V4-A8L-VAS-2.75		2.75		

SERIAL NUMBER DETAIL



DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		L	ECO	MAR 13, 2024 REVISE NOTE 4 PRODUCTION RELEASE	JNC	DLD
DRFT	DATE	DRFT	DATE	DRFT	DATE	DATE
		L	SCHMIDT	JUN 14, 2023		
CHKD	DATE	CHKD	DATE	CHKD	DATE	DATE
		D	BOYE	JUN 14, 2023		
DIVISION	DIVISION CODE					
	EMSD	<small>© 3M COPYRIGHT 2024          This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.</small>				
DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED	<b>3M™ 400G QSFP-DD TO 2X QSFP56 DAC CABLE ASSEMBLIES</b>			
THIRD ANGLE PROJECTION	TOLERANCES IN INCHES	TOLERANCES IN MILLIMETERS	CAGE NUMBER: <b>D78-5100-2788-7</b>			
INTERPRET PER ASME Y14.5 - 2018	.00 ±	0 ± .1	DRAWING NO.: <b>78-5100-2788-7</b>			
MAX SURFACE ROUGHNESS	.000 ±	.00 ± .2	REV. <b>A</b>			
MARKED SURFACES	.000 ±	.00 ± .10	MODEL: <b>OSFP-DD</b>			
MARKED ONLY	ANGLES ±1°	.000 ± .005	DET: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 2 OF 2			

DRAWING NUMBER: 78-5100-2788-7