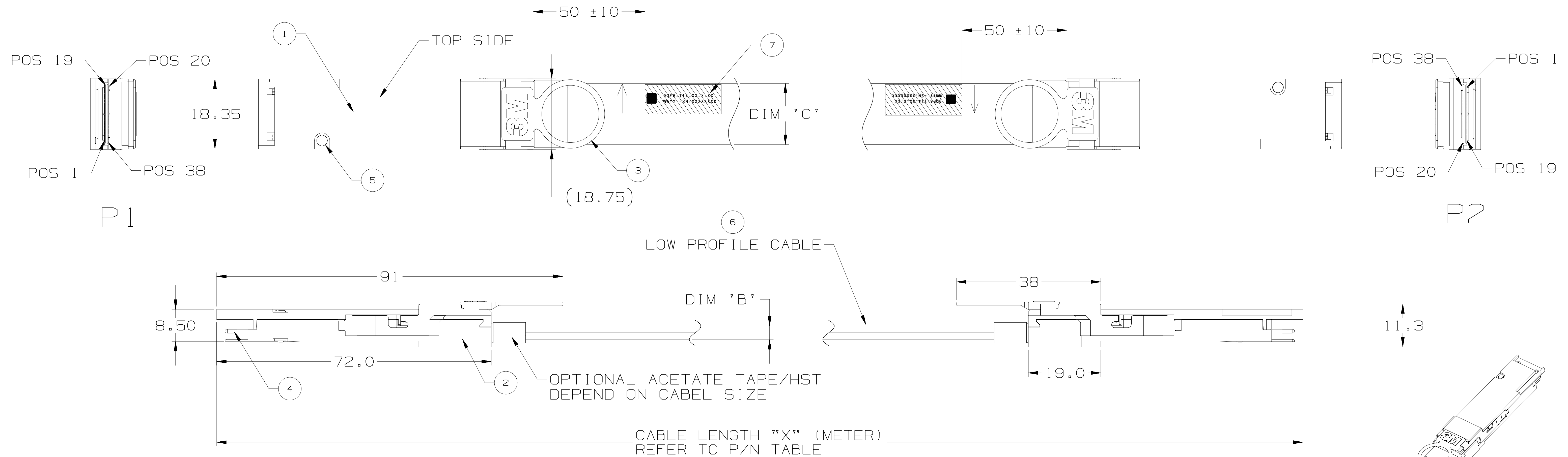


3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series
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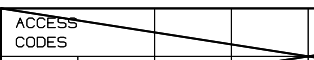


WIRING LIST			
P1 END		P2 END	
POS	SIGNAL	POS	SIGNAL
1	GND (TX)	20	GND (RX)
2	TX2n	21	RX2n
3	TX2P	22	RX2p
4	GND (TX)	23	GND (RX)
5	TX4n	24	RX4n
6	TX4P	25	RX4p
7	GND (TX)	26	GND (RX)
13	GND (RX)	32	GND (TX)
14	RX3p	33	TX3p
15	RX3n	34	TX3n
16	GND (RX)	35	GND (TX)
17	RX1p	36	TX1p
18	RX1n	37	TX1n
19	GND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

LOW SPEED SIGNALS	
P1 & P2	
POS	SIGNAL
8	ModSelL
9	ResetL
10	VccRx
11	SCL
12	SDA
27	ModPrsL
28	IntL
29	VccTx
30	VccI
31	LPMoDe

A diagram of a standard product label. It consists of a white rectangular area with a thin black border. Inside, on the left, is a solid black square. To the right of the square, the text "9QXX-114-XX-X.XX" is displayed on the top line, and "WWYY - SN:XXXXXXXXX" is displayed on the bottom line. Below the label diagram, the text "STANDARD PRODUCT LABEL DESCRIPTION" is written in all caps, followed by "(CUSTOM AVAILABLE UPON REQUEST)" in all caps.

7	PRODUCT LABEL	2
6	3M™ LOW PROFILE TWIN AXIAL CABLE	4
5	RIVET	2
4	PADDLE CARD	2
3	LATCH WITH PULL TAB	2
2	BOTTOM SHELL	2
1	UPPER SHELL	2
BALLOON ITEM	DESCRIPTION	QTY

A 0074404 JUN 22, 2017 NEW RELEASED				YL	YK
DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO
ADDL CODES		DPT Yum'long		ISSUE DATE	DESCRIPTION
		CHD Yum'long		DATE	DATE
DIVISION		DIVISION CODE		DATE	DATE
EMSD		DIVISION CODE		DATE	DATE
DO NOT SCALE		SCALE 2 1		TOLERANCES EXCEPT AS NOTED	
		INCHES		TITLE	
THIRD ANGLE PROJECTION		.00 ± .000 ± .0000		3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series	
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS 0 ± 1		CAGE NUMBER D 78-5100-2672-3	
MAX SURFACE ROUGHNESS 125 ☒ ALL SURFACES ☐ MARKED ONLY		.0 ± .2 ± .00 ± .000		DRAWING NO. REV. A	
ANGLES ±0.5°		DET. LISTS YES ☒ NO ☐		SHT 1 OF 2	

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NOTES:

1. ORDERING INFORMATION:
9QXX-114-XX-X.XX
- ASSEMBLY LENGTH X IN METERS SEE TABLE 1
- EEPROM MEMORY MAP
22= IEEE Std 802.3bJ-2014 100GBASE-CR4
XX= CUSTOMIZATION(SEE 3M SALES REP)
- AWG
0= 30AWG (only for below and 2 meters)
6= 26AWG (only for 2 meters and above)
- CABLE TYPE
H= 26AWG (PVC) WITH OUTER COPPER SHIELD
J= 30AWG (PVC) WITH OUTER COPPER SHIELD
K= 26AWG (PVC) WITH OUTER COPPER SHIELD (UL RATE -CL2)

2. REFER TO TABLE 1 FOR CABLE LENGTH, WIDTH, THICKNESS AND WIRE AWG
3. PCB PINOUT DESIGNED TO SFF8436 SPECIFICATION
4. CABLE ASSEMBLY DESIGNED TO SFF 8661 & IEEE 802.3bJ SPECIFICATION
5. JACKET DETAIL: BLACK COLOR PVC, OTHER COLOR OPTION CONTACT 3M SALES REP.
6. BULK CABLE MEET UL TEMPERATURE RATING -20C TO +80C
7. 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.
8. PRODUCT SPECIFICATION REFER TO 3M DOCUMENT: 78-5102-0262-1
9. 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 IEEE802.3bJ. 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.
- 10.FOR CUSTOM LENGTHS CONTACT A 3M SALES REPRESENTATIVE

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

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Austin, TX 78726-9000
1-800-225-5373
www.3M.com/interconnect

TABLE 1

TABLE 1						
ORDERING INFORMATION	ASSY LENGTH= "X" (m)	CABLE SIZE	WITH COPPER SHIELD	LENGTH TOLERANCE (mm)	B NOMINAL (mm)	C NOMINAL (mm)
9QJ0-114-22-0.50	0.50	30AWG	YES	+10 / -0	(2.8)	(15.0)
9QJ0-114-22-1.00	1.00	30AWG	YES	+50 / -0		
9QJ0-114-22-2.00	2.00	30AWG	YES			
9QH6-114-22-2.00	2.00	26AWG	YES		(3.8)	(16.0)
9QH6-114-22-3.00	3.00	26AWG	YES			
9QH6-114-22-4.00	4.00	26AWG	YES			
9QK6-114-22-2.50	2.50	26AWG	YES	+50 / 0	(6.0)	(18.5)
9QK6-114-22-3.50	3.50	26AWG	YES			

DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
XREF CODES				DR1 Yunlong		DATE MAR 02,2017		EFC CHEN		DATE MAR 02,2017			
DIVISION		DIVISION CODE		CHKD Yunlong		DATE MAR 02,2017		APPR S BANDHU		DATE MAR 02,2017			
EMSD				3M		3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2017		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.			
DO NOT SCALE DRAWING		SCALE 2 1		TOLERANCES EXCEPT AS NOTED		INCHES 0 ±.1		MILLIMETERS 0 ±.1		TITLE		3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS 125 / 0.00 ±.10		CAGE NUMBER D78-5100-2672-3		DRAWING NO.		REV.		A	
125 / 0.00 ±.10		ALL SURFACES MARKED ONLY		ANGLES ±0.5°		MODEL		DET LISTS		YES NO		SHT 2 OF 2	