



3M™ 100G QSFP28 DIRECT ATTACH COPPER CABLE ASSEMBLIES, 9Q SERIES

NOTES:

1. ORDERING INFORMATION:

9QXX-114-XX-X.XX

ASSEMBLY LENGTH X IN METERS SEE TABLE 1

EEPROM MEMORY MAP

22= IEEE Std 802.3b<sub>J</sub>-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

J= 30AWG UTJ PVC JACKET WITH SHIELD (UP TO 2 METERS)  
N= 30AWG CL2 JACKET WITH SHIELD (UP TO 2 METERS)  
H= 26AWG UTJ PVC JACKET WITH SHIELD (2 TO 4.5 METERS)  
M= 26 AWG CL2 JACKET WITH SHIELD (2 TO 4.5 METERS)

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 802.3b<sub>J</sub> SPECIFICATION

5. JACKET FOR CABLE TYPE J AND H: PVC, COLOR: BLACK  
JACKET FOR CABLE TYPE N AND M: HALOGEN-FREE\* CL2, COLOR: BLACK  
METAL SHELL: NICKEL PLATED ZINC ALLOY  
PULL TAB: HALOGEN-FREE\* THERMOPLASTIC, COLOR: BLACK  
PCB FOR CABLE TYPE J AND H: HALOGENATED FLAME RETARDANT  
PCB FOR CABLE TYPE N AND M: HALOGEN-FREE\* FLAME RETARDANT  
ASSEMBLIES WITH CABLE TYPE N AND M ARE FULLY HALOGEN-FREE\*

6. 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.

7. PRODUCT SPECIFICATION REFER TO 3M DOCUMENT: 78-5102-0262-1

8. 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 IEEE802.3b<sub>J</sub>. 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.

9. FOR CUSTOM LENGTHS CONTACT A 3M SALES REPRESENTATIVE

10 \* HALOGEN-FREE IS DEFINED AS BOTH (1) NO HALOGEN COMPOUNDS ARE INTENTIONALLY ADDED TO THE PRODUCT OR USED IN THE MANUFACTURING PROCESS FOR THE PRODUCT, AND (2) ANY IMPURITIES PRESENT ARE LESS THAN 900 PPM BROMINE, LESS THAN 900 PPM CHLORINE, AND/OR LESS THAN 1500 PPM TOTAL BROMINE AND CHLORINE.

TABLE 1

ORDERING INFORMATION	ASSY LENGTH="X" (m)	CABLE SIZE	LENGTH TOLERANCE (mm)	B NOMINAL (mm)	C NOMINAL (mm)
9QJ0-114-22-0.50	0.50	30AWG	+10/-0	(2.8)	(15.0)
9QJ0-114-22-1.00	1.00	30AWG	+50/-0		
9QJ0-114-22-2.00	2.00	30AWG			
9QH6-114-22-2.00	2.00	26AWG		(3.8)	(16.0)
9QH6-114-22-3.00	3.00	26AWG			
9QH6-114-22-4.00	4.00	26AWG	+50/0	(3.5)	(17.8)
9QN0-114-22-1.00	1.00	30AWG CL2			
9QM6-114-22-3.00	3.00	26AWG CL2			

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

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DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD	
		DRFT	YUNLON	DATE	MAR 02, 2017	DATE	MAR 02, 2017
		CHKD	YUNLON	DATE	MAR 02, 2017	DATE	MAR 02, 2017
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DO NOT SCALE DRAWING	SCALE 2/1	TOLERANCES EXCEPT AS NOTED		INCHES .00 ± .000 ± .0000 ± MILLIMETERS 0 ±.1 .00 ±0.10 .000 ±0.005 ANGLES ±			
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	MAX SURFACE ROUGHNESS		TITLE 100G QSFP28 DIRECT ATTACH COPPER CABLE ASSEMBLIES, 9Q SERIES CAGE NUMBER DRAWING NO. 78-5100-2672-3 MODEL QSFP28			
		MARKED ONLY		DET IS1s <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 2 OF 2			

78-5100-2672-3  
DRAWING NUMBER