

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 802.3bJ-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

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 802.3bJ 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 IEEE802.3bJ. 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.

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.


11. CE AND WEEE LABEL.
CE HEIGHT: MUST BE AT LEAST 5MM
WEEE HEIGHT: MUST BE AT LEAST 7MM.

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			
9QN0-114-22-2.00	2.00	30AWG CL2			
9QM6-114-22-3.00	3.00	26AWG CL2	(6.0)	(18.5)	

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3M.com/interconnect>

3M IS A TRADEMARK OF 3M COMPANY.
FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD	
		E	108495	JAN 12, 2023 ADDED 2M 30AWG CL2 VERSION TO TABLE 1	JNC	MML	
		D	91871	JUL 16, 2020 ADD NOTE 11 AND LABELS	JNC	DLD	
		C	86392	SEP 26, 2019 REVISE NOTES	JNC	DLD	
		B	84769	JUL 17, 2019 ADDED CL2 CABLE OPTIONS	JNC	DLD	
		A	74404	JUN 22, 2017 NEW RELEASE	YL	YL	
DRFT	YUNLONG	DATE	MAR 02, 2017	DRFT	YUNLONG	DATE	MAR 02, 2017
DIVISION	EMSD	DATE	MAR 02, 2017	APPR	S. BANDHU	DATE	MAR 02, 2017
DO NOT SCALE DRAWING	SCALE 2/1	TOLERANCES EXCEPT AS NOTED	 © 3M COPYRIGHT 2023 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.				
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	MILLIMETERS 0 ± 1	TITLE 100G QSFP28 DIRECT ATTACH COPPER CABLE ASSEMBLIES, 9Q SERIES				
MAX SURFACE ROUGHNESS	ALL SURFACES	INCHES .00 ± .0000	CAGE NUMBER D 78-5100-2672-3				
MARKED ONLY	ANGLES	MILLIMETERS .00 ± 0.2 .00 ± 0.10 .000 ± 0.005	DRAWING NO. 78-5100-2672-3				
			MODEL QSFP28				
			DET YES NO SHT 2 OF 3				

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

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

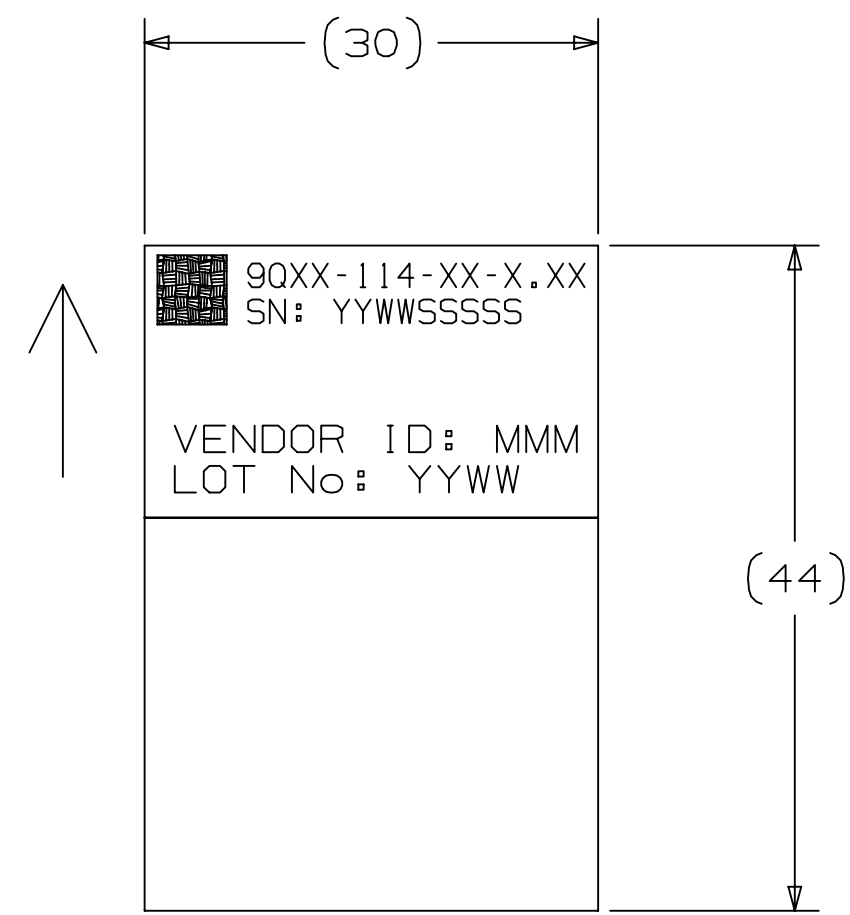
Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product in accordance with all applicable instructions and with appropriate safety equipment, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement or repair of the 3M product or refund of the purchase price.

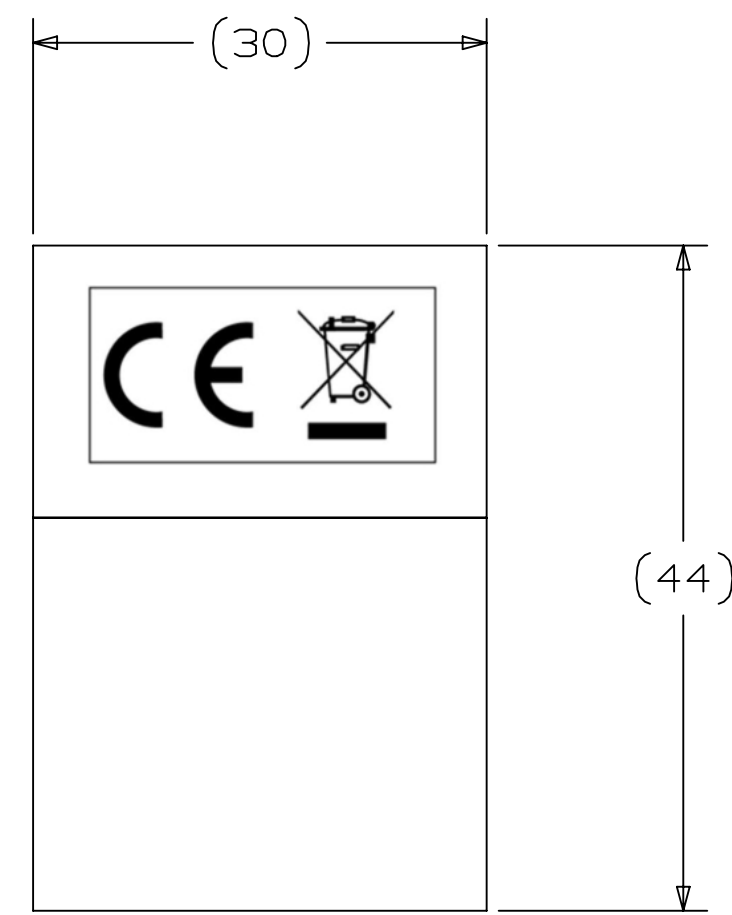
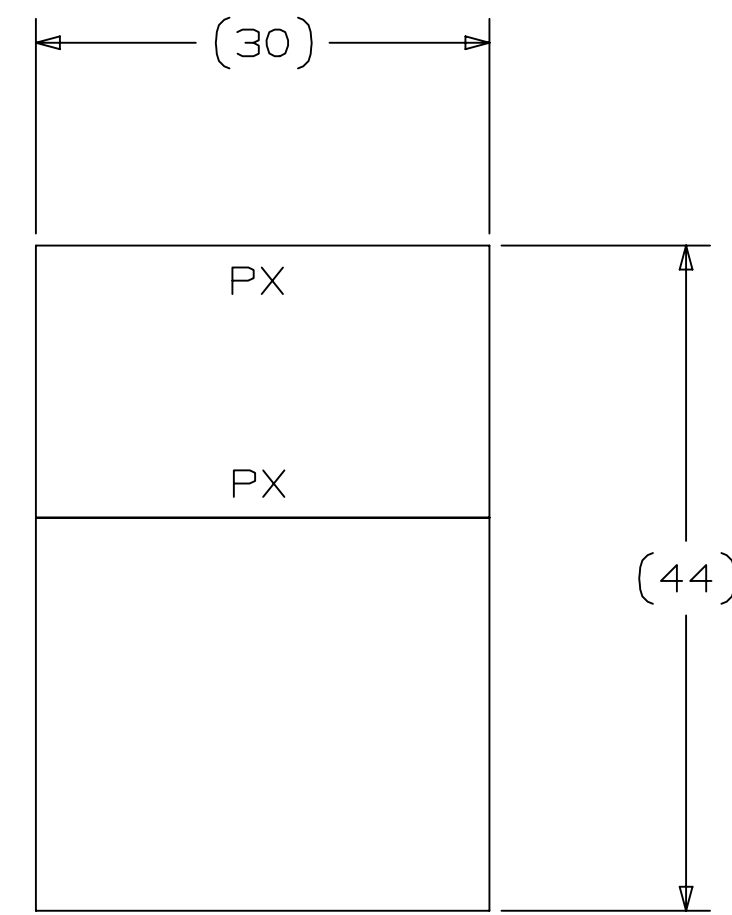
Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by applicable law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: For industrial use only. Not intended, labeled or packaged for consumer sale or use.

3M Company
 Electronics Materials Solutions Division
 13011 McCallen Pass, Bldg. C
 Austin, TX 78753-5380
 1-800-225-5373
www.3M.com/interconnect



LABEL DETAIL
 9QXX-114-XX-X.XX (text string)
 SN: YYWWSSSSS (text string)
 YY = 2 digit year
 WW = 2 digit week
 SSSSS = 5 digit serialization (00001-99999)
 BAR CODE IS: "9QXX-114-XX-X.XX" SPACE "YYWWSSSSS"



CE WEEE LABEL
 (SEE NOTE 11)

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
E	108495	JAN 12, 2023 ADDED 2M 30AWG CL2 VERSION TO TABLE 1	JNC	MML
D	91871	JUL 16, 2020 ADD NOTE 11 AND LABELS	JNC	DLD
C	86392	SEP 26, 2019 REVISE NOTES	JNC	DLD
B	84769	JUL 17, 2019 ADDED CL2 CABLE OPTIONS	JNC	DLD
A	74404	JUN 22, 2017 NEW RELEASE	YL	YL

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		DRFT	YUNLONG	DATE	MAR 02, 2017	CHKD
		DATE	MAR 02, 2017	DRFT	E. CHEN	DATE
		DATE	MAR 02, 2017	APPV	S. BANDHU	DATE
		DATE	MAR 02, 2017			
DIVISION		DIVISION CODE		EMSD		
DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION	INCHES	MILLIMETERS		100G QSFP28 DIRECT ATTACH COPPER CABLE ASSEMBLIES, 9Q SERIES		
INTERPRET PER ASME Y14.5 - 2018	0 ± 1	0 ± 1		CAGE NUMBER D78-5100-2672-3		
MAX SURFACE ROUGHNESS	.00 ± 0.2	.00 ± 0.10		DRAWING NO. 78-5100-2672-3		
MARKED ONLY	.000 ± 0.005	.000 ± 0.005		MODEL 05FP28		
	ANGLES	ANGLES		DET <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 3 OF 3		

78-5100-2672-3
DRAWING NUMBER