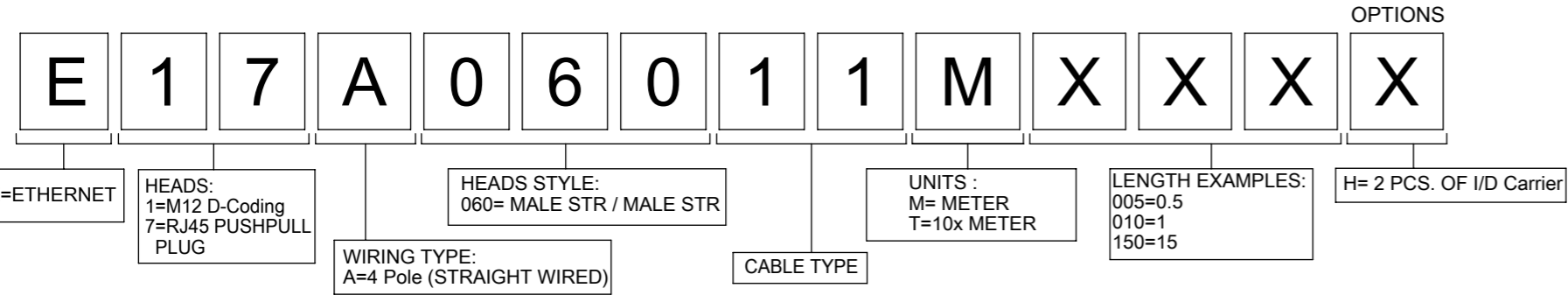
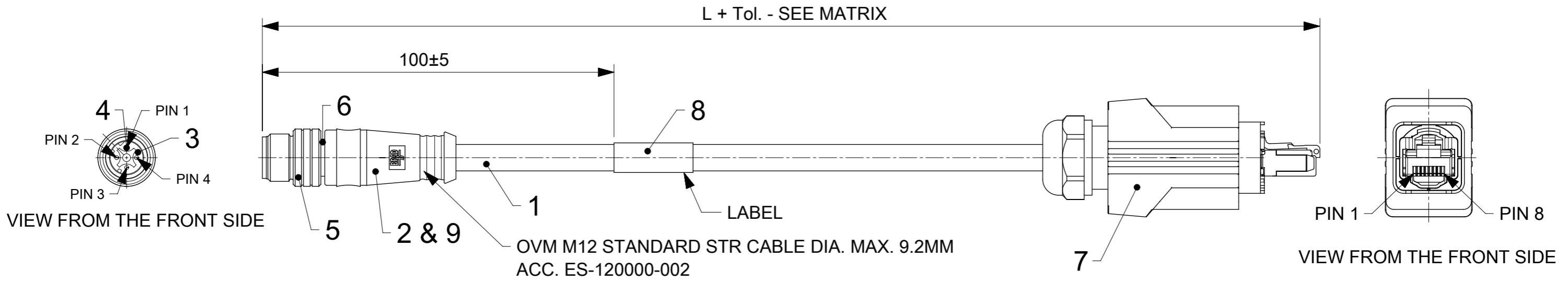
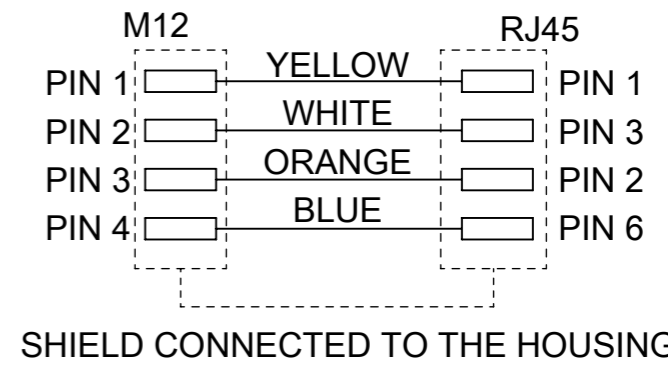


# PART No MATRIX



## WIRING DIAGRAM



### NOTES:

- MATERIAL : SEE TABLE
- FINISHES : SEE TABLE
- CABLE : #22x2x2 SHIELDED PUR
- ELECTRICAL DATA:  
 ACCORDING TO ETHERNET STANDARD  
 MAX. VOLTAGE : 30V  
 MAX. CURRENT : 1.5A
- ENVIRONMENTAL :  
 PROTECTION CLASS RJ45 : IP20  
 PROTECTION CLASS M12 : IP67 in mated and locked position  
 OPERATING TEMPERATURE : -25°C TO +85°C
- WRAP LABEL IS MARKED WITH P/N DATE CODE, VOLTAGE & AMPERAGE.
- ASSEMBLY IS RoHS COMPLIANT.

### BOM

ITEM	QTY	DESCRIPTION	MATERIAL	FINISH/COLOR
8	1	LABEL WRAP	VINYL	YELLOW
7	1	RJ45 Push Pull Plug Connector	-	-
6	1	M12 SHIELD SLEEVE	BRASS	NICKEL PLATED
5	1	COUPLING NUT M12 MA	BRASS	NICKEL PLATED
4	4	CONTACT 10 MA	BRONZE	GOLD OVER NICKEL PLATED
3	1	INSERT M12 MA 4P DC	PUR	BLACK
2	-	MOULDING MATERIAL	TPU	BLACK
1	-	CABLE 2x2x22AWG	PUR	GREEN

CABLE LENGTH TOLERANCES	LENGTH	TOLERANCE
	0m-1m	+40 mm
	>1m-5m	+60 mm
	>5m-10m	+80 mm
	>10m-20m	+140 mm
	>20m-30m	+160 mm
	>30m	+1% length

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

FUNCTIONAL SYMBOLS:  $\nabla/\bar{A}$  = 0,  $\nabla/\bar{E}$  = 0,  $\nabla/\bar{V}$  = 0

DIVISIONAL SYMBOLS

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

CURRENT REV DESC: CABLE AND STDS UPDATED

EC NO: 672185  
 DRWN: MDHARMANTI 2021/07/22  
 CHK'D: RSILLER 2021/09/20  
 APPR: RSILLER 2021/09/20

INITIAL REVISION:  
 DRWN: MDHARMANTI 2021/07/22  
 APPR: RSILLER 2021/09/20

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 120108

MATERIAL NUMBER: SEE MATRIX

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 2

DOCUMENT NUMBER: 1201080204

DOC TYPE: PSD

DOC PART: 000

REVISION: A

**molex**

M12-4P(D)-MM-ST/PUSHPULL RJ XM

PRODUCT CUSTOMER DRAWING

PHYSICAL CHARACTERISTICS:	
CONDUCTOR PAIR SIZE	#22 (7 X #30) BARE COPPER ALLOY
WIRE CROSS SECTION	0.34mm <sup>2</sup> (NOM.)
INSULATION TYPE	POLYOLEFIN INSULATION
FOIL SHIELD	PLASTIC/ALUMINIUM FOIL WITH FOIL OUT
BRAID SHIELD	TINNED COPPER BRAID WITH MIN. 85% COVERAGE
OUTSIDE DIAMETER	∅ 6.8mm (.267")
JACKET INSULATION	GREEN PUR
PROFINET CABLE STYLE	TYPE C

MECHANICAL CHARACTERISTICS FOR C-TRACK APPLICATIONS:	
MIN. BENDING RADIUS	15xCABLE DIAMETER
OPERATING WAY	5M OF TRAVEL
SPEED	200M/min.
MAX. C-TRACK CYCLES	5 MILLION
ACCELERATION	MAX. 2m/s

ENVIRONMENTAL CHARACTERISTICS:	
FLAME RESISTANCE	FT2
AGENCY CERTIFICATIONS	UL AND USA
OPERATION TEMPERATURE	-20°C TO 60°C
STORAGE TEMPERATURE	-40°C TO 80°C
HALOGEN FREE	IEC 60754-1
SILICONE FREE	YES
CFC-FREE	YES

IMPRINT: x N x 2x2xAWG 22/7-9H(ST)C11Y INDUSTRIAL ETHERNET  
 PROFINET TYP C E48408 cULus AWM STYLE 20236  
 AWM I/II A/B 80C 30 V FT1

**PART LIST**

MOLEX PN	DESCRIPTION
1201080204	M12-4P(D)-MM-ST/PUSHPULL RJ 2M
1201080208	M12-4P(D)-MM-ST/PUSHPULL RJ 20M
1201080209	M12-4P(D)-MM-ST/PUSHPULL RJ 23M
1201080210	M12-4P(D)-MM-ST/PUSHPULL RJ 25M
1201080211	M12-4P(D)-MM-ST/PUSHPULL RJ 30M
1201080212	M12-4P(D)-MM-ST/PUSHPULL RJ 35M
1201080214	M12-4P(D)-MM-ST/PUSHPULL RJ 1M
1201080215	M12-4P(D)-MM-ST/PUSHPULL RJ .5M
1201080216	M12-4P(D)-MM-ST/PUSHPULL RJ 5M
1201080217	M12-4P(D)-MM-ST/PUSHPULL RJ 4M
1201080279	M12-4P(D)-MM-ST/PUSHPULL RJ 8M
1201080299	M12-4P(D)-MM ST/PUSH PULL RJ45 3M
1201088124	M12-4P(D)-MM-ST/PUSHPULL RJ 6M
1201088125	M12-4P(D)-MM-ST/PUSHPULL RJ 7M
1201088126	M12-4P(D)-MM-ST/PUSHPULL RJ 9M
1201088127	M12-4P(D)-MM-ST/PUSHPULL RJ 15M
1201088656	M12-4P(D)-MM-ST/PUSHPULL RJ 10M

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: CABLE AND STDS UPDATED		<b>molex</b>
	$\nabla_A = 0$ $\nabla_B = 0$ $\nabla_C = 0$	DIMENSION UNITS: <b>mm</b> SCALE: <b>1:1</b> GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 0.5° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.13 1 PLACE ± 0.25 0 PLACES ±	EC NO: 672185 DRWN: MDHARMANTI 2021/07/22 CHK'D: RSILLER 2021/09/20 APPR: RSILLER 2021/09/20	<b>M12-4P(D)-MM-ST/PUSHPULL RJ XM</b>  PRODUCT CUSTOMER DRAWING	
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIRD ANGLE PROJECTION 	DRAWING: <b>A3-SIZE</b> SERIES: <b>120108</b>	INITIAL REVISION: DRWN: MDHARMANTI 2021/07/22 APPR: RSILLER 2021/09/20	DOCUMENT NUMBER: <b>1201080204</b> DOC TYPE: PSD DOC PART: 000 REVISION: <b>A</b>	MATERIAL NUMBER: <b>120108</b> CUSTOMER: <b>GENERAL MARKET</b> SHEET NUMBER: <b>2 OF 2</b>