

PART MATRIX

E 1 1 A 0 6 0 1 6 M X X X X

E = ETHERNET/
EtherCat

HEADS:
1=M12 D-Coding
1=M12 D-Coding

HEADS STYLE:
060 = MALE STR/MALE STR

CABLE TYPE :

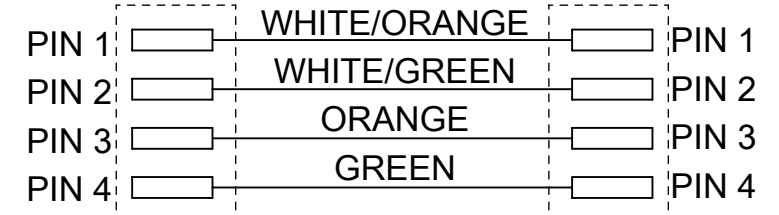
Units:
M = Meter
T = 10x Meter

Length
Examples:
005 = 0.5 m
010 = 1 m
050 = 5 m
100 = 10 m
150 = 15 m

H=2 PCS
ID CARRIER

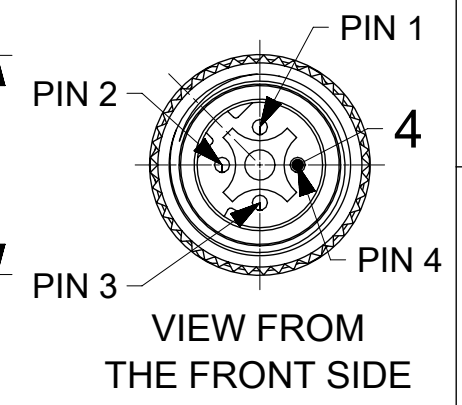
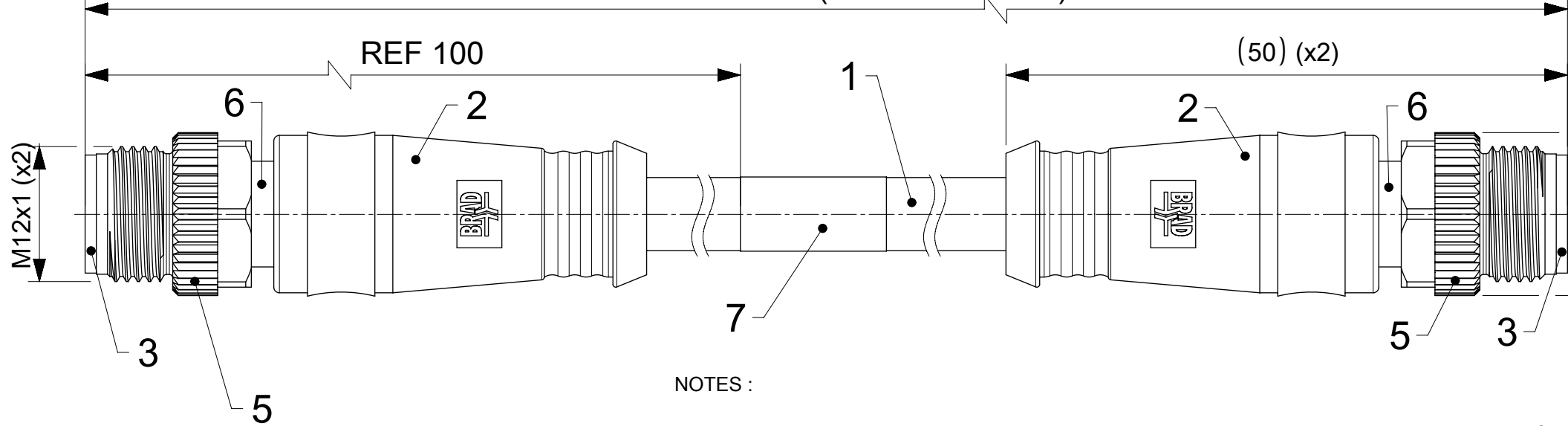
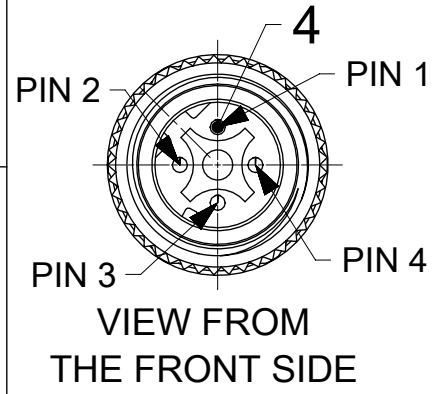
WIRING TYPE:
A=4 Pole
(STRAIGHT WIRED)

WIRING DIAGRAM



L+Tol. (SEE PART LIST)

SHIELD CONNECTED TO THE HOUSING



NOTES :

ELECTRICAL DATA :
VOLTAGE RATING : 30V AC/DC
AMPERAGE RATING : 1.5A
INSULATION RESISTANCE : 10⁹Ω MIN.
MATING CYCLES : MIN. 100

ENVIRONMENTAL :
PROTECTION : IP67 IN MATED AND LOCKED POSITION
OPERATING TEMPERATURE : -25°C TO +85°C

TRANSMISSION CHARACTERISTICS ACCORDING TO ISO/IEC 11801 CATEGORY 5e
PATCH CORD PROFINET TYPE C

CABLE SPECIFICATION
CONDUCTOR:
MATERIAL: BARE COPPER
SECTION: 0.22mm² - 24AWG
INSULATION:
COMPOUND: PE
DIAMETER: Ø1.20mm
COLOR: WHITE/ORANGE, WHITE/GREEN,
ORANGE, GREEN
JACKET:
COMPOUND: TPU
COLOR: TEAL
DIAMETER: Ø6.5mm

PART LIST

| MOLEX PN | ENGINEERING NO | L+Tol.[mm] |
|------------|----------------|------------|
| 1201088438 | E11A06016M380 | 38000 |
| 1201088420 | E11A06016M010 | 1000 |
| 1201088421 | E11A06016M020 | 2000 |
| 1201088422 | E11A06016M030 | 3000 |
| 1201088423 | E11A06016M040 | 4000 |
| 1201088424 | E11A06016M050 | 5000 |
| 1201088425 | E11A06016M060 | 6000 |
| 1201088426 | E11A06016M080 | 8000 |
| 1201088427 | E11A06016M100 | 10000 |
| 1201088428 | E11A06016M120 | 12000 |
| 1201088429 | E11A06016M150 | 15000 |
| 1201088430 | E11A06016M180 | 18000 |
| 1201088431 | E11A06016M200 | 20000 |
| 1201088432 | E11A06016M230 | 23000 |
| 1201088433 | E11A06016M250 | 25000 |
| 1201088434 | E11A06016M270 | 27000 |
| 1201088435 | E11A06016M300 | 30000 |
| 1201088436 | E11A06016M340 | 34000 |
| 1201088437 | E11A06016M350 | 35000 |
| 1201088438 | E11A06016M380 | 38000 |
| 1201088439 | E11A06016M400 | 40000 |
| 1201088440 | E11A06016M450 | 45000 |

| MOLEX PN | ENGINEERING NO | L+Tol.[mm] |
|------------|----------------|------------|
| 1201088441 | E11A06016M500 | 50000 |
| 1201088442 | E11A06016M550 | 55000 |
| 1201088443 | E11A06016M600 | 60000 |
| 1201088444 | E11A06016M650 | 65000 |
| 1201088445 | E11A06016M700 | 70000 |
| 1201088446 | E11A06016M750 | 75000 |
| 1201088447 | E11A06016M760 | 76000 |
| 1201088448 | E11A06016M800 | 80000 |
| 1201088449 | E11A06016M850 | 85000 |
| 1201088506 | E11A06016M070 | 7000 |
| 1201088509 | E11A06016M420 | 42000 |
| 1201088510 | E11A06016M530 | 53000 |
| 1201088511 | E11A06016M570 | 75000 |
| 1201088525 | E11A06016M900 | 90000 |
| 1201088585 | E11A06016M460 | 46000 |
| 1201088586 | E11A06016M540 | 54000 |
| 1201088587 | E11A06016M610 | 61000 |
| 1201088588 | E11A06016M950 | 95000 |
| 1201088763 | E11A06016M680 | 68000 |
| 1201088774 | E11A06016M003 | 300 |
| 1201088775 | E11A06016M006 | 600 |
| 1201088844 | E11A06016M002 | 200 |

BOM

| ITEM | QTY | DESCRIPTION | MATERIAL | FINISH |
|------|-----|-------------------------------------|----------|---------------------------|
| 7 | 1 | LABEL | VINYL | YELLOW |
| 6 | 2 | M12 SHIELD SLEEVE | BRASS | Ni-PLATED |
| 5 | 2 | NUT M12 MA HEX SW13 | BRASS | Ni-PLATED |
| 4 | 8 | CONTACT 10 MA STA | BRASS | SELECTED GOLD OVER NICKEL |
| 3 | 2 | INSERT M12 MA 4P DC | PUR | BLACK |
| 2 | - | OVER MOULD | TPU | BLACK |
| 1 | - | CABLE #24-2-2 TEAL WELD SLAG RESIST | TPU | TEAL |

TABLE 2
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 |

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FUNCTIONAL SYMBOLS: $\nabla/A = 0$, $\nabla/E = 0$, $\nabla/F = 0$

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:

EC NO: 689781
DRWN: MDHARMANTI 2021/08/03
CHK'D: RSILLER 2021/12/21
APPR: RSILLER 2021/12/21

INITIAL REVISION:
DRWN: MDHARMANTI 2021/08/03
APPR: RSILLER 2021/12/21

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE
SERIES: 120108

MATERIAL NUMBER: SEE PART LIST
CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 1

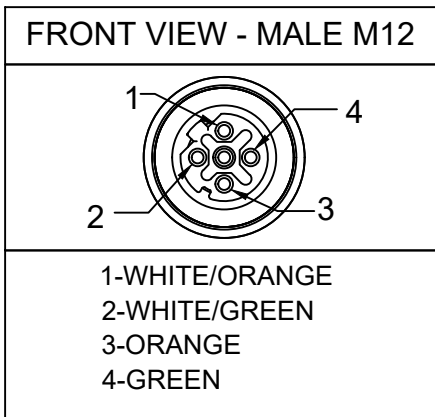
DOCUMENT NUMBER: 1201088420
DOC TYPE: PSD
DOC PART: 000
REVISION: A

molex

CSE M12 ETH 4P DC MA MA STR WSOR XM DE

PRODUCT CUSTOMER DRAWING

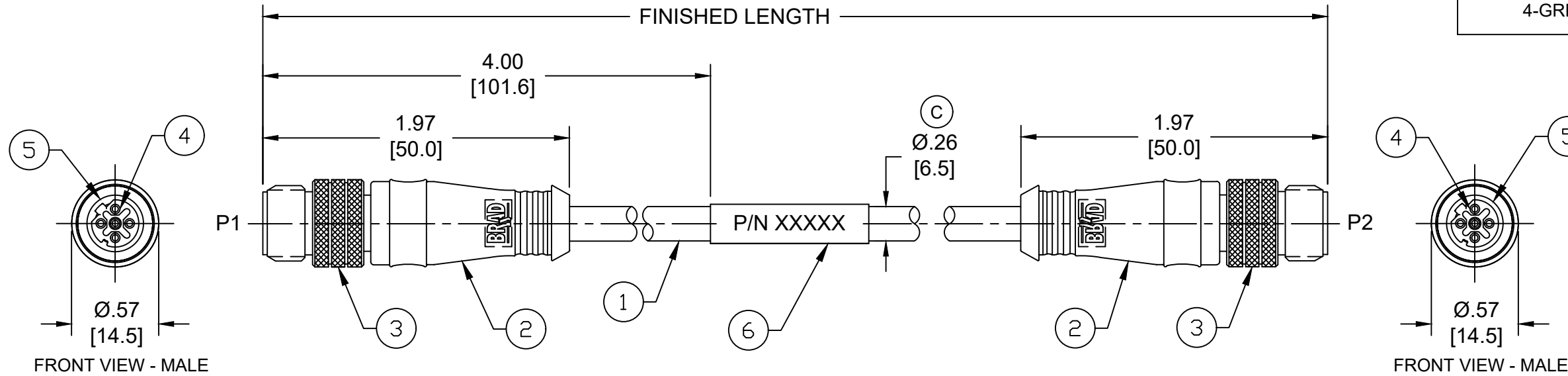
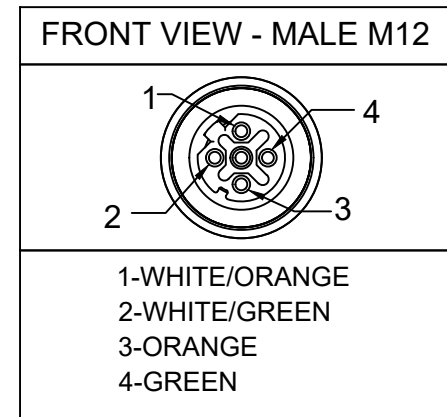
DATE: 2021/12/21 11:53:00



PART NUMBER LEGEND
E11A06016M002

FINISHED LENGTH
M002 - 0.2 METER
M010 - 1 METER
M200 - 20 METER

| MATERIAL NUMBER | ENGINEERING NUMBER | FINISHED LENGTH |
|-----------------|--------------------|-----------------|
| 1201088844 | E11A06016M002 | 0.2M [8 IN] |
| 1201088440 | E11A06016M450 | 45M[147FT 8 IN] |
| 1201088588 | E11A06016M950 | 95M[311FT 8 IN] |



ADDITIONAL CABLE INFORMATION

PHYSICAL CHARACTERISTICS:

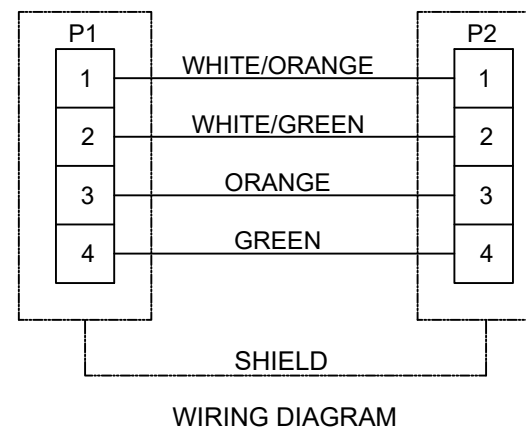
| | |
|---------------------|--|
| CONDUCTOR SIZE | 24AWG 2 PAIR (19/0.12mm) BARE COPPER |
| INSULATION MATERIAL | POLYOLEFIN |
| SHIELD/BRAID | TINNED COPPER 85% COVERAGE |
| JACKET MATERIAL | TPU (TEAL) |
| CONDUCTOR TAPE | ORANGE, ORANGE-WHITE & GREEN, GREEN-WHITE ALUMINUM-POLYESTER |

CABLE:

| | |
|--------------------------------|------------------------|
| TEMPERATURE RATING (STORAGE) | -40 / +80°C |
| TEMPERATURE RATING (OPERATION) | -20 / +50°C |
| WELD SLAG RESISTANCE | YES, S-300 MOLEX TEST |
| FREE SUBSTANCE'S | FCKW, SILICONE, AND PB |
| FIRE PERFORMANCE | IEC60332-1, UL1581 |
| OIL RESISTANCE | ISO6722, UL758/2556 |

NOTES:

- MATERIAL: AS NOTED
- FINISH: AS NOTED
- ELECTRICAL:
VOLTAGE: 30V AC/DC
CURRENT: 1.5A
- PROTECTION: IP67 (WHEN MATED)
- COUPLING THREAD: M12X1
- ALL DIMENSIONS ARE FOR REFERENCE UNLESS TOLERANCED OR NOTED OTHERWISE



CABLE LENGTH TOLERANCES

| | |
|--------------------------|-------------------------|
| <.3M [1FT]: | +19mm-0 [+ .75in-0] |
| .3 - .9M [1 - 3FT]: | +44.5mm-0 [+1.75in-0] |
| .9 - 1.8M [3 - 6FT]: | +55.6mm-0 [+2.19in-0] |
| 1.8 - 3.7M [6 - 12FT]: | +88.9mm-0 [+3.50in-0] |
| 3.7 - 7.3M [12 - 24FT]: | +165.1mm-0 [+6.50in-0] |
| 7.3-14.6M [24 - 48FT]: | +317.5mm-0 [+12.50in-0] |
| 14.6 - 30.5M [48-100FT]: | +622.3mm-0 [+24.50in-0] |
| OVER 30M [100FT]: | +2% OF FINISHED LENGTH |

| | | | |
|------|--------------|--------------|------------------|
| 6 | WRAP LABEL | VINYL | BLACK/YELLOW |
| 5 | INSERT | PUR | BLACK |
| 4 | PIN CONTACT | COPPER ALLOY | GOLD OVER NICKEL |
| 3 | COUPLING NUT | BRASS | NICKEL PLATED |
| 2 | OVERMOLD | TPU | BLACK |
| 1 | CABLE #24AWG | TPU | TEAL |
| ITEM | DESCRIPTION | MATERIAL | FINISH |

| FUNCTIONAL SYMBOLS | | | | | | | | | |
|--|-------|-------|---|---|---------|-------------------|--------|------------|-----------------|
| $F=0$ | $E=0$ | $P=0$ | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |
| DIMENSION UNITS | | SCALE | | CURRENT REV DESC: ITEM-2 WAS PUR. ADDED CABLE DIA & TOL CHART. MODIFIED PN CHART | | | | | |
| INCH/MM | | NTS | | molex MICRO-CHANGE CORDSET, M12, 4 POLE, MALE - MALE, STRAIGHT, #24 AWG PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: SD-120108-083 DOC TYPE: PSD DOC PART: 001 REVISION: C MATERIAL NUMBER: SEE CHART CUSTOMER: GENERAL MARKET SHEET NUMBER: 1 OF 1 | | | | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | | | | | | | | |
| 4 PLACES | | ±---- | | | | | | | |
| 3 PLACES | | ±---- | | | | | | | |
| 2 PLACES | | ±---- | | EC NO: 703079 | | DRWN: ABENJAMINLW | | 2022/03/14 | |
| 1 PLACE | | ±---- | | CHK'D: RSTONE | | APPR: BWOODMAN | | 2022/04/12 | |
| 0 PLACES | | ±---- | | INITIAL REVISION: | | DRWN: MZIELINS | | 2015/05/06 | |
| ANGULAR TOL ± ---- ° | | --- | | APPR: BWOODMAN | | 2015/06/03 | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | THIRD ANGLE PROJECTION | | DRAWING | | SERIES | | MATERIAL NUMBER |
| | | | | | B-SIZE | | 120108 | | SEE CHART |