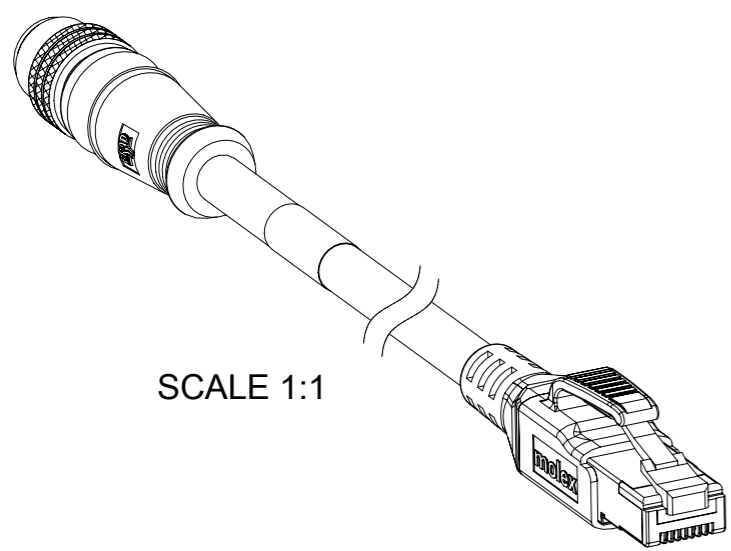
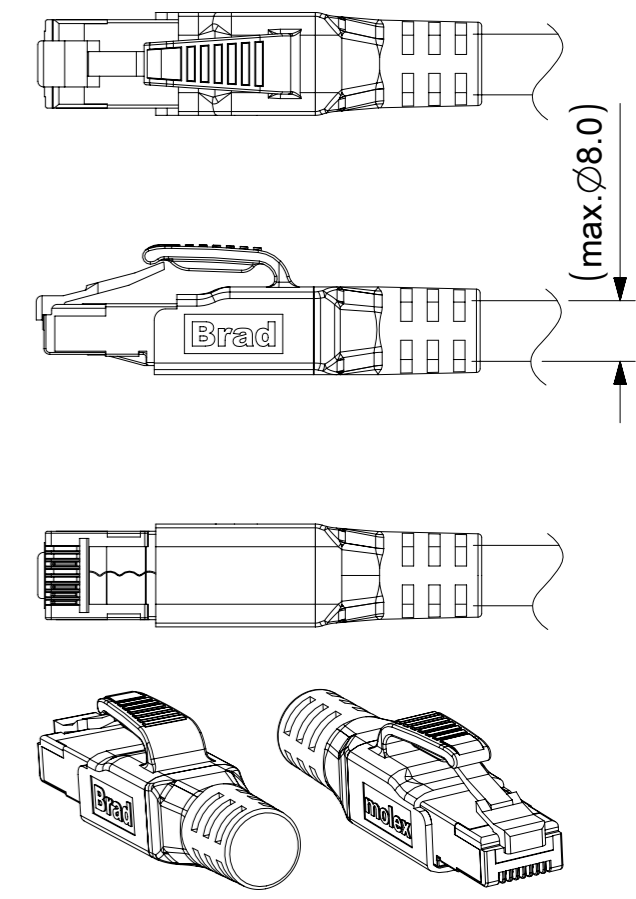
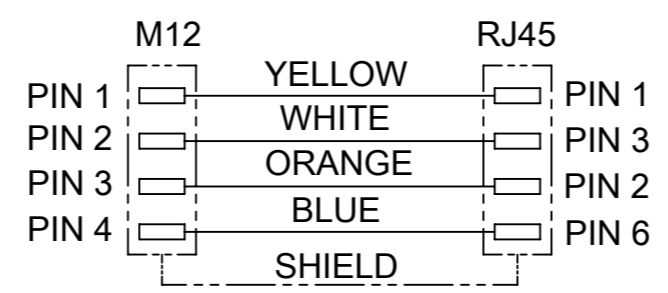


OVERMOLD VIEW FOR CABLES O.D. ≥ 6.7mm



WIRING DIAGRAM



BOM

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH/COLOR |
|------|--------|-----------------------|-----------------|----------------|
| 9 | 4 | CONTACTS M12 MALE | BRASS | SELECTIVE GOLD |
| 8 | 1 | INSERT 4P MALE | PUR | BLACK |
| 7 | 1 | COUPLING NUT M12 MALE | BRASS | NICKEL |
| 6 | 1 | LABEL 50x69.8 | VINYL | WHITE |
| 5 | - | CABLE | SEE SHEET 2 | --- |
| 4 | - | OVERMOLD | TPU | BLACK |
| 3 | 1 | SHIELD | BRASS | TIN |
| 2 | 1 | PLUG RJ45 TRANSPARENT | POLYCARBONATE | --- |
| 1 | 4 or 8 | CONTACT RJ45 MALE | PHOSPHOR BRONZE | SELECTIVE GOLD |

NOTES:

- ELECTRICAL DATA:
MAX. VOLTAGE RATING 60 VDC
MAX. CURRENT PER CONTACT 1.5 A
- ENVIRONMENTAL:
OPERATING TEMPERATURE SEE SHEET 2
INDEX OF PROTECTION RJ45: IP20
INDEX OF PROTECTION M12: IP67
- FOR MORE INFORMATION SEE PRODUCT SPECIFICATION 1201080202 PS P00

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

SYMBOLS: $\nabla = 0$ DIMENSION UNITS: mm SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED):
 ANGULAR TOL ± 1.0°
 4 PLACES ±
 3 PLACES ±
 2 PLACES ± 0.05
 1 PLACE ± 0.1
 0 PLACES ± 0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 120108

MATERIAL NUMBER: SEE SHEET 3

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 3

CURRENT REV DESC: LABEL + CABLE LENGTH TOL.+ CABLE INF. UPDATED, CHANGED NOTES

EC NO: 632824
 DRWN: JMARSZALEK 2016/10/11
 CHK'D: RSILLER 2020/05/12
 APPR: RSILLER 2020/05/12

INITIAL REVISION:
 DRWN: JMARSZALEK 2015/07/07
 APPR: RSILLER 2020/05/12

molex

CSE M12 RJ45 4P DC MA STR MA STR XM

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 1201080256
 DOC TYPE: PSD
 DOC PART: 000
 REVISION: A

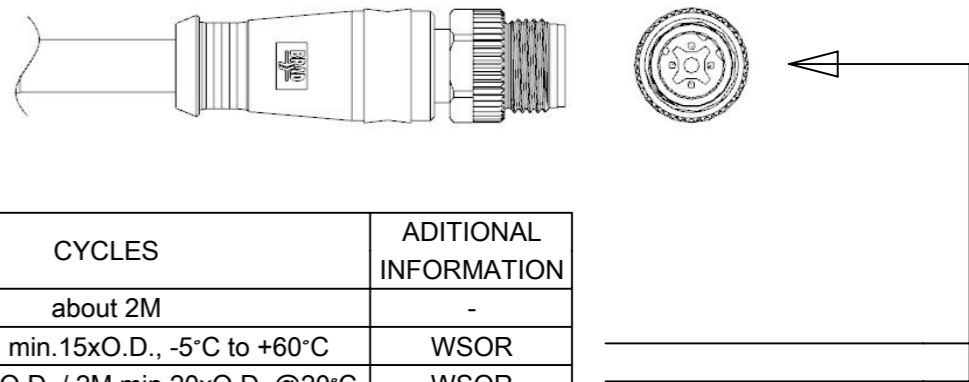
NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

OPTIONS

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

- E=Ethernet
- Heads:
1=M12x1 4P D-Code
6=RJ45
- Wiring type
- Heads style:
060=MA M12 STR / RJ45 Plug STR
- Cable type:
See cable table
- Units:
M=Meter
T=10x meter
- Length
Examples:
005=0.5 units
010=1 units
150=15 units
- H= 2 pcs. of I/D Carrier

FOR CABLE TYPE "12" & "16"
KNURLED/HEXAGONAL NUT - 1202070090



CABLE INFORMATION (for more information see Cable Data Sheet).

| CABLE TYPE | CABLE O.D. | APPLICATION | CROSS SECTION | CABLE JACKET | UL | TEMP. RANGE STATIC BENDING RADIUS STATIC | TEMP. RANGE DYNAMIC BENDING RADIUS DYNAMIC | CYCLES | ADDITIONAL INFORMATION |
|------------|------------|-----------------|---------------|-----------------|-------------|--|--|--|------------------------|
| 11 | 6.7mm | PROFINET TYPE C | 22AWG | PUR GREEN | STYLE 20236 | -20°C to +60°C / min.5xO.D. | -20°C to +60°C / min.15xO.D. | about 2M | - |
| 12 | 6.7mm | PROFINET TYPE C | 22AWG | TPU BASED GREEN | STYLE 21215 | -40°C to +80°C / min.5xO.D. | -25°C to +80°C / min.15xO.D. | about 2M, min.15xO.D., -5°C to +60°C | WSOR |
| 16 | 6.5mm | - | 24AWG | TPU BASED TEAL | STYLE 21215 | -40°C to +80°C / min.6xO.D. | -20°C to +50°C | 1M, min.10xO.D. / 2M min.20xO.D. @20°C | WSOR |

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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








| | | |
|--|--|---|
| SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | <p>molex</p> <p>CSE M12 RJ45 4P DC MA STR MA STR XM</p> <p>PRODUCT CUSTOMER DRAWING</p> |
| | <p>CURRENT REV DESC: LABEL + CABLE LENGTH TOL.+ CABLE INF. UPDATED, CHANGED NOTES</p> <p>EC NO: 632824</p> <p>DRWN: JMARSZALEK 2016/10/11</p> <p>CHK'D: RSILLER 2020/05/12</p> <p>APPR: RSILLER 2020/05/12</p> <p>INITIAL REVISION:</p> <p>DRWN: JMARSZALEK 2015/07/07</p> <p>APPR: RSILLER 2020/05/12</p> | |
| <p>▽ = 0 DIMENSION UNITS</p> <p>▽ = 0 SCALE</p> <p>▽ = 0 GENERAL TOLERANCES (UNLESS SPECIFIED)</p> <p>▽ = 0 ANGULAR TOL ± 1.0°</p> <p>▽ = 0 4 PLACES ±</p> <p>▽ = 0 3 PLACES ±</p> <p>▽ = 0 2 PLACES ± 0.05</p> <p>▽ = 0 1 PLACE ± 0.1</p> <p>▽ = 0 0 PLACES ± 0.2</p> <p>■ = 0 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</p> | <p>mm</p> <p>1:1</p> <p>THIRD ANGLE PROJECTION</p> | <p>DOCUMENT NUMBER</p> <p>1201080256</p> <p>DOC TYPE</p> <p>PSD</p> <p>DOC PART</p> <p>000</p> <p>REVISION</p> <p>A</p> <p>MATERIAL NUMBER</p> <p>SEE SHEET 3</p> <p>CUSTOMER</p> <p>GENERAL MARKET</p> <p>SHEET NUMBER</p> <p>2 OF 3</p> |

PART LIST

| No. | Part No. | Engineering No. | L (Cable Length) |
|-----|------------|-----------------|------------------|
| 1 | 1201080203 | E16A06011M020 | 2m |
| 2 | 1201080256 | E16A06011M010 | 1m |
| 3 | 1201080257 | E16A06011M050 | 5m |
| 4 | 1201080258 | E16A06011M100 | 10m |
| 5 | 1201080259 | E16A06011M150 | 15m |
| 6 | 1201080260 | E16A06011M200 | 20m |
| 7 | 1201080261 | E16A06011M250 | 25m |
| 8 | 1201080262 | E16A06011M300 | 30m |
| 9 | 1201080263 | E16A06011M500 | 50m |
| 10 | 1201080285 | E16A06011M060 | 6m |
| 11 | 1201080286 | E16A06011M080 | 8m |
| 12 | 1201080289 | E16A06011M040 | 4m |
| 13 | 1201080290 | E16A06011M090 | 9m |
| 14 | 1201080291 | E16A06011M120 | 12m |
| 15 | 1201080292 | E16A06011M140 | 14m |
| 16 | 1201080293 | E16A06011M180 | 18m |
| 17 | 1201080294 | E16A06011M700 | 70m |
| 18 | 1201080521 | E16A06012M010 | 1m |
| 19 | 1201080522 | E16A06012M020 | 2m |
| 20 | 1201080524 | E16A06012M100 | 10m |
| 21 | 1201088120 | E16A06011M005 | 0.5m |
| 22 | 1201088121 | E16A06011M030 | 3m |
| 23 | 1201088122 | E16A06011M070 | 7m |
| 24 | 1201088123 | E16A06011M230 | 23m |
| 25 | 1201088196 | E16A06011M900 | 90m |
| 26 | 1201088199 | E16A06011M400 | 40m |
| 27 | 1201088200 | E16A06011T100 | 10m |
| 28 | 1201088255 | E16A06011M002 | 0.2m |
| 29 | 1201088266 | E16A06012M020H | 2m |
| 30 | 1201088272 | E16A06012M010H | 1m |
| 31 | 1201088273 | E16A06012M050H | 5m |
| 32 | 1201088274 | E16A06012M100H | 10m |
| 33 | 1201088275 | E16A06012M150H | 15m |
| 34 | 1201088276 | E16A06012M200H | 20m |
| 35 | 1201088277 | E16A06012M250H | 25m |

| No. | Part No. | Engineering No. | L (Cable Length) |
|-----|------------|-----------------|------------------|
| 36 | 1201088278 | E16A06012M300H | 30m |
| 37 | 1201088279 | E16A06012M500H | 50m |
| 38 | 1201088286 | E16A06012M700H | 70m |
| 39 | 1201088290 | E16A06012M005H | 0.5m |
| 40 | 1201088291 | E16A06012M900H | 90m |
| 41 | 1201088292 | E16A06012M400H | 40m |
| 42 | 1201088299 | E16A06012M002H | 0.2m |
| 43 | 1201088329 | E16A06012M010 | 1m |
| 44 | 1201088330 | E16A06012M020 | 2m |
| 45 | 1201088331 | E16A06012M030 | 3m |
| 46 | 1201088332 | E16A06012M040 | 4m |
| 47 | 1201088333 | E16A06012M050 | 5m |
| 48 | 1201088334 | E16A06012M060 | 6m |
| 49 | 1201088335 | E16A06012M080 | 8m |
| 50 | 1201088336 | E16A06012M090 | 9m |
| 51 | 1201088338 | E16A06012M120 | 12m |
| 52 | 1201088339 | E16A06012M150 | 15m |
| 53 | 1201088340 | E16A06012M200 | 20m |
| 54 | 1201088341 | E16A06012M250 | 25m |
| 55 | 1201088342 | E16A06012M300 | 30m |
| 56 | 1201088343 | E16A06012M350 | 35m |
| 57 | 1201088344 | E16A06012M400 | 40m |
| 58 | 1201088345 | E16A06012M450 | 45m |
| 59 | 1201088346 | E16A06012M500 | 50m |
| 60 | 1201088347 | E16A06012M550 | 55m |
| 61 | 1201088348 | E16A06012M600 | 60m |
| 62 | 1201088349 | E16A06012M650 | 65m |
| 63 | 1201088350 | E16A06012M700 | 70m |
| 64 | 1201088351 | E16A06012M750 | 75m |
| 65 | 1201088352 | E16A06012M800 | 80m |
| 66 | 1201088388 | E16A06011M350 | 35m |
| 67 | 1201088399 | E16A06012M030H | 3m |
| 68 | 1201088400 | E16A06012M600H | 60m |
| 69 | 1201088401 | E16A06012M1K0H | 100m |
| 70 | 1201088450 | E16A06016M010 | 1m |

| No. | Part No. | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 71 | 1201088451 | E16A06016M020 | 2m |
| 72 | 1201088452 | E16A06016M030 | 3m |
| 73 | 1201088453 | E16A06016M040 | 4m |
| 74 | 1201088454 | E16A06016M050 | 5m |
| 75 | 1201088455 | E16A06016M060 | 6m |
| 76 | 1201088456 | E16A06016M080 | 8m |
| 77 | 1201088457 | E16A06016M090 | 9m |
| 78 | 1201088458 | E16A06016M100 | 10m |
| 79 | 1201088459 | E16A06016M120 | 12m |
| 80 | 1201088460 | E16A06016M150 | 15m |
| 81 | 1201088461 | E16A06016M200 | 20m |
| 82 | 1201088462 | E16A06016M250 | 25m |
| 83 | 1201088463 | E16A06016M300 | 30m |
| 84 | 1201088464 | E16A06016M350 | 35m |
| 85 | 1201088465 | E16A06016M400 | 40m |
| 86 | 1201088466 | E16A06016M450 | 45m |
| 87 | 1201088467 | E16A06016M500 | 50m |
| 88 | 1201088468 | E16A06016M550 | 55m |
| 89 | 1201088469 | E16A06016M600 | 60m |
| 90 | 1201088470 | E16A06016M650 | 65m |
| 91 | 1201088471 | E16A06016M700 | 70m |
| 92 | 1201088472 | E16A06016M750 | 75m |
| 93 | 1201088473 | E16A06016M800 | 80m |
| 94 | 1201088526 | E16A06016M850 | 85m |
| 95 | 1201088527 | E16A06016M900 | 90m |
| 96 | 1201088533 | E16A06016M070 | 7m |
| 97 | 1201088534 | E16A06016M140 | 14m |
| 98 | 1201088537 | E16A06012M080H | 8m |
| 99 | | | |
| 100 | | | |
| 101 | | | |
| 102 | | | |
| 103 | | | |
| 104 | | | |
| 105 | | | |

| | | | | | | | | |
|--|---|--|--|---------|--|-----------------|----------|--------------------------|
| SYMBOLS  = 0  = 0  = 0  = 0  = 0  = 0  = 0  = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS: mm SCALE: 1:1 | | CURRENT REV DESC: LABEL + CABLE LENGTH TOL.+ CABLE INF. UPDATED, CHANGED NOTES | |  CSE M12 RJ45 4P DC MA STR MA STR XM | | | |
| | GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° | | EC NO: 632824 DRWN: JMARSZALEK 2016/10/11 CHK'D: RSILLER 2020/05/12 APPR: RSILLER 2020/05/12 | | | | | PRODUCT CUSTOMER DRAWING |
| | 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.1 0 PLACES ± 0.2 | | INITIAL REVISION: DRWN: JMARSZALEK 2015/07/07 APPR: RSILLER 2020/05/12 | | DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |