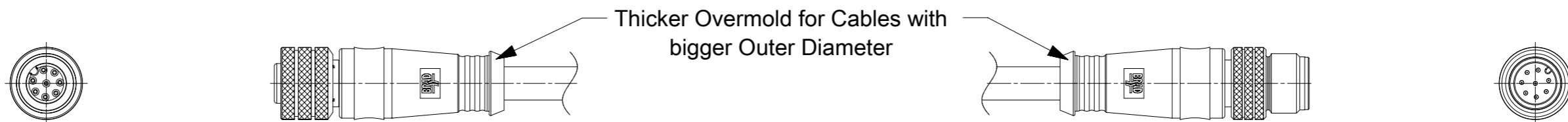
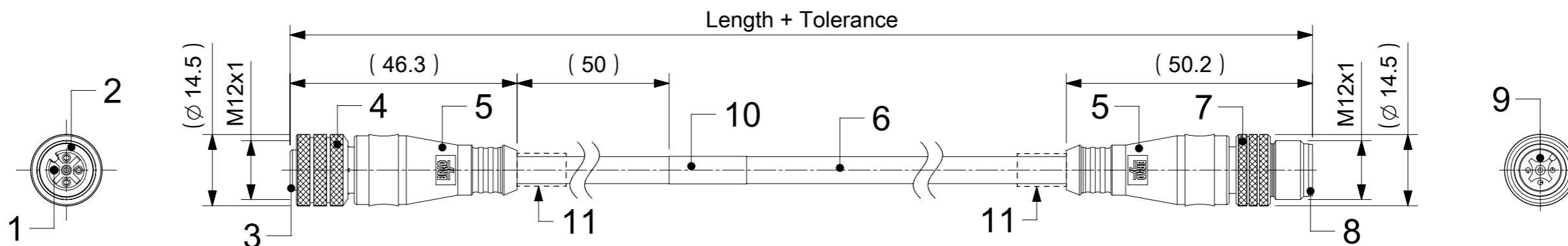


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



NOTES:

RATED VOLTAGE: 3, 4 contacts 250V per IEC 60664
 5 contacts 60V per IEC 60664
 5 contacts 250V per UL 2238
 8 contacts 30V per IEC 60664

RATED CURRENT: 3, 4, 5 contacts 4A
 8 contacts 2A

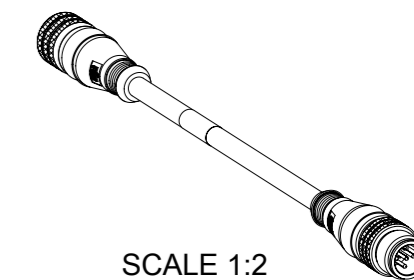
PROTECTION CLASS: IP 67

TEMPERATURE: -25°C / +85°C

CONTACTS POSITION FRONT VIEW:

| | 3 CONTACTS | | 4 CONTACTS | | 5 CONTACTS | | 8 CONTACTS | |
|-------------|------------|-------|------------|-------|------------|----------------------|------------|--------|
| FEMALE | | | | | | | | |
| MALE | | | | | | | | |
| CONNECTIONS | PIN | WIRE | PIN | WIRE | PIN | WIRE | PIN | WIRE |
| | 1 | BROWN | 1 | BROWN | 1 | BROWN | 1 | WHITE |
| | 2 | --- | 2 | WHITE | 2 | WHITE | 2 | BROWN |
| | 3 | BLUE | 3 | BLUE | 3 | BLUE | 3 | GREEN |
| | 4 | BLACK | 4 | BLACK | 4 | BLACK | 4 | YELLOW |
| | | | 5 | --- | 5 | GREY OR GREEN/YELLOW | 5 | GREY |
| | | | | | | | 6 | PINK |
| | | | | | | | 7 | BLUE |
| | | | | | | 8 | RED | |

CODING REQUIRED TO IEC 61076-2-101



FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH |
|------|---------------|-------------------------|---------------|----------------------|
| 11 | SEE SHEET 2 | ID CARRIER | PVC | TRANSPARENT |
| 10 | 1 | LABEL YELLOW | VINYL | --- |
| | - | PRINTING FOR CABLES Ixx | --- | --- |
| 9 | 3 / 4 / 5 / 8 | CONTACT MALE | SEE PART LIST | SELECTIVE Au OVER Ni |
| 8 | 1 | INSERT MALE BLACK | TPU | --- |
| 7 | 1 | COUPLING NUT MALE | --- | --- |
| 6 | - | CABLE | SEE SHEET 2 | --- |
| 5 | - | OVERMOLDING BLACK | TPU | --- |
| 4 | 1 | COUPLING NUT FEMALE | --- | --- |
| 3 | 1 | INSERT FEMALE BLACK | PUR | --- |
| 2 | 1 | ORING RED | FPM | --- |
| 1 | 3 / 4 / 5 / 8 | CONTACT FEMALE | SEE PART LIST | SELECTIVE Au OVER Ni |

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: REMOVED PNS | |
| mm | 1:1 | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | CSE M12 XP AC FE STR MA STR XM DE PRODUCT CUSTOMER DRAWING | |
| ANGULAR TOL | ± 1.0° | | |
| 4 PLACES | ± | | |
| 3 PLACES | ± | | |
| 2 PLACES | ± 0.05 | | |
| 1 PLACE | ± 0.3 | EC NO: 615671 DRWN: MDHARMANTI 2019/04/01 CHK'D: RSILLER 2019/04/16 APPR: RSILLER 2019/04/16 | |
| 0 PLACES | ± 0.5 | INITIAL REVISION: DRWN: JMARSZALEK 2016/09/19 APPR: RSILLER 2016/12/08 | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING |
| | | | A3-SIZE |
| | | SERIES | MATERIAL NUMBER |
| | | 120066 | SEE PART LIST |
| | | CUSTOMER | DOCUMENT NUMBER |
| | | GENERAL MARKET | 1200668165 |
| | | DOC TYPE | DOC PART |
| | | PSD | 000 |
| | | REVISION | A3 |
| | | SHEET NUMBER | 1 OF 5 |

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

OPTIONS

8 8 X 0 3 0 X X X X X X X X

88=Micro-Change
M12x1
Double ended

Contacts:
3=3 Contacts
4=4 Contacts
5=5 Contacts
8=8 Contacts

Heads style:
030=Plug Female Straight
to Plug Male Straight

Cable type: See Table

Units:
M=Meter

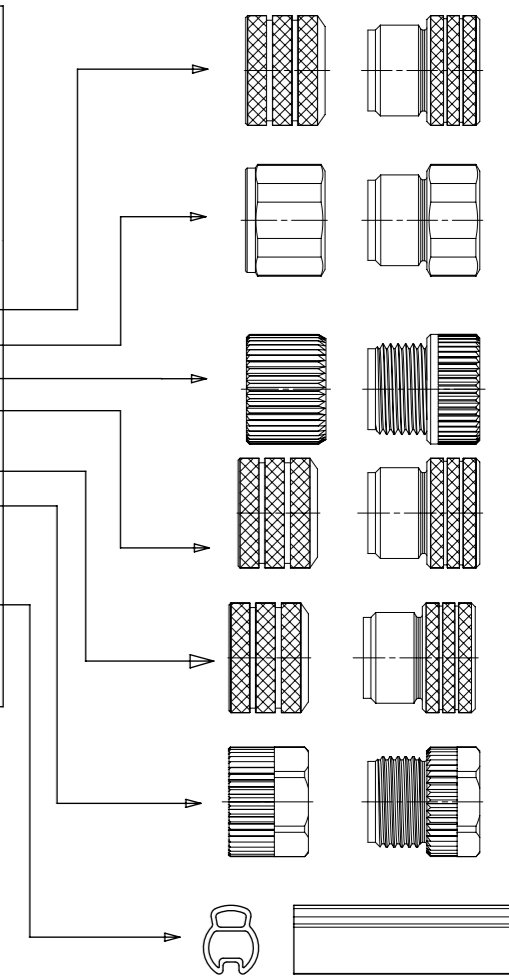
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

Coupling Nut:
Blank (Standard)=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
Blank=7 for cables I20, I26, K03, K05, P82, S26
8=Type 316 stainless steel
9=Knurled / Hexagonal Brass Ni Plated SW13

H= 2 pcs. of I/D Carrier PVC Transparent
(Cables Ixx & P82 always with 2 pcs. of I/D Carrier even if no H in Engineering No.)

Overmold color:
Blank (Standard)=Black TPU
Blank=Yellow PVC for cables
A09, S19, S20, S26
Blank=Yellow TPE-E for cables
K03, K05
A=Grey / G=Black / Y=Yellow

COUPLING NUT
FEMALE MALE


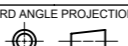


| CABLE LENGTH TOLERANCES | | |
|-------------------------|--------------------------|------------------------|
| OVER [mm] | UP TO AND INCLUDING [mm] | TOLERANCES [mm] |
| 0 | 305 | +19 |
| 305 | 915 | +45 |
| 915 | 1830 | +56 |
| 1830 | 3660 | +89 |
| 3660 | 7320 | +165 |
| 7320 | 14640 | +317 |
| 14640 | 30500 | +610 |
| 30500 | > | +2% OF FINISHED LENGTH |

| | | | | | | | | | |
|---|---------|-----------------------------------|---------|--------|-----------------|----------------|--|--------------|--|
| 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: REMOVED PNS | | | | | | | |
| mm | 1:1 | | | | | | | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | | | | | | | | |
| ANGULAR TOL | ± 1.0 ° | CSE M12 XP AC FE STR MA STR XM DE | | | | | | | |
| 4 PLACES | ± | PRODUCT CUSTOMER DRAWING | | | | | | | |
| 3 PLACES | ± | DOCUMENT NUMBER | | | | | | | |
| 2 PLACES | ± 0.05 | 1200668165 | | | | | | | |
| 1 PLACE | ± 0.3 | DOC TYPE DOC PART REVISION | | | | | | | |
| 0 PLACES | ± 0.5 | PSD 000 A3 | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | | SHEET NUMBER | |
| | | | A3-SIZE | 120066 | SEE PART LIST | GENERAL MARKET | | 2 OF 5 | |

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

| CABLE TYPE | NO. OF WIRES | CROSS SECTION | CABLE JACKET | UL | CSA | STATIC: TEMP. / BENDING RADIUS | DYNAMIC: TEMP. / BENDING RADIUS | DRAG CHAIN | SHIELD |
|------------|--------------|---------------------|----------------|----------------|-----------------------|--------------------------------|---------------------------------|----------------------------|--------|
| A09 | 4 | 22AWG | PVC YELLOW | UL 2661 | I/II A/B 80°C/300V | - | - | - | - |
| B02 | 4 | 18AWG | PUR YELLOW | UL 20549 | I/II A/B 80°C/300V | - | - | - | - |
| E52 | 3 / 4 | 0.34mm ² | PVC GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | - |
| E57 | 5 | 0.34mm ² | PVC GREY | - | - | - | -5°C to +70°C | - | - |
| I02 | 3 / 4 / 8 | 0.25mm ² | PVC CEI GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | - |
| I03 | 3 / 4 / 5 | 0.34mm ² | PVC CEI GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | - |
| I20 | 3 / 4 | 0.34mm ² | PVC CEI GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | YES |
| I26 | 5 | 0.34mm ² | PVC CEI GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | YES |
| K03 | 4 / 5 | 18AWG | TPE YELLOW | UL ITC or PLC | I/II A/B 90°C/300V | max 105°C | - | - | - |
| K05 | 3 / 4 / 5 | 22AWG | TPE YELLOW | UL ITC or PLTC | I/II A/B 90°C/300V | max 105°C | - | - | - |
| P04 | 4 | 0.50mm ² | PUR BLACK | - | - | -40°C to +90°C, >7.5xO.D. | -15°C to +90°C, >12.5xO.D. | - | - |
| P19 | 8 | 0.25mm ² | PUR BLACK | - | - | -40°C to +90°C, >7.5xO.D. | -15°C to +90°C, >12.5xO.D. | 2 000 000 cycles, >15xO.D. | YES |
| P20 | 3 / 4 / 5 | 0.34mm ² | PUR BLACK LS0H | - | - | -30°C to +80°C | - | - | YES |
| P82 | 3 / 4 / 5 | 0.34mm ² | PUR IRR ORANGE | - | - | -50°C to +105°C, >5xO.D. | -40°C to +105°C, >7.5xO.D. | - | - |
| S19 | 8 | 0.25mm ² | PVC YELLOW | UL 2661/1569 | C22.2 II A 105°C/300V | -30°C to +105°C, >10xO.D. | -15°C to +105°C, >15xO.D. | - | YES |
| S20 | 3 / 4 / 5 | 0.34mm ² | PVC YELLOW | UL 2661/1731 | C22.2 II A 105°C/300V | -30°C to +105°C | - | - | YES |
| S26 | 5 | 0.34mm ² | PVC YELLOW | UL 2661/1731 | C22.2 II A 105°C/300V | -30°C to +105°C | - | - | YES |

| | | | | | | | | | | |
|---|---------|---|---------|--------|-----------------|----------------|---|--|--|--|
| 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: REMOVED PNS | | | | |  | | | |
| mm | 1:1 | | | | | | | | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | EC NO: 615671 | | | | | CSE M12 XP AC FE STR MA STR XM DE | | | |
| ANGULAR TOL | ± 1.0 ° | DRWN: MDHARMANTI 2019/04/01 | | | | | | | | |
| 4 PLACES | ± | CHK'D: RSILLER 2019/04/16 | | | | | | | | |
| 3 PLACES | ± | APPR: RSILLER 2019/04/16 | | | | | PRODUCT CUSTOMER DRAWING | | | |
| 2 PLACES | ± 0.05 | INITIAL REVISION: | | | | | DOCUMENT NUMBER | | | |
| 1 PLACE | ± 0.3 | DRWN: JMARSZALEK 2016/09/19 | | | | | 1200668165 | | | |
| 0 PLACES | ± 0.5 | APPR: RSILLER 2016/12/08 | | | | | PSD 000 A3 | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER | | | |
| | |  | A3-SIZE | 120066 | SEE PART LIST | GENERAL MARKET | 3 OF 5 | | | |

PART LIST

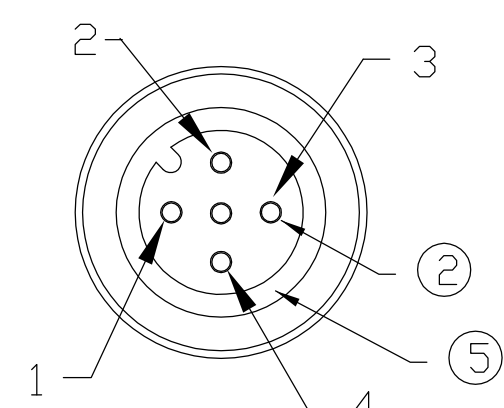
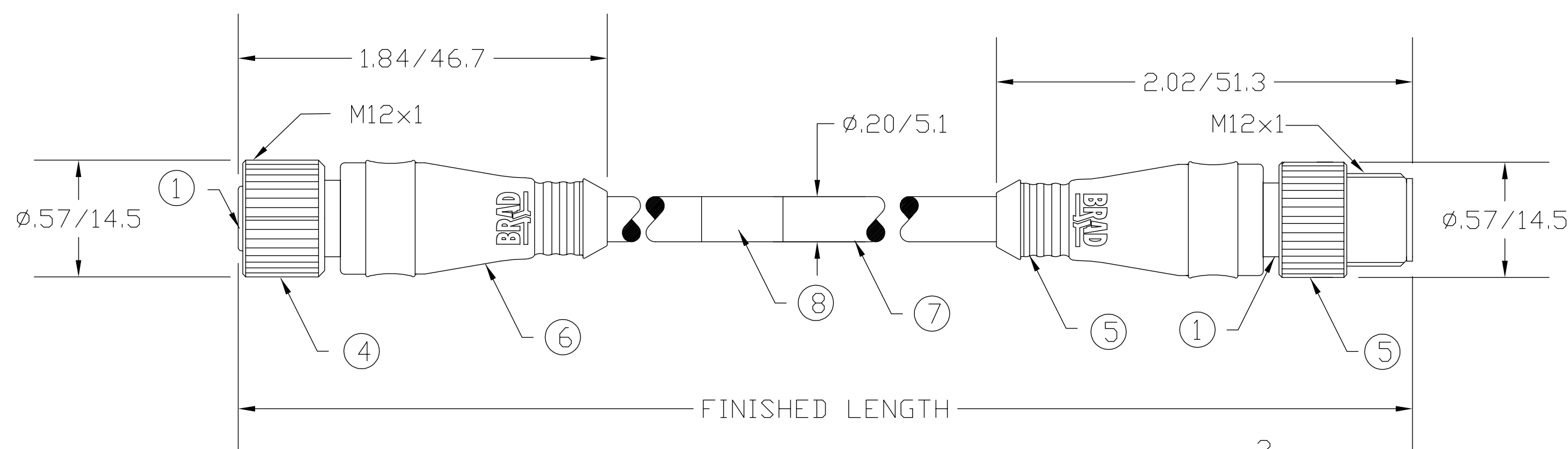
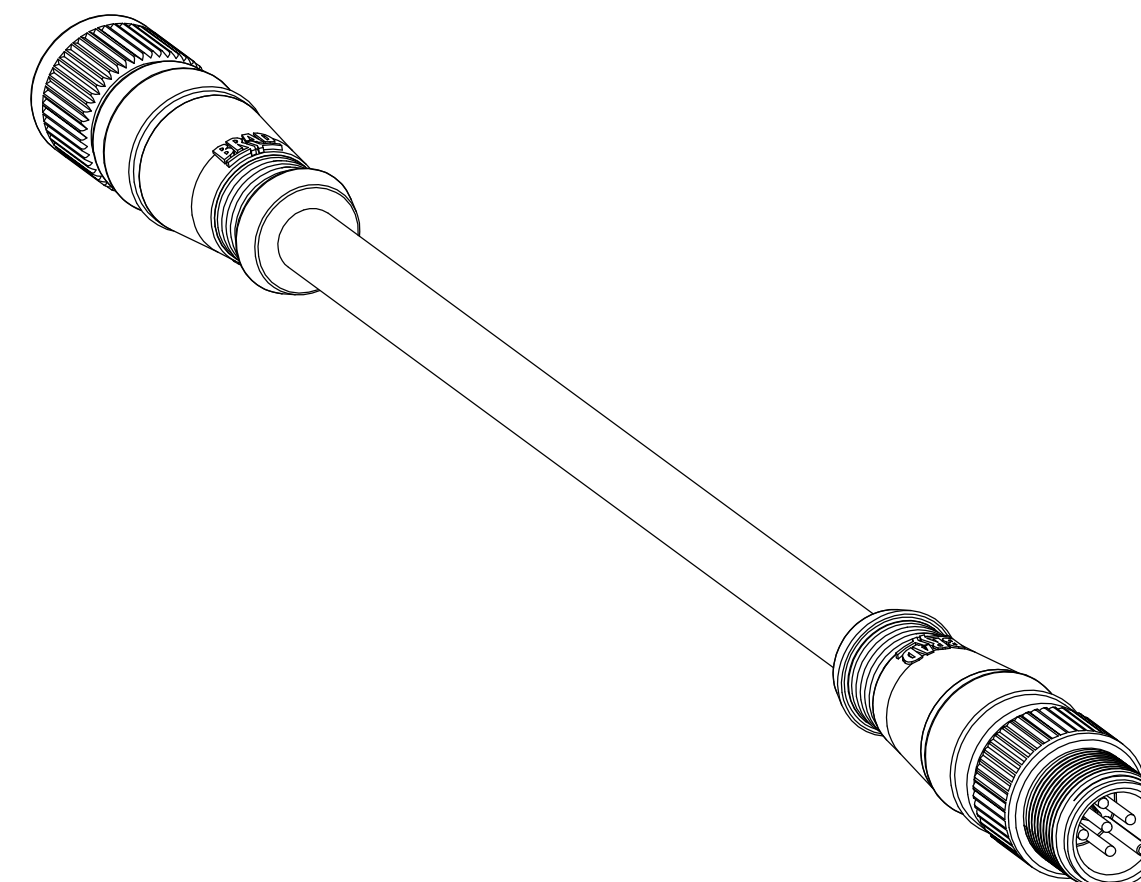
| No. | Part No. | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 171 | 1200668644 | 884030P82M0107Y | 1m |
| 172 | 1200668645 | 884030P82M0207Y | 2m |
| 173 | 1200668696 | 883030I03M030A | 3m |
| 174 | 1200668697 | 883030I03M050A | 5m |
| 175 | 1200668698 | 883030I03M100A | 10m |
| 176 | 1200668699 | 883030I03M200A | 20m |
| 177 | 1200668735 | 884030P82M0707Y | 7m |
| 178 | 1200668736 | 885030I26M015Y | 1.5m |
| 179 | 1200668773 | 885030P82M0107 | 1m |
| 180 | 1200668873 | 885030I26M050Y | 5m |
| 181 | 1200669113 | 884030A09M0308 | 3m |
| 182 | 1200669118 | 884030P82M0307Y | 3m |
| 183 | 1200669149 | 883030I03M010Y | 1m |
| 184 | 1200669218 | 885030I03M100Y | 10m |
| 185 | 1200669227 | 884030K05M500 | 50m |
| 186 | 1200669228 | 884030K05M600 | 60m |
| 187 | 1200718014 | 884030P82M0607 | 6m |
| 188 | 1200660166 | 883030A09M010 | 1m |
| 189 | 1200660261 | 884030A09M005 | 0.5m |
| 190 | 1200660262 | 884030A09M006 | 0.6m |
| 191 | 1200660266 | 884030A09M010 | 1m |
| 192 | 1200660269 | 884030A09M015 | 1.5m |
| 193 | 1200660294 | 884030A09M080 | 8m |
| 194 | 1200660299 | 884030A09M1008 | 10m |

| No. | Part No. | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 195 | 1200660434 | 885030A09M050 | 5m |
| 196 | 1200661037 | 885030K03M040 | 4m |
| 197 | 1200661039 | 885030K03M060 | 6m |
| 198 | 1200661041 | 885030K03M080 | 8m |
| 199 | 1200661684 | 885030K03M300 | 30m |
| 200 | 1200661686 | 885030K03M180 | 18m |
| 201 | 1200661687 | 885030K03M230 | 23m |
| 202 | 1200668081 | 885030E57M100A | 10m |
| 203 | 1200668293 | 883030D02M005 | 0.5m |

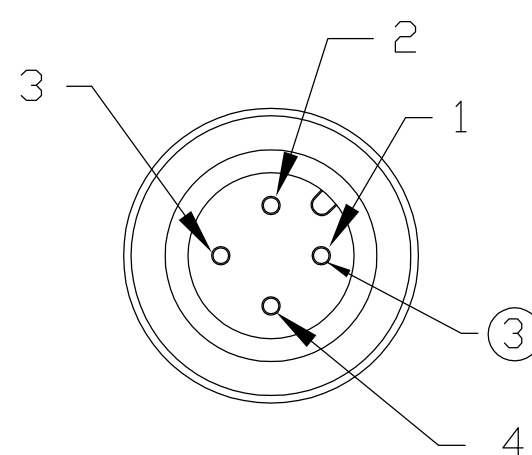
| | | | | | | | | | |
|---|------------------------|-------------------------------|--------|-----------------|----------------|--------------|-----------------------------------|--|--|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | |
| DIMENSION UNITS | SCALE | CURRENT REV DESC: REMOVED PNS | | | | | molex | | |
| mm | 1:1 | | | | | | | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | EC NO: 615671 | | | | | CSE M12 XP AC FE STR MA STR XM DE | | |
| ANGULAR TOL | ± 1.0 ° | DRWN: MDHARMANTI 2019/04/01 | | | | | | | |
| 4 PLACES | ± | CHK'D: RSILLER 2019/04/16 | | | | | | | |
| 3 PLACES | ± | APPR: RSILLER 2019/04/16 | | | | | PRODUCT CUSTOMER DRAWING | | |
| 2 PLACES | ± 0.05 | INITIAL REVISION: | | | | | DOCUMENT NUMBER | | |
| 1 PLACE | ± 0.3 | DRWN: JMARSZALEK 2016/09/19 | | | | | 1200668165 | | |
| 0 PLACES | ± 0.5 | APPR: RSILLER 2016/12/08 | | | | | PSD 000 A3 | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER | | | |
| | | A3-SIZE | 120066 | SEE PART LIST | GENERAL MARKET | 5 OF 5 | | | |

| | | | | |
|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2019/04/16 | 15:06:12 |
|-----------------|----|--------------|------------|----------|

| MATERIAL NUMBER | OLD PART NUMBER | FINISHED LENGTH |
|-----------------|-----------------|-------------------------------------|
| 120066-0259 | 884030A09M003 | .98' +.75" -0 [1.3M +19.1 -0] |
| 120066-0262 | 884030A09M006 | 1.97' +1.75" -0 [1.6M +44.5 -0] |
| 120066-0266 | 884030A09M010 | 3.27' +2.19" -0 [1.0M +55.6 -0] |
| 120066-0271 | 884030A09M020 | 6.56' +3.50" -0 [2.0M +88.9 -0] |
| 120066-0277 | 884030A09M030 | 9.84' +3.50" -0 [3.0M +88.9 -0] |
| 120066-0279 | 884030A09M040 | 13.12' +6.50" -0 [4.0M +165.1 -0] |
| 120066-0284 | 884030A09M050 | 16.40' +6.50" -0 [5.0M +165.1 -0] |
| 120066-0297 | 884030A09M100 | 32.81' +12.50" -0 [10.0M +317.5 -0] |
| 120066-0313 | 884030A09M200 | 65.62' +24.50" -0 [20.0M +622.3 -0] |



FEMALE FACE VIEW



MALE FACE VIEW

| | | |
|---|-------|---|
| 1 | BROWN | 1 |
| 2 | WHITE | 2 |
| 3 | BLUE | 3 |
| 4 | BLACK | 4 |

WIRING DIAGRAM

| ITEM | COMPONENT | MATERIAL | FINISH |
|------|--|--------------|------------------|
| 1 | INSERT | PUR | BLACK |
| 2 | CONTACT SOCKET | COPPER ALLOY | GOLD OVER NICKEL |
| 3 | CONTACT PIN | COPPER ALLOY | GOLD OVER NICKEL |
| 4 | COUPLING NUT | BRASS | NICKEL PLATED |
| 5 | O-RING | VITON | RED |
| 6 | OVERMOLD | PUR | YELLOW |
| 7 | CABLE-22 AWG, 26 x #36 COPPER STRANDING, 4 CONDUCTOR, 300V | PVC | YELLOW |
| 8 | LABEL | MYLAR | BLACK/YELLOW |

| | |
|-----------------------|---------------------------------|
| VOLTAGE RATING | 250 VAC/VDC |
| AMPERAGE RATING | 4 AMPS |
| PROTECTION | IP67 |
| OPERATING TEMPERATURE | -20°C TO 105°C |
| UL CERTIFICATIONS | UL RECOGNIZED, FILE NO. E152210 |
| CSA CERTIFICATIONS | CSA CERTIFIED, FILE NO. LR6837 |

| | | | | | | | | | | | | | | | | | | | |
|---|--------------------------------------|---|--|----|------|----------|------|------|----------|------|------|----------|------|------|---------|------|------|---|---|
| RLSO DRAWING EC NO: WNA2009-0631 DRWN: BWOODMAN 3/27/09 CH'KD: JM APPR: JFMURPHY 2009/04/01 | QUALITY SYMBOL ▽=0 ▽C=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>±---</td> <td>±---</td> </tr> <tr> <td>3 PLACES</td> <td>±---</td> <td>±---</td> </tr> <tr> <td>2 PLACES</td> <td>±---</td> <td>±.01</td> </tr> <tr> <td>1 PLACE</td> <td>±0.3</td> <td>±---</td> </tr> </table> | | mm | INCH | 4 PLACES | ±--- | ±--- | 3 PLACES | ±--- | ±--- | 2 PLACES | ±--- | ±.01 | 1 PLACE | ±0.3 | ±--- | DIMENSION STYLE IN/MM DRAWN BY: BW DATE: 2009/03/27 CHECKED BY: TW DATE: 2009/03/27 APPROVED BY: DATE: | SCALE: --- DESIGN UNITS: --- THIRD ANGLE PROJECTION |
| | | mm | INCH | | | | | | | | | | | | | | | | |
| | 4 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | |
| | 3 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | |
| 2 PLACES | ±--- | ±.01 | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±0.3 | ±--- | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE CHART SIZE C | TITLE: MICRO-CHANGE CORDSET 4 POLE MALE/FEMALE PVC CABLE MOLEX INCORPORATED | DOCUMENT NO. SD-120066-005 SHEET NO. 1 OF 1 | | | | | | | | | | | | | | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | |