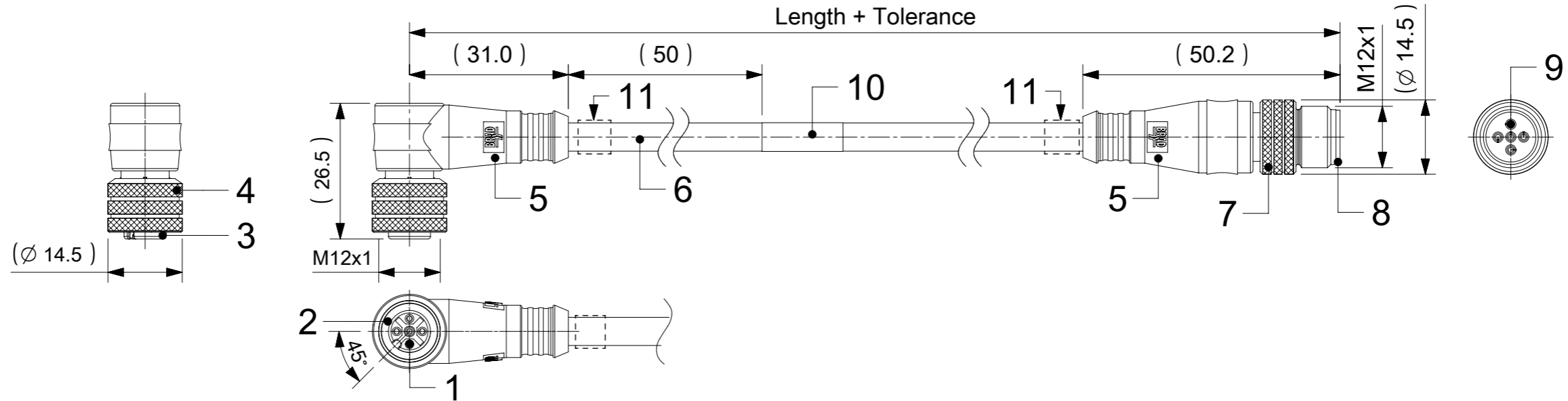


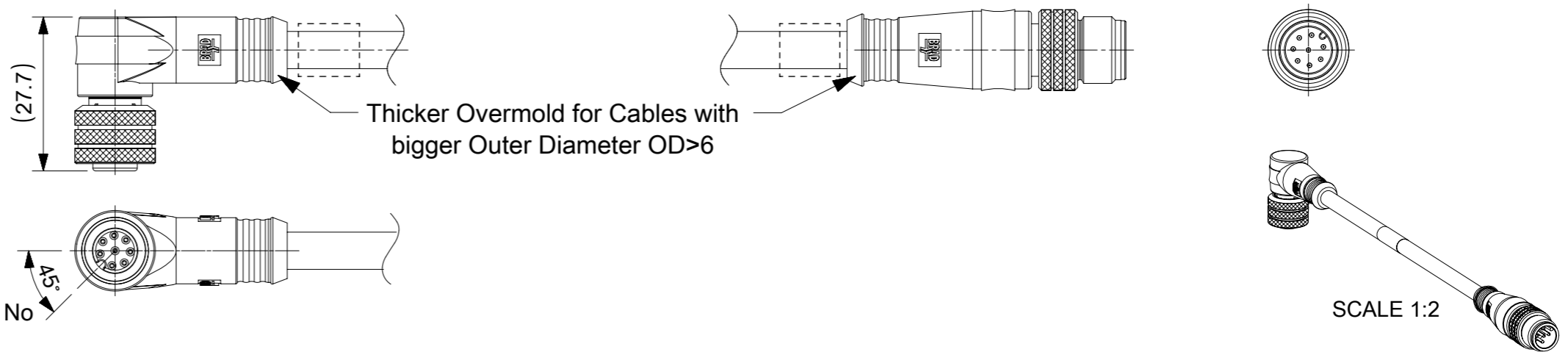
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



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

* FOR CABLES Ixx USE PRINTING ON THE CABLE IN THE SAME MEASUREMENT LIKE FOR LABEL - ENGINEERING No



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 | --- | 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 PART LIST | 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 | SEE PART LIST | --- |
| 7 | 1 | COUPLING NUT MALE | SEE PART LIST | --- |
| 6 | - | CABLE | SEE SHEET 2 | --- |
| 5 | - | OVERMOLDING BLACK | SEE PART LIST | --- |
| 4 | 1 | COUPLING NUT FEMALE | SEE PART LIST | --- |
| 3 | 1 | INSERT FEMALE BLACK | SEE PART LIST | --- |
| 2 | 1 | O-RING RED | FPM | --- |
| 1 | 3 / 4 / 5 / 8 | CONTACT FEMALE | SEE PART LIST | SELECTIVE Au OVER Ni |

| | | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------|
| FUNCTIONAL SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | |
| ▽A = 0 | DIMENSION UNITS: mm | SCALE: 1:1 |
| ▽E = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | |
| ▽F = 0 | ANGULAR TOL ± 1.0° | |
| DIVISIONAL SYMBOLS | 4 PLACES | ± |
| | 3 PLACES | ± |
| | 2 PLACES | ± 0.05 |
| | 1 PLACE | ± 0.3 |
| | 0 PLACES | ± 0.5 |

| | |
|-------------------|------------|
| EC NO: 726454 | 2022/11/30 |
| DRWN: LIKITV | 2022/11/30 |
| CHK'D: GGA | 2022/11/30 |
| APPR: GGA | 2022/11/30 |
| INITIAL REVISION: | |
| DRWN: JMARSZALEK | 2016/10/06 |
| APPR: RSILLER | 2016/12/08 |

| | | | |
|-----------------|----------|----------|----------|
| DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
| 1200660973 | PSD | 000 | A10 |

| | | | | | | |
|------------------------------------------------------|------------------------|---------|--------|-----------------|----------------|--------------|
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
| | | A3-SIZE | 120066 | SEE SHEET 3, 4 | GENERAL MARKET | 1 OF 4 |

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

8 8 X 0 X 1 X X X X X X X X

OPTIONS

88=Micro-Change
M12x1
Double ended

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

Heads style:
031=Plug Female 90°
to Plug Male Straight
021=Plug Female 90°
to Plug Male Straight
with Female
Coupling Nut

Cable type: See Table

Units:
M=Meter
C=Centimeter

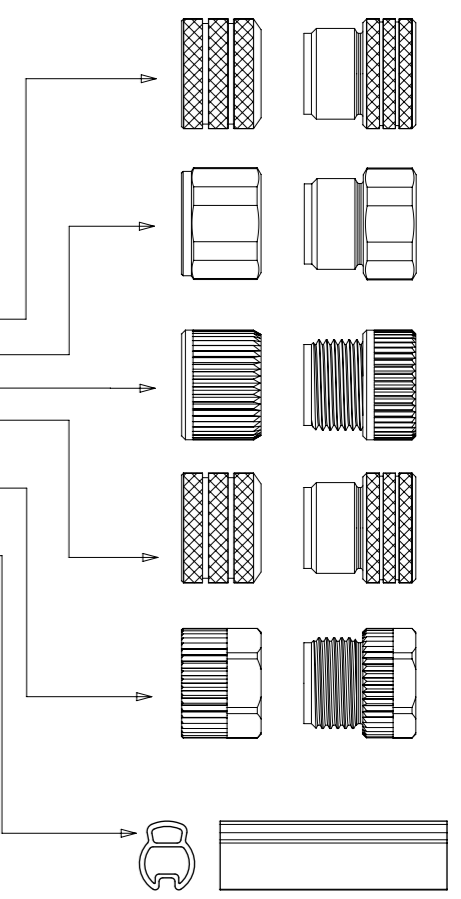
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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
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 TPU 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 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 |
|------------|---------------|---------------------|-----------------|----------------|--------------------------|--------------------------------|---------------------------------|-----------------------------------------------------|--------|
| 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 | 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 PLC | I/II A/B 90°C/300V | max 105°C | - | - | - |
| 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. | - | - |
| 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 |
| E02 | 3 / 4 / 5 / 8 | 0.25mm ² | PVC BLACK | UL 2464/1729 | C22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D. | -10°C to +80°C, 15xO.D. | - | - |
| E03 | 3 / 4 / 5 | 0.34mm ² | PVC BLACK | UL 2464/1729 | C22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D. | -10°C to +80°C, 15xO.D. | - | - |
| H09 | 3 / 4 / 5 | 0.34mm ² | PUR BLACK LSOH | UL 21198/10493 | C22.2 I/II A/B 80°C/300V | -40°C to +80°C, 5xO.D. | -25°C to +80°C, 10xO.D. | 2 000 000 cycles at 20°C, Temp. range +5°C to +60°C | - |
| P03 | 3 / 4 / 5 | 0.34mm ² | PUR / PVC BLACK | - | - | -30°C to +80°C, >7xO.D. | -5°C to +80°C, >15xO.D. | - | - |
| H08 | 8 | 0.25mm ² | PUR BLACK LSOH | UL 21198/10493 | UL 21198/10493 | -40°C to +80°C, >5xO.D. | -25°C to +80°C, >10xO.D. | 2 000 000 cycles, Temp max 60°C | - |
| P02 | 8 | 0.25mm ² | PUR / PVC BLACK | - | - | -30°C to +80°C, >7xO.D. | -5°C to +80°C, >15xO.D. | - | - |


CABLE LENGTH TOLERANCES

| OVER | UP TO AND INCLUDING | TOLERANCES |
|---------|---------------------|------------------------|
| 0 | 305mm | +19mm |
| 305mm | 915mm | +45mm |
| 915mm | 1830mm | +56mm |
| 1830mm | 3660mm | +89mm |
| 3660mm | 7320mm | +165mm |
| 7320mm | 14640mm | +317mm |
| 14640mm | 30500mm | +610mm |
| 30500mm | > | +2% of finished length |

| | | | | | | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------|--------------|----------|
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | molex | | |
| | FUNCTIONAL SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | CSE M12 XP AC FE RA MA STR XM DE | | | |
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | PRODUCT CUSTOMER DRAWING | | | |
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | 1200660973 | PSD | 000 | A10 |
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER | |
| 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807. | SEE SHEET 3, 4 | GENERAL MARKET | 2 OF 4 | |

| Pos. | Part No. | Engineering No. | Cable Length |
|------|------------|-----------------|--------------|
| 143 | 1200668210 | 884031H09M009 | 0.9m |
| 144 | 1200668484 | 884031H09M010 | 1m |
| 145 | 1200668848 | 884031H09M013 | 1.3m |
| 146 | 1200668488 | 884031H09M015 | 1.5m |
| 147 | 1200668845 | 884031H09M018 | 1.8m |
| 148 | 1200668212 | 884031H09M020 | 2m |
| 149 | 1200668847 | 884031H09M021 | 2.1m |
| 150 | 1200668215 | 884031H09M030 | 3m |
| 151 | 1200668670 | 884031H09M050 | 5m |
| 152 | 1200668671 | 884031H09M100 | 10m |
| 153 | 1200070526 | 884031P03M003 | 0.3m |
| 154 | 1200070527 | 884031P03M006 | 0.6m |
| 155 | 1200060056 | 884031P03M010 | 1m |
| 156 | 1200060057 | 884031P03M020 | 2m |
| 157 | 1200070529 | 884031P03M030 | 3m |
| 158 | 1200071187 | 884031P03M050 | 5m |
| 159 | 1200072012 | 884031P03M100 | 10m |
| 160 | 1300288001 | 885031D12M020 | 2m |
| 161 | 1200668658 | 885031E02M020 | 2m |
| 162 | 1200668610 | 885031E02M050 | 5m |
| 163 | 1200668660 | 885031E02M100 | 10m |
| 164 | 1200668339 | 885031E03M006 | 0.6m |
| 165 | 1200668189 | 885031E03M010 | 1m |
| 166 | 1200668278 | 885031E03M020 | 2m |
| 167 | 1200668340 | 885031E03M030 | 3m |
| 168 | 1200668279 | 885031E03M050 | 5m |
| 169 | 1200668653 | 885031E03M070 | 7m |
| 170 | 1200668348 | 885031E03M100 | 10m |
| 171 | 1200668761 | 885031E03M150 | 15m |
| 172 | 1200669229 | 885031H09C250 | 25m |
| 173 | 1200668512 | 885031H09M006 | 0.6m |
| 174 | 1200668496 | 885031H09M010 | 1m |
| 175 | 1200668513 | 885031H09M020 | 2m |
| 176 | 1200668514 | 885031H09M030 | 3m |
| 177 | 1200668515 | 885031H09M050 | 5m |
| 178 | 1200668516 | 885031H09M100 | 10m |
| 179 | 1200073085 | 885031P03M006 | 0.6m |
| 180 | 1200668188 | 885031P03M010 | 1m |
| 181 | 1200072376 | 885031P03M0105 | 1m |
| 182 | 1200070917 | 885031P03M020 | 2m |
| 183 | 1200668091 | 885031P03M025 | 2.5m |
| 184 | 1200070919 | 885031P03M030 | 3m |
| 185 | 1200668273 | 885031P03M050 | 5m |
| 186 | 1200073086 | 885031P03M100 | 10m |
| 187 | 1200070434 | 884021E03M020 | 2m |
| 188 | 1200658319 | 888031H08M050 | 5m |
| 189 | 1200668673 | 888031E02M0041 | 0.4m |
| 190 | 1200668849 | 888031P02M150 | 15m |

| Pos. | Part No. | Engineering No. | Cable Length |
|------|------------|-----------------|--------------|
| 191 | 1200656208 | 888031H08C250 | 2.5m |
| 192 | 1200656209 | 888031H08M005 | 0.5m |
| 193 | 1200656210 | 888031H08M008 | 0.8m |
| 194 | 1200656211 | 888031H08M012 | 1.2m |
| 195 | 1200656212 | 888031H08M015 | 1.5m |
| 196 | 1200070057 | 883021E03M006 | 0.6m |
| 197 | 1200070058 | 883021E03M020 | 2m |
| 198 | 1200070439 | 884021P03M006 | 0.6m |
| 199 | 1200070440 | 884021P03M010 | 1m |
| 200 | 1200070441 | 884021P03M020 | 2m |
| 201 | 1200070442 | 884021P03M030 | 3m |
| 202 | 1200070870 | 883021P03M050 | 5m |
| 203 | 1200072191 | 883021E03M030 | 3m |
| 204 | 1200072198 | 883021E03M050 | 5m |
| 205 | 1200665038 | 884021E03M050 | 5m |
| 206 | 1200668061 | 884021E03M006 | 0.6m |
| 207 | 1200668219 | 884021E03M030 | 3m |
| 208 | 1200668673 | 888031E02M0041 | 0.4m |
| 209 | 1200669541 | 884031P03M015 | 1.5m |
| 210 | 1200669885 | 884031E03M004 | 0.4m |
| 211 | 1200669886 | 884031E03M005 | 0.5m |
| 212 | 1200669887 | 884031E03M013 | 1.3m |
| 213 | 1200669888 | 884031E03M080 | 8m |

| | | | |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
| FUNCTIONAL SYMBOLS | 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 OBSOLETE PART NUMBERS AS PER PCN#510807. |
| $\nabla_A = 0$ | mm | 1:1 |  CSE M12 XP AC FE RA MA STR XM DE |
| $\nabla_E = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | |
| $\nabla_P = 0$ | ANGULAR TOL $\pm 1.0^\circ$ | | EC NO: 726454 DRWN: LIKITV 2022/11/30 CHK'D: GGA 2022/11/30 APPR: GGA 2022/11/30 |
| DIVISIONAL SYMBOLS | 4 PLACES | \pm | |
| | 3 PLACES | \pm | INITIAL REVISION: DRWN: JMARSZALEK 2016/10/06 APPR: RSILLER 2016/12/08 |
| | 2 PLACES | ± 0.05 | |
| | 1 PLACE | ± 0.3 | DOCUMENT NUMBER: 1200660973 DOC TYPE: PSD DOC PART: 000 REVISION: A10 |
| | 0 PLACES | ± 0.5 | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING: A3-SIZE |
| | | SERIES: 120066 | MATERIAL NUMBER: SEE PART LIST |
| | | CUSTOMER: GENERAL MARKET | SHEET NUMBER: 4 OF 4 |