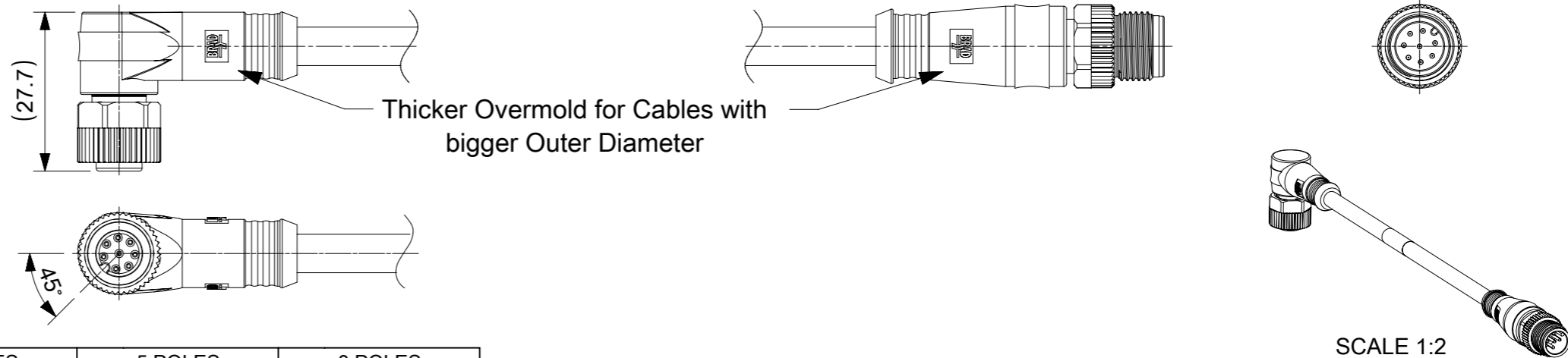


FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



NOTES:
 CONTACT CURRENT RATING: 3-5 POLES 4A
 8 POLES 2A
 VOLTAGE RATING: 3-4 POLES 250V
 5 POLES 60V
 8 POLES 30V
 PROTECTION CLASS: IP 67
 TEMPERATURE: -25°C / +85°C



CONTACT POSITION FRONT VIEW:

| CABLE | 3 POLES | 4 POLES | 5 POLES | 5 POLES | 8 POLES | | | | | |
|-------------|----------|--------------------|--------------------|---------|----------|-------|-----|------------------|-----|--------|
| | B30, B55 | B30, B33, B36, B55 | B30, B33, B36, B55 | B42 | B41, B49 | | | | | |
| FEMALE | | | | | | | | | | |
| MALE | | | | | | | | | | |
| CONNECTIONS | PIN | WIRE | PIN | WIRE | PIN | WIRE | PIN | WIRE | PIN | WIRE |
| | 1 | BROWN | 1 | BROWN | 1 | BROWN | 1 | BROWN | 1 | WHITE |
| | 2 | --- | 2 | WHITE | 2 | WHITE | 2 | WHITE | 2 | BROWN |
| | 3 | BLUE | 3 | BLUE | 3 | BLUE | 3 | BLUE | 3 | GREEN |
| | 4 | BLACK | 4 | BLACK | 4 | BLACK | 4 | BLACK | 4 | YELLOW |
| | 5 | --- | 5 | --- | 5 | GREY | 5 | GREEN/ YELLOW | 5 | GREY |
| | | | | | | | 6 | | 6 | PINK |
| | | | | | | | 7 | | 7 | BLUE |
| | | | | | | 8 | | 8 | RED | |

CODING REQUIRED TO IEC 61076-2-101

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH |
|------|-----------|---------------------|-------------|----------------------------|
| 10 | 1 | LABEL OR PRINTING | VINYL / --- | --- |
| 9 | 3 / 4 / 5 | CONTACT M12 MALE | COPPER | SELECTIVE GOLD OVER NICKEL |
| | 8 | | BRASS | SELECTIVE GOLD OVER NICKEL |
| 8 | 1 | INSERT MALE BLACK | TPU | --- |
| 7 | 1 | COUPLING NUT MALE | SEE SHEET 2 | SEE SHEET 2 |
| 6 | - | CABLE | SEE SHEET 2 | --- |
| 5 | - | OVERMOULDING | TPU | SEE SHEET 2 |
| 4 | 1 | COUPLING NUT FEMALE | SEE SHEET 2 | SEE SHEET 2 |
| 3 | 1 | INSERT FEMALE BLACK | PUR | --- |
| 1 | 3 / 4 / 5 | CONTACT M12 FEMALE | BRONZE | SELECTIVE GOLD OVER NICKEL |
| | 8 | | BRASS | SELECTIVE GOLD OVER NICKEL |

| | | | | |
|--|---|---------------------------------|--|--|
| FUNCTIONAL SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |
| $\nabla/A = 0$ $\nabla/E = 0$ $\nabla/F = 0$ | DIMENSION UNITS: mm SCALE: 1:1 | CURRENT REV DESC: NEW P/N ADDED | | |
| DIVISIONAL SYMBOLS | EC NO: 730623 DRWN: RSCHIEBER CHK'D: RSILLER APPR: RSILLER | | 2022/11/21 2022/12/01 2022/12/01 | |
| | GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.1 0 PLACES ± 0.2 | | PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 1200668999 DOC TYPE: PSD DOC PART: 000 REVISION: A8 | |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIRD ANGLE PROJECTION | | DRAWING: A3-SIZE SERIES: 120066 MATERIAL NUMBER: SEE SHEET 3 CUSTOMER: GENERAL MARKET SHEET NUMBER: 1 OF 3 | |

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

OPTIONS

8 8 X 0 3 1 X X X X X X X X

88=M12x1 Double ended

Poles:
3=3 Poles
4=4 Poles
5=5 Poles
8=8 Poles

Heads style:
031=Plug Female 90° to Plug Male Straight

Cable type: See Table

Units:
M=Meter
C=Centimeter
T=10x Meter

Length
Examples:
005=0.5 units
010=1 units
020=1 units
050=5 units
100=10 units
150=15 units
200=20 units

Overmold color:
Blank (Standard)=Black
A=Grey / G=Black / Y=Yellow / R=Red

Coupling Nut:
Blank (Standard)=Knurled/Hex Brass, Ni Plated
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated

H= 2 pcs. of I/D Carrier PVC Transparent (Cable B36 always with 2 pcs. I/D Carrier)



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: TEMP. / BENDING RADIUS | DRAG CHAIN | CABLE PRODUCT SPECIFICATION | CABLE SPEC. DRAWING |
|------------|--------------|---------------------|--------------|--------------|-------------------------|--------------------------------|---------------------------------|------------------------------------|-------------------------------------|-----------------------------|---------------------|
| B30 | 3 / 4 / 5 | 0.34mm ² | TPU Black | UL 21215/758 | C22.2 I/II A/B 80°/600V | -40°C to +90°C 5xO.D. | -25°C to +80°C 7.5xO.D. | -5°C to +60°C 7.5xO.D. | up to 5 000 000 cycles at temp 20°C | 1552200001 | SD-120209-001 |
| B33 | 4 / 5 | 0.34mm ² | TPU Gray | | | | | | | | SD-120209-001 |
| B36 | 4 / 5 | 0.34mm ² | TPU Orange | | | | | | | | SD-120209-001 |
| B41 | 8 | 0.25mm ² | TPU Black | | | | | | | | SD-120209-006 |
| B42 | 5 | 0.34mm ² | TPU Black | | | | | | | | SD-120209-001 |
| B55 | 4 / 5 | 0.34mm ² | TPU Yellow | | | | | | | | n/a |

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

| | | | | | | | | |
|--|---|------------------------|--|----------------|-----------------------------|---|---------------|--------------|
| 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: NEW P/N ADDED | | molex | | | |
| | △/A = 0 | DIMENSION UNITS: mm | | | | | | SCALE: 1:1 |
| DIVISIONAL SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | EC NO: 730623 DRWN: RSCHIEBER 2022/11/21 CHK'D: RSILLER 2022/12/01 APPR: RSILLER 2022/12/01 INITIAL REVISION: DRWN: JMARSZALEK 2016/08/12 APPR: RSILLER 2016/08/29 | | | CSE M12 XP AC FE RA WSOR MA STR XM DE PRODUCT CUSTOMER DRAWING | | |
| | △/E = 0 | ANGULAR TOL ± 1.0 ° | | | | | | |
| | △/F = 0 | 4 PLACES ± | | | | | | |
| | △/G = 0 | 3 PLACES ± | | | | | | |
| | △/H = 0 | 2 PLACES ± 0.05 | | | | | | |
| △/I = 0 | 1 PLACE ± 0.1 | | | | | | | |
| △/J = 0 | 0 PLACES ± 0.2 | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066 | DOCUMENT NUMBER: 1200668999 | DOC TYPE: PSD | DOC PART: 000 | REVISION: A8 |

PART LIST

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 1 | 1200668877 | 883031B30M006 | 600 |
| 2 | 1200668878 | 883031B30M010 | 1000 |
| 3 | 1200668879 | 883031B30M020 | 2000 |
| 4 | 1200668880 | 883031B30M030 | 3000 |
| 5 | 1200668881 | 883031B30M050 | 5000 |
| 6 | 1200668882 | 883031B30M100 | 10000 |
| 7 | 1200668829 | 884031B30M006 | 600 |
| 8 | 1200668830 | 884031B30M010 | 1000 |
| 9 | 1200668831 | 884031B30M020 | 2000 |
| 10 | 1200668832 | 884031B30M030 | 3000 |
| 11 | 1200668833 | 884031B30M050 | 5000 |
| 12 | 1200668834 | 884031B30M100 | 10000 |
| 13 | 1200669285 | 884031B30M150 | 15000 |
| 14 | 1200669520 | 884031B30M015 | 1500 |
| 15 | 1200669566 | 884031B30M200 | 20000 |
| 16 | 1200668997 | 885031B30M006 | 600 |
| 17 | 1200668998 | 885031B30M010 | 1000 |
| 18 | 1200668999 | 885031B30M020 | 2000 |
| 19 | 1200669000 | 885031B30M030 | 3000 |
| 20 | 1200669001 | 885031B30M050 | 5000 |
| 21 | 1200669002 | 885031B30M100 | 10000 |
| 22 | 1200669241 | 885031B30M0067 | 600 |
| 23 | 1200669243 | 885031B30M0207 | 2000 |
| 24 | 1200669371 | 885031B30M010H | 1000 |
| 25 | 1200669677 | 885031B30M150 | 15000 |
| 26 | 1200669678 | 885031B30M200 | 20000 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 27 | 1200669569 | 884031B33M005 | 500 |
| 28 | 1200669570 | 884031B33M010 | 1000 |
| 29 | 1200669571 | 884031B33M020 | 2000 |
| 30 | 1200669572 | 884031B33M030 | 3000 |
| 31 | 1200669573 | 884031B33M050 | 5000 |
| 32 | 1200669574 | 884031B33M100 | 10000 |
| 33 | 1200669581 | 884031B33M005A | 500 |
| 34 | 1200669582 | 884031B33M010A | 1000 |
| 35 | 1200669621 | 884031B33M020A | 2000 |
| 36 | 1200669622 | 884031B33M030A | 3000 |
| 37 | 1200669623 | 884031B33M050A | 5000 |
| 38 | 1200669624 | 884031B33M100A | 10000 |
| 39 | 1200669625 | 884031B33M150A | 15000 |
| 40 | 1200669626 | 884031B33M200A | 20000 |
| 41 | 1200669670 | 885031B33M010A | 1000 |
| 42 | 1200669671 | 885031B33M020A | 2000 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 43 | 1200669672 | 885031B33M030A | 3000 |
| 44 | 1200669673 | 885031B33M050A | 5000 |
| 45 | 1200669674 | 885031B33M100A | 10000 |
| 46 | 1200669675 | 885031B33M150A | 15000 |
| 47 | 1200669676 | 885031B33M200A | 20000 |
| 48 | 1200669908 | 885031B33M005A | 500 |
| 49 | 1200669909 | 885031B33M300A | 300000 |
| 50 | 1200669910 | 885031B33M400A | 400000 |
| 51 | 1200669911 | 885031B33M500A | 500000 |

| Lp. | MOLEX PN | ENGINEERING NO | L [mm] |
|-----|------------|-----------------|--------|
| 48 | 1200669060 | 885031B36M0057Y | 500 |
| 49 | 1200669061 | 885031B36M0107Y | 1000 |
| 50 | 1200669062 | 885031B36M0207Y | 2000 |
| 51 | 1200669063 | 885031B36M0307Y | 3000 |
| 52 | 1200669064 | 885031B36M0407Y | 4000 |
| 53 | 1200669065 | 885031B36M0507Y | 5000 |
| 54 | 1200669066 | 885031B36M0607Y | 6000 |
| 55 | 1200669067 | 885031B36M0807Y | 8000 |
| 56 | 1200669068 | 885031B36M1007Y | 10000 |
| 57 | 1200669069 | 885031B36M1207Y | 12000 |
| 58 | 1200669070 | 885031B36M1507Y | 15000 |
| 59 | 1200669071 | 885031B36M1807Y | 18000 |
| 60 | 1200669072 | 885031B36M2007Y | 20000 |
| 61 | 1200669073 | 885031B36M2507Y | 25000 |
| 62 | 1200669074 | 885031B36M3007Y | 30000 |
| 63 | 1200669549 | 885031B36M0057H | 500 |
| 64 | 1200669550 | 885031B36M0107H | 1000 |
| 65 | 1200669551 | 885031B36M0157H | 1500 |
| 66 | 1200669552 | 885031B36M0207H | 2000 |
| 67 | 1200669553 | 885031B36M0307H | 3000 |
| 68 | 1200669554 | 885031B36M0507H | 5000 |
| 69 | 1200669555 | 885031B36M1007H | 10000 |
| 70 | 1200668861 | 884031B36M0507Y | 5000 |
| 71 | 1200668862 | 884031B36M1007Y | 10000 |
| 72 | 1200669047 | 884031B36M0057Y | 500 |
| 73 | 1200669048 | 884031B36M0107Y | 1000 |
| 74 | 1200669049 | 884031B36M0157Y | 1500 |
| 75 | 1200669050 | 884031B36M0207Y | 2000 |
| 76 | 1200669051 | 884031B36M0307Y | 3000 |
| 77 | 1200669052 | 884031B36M0407Y | 4000 |
| 78 | 1200669053 | 884031B36M0607Y | 6000 |
| 79 | 1200669054 | 884031B36M0807Y | 8000 |
| 80 | 1200669055 | 884031B36M1207Y | 12000 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|-----------------|--------|
| 81 | 1200669056 | 884031B36M1507Y | 15000 |
| 82 | 1200669057 | 884031B36M2007Y | 20000 |
| 83 | 1200669058 | 884031B36M2507Y | 25000 |
| 84 | 1200669059 | 884031B36M3007Y | 30000 |
| 85 | 1200669534 | 884031B36M0057H | 500 |
| 86 | 1200669535 | 884031B36M0107H | 1000 |
| 87 | 1200669536 | 884031B36M0157H | 1500 |
| 88 | 1200669537 | 884031B36M0207H | 2000 |
| 89 | 1200669538 | 884031B36M0307H | 3000 |
| 90 | 1200669539 | 884031B36M0507H | 5000 |
| 91 | 1200669540 | 884031B36M1007H | 10000 |
| 92 | 1200669564 | 884031B36M0067Y | 600 |


| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 93 | 1200668887 | 888031B41M050 | 5000 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 94 | 1200668835 | 885031B42M006 | 600 |
| 95 | 1200668836 | 885031B42M010 | 1000 |
| 96 | 1200668837 | 885031B42M020 | 2000 |
| 97 | 1200668838 | 885031B42M030 | 3000 |
| 98 | 1200668839 | 885031B42M050 | 5000 |
| 99 | 1200668840 | 885031B42M100 | 10000 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 100 | 1200669272 | 884031B55M010Y | 1000 |
| 101 | 1200669273 | 884031B55M020Y | 2000 |
| 102 | 1200669274 | 884031B55M030Y | 3000 |
| 103 | 1200669275 | 884031B55M050Y | 5000 |
| 104 | 1200669276 | 884031B55M060Y | 6000 |
| 105 | 1200669277 | 884031B55M100Y | 10000 |
| 106 | 1200669278 | 884031B55M150Y | 15000 |
| 107 | 1200669419 | 884031B55M070Y | 7000 |
| 108 | 1200669420 | 884031B55M200Y | 20000 |
| 109 | 1200669730 | 884031B55M005Y | 500 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] |
|-----|------------|----------------|--------|
| 110 | 1200669679 | 885031B55M010Y | 1000 |
| 111 | 1200669680 | 885031B55M020Y | 2000 |
| 112 | 1200669681 | 885031B55M030Y | 3000 |
| 113 | 1200669682 | 885031B55M050Y | 5000 |
| 114 | 1200669683 | 885031B55M100Y | 10000 |
| 115 | 1200669684 | 885031B55M150Y | 15000 |
| 116 | 1200669685 | 885031B55M200Y | 20000 |

| Lp. | MOLEX PN | ENGINEERING No | L [mm] | |
|-----|------------|----------------|--------|----|
| 117 | 1200669949 | 884031B30M003 | 300 | A8 |
| 118 | 1200669744 | 884031B30M080 | 8000 | |

| | | | | |
|--|---|------------------------|--|--|
| FUNCTIONAL SYMBOLS √A = 0 √E = 0 √V = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | CURRENT REV DESC: NEW P/N ADDED | |
| | DIMENSION UNITS mm | SCALE 1:1 |  CSE M12 XP AC FE RA WSOR MA STR XM DE | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | EC NO: 730623 | | |
| ANGULAR TOL ± 1.0° | | DRWN: RSCHIEBER | 2022/12/01 | DOC TYPE DOC PART REVISION PSD 000 A8 |
| 4 PLACES ± | | CHK'D: RSILLER | 2022/12/01 | PRODUCT CUSTOMER DRAWING |
| 3 PLACES ± | | APPR: RSILLER | | |
| 2 PLACES ± 0.05 | | INITIAL REVISION: | | MATERIAL NUMBER SEE PART LIST |
| 1 PLACE ± 0.1 | | DRWN: JMARSZALEK | 2016/08/12 | |
| 0 PLACES ± 0.2 | | APPR: RSILLER | | SHEET NUMBER 3 OF 3 |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING A3-SIZE | SERIES 120066 |