

FEMALE MICRO-CHANGE M12 STRAIGHT TO MALE MICRO-CHANGE M12 STRAIGHT

ELECTRICAL SPECIFICATIONS :

VOLTAGE RATING : 3-4P = 250V
 5P = 60V
 8P = 30V

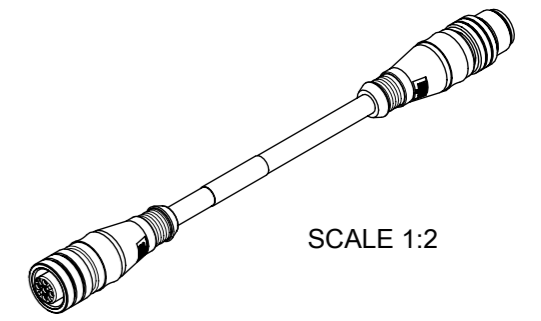
CURRENT RATING : 3-5P = 4 AMPS
 8P = 2 AMPS

INSULATION RESISTANCE : $10^8 \Omega$ MN

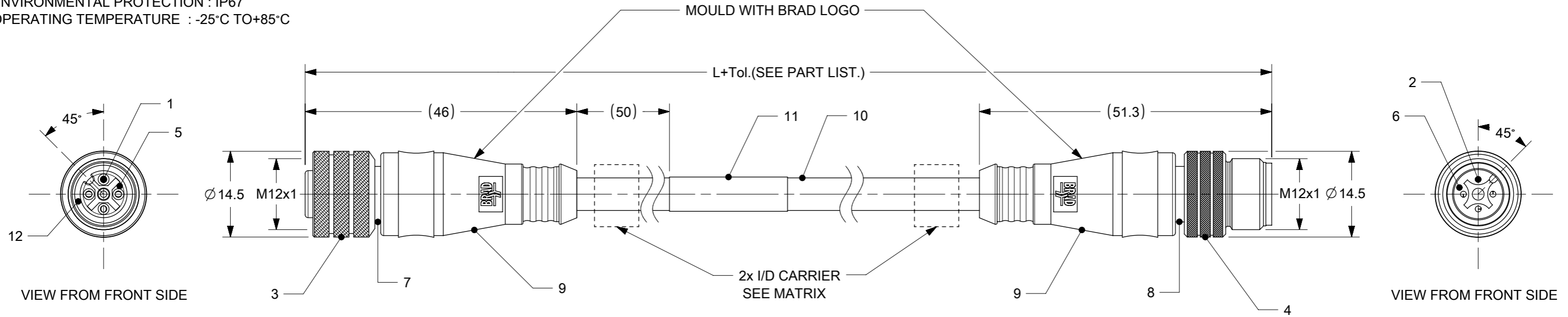
MATING CYCLES : MAX. 100

ENVIRONMENTAL PROTECTION : IP67

OPERATING TEMPERATURE : -25°C TO +85°C



SCALE 1:2



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 | GREY | 5 | GREY |
| | | | | | | | 6 | PINK |
| | | | | | | | 7 | BLUE |
| | | | | | | 8 | RED | |

CODING REQUIRED TO IEC 61076-2-101

BOM

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH/COLOR |
|------|--------------|---------------------|------------|----------------------------|
| 1 | 3/ 4 / 5 / 8 | CONTACT FEMALE | BRASS | SELECTIVE GOLD OVER NICKEL |
| 2 | 3/ 4 / 5 / 8 | CONTACT MALE | BRASS | SELECTIVE GOLD OVER NICKEL |
| 3 | 1 | COUPLING NUT FEMALE | BRASS | Ni-PLATED |
| 4 | 1 | COUPLING NUT MALE | BRASS | Ni-PLATED |
| 5 | 1 | M12 INSERT FEMALE | PUR | BLACK |
| 6 | 1 | M12 INSERT MALE | PUR | BLACK |
| 7 | 1 | SLEEVE SHLD FEMALE | BRASS | Ni-PLATED |
| 8 | 1 | SLEEVE SHLD MALE | BRASS | Ni-PLATED |
| 9 | - | OVERMOULD | TPU | SEE MATRIX |
| 10 | - | CABLE | SEE MATRIX | SEE MATRIX |
| 11 | 1 | LABEL YELLOW | VINYL | - |
| 12 | 1 | O-RING | FPM | RED |

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

DIMENSION UNITS: mm SCALE: 2:1

GENERAL TOLERANCES (UNLESS SPECIFIED):
 ANGULAR TOL ± 1.0°
 4 PLACES ±
 3 PLACES ±
 2 PLACES ± 0.05
 1 PLACE ± 0.3
 0 PLACES ± 0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 120069

MATERIAL NUMBER: SEE TABLE

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 3

EC NO: 732259
 DRWN: SANTHN
 CHK'D: GGA
 APPR: GGA

2022/12/15
 2022/12/21
 2022/12/21

INITIAL REVISION:
 DRWN: RSTONE
 APPR: BWOODMAN

2017/01/04
 2017/01/18

DOCUMENT NUMBER: SD-120069-041

DOC TYPE: PSD

DOC PART: 001

REVISION: A5

molex

MICRO-CHANGE ASSEMBLY
 MALE/FEMALE, SHIELDED 3-8 POLE

PRODUCT CUSTOMER DRAWING

ENGINEERING NO. - NUMERICAL CODE

8 8 X S 3 0 X X X M X X X X X

8 = M12
MICRO
CHANGE

8 = M12
MICRO
CHANGE

S30= Double-Ended Cordset
Shielded Female Straight
to Shielded Male Straight

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

Cable type:
S20 - Yellow Braided PVC 0.34mm²(22AWG)
P20 - Black Braided PUR 0.34mm²(22AWG)
P19 - Black Braided PUR 0.25mm²(24AWG)
S19 - Yellow Braided PVC 0.25mm²(24AWG)

Units:
M=Meter
F=Feet

Length
Examples:
020=0.5 METERS
050=5 METERS
200=20 METERS

Overmold color:
Blank= PUR (Standard)
A=Grey / G=Black / Y=Yellow
BLANK = Yellow TPU for
cables S19, S20


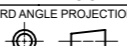
Coupling Nut Material :
Blank : Standard
1 = Stainless Steel
5= Delrin
7= Teflon Coated
H= 2x ID Carrier

CABLE INFORMATION :

| CABLE TYPE | NO. OF WIRES | CROSS SECTION | CABLE JACKET | UL | CSA | STATIC: TEMP. / BENDING RADIUS | DYNAMIC: TEMP. / BENDING RADIUS | DRAG CHAIN | SHIELD |
|------------|--------------|---------------------|----------------|---------|-----------|--------------------------------|---------------------------------|---|--------|
| 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, Velocity = 120m/min ; bending 15XO.D. | YES |
| P20 | 3/4/5 | 0.34mm ² | PUR BLACK LSOH | - | - | -40°C to +90°C | -25°C to +90°C | - | YES |
| S19 | 8 | 0.25mm ² | PVC YELLOW | UL 2661 | CSA C22.2 | -30°C to +105°C, 10xO.D. | -15°C to +105°C, 15xO.D. | 2 000 000 cycles , speed =4m/sec | YES |
| S20 | 3/4/5 | 0.34mm ² | PVC YELLOW | UL 2661 | 1731-CSA | -30°C to +105°C | -40°C to +105°C | - | YES |

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 |


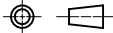
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|---|---------|--|---------|----------|-----------------|----------------|--|--------------|--|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | |
| DIMENSION UNITS | SCALE | CURRENT REV DESC: REMOVED OBSOLETE PART NUMBER AS PER PCN#512871. | | | | | | | |
| mm | 1:1 |  MICRO-CHANGE ASSEMBLY MALE/FEMALE, SHIELDED 3-8 POLE | | | | | | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | | | | | | | | |
| ANGULAR TOL | ± 1.0 ° | EC NO: 732259 DRWN: SANTHN 2022/12/15 CHK'D: GGA 2022/12/21 APPR: GGA 2022/12/21 | | | | | | | |
| 4 PLACES | ± | | | | | | | | |
| 3 PLACES | ± | INITIAL REVISION: DRWN: RSTONE 2017/01/04 APPR: BWOODMAN 2017/01/18 | | | | | | | |
| 2 PLACES | ± 0.05 | | | | | | | | |
| 1 PLACE | ± 0.3 | DOCUMENT NUMBER | | DOC TYPE | | DOC PART | | REVISION | |
| 0 PLACES | ± 0.5 | SD-120069-041 | | PSD | | 001 | | A5 | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | | SHEET NUMBER | |
| | |  | A3-SIZE | 120069 | SEE TABLE | GENERAL MARKET | | 2 OF 3 | |

| | | | | |
|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/12/21 | 07:37:43 |
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PART LIST

| No.. | MOLEX PN | ENGINEERING NO. | LENGTH |
|------|------------|-----------------|--------|
| 1 | 1200695045 | 883S30P20M010 | 1m |
| 2 | 1200698080 | 883S30P20M050 | 5m |
| 3 | 1200698035 | 884S30P20M010 | 1m |
| 4 | 1200698036 | 884S30P20M050 | 5m |
| 5 | 1200698128 | 884S30P20M100 | 10m |
| 6 | 1200698129 | 884S30P20M150 | 15m |
| 7 | 1200695054 | 885S30P20M003 | 0.3m |
| 8 | 1200699582 | 885S30P20M006H | 0.6m |
| 9 | 1200698395 | 885S30P20M010 | 1m |
| 10 | 1200699583 | 885S30P20M010H | 1m |
| 11 | 1200698342 | 885S30P20M015 | 1.5m |
| 12 | 1200698039 | 885S30P20M020 | 2m |
| 13 | 1200699584 | 885S30P20M020H | 2m |
| 14 | 1200698448 | 885S30P20M030 | 3m |
| 15 | 1200699585 | 885S30P20M030H | 3m |
| 16 | 1200698040 | 885S30P20M050 | 5m |
| 17 | 1200699586 | 885S30P20M050H | 5m |
| 18 | 1200698544 | 885S30P20M060 | 6m |
| 19 | 1200699587 | 885S30P20M060H | 6m |
| 20 | 1200695053 | 885S30P20M100 | 10m |
| 21 | 1200699588 | 885S30P20M100H | 10m |
| 22 | 1200698590 | 885S30P20M120 | 12m |
| 23 | 1200699589 | 885S30P20M150H | 15m |
| 24 | 1200699590 | 885S30P20M200H | 20m |
| 25 | 1200698140 | 885S30P20M250 | 25m |
| 26 | 1200699591 | 885S30P20M300H | 30m |
| 27 | 1200699592 | 885S30P20M350H | 35m |
| 28 | 1200698111 | 888S30P19M010 | 1m |
| 29 | 1200100233 | 888S30P19M050 | 5m |
| 30 | 1200695005 | 888S30P19M100 | 10m |

| NO. | MOLEX PN | ENGINEERING NO. | LENGTH |
|-----|------------|-----------------|--------|
| 31 | 1200695011 | 888S30P19M250 | 25m |
| 32 | 1200100128 | 883S30S20M050 | 5m |
| 33 | 1200100203 | 884S30S20M100 | 10m |
| 34 | 1200698091 | 888S30S19M010 | 1m |
| 35 | 1200699605 | 885S30P20M070 | 7m |
| 36 | 1200699606 | 885S30P20M055 | 5.5m |
| 37 | 1200699703 | 885S30P20M090 | 9m |
| 38 | | | |
| 39 | | | |
| 40 | | | |
| 41 | | | |

| | | | | | | | | | |
|---|--|--------|--|---|--|----------|--|---|--|
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| DIMENSION UNITS | | SCALE | | CURRENT REV DESC: REMOVED OBSOLETE PART NUMBER AS PER PCN#512871. | | | |  | |
| mm | | 1:1 | | | | | | | |
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | | | EC NO: 732259 DRWN: SANTHN 2022/12/15 CHK'D: GGA 2022/12/21 APPR: GGA 2022/12/21 | | | | | |
| ANGULAR TOL ± 1.0° | | | | | | | | | |
| 4 PLACES | | ± | | INITIAL REVISION: DRWN: RSTONE 2017/01/04 APPR: BWOODMAN 2017/01/18 | | | | | |
| 3 PLACES | | ± | | | | | | | |
| 2 PLACES | | ± 0.05 | | DOCUMENT NUMBER | | DOC TYPE | | REVISION | |
| 1 PLACE | | ± 0.3 | | SD-120069-041 | | PSD | | 001 A5 | |
| 0 PLACES | | ± 0.5 | | MATERIAL NUMBER | | CUSTOMER | | SHEET NUMBER | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | THIRD ANGLE PROJECTION  | | DRAWING | | SERIES | |
| | | | | A4-SIZE | | 120069 | | SEE TABLE GENERAL MARKET 3 OF 3 | |

| | | | | |
|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/12/21 | 07:37:43 |
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FORMAT: master-b-prod-A4
 REVISION: .01
 DATE: 2021/05/01