

NOTES:

RATED VOLTAGE: 3, 4, 5 contacts 250V / 300V
 RATED CURRENT: 3, 4, 5 contacts 4A
 PROTECTION CLASS: IP 68
 TEMPERATURE: -30°C / +80°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 | 5 | GREY |
| | | | | | | | 6 | PINK |
| | | | | | | | 7 | BLUE |
| | | | | | | | 8 | RED |

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH |
|------|-----------|-----------------------|-------------|----------------------|
| 7 | 1 | LABEL YELLOW | VINYL | --- |
| 6 | 3 / 4 / 5 | CONTACT MALE | COPPER | SELECTIVE Au OVER Ni |
| 5 | 1 | PLUG U12 MA XP AC STR | - | --- |
| 4 | - | CABLE | SEE SHEET 2 | --- |
| 3 | - | OVERMOULDING BLACK | TPU | --- |
| 2 | 1 | PLUG U12 FE XP AC STR | - | --- |
| 1 | 3 / 4 / 5 | CONTACT FEMALE | BRONZE | 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 | CURRENT REV DESC: | | | |
| | $\nabla_A = 0$ $\nabla_E = 0$ $\nabla_V = 0$ | DIMENSION UNITS: mm SCALE: 2:1 | GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL $\pm 1.0^\circ$ | | |
| DIVISIONAL SYMBOLS | 4 PLACES \pm | EC NO: 698441 | 2021/12/22 | U12 U12 XP FE RA MA STR XM PRODUCT CUSTOMER DRAWING | |
| | 3 PLACES \pm | DRWN: SSM | 2022/03/08 | | |
| | 2 PLACES ± 0.05 | CHK'D: RSILLER | 2022/03/08 | | |
| | 1 PLACE ± 0.3 | APPR: RSILLER | 2022/03/08 | | |
| 0 PLACES ± 0.5 | INITIAL REVISION: | DRWN: AKONDRACIUK | 2016/12/20 | DOCUMENT NUMBER | DOC TYPE |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | THIRD ANGLE PROJECTION | APPR: MIWASIECZKO | 2017/03/28 | 1200808027 | PSD |
| | | | | 000 | A1 |
| | | | | SEE PART LIST | GENERAL MARKET |
| | | | | | 1 OF 2 |

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

OPTIONS

WWXX031XXXXXX

WW=U12x1
Double ended

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

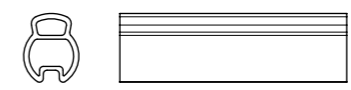
Heads style:
031=Plug Female 90°
to Plug Male Straight

Cable type: See Table

Units:
M=Meter
C=Centimeter

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

Overmold color:
Blank (Standard)=Black TPU
A=Grey / G=Black / Y=Yellow
H= 2 pcs. of I/D Carrier PVC Transparent



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 |
|------------|---------------|---------------------|----------------|----------------|---------------------------|--------------------------------|---------------------------------|---------------------------------|--------|
| H09 | 3 / 4 / 5 | 0.34mm ² | PUR BLACK LS0H | UL 21198/10493 | C 22.2 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, Temp max 60°C | - |
| H08 | 3 / 4 / 5 / 8 | 0.25mm ² | PUR BLACK LS0H | UL 21198/10493 | C 22.2 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, Temp max 60°C | - |
| E03 | 3 / 4 / 5 | 0.34mm ² | PVC BLACK | UL 2464/1729 | C 22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D. | -10°C to +80°C, 15xO.D. | - | - |
| P03 | 3 / 4 / 5 | 0.34mm ² | PUR/PVC BLACK | - | - | -30°C to +80°C, 7xO.D. | -5°C to +80°C, 15xO.D. | - | - |
| P02 | 3 / 4 / 5 / 8 | 0.25mm ² | PUR/PVC BLACK | - | - | -30°C to +80°C, 7xO.D. | -5°C to +80°C, 15xO.D. | - | - |

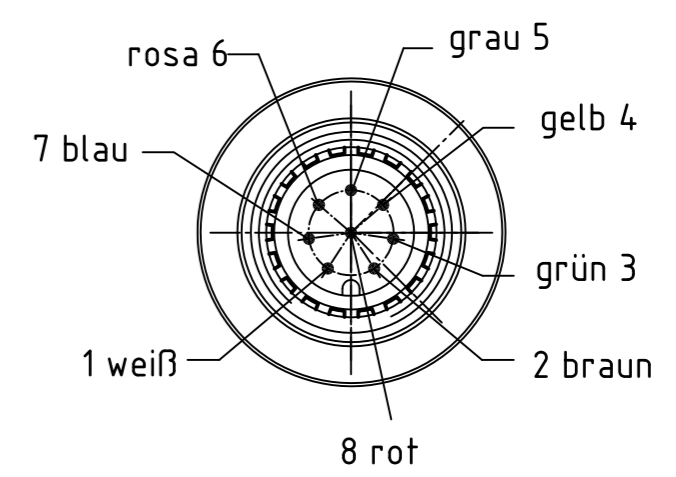
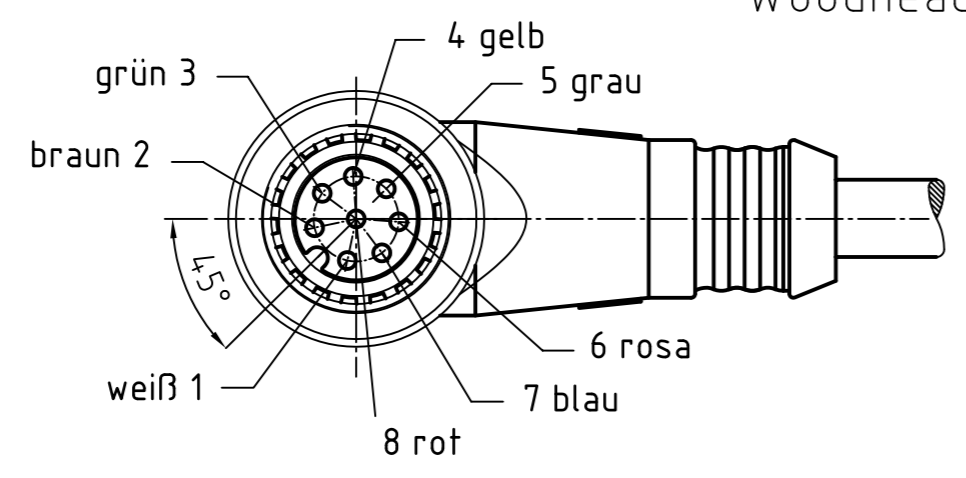
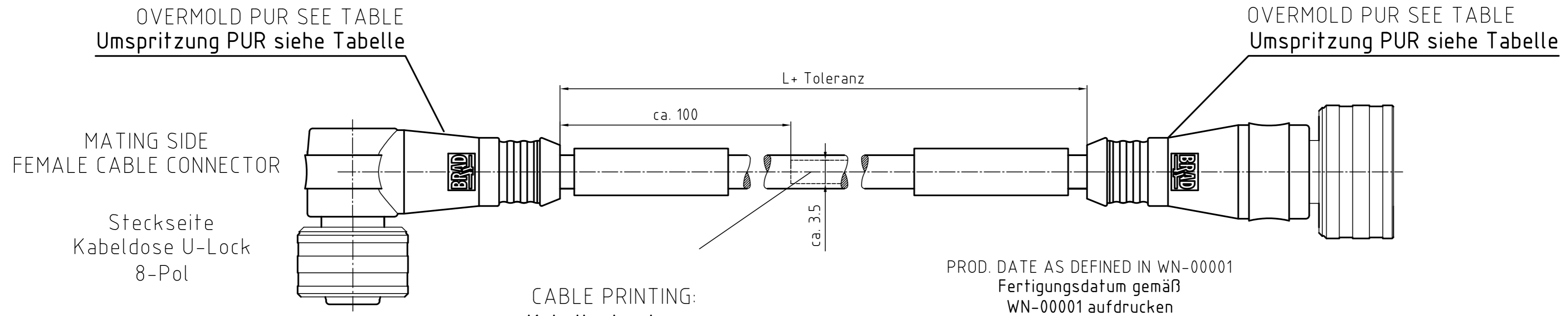
PART LIST

| MOLEX PN | ENGINEERING No | L [mm] |
|------------|----------------|--------|
| 1200808030 | WW3031H09M010 | 1000 |
| 1200808027 | WW4031H09M010 | 1000 |
| 1200808153 | WW4031E03M010 | 1000 |
| 1200805078 | WW5031P03M010 | 1000 |
| 1200808028 | WW5031H09M010 | 1000 |
| 1200808056 | WW5031P03M015 | 1500 |
| 1200808057 | WW5031P03M020 | 2000 |
| 1200808058 | WW5031P03M040 | 4000 |
| 1200808059 | WW5031P03M045 | 4500 |
| 1200808060 | WW5031P03M050 | 5000 |
| 1200808061 | WW5031P03M100 | 10000 |
| 1200808074 | WW5031P03M020A | 2000 |
| 1200808075 | WW5031P03M050A | 5000 |
| 1200805084 | WW8031P02M010 | 1000 |
| 1200808034 | WW8031H08M010 | 1000 |

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 |

| | |
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| FUNCTIONAL SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |
| $\nabla_A = 0$ $\nabla_B = 0$ $\nabla_C = 0$ | DIMENSION UNITS: mm SCALE: 1:1 GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |
| DIVISIONAL SYMBOLS | CURRENT REV DESC: EC NO: 698441 DRWN: SSM CHK'D: RSILLER APPR: RSILLER INITIAL REVISION: DRWN: AKONDRACIUK APPR: MIWASIECZKO THIRD ANGLE PROJECTION DRAWING: A3-SIZE SERIES: 120080 |
| DOCUMENT NUMBER: 1200808027 DOC TYPE: PSD DOC PART: 000 REVISION: A1 MATERIAL NUMBER: SEE PART LIST CUSTOMER: GENERAL MARKET SHEET NUMBER: 2 OF 2 | |



| | | | | |
|---|---|-------------------------|-------------------------------|---|
| Allgemeine Kennwerte General Characteristics | | Norm Standard | | |
| Polzahl Kontaktanordnung | Number of contacts Contact configuration | IEC 947-5-2 | 8 | |
| Bemessungsspannung | Rated Voltage | IEC 664 | 30V AC / DC | |
| Verschmutzungsgrad | Pollution Degree | IEC 664 | 3 | |
| Betriebsstrom | Current carrying capacity | IEC 512-3 Test 5 b | 2A | |
| Durchgangswiderstand | Contact Resistance | IEC 512-2 Test 2 a | < 5mOhm | |
| Bemessungsstoßspannung | Rated Impulse Withstand Voltage | IEC 664 | 0,8 kV | |
| Prüfspannung | Test Voltage | IEC 60512-2 Test 4 A | 0,5 kV / 60 sec | |
| Isolationswiderstand | Insulation Resistance | IEC 512-2 Test 3 A | > 100 MOhm | |
| IP-Schutzart | IP Degree of Protection | IEC 529 | IP 67 | |
| Stiftdurchmesser | Pin Diameter | | 0,6 mm | |
| Werkstoffe | Kontakte | Materials | Kontakte | Kupferlegierung / copper alloy |
| | Kontaktoberfläche | | Kontakte Plating | Au/Ni |
| | Kontaktträger | | Dielectric Material | PUR |
| | Gehäuse (Umspritzung) | | Housing (Overmold) | PUR |
| | Dichtung (O-Ring) | | Gaskets (O-Ring) | VITON |
| | Schiebehülse | | Push Sleeve | CuZn (brass) mit Ni-Oberfläche Nickel Plated |
| Anschlussart | Termination | | Crimp | |
| Brennbarkeit | Kontaktträger | Flammfähigkeit | Inserts | HB |
| | Gehäuse (Umspritzung) | | Housing (Overmold) | HB |
| | Leitung / Kabel | | Cable | 2 LAYER PUR/PVC CABLE BLACK 0.25 ² |
| Mechanische Lebensdauer | Mechanical Operation | | 100 Steckzyklen/Mating Cycles | |
| Temperaturbereich | Temperature Range | IEC 60668-1 | -30°C / +80°C | |

| | | | |
|------------|------------------|-------------------|---------|
| SAP-Nummer | Engineering Nr.: | Umspritzungsfarbe | L-Länge |
| SAP-Number | | Overmold Color | Length |
| 1200805084 | WW8031P02M010 | yellow | 1M |

| | | | |
|--|--------------|---|--|
| Toleranzen Maß L: sichtbare Kabellänge bei M8, M12 und M12U | | BU/ BLUE WH/ WHITE GN/ GREEN GY/ GREY PK/ PINK YE/ YELLOW RD/ RED BK/ BLACK VT/ VIOLET BN/ BROWN | bl/blau ws/weiß gn/grün gr/grau rs/rosa ge/gelb rt/rot sw/schwarz vi/violett bn/braun |
| von 0 bis 0.6 m: | ±10 mm | | |
| über 0.6 bis 1 m: | +30 / -10 mm | | |
| über 1 bis 5 m: | ±25 mm | | |
| über 5 bis 20 m: | ±30 mm | | |
| über 20 m: | ±50 mm | | |

| | | | | | | |
|---|-----------------|--|--|---|------------------|------------------------|
| DESCRIPTION EC NO: WEU2010-0435 DRWN: LSTEMMLE 2010/03/17 CHKD: NS APPR: FPACHER 2010/03/19 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | FIRST ANGLE PROJECTION |
| | ▽ = 0 ∇ = 0 | mm INCH | MM ONLY | 2:1 | METRIC | |
| | | 4 PLACES ±--- ±--- 3 PLACES ±--- ±--- 2 PLACES ±0.05 ±--- 1 PLACE ±0.1 ±--- | DRAWN BY DATE LSTEMMLE 2010/03/17 CHECKED BY DATE NS 2010/03/18 APPROVED BY DATE FPACHER 2010/03/18 | M12U-8P-FE-90-M-STR PUR/0.25 BL-XM | | |
| | | ANGULAR ± --- ° | MATERIAL NO. DOCUMENT NO. | MOLEX INCORPORATED SD-120080-054 | | |
| 1 | REV | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SIZE A2 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |
| | | | | | SHEET NO. 1 OF 1 | |