



VIEW FROM THE FRONT SIDE
SCALE 2:1



VIEW FROM THE FRONT SIDE
SCALE 2:1

OVERMOULD FOR CABLE DIA. MAX. 6.0 MM

OVERMOULD FOR CABLE DIA. BETWEEN ABOVE MIN. 6.0 TO BELOW MAX. 9.2 MM

NOTES:
 RATED VOLTAGE:
 3, 4 contacts 250V
 5 contacts 60V
 8 contacts 30V
 RATED CURRENT:
 3, 4, 5 contacts 4A
 8 contacts 2A
 PROTECTION CLASS: IP 67

CONTACTS POSITION FRONT VIEW:

| | 3 CONTACTS | 4 CONTACTS | 5 CONTACTS | 8 CONTACTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|------------|------------|------------|-------|---|------|---|-------|---|-----|------|---|-------|---|-------|---|------|---|-------|--|-----|------|---|-------|---|-------|---|------|---|-------|---|----------------------|--|-----|------|---|-------|---|-------|---|-------|---|--------|---|------|---|------|---|------|---|-----|
| MALE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CONNECTIONS | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> </table> | PIN | WIRE | 1 | BROWN | 3 | BLUE | 4 | BLACK | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>2</td><td>WHITE</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> </table> | PIN | WIRE | 1 | BROWN | 2 | WHITE | 3 | BLUE | 4 | BLACK | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>2</td><td>WHITE</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> <tr><td>5</td><td>GREY OR GREEN/YELLOW</td></tr> </table> | PIN | WIRE | 1 | BROWN | 2 | WHITE | 3 | BLUE | 4 | BLACK | 5 | GREY OR GREEN/YELLOW | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>WHITE</td></tr> <tr><td>2</td><td>BROWN</td></tr> <tr><td>3</td><td>GREEN</td></tr> <tr><td>4</td><td>YELLOW</td></tr> <tr><td>5</td><td>GREY</td></tr> <tr><td>6</td><td>PINK</td></tr> <tr><td>7</td><td>BLUE</td></tr> <tr><td>8</td><td>RED</td></tr> </table> | PIN | WIRE | 1 | WHITE | 2 | BROWN | 3 | GREEN | 4 | YELLOW | 5 | GREY | 6 | PINK | 7 | BLUE | 8 | RED |
| PIN | WIRE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | BROWN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | BLUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BLACK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PIN | WIRE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | BROWN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | WHITE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | BLUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BLACK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PIN | WIRE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | BROWN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | WHITE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | BLUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BLACK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | GREY OR GREEN/YELLOW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PIN | WIRE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | WHITE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | BROWN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | GREEN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | YELLOW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | GREY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | PINK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | BLUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | RED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FOR OPTION SEE - NUMERICAL CODE - ON SHEET 2

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH |
|------|-------|---------------------|-------------|---------------------|
| 6 | 1 | LABEL | VINYL | YELLOW |
| 5 | 3/4/5 | CONTACT MA | COPPER | GOLD OVER Ni-PLATED |
| | 8 | CONTACT MA | BRASS | GOLD OVER Ni-PLATED |
| 4 | 1 | INSERT M12 MA XP | PUR | BLACK |
| 3 | 1 | COUPLING NUT M12 MA | SEE SHEET 2 | SEE SHEET 2 |
| 2 | - | OVERMOULDING | TPU | SEE SHEET 2 |
| 1 | - | CABLE | SEE SHEET 2 | - |

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

FUNCTIONAL SYMBOLS: $\nabla_A = 0$, $\nabla_E = 0$, $\nabla_F = 0$

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

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE | SERIES: 120065 | MATERIAL NUMBER: SEE SHEET 3 | CUSTOMER: GENERAL MARKET | SHEET NUMBER: 1 OF 3

EC NO: 704766 | DRWN: ARPITT | 2022/04/27 | CHK'D: RSILLER | 2022/04/28 | APPR: RSILLER | 2022/04/28

INITIAL REVISION: DRWN: MDHARMANTI | 2021/10/01 | APPR: RSILLER | 2021/10/06

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 1200659964 | DOC TYPE: PSD | DOC PART: 000 | REVISION: A3

molex

CSE M12 XP AC MA STR WSOR XM SE UNSH

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



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 |
| B49 | 8 | 0.25mm ² | TPU Orange | | | | | | | | SD-120209-006 |
| B55 | 3 / 4 / 5 | 0.34mm ² | TPU Yellow | | | | | | | | n/a |

| | | | | | | | |
|--|---|---------------------------------------|--------------------------------------|-----------------|--------------------------|----------|----------------|
| FUNCTIONAL SYMBOLS FA = 0 FE = 0 FV = 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 PN ADDED | | molex | | | |
| | DIMENSION UNITS: mm | SCALE: 1:1 | CSE M12 XP AC MA STR WSOR XM SE UNSH | | | | |
| | DIVISIONAL SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | EC NO: 704766 | | PRODUCT CUSTOMER DRAWING | | |
| | 4 PLACES ± | ANGULAR TOL ± 1.0° | DRWN: ARPITT | 2022/04/27 | DOCUMENT NUMBER | DOC TYPE | DOC PART |
| 3 PLACES ± | 2 PLACES ± 0.05 | CHK'D: RSILLER | 2022/04/28 | 1200659964 | PSD | 000 | A3 |
| 2 PLACES ± | 1 PLACE ± 0.3 | APPR: RSILLER | 2022/04/28 | MATERIAL NUMBER | | | CUSTOMER |
| 1 PLACE ± | 0 PLACES ± 0.5 | INITIAL REVISION: | 2021/10/01 | SEE SHEET 3 | | | GENERAL MARKET |
| 0 PLACES ± | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRWN: MDHARMANTI | 2021/10/06 | A3-SIZE | | | 2 OF 3 |
| | THIRD ANGLE PROJECTION | APPR: RSILLER | 2021/10/06 | SERIES | | | SHEET NUMBER |
| | | | | 120065 | | | |

PART LIST


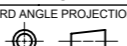
| MOLEX P/N | ENGINEERING No. | LENGTH [mm] |
|--------------|-----------------|-------------|
| 3P CABLE B30 | | |
| 1200652271 | 803006B30M010 | 1000 |
| 1200652272 | 803006B30M020 | 2000 |
| 1200652273 | 803006B30M050 | 5000 |
| 1200652274 | 803006B30M100 | 10000 |
| 4P CABLE B30 | | |
| 1200656066 | 804006B30M005 | 500 |
| 1200652275 | 804006B30M010 | 1000 |
| 1200652378 | 804006B30M010R | 1000 |
| 1200652276 | 804006B30M020 | 2000 |
| 1200652379 | 804006B30M020R | 2000 |
| 1200656001 | 804006B30M030 | 3000 |
| 1200652380 | 804006B30M030R | 3000 |
| 1200656002 | 804006B30M040 | 4000 |
| 1200652381 | 804006B30M040R | 4000 |
| 1200652277 | 804006B30M050 | 5000 |
| 1200652382 | 804006B30M050R | 5000 |
| 1200656296 | 804006B30M080 | 8000 |
| 1200652278 | 804006B30M100 | 10000 |
| 1200659440 | 804006B30M150 | 15000 |
| 1200657234 | 804006B30M200 | 20000 |
| 5P CABLE B30 | | |
| 1200659964 | 805006B30M006 | 600 |
| 1200659526 | 805006B30M010 | 1000 |
| 1200659527 | 805006B30M020 | 2000 |
| 1200656679 | 805006B30M030 | 3000 |
| 1200659528 | 805006B30M050 | 5000 |
| 1200659529 | 805006B30M100 | 10000 |
| 1200656398 | 805006B30M150 | 15000 |
| 1200656399 | 805006B30M200 | 20000 |
| 1200656400 | 805006B30M300 | 30000 |
| 1200656401 | 805006B30M500 | 50000 |
| | | |
| | | |

| MOLEX P/N | ENGINEERING No. | LENGTH [mm] |
|--------------|-----------------|-------------|
| 4P CABLE B33 | | |
| 1200656489 | 804006B33M003A | 300 |
| 1200656521 | 804006B33M005A | 500 |
| 1200656487 | 804006B33M010A | 1000 |
| 1200659451 | 804006B33M020 | 2000 |
| 1200659596 | 804006B33M020A | 2000 |
| 1200656522 | 804006B33M030A | 3000 |
| 1200659597 | 804006B33M050A | 5000 |
| 1200657152 | 804006B33M070A | 7000 |
| 1200656488 | 804006B33M100A | 10000 |
| 1200656614 | 804006B33M150A | 15000 |
| 1200657156 | 804006B33M200A | 20000 |
| 1200657154 | 804006B33M300A | 30000 |
| 5P CABLE B33 | | |
| 1200657186 | 805006B33M005A | 500 |
| 1200656673 | 805006B33M010A | 1000 |
| 1200659452 | 805006B33M020 | 2000 |
| 1200656674 | 805006B33M020A | 2000 |
| 1200656675 | 805006B33M030A | 3000 |
| 1200656676 | 805006B33M050A | 5000 |
| 1200656677 | 805006B33M100A | 10000 |
| 1200656678 | 805006B33M150A | 15000 |
| 1200657187 | 805006B33M200A | 20000 |
| 1200657188 | 805006B33M300A | 30000 |
| 1200657189 | 805006B33M400A | 40000 |
| 1200657190 | 805006B33M500A | 50000 |
| 4P CABLE B36 | | |
| 1200656855 | 804006B36M0207Y | 2000 |
| 1200657220 | 804006B36M0507Y | 5000 |
| 1200657221 | 804006B36M0807Y | 8000 |
| 1200657222 | 804006B36M1007Y | 10000 |
| 1200657223 | 804006B36M1507Y | 15000 |
| 1200657224 | 804006B36M2007Y | 20000 |
| 5P CABLE B36 | | |
| 1200656552 | 805006B36M1007Y | 10000 |

| MOLEX P/N | ENGINEERING No. | LENGTH [mm] |
|--------------|-----------------|-------------|
| 8P CABLE B41 | | |
| 1200659680 | 808006B41M003 | 300 |
| 1200652302 | 808006B41M010 | 1000 |
| 1200652383 | 808006B41M010R | 1000 |
| 1200659453 | 808006B41M020 | 2000 |
| 1200652384 | 808006B41M020R | 2000 |
| 1200659776 | 808006B41M030 | 3000 |
| 1200652385 | 808006B41M030R | 3000 |
| 1200656003 | 808006B41M040 | 4000 |
| 1200652386 | 808006B41M040R | 4000 |
| 1200652304 | 808006B41M050 | 5000 |
| 1200652387 | 808006B41M050R | 5000 |
| 1200652305 | 808006B41M100 | 10000 |
| 5P CABLE B42 | | |
| 1200652279 | 805006B42M010 | 1000 |
| 1200652280 | 805006B42M020 | 2000 |
| 1200652281 | 805006B42M050 | 5000 |
| 1200652282 | 805006B42M100 | 10000 |
| 1200659546 | 805006B42M200 | 20000 |
| 1200659547 | 805006B42M300 | 30000 |
| 4P CABLE B55 | | |
| 1200656634 | 804006B55M010Y | 1000 |
| 1200656635 | 804006B55M020Y | 2000 |
| 1200656636 | 804006B55M030Y | 3000 |
| 1200659943 | 804006B55M050Y | 5000 |
| 1200659944 | 804006B55M100Y | 10000 |
| 1200656637 | 804006B55M150Y | 15000 |
| 5P CABLE B55 | | |
| 1200656680 | 805006B55M010Y | 1000 |
| 1200656681 | 805006B55M020Y | 2000 |
| 1200656682 | 805006B55M030Y | 3000 |
| 1200659945 | 805006B55M050Y | 5000 |
| 1200659946 | 805006B55M100Y | 10000 |
| 1200659947 | 805006B55M150Y | 15000 |

CABLE LENGTH TOLERANCES

| LENGTH | TOLERANCE |
|----------|------------|
| 0m-1m | +40 mm |
| >1m-5m | +60 mm |
| >5m-10m | +80 mm |
| >10m-20m | +140 mm |
| >20m-30m | +160 mm |
| >30m | +1% length |

| | |
|--|---|
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| $\nabla/A = 0$ $\nabla/E = 0$ $\nabla/P = 0$ | DIMENSION UNITS: mm SCALE: 1:1 GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL $\pm 1.0^\circ$ 4 PLACES \pm 3 PLACES \pm 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |
| DIVISIONAL SYMBOLS | CURRENT REV DESC: NEW PN ADDED EC NO: 704766 DRWN: ARPITT CHK'D: RSILLER APPR: RSILLER INITIAL REVISION: DRWN: MDHARMANTI APPR: RSILLER |
| | 2022/04/27 2022/04/28 2022/04/28 2021/10/01 2021/10/06 |
| |  CSE M12 XP AC MA STR WSOR XM SE UNSH PRODUCT CUSTOMER DRAWING |
| | DOCUMENT NUMBER: 1200659964 DOC TYPE: PSD DOC PART: 000 REVISION: A3 |
| | THIRD ANGLE PROJECTION:  DRAWING: A3-SIZE SERIES: 120065 MATERIAL NUMBER: SEE PART LIST CUSTOMER: GENERAL MARKET SHEET NUMBER: 3 OF 3 |