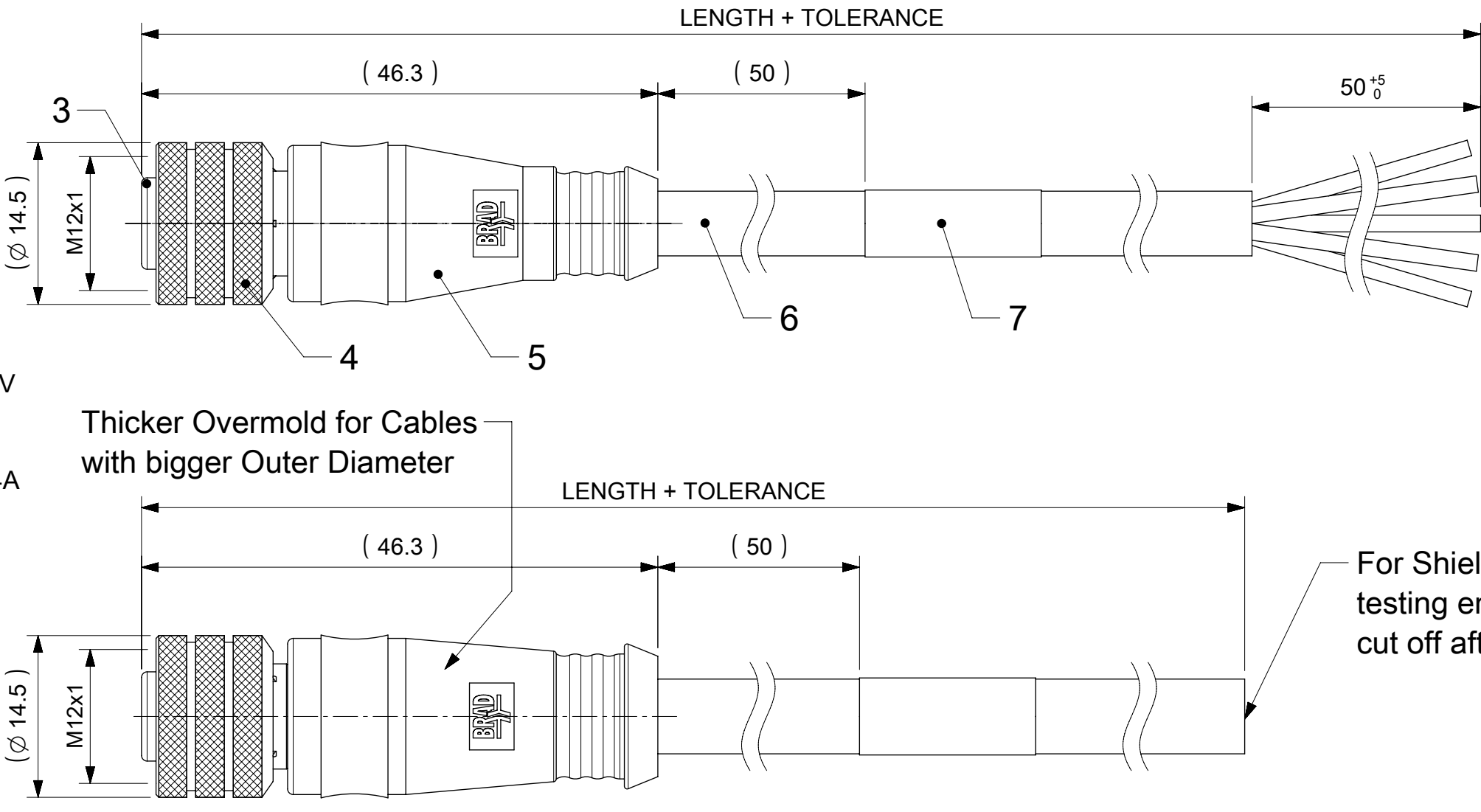


FEMALE PLUG M12 STRAIGHT

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  
TEMPERATURE: -25°C / +85°C

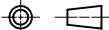


CONTACTS POSITION FRONT VIEW:

| 3 CONTACTS |                       | 4 CONTACTS |       | 5 CONTACTS |                      | 8 CONTACTS |        |
|------------|-----------------------|------------|-------|------------|----------------------|------------|--------|
|            |                       |            |       |            |                      |            |        |
| 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 OR YELLOW/GREEN | 4          | BLACK | 4          | BLACK                | 4          | YELLOW |
| 5          | ---                   | 5          | ---   | 5          | GREY OR YELLOW/GREEN | 5          | GREY   |
|            |                       |            |       |            |                      | 6          | PINK   |
|            |                       |            |       |            |                      | 7          | BLUE   |
|            |                       |            |       |            |                      | 8          | RED    |

CODING REQUIRED TO IEC 61076-2-101

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

|                                                                                                                                               |               |                                                                                    |             |                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------|-------------|----------------------|
| 7                                                                                                                                             | 1             | LABEL YELLOW                                                                       | VINYL       | ---                  |
|                                                                                                                                               | -             | PRINTING FOR CABLES lxx                                                            | ---         | ---                  |
| 6                                                                                                                                             | -             | CABLE                                                                              | SEE SHEET 2 | ---                  |
| 5                                                                                                                                             | -             | OVERMOLDING BLACK                                                                  | TPU         | ---                  |
| 4                                                                                                                                             | 1             | COUPLING NUT FEMALE                                                                | BRASS       | NICKEL               |
| 3                                                                                                                                             | 1             | INSERT FEMALE BLACK                                                                | PUR         | ---                  |
| 2                                                                                                                                             | 1             | ORING RED                                                                          | FPM         | ---                  |
| 1                                                                                                                                             | 3 / 4 / 5 / 8 | CONTACT M12 FEMALE                                                                 | BRASS       | SELECTIVE Au OVER Ni |
| ITEM                                                                                                                                          | QTY.          | DESCRIPTION                                                                        | MATERIAL    | FINISH               |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |               |                                                                                    |             |                      |
| DIMENSION UNITS                                                                                                                               |               | CURRENT REV DESC: ADDED NEW P/N:<br>1200651287; 1200651293; 1200651300; 1200652022 |             |                      |
| mm                                                                                                                                            |               | <div>molex</div>                                                                   |             |                      |
| SCALE<br>2:1                                                                                                                                  |               |                                                                                    |             |                      |
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                      |               | CSE M12 XP AC FE STR XM SE UNSH                                                    |             |                      |
| ANGULAR TOL ± 1.0 °                                                                                                                           |               |                                                                                    |             |                      |
| 4 PLACES ±                                                                                                                                    |               | EC NO: 775470                                                                      |             |                      |
| 3 PLACES ±                                                                                                                                    |               | DRWN: AKABADI 2023/10/22                                                           |             |                      |
| 2 PLACES ± 0.05                                                                                                                               |               | CHK'D: THAERDT 2024/01/30                                                          |             |                      |
| 1 PLACE ± 0.3                                                                                                                                 |               | APPR: THAERDT 2024/01/30                                                           |             |                      |
| 0 PLACES ± 0.5                                                                                                                                |               | PRODUCT CUSTOMER DRAWING                                                           |             |                      |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |               | INITIAL REVISION:                                                                  |             | DOCUMENT NUMBER      |
|                                                                                                                                               |               | DRWN: JMARSZALEK 2016/01/12                                                        |             | 1200658605           |
|                                                                                                                                               |               | APPR: RSILLER 2016/04/08                                                           |             | DOC TYPE<br>PSD      |
|                                                                                                                                               |               |                                                                                    |             | DOC PART<br>000      |
|                                                                                                                                               |               |                                                                                    |             | REVISION<br>A7       |
| THIRD ANGLE PROJECTION                                                                                                                        |               | DRAWING                                                                            | SERIES      | MATERIAL NUMBER      |
|                                                          |               | A3-SIZE                                                                            | 120065      | SEE PART LIST        |
|                                                                                                                                               |               |                                                                                    |             | CUSTOMER             |
|                                                                                                                                               |               |                                                                                    |             | GENERAL MARKET       |
|                                                                                                                                               |               |                                                                                    |             | SHEET NUMBER         |
|                                                                                                                                               |               |                                                                                    |             | 1 OF 4               |

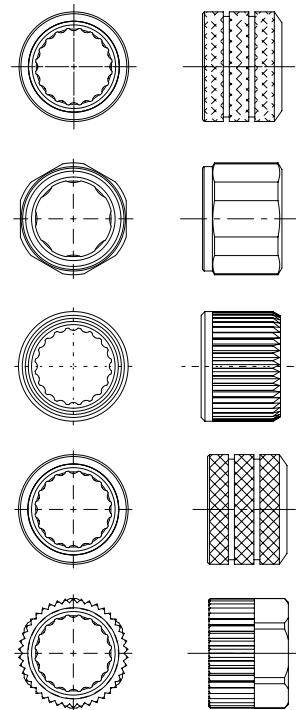
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

OPTIONS



H= 2 pcs. of I/D Carrier  
PVC Transparent  
(Cables lxx & P82 always  
with 2 pcs. of I/D Carrier  
even if no H in  
Engineering No.)

COUPLING NUTS



80=M12x1  
Single ended

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

Heads style:  
000=Plug Female Straight

Cable type: See Table

Units:  
M=Meter  
C=Centimeter

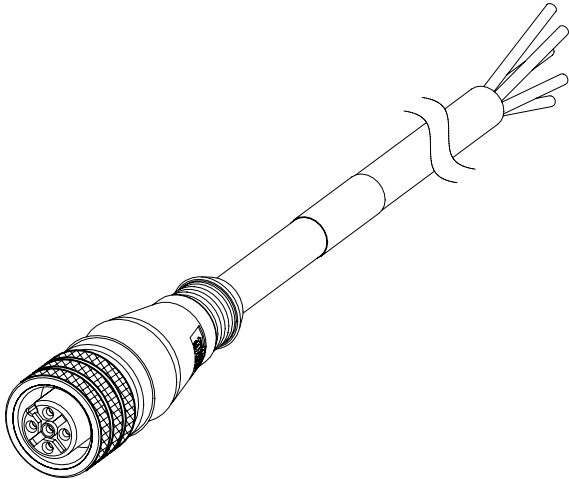
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 units

Overmold color:  
Blank (Standard)=Black TPU  
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:  
Blank (Standard) & 3=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

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 |
|------------|--------------|---------------|----------------|------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------|--------|
| E13        | 3            | 18AWG         | PVC YELLOW     | UL 2661/1731           | I/II A/B 80°C/300V       | -                              | -                               | -                         | -      |
| E52        | 3 / 4 / 8    | 0.34mm²       | PVC GREY       | -                      | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -                         | -      |
| E63        | 5            | 0.34mm²       | PVC GREY       | -                      | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -                         | YES    |
| H12        | 4            | 0.50mm²       | PUR BLACK LS0H | UL 21198/10493         | C22.2 I/II A/B 80°C/300V | -50°C to +80°C, 5xO.D.         | -25°C to +80°C, 10xO.D.         | 2 000 000, Temp max 60°C  | -      |
| H69        | 4            | 0.20mm²       | PUR GREY LS0H  | -                      | -                        | -                              | -                               | -                         | -      |
| I02        | 3 / 4 / 8    | 0.25mm²       | PVC CEI GREY   | -                      | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -                         | -      |
| I03        | 3 / 4 / 5    | 0.34mm²       | PVC CEI GREY   | -                      | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -                         | -      |
| I04        | 4            | 0.50mm²       | PVC CEI GREY   | -                      | -                        | -25°C to +70°C                 | -5°C to +70°C                   | -                         | -      |
| I20        | 3 / 4        | 0.34mm²       | PVC CEI GREY   | -                      | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -                         | YES    |
| I26        | 5            | 0.34mm²       | PVC CEI GREY   | -                      | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -                         | -      |
| K03        | 4 / 5        | 0.34mm²       | TPE YELLOW     | UL JEC 60332-1 or PLCT | I/II 90°C/300V           | -                              | -                               | -                         | -      |
| K05        | 3 / 4 / 5    | 0.34mm²       | TPE YELLOW     | UL ITC E195601 or PLC  | I/II A/B 90°C/300V       | -                              | -                               | -                         | -      |
| P04        | 4            | 0.50mm²       | PUR BLACK      | -                      | -                        | -40°C to +90°C, 7.5xO.D.       | -15°C to +90°C, 12.5xO.D.       | -                         | -      |
| P12        | 3 / 5        | 0.50mm²       | PUR BLACK      | -                      | -                        | -30°C to +90°C                 | -5°C to +90°C                   | -                         | -      |
| P19        | 8            | 0.25mm²       | PUR BLACK      | -                      | -                        | -40°C to +90°C, 7.5xO.D.       | -15°C to +90°C, 12.5xO.D.       | 2 000 000 cycles, 15xO.D. | YES    |
| P20        | 3 / 4 / 5    | 0.34mm²       | PUR BLACK LS0H | -                      | -                        | -30°C to +80°C                 | -                               | -                         | YES    |
| P82        | 3 / 4 / 5    | 0.34mm²       | PUR IRR ORANGE | -                      | -                        | -50°C to +105°C, 5xO.D.        | -40°C to +105°C, 7.5xO.D.       | -                         | -      |
| S19        | 8            | 0.25mm²       | PVC YELLOW     | UL 2661/1569           | C22.2 II A 105°C/300V    | -30°C to +105°C, 10xO.D.       | -15°C to +105°C, 15xO.D.        | -                         | YES    |
| S20        | 3 / 4 / 5    | 0.34mm²       | PVC YELLOW     | UL 2661/1731           | C22.2 II A 105°C/300V    | -30°C to +105°C                | -                               | -                         | YES    |
| S26        | 5            | 0.34mm²       | PVC YELLOW     | UL 2661/1731           | C22.2 II A 105°C/300V    | -30°C to +105°C                | -                               | -                         | YES    |



SCALE 1:1

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 |

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

|                                                      |         |
|------------------------------------------------------|---------|
| DIMENSION UNITS                                      | SCALE   |
| mm                                                   | 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 |         |

CURRENT REV DESC: ADDED NEW P/N:  
1200651287; 1200651293; 1200651300; 1200652022

EC NO: 775470  
DRWN: AKABADI  
CHK'D: THAERDT  
APPR: THAERDT

INITIAL REVISION:  
DRWN: JMARSZALEK  
APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER



CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

1200658605

PSD

000

A7

SEE PART LIST

GENERAL MARKET

2 OF 4

|              |                 |   |                 |   |        |   |   |   |   |
|--------------|-----------------|---|-----------------|---|--------|---|---|---|---|
| 10           | 9               | 8 | 7               | 6 | 5      | 4 | 3 | 2 | 1 |
| PART LIST    |                 |   |                 |   |        |   |   |   |   |
| MOLEX P/N    |                 |   | ENGINEERING No. |   | L [mm] |   |   |   |   |
| 3P CABLE E13 |                 |   |                 |   |        |   |   |   |   |
| 1200658524   | 803000E13M030   |   | 3000            |   |        |   |   |   |   |
| 3P CABLE E52 |                 |   |                 |   |        |   |   |   |   |
| 1200651767   | 803000E52M050A  |   | 5000            |   |        |   |   |   |   |
| 1200658293   | 803000E52M3001A |   | 30000           |   |        |   |   |   |   |
| 4P CABLE E52 |                 |   |                 |   |        |   |   |   |   |
| 1200064254   | 804000E52M010A  |   | 1000            |   |        |   |   |   |   |
| 1200651778   | 804000E52M050A  |   | 5000            |   |        |   |   |   |   |
| 1200651857   | 804000E52M100A  |   | 10000           |   |        |   |   |   |   |
| 1200060436   | 804000E52M200A  |   | 20000           |   |        |   |   |   |   |
| 1200061620   | 804000E52M3001A |   | 30000           |   |        |   |   |   |   |
| 1200063819   | 804000E52K0011A |   | 100000          |   |        |   |   |   |   |
| 8P CABLE E52 |                 |   |                 |   |        |   |   |   |   |
| 1200657335   | 808000E52M005   |   | 500             |   |        |   |   |   |   |
| 1200658236   | 808000E52M020   |   | 2000            |   |        |   |   |   |   |
| 1200062049   | 808000E52M050   |   | 5000            |   |        |   |   |   |   |
| 1200659997   | 808000E52M100   |   | 10000           |   |        |   |   |   |   |
| 5P CABLE E63 |                 |   |                 |   |        |   |   |   |   |
| 1200658015   | 805000E63M020A  |   | 2000            |   |        |   |   |   |   |
| 1200061936   | 805000E63M050A  |   | 5000            |   |        |   |   |   |   |
| 4P CABLE H12 |                 |   |                 |   |        |   |   |   |   |
| 1200659593   | 804000H12M020   |   | 2000            |   |        |   |   |   |   |
| 1200659767   | 804000H12M0209  |   | 2000            |   |        |   |   |   |   |
| 1200659768   | 804000H12M0309  |   | 3000            |   |        |   |   |   |   |
| 1200659113   | 804000H12M050   |   | 5000            |   |        |   |   |   |   |
| 1200659769   | 804000H12M0509  |   | 5000            |   |        |   |   |   |   |
| 1200659271   | 804000H12M100   |   | 10000           |   |        |   |   |   |   |
| 1200659770   | 804000H12M1009  |   | 10000           |   |        |   |   |   |   |
| 3P CABLE H69 |                 |   |                 |   |        |   |   |   |   |
| 1200062094   | 803000H69M050   |   | 5000            |   |        |   |   |   |   |
| 4P CABLE H69 |                 |   |                 |   |        |   |   |   |   |
| 1200061680   | 804000H69M050   |   | 5000            |   |        |   |   |   |   |
| 1200658242   | 804000H69M300   |   | 30000           |   |        |   |   |   |   |
| 8P CABLE I02 |                 |   |                 |   |        |   |   |   |   |
| 1200658677   | 808000I02M010   |   | 1000            |   |        |   |   |   |   |
| 1200658678   | 808000I02M020   |   | 2000            |   |        |   |   |   |   |
| 1200658679   | 808000I02M030   |   | 3000            |   |        |   |   |   |   |
| 1200658680   | 808000I02M040   |   | 4000            |   |        |   |   |   |   |
| 1200658681   | 808000I02M050   |   | 5000            |   |        |   |   |   |   |
| 1200658682   | 808000I02M100   |   | 10000           |   |        |   |   |   |   |

NOTES:

★ - Part No. with Yellow PVC overmolding

|                 |  |    |              |            |          |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
|-----------------|--|----|--------------|------------|----------|---|--|---|--|---|--|---|--|---|--|---|--|---|--|
| DOCUMENT STATUS |  | P1 | RELEASE DATE | 2024/01/30 | 10:40:43 |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| 10              |  | 9  |              | 8          |          | 7 |  | 6 |  | 5 |  | 4 |  | 3 |  | 2 |  | 1 |  |

