



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

OPTIONS

80X000XXX

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

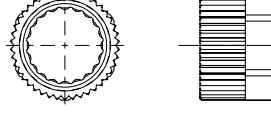
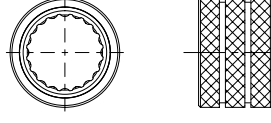
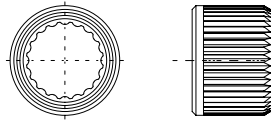
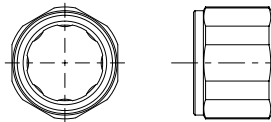
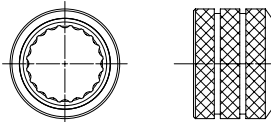
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 units

Overmold color:  
Blank (Standard)=Black  
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  
9=Knurled / Hexagonal Brass Ni Plated

H= 2 pcs. of I/D Carrier PVC Transparent

COUPLING NUTS

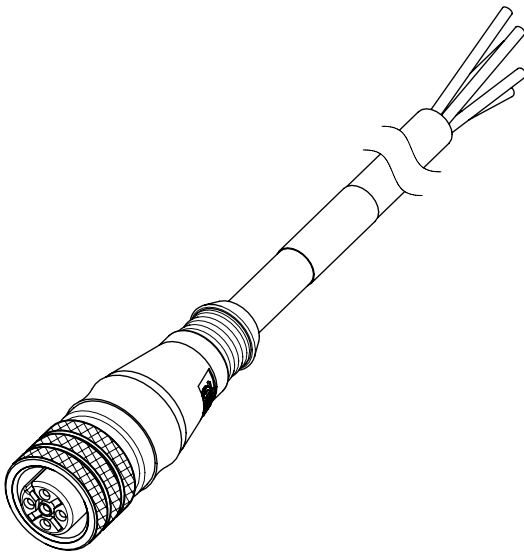


CABLE INFORMATION (for more information see Cable Data Sheet).

| CABLE TYPE | NO. OF WIRES  | CROSS SECTION | CABLE JACKET    | UL             | CSA                      | STATIC: TEMP. / BENDING RADIUS | DYNAMIC: TEMP. / BENDING RADIUS | DRAG CHAIN                                          | SHIELD |
|------------|---------------|---------------|-----------------|----------------|--------------------------|--------------------------------|---------------------------------|-----------------------------------------------------|--------|
| E02        | 3 / 4 / 5 / 8 | 0.25mm²       | PVC BLACK       | UL 2464/1729   | C22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D.        | -10°C to +80°C, 15xO.D.         | -                                                   | -      |
| E03        | 3 / 4 / 5     | 0.34mm²       | PVC BLACK       | UL 2464/1729   | C22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D.        | -10°C to +80°C, 15xO.D.         | -                                                   | -      |
| H08        | 3 / 4 / 5 / 8 | 0.25mm²       | PUR BLACK LS0H  | UL 21198/10493 | C22.2 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 at 20°C, Temp. range +5°C to +60°C | -      |
| H09        | 3 / 4 / 5     | 0.34mm²       | PUR BLACK LS0H  | UL 21198/10493 | C22.2 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 at 20°C, Temp. range +5°C to +60°C | -      |
| P02        | 3 / 4 / 5 / 8 | 0.25mm²       | PUR / PVC BLACK | -              | -                        | -30°C to +80°C, 7xO.D.         | -5°C to +80°C, 15xO.D.          | -                                                   | -      |
| P03        | 3 / 4 / 5     | 0.34mm²       | PUR / PVC BLACK | -              | -                        | -30°C to +80°C, 7xO.D.         | -5°C to +80°C, 15xO.D.          | -                                                   | -      |

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 |



SCALE 1:1

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: NEW PN ADD TO DRAWING

EC NO: 726420

DRWN: RSILLER

CHK'D: THAERDT

APPR: THAERDT

2022/10/28

2022/10/28

2022/10/28

INITIAL REVISION:

DRWN: JMARSZALEK

APPR: RSILLER

2016/01/11

2016/04/08

THIRD ANGLE PROJECTION

DRAWING

SERIES

A3-SIZE

120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

GENERAL MARKET

2 OF 4

|           |            |                 |              |     |            |                 |              |     |            |                 |              |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
|-----------|------------|-----------------|--------------|-----|------------|-----------------|--------------|-----|------------|-----------------|--------------|-----|------------|-----------------|--------------|-----|------------|-----------------|---------------|------|------------|-----------------|----------------|-----|------------|-----------------|---------------|----------------|------------|-----------------|---------------|------------|---------------|-----------------|---------------|-----|--|--|--|
| 10        |            |                 |              | 9   |            |                 |              | 8   |            |                 |              | 7   |            |                 |              | 6   |            |                 |               | 5    |            |                 |                | 4   |            |                 |               | 3              |            |                 |               | 2          |               |                 |               | 1   |  |  |  |
| PART LIST |            |                 |              |     |            |                 |              |     |            |                 |              |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| No.       | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length  | No.  | Part No.   | Engineering No. | Cable Length   | No. | Part No.   | Engineering No. | Cable Length  | No.            | Part No.   | Engineering No. | Cable Length  | No.        | Part No.      | Engineering No. | Cable Length  |     |  |  |  |
| 1         | 1200060001 | 803000E03M020   | 2m           | 36  | 1200060458 | 804000P03M0501  | 5m           | 71  | 1200063673 | 803000P03M1001  | 10m          | 106 | 1200658008 | 804000H09M050H  | 5m           | 107 | 1200658009 | 804000H09M100H  | 10m           | 108  | 1200658020 | 805000P03M040   | 4m             | 109 | 1200658021 | 808000P02M150   | 15m           | 110            | 1200658022 | 808000P02M030   | 3m            | 111        | 1200658064    | 804000P03M010   | 1m            |     |  |  |  |
| 2         | 1200060002 | 803000E03M050   | 5m           | 37  | 1200060461 | 804000P03M200   | 20m          | 72  | 1200063779 | 805000E03M300   | 30m          | 112 | 1200658081 | 805000E03M200   | 20m          | 113 | 1200658165 | 805000E03M030   | 3m            | 114  | 1200658172 | 805000H09M020   | 2m             | 115 | 1200658173 | 805000H09M050   | 5m            | 116            | 1200658174 | 805000H09M100   | 10m           | 117        | 1200658175    | 803000H09M020   | 2m            |     |  |  |  |
| 3         | 1200060003 | 803000E03M100   | 10m          | 38  | 1200060634 | 805000E03M020   | 2m           | 73  | 1200063940 | 804000P03M0051  | 0.5m         | 118 | 1200658176 | 803000H09M050   | 5m           | 119 | 1200658177 | 803000H09M100   | 10m           | 120  | 1200658178 | 804000H09M020   | 2m             | 121 | 1200658179 | 804000H09M050   | 5m            | 122            | 1200658190 | 804000H09M100   | 10m           | 123        | 1200658197    | 805000P03M010   | 1m            |     |  |  |  |
| 4         | 1200060004 | 803000P03M020   | 2m           | 39  | 1200060638 | 805000E03M100   | 10m          | 74  | 1200064033 | 804000P03M120   | 12m          | 124 | 1200658197 | 805000P03M010   | 1m           | 125 | 1200658208 | 805000E03M0061  | ✱             | 0.6m | 126        | 1200658210      | 805000E03M0501 | ✱   | 5m         | 127             | 1200658219    | 803000E03M0201 | ✱          | 2m              | 128           | 1200658224 | 808000E02M050 | 5m              |               |     |  |  |  |
| 5         | 1200060005 | 803000P03M050   | 5m           | 40  | 1200060646 | 805000P03M003   | 0.3m         | 75  | 1200064093 | 803000P03M032   | 3.2m         | 129 | 1200658228 | 804000E03M3001  | ✱            | 30m | 130        | 1200658244      | 808000H08M050 | 5m   | 131        | 1200658264      | 808000H08M100  | 10m | 132        | 1200658264      | 808000H08M100 | 10m            | 133        | 1200658277      | 808000E02M020 | 2m         | 134           | 1200658278      | 808000E02M100 | 10m |  |  |  |
| 6         | 1200060006 | 803000P03M100   | 10m          | 41  | 1200060647 | 805000P03M020   | 2m           | 76  | 1200064292 | 805000P03M200   | 20m          | 135 | 1200658288 | 804000E03M050G  | 5m           | 136 | 1200658309 | 808000E02M0501  | 5m            | 137  | 1200658321 | 804000P03M005   | 0.5m           | 138 | 1200658331 | 805000E03M050H  | 5m            | 139            | 1200658350 | 803000E03M1001  | ✱             | 10m        |               |                 |               |     |  |  |  |
| 7         | 1200060014 | 804000E03M020   | 2m           | 42  | 1200060649 | 805000P03M100   | 10m          | 77  | 1200064422 | 804000E03M120   | 12m          |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 8         | 1200060015 | 804000E03M050   | 5m           | 43  | 1200061337 | 804000E03M0205  | 2m           | 78  | 1200064434 | 804000H09M050G  | 5m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 9         | 1200060016 | 804000E03M100   | 10m          | 44  | 1200061431 | 805000P03M150   | 15m          | 79  | 1200064422 | 804000E03M120   | 12m          |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 10        | 1200060018 | 804000P03M020   | 2m           | 45  | 1200061528 | 804000E03M250   | 25m          | 80  | 1200064434 | 804000H09M050G  | 5m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 11        | 1200060019 | 804000P03M050   | 5m           | 46  | 1200061765 | 803000P03M002   | 0.2m         | 81  | 1200065004 | 805000P03M0201  | 2m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 12        | 1200060027 | 803000E03M006   | 0.6m         | 47  | 1200061785 | 804000P03M006   | 0.6m         | 82  | 1200065006 | 804000H09M250G  | 25m          |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 13        | 1200060032 | 804000E03M005   | 0.5m         | 48  | 1200061913 | 804000E03M300   | 30m          | 83  | 1200065012 | 803000P03M030G  | 3m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 14        | 1200060034 | 804000P03M025   | 2.5m         | 49  | 1200061958 | 803000E03M021   | 2.1m         | 84  | 1200650951 | 808000P02M020   | 2m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 15        | 1200060107 | 803000E03M003   | 0.3m         | 50  | 1200062071 | 803000E03M060   | 6m           | 85  | 1200650952 | 808000P02M040   | 4m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 16        | 1200060113 | 803000E03M030   | 3m           | 51  | 1200062098 | 803000P03M006   | 0.6m         | 86  | 1200650953 | 808000P02M050   | 5m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 17        | 1200060116 | 803000E03M0505  | 5m           | 52  | 1200062130 | 804000E03M050H  | 5m           | 87  | 1200650954 | 808000P02M060   | 6m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 18        | 1200060117 | 803000E03M1005  | 10m          | 53  | 1200062167 | 804000P03M100H  | 10m          | 88  | 1200650955 | 808000P02M080   | 8m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 19        | 1200060117 | 803000E03M1005  | 10m          | 54  | 1200062264 | 804000E03M1505  | 15m          | 89  | 1200650956 | 808000P02M0801  | 8m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 20        | 1200060119 | 803000E03M150   | 15m          | 55  | 1200062347 | 804000P03M050H  | 5m           | 90  | 1200650957 | 808000P02M100   | 10m          |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 21        | 1200060121 | 803000E03M200   | 20m          | 56  | 1200062521 | 805000P03M030   | 3m           | 91  | 1200651769 | 803000P03M050G  | 5m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 22        | 1200060124 | 803000E03M2505  | 25m          | 57  | 1200062521 | 805000P03M030   | 3m           | 92  | 1200651780 | 804000P03M050G  | 5m           |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |
| 23        | 1200060152 | 803000P03M010   | 1m           | 58  | 1200062772 | 803000P03M250   | 25m          | 93  | 1200651782 | 804000P03M100   |              |     |            |                 |              |     |            |                 |               |      |            |                 |                |     |            |                 |               |                |            |                 |               |            |               |                 |               |     |  |  |  |

|           |            |                 |              |     |            |                 |              |     |            |                 |              |
|-----------|------------|-----------------|--------------|-----|------------|-----------------|--------------|-----|------------|-----------------|--------------|
| 10        | 9          | 8               | 7            | 6   | 5          | 4               | 3            | 2   | 1          |                 |              |
| PART LIST |            |                 |              |     |            |                 |              |     |            |                 |              |
| No.       | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length |
| 142       | 1200658492 | 804000P03M100G  | 10m          | 176 | 1200658780 | 805000H09M200   | 20m          | 217 | 1200659123 | 804000P03M100HY | 10m          |
| 143       | 1200658502 | 805000E03M005   | 0.5m         | 177 | 1200658782 | 804000E03M060   | 6m           | 218 | 1200659144 | 805000H09M300   | 30m          |
| 144       | 1200658503 | 805000E03M0201  | 2m           | 178 | 1200658812 | 808000E02M150   | 15m          | 219 | 1200659187 | 808000E02M4001  | 40m          |
| 145       | 1200658511 | 808000E02M010   | 1m           | 179 | 1200658813 | 808000H08M025   | 2.5m         | 221 | 1200659200 | 808000E02M250H  | 25m          |
| 146       | 1200658525 | 808000P02C350   | 0.35m        | 181 | 1200658880 | 804000H09M200   | 20m          | 222 | 1200659207 | 805000E03C230   | 0.23m        |
| 147       | 1200658545 | 804000P03M015   | 1.5m         | 182 | 1200658882 | 804000E03M100H  | 10m          | 223 | 1200659214 | 805000P03M300   | 30m          |
| 148       | 1200658550 | 804000H09M015   | 1.5m         | 183 | 1200658887 | 803000E03M020H  | 2m           | 224 | 1200659256 | 808000E02M200   | 20m          |
| 149       | 1200658551 | 808000E02M1001  | 10m          | 184 | 1200658889 | 803000E03M050H  | 5m           | 225 | 1200659279 | 805000E03M007   | 0.7m         |
| 150       | 1200658562 | 803000E03M010   | 1m           | 185 | 1200658891 | 804000H09M003   | 0.3m         | 226 | 1200659280 | 805000E03M350   | 35m          |
| 151       | 1200658563 | 803000E03M040   | 4m           | 186 | 1200658894 | 804000E03M020G  | 2m           | 227 | 1200659282 | 805000P03M005   | 0.5m         |
| 152       | 1200658570 | 804000E03M040   | 4m           | 187 | 1200658896 | 804000E03M075   | 7.5m         | 228 | 1200659283 | 805000P03M007   | 0.7m         |
| 153       | 1200658590 | 808000E02M030   | 3m           | 188 | 1200658899 | 808000H08M250   | 25m          | 229 | 1200659302 | 804000P03M1005  | 10m          |
| 154       | 1200658591 | 808000E02M040   | 4m           | 192 | 1200658927 | 804000P02M050   | 5m           | 230 | 1200659326 | 805000P03M020H  | 2m           |
| 155       | 1200658592 | 805000E03M040   | 4m           | 194 | 1200658930 | 808000H08M150   | 15m          | 231 | 1200659329 | 805000P03M150H  | 15m          |
| 156       | 1200658609 | 804000P02M020   | 2m           | 196 | 1200658983 | 804000E03M002   | 0.2m         | 232 | 1200659330 | 805000P03M200H  | 20m          |
| 157       | 1200658610 | 803000P03M040   | 4m           | 197 | 1200658984 | 808000E02M2501  | 25m          | 233 | 1200659334 | 808000P02M200H  | 20m          |
| 161       | 1200658632 | 805000H09M010   | 1m           | 199 | 1200658991 | 805000P03M100H  | 10m          | 234 | 1200659340 | 804000P03M1501  | 15m          |
| 162       | 1200658633 | 805000H09M015   | 1.5m         | 200 | 1200659038 | 804000E02M100   | 10m          | 235 | 1200659341 | 804000P03M2501  | 25m          |
| 163       | 1200658634 | 805000H09M030   | 3m           | 201 | 1200659040 | 804000E02M050   | 5m           | 236 | 1200659368 | 805000E03M015   | 1.5m         |
| 164       | 1200658635 | 805000H09M040   | 4m           | 202 | 1200659052 | 808000E02M2001  | 20m          | 237 | 1200659370 | 804000P03M020Y  | 2m           |
| 165       | 1200658636 | 803000H09M010   | 1m           | 203 | 1200659053 | 808000E02M3001  | 30m          | 238 | 1200659387 | 808000E02M500   | 50m          |
| 166       | 1200658637 | 803000H09M015   | 1.5m         | 209 | 1200659088 | 804000P03M050HY | 5m           | 239 | 1200659388 | 804000P03M012   | 1.2m         |
| 167       | 1200658638 | 803000H09M030   | 3m           | 210 | 1200659092 | 808000P02M050Y  | 5m           | 241 | 1200659397 | 808000P02M100Y  | 10m          |
| 168       | 1200658639 | 803000H09M040   | 4m           |     |            |                 |              | 242 | 1200659399 | 808000P02M015   | 1.5m         |
| 169       | 1200658640 | 804000H09M010   | 1m           |     |            |                 |              | 243 | 1200659474 | 804000P03M250   | 25m          |
| 170       | 1200658641 | 804000H09M040   | 4m           |     |            |                 |              | 244 | 1200659475 | 804000P03M300   | 30m          |
| 171       | 1200658642 | 808000H08M010   | 1m           |     |            |                 |              | 245 | 1200659509 | 805000E03M600   | 60m          |
| 172       | 1200658643 | 808000H08M015   | 1.5m         |     |            |                 |              |     |            |                 |              |
| 173       | 1200658644 | 808000H08M020   | 2m           |     |            |                 |              |     |            |                 |              |
| 174       | 1200658645 | 808000H08M030   | 3m           |     |            |                 |              |     |            |                 |              |
| 175       | 1200658646 | 808000H08M040   | 4m           |     |            |                 |              |     |            |                 |              |

NOTES:

✱

 - Part No. with Yellow PVC overmolding

✱✱

 - Part No. with Black PVC overmolding

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

THIRD ANGLE PROJECTION

DRAWING

SERIES

120065

A3-SIZE

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DRWN: RSILLER

CHK'D: THAERDT

APPR: THAERDT

INITIAL REVISION:

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GENERAL MARKET

4 OF 4

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CURRENT REV DESC: NEW PN ADD TO DRAWING