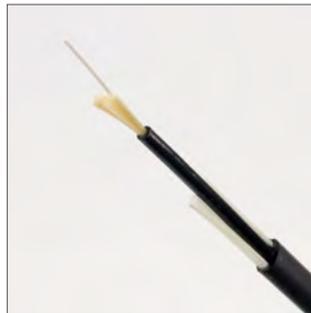
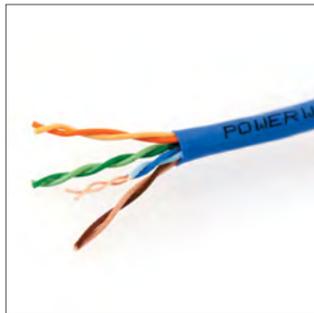
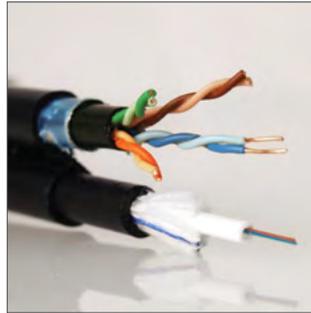
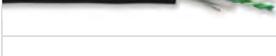


PRODUCT LINE CARD



# The PIONEER and TRUE Market Leader in Sustainability

|  |   | Product Name  | Listing  | Part Number <sup>1</sup>          | Package              | Sustainability         |          |
|--|---|---|--|-----------------------------------|----------------------|------------------------|----------|
| PREMISES COPPER  | Category 6A   |  <b>10Gain® XP CAT 6A</b> <b>4PPoE</b> <b>CHDBT™</b>     | CMR-LP   | 6H-246-xA                         | 1,000' BrakeBox®     | EPD, HPD               |          |
|  |   |   | CMP-LP   | 6H-246-xB                         |                      |                        |          |
|  |   |  <b>10Gain CAT 6A</b>                                    | CMR  | 6A-246-xA                         | 1,000' BrakeBox      | EPD, HPD               |          |
|  |   |   | CMP  | 6A-272-xB                         | 1,000' Reel          |                        |          |
|  |   |  <b>CAT 6A U/FTP (STP)</b>                               | CMR  | 6S-220-xA                         | 1,000' Reel          | EPD, HPD               |          |
|  | CMP   |   | 6S-220-xB  |                                   |                      |                        |          |
|  |  <b>CAT 6A F/UTP (ScTP)</b>    | CMR   | 6F-246-xA  | 1,000' BrakeBox                   | EPD, HPD             |                        |          |
|  |   | CMP   | 6F-246-xB  |                                   |                      |                        |          |
|  | PREMISES COPPER   | Category 6  |  <b>CAT 6+ F/UTP (ScTP)</b> <b>CHDBT™</b> | CMR                               | 6T-246-xA            | 1,000' BrakeBox        | EPD, HPD |
|  |   |   |  | CMP                               | 6T-246-xB            |                        |          |
|  <b>NextGain® CAT 6eX</b>   |   | CMR   | 54-246-xA  | 1,000' BrakeBox                   | EPD, HPD             |                        |          |
|  |   | CMP   | 54-246-xB  | 1,000' BrakeBox                   |                      |                        |          |
|  <b>DataGain® CAT 6+</b>  |   | CMR   | 66-246-xA  | 1,000' BrakeBox                   | EPD, HPD             |                        |          |
|  |   |   | 66-240-xA  | 1,000' POP™ box                   |                      |                        |          |
|  |   | CMP   | 66-246-xB  | 1,000' BrakeBox                   |                      |                        |          |
|  |   |   | 66-240-xB  | 1,000' POP box                    |                      |                        |          |
|  <b>CAT 6+ LSHF</b>   |   | CMR-LSHF  | 66-246-xM  | 1,000' BrakeBox                   | EPD, HPD             |                        |          |
|  |   |  <b>CAT 6 with FEP Jacket</b>                            | CMP  | 66-246-xP                         | 1,000' BrakeBox      | EPD, HPD 2.0           |          |
|  <b>CAT 6</b>   | CMR   |   | 77-246-xA  | 1,000' BrakeBox                   | EPD, HPD             |                        |          |
|  | CMP   | 77-240-xA   | 1,000' POP box   |                                   |                      |                        |          |
|  |   | 77-246-xB   | 1,000' BrakeBox  |                                   |                      |                        |          |
|  <b>CAT 6</b>   | Indoor/Outdoor Sunlight Resistant   | CMR/CMX   | 77-246-E1  | 1,000' BrakeBox                   | -                    |                        |          |
|  |   | Indoor/Outdoor  | 77-246-x1  |                                   |                      |                        |          |
|  <b>Interlock Armored Premises Copper CAT 6 (single component)</b>  | CMR   | K4-199-xA <sup>2</sup>  | 1,000' Reel  | -                                 |                      |                        |          |
|  |   | L4-199-xA <sup>3</sup>  |  |                                   |                      |                        |          |
| PREMISES COPPER  | Category 5e   |  <b>Cobra CAT 5e+</b>                                    | CMR  | 52-200-x5                         | 1,000' Reel-in-a-Box | EPD, HPD               |          |
|  |   |   |  | 52-240-x5                         | 1,000' POP box       |                        |          |
|  |   |   | CMP  | 52-200-x8                         | 1,000' Reel-in-a-Box |                        |          |
|  |   |   |  | 52-241-x8                         | 1,000' POP box       |                        |          |
|  |  <b>CAT 5e+ F/UTP (ScTP)</b>  | CMR   | 5F-220-x5  | 1,000' Reel                       | EPD, HPD             |                        |          |
|  |   | CMP   | 5F-220-x8  |                                   |                      |                        |          |
|  |  <b>Marathon LAN® CAT 5e</b> | CMR   | 51-243-x5  | 1,000' Reel-in-a-Box              | EPD, HPD             |                        |          |
|  |   |   | 51-240-x5  | 1,000' POP box                    |                      |                        |          |
|  |   | CMP   | 51-243-x8  | 1,000' Reel-in-a-Box              |                      |                        |          |
|  |  <b>CAT 5e F/UTP (ScTP)</b>  | CMR/CMX   | Indoor/Outdoor Sunlight Resistant  | 5F-220-E1                         | 1,000' Reel          | -                      |          |
| Indoor/Outdoor   |   |   | 5F-220-x1  |                                   |                      |                        |          |
|  <b>CAT 5e</b>  | CMR/CMX   | Indoor/Outdoor Sunlight Resistant   | 51-240-E1  | 1,000' POP box                    | -                    |                        |          |
|  |   | Indoor/Outdoor  |  |                                   |                      | 51-240-x1              |          |
|  <b>25-Pair CAT 5e</b>  | CMR   | Power Sum   | 51-478-x5  | 1,000' Reel                       | -                    |                        |          |
|  |   | CMP   |  |                                   |                      | 51-478-48              |          |
|  <b>Interlock Armored Premises Copper CAT 5e (dual component)</b> | CM  | Indoor/Outdoor  | 51-499-EL  | 1,000' Reel                       | -                    |                        |          |
|  |   | CMR   |  |                                   |                      | K2-299-S5 <sup>2</sup> |          |
| POWERWISE COPPER   | 1G  |  <b>PowerWise® 1G 4PPoE</b> <b>4PPoE</b> <b>CHDBT™</b> | CMR-LP   | PW52-H46-x5                       | 1,000' BrakeBox      | EPD, HPD               |          |
|  |   |   | CMP-LP   | PW52-H46-x8                       |                      |                        |          |
|  |   |   | CMR/CMX  | Indoor/Outdoor Sunlight Resistant |                      | PW52-H46-E1            | -        |
|  |   |   |  | Indoor/Outdoor                    |                      | PW52-H46-x1            |          |

| PREMISES COPPER<br>OSP Broadband | Product Name                                     |                                 | Category  | Part Number | Product Code         | Shield               | Package     |
|----------------------------------|--|---------------------------------|-----------|-------------|----------------------|----------------------|-------------|
|                                  |  | OSP Broadband BBDG <sup>5</sup> | CAT 6A    | 04-001-A5   | BBDG6A               | Copper-clad steel    | 1,000' Reel |
|                                  |  |                                 | CAT 6     | 04-001-65   | BBDG6                |                      |             |
|                                  |  | OSP Broadband BBDN <sup>5</sup> | CAT 6A    | 04-001-A4   | BBDN6A               | Coated aluminum tape | 1,000' Reel |
|                                  |  |                                 | CAT 6     | 04-001-64   | BBDN6                |                      |             |
|                                  |  | OSP Broadband BBD <sup>5</sup>  | CAT 6     | 04-001-68   | BBD6                 | None                 | 1,000' Reel |
| CAT 5e                           |  |                                 | 04-001-58 | BBD6e       |                      |                      |             |
|                                  | OSP Broadband Indoor/Outdoor Halogen-Free CM/CMX | CAT 6A                          | 04-001-A3 | BBDG6A      | Copper-clad steel    | 1,000' Reel          |             |
|                                  |  | CAT 6A                          | 04-001-A2 | BBDN6A      | Coated aluminum tape |                      |             |
|                                  |  | CAT 6                           | 04-001-63 | BBDG6       | Copper-clad steel    |                      |             |
|                                  |  | CAT 6                           | 04-001-62 | BBDN6       | Coated aluminum tape |                      |             |
|                                  | OSP Broadband Duplex                             | CAT 5e                          | 04-A01-55 | BBDGe       | Copper-clad steel    | 1,000' Reel          |             |

| BUNDLED | Product Name |                       | Part Number | Number of Cable Components <sup>6</sup> |           |                       | Package |
|---------|--------------|-----------------------|-------------|---|-----------|-----------------------|---------|
|         |              |                       |             | CAT 6/5e                                | RG-6 Quad | 62.5 2-Fiber          |         |
|         |              | Bundled Composite CMR |             | D3-B169SA                               | CAT 6 x 2 | 1                     | 1       |
|         |              | D1-B169S5             | CAT 5e x 2  | 1                                       | 1         | Cut to length on reel |         |

| PREMISES COPPER<br>Coaxial | CAT 3                         | Product Name   |          | Listing   | Part Number            | Jacket Color            | Package        | Sustainability |          |
|----------------------------|-------------------------------|--|----------|-----------|------------------------|-------------------------|----------------|----------------|----------|
|                            |                               |  | CAT 3    | 100-Pair  | CMR                    | 18-789-33               | Gray           | Cut to length  | EPD, HPD |
|                            |                               |  |          |           | CMP                    | 18-799-36               |                |                |          |
|                            |                               |  | CAT 3    | 300-Pair  | CMR                    | 18-B99-33               |                |                | EPD, HPD |
|                            | CMP                           |  |          |           | 18-B99-36              |                         |                |                |          |
|                            |                               | Coax RG-6, Quad Shield<br>CM/CATV, CMR/CATVR<br>and CMP/CL2P |          | CM/CATV   | 78-147-9P              | White                   | 1,000' POP box | -              |          |
|                            |                               |  |          |           | 79-147-9P              | Black                   |                |                |          |
|                            |                               |  |          | CMR/CATVR | 78-148-91              | White                   | 1,000' Reel    |                |          |
|                            |                               | Coax RG-6, Quad Shield<br>Aluminum Interlock Armored         |          | CMR       | KC-919-45 <sup>7</sup> | White                   | 1,000' Reel    | -              |          |
|                            |                               |  |          |           | KC-919-E5 <sup>7</sup> | Black                   |                |                |          |
|                            | Coax RG-6, Tri-Shield 70%     |  | CM       | 78-11A-9R | White                  | 1,000'<br>Reel-in-a-Box | -              |                |          |
|                            |                               |  |          | 79-11A-9R | Black                  |                         |                |                |          |
|                            |                               |  |          | CMR       | 79-11B-9R              |                         |                | Black          |          |
|                            | Coax RG-6, 60% Shield         |  | CM       | 78-107-9P | White                  | 1,000' POP box          | -              |                |          |
|                            |                               |  |          | 79-107-9P | Black                  |                         |                |                |          |
|                            | Coax RG-59, 95% Shield        |  | CMR/CL2R | 78-558-91 | White                  | 1,000' Reel             | -              |                |          |
|                            |                               |  |          | 79-558-91 | Black                  |                         |                |                |          |
|                            |                               |  | CMP/CL2P | 78-55C-91 | White                  |                         |                |                |          |
|                            | Coax RG-59, 95% Shield + 18/2 |  | CMP/CL2P | 86-57D-A1 | White                  | 1,000' Reel             | -              |                |          |

<sup>1</sup>Where "x" = jacket color (see color key below). <sup>2</sup>No outer jacket. <sup>3</sup>With outer jacket. For single component cables, the outer jacket color matches the internal component jacket color. For dual component cables, the standard outer jacket color is Blue. <sup>4</sup>Non-standard jacket colors and other packaging options (types and lengths) available with minimum order quantity and lead time. <sup>5</sup>Also available with optional aluminum interlock armor with overjacket upon request. <sup>6</sup>Multiple construction options available, including other fiber types and fiber counts upon request. <sup>7</sup>No outer jacket.

| KEY                            | Standard Jacket Colors |          |           |
|--------------------------------|------------------------|----------|-----------|
| <sup>1</sup> Replace "x" with: | Blue = 2               | Gray = 3 | White = 4 |

| Non-standard Jacket Colors <sup>4</sup> |            |            |         |            |           |
|---|------------|------------|---------|------------|-----------|
| Green = 5                               | Yellow = 6 | Purple = 7 | Red = 9 | Orange = D | Black = E |

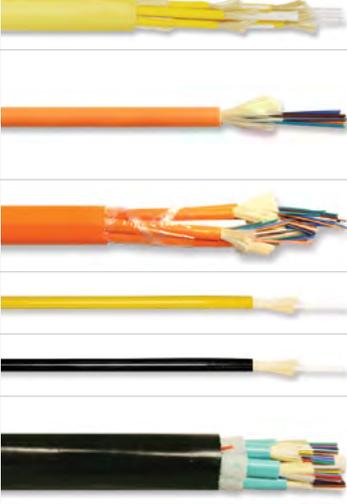
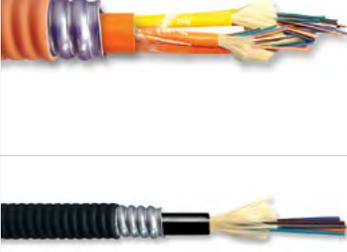
| PREMISES LOOSE-TUBE FIBER | Interconnect              | Product Name                        | Listing                                     | Part Number <sup>1</sup> | Configuration | Fiber Count | Package  | Sustainability |          |
|---------------------------|---------------------------|-------------------------------------|---|--------------------------|---------------|-------------|----------|----------------|----------|
|                           |                           |                                     |   |                          |               |             |          | EPD, HPD       |          |
| PREMISES LOOSE-TUBE FIBER | Interconnect              | Microarray Data Center Interconnect | OFNR  | P3***xx01                | 3 mm round    | 2 - 12      | Reel     | EPD, HPD       |          |
|                           |                           |                                     |   | P3024xxA1                | Duplex        | 24          |          |                |          |
|                           |                           |                                     | OFNP  | V4***xx01                | 2 mm Round    | 2 - 12      |          |                |          |
|                           |                           |                                     |   | P4***xx01                | 3 mm round    | 2 - 12      |          |                |          |
|                           | PREMISES LOOSE-TUBE FIBER | Breakout                            | 2 mm Microarray Breakout                    | OFNP                     | V4***xxB1     | Multi-unit  | 24       | Reel           | EPD, HPD |
|                           |                           |                                     |   |                          | V4***xx01     | Multi-unit  | 36 - 144 |                |          |
|                           |                           | Breakout                            | 2 mm Interlock Armored, Microarray Breakout | OFCP                     | L4***xB1      | Multi-unit  | 24       | Reel           | EPD, HPD |
|                           |                           |                                     |   |                          | L4***xV01     | Multi-unit  | 36 - 144 |                |          |
|                           |                           | Breakout                            | 3 mm Microarray Breakout                    | OFNR                     | P3024xxB1     | Multi-unit  | 24       | Reel           | EPD, HPD |
|                           |                           |                                     |   |                          | P3***xx01     |             | 36 - 144 |                |          |
| OFNP                      |                           |                                     |   | P4024xxB1                | Multi-unit    | 24          |          |                |          |
| Breakout                  |                           |                                     | 3 mm Interlock Armored, Microarray Breakout | OFCR                     | L3024xPB1     | Multi-unit  | 24       | Reel           | EPD, HPD |
|                           |                           |                                     |   |                          | L3***xP01     |             | 36 - 144 |                |          |
|                           |                           |                                     |   | OFCP                     | L4024xPB1     | Multi-unit  | 24       |                |          |
|                           |                           |                                     |   | L4***xP01                |               | 36 - 144    |          |                |          |

| MICROLITE® | Product Name                        | Listing | Part Number <sup>1</sup> | Configuration | Fiber Count | Package | Sustainability |
|------------|-------------------------------------|---------|--------------------------|---------------|-------------|---------|----------------|
|            |                                     |         |                          |               |             |         | EPD, HPD       |
| MICROLITE® | MicroLite® Data Center Interconnect | OFNP    | P4024xxC1                | 3.8 mm round  | 24          | Reel    | EPD, HPD       |
|            | MicroLite® Distribution             |         | F457-048Uyy-z991         | 6.4 mm round  | 48          |         |                |

| ENDURALITE® | Product Name   | Listing | Part Number <sup>1</sup> | Configuration | Fiber Count | Package         |
|-------------|--|---------|--------------------------|---------------|-------------|-----------------|
|             |  |         |                          |               |             |                 |
| ENDURALITE® | EnduraLite® Indoor/Outdoor Loose Tube Sunlight Resistant/Dry Block | OFNR    | F360-***Uyy-E991         | Single unit   | 2 - 12      | Reel            |
|             |  |         | F360-***Uyy-EA51         |               |             | 1,000' BrakeBox |
|             |  | OFNP    | F460-***Uyy-E991         |               |             | Reel            |
|             |  |         | F460-***Uyy-EA51         |               |             | 1,000' BrakeBox |
|             | EnduraLite® Indoor/Outdoor, Loose Tube, Interlock Armored          | OFCR    | F160-***Uyy-E991         | Single unit   | 2 - 12      | Reel            |
|             |  | OFCP    | F260-***Uyy-E991         |               |             |                 |
|             |  |         | F262-***Uyy-E991         | Multi-unit    | 24, 36, 48  |                 |

| POWERWISE® FIBER | Product Name     | Listing                        | Armor              | Part Number          | Configuration          | Package |
|------------------|------------------|--------------------------------|--------------------|----------------------|------------------------|---------|
|                  |                  |                                |                    |                      |                        |         |
| POWERWISE® FIBER | PowerWise® Fiber | CL3R-OF/<br>CMR-OF/<br>FPLR-OF | No armor           | F3C3-002U15-6991-CE9 | 2 - SMF,<br>2 - 16 AWG | Reel    |
|                  |                  |                                | Interlock<br>Armor | F1C3-002U15-6991-CE9 |                        |         |
|                  |                  | CL3P-OF/<br>CMP-OF/<br>FPLP-OF | No armor           | F4C3-002U15-6991-CE9 |                        |         |

| PREMISES RIBBON | Product Name        | Listing | Fiber Type  | Part Number <sup>1</sup> | Configuration | Fiber Count | Package |
|-----------------|---------------------|---------|-------------|--------------------------|---------------|-------------|---------|
|                 |                     |         |             |                          |               |             |         |
| PREMISES RIBBON | Ribbon Distribution | OFNR    | Single mode | F356-***Uyy-6991         | Single unit   | 12 - 288    | Reel    |
|                 |                     |         | Multimode   | F356-***Uyy-K991         |               |             |         |
|                 |                     | OFNP    | Single mode | F456-***Uyy-6991         |               |             |         |
|                 |                     |         | Multimode   | F456-***Uyy-K991         |               |             |         |

|                   |   | Product Name   | Listing  | Part Number <sup>1</sup> | Configuration    | Fiber Count | Package      | Sustainability |  |      |           |
|-------------------|---|--|--|--------------------------|------------------|-------------|--------------|----------------|--|------|-----------|
| Interconnect      |    | Simplex, Duplex and Quad Interconnect                    | OFNR   | 33***xx01                | 3 mm Round       | 1           | Reel         | EPD, HPD       |  |      |           |
|                   |   |  |  | A3001xx01                | 2 mm Round       | 1           |              |                |  |      |           |
|                   |   |  |  | B3002xx01                | 3 mm Zip         | 2           |              |                |  |      |           |
|                   |   |  |  | C3002xx01                | 2 mm Zip         | 2           |              |                |  |      |           |
|                   |   |  | OFNP   | 33***xyy                 | Round            | 2, 4        | Refer to key |                |  |      |           |
|                   |   |  |  | 34***xx01                | 3 mm Round       | 1           | Reel         |                |  |      |           |
|                   |   |  |  | A4001xx01                | 2 mm Round       | 1           |              |                |  |      |           |
|                   |   |  |  | B4002xx01                | 3 mm Zip         | 2           |              |                |  |      |           |
|                   |   |  |  | C4002xx01                | 2 mm Zip         | 2           |              |                |  |      |           |
|                   |   |  |  | 34***xyy                 | Round            | 2, 4        | Refer to key |                |  |      |           |
| Distribution      |    | Single Unit Distribution                                 | OFNR   | 43***xyy                 | Single unit      | 6, 8, 12    | Refer to key | EPD, HPD       |  |      |           |
|                   |   |  |  | 43***xK01                |                  | 18, 24      | Reel         |                |  |      |           |
|                   |   |  | OFNP   | 44***xyy                 |                  | 6, 8, 12    | Refer to key |                |  |      |           |
|                   |   |  |  | 44***xK01                |                  | 18, 24      | Reel         |                |  |      |           |
|                   |   | Multi-Unit Distribution                                  | OFNR   | 43***xx01                | Multi-unit       | 18 - 144    | Reel         | EPD, HPD       |  |      |           |
|                   |   |  |  | 44***xx01                |                  |             |              |                |  |      |           |
|                   |   | Rugged Indoor MDU Tight Buffer                           | OFNR   | D3001L5yy                | Round            | 1           | Refer to key | EPD, HPD       |  |      |           |
|                   |   |  |  |                          |                  |             |              |                | Rugged Indoor/Outdoor MDU Tight Buffer | OFNR | D5001L5yy |
|                   |   | Dry Block/Sunlight Resistant Indoor/Outdoor Tight Buffer | OFNR   | F308-***Uyy-E991         | Single unit      | 2 - 24      | Refer to key | EPD, HPD       |  |      |           |
|                   |   |  |  | W3***xx01                | Multi-unit       | 18 - 144    | Reel         |                |  |      |           |
| OFNP              | W4***xyy  |  | Single unit                                    | 2 - 24                   | Refer to key     |             |              |                |  |      |           |
|                   | F409-***Uyy-E991  |  | Multi-unit                                     | 24 - 72                  | Reel             |             |              |                |  |      |           |
| Interlock Armored |  | Interlock Armored, Tight Buffer Indoor                   | OFCR   | L3***x301                | Single unit      | 2, 4        | Reel         | EPD, HPD       |  |      |           |
|                   |   |  |  | L3***x401                |                  | 6, 8, 12    |              |                |  |      |           |
|                   |   |  |  | L3***xK1Q                |                  | 18, 24      |              |                |  |      |           |
|                   |   |  |  | L3***x401                |                  | Multi-unit  |              |                | 18 - 144                               |      |           |
|                   |   |  | OFCP   | L4***x301                | Single unit      | 2, 4        |              |                |  |      |           |
|                   |   |  |  | L4***x401                |                  | 6, 8, 12    |              |                |  |      |           |
|                   |   |  |  | L4***xK1Q                |                  | 18, 24      |              |                |  |      |           |
|                   |   |  |  | L4***x401                |                  | Multi-unit  |              |                | 18 - 72                                |      |           |
|                   |   |  | Interlock Armored, Indoor/Outdoor Tight Buffer | OFCR                     | F108-***Uyy-E991 | Single unit |              |                | 2 - 24                                 | Reel | EPD, HPD  |
|                   |   |  |  |                          | L3***xW01        | Multi-unit  |              |                | 18 - 144                               |      |           |
| OFCP              | L4***xW01   | Single unit  |  | 2 - 24                   |                  |             |              |                |  |      |           |
|                   | F209-***Uyy-E991  | Multi-unit   |  | 24 - 72                  |                  |             |              |                |  |      |           |

<sup>1</sup>Where "\*\*\*\*" = fiber count and "x" or "xx" or "yy" = fiber type (refer to key below).

|     |                             | Single Mode Fiber (SMF) Types   |                   |          |    |
|-----|-----------------------------|---------------------------------|-------------------|----------|----|
| KEY |                             | TeraFlex® Bend Resistant        |                   |          |    |
|     |                             | G.657.A1                        | G.657.A2          | G.657.B3 |    |
|     |                             | <sup>1</sup> Replace "x" with:  | K                 | J        | L  |
|     |                             | <sup>1</sup> Replace "xx" with: | K1                | J1       | L1 |
|     |                             | <sup>1</sup> Replace "yy" with: | 13                | 14       | 15 |
|     |                             | Premises Jacket Colors          | "z" = 6<br>Yellow |          |    |
|     | Indoor/Outdoor Jacket Color | "z" = E<br>Black                |                   |          |    |

|     |                             | Multimode Fiber (MMF) Types     |  |                 |    |
|-----|-----------------------------|---------------------------------|--|-----------------|----|
| KEY |                             | TeraGain® 62.5/125              | TeraFlex Bend Resistant Laser Optimized 50/125 |                 |    |
|     |                             |                                 | OM3  | OM4             |    |
|     |                             | <sup>1</sup> Replace "x" with:  | 6  | N               | P  |
|     |                             | <sup>1</sup> Replace "xx" with: | 6G   | NG              | PG |
|     |                             | <sup>1</sup> Replace "yy" with: | 23   | 30              | 32 |
|     |                             | Premises Jacket Colors          | "z" = D<br>Orange                              | "z" = K<br>Aqua |    |
|     | Indoor/Outdoor Jacket Color | "z" = E<br>Black                |  |                 |    |

|     |  | Packaging Options*         |                                 |                   |                   |
|-----|--|----------------------------|---------------------------------|-------------------|-------------------|
| KEY |  | Cut to Length Plywood reel | 1,000 ft BrakeBox®              | 1,500 ft BrakeBox | 2,000 ft BrakeBox |
|     |  |                            | <sup>1</sup> Replace "yy" with: | 01                | BB*               |

\*Check with your sales representative to insure product is available in the desired length.

|                                       | Product Name                                       | Series                  | Features                              | Part Number <sup>1</sup>      | Fiber Count |
|---------------------------------------|--|-------------------------|---------------------------------------|-------------------------------|-------------|
| Loose Tube                            | Loose Tube Single Jacket All Dielectric            | 11D                     | Dri-Lite® gel-free                    | 11***xD0b                     | 6 - 288     |
|                                       |  | 11                      | PFM™ gel-filled                       | 11***xz0b                     | 2 - 432     |
|                                       |  | 1NY                     | PFM gel-filled, nylon overjacket      | 11***xN0b                     | 2 - 288     |
|                                       | Loose Tube Double Jacket All Dielectric            | 1GD                     | Dri-Lite gel-free                     | 1G***xD0b                     | 6 - 288     |
|                                       |  | 1G                      | PFM gel-filled                        | 1G***xz0b                     | 2 - 288     |
|                                       | Loose Tube Single Jacket Single Armor              | 12D                     | Dri-Lite gel-free                     | 12***xD0b                     | 6 - 288     |
|                                       | Loose Tube Double Jacket Single Armor              | 12                      | PFM gel-filled                        | 12***xz0b                     | 2 - 432     |
| 1AD                                   |  | Dri-Lite gel-free       | 1A***xD0b                             | 6 - 288                       |             |
| Loose Tube Double Jacket Double Armor | 1A   | PFM gel-filled          | 1A***xz0b                             | 2 - 288                       |             |
|                                       | 1DD  | Dri-Lite gel-free       | 1D***xD0b                             | 6 - 288                       |             |
| Loose Tube Triple Jacket Double Armor | 1D   | PFM gel-filled          | 1D***xz0b                             | 2 - 288                       |             |
|                                       | 1CD  | Dri-Lite gel-free       | 1C***xD0b                             | 6 - 144                       |             |
| Air Blown Micro Fiber                 | 1C   | PFM gel-filled          | 1C***xz0b                             | 2 - 144                       |             |
|                                       | LT   | Dry (SAP) core standard | FJ10-***xxx-E991                      | 24 - 288                      |             |
| Outdoor/Indoor                        | Loose Tube Outdoor/Indoor                          | 13D                     | Dri-Lite gel-free OFNR                | 13***xD0b                     | 6 - 288     |
|                                       |  | 13                      | PFM gel-filled OFNR                   | 13***xz0b                     | 2 - 288     |
|                                       |  | 13I                     | Interlock armored OFCR                | L3***x10b                     | 2 - 144     |
|                                       | Loose Tube Outdoor/Indoor LSZH                     | HZD                     | Single jacket, all dielectric OFNR-LS | FH16-***xxx-E99b              | 6 - 288     |
|                                       |  | HZA                     | Single jacket, single armor OFCR-LS   | FH25-***xxx-E99b              | 6 - 288     |
| Heavy Duty Loose Tube                 | 1H   | OFNR                    | 1H***xz0b                             | 2 - 216                       |             |
| ADSS                                  | All Dielectric Self Supporting (ADSS)              | 1F100                   | 100 meter span                        | FE11-***xxx-E99b <sup>2</sup> | 6 - 288     |
|                                       |  | 1F200                   | 200 meter span                        | FE12-***xxx-E99b <sup>2</sup> | 6 - 288     |
|                                       |  | 1F400                   | 400 meter span                        | FE14-***U10-E991              | 6 - 288     |
| Miscellaneous                         | Single Loose Tube                                  | 51                      | All dielectric                        | 51***xz0b                     | 2 - 96      |
|                                       |  | 52                      | Single armor                          | 52***xz0b                     | 2 - 96      |
|                                       |  | 53                      | Indoor/Outdoor OFNR                   | 53***xz0b                     | 2 - 96      |
|                                       | Single Flex Tube                                   | F1                      | All dielectric                        | F1***xz0b                     | 2 - 96      |
|                                       |  | F2                      | Single armor                          | F2***xz5b                     | 2 - 96      |
|                                       | Flex Tube Locate                                   | FM                      | Metallic locatable tape               | FM***x1Sb                     | 2 - 96      |
| FTTP                                  | UG FTTP  | 513                     | All dielectric                        | 51***xz0b                     | 2 - 12      |
|                                       |  | 52S                     | Steel armor                           | 52***xS0b                     | 2 - 12      |
|                                       |  | 52U                     | Steel armor with rip cords            | 52***xU0b                     | 2 - 12      |
|                                       | Buried FTTP  | 523                     | Aluminum armor                        | 52***xz0b                     | 2 - 12      |
|                                       |  | 573Q                    | 21 mm solid steel self support        | 57***x23Q                     | 1 - 12      |
|                                       | Oval Drop FTTP                                     | 6U                      | MDPE Universal                        | 6U***x1RG                     | 2 - 12      |
|                                       |  | 6T                      | MDPE Toneable                         | 6T***x1RG                     | 2 - 12      |
| 6S                                    |  | PVC Universal           | 6S***x1RG                             | 2 - 12                        |             |
| 6R                                    |  | PVC Toneable            | 6R***x1RG                             | 2 - 12                        |             |
| FTTP Tight Buffered I/O Drop          | W7U  | MDPE Universal          | W7***KU0b                             | 1 - 2                         |             |
|                                       | W7T  | MDPE Toneable           | W7***K10b                             | 1 - 2                         |             |
| Ribbon                                | Ribbon Locate                                      | RM                      | Metallic locatable tape               | RM***x1Sb <sup>2</sup>        | 60 - 216    |
|                                       | Single Tube Ribbon                                 | R1D                     | Dri-Lite gel-free, all dielectric     | R1***xD0b <sup>2</sup>        | 12 - 432    |
|                                       |  | R1                      | PFM gel filled, all dielectric        | R1***x10b <sup>2</sup>        | 12 - 432    |
|                                       |  | R2D                     | Dri-Lite gel-free, single armor       | R2***xDSb <sup>2</sup>        | 12 - 432    |
|                                       |  | R2                      | PFM gel filled, single armor          | R2***x1Sb <sup>2</sup>        | 12 - 432    |
| Stranded Tube Ribbon                  | S2   | Single armor            | S2***x10b <sup>2</sup>                | 360 - 1,008                   |             |
| Loose Tube Self Support               | Loose Tube Single Jacket Self Support              | 11DM                    | Dri-Lite gel-free                     | 11***xDMb                     | 6 - 288     |
|                                       |  | 11M                     | PFM gel-filled                        | 11***zMb                      | 2 - 288     |
|                                       |  | 11MLS                   | Long-span ½" messenger                | 11***KDLb                     | 6 - 288     |
|                                       |  |                         | Long-span ¾" messenger                | 11***KDKb                     | 6 - 288     |
|                                       | Loose Tube Double Jacket Self Support              | 1GDM                    | Dri-Lite gel-free                     | 1G***xDMb                     | 6 - 120     |
|                                       |  | 1GM                     | PFM gel-filled                        | 1G***zMb                      | 2 - 120     |
|                                       | Loose Tube Single Jacket Single Armor Self Support | 12DM                    | Dri-Lite gel-free                     | 12***xDMb                     | 6 - 288     |
|                                       |  | 12M                     | PFM gel-filled                        | 12***zMb                      | 2 - 288     |
|                                       | Loose Tube Double Jacket Single Armor Self Support | 1ADM                    | Dri-Lite gel-free                     | 1A***xDMb                     | 6 - 120     |
|                                       |  | 1AM                     | PFM gel-filled                        | 1A***zMb                      | 2 - 120     |

| OSP COMPOSITE   |   | Product Name          | Series   | Features  | Part Number <sup>3</sup> | Copper Pair Count | Fiber Count |        |
|---|---|-----------------------|--|-----------|--------------------------|-------------------|-------------|--------|
|   |  | Buried Drop Composite | Fiber/copper composite with aluminum armor                           | 72        |                          | 72***x32b         | 2           | 2 - 12 |
| 72***x33b   | 3   |                       |  |           |                          |                   |             |        |
| 72***x36b   | 6   |                       |  |           |                          |                   |             |        |
|  | 72S   |                       | Fiber/copper composite with steel armor                              |           |                          | 72***x32S         | 2           | 2 - 12 |
|   |   |                       |  |           |                          | 72***x33S         | 3           |        |
|   |   |                       |  |           |                          | 72***x36S         | 6           |        |
|  | Composite Right of Way  | MR                    | Fiber/copper composite for small conduits                            | MR0723011 | 12                       | 72                |             |        |
|  | Composite CAT 5e Drop   | 5F                    | Composite with 4 fibers and CAT 5e                                   | 11-003-30 | 4                        | 4                 |             |        |
|  | Composite Drop Web  | 5W                    | Fiber/copper composite with 2 - 12 fibers and 2 or 5 copper pairs    |           | 5W***x01Q                | 2                 | 2 - 12      |        |
|   |   |                       |  |           | 5W***x02Q                | 5                 | 2 - 12      |        |
|  | Composite OSP Web   | 5V                    | Fiber/copper composite with 6 - 24 fibers and 6 - 25 copper pairs    |           | 5V***x061                | 6                 | 6 - 24      |        |
|   |   |                       |  |           | 5V***x121                | 12                |             |        |
|   |   |                       |  |           | 5V***x181                | 18                |             |        |
|   |   |                       |  |           | 5V***x251                | 25                |             |        |
|  | Composite OSP Overjacket  | 70 OJ                 | Fiber/copper composite with 48 - 96 fibers and 50 - 200 copper pairs |           | 70-065-24                | 50                | 24          |        |
|   |   |                       |  |           | 70-073-96                | 200               | 96          |        |
|  | Composite Round CF  | L                     | Many fiber constructions with 1 - 3 copper pairs                     |           | 11***C02Q                | 1                 | 2 - 288     |        |
|   |   |                       |  |           | 12***C103                | 1 - 3             |             |        |

| FTTA  |  | Product Name                              | Part Number       | Conductor Count | AWG (mm) | Fiber Component | Fiber Count  |
|---|--|---|-------------------|-----------------|----------|-----------------|--------------|
|   |  | Fiber-to-the-Antenna (FTTA)<br>Fiber OFNR |                   | 53012K01Q       | -        | -               | Central tube |
| 53024K01Q   |  |   |                   | 24              |          |                 |              |
| 53048K01Q   |  |   |                   | 48              |          |                 |              |
|  | Fiber-to-the-Antenna (FTTA)<br>Hybrid Fiber + Power                                |   | FHG3-012-U13-E991 | 6               | 8 (3.26) | Tight buffer    | 12           |
|   |  |   | FHG2-012-U13-E991 |                 |          | Central tube    |              |
|   |  |   | FHG1-012-U13-E991 |                 |          | Loose tube      |              |

<sup>1</sup>Where "\*\*\*\*" = fiber count (i.e. 001, 002, 004, 006, 008, 012...), "x" = fiber type, "z" = special attribute, "b" = jacket print code and "O" = standard product (refer to keys below).

<sup>2</sup>These products are only available with single mode (SMF) fiber types. <sup>3</sup>Where "\*\*\*\*" = fiber count (i.e. 001, 002, 004, 006, 008, 012...), "x" = fiber type and "O" = standard product (refer to keys below).

| KEY                              | Single Mode Fiber (SMF) Types |                 |                          |          |          |      |      |
|----------------------------------|-------------------------------|-----------------|--------------------------|----------|----------|------|------|
|                                  | Reduced Water Peak            | Zero Water Peak | TeraFlex® Bend Resistant |          |          | NZDS | LEAF |
|                                  |                               |                 | G.657.A1                 | G.657.A2 | G.657.B3 |      |      |
| <sup>1</sup> Replace "x" with:   | 3                             | 2               | K                        | J        | L        | 8    | S    |
| <sup>1</sup> Replace "xxx" with: | U10                           | U17             | U13                      | U14      | U15      | U19  | C19  |

|                                  | Multimode Fiber (MMF) Types |  |         |         |
|----------------------------------|-----------------------------|--|---------|---------|
|                                  | TeraGain® 62.5/125          | TeraFlex Bend Resistant Laser Optimized 50/125 |         |         |
|                                  |                             | 10G/150  | 10G/300 | 10G/550 |
| <sup>1</sup> Replace "x" with:   | 6                           | M  | N       | P       |
| <sup>1</sup> Replace "xxx" with: | U23                         | U28  | U30     | U32     |

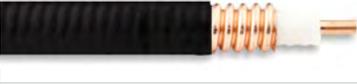
| KEY                            | Special Attributes  |             |                             |
|--------------------------------|---------------------|-------------|-----------------------------|
|                                | 12-fiber tubes with |             | TeraGain MMF 12-fiber tubes |
|                                | < 36 fibers         | > 36 fibers |                             |
| <sup>1</sup> Replace "z" with: | T                   | 1           | G                           |

|                                | Jacket Print Codes |        |                  |        |
|--------------------------------|--------------------|--------|------------------|--------|
|                                | Dry core           |        | Dry core special |        |
|                                | Feet               | Meters | Feet             | Meters |
| <sup>1</sup> Replace "b" with: | 1                  | 2      | 5                | 6      |

|           |                           | Product Name                            | Part Number  | Pair Count   | AWG (mm)      | Standard Length<br>ft (m) | Reel Size F x T x D<br>in |
|-----------|---------------------------|---|--------------|--------------|---------------|---------------------------|---------------------------|
| SEALPIC   |                           | SEALPIC®<br>(air core)                  | 01-097-40    | 25           | 24 (0.51)     | 5,000 (1,524)             | 44 x 18 x 20              |
|           |                           |   | 01-100-40    | 50           |               |                           | 46 x 25 x 20              |
|           |                           |   | 01-104-40    | 100          |               |                           | 58 x 25 x 20              |
|           |                           | SEALPIC-84<br>(air core self support)   | 01-092-38    | 6            | 24 (0.51)     | 5,000 (1,524)             | 46 x 25 x 20              |
|           |                           |   | 01-097-38    | 25           |               |                           | 58 x 25 x 20              |
|           |                           |   | 01-104-38    | 100          |               |                           | 72 x 36 x 36              |
|           |                           | SEALPIC-FSF-84<br>(filled self support) | 09-092-05    | 6            | 24 (0.51)     | 5,000 (1,524)             | 46 x 25 x 20              |
|           |                           |   | 09-097-05    | 25           |               |                           | 58 x 25 x 20              |
|           |                           |   | 09-104-05    | 100          |               |                           | 72 x 36 x 36              |
|           |                           | SEALPIC-FSF<br>RDUP PE-89               | 09-062-02    | 25           | 22 (0.64)     | 5,000 (1,524)             | 46 x 25 x 20              |
|           |                           |   | 09-069-02    | 100          |               |                           | 62 x 30 x 24              |
|           |                           |   | 09-075-02    | 300          |               |                           | 58 x 25 x 20              |
|           |                           |   | 09-081-02    | 600          | 24 (0.51)     | 1250 (381)                | 72 x 35 x 36              |
|           |                           |   | 09-092-02    | 6            |               | 36 x 18 x 14              |                           |
|           |                           |   | 09-097-02    | 25           |               | 5,000 (1,524)             | 44 x 18 x 20              |
| 09-104-02 |                           |   | 100          | 58 x 25 x 20 |               |                           |                           |
| 09-110-02 | 300                       | 2,500 (762)                             | 65 x 30 x 32 |              |               |                           |                           |
|           | SEALPIC-F<br>RDUP PE-39   | 04-092-21                               | 6            | 24 (0.51)    | 5,000 (1,524) | 36 x 18 x 14              |                           |
|           |                           | 04-097-21                               | 25           |              |               | 46 x 25 x 20              |                           |
|           |                           | 04-104-21                               | 100          |              |               | 65 x 30 x 32              |                           |
|           | CUPIC-F®<br>RDUP PE-39    | 04-092-04                               | 6            | 24 (0.51)    | 5,000 (1,524) | 36 x 18 x 14              |                           |
|           |                           | 04-097-04                               | 25           |              |               | 46 x 25 x 20              |                           |
|           |                           | 04-104-04                               | 100          |              |               | 65 x 30 x 32              |                           |
|           | GOPIC®-F<br>RDUP PE-39    | 04-092-27                               | 6            | 24 (0.51)    | 5,000 (1,524) | 36 x 18 x 14              |                           |
|           |                           | 04-097-27                               | 25           |              |               | 46 x 25 x 20              |                           |
|           |                           | 04-104-27                               | 100          |              |               | 65 x 30 x 32              |                           |
|           | CASPIC®-FSF<br>RDUP PE-89 | 09-092-92                               | 6            | 24 (0.51)    | 5,000 (1,524) | 36 x 18 x 14              |                           |
|           |                           | 09-097-92                               | 25           |              |               | 46 x 25 x 20              |                           |
|           |                           | 09-104-92                               | 100          |              |               | 58 x 25 x 20              |                           |

|           |               | Product Name                             | Part Number                | Pair Count | AWG (mm)    | Wire Color  | Standard Length<br>ft (m) | Package     |
|-----------|---------------|--|----------------------------|------------|-------------|-------------|---------------------------|-------------|
| Aerial    |               | ADP NMS                                  | 12-031-08                  | 1          | 22 (0.64)   | -           | 750 (229)                 | POP™ box    |
|           |               |  | 12-004-08                  | 2          |             |             | 750 (229)                 |             |
|           |               |  | 12-019-08                  | 3          |             |             | 600 (183)                 |             |
|           |               |  | 12-519-08                  | 5          |             |             | 400 (122)                 |             |
|           |               |  | 12-009-08                  | 6          |             |             | 1,000 (305)               | Reel        |
| Buried    |               | ADP S                                    | 12-301-07                  | 3          | 22 (0.64)   | -           | 1,000 (305)               | Reel        |
|           |               |  |                            | BDW A      | 04-089-85   | 2           | 24 (0.51)                 | -           |
|           | 04-104-85     | 6  |                            |            |             |             |                           |             |
|           |               | BDW G                                    | 04-053-17                  | 2          | 22 (0.64)   | -           | 2,500 (762)               | Reel        |
|           |               |  | 04-062-16                  | 6          |             |             |                           |             |
|           |               | BW GDJ                                   | 25-360-79                  | 3          | 22 (0.64)   | -           | 1,200 (366)               | Reel        |
|           |               |  | 25-555-79                  | 5          |             |             | 1,000 (305)               |             |
|           |               | BW AF                                    | 25-069-86                  | 2          | 22 (0.64)   | -           | 1,300 (396)               | Reel        |
|           |               |  | 25-549-86                  | 5          |             |             | 5,000 (1,676)             |             |
|           | Miscellaneous |  | Temporary Drop Wire<br>TDW | 12-311-36  | 2           | 22 (0.64)   | Red/Green, Yellow/Black   | 1,000 (305) |
| 12-331-36 |               |  |                            | 1          | 24 (0.51)   | Red/Green   | 2,000 (610)               |             |
|           |               | Ground Wire<br>Gray Jacketed             | 12-101-04                  | -          | 6 (4.12)    | -           | 200 (61)                  | Boxed coil  |
|           |               |  | 12-111-04                  | -          | 10 (2.59)   | -           |                           |             |
|           |               | Cross-Connect CAT 5 Wire<br>XCW          | 02-011-23                  | 1          | 24 (0.51)   | White/Blue  | 1,000 (305)               | Spool       |
|           |               |  | 02-032-23                  |            |             | Violet/Blue |                           |             |
|           |               | Indoor/Outdoor<br>Cross-Connect Wire XCW | 02-111-13                  | 1          | 22 (0.64)   | White/Blue  | 1,000 (305)               | Spool       |
|           | 02-102-13     |  | Yellow/Blue                |            |             |             |                           |             |
|           | 02-001-13     |  | 24 (0.51)                  |            | White/Blue  | 600 (183)   |                           |             |
|           | 02-D02-13     |  |                            |            | Yellow/Blue |             |                           |             |

| DAS HYBRID  | Cables  |                                      | Part Number          | Conductor Count | Conductor Type | AWG (mm)  | Fiber Count                                 | Fiber Type                                  |
|---|---|--------------------------------------|----------------------|-----------------|----------------|-----------|---|---|
|   |  | DAS Hybrid<br>Fiber + Copper, Plenum | F4C2-012U13-6991-CE5 | 4               | 19 x 0.185"    | 12 (2.05) | 12  | SMF TeraFlex®<br>Bend Resistant<br>G.657.A1 |
|  | Interlock Armored<br>DAS Hybrid<br>Fiber + Copper, Plenum                         | F2C2-012U13-6991-CE5                 | 4                    | 19 x 0.185"     | 12 (2.05)      | 12        | SMF TeraFlex®<br>Bend Resistant<br>G.657.A1 |   |

| DAS CABLE AND CONNECTORS |  | Cables  | Compatible DIN Connectors | Compatible N Connectors | Connector Interface Type |                   |
|--------------------------|--|---|---------------------------|-------------------------|--------------------------|-------------------|
|                          |  |   |                           |                         | Gender                   | Straight or Angle |
| Riser                    |   | HFSC-12DR<br>½" Super Flexible, Foam Dielectric<br>Copper Corrugated Outer Conductor<br>ETL listed CMR                    | CHFS-12DM                 | CHFS-12NM               | Male                     | Straight          |
|                          |  |   | CHFS-12DF                 | CHFS-12NF               | Female                   | Straight          |
|                          |  |   | CHFS-12DMR                | CHFS-12NMR              | Male                     | Right Angle       |
|                          |   | LHF-12DR<br>½" Low Loss, High Flexible, Foam Dielectric<br>Copper Corrugated Outer Conductor<br>ETL Listed CMR            | CLH-12DM                  | CLH-12NM                | Male                     | Straight          |
|                          |  |   | CLH-12DF                  | CLH-12NF                | Female                   | Straight          |
|                          |  |   | CLH-12DMR                 | CLH-12NMR               | Male                     | Right Angle       |
|                          |   | HFAC-12DR<br>½" Low Loss, High Flexible, Foam Dielectric<br>Aluminum Corrugated Outer Conductor<br>ETL Listed CMR         | CHFA-12DM                 | CHFA-12NM               | Male                     | Straight          |
|                          |  |   | CHFA-12DF                 | CHFA-12NF               | Female                   | Straight          |
|                          |  |   | -                         | CHFA-12NMR              | Male                     | Right Angle       |
|                          |  | -   | CHFA-12NFR                | Female                  | Right Angle              |                   |
| Plenum                   |   | HFSC-12DP<br>½" Super Flexible, Air Dielectric<br>Copper Corrugated Outer Conductor<br>ETL Listed CMP                     | CHFSP-12DM                | CHFSP-12NM              | Male                     | Straight          |
|                          |  |   | CHFSP-12DF                | CHFSP-12NF              | Female                   | Straight          |
|                          |  |   | CHFSP-12DMR               | CHFSP-12NMR             | Male                     | Right Angle       |
|                          |   | LHF-12DPV<br>½" Low Loss, High Flexible, Air Dielectric<br>Copper Corrugated Outer Conductor<br>ETL Listed CMP PVC Jacket | CLHPV-12DM                | CLHPV-12NM              | Male                     | Straight          |
|                          |  |   | CLHPV-12DF                | CLHPV-12NF              | Female                   | Straight          |
|                          |  |   |                           | CLHPV-12NMR             | Male                     | Right Angle       |
|                          |  | HFAC-12DPV<br>½" Low Loss, High Flexible, Air Dielectric<br>Aluminum Corrugated Outer Conductor<br>ETL Listed CMP         | CLHPV-12DM                | CLHPV-12NM              | Male                     | Straight          |
|                          |  |   | CLHPV-12DF                | CLHPV-12NF              | Female                   | Straight          |
|                          |  |   |                           | CLHPV-12NMR             | Male                     | Right Angle       |

| CABLE PREP  |   | Part Number   | Description  | Compatible Cable/ Tool                |
|---|---|---|--|---------------------------------------|
|   |   |  | T-HFSC12DR   | Cable Prep Drill Tool                 |
| T-LHF12DR   | LHF-12DR  |   |  |                                       |
| T-HFAC12DR  | HFAC-12DR   |   |  |                                       |
| T-HFSC12DP  | HFSC-12DP   |   |  |                                       |
| T-LHFA12DPV   | LHF-12DPV, HFAC-12DPV   |   |  |                                       |
|  | TF-LHFA12   | Flare and Foam Separator  | LHF-12DPV, LHF-12DR,<br>HFAC-12DPV, HFAC-12DR          |                                       |
|   | TF-HFSC12   |   | HFSC-12DP, HFSC-12DR                                   |                                       |
| Blade Kits  |  | TBK-LHFA12  | Replacement Blade Kit for<br>Automatic Cable Prep Tool | T-LHFA12DPV, T-LHF12DR,<br>T-HFAC12DR |
|   |   | TBK-HFSC12  |  | T-HFSC12DP, T-HFSC12DR                |

| FTTA | Cable   | Part Number | Conductor Count | AWG (mm) | Fiber Component |             |
|------|---|-------------|-----------------|----------|-----------------|-------------|
|      |   |             |                 |          | Fiber Component | Fiber Count |
|      | Fiber-to-the-Antenna (FTTA)<br>Fiber OFNR           | 53012K01Q   | -               | -        | Central tube    | 12          |
|      |   | 53024K01Q   |                 |          |                 | 24          |
|      |   | 53048K01Q   |                 |          |                 | 48          |
|      | Fiber-to-the-Antenna (FTTA)<br>Hybrid Fiber + Power | GM012K221   | 6               | 8 (3.26) | Tight buffer    | 12          |
|      |   | GM012K111   |                 |          | Central tube    |             |
|      |   | GM012K011   |                 |          | Loose tube      |             |

| REF CABLE AND CONNECTORS | Cables   | Compatible DIN Connectors | Compatible N Connectors | Connector Interface Type |                   |        |             |
|--------------------------|----------|---------------------------|-------------------------|--------------------------|-------------------|--------|-------------|
|                          |          |                           |                         | Gender                   | Straight or Angle |        |             |
| Super Flex               |          | CHFS-12DM                 | CHFS 12NM               | Male                     | Straight          |        |             |
|                          |          |                           |                         | CHFS-12DF                | CHFS-12NF         | Female | Straight    |
|                          |          |                           |                         | CHFS12DMR                | CHFS12NMR         | Male   | Right Angle |
| Low Loss                 |          | CLH-12DM                  | CLH-12NM                | Male                     | Straight          |        |             |
|                          |          |                           |                         | CLH-12DF                 | CLH-12NF          | Female | Straight    |
|                          |          |                           |                         | CLH-12DMR                | CLH-12NMR         | Male   | Right Angle |
| Ultra Low Loss           |          | CLH-22DM                  | CLH-22NM                | Male                     | Straight          |        |             |
|                          |          |                           |                         | CLH-22DF                 | CLH-22NF          | Female | Straight    |
|                          |          |                           |                         | CLH-42DM                 | CLH-42NM          | Male   | Straight    |
| CLH-42DF                 | CLH-42NF | Female                    | Straight                |                          |                   |        |             |

| HANGER KITS       | Part Number | Description                         | Unit of Measure |
|-------------------|-------------|-------------------------------------|-----------------|
|                   |             |                                     |                 |
|                   | LBHS22NH    | ¾" Cable Standard Hangers           | Kit of 10       |
|                   | LBHS33NH    | 1¼" Cable Standard Hangers          | Kit of 10       |
|                   | LBHS42NH    | 1½" Cable Standard Hangers          | Kit of 10       |
| Stackable Snap-In | L-SH-S12    | ½" Cable Stackable Snap-In Hangers  | Kit of 10       |
|                   | L-SH-S22    | ¾" Cable Stackable Snap-In Hangers  | Kit of 10       |
|                   | L-SH-S33    | 1¼" Cable Stackable Snap-In Hangers | Kit of 10       |
|                   | L-SH-S42    | 1½" Cable Stackable Snap-In Hangers | Kit of 10       |
| Universal Snap-In | L-SH-U12    | ½" Cable Universal Snap-In Hangers  | Kit of 10       |
|                   | L-SH-U22    | ¾" Cable Universal Snap-In Hangers  | Kit of 10       |
|                   | L-SH-U33    | 1¼" Cable Universal Snap-In Hangers | Kit of 10       |
|                   | L-SH-U42    | 1½" Cable Universal Snap-In Hangers | Kit of 10       |

| ADAPTER KITS | Part Number                   | Description | Unit of Measure |
|--------------|-------------------------------|-------------|-----------------|
|              |                               |             |                 |
| RM-A300      | 3" to 4" Round Adapters       | Kit of 10   |                 |
| SA-SS200     | 1½" to 3½" Stand-Off Adapters | Kit of 10   |                 |
| SA-SS300     | 2" to 4.5" Stand-Off Adapters | Kit of 10   |                 |
| L-SA-38      | 3-Way Stand-Off Adapters      | Kit of 10   |                 |
| AA-SL        | Angle Adapters                | Kit of 10   |                 |

| OTHER ACCESSORIES | Part Number | Description   | Unit of Measure |
|-------------------|-------------|---|-----------------|
|                   |             |   |                 |
|                   | L-GK-C22    | ¾" Cable Grounding Kit - Clip-on Type                     | Kit             |
|                   | L-GK-C42    | 1½" Cable Grounding Kit - Clip-on Type                    | Kit             |
| Hoisting Grips    | L-HG-12     | ½" Cable Hoisting Grip - Lace-Up                          | Each            |
|                   | L-HG-22     | ¾" Cable Hoisting Grip - Lace-Up                          | Each            |
|                   | L-HG-33     | 1¼" Cable Hoisting Grip - Lace-Up                         | Each            |
|                   | L-HG-42     | 1½" Cable Hoisting Grip - Lace-Up                         | Each            |
|                   | L-HG-12L    | ½" Cable Hoisting Grip - Pre-Laced                        | Each            |
|                   | L-HG-22L    | ¾" Cable Hoisting Grip - Pre-Laced                        | Each            |
| Boots             | LBA-12-1A   | ½" Cable Boot Assembly, 4" with 1 Hole                    | Kit             |
|                   | LBA-22-1A   | ¾" Cable Boot Assembly, 4" with 1 Hole                    | Kit             |
|                   | LBA-42-1A   | 1½" Cable Boot Assembly, 4" with 1 Hole                   | Kit             |
| Surge Arrestors   | AGDMDF02    | Surge Arrestor - Wide Band (DC Pass) DIN Male/DIN Female  | Each            |
|                   | AG-NFNF     | Surge Arrestor - Wide Band (DC Pass) N Female/N Female    | Each            |
|                   | ATNMNF700   | Surge Arrestor - 700-2,700 Wave 4 N Male/N Female         | Each            |
|                   | ATDMDF700   | Surge Arrestor - 700-2,700 MHz Wave 4 DIN Male/DIN Female | Each            |
|                   | AT-NMNF-W   | Surge Arrestor - 800-2,700 MHz Wave 4 N Male/N Female     | Each            |
|                   | AT-DMDF-W   | Surge Arrestor - 800-2,700 MHz Wave 4 DIN Male/DIN Female | Each            |
| Tools             | L-CT-12D    | ½" Cable Cutting Tool - LHF and HFAC                      | Each            |
|                   | L-CT-12DS   | ½" Cable Cutting Tool - HFSC                              | Each            |
|                   | L-CT-22D    | ¾" Cable Cutting Tool - LHF                               | Each            |
|                   | L-FT-42D    | 1½" Cable Cutting Tool - LHF                              | Each            |
| Miscellaneous     | L-WK-U      | Universal Weatherproofing Kit                             | Kit             |
|                   | GB0424TU    | Ground Bus Bar Kit  | Kit             |
|                   | WPSANT12D   | Weather Proofing Shell - Antenna to ½" DIN                | Each            |
|                   | WPS12158D   | Weather Proofing Shell - ½" to 1½" DIN                    | Each            |
|                   | WATS-38     | Anti-Theft Hardware Kit                                   | Kit             |

|   | Product Name                                     | Listing       | Part Number | Conductor Count  | AWG (mm)  | Jacket Color | Package              |
|---|--|---------------|-------------|--|-----------|--------------|----------------------|
|  | Fire Alarm, Non-Shielded Power Limited           | FPLR/CL3R/CMR | 2F-212-91   | 2  | 16 (1.29) | Red          | 1,000' Ribbed spool  |
|   |  | FPLP/CL3P/CMP | 2F-212-93   |  |           |              |                      |
|  | Fire Alarm, Shielded Power Limited               | FPLR/CL3R/CMR | 2F-132-92   | 4  | 18 (1.02) | Red          | 1,000' Ribbed spool  |
|   |  | FPLP/CL3P/CMP | 2F-132-94   |  |           |              |                      |
|  | Interlock Armored Fire Alarm Riser, Non-Shielded | FPLR/CL3R     | K2F-419-91  | 2  | 12 (2.05) | Red          | 1,000' Wood reel     |
|   |  |               | K2F-339-91  | 4  | 14 (1.63) |              | 1,000' Wood reel     |
|  | Security Control, Non-Shielded Power Limited     | FPLR/CL3R/CMR | 2F-D12-31   | 2  | 16 (1.46) | Gray         | 1,000' Ribbed spool  |
|   |  | FPLP/CL3P/CMP | 2F-D34-43   | 4  | 16 (1.46) | White        | 1,000' Reel-in-a-Box |
|  | Security Control, Shielded Power Limited         | FPLR/CL3R/CMR | 2F-D12-32   | 2  | 16 (1.46) | Gray         | 1,000' Ribbed spool  |
|   |  | FPLP/CL3P/CMP | 2F-D12-44   |  |           | White        |                      |
|  | Access Control Composite                         | CMR/CL3R/FPLR | AC-A12-55   | 4 x 18 AWG<br>3 pairs x 22 AWG<br>4 x 22 AWG<br>2 x 22 AWG |           | Green        | 1,000' Wood reel     |
|   |  | CMP/CL3P/FPLP | AC-A12-68   |  |           | Yellow       | 500' Wood reel       |
|   |  | CMR/CL3R/FPLR | AC-A13-55   |  |           | Green        |                      |
|   |  | CMP/CL3P/FPLP | AC-A13-68   |  |           | Yellow       |                      |

|  |   |  |
|--|---|--|
|   |    |   |
| <p><b>BrakeBox® Dual Brake System</b></p> <p>The brake allows for back-tension and over-spin control. The spool may be taken from the box for installation or may be left in the box where the cable pays out through a slotted opening.</p> | <p><b>POP™ Box</b></p> <p>In this package, the cable is coiled into a box. The product pays out through a tube opening in the box. This design does not allow for the cable to be removed as a unit from the box.</p> | <p><b>Reel-in-a-Box</b></p> <p>The cable is placed onto a plastic spool, which is placed into a box. The spool may be taken from the box for installation or may be left in the box where the cable pays out through a slotted opening.</p>                    |
|   |   |   |
| <p><b>Steel Reel</b></p> <p>Long lengths of cable are placed onto steel reels. This reel is environmentally-friendly and recycled for years of service.</p>  | <p><b>Wood/Plywood Reel</b></p> <p>Reels may be made of plywood or wood. Our wooden reels can be recycled an average of five times before retirement (see Web site for further details).</p>                          | <p><b>Spool or Ribbed Spool</b></p> <p>Wire is wound onto a spool and placed inside a box for protection during shipment. Cable is wound onto a ribbed, plastic recyclable spool that is rugged, robust and easy to handle. Spools are smaller than reels.</p> |
|   |   |   |
| <p><b>Parallel Cone</b></p> <p>This package is designed to fit into the GMP cast aluminum wire dispensing system (80470 or 80471). When placed on the GMP dispenser, the jumper or distribution frame wire pays out smoothly.</p>            | <p><b>Knock-out Box</b></p> <p>Cable is coiled and fastened within a box. Knock out boxes can be identified by a perforated "knock-out" that is removed, allowing access to the cable.</p>                            | <p><b>Coils</b></p> <p>Coils refer to lengths of cable that have been wrapped into a shape (usually a circle) and fastened with multiple ties. Coils can be custom configured to fit a customer's unique cable and wire feeding systems.</p>                   |

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