

# 860646624/DB | O-144-LN-8W-M12BK/20G



Fiber OSP cable, LightScope ZWP® Mini Single Jacket, All-Dielectric, 144 fiber, Gel-Filled, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

## Product Classification

|                              |                 |
|------------------------------|-----------------|
| <b>Regional Availability</b> | EMEA            |
| <b>Portfolio</b>             | CommScope®      |
| <b>Product Type</b>          | Fiber OSP cable |
| <b>Product Series</b>        | O-LN            |

## General Specifications

|                                     |  |
|-------------------------------------|--|
| <b>Cable Type</b>                   | Stranded loose tube  |
| <b>Construction Type</b>            | Non-armored  |
| <b>Subunit Type</b>                 | Gel-filled   |
| <b>Jacket Color</b>                 | Black  |
| <b>Jacket Marking</b>               | Meters   |
| <b>Jacket Marking Method</b>        | Inkjet   |
| <b>Jacket Marking Text</b>          | COMMSCOPE GB OPTICAL CABLE TYPE OS2 SM 144 FIBER [SERIAL NUMBER] [MM /YYYY] [METRE MARK] |
| <b>Subunit, quantity</b>            | 12   |
| <b>Fibers per Subunit, quantity</b> | 12   |
| <b>Total Fiber Count</b>            | 144  |

## Dimensions

|                                     |                    |
|-------------------------------------|--------------------|
| <b>Buffer Tube/Subunit Diameter</b> | 2 mm   0.079 in    |
| <b>Diameter Over Jacket</b>         | 13.5 mm   0.531 in |

## Representative Image



## Material Specifications

**Jacket Material** PE

## Mechanical Specifications

|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 200 mm   7.874 in                     |
| <b>Minimum Bend Radius, unloaded</b>     | 133 mm   5.236 in                     |
| <b>Tensile Load, long term, maximum</b>  | 800 N   179.847 lbf                   |
| <b>Tensile Load, short term, maximum</b> | 2700 N   606.984 lbf                  |
| <b>Compression</b>                       | 22 N/mm   125.623 lb/in               |
| <b>Compression Test Method</b>           | IEC 60794-1 E3                        |
| <b>Flex</b>                              | 25 cycles                             |
| <b>Flex Test Method</b>                  | IEC 60794-1 E6                        |
| <b>Impact</b>                            | 4.41 N-m   39.032 in lb               |
| <b>Impact Test Method</b>                | IEC 60794-1 E4                        |
| <b>Strain</b>                            | See long and short term tensile loads |
| <b>Strain Test Method</b>                | IEC 60794-1 E1                        |
| <b>Twist</b>                             | 10 cycles                             |
| <b>Twist Test Method</b>                 | IEC 60794-1 E7                        |
| <b>Vertical Rise, maximum</b>            | 594 m   1,948.819 ft                  |

## Optical Specifications

**Fiber Type** G.652.D and G.657.A1 | G.652.D and G.657.A1

## Environmental Specifications

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|                                      |  |
|--------------------------------------|--|
| <b>Installation temperature</b>      | -10 °C to +50 °C (+14 °F to +122 °F)           |
| <b>Operating Temperature</b>         | -40 °C to +70 °C (-40 °F to +158 °F)           |
| <b>Storage Temperature</b>           | -40 °C to +75 °C (-40 °F to +167 °F)           |
| <b>Cable Qualification Standards</b> | ANSI/ICEA S-87-640   EN 187105   IEC 60794-1-2 |
| <b>Environmental Space</b>           | Aerial, lashed   Buried                        |
| <b>Jacket UV Resistance</b>          | UV stabilized                                  |
| <b>Water Penetration</b>             | 24 h   |
| <b>Water Penetration Test Method</b> | IEC 60794-1 F5                                 |

## Environmental Test Specifications

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Cable Freeze</b>                  | -2 °C   28.4 °F                      |
| <b>Cable Freeze Test Method</b>      | IEC 60794-1 F15                      |
| <b>Drip</b>                          | 70 °C   158 °F                       |
| <b>Drip Test Method</b>              | IEC 60794-1 E14                      |
| <b>Heat Age</b>                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| <b>Heat Age Test Method</b>          | IEC 60794-1 F9                       |
| <b>Low High Bend</b>                 | -30 °C to +60 °C (-22 °F to +140 °F) |
| <b>Low High Bend Test Method</b>     | IEC 60794-1 E11                      |
| <b>Temperature Cycle</b>             | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Temperature Cycle Test Method</b> | IEC 60794-1 F1                       |

## Packaging and Weights

|                     |                           |
|---------------------|---------------------------|
| <b>Cable weight</b> | 138 kg/km   92.732 lb/kft |
|---------------------|---------------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |



## Included Products

# 860646624/DB | O-144-LN-8W-M12BK/20G

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DB-8W-LT – LightScope ZWP® Singlemode  
Fiber

\* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable