## Applications

$\square$ All dielectric self-supporting Optical Cable for 1000 m Span.
$\square$ Subscriber Network Systems.

- Local Area network Systems.



## LP-OC10120244ZC1000

## All dielectric self-supporting Optical Cable

for 1000m span with 24 Singlemode SMF-28+ ITU-T G.652D fibers in Gel filled Loose Tubes, protected with Double Jacket
(AT + PE), Peripheral Aramid® Yarns, FRP Central Strength member and Ripcord

The LP-OC10120244ZC1000 is what the industry calls, all dielectric self-supporting Optical Cable for 1000 m span with 24 Singlemode SMF-28+ ITU-T G.652D fibers in Gel filled Loose Tubes, protected with Double Jacket (AT + PE), Peripheral Aramid $®^{8}$ Yarns, FRP Central Strength member and Ripcord.

## Note about High Voltage ADSS CABLES

## AntiTrack (AT) Jacket:

Dry arcing is dependent on the hardware configuration, the system voltage, environmental conditions, and also on the electrical resistance of the cable sheath material itself. The induced voltage difference between a mid-span section of the ADSS cable and any grounded section of the system's hardware creates a possibility of inducing current flow along the sheath. On a newly installed dry cable, the sheath resistance is quite high ( $>109 \mathrm{Ohm} / \mathrm{m}$ ) so the induced currents are insignificant. However, as a cable ages from exposure to the sun's ultraviolet rays, contaminants such as salt and/or pollutants and moisture can affect the surface resistance of the cable. A thermoplastic track-resistant jacket (AT jacket in LanPro notation) with acceptable carbon black content and UV stabilization provides a three pronged solution to dry band arcing. First, the addition of a UV stabilization system including carbon black ensures the ADSS jacket will not prematurely age with UV exposure. This assures a high electrical resistivity of the cable jacket. UV aging of the jacket can allow collection of salt / pollution on cable sheath lowering the cable resistance. Second, thermoplastic track resistant jacket materials minimize carbon surface tracking more effectively than cross-linked materials. Finally, the tough filled thermoplastic track resistant jacket will resist any heat or ablation damage if arcing does occur. This cable is made with an AT chemical material for the jacket and not the traditional PE to avoid damage due the dry arcing phenomena.

## B Cable Section



NOTE: AT Jacket is selected for this cable, instead of traditional PE one, because of the high voltage present on the scenario.

## Cable Description

| Attenuation | $\leq 0.36 \mathrm{~dB} / \mathrm{km} @ 1310 \mathrm{~nm}$ | $\leq 0.22 \mathrm{~dB} / \mathrm{km} @ 1550 \mathrm{~nm}$ |
| :---: | :---: | :---: |


| Bandwidth | $50 / 125$ | $\geq 500 \mathrm{MHz} \cdot \mathrm{km} @ 850 \mathrm{~nm}$ | $\geq 500 \mathrm{MHz} \cdot \mathrm{km} @ 1300 \mathrm{~nm}$ |
| :---: | :---: | :---: | :--- |
|  | $62.5 / 125$ | $\geq 200 \mathrm{MHz} \cdot \mathrm{km} @ 850 \mathrm{~nm}$ | $\geq 500 \mathrm{MHz} \cdot \mathrm{km} @ 1300 \mathrm{~nm}$ |


| Max Allowable Working Tension | 23000 N |
| :---: | :---: |
| Short-term Crush Resistance | $2200 \mathrm{~N} / 100 \mathrm{~mm}$ |


| Operating Temperature | $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| Bending Radius | Static $10 \times$ Dia. |
|  | Dynamic $20 \times$ Dia. |


| Cable Diameter | approx. 14 mm |  |
| :---: | :---: | :---: |
|  | approx. $249 \mathrm{~kg} / \mathrm{km}$ |  |
| Cable Weight | Inner Sheath | 0.8 mm |
| Sheath Thickness | Outer Sheath | 1.7 mm |

D How to Order

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