

Contact

Fiber LAN Product Inquiry
Phone: 717-354-6200
fiber-pc.us@nexans.com

Premises Distribution Plenum Rated Optical Cable

12 x OM4 Premise Distribution Plenum Cable

Part Number: PDP012FB3010/F5

Berk-Tek's tight buffered, fiber optic cable is designed for installation in plenum, riser and horizontal environments and interbuilding backbone structures.

Description

Construction

- 900 µm buffered fibers surrounded by aramid yarns
- Sheathed using a special, state-of-the-art polymer material
- All dielectric
- OFNP Rated
- Aluminum and Steel interlock armor available

Outdoor Considerations

Black jacketed and water-blocked versions of this plenum cable is available upon request for outdoor installations. Outdoor versions feature UV and fungus resistant jacketing.

Applications

Berk-Tek's tight buffered plenum distribution cable is intended for all high speed data applications including:

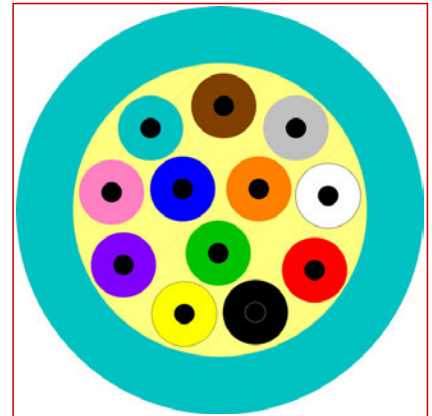
- 10BASE-FL
- 100BASE-SX/100BASE-FX
- ATM 155/ATM 622
- 1000BASE-SX/1000BASE-LX
- Fibre Channel 1.062/2.125
- 10GBASE-SR/SW
- 10GBASE-LX4
- 40/100 GbE

Features

- Single-mode, multimode, GIGAlite™ and hybrid designs available
- Available with new bend-optimized single-mode fibers
- High tensile strength, crush resistant
- Flexible, small diameter, 900 µm tight buffered construction
- Six to 144 count fiber construction plenum designs ideal for horizontal and backbone and installations and along plenums
- Also available in low smoke zero halogen riser rated design
- Configurations available suitable for indoor/outdoor installations in conduit, below the frost line

Benefits

- Cost-saving design, easy to install and terminate
- Provides for greater pulling distances thus reducing installation time
- Assurance that cables will meet required specifications for communication networking applications
- Broad design selection allows for mix and match of fiber components to specific networking applications



Standards

International EN 50173; ISO/IEC 11801

National ANSI/ICEA S-83-596; ANSI/TIA-568-C.3; Telcordia GR-409

Premises Distribution Plenum Rated Optical Cable

12 x OM4 Premise Distribution Plenum Cable

Characteristics

Construction characteristics	
Fiber optic type	OM4 50/125
Type of cable	Tight Buffered (TB)
Outer sheath	Plenum
Sheath colour	Aqua
Dimensional characteristics	
Number of optical fibres	12
Nominal outer diameter	0.21 in
Nominal outer diameter	5.3 mm
Approximate weight	18 lb/kft
Approximate weight	26 kg/km
Transmission characteristics	
Optical performance	FB (50/125 GIGAlite 10-FB, OM4)
Attenuation, max. 850 nm (cabled)	3.0 dB/km
Attenuation, max. 1300 nm (cabled)	1.0 dB/km
Mechanical characteristics	
Maximum installation tension	100 lb
Maximum installation tension	445.0 N
Max. Load. Long Term (lbs)	30.0 lb
Max. Load. Long Term	133.0 N
Impacts per TIA/EIA FOTP-25	2 at 4.41 N-m
Crush resistance per TIA/EIA FOTP-41	100 N/cm
Cable flexibility per TIA/EIA FOTP-104	100 cycles
Usage characteristics	
Minimum Bending Radius - Install	3.2 in
Minimum Bend Radius - Install	8 cm
Minimum Bending Radius - LongTerm	2.1 in
Minimum Bending Radius - LongTerm	5.3 cm
RoHS conform	Yes
Operating temperature, range	-20 .. 75 °C
Ambient installation temperature, range	0 .. 75 °C
Storage temperature, range	-40 .. 85 °C
Field of application	Indoor

Premises Distribution Plenum Rated Optical Cable

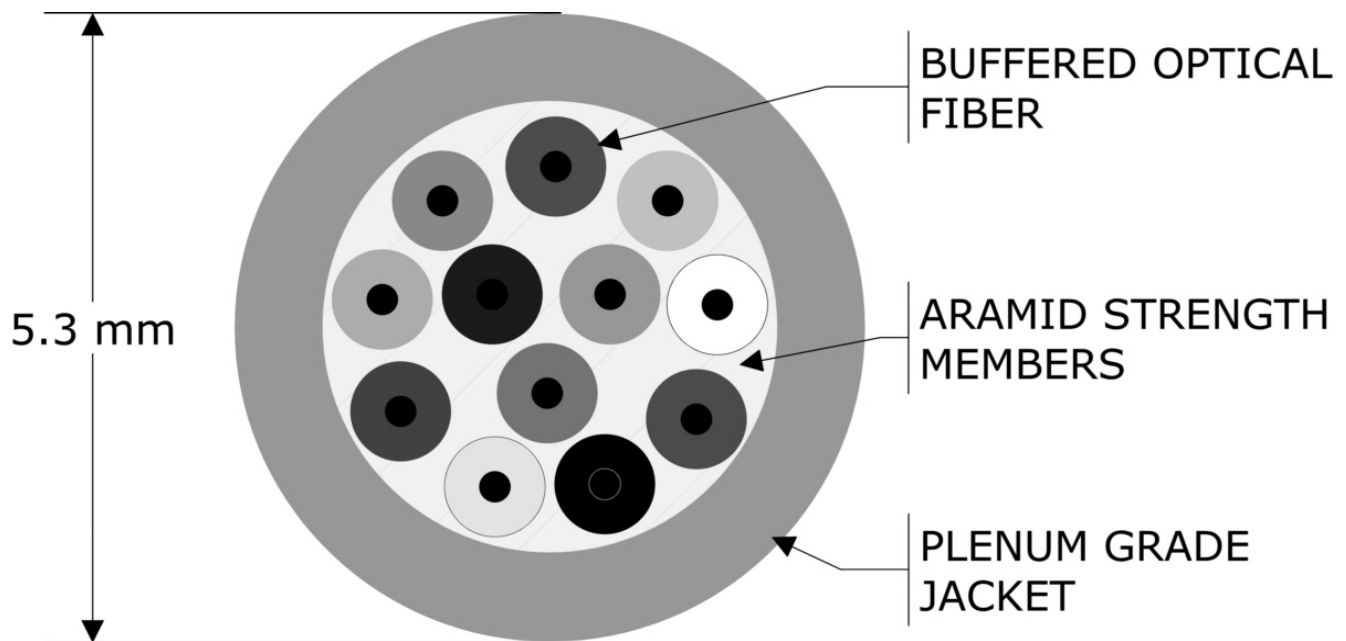
12 x OM4 Premise Distribution Plenum Cable

Standard Sheath Colors

Fiber Type	ISO-TIA Standard	Effective Modal BW @ 850 nm	Overfilled Launch BW @ 850 nm	Attenuation @ 850 nm	Attenuation @ 1300 nm	Attenuation @ 1550 nm	Sheath Color
AB	OS2	NS	NS	NS	0.7 dB/km	0.7 dB/km	Yellow
CB	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Orange
GB	OM1+	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Orange
ZB	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Orange
LB	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Orange
EB	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
FB	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
XB	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua

NS = Not Specified

Cross-section Diagram - PDP012



Manufacturing Release

IMPORTANT NOTICE: This product specification is provided for informational purposes only in order to illustrate typical product constructions, applications and/or methods of installation. Because conditions of actual installation and use are unique and will vary, Berk-Tek makes no representation or warranty as to the reliability, accuracy or completeness of this data, even if Berk-Tek is aware of the product's intended use or purpose. Furthermore, this data does not constitute, nor should it be regarded or relied upon, as professional engineering advice. Installation of cable should only be done by qualified personnel and in conformance with all safety, electrical and other applicable codes, standards, rules or regulations. Appropriate and correct product selection, installation and use, and compliance with all such codes, standards, rules and regulations, is a customer/end-user responsibility. Product specifications, standards, programs or services are subject to improvement or changes without notice.

Contact

Fiber LAN Product Inquiry
Phone: 717-354-6200
fiber-pc.us@nexans.com

Premises Distribution Plenum Rated Optical Cable

12 x OM4 Premise Distribution Plenum Cable

Berk-Tek accepts no liability for typographical errors, technical inaccuracies, omissions or misuse of the information contained herein. Changes will be periodically made to address any such issues.