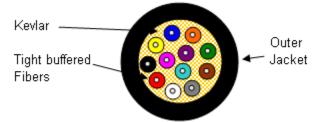


Remfo® Series 11 Indoor TB Cable



FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo^(R) 11 Series all-dielectric is design is suitable for installation indoor in riser applications. The cable is a tight buffered distribution design. The cable construction has a flame retardant OFNR jacket that is suitable for indoors. This cable design is available in numerous fiber types including 62.5 µm, 50 µm, single-mode, including hybrid and composite versions as well and up to 144 fibers. Fiber counts above 12 are in a sub unit construction.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 1666 Color Coding of Fiber Optic Cables TIA/EIA-598 GR-409-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74M 76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74E 76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf Impact Resistance: 25 Impacts (min.)

Flexing, ±90°: 25 Cycles (min.) ≥12-fiber 2700N/600lbf

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf Temperature rating:

≥12-fiber 600N/135lbf Operation, -40°C to +85°C Minimum bending radius: Installation, 0°C to +75°C Loaded: 20 x diameter -55°C to +85°C Storage. Crush Resistance: 100N/cm

Unloaded: 10 x diameter

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification

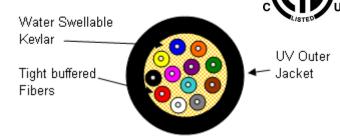


Remfo® Series 11 Indoor/Outdoor TB Cable

(FT)

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{\circledR}$ 11 Series I/O all-dielectric design is suitable for installation in both indoor/outdoor duct and in riser applications. The cable is a tight buffered distribution design and is fully water-blocked using dry water-swellable materials. The cable construction has a UV resistant flame retardant OFNR jacket that is suitable for ISP or OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well and up to 144 fibers. Fiber counts above 12 are in a sub unit construction.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 1666
Color Coding of Fiber Optic Cables TIA/EIA-598 GR-409-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf Impact Resis

≥12-fiber 2700N/600lbf

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf

≥12-fiber 600N/135lbf

Minimum bending radius:

Loaded: 20 x diameter Unloaded: 10 x diameter

Impact Resistance: 25 Impacts (min.) Flexing, ±90°: 25 Cycles (min.)

Temperature rating:

Operation, -40°C to +85°C

Installation, 0°C to +75°C Storage, -55°C to +85°C Crush Resistance: 100N/cm

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

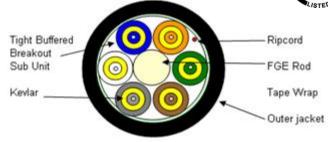
All Specifications Are Subject to Change Without Notification



Remfo® Series 12 Indoor Breakout Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo® 12 Series indoor all-dielectric breakout design is suitable for installation indoors in riser applications. The cable is a rugged tight buffered breakout riser rated design. The cable construction has flame retardant OFNR iacket that is suitable for indoors. This cable design is available in numerous fiber types including 62.5 um, 50 µm, single-mode, including hybrid and composite versions as well and up to 48 fibers

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 1666 Color Coding of Fiber Optic Cables TIA/EIA-598 GR-409-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74M 76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74E 76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf Impact Resistance: 25 Impacts (min.)

≥12-fiber 2700N/600lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf Temperature rating:

≥12-fiber 600N/135lbf Operation,

-40°C to +85°C Minimum bending radius: Installation, 0°C to +75°C Loaded: 20 x diameter Storage, -55°C to +85°C Unloaded: 10 x diameter Crush Resistance: 100N/cm

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification

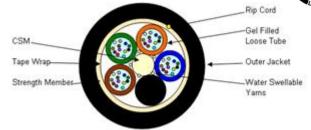
-40°C to +85°C



Remfo® Series 12 I/O Breakout Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Ouality Labs ISO9001 Accredited Standard and Extended Warranties



Operation.

SCOPE

Remfo® 27 Series all-dielectric is design is suitable for installations indoor or outdoor in aerial, duct or riser applications. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The all-dielectric cable constructions have a UV resistant flame retardant OFNR jacket that is suitable for ISP or OSP. This cable design is available in numerous fiber types including 62.5 µm, 50 µm, single-mode, including hybrid and composite versions as well and up to 288 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 1666 Color Coding of Fiber Optic Cables TIA/EIA-598 **GR-20-CORE**

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74M 76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74E 76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf Impact Resistance: 25 Impacts (min.)

≥12-fiber 2700N/600lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf Temperature rating:

≥12-fiber 600N/135lbf

Minimum bending radius:

 0° C to +75 $^{\circ}$ C Installation, Loaded: 20 x diameter -55°C to +85°C Storage, Unloaded: 10 x diameter Crush Resistance: 100N/cm

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

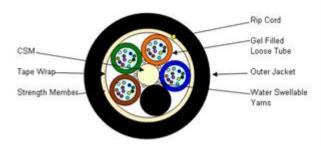
All Specifications Are Subject to Change Without Notification



Remfo® Series 22 OSP Aerial/Duct LT Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{(R)}$ 22 Series all-dielectric is designed for outdoor use for campus backbones in lashed aerial and duct installations. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and or dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The all-dielectric cable constructions have a UV resistant medium density polyethylene jacket that is suitable for OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well up to 288 fiber counts.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 RUS 1755.900 Accepted

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Installation: 2700N / 607lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 890N / 200lbf Temperature Rating:

Minimum bending radius: Operation, -40°C to $+70^{\circ}\text{C}$ Loaded: 20 x diameter Installation, -30°C to $+55^{\circ}\text{C}$ Unloaded: $10 \times \text{diameter}$ Storage, -50°C to $+70^{\circ}\text{C}$

Crush Resistance: 220N/cm Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

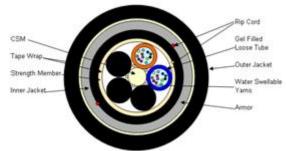
All Specifications Are Subject to Change Without Notification



Remfo® Series 23 OSP Aerial/Duct LT Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{(R)}$ 23 Series is a double jacket single corrugated steel armored cable designed for direct burial applications as well as duct and lashed aerial installations. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and or dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The cable construction has a UV resistant medium density polyethylene inner and outer jacket that is suitable for OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well as up to 288 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 RUS 1755.900 Accepted

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Installation: 2700N / 607lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 890N / 200lbf Temperature Rating:

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Operation, -40°C to +70°C

Installation, -30°C to +55°C

Storage, -50°C to +70°C

Crush Resistance: 440N/cm Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

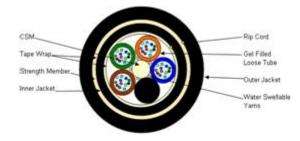
All Specifications Are Subject to Change Without Notification



Remfo® Series 25 OSP Aerial/Duct LT Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{(R)}$ 25 Series all-dielectric double jacket designed for rugged outdoor use in duct and lashed aerial installations. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and or dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The all-dielectric cable construction has a inner and outer UV resistant medium density polyethylene jacket that is suitable for OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well and up to 288 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 RUS 1755.900 Accepted

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Installation: 2700N / 607lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 890N / 200lbf Temperature Rating:

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Operation, -40°C to +70°C

Installation, -30°C to +55°C

Storage, -50°C to +70°C

Crush Resistance: 220N/cm Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

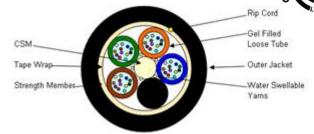
All Specifications Are Subject to Change Without Notification



Remfo® Series 27 I/O Loose Tube Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo® 27 Series all-dielectric is design is suitable for installations indoor or outdoor in aerial, duct or riser applications. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The all-dielectric cable constructions have a UV resistant flame retardant OFNR jacket that is suitable for ISP or OSP. This cable design is available in numerous fiber types including 62.5 µm, 50 µm, single-mode, including hybrid and composite versions as well and up to 288 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 1666 Color Coding of Fiber Optic Cables TIA/EIA-598 **GR-20-CORE**

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74M 76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74E 76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2700N / 607lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 890N / 200lbf

Minimum bending radius:

Loaded: 20 x diameter Unloaded: 10 x diameter

Crush Resistance: 220N/cm

Impact Resistance: 25 Impacts (min.)

Temperature Rating:

-40°C to +70°C Operation, -20°C to +55°C Installation. -40°C to +70°C Storage.

Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

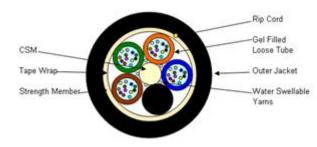
All Specifications Are Subject to Change Without Notification



Remfo® Series 28 OSP Armored Burial Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{(R)}$ 28 Series is a single jacket single corrugated steel armored cable designed for direct burial applications as well as duct and lashed aerial installations. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and or dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The cable construction has a UV resistant medium density polyethylene jacket that is suitable for OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well and up to 288 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 RUS 1755.900 Accepted

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Installation: 2700N / 607lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 890N / 200lbf Temperature Rating:

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Operation, -40°C to +70°C

Installation, -30°C to +55°C

Storage, -50°C to +70°C

Crush Resistance: 440N/cm Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification

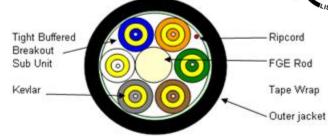


Remfo® Series 32 Indoor Breakout Cable

C C UNITER TEXT

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{\circledR}$ 32 Series indoor all-dielectric breakout design is suitable for installation indoors in plenum applications. The cable is a rugged tight buffered breakout plenum rated design. The cable construction has flame retardant OFNP jacket that is suitable for indoors. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well and up to 48 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 910

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1900N/427lbf Impact Resistance: 25 Impacts (min.)

≥6-fiber 2700N/600lbf Flexing, ±90°: 25 Cycles (min.) Long Term: 2&4-fiber 455N/102lbf

≥6-fiber 600N/135lbf Temperature Rating:

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Unloaded: 10 x diameter

Crush Resistance: 100N/cm

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification

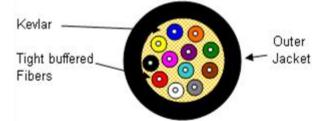


Remfo® Series 33 Indoor TB Cable



FEATURES

U.S. Manufacturer for local support State-of-the-Art Ouality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo® 33 Series all-dielectric is design is suitable for installation indoor in plenum applications. The cable is a tight buffered distribution design. The cable construction has a flame retardant OFNP jacket that is suitable for indoors. This cable design is available in numerous fiber types including 62.5 um, 50 um, single-mode, including hybrid and composite versions as well up to 72 fiber counts. Fiber counts above 12 are in a sub unit construction.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 **UL 910**

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-409-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

221 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm 76M

74F SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm 76E

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf Impact Resistance: 25 Impacts (min.)

> ≥12-fiber 2700N/600lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf Temperature rating:

≥12-fiber 600N/135lbf Operation,

-20°C to +85°C Minimum bending radius: 0°C to +75°C Installation, -40°C to +85°C

Loaded: 20 x diameter Storage, Unloaded: 10 x diameter Crush Resistance: 100N/cm

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification

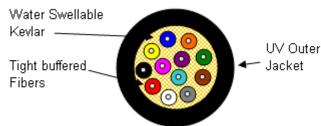


Remfo® Series 33 Indoor/Outdoor TB Cable



FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{(R)}$ 33 Series all-dielectric is design is suitable for installation both indoor/outdoor duct and in plenum applications. The cable is a tight buffered distribution design. The cable construction has a flame retardant OFNP jacket that is suitable for ISP or OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well up to 72 fiber counts. Fiber counts above 12 are in a sub unit construction.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 UL 910

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-409-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf Impact Resistance: 25 Impacts (min.)

≥12-fiber 2700N/600lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf

Temperature rating:

284-fiber 4351V 102ibl, 686-fiber 5351V 120ibl Temperature rating.

≥12-fiber 600N/135lbf Operation, -20°C to +85°C

≥12-fiber 600N/135lbf

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Installation, 0°C to +75°C

Storage, -40°C to +85°C

Crush Resistance: 100N/cm

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

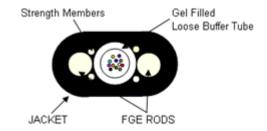
All Specifications Are Subject to Change Without Notification



Remfo® Series 52F Aerial/Direct Burial FTTH

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo® 52F Series all-dielectric is designed for outdoor use for aerial or burial installations for drop cables or FTTH (Fiber To The Home). The construction is a gel filled central loose tube design and is fully water-blocked per EIA/TIA-82 using gel and dry water-swellable materials. The all-dielectric cable constructions have a UV resistant medium density polyethylene jacket that is suitable for OSP. This cable design is available in numerous fiber types including 62.5 µm, 50 µm, single-mode, including hybrid and composite versions as well up to 12 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm 76M SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm 74E 76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Flexing, ±90°: 25 Cycles (min.) Installation: 1375N / 310lbf

Long Term: 413N / 93lbf Temperature Rating:

Minimum bending radius: -40°C to +70°C Operation, Loaded: 20 x diameter Installation, -30°C to +55°C

Unloaded: 10 x diameter -50°C to +70°C Storage.

Crush Resistance: 220N/cm Twist Test: 25 Cycles (min.)

Maximum Spans: NESC Heavy 150ft, NESC Medium 300ft, NESC Light 400ft

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

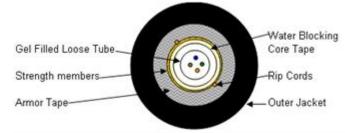
All Specifications Are Subject to Change Without Notification



Remfo® Series 54 Central Tube Armored Burial

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{\circledR}$ 54 Series is a central loose tube, single corrugated steel cable designed for outdoor use for direct burial applications as well as duct and lashed aerial installations. The construction is a gel filled central loose tube armored design and is fully water-blocked per EIA/TIA-82 using gel and dry water-swellable materials. The armored cable constructions have a UV resistant medium density polyethylene jacket that is suitable for OSP. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, and single-mode up to 12 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 1335N / 310lbf Long Term: 600N / 135lbf

Minimum bending radius:

Loaded: 20 x diameter Unloaded: 10 x diameter

Crush Resistance: 440N/cm

Impact Resistance: 25 Impacts (min.) Flexing, ±90°: 25 Cycles (min.)

Temperature Rating:

Operation, -40°C to +70°C Installation, -30°C to +55°C Storage, -50°C to +70°C

Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

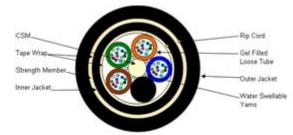
All Specifications Are Subject to Change Without Notification



Remfo® Series 80 Self Supporting OSP ADSS

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties



SCOPE

Remfo $^{(R)}$ Series all-dielectric cable is designed for outdoor use in self-supporting aerial applications as well as duct installations. The construction is a gel filled central loose tube design and is fully water-blocked per EIA/TIA-82 using gel and dry water-swellable materials. The all-dielectric cable constructions have a UV resistant double polyethylene jacket (optional designs may have a single jacket design) that is suitable for self-supporting OSP. The ADSS cable is custom designed to a maximum cable span and NESC loading factor for space potential areas of no greater than 12kv. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well up to 12 fibers.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm, Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm
74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm
76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

See sag & tension chart per design Flexing, ±90°: 25 Cycles (min.)

Temperature Rating:

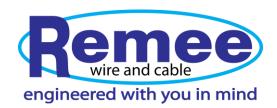
Minimum bending radius: Operation, -40°C to $+70^{\circ}\text{C}$ Loaded: $20 \times \text{diameter}$ Installation, -30°C to $+55^{\circ}\text{C}$ Unloaded: $10 \times \text{diameter}$ Storage, -50°C to $+70^{\circ}\text{C}$

Crush Resistance: 220N/cm Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification



Remfo® Series 88 OSP Aerial LT Cable

FEATURES

U.S. Manufacturer for local support State-of-the-Art Quality Labs ISO9001 Accredited Standard and Extended Warranties

Water Swellable Yarns CSM Water Swellable Tape Wrap Strength Member Gel Filled Loose Tube

SCOPE

Remfo $^{(R)}$ 88 Series is designed for outdoor use for campus backbones in aerial self-supporting installations. The construction is a gel filled loose tube design and is fully water-blocked per EIA/TIA-82 using gel and or dry water-swellable materials. The loose buffer tubes are SZ-stranded allowing easy mid-span access. The cable constructions have a UV resistant medium density polyethylene jacket with a 1/4" EHS galvanized steel messenger that is suitable for OSP in self-supporting applications. This cable design is available in numerous fiber types including 62.5 μ m, 50 μ m, single-mode, including hybrid and composite versions as well up to 288 fiber counts.

APPLICABLE DOCUMENTS

TIA/EIA FOTP Standards 455 RUS 1755.900 Accepted

Color Coding of Fiber Optic Cables TIA/EIA-598 GR-20-CORE

OPTICAL SPECIFICATIONS (Other options available upon request, including 10 Gb/s per IEEE802.3ae)

MULTIMODE:

22J 62.5/125, 3.2dB/km & 200MHz-km @850nm, 1.0dB/km & 600MHz-km @1300nm,

Guaranteed Gigabit Ethernet Distance of 300/550mtr@850/1300nm for 1 Gb/s per IEEE802.3z

12C 50/125, 3.0dB/km & 500MHz-km @850nm, 1.0dB/km & 500MHz-km @1300nm

Guaranteed Gigabit Ethernet Distance of 600/600mtr@850/1300nm for 1 Gb/s per IEEE802.3z

SINGLEMODE:

74M SM MC ITU G.652b, 0.35dB/km @1310nm, 0.25dB/km @1550nm

76M SM MC ITU G.652b, 0.40dB/km @1310nm, 0.30dB/km @1550nm

74E SM MC LWP ITU G.652d, 0.35dB/km @1310nm, 0.25dB/km @1550nm

76E SM MC LWP ITU G.652d, 0.40dB/km @1310nm, 0.30dB/km @1550nm

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Installation: 2700N / 607lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 890N / 200lbf Temperature Rating: Minimum bending radius: Operation,

ending radius: Operation, -40°C to +70°C Loaded: 20 x diameter Installation, -30°C to +55°C Unloaded: 10 x diameter Storage, -50°C to +70°C

Crush Resistance: 220N/cm Twist Test: 25 Cycles (min.)

PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

All Specifications Are Subject to Change Without Notification