

Network Cabling Systems Fiber Optic Catalogue

VOYGAR
QUALITY IS OUR CONCERN

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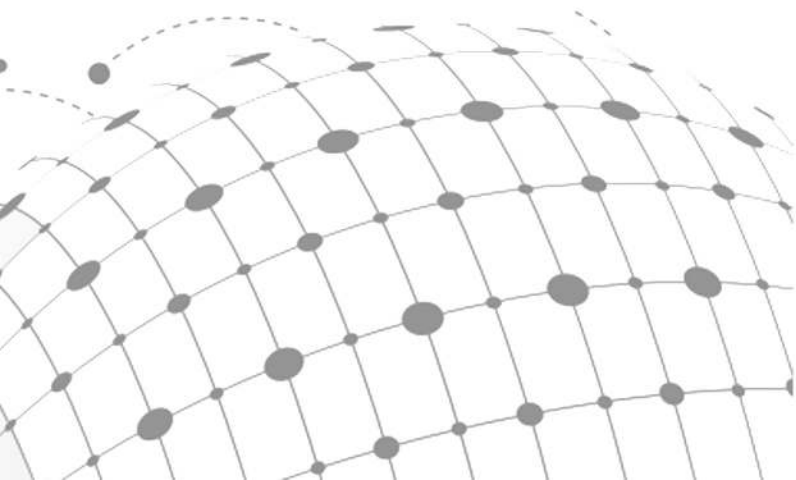


RELIABLE END TO END SOLUTIONS

VOYGAR Connecting System offers a diverse product selection of connectivity products that include various types of copper LAN cables and copper components, fiber optical cables and fiber accessories, airblown fiber cable, and data center equipment.

At VOYGAR, we offer quality network solutions, from structured cabling system (SCS) to networking components and data center equipment that support all of today's network infrastructure.

We have the expertise, resources, and relationships to deliver top quality communication products promptly. We have many partnerships with connectivity manufacturers in the voice and data industry worldwide, so you no longer need to look for multiple manufacturers yourself. VOYGAR SYSTEMS has everything you need and provides you one-stop shopping experience.



High Quality standard

The products are manufactured and tested to strict guidelines ensuring a consistent level of performance, designed to exceed the relevant standards.

We are confident of the quality of our products. Regardless of the cables series, our items are manufactured only with the best materials, on the most expertized plants. Under stringiest control, our samples from each batch are tested directly at the plant.

Fiber Optic Solutions

VOYGAR systems GmbH offers a wide range of fiber solutions that meets the needs of installers and customers alike with great features and benefits for Campus Network or data center environment or fiber to the home.

Depending on application; VOYGAR has standards compliant indoor and outdoor cable to suit every environment as well as bend insensitive fiber to the home FTTH. These are complimented by its range of fiber panels (Rack or Wall Mount), fusion splice tray, connectors, pigtails and patch cords. MTP solution from VOYGAR ensures faster deployment of physical infrastructure in the data center environment.

- SM and MM fiber including Bend Insensitive fiber for FTTH
- Fiber count from 2 core up to 144 core
- High Density Panels up to 144 ports
- MTP (Multi Terminal Push) panel for data center
- Pre connectorized connect or with option to choose APC
- Custom length and jacket Patch cords

Cables

- Standards based cable complies to ISO/IEC 11801/11080
- Choose between OS1, OS2, OM2, OM3 and OM4



Patch Cords

- Fully Compliant with all relevant standards
- Choice of connectors and lengths
- SM, MM available

Airblown Fiber

- Designed with special grooves to advance blowing distance
- Lightweight and proper stiffness





Panels

- Unique design make maintenance easier
- 19 Inch Rack Mount or Wall Mount
- Fixed to Drawer type
- 24 to 144 port available

Pigtails

- High stability and reliability
- Precisely Machined Ceramic Ferrule



Connectors

- Precisely Machined Ceramic Ferrule with stringent tolerances
- Fully Complies with all relevant standards
- Available in SM and MM

PLC Splitters

- Uniform power splitting
- wide Operating Wavelength: from 1260nm to 1650nm
- Telcordia GR-1221 and GR-1209



Splice Closures

- Dome and horizontal types
- Light weight, compact structure
- load 16pcs 2*3mm cable or 8pcs 3*3mm cable

Distribution Box

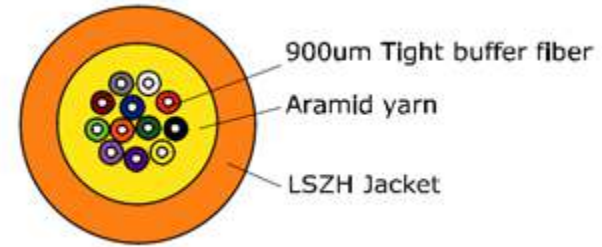
- Fiber cable inlets in every direction
- Remarkable laser warning identification



Indoor Tight Buffer Distribution Cable

In-Door Fiber Optic Cable

- Standard 04, 06, 08, 12C, and 14-24C upon request
- Extremely flexible, tight buffer cable design
- Meet the fire performance test of IEC60332-3C



Application

- Inter-building
- Backbone premise pathways
- Drop ceiling
- 10Gbps Ethernet
- 550MHz Broadband Video
- SAN, data center

Specifications

Tight buffer fiber Diameter	900±50 µm
Core reinforce	Aramid Yarn
Outer jacket material	LSZH

Fiber count	4C	6C	8C	12C	24C
Cable diameter (mm)	4.8	5.1	5.6	6.2	8.1
Cable weight (kg/km)	18	23	31	36	57
Operation / Storage Temp	-5°C to 50°C / -20°C to 60°C				

Max. loading (IEC60794-1)	
Installation / Operation	440N / 130N
Min. bend radius (IEC60794-1)	
Static / Dynamic	10xD / 20xD mm
Crush resistance(IEC60794-1)	1000N / 100mm

Transmission Performance

Fiber type		OS2		OM3		OM4	
		(9/125um)		(50/125um)		(50/125um)	
		1310nm	850nm	850nm	1300nm	850nm	1300nm
Attenuation (dB/km)	Typical	0.36	3.0	3.0	1.0	3.0	1.0
	Maximum	0.5	3.5	3.5	1.5	3.5	1.5
Bandwidth (MHz-km)	@850nm	---		≥1500		≥1500	
	@1300nm	---		≥500		≥500	

Ordering information

Single Mode

P/N	Description
TS1NO902	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 2 Core
TS1NO904	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 4 Core
TS1NO906	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 6 Core
TS1NO908	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 8 Core
TS1NO912	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 12 Core
TS1NO916	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 16 Core
TS1NO924	VOYGAR Indoor, 900nm Tight Buffered, Optical fiber Cable, LSZH, Single mode 9/125nm, 24 Core

Multimode OM3

P/N	Description
TM3NO902	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 2 Core
TM3NO904	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 4 Core
TM3NO906	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 6 Core
TM3NO908	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 8 Core
TM3NO912	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 12 Core
TM3NO916	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 16 Core
TM3NO924	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM3, 24 Core

Multimode OM4

P/N	Description
TM4NO902	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 2 Core
TM4NO904	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 4 Core
TM4NO906	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 6 Core
TM4NO908	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 8 Core
TM4NO912	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 12 Core
TM4NO916	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 16 Core
TM4NO924	VOYGAR Indoor Tight Buffered 900nm, Optical fiber Cable, LSZH, Multimode 50/125nm OM4, 24 Core

Indoor/Outdoor Spiral Armored-Tight Buffer Cable

Features

- Designed for direct termination.
- Extremely flexible, tight buffer cable.
- Aramid yarns for ease of handling with strength.
- Horizontal and vertical installations.

Applications

- Indoor/Outdoor in ducts
- Backbone premise pathways
- SAN, data center.



Specifications

Tight buffer fiber Diameter	900±50 µm
Core reinforce	Aramid Yarn
Armoring	Stainless Steel
Outer jacket material	LSZH
Color	SM: Yellow OM3:Aqua MM: Orange

Max. loading (IEC60794-1)	
Installation / Operation	1000N / 600N
Min. bend radius(IEC60794-1)	
Static / Dynamic	15xD / 20xD mm
Crush resistance (IEC60794-1)	3000N / 5000mm

Fiber count	4C	6C	8C	12C	24C
Cable diameter (mm)	4.9	5.4	5.8	6.4	7.1
Cable weight (kg/km)	36	40	45	50	71
Operation / Storage Temp.	-40°C to +70 °C/ -40°C to +70 °C				

Transmission Performance

Fiber type		OS2		OM3		OM4	
		(9/125um)		(50/125um)		(50/125um)	
		850nm	1300nm	1310nm	1550nm	1310nm	1550nm
Attenuation	Typical	3.0	1.0	0.36	0.22	0.36	0.22
(dB/km)	Maximum	3.5	1.5	0.5	0.4	0.5	0.4
Bandwidth	@850nm	≥1500					
(MHz-km)	@1300nm	≥500					

Ordering information

Single Mode

P/N	Description
TS1ST902	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 2 Core
TS1ST904	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 4 Core
TS1ST906	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 6 Core
TS1ST908	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 8 Core
TS1ST912	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 12 Core
TS1ST916	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 16 Core
TS1ST924	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Singlemode 9/125nm, 24 Core

Multimode OM3

P/N	Description
TM3ST902	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 2 Core
TM3ST904	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 4 Core
TM3ST906	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 6 Core
TM3ST908	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 8 Core
TM3ST912	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 12 Core
TM3ST916	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 16 Core
TM3ST924	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM3, 24 Core

Multimode OM4

P/N	Description
TM4ST902	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 2 Core
TM4ST904	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 4 Core
TM4ST906	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 6 Core
TM4ST908	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 8 Core
TM4ST912	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 12 Core
TM4ST916	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 16 Core
TM4ST924	VOYGAR, Indoor /Outdoor, Spiral Steel tape 900nm Tight Buffered, LSZH, Multimode 50/125nm, OM4, 24 Core

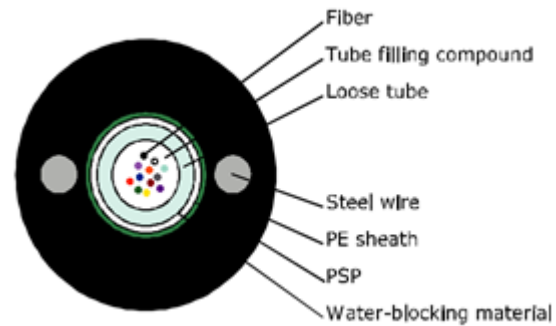
Outdoor Central Tube Armored cable

Features

- Standard 02-24C
- Central code tube design

Applications

- Duct/Aerial
- Backbone in LAN, MAN, WAN
- 10Gbps Ethernet
- 550MHz Broadband Video
- SAN, data center



Specifications

Loose tube material		PBT
Light Armor		PSP
Steel Wire (mm)	1.2 (02-12C)	1.6 (14-24C)
Outer jacket material	PE, Black	
Sheath thickness	Average 2.2mm	

Tensile Strength	Long Term	600N (02-12C)	1000N(14-24C)
	Short Term	1500N (02-12C)	3000N (14-24C)
Crush resistance	Long Term	300N	100mm
	Short Term	1000N / 100mm	
Min. bend radius	Static	10xDia. mm	
	Dynamic	20xDia. mm	

Fiber count	02-12C	14-24C
Cable diameter (mm)	approx. 8.7	approx. 12.0
Cable weight (kg/km)	approx. 82	approx. 147
Temperature rating		
Operation / Storage	-40°C to 70°C / -40°C to 70°C	

Transmission Performance

Fiber type	OS2		OM3		OM4	
	G652(9/125um)		(50/125um)		(50/125um)	
	1310nm	1550nm	850nm	1300nm	850nm	1300nm
Attenuation (dB/km)	≤0.36	≤0.22	≤3.0	≤1.0	≤3.0	≤1.0
Bandwidth (MHz-km)	---	---	≥1500	≥500	≥1500	≥500

Ordering information

Single Mode

P/N	Description
CS2AF004	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell free, SM 9/125nm, 4 Core
CS2AF006	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell free, SM 9/125nm, 6 Core
CS2AF008	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell free, SM 9/125nm, 8 Core
CS2AF012	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell free, SM 9/125nm, 12 Core
CS2AF024	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell free, SM 9/125nm, 24 Core
CS2AJ004	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled, SM 9/125nm, 4 Core
CS2AJ006	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled, SM 9/125nm, 6 Core
CS2AJ008	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled, SM 9/125nm, 8 Core
CS2AJ012	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled, SM 9/125nm, 12 Core
CS2AJ024	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled, SM 9/125nm, 24 Core

Multimode OM3

P/N	Description
CM3AF004	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM3, 4 Core
CM3AF006	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM3, 6 Core
CM3AF008	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM3, 8 Core
CM3AF012	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM3, 12 Core
CM3AF024	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM3, 24 Core
CM3AJ004	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM3, 4 Core
CM3AJ006	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM3, 6 Core
CM3AJ008	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM3, 8 Core
CM3AJ012	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM3, 12 Core
CM3AJ024	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM3, 24 Core

Multimode OM4

P/N	Description
CM4AF004	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM4, 4 Core
CM4AF006	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM4, 6 Core
CM4AF008	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM4, 8 Core
CM4AF012	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM4, 12 Core
CM4AF024	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jell Free OM4, 24 Core
CM4AJ004	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM4, 4 Core
CM4AJ006	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM4, 6 Core
CM4AJ008	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM4, 8 Core
CM4AJ012	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM4, 12 Core
CM4AJ024	VOYGAR, Outdoor, 2 Parallel Steel Wires Strengthen member, Central Loose Tube, jellyfilled OM4, 24 Core

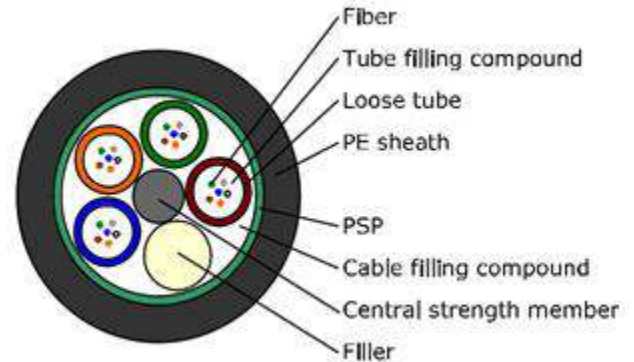
Outdoor Stranded Loose Tube Armored Cable

Features

- Standard 02-60C, and up to 144C
- Loose tube armored cable

Applications

- Duct/Aerial
- Backbone in LAN, MAN, WAN
- 10Gbps Ethernet
- SAN, data center



Specifications

Loose tube material	PBT
Light Armor	PSP
Strength member	Steel wire
Outer jacket material	PE, Black
Sheath thickness	Average 1.6mm

Tensile Strength	Long Term	300N (02-30C)	600N (32-36C)	1000N (38-60C)
	Short Term	1000N (02-30C)	1500N (32-36C)	3000N (38-60C)
Crush resistance	Long Term	300N / 100mm		
	Short Term	1000N / 100mm		
Min. bend radius	Static	10xDia. mm		
	Dynamic	20xDia. mm		

Fiber count	02-30C	32-36C	38-60C
Cable diameter (mm)	approx. 9.2	approx. 9.7	approx. 10.2
Cable weight (kg/km)	approx. 104	approx. 123	approx. 127
Temperature rating			
Operation / Storage	-40°C to 70°C / -40°C to 70°C		

Transmission Performance

Fiber type	OS2		OM3		OM4	
	G652(9/125um)		(50/125um)		(50/125um)	
	1310nm	1550nm	850nm	1300nm	850nm	1300nm
Attenuation (dB/km)	≤0.36	≤0.22	≤3.0	≤1.0	≤3.0	≤1.0
Bandwidth (MHz-km)	---	---	≥1500	≥500	≥1500	≥500

Ordering information

Single Mode

Multimode OM3

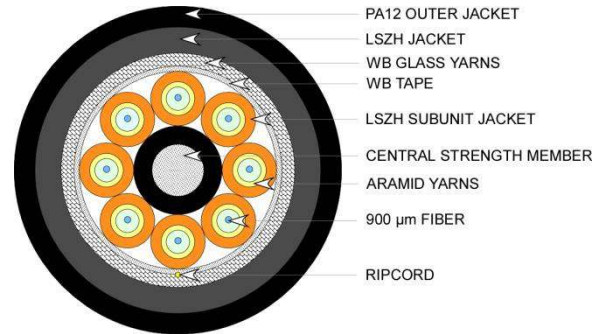
Multimode OM4

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Outdoor Armored Tight Buffer Cable

Features

- High resistance to traction.
- Tight buffered fiber easy to strip.
- Suitable for aerial, duct and direct buried;
- Long distance and local area network communication.
- Good mechanical and temperature performance
- Superior water-proof function.
- Excellent rodent resistance.
- Totally Dielectric.
- Moisture Protected.
- Ultraviolet Resistance.
- Rodent Resistant.



Applications

- Outdoor
- Direct connection to terminal equipment
- Direct Buried

Specifications

Tight buffer fiber Diameter	900±50 μm
Core reinforce	Fiberglass Yarns
Sub cables jacket	LSZH
Outer jacket material	Black LSZH
Additional Jacket	Polyamide (PA12)

Max. loading (IEC60794-1)	
Installation / Operation	2400 / 4100N
Min. bend radius(IEC60794-1)	
Static / Dynamic	10xD / 20xD mm
Crush resistance(IEC60794-1)	2500 N/10 cm

Fiber count	4C	6C	8C	12C	24C
Sub cables jacket	2.1				
Cable diameter (mm)	8.2	10.5	12	12.8	17.5
Cable weight (kg/km)	96	110	145	210	279
Temperature rating					
Operation / Storage	-40 °C to +70 °C / -40 °C to +70 °C				

Transmission Performance

Fiber type		OS2 (9/125μm)		OM3 (50/125μm)	
		1310nm	1550nm	850nm	1300nm
Attenuation	Typical	≤0.40	0.22	3.0	1.0
(dB/km)	Maximum	0.5	0.4	3.5	1.5
Bandwidth	@850nm	---		≥1500	
(MHz-km)	@1300nm	---		≥500	

Ordering information

Single Mode

P/N	Description
TS2DJ902	VOYGAR, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 2 Core
TS2DJ904	VOYGAR, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 4 Core
TS2DJ906	VOYGAR, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 6 Core
TS2DJ908	VOYGAR, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 8 Core
TS2DJ912	VOYGAR, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 12Core

Multimode OM3

P/N	Description
TS2DJ902	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 2 Core
TS2DJ904	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 4 Core
TS2DJ906	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 6 Core
TS2DJ908	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 8 Core
TS2DJ912	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 12 Core

Multimode OM4

P/N	Description
TS2DJ902	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 2 Core
TS2DJ904	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 4 Core
TS2DJ906	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 6 Core
TS2DJ908	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 8 Core
TS2DJ912	VOYGAR OFC, Outdoor, Double jacket Tight Buffered, Optical fiber Cable, LSZH, Singlemode 9/125nm, 12 Core

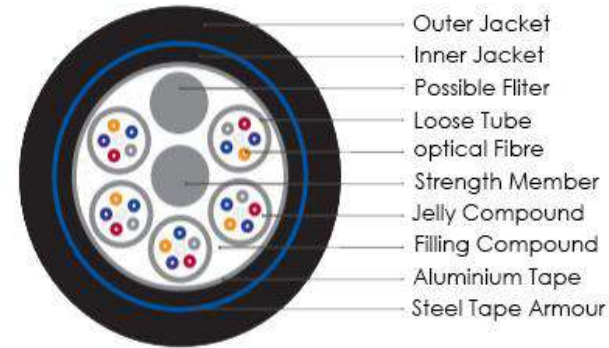
Outdoor Armor Double Jacket Loose Tube Cable

Features

- Adapted to outdoor distribution and direct burial.
- Adapted to trunk power transmission system.
- Access network and local network in high electromagnetic interfering places.
- Good mechanical and temperature performance.
- Special tube filling compound ensure a critical protection of fiber.
- Crush resistance and flexibility.
- PSP enhancing moisture-proof.

Applications

- Universal Aerial, lashed /buried
- Backbone in LAN, MAN, WAN
- 10Gbps Ethernet



Specifications

Loose tube material	PBT
Armor#1	Aluminum Tape
Armor#2	Steel Tape
Strength member	FRP with PE covers
Inner Jacket	PE
Inner Jacket Thickness	1.2mm
Outer jacket material	PE, Black
Outer jacket Thickness	1.7

Max. loading (IEC60794-1)	
Installation / Operation	1200 / 1500N
Min. bend radius(IEC60794-1)	
Static / Dynamic	10xD / 20xD mm
Crush resistance(IEC60794-1)	3000 N/10 cm

Fiber count	24C	36C	48C	72C	96C	144C
Cable diameter (mm)	12.7	14	15.5	16.2	16.5	18
Cable weight (kg/km)	160	178	186	205	225	260
Temperature rating						
Operation / Storage	-40 °C to +70 °C / -40 °C to +75 °C					

Transmission Performance

Fiber type		OS2 (9/125um)		OM3 (50/125um)	
		1310nm	1550nm	850nm	1300nm
Attenuation (dB/km)	Typical	≤0.40	0.22	3.0	1.0
	Maximum	0.5	0.4	3.5	1.5
Bandwidth (MHz-km)	@850nm	---		≥1500	
	@1300nm	---		≥500	

Ordering information

Single Mode

P/N	Description
LS2CJ024	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 9/125nm, OS2, 24 Core
LS2CJ036	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 9/125nm, OS2, 36 Core
LS2CJ048	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 9/125nm, OS2, 48 Core
LS2CJ072	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 9/125nm, OS2, 72 Core
LS2CJ096	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 9/125nm, OS2, 96 Core
LS2CJ144	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 9/125nm, OS2, 144 Core

Multimode OM3

P/N	Description
LM3CJ024	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM3, 24 Core
LM3CJ036	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM3, 36 Core
LM3CJ048	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM3, 48 Core
LM3CJ072	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM3, 72 Core
LM3CJ096	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM3, 96 Core
LM3CJ144	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM3, 144 Core

Multimode OM4

P/N	Description
LM4CJ024	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM4, 24 Core
LM4CJ036	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM4, 36 Core
LM4CJ048	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM4, 48 Core
LM4CJ072	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM4, 72 Core
LM4CJ096	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM4, 96 Core
LM4CJ144	VOYGAR, Outdoor, Double PE jacket, Double Armor Tape, 1 Steel Strengthen member, Stranded Loose Tube, jellyfilled, Singlemode 50/125, OM4, 144 Core

Air blown Super mini blown cable

VOYGAR supplies various types of air blown cable. Its main product is central tube air blown cable and layer stranding air blow cable which has absolutely technical advantage in Korea and equivalent air blown performance as Europe products.

Features

- Stable structure, good mechanical and temperature performance.
- Designed with special grooves to advance blowing distance.
- Lightweight and proper stiffness, repeat installation.
- Designed with no gel, easy stripping and handling.
- Better costs advantage compared to traditional product.
- Complete accessories, less manpower, lower installation time.

Applications

- Backbone in LAN, MAN, WAN
- 10Gbps Ethernet
- FTTH

ABF Construction

Number of fibers	2	4	8	12
Min Bend radius(mm)	40	40	60	60
Coating Material	UV curable Acrylate Resin			
Outer sheath	HDPE			
Outer Diameter (Nominal)	1.2 ± 0.2mm	1.2 ± 0.2mm	1.4 ± 0.2mm	1.6 ± 0.2mm
Unit Color	Yellow, Orange, Blue			

Transmission Performance

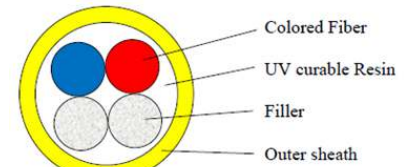
Fiber type	Single mode OS2			
	G.657.A1		G.657.A2	
Wavelength	1310nm	1550nm	1310nm	1550nm
Attenuation (dB/km)	≤0.40	≤0.30	≤0.40	≤0.30

Temperature rating	-20 °C to +65 °C
Operation / Storage	

Ordering Information

P.N	Description
ACG65202	VOYGAR ABF Super Mini Air blown Fiber Cable SM 2core
ACG65204	VOYGAR ABF Super Mini Air blown Fiber Cable SM 4core
ACG65206	VOYGAR ABF Super Mini Air blown Fiber Cable SM 6core
ACG65208	VOYGAR ABF Super Mini Air blown Fiber Cable SM 8core
ACG65212	VOYGAR ABF Super Mini Air blown Fiber Cable SM 12core

1. Smooth sheath ABF



2-Fibers Air Blown Fiber



4-Fibers



8-Fibers



12-Fibers

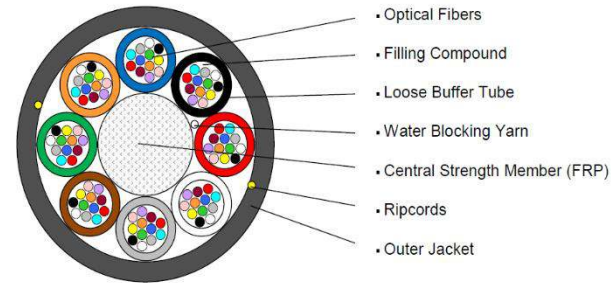
Air blown Super Slim blown Cable

Features

- Stable structure, good mechanical and temperature performance.
- Designed with special grooves to advance blowing distance.
- Lightweight and proper stiffness, repeat installation.
- Designed with no gel, easy stripping and handling.
- Better costs advantage compared to traditional product.
- Complete accessories, less manpower, lower installation time.

Applications

- Backbone in LAN, MAN, WAN
- 10Gbps Ethernet
- FTTH



ABF Construction

Fiber Count	24 fibers	72 fibers	96 fibers	144 fibers
No. of Fibers per Tube	4	12	12	12
No. of PBT Loose Buffer Tube	6	6	8	12
Filling Compound in Loose Buffer Tube	Thixotropic Jelly Compound			
No. of PE Filler	5	5	0	0
Central Strength Member	FRP			
Water Blocking Material	Water Swellable Yarn around the CSM			
Sheath material	Black HDPE			
Rip Cord	Two Aramid Yarn			
Outer Diameter(mm)	4.5	5.9	6.5	8.0
Approx. Cable Weight (kg/km)	17	28	38	58
Recommendation of Duct Size (ID/OD mm)	6/8-8/10	8/10	8/10-10/12	10/12-12/14
Blowing Distance	2000m	2000m	1000m/2000m	1000m/2000m
Standard Reel Length	4000m			

Transmission Performance

Fiber type	Single mode OS2			
	G.657.A1		G.657.A2	
Wavelength	1310nm	1550nm	1310nm	1550nm
Attenuation (dB/km)	≤0.40	≤0.30	≤0.40	≤0.30
Installation	-10°C ~ +40°C			
Operation	-40°C ~ +70°C			
Storage	-40°C ~ +70°C			

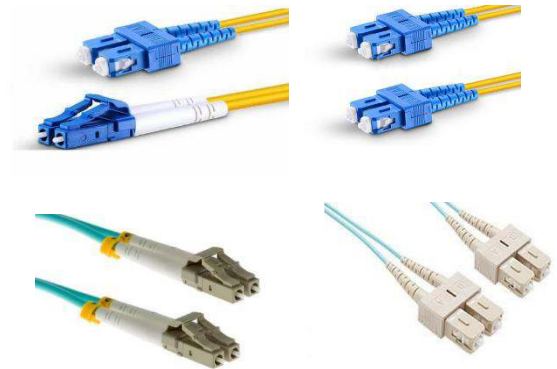
Ordering Information

P.N	Description
ACG57024	VOYGAR ABC Super Slim Design Air blown Fiber Optic Cable SM 24core
ACG57048	VOYGAR ABC Super Slim Design Air blown Fiber Optic Cable SM 48core
ACG57072	VOYGAR ABC Super Slim Design Air blown Fiber Optic Cable SM 72core
ACG57096	VOYGAR ABC Super Slim Design Air blown Fiber Optic Cable SM 96core
ACG57144	VOYGAR ABC Super Slim Design Air blown Fiber Optic Cable SM 144core

Fiber Optic Patch Cords

Features

- Compliance with Telcordia GR-326-Core
- TIA/EIA and IEC
- Customized length
- Various connector type available
- Environmental stable



Applications

- Telecommunication network
- CATV system
- Local Area Network
- Active/Passive device
- FTTH and FTTx

Specifications

Optical Performance	Single mode		Multimode	
Insertion Loss	0.20dB		0.30dB	
Return Loss	45dB(PC)		35dB	
	50dB(UPC)			
	60dB(APC)			
Repeatability	0.10dB			
Durability	0.2dB typical change,1000 matings			
Operating Temperature	-20~+75			
Storage Temperature	-40~+85			
End face Geometry				
Parameter	2.5mm ferrule		1.25mm ferrule	
	UPC	APC	UPC	APC
Radius of Curvature	10-25mm	5-12mm	7-25mm	5-12mm
Apex Offset	0-50• m	0-50• m	0-50• m	0-50• m
Fiber Height	-100-50nm	-100--100nm	-100-50nm	-100-100nm
Angle	--	7.7-8.3 degree	--	7.7-8.3degree

Ordering information

Single Mode

P/N	Description
SM22DX01	VOYGAR Fiber Patch Cord Singlemode LC /LC duplex, 1M
SM22DX03	VOYGAR Fiber Patch Cord Singlemode LC /LC duplex, 3M
SM22DX05	VOYGAR Fiber Patch Cord Singlemode LC /LC duplex, 5M
SM92DX01	VOYGAR Fiber Patch Cord Singlemode SC/LC duplex, 1M
SM92DX03	VOYGAR Fiber Patch Cord Singlemode SC/LC duplex, 3M
SM92DX05	VOYGAR Fiber Patch Cord Singlemode SC/LC duplex, 5M
SM92DX01	VOYGAR Fiber Patch Cord Singlemode SC/SC duplex, 1M
SM92DX03	VOYGAR Fiber Patch Cord Singlemode SC/SC duplex, 3M
SM92DX05	VOYGAR Fiber Patch Cord Singlemode SC/SC duplex, 5M

Multimode OM3

P/N	Description
M322DX01	VOYGAR Fiber Patch Cord Multimode OM3, LC/LC, duplex, 1M
M322DX03	VOYGAR Fiber Patch Cord Multimode OM3, LC/LC, duplex, 3M
M322DX05	VOYGAR Fiber Patch Cord Multimode OM3, LC/LC, duplex, 5M
M392DX01	VOYGAR Fiber Patch Cord Multimode OM3, SC/LC duplex, 1M
M392DX03	VOYGAR Fiber Patch Cord Multimode OM3, SC/LC duplex, 3M
M392DX05	VOYGAR Fiber Patch Cord Multimode OM3, SC/LC duplex, 5M
M399DX01	VOYGAR Fiber Patch Cord Multimode OM3, SC/SC duplex, 1M
M399DX03	VOYGAR Fiber Patch Cord Multimode OM3, SC/SC duplex, 3M
M399DX05	VOYGAR Fiber Patch Cord Multimode OM3, SC/SC duplex, 5M

Multimode OM4

P/N	Description
M422DX01	VOYGAR Fiber Patch Cord, Multimode OM4, LC/LC, duplex, 1M
M422DX03	VOYGAR Fiber Patch Cord, Multimode OM4, LC/LC, duplex, 3M
M422DX05	VOYGAR Fiber Patch Cord, Multimode OM4, LC/LC, duplex, 5M
M492DX01	VOYGAR Fiber Patch Cord Multimode OM4 SC/LC duplex, 1M
M492DX03	VOYGAR Fiber Patch Cord Multimode OM4 SC/LC duplex, 3M
M492DX05	VOYGAR Fiber Patch Cord Multimode OM4 SC/LC duplex, 5M
M499DX01	VOYGAR Fiber Patch Cord Multimode OM4 SC/SC duplex, 1M
M499DX03	VOYGAR Fiber Patch Cord Multimode OM4 SC/SC duplex, 3M
M499DX05	VOYGAR Fiber Patch Cord Multimode OM4 SC/SC duplex, 5M

Fiber Optic Pigtails

Features

- 9/125um OS2, 50/125um OM2/3/4 & 62.5/125um OM1 fiber optic cables.
- 100% factory IL& End face inspected, compliance with Telcordia GR-326-CORE
- Insertion Loss (dB): ≤ 0.30 (single-mode), ≤ 0.30 (multi-mode)
- Return Loss (dB): ≥ 55 (single-mode), ≥ 35 (multi-mode)



Ordering information

Single Mode

P/N	Description
FPGSM201	VOYGAR LC/UPC Single mode Pigtail, 9/125, 0.9 mm, 1m
FPGSM202	VOYGAR LC/UPC Single mode Pigtail, 9/125, 0.9 mm, 2m
FPGSM203	VOYGAR LC/UPC Single mode Pigtail, 9/125, 0.9 mm, 3m
FPGSM901	VOYGAR SC/UPC Single mode Pigtail, 9/125, 0.9 mm, 1m
FPGSM902	VOYGAR SC/UPC Single mode Pigtail, 9/125, 0.9 mm, 2m
FPGSM903	VOYGAR SC/UPC Single mode Pigtail, 9/125, 0.9 mm, 3m

Multimode OM3

P/N	Description
FPGM3201	VOYGAR LC Multimode OM3 Pigtail, 50/125, 0.9 mm, 1m
FPGM3202	VOYGAR LC Multimode OM3 Pigtail, 50/125, 0.9 mm, 2m
FPGM3203	VOYGAR LC Multimode OM3 Pigtail, 50/125, 0.9 mm, 3m
FPGM3901	VOYGAR SC Multimode OM3 Pigtail, 50/125, 0.9 mm, 1m
FPGM3902	VOYGAR SC Multimode OM3 Pigtail, 50/125, 0.9 mm, 2m
FPGM3903	VOYGAR SC Multimode OM3 Pigtail, 50/125, 0.9 mm, 3m

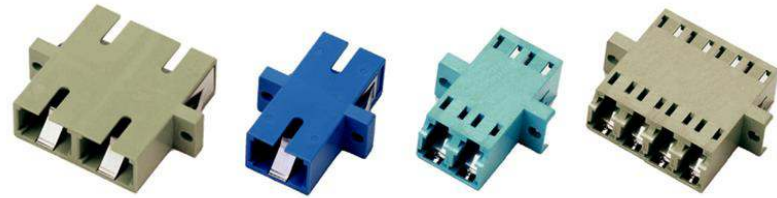
Multimode OM4

P/N	Description
FPGM4201	VOYGAR LC Multimode OM4 Pigtail, 50/125, 0.9 mm, 1m
FPGM4202	VOYGAR LC Multimode OM4 Pigtail, 50/125, 0.9 mm, 2m
FPGM4203	VOYGAR LC Multimode OM4 Pigtail, 50/125, 0.9 mm, 3m
FPGM4901	VOYGAR SC Multimode OM4 Pigtail, 50/125, 0.9 mm, 1m
FPGM4902	VOYGAR SC Multimode OM4 Pigtail, 50/125, 0.9 mm, 2m
FPGM4903	VOYGAR SC Multimode OM4 Pigtail, 50/125, 0.9 mm, 3m

Fiber Optic Adaptor

Features

- Low Insertion Loss
- Compliance with Telcordia GR-326-Core, IEC, TIA
- High Precision of Mechanical Dimensions
- RoHS Compliance
- Available Ceramic or PB Sleeves
- Available Hybrid Adaptors/Shutter Adaptor



Applications

- CATV System
- Local Area Networks
- Telecommunication Networks
- FTTH and FTTx
- Testing Equipment
- Fiber LAN

Specifications

Optical Parameter	Ceramic Sleeve
Insertion Loss	<0.10dB
Durability	<0.10 dB typical change, 1000 times
Operating Temp.	-20 ~+ 75
Storage Temp.	-40 ~+ 85

Ordering information

Single Mode

P/N	Description
FASMF2DX	VOYGAR LC Singlemode Coupler Duplex
FASMF9DX	VOYGAR SC Singlemode Coupler Duplex
FASMF2SX	VOYGAR LC Singlemode Coupler Simplex
FASMF9SX	VOYGAR SC Singlemode Coupler Simplex

Multimode

P/N	Description
FAMMF2DX	VOYGAR LC Multimode Coupler Duplex
FAMMF9DX	VOYGAR SC Multimode Coupler Duplex
FAMMF2SX	VOYGAR LC Multimode Coupler Simplex
FAMMF9SX	VOYGAR SC Multimode Coupler Simplex

PLC Splitters 1: N /2: N

VOYGAR PLC Splitter family has 1x2, 1x4, 1x8, 1x16, 1x32, 1x64, 2x2, 2x4, 2x8, 2x16, 2x32, 2 x 64 PLC splitter, with specifications that are tailored for different applications and markets. Wide bandwidth, compact size. All products meet ROHS, GR-1209-CORE-2001 and GR-1221-CORE-1999.

Features

- Low Insertion loss
- Low Polarization Dependent Loss.
- Compact Design
- Good channel-to-channel uniformity
- Wide Operating Wavelength: from 1260nm to 1650nm
- High Reliability and Stability
- Excellent Environmental Stability.
- Excellent Mechanical Stability.
- Telcordia GR-1221 and GR-1209.



Applications

- FTTX Systems
- PON Networks
- CATV Links
- Optical Signal Distribution

Specifications

Fiber length	1.5m						
Connector Type	SC APC						
Optical Fiber Type	Corning SMF-28e fiber, G657A1						
Directivity (dB) Min *	55						
Return Loss (dB) Min *	55 (50)						
Power Handling(mW)	300						
Operating Wavelength (nm)	1260 ~ 1650						
Operating Temperature(°C)	-40~ +85						
Storage Temperature(°C)	-40 ~ +85						
Parameter	Un	Specification (P Grade)					
Operation Wavelength	nm	1260 ~ 1650					
Channel Number		1X2	1X4	1X8	1X16	1X32	1X64
Insertion Loss with Connector (Max)	dB	4.1/4.4	7.4/7.9	10.5/11.0	13.8/14.1	17.1/17.4	20.4/21.0
Insertion Loss without Connector (Max)	dB	3.8/4.1	7.1/7.6	10.2/10.7	13.5/13.8	16.8/17.1	20.1/20.7
Uniformity (Max.)	dB	0.6	0.7	0.8	1.0	1.5	2.0
Polarization Dependent Loss	dB	0.2	0.2	0.2	0.3	0.3	0.3
Channel Number		2X2	2X4	2X8	2X16	2X32	2X64
Insertion Loss with Connector (Max)	dB	4.4/4.6	7.7/8.1	10.8/11.3	14.1/14.4	17.4/17.7	20.6/21.3
Insertion Loss without Connector (Max)	dB	4.1/4.3	7.4/7.8	10.5/11	13.8/14.1	17.1/17.4	20.3/21.0
Uniformity (Max.)	dB	0.6	0.7	0.8	1.0	1.5	2.0
Polarization Dependent Loss	dB	0.2	0.2	0.2	0.3	0.3	0.5
Return Loss	dB	≥45 (PC) ; 50 (UPC) ; 60 (APC)					
Directivity	dB	≥55					

Ordering information

P/N	Description
SPLM8102	PLC Splitter 1: 2 Mini type with SC APC Connector, 1.5m Pigtails
SPLM8104	PLC Splitter 1: 4 Mini type with SC APC Connector, 1.5m Pigtails
SPLM8108	PLC Splitter 1: 8 Mini type with SC APC Connector, 1.5m Pigtails
SPLM8116	PLC Splitter 1: 16 Mini type with SC APC Connector, 1.5m Pigtails
SPLM8132	PLC Splitter 1: 32 Mini type with SC APC Connector, 1.5m Pigtails
SPLB8102	PLC Splitter 1: 2 Box Type with SC APC Connector, 1.5m Pigtails
SPLB8104	PLC Splitter 1: 4 Box Type with SC APC Connector, 1.5m Pigtails
SPLB8108	PLC Splitter 1: 8 Box Type with SC APC Connector, 1.5m Pigtails
SPLB8116	PLC Splitter 1: 16 Box Type with SC APC Connector, 1.5m Pigtails
SPLB8132	PLC Splitter 1: 32 Box Type with SC APC Connector, 1.5m Pigtails
SPLR8102	PLC Splitter 1: 2 Rack mounted Type With SC APC adapters
SPLR8104	PLC Splitter 1: 4 Rack mounted Type With SC APC adapters
SPLR8108	PLC Splitter 1: 8 Rack mounted Type With SC APC adapters
SPLR8116	PLC Splitter 1: 16 Rack mounted Type With SC APC adapters
SPLR8132	PLC Splitter 1: 32 Rack mounted Type With SC APC adapters
SPLT8102	PLC Splitter 1: 2 Terminal Box Type With SC APC adapters
SPLT8104	PLC Splitter 1: 4 Terminal Box Type With SC APC adapters
SPLT8108	PLC Splitter 1: 8 Terminal Box Type With SC APC adapters
SPLT8116	PLC Splitter 1: 16 Terminal Box Type With SC APC adapters
SPLT8132	PLC Splitter 1: 32 Terminal Box Type With SC APC adapters
SPLM8204	PLC Splitter 2: 4 Mini type With SC APC Connector, 1.5m Pigtails
SPLM8208	PLC Splitter 2: 8 Mini type With SC APC Connector, 1.5m Pigtails
SPLM8216	PLC Splitter 2: 16 Mini type With SC APC Connector, 1.5m Pigtails
SPLM8232	PLC Splitter 2: 32 Mini type With SC APC Connector, 1.5m Pigtails
SPLB8204	PLC Splitter 2: 4 ABS Box Type With SC APC Connector, 1.5m Pigtails
SPLB8208	PLC Splitter 2: 8 ABS Box Type With SC APC Connector, 1.5m Pigtails
SPLB8216	PLC Splitter 2: 16 ABS Box Type With SC APC Connector, 1.5m Pigtails
SPLB8232	PLC Splitter 2: 32 ABS Box Type with SC APC Connector, 1.5m Pigtails
SPLR8204	PLC Splitter 2: 4 Rack mounted Type with SC APC adapters
SPLR8208	PLC Splitter 2: 8 Rack mounted Type with SC APC adapters
SPLR8216	PLC Splitter 2: 16 Rack mounted Type with SC APC adapters
SPLR8232	PLC Splitter 2: 32 Rack mounted Type with SC APC adapters
SPLT8204	PLC Splitter 2: 4 Terminal Box Type with SC APC adapters
SPLT8208	PLC Splitter 2: 8 Terminal Box Type with SC APC adapters
SPLT8216	PLC Splitter 2: 16 Terminal Box Type with SC APC adapters
SPLT8232	PLC Splitter 2: 32 Terminal Box Type with SC APC adapters

19" Fiber Optic Rack Mount Patch Panel

VOYGAR SYSTEMS offers an innovative, robust 1U sliding patch panel. This panel has been designed to accept up to 48 fibers housed within a 1U space.

Features

- Up to 48 fibers in 1U.
- Multiple Adaptor options available.
- 24 Adaptor positions.
- Individually labelled ports.
- Accepts loose tube, distribution and pre terminated cables
- ROHS, REACH and UL rated.
- Fits standard 19"
- Fiber termination/Connection ports option.
- Optical splice capability.
- Compact design.
- Compatible with most cable management system.



Applications

- Data Centers, premise installations, telecommunication networks
- Ethernet, fiber Channel, ATM, LAN, MAN, and WAN
- Data communication
- Indoor applications

Specifications

Material Coating	Electro Static Powder Coating
Cable Entry 20mm: 4	4
Operating Temp.	-20 ~+ 70
Dimension Height x Width x Depth	44mm x 482mm x 230mm

Ordering information

P/N	Description
PSL1A212	VOYGAR ABS, Sliding Fiber patch panel, with front faceplate 12 port LC Duplex
PSL1A224	VOYGAR ABS, Sliding Fiber patch panel, with front faceplate 24 port LC Duplex
PSL1A924	VOYGAR ABS, Sliding Fiber patch panel, with front faceplate 12 port SC Duplex
PSL1A948	VOYGAR ABS, Sliding Fiber patch panel, with front faceplate 24 port SC Duplex
PSL1S212	VOYGAR STEEL, Sliding Fiber patch panel, with front faceplate 12 port LC Duplex
PSL1S224	VOYGAR STEEL, Sliding Fiber patch panel, with front faceplate 24 port LC Duplex
PSL1S924	VOYGAR STEEL, Sliding Fiber patch panel, with front faceplate 12 port SC Duplex
PSL1S948	VOYGAR STEEL, Sliding Fiber patch panel, with front faceplate 24 port SC Duplex

High Density Fiber Patch Panel

This Fiber Distribution Panel is 1,2 and 4U and fits in a standard 19" rack or enclosure. It has 12 adapter panel ports that can fit up to 288 fibers with 12x Quad LC fiber adapter panels. This fiber panel is designed to support both patching and splicing in one distribution panel and includes trays & spools. The distribution panel has a slide out master panel with an integrated tray stop to prevent overextension of fiber cables. The distribution panel also has a two piece top and a latch door to allow for easy access to the adapter panel.



Features

- LGX Compatible
- Rack Mountable
- Mounts to standard EIA 19" rack rails, holds up to 4x FAPs or MTP Cassettes.
- Changeable Modules Inside
- Suitable for both Ribbon and Round Cable
- Ensures signal integrity, proper cable routing, bend radius control and cable protection.
- Improved design to ensure fiber optic cable bend radius not less than 40mm
- Good protection of pigtails
- Front and Rear Hinged Doors
- Includes mounting hardware and cable management accessories

Applications

- Telecommunications
- Fiber to the home (FTTH)
- Applicable for fiber termination, protection and distribution

Specifications

Panel Material	Cold-Roll Steel
Finish	Black Powder Coat Paint
Rack Unit Size	1/ 2/ 4U
Weight	11.2kg
Modular Adapter Panel Capacity	6 LGX Module
Capacity 1U	48 LC
Capacity 2U	96 LC
Capacity 4U	144 LC
Operating Temperature	-20°C -- +60°C
Storage Temperature	-40°C -- +70°C
Humidity	90% at 30°C
Dimension	
Height x Width x Depth	
1U	44mm x 482mm x 230mm
2U	88mm x 482mm x 230mm
4U	176mm x 482mm x 230mm

Ordering information

P/N	Description
PHD1SL04	1U, Fiber Panel High Density, accepts 4 fiber Modules /MPO
PHD2SL08	2U, Fiber Panel High Density, accepts 8 fiber Modules /MPO
PHD4SL12	4U, Fiber Panel High Density, accepts 12 fiber Modules /MPO
HDFLDX23	VOYGAR Fiber optic 3 LC Duplex Single mode Fiber adapter faceplate for high density panel.
HDFLDX26	VOYGAR Fiber optic 6 LC Duplex Single mode Fiber adapter faceplate for high density panel.
HDFLDX93	VOYGAR Fiber optic 3 SC Duplex Single mode Fiber adapter faceplate for high density panel.
HDFLDX86	VOYGAR Fiber optic 6 SC Duplex Single mode Fiber adapter faceplate for high density panel.
HDFLDX22	VOYGAR Fiber optic 12 LC Duplex Single mode Fiber adapter faceplate for high density panel.
HDFEDX93	VOYGAR Fiber optic 3 SC Duplex /LC Quad Fiber adapter faceplate for high density panel.

Outdoor Inline Fiber Splice Closure

HSC65 has 4 fiber cables in-out round ports. It can be used in wall-mounting and aerial-hanged. This product is made of STEEL plastic and with the mechanical sealing structure filled with the sealing material. The external component and fastening piece are all made of high-quality steel. It can be opened after sealing and can be reused without changing sealing material.



Features

- Offers excellent resistance to vibration, ultraviolet and change in climate
- The silicone gasket is used to seal the closure and provide a long-term reliability.
- The closure can be installed at temperatures between (-40°C~80°C)
- Humidity detector is mounted at outside of closure to check water penetration
- Without opening splice closure.

Applications

- Telecommunication Networks
- CATV Networks
- Local Area Networks
- Underground, Aerial, Direct buried, and Building environments

Specifications

Dimension(mm)	576(L)x222(W)x139(H)
Weight(Kg)	About 2.6
Cable Diameter (mm)	Φ7mm~Φ18mm
Cable Entry Ports	2 in 2out
Max Capacity Of Fiber Splice	24
Max Capacity Of Splice Tray	2
Sealing Structure	Sticky cincture or Silicon Gum Material

Ordering information

P/N	Description
HSC65012	VOYGAR Outdoor Horizontal type, 2 In, 2 Out Splice Closure, Maximum capacity 12 Cores.
HSC65024	VOYGAR Outdoor Horizontal type, 2 In, 2 Out Splice Closure, Maximum capacity 24Cores.
HSC65048	VOYGAR Outdoor Horizontal type, 2 In, 2 Out Splice Closure, Maximum capacity 48Cores.
HSC65096	VOYGAR Outdoor Horizontal type, 2 In, 2 Out Splice Closure, Maximum capacity 96Cores.
HSC65144	VOYGAR Outdoor Horizontal type, 2 In, 2 Out Splice Closure, Maximum capacity 144Cores.
HSB65024	VOYGAR Outdoor Horizontal type, 2 In, 2 Out, Cable size up to diameter 14mm, Splice Closure with SC APC Adapter Plate, Maximum capacity 24Cores.
HSB65048	VOYGAR Outdoor Horizontal type, 2 In, 2 Out Splice Closure with SC APC Adapters Plate, Cable Input up to 4 cables, Maximum cable size up to diameter 14mm, Maximum capacity 48Cores.

Dome Type Optical Fiber Splice Closure

Vertical Fiber Optic Splice Closure FOSC V768 is widely applied to the splicing, distributing variable optical cables. It is big capacity, max. 144 fibers.



Features

- Splice tray: Max. 6pcs, each 24cores
- Cable port: 6pcs round port $\phi 19.9\text{mm}$, 1pc oval port 38x70mm for supporting cable entry without cutting. All cable ports are heat shrink sealing.
- Waterproof: IP68
- Wall-mounting, aerial hanger and pole holding
- Material: high impact resistance PP materials with UV

Specifications

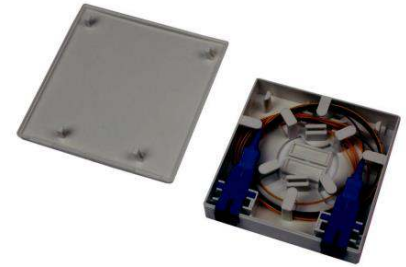
Model	Splice tray	Fiber core	Dimension(mm)
48	4 trays, each 12core	48 FO	$\Phi 267 \times 527.5$
96	8 trays, each 12core	96 FO	$\Phi 267 \times 527.5$
144	12 trays, each 12core	144 FO	$\Phi 267 \times 527.5$
288	24 trays, each 12core	288 FO	$\Phi 267 \times 527.5$

Ordering information

P/N	Description
VSC68048	Vertical Fiber Optic Cable Joint Box/ Dome Type Splice Closure, for splicing upto 7 cables, capacity up to 48 Cores
VSC68096	Vertical Fiber Optic Cable Joint Box/ Dome Type Splice Closure, for splicing upto 7 cables, capacity up to 96 Cores
VSC68144	Vertical Fiber Optic Cable Joint Box/ Dome Type Splice Closure, for splicing up to 7 cables, capacity up to 144 Cores
VSC68288	Vertical Fiber Optic Cable Joint Box/ Dome Type Splice Closure, for splicing up to 7 cables, capacity up to 288Cores

Fiber Optic Distribution Box 2, 4 cores

This mini style distribution box is widely applied in the FTTX network to connect drop cable and ONU devices through fiber port. It supports splicing, distribution, mechanical connection and wall mounted installation.

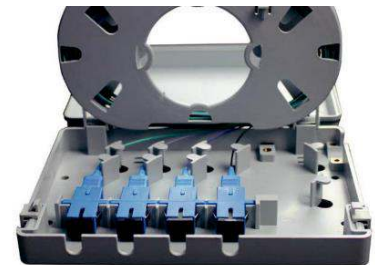


Features

- STEEL material used ensures the body strong and light
- Easy installations: Mount on wall

Specifications

Adapter Capacity	4 fibers with LC adapters 2 fibers with SC adapters
Number of Cable Entrance	Up to 4
Drop Cable(flat)	Indoor flat drop cable 2 x 3mm
Drop Cable(round)	Φ5mm~Φ10mm
Curvature Radius	≥15mm
Dimensions (W*H*D)	86mm*86mm*24mm
Storage Temp.	-5°C~60°C



Adapter Capacity	4 fibers with SC/ FC adapters
Number of Cable Entrance/ Exit	1/4
Max diameter of entry cable	12.2mm
Drop Cable(round)	Φ5mm~Φ10mm
Curvature Radius	≥15mm
Dimensions (W*H*D)	152mm*112mm*30mm
Storage Temp.	-5°C~60°C

Ordering information

P/N	Description
TB20A202	VOYGAR Indoor FTTH Plastic Fiber Optical Cable Access Termination Box 2 Port SC Simplex/ LC Duplex Slots
TB20A204	VOYGAR Indoor FTTH Plastic Fiber Optical Cable Access Termination Box 4 Port SC Simplex/ LC Duplex Slots

Outdoor Fiber Optic Distribution Box 6, 8 cores

This distribution box is used as a termination point for the feeder cable to connect with drop cable in FTTx communication network system. The fiber splicing, splitting, distribution can be done in this box, and meanwhile it provides solid protection and management for the FTTx network building.

Features

- Made of high impact plastic, outdoor installation with IP65, indoor application with IP55 protection
- Wall mount and pole mount available, dust-proof design
- Widely used in FTTH access network.

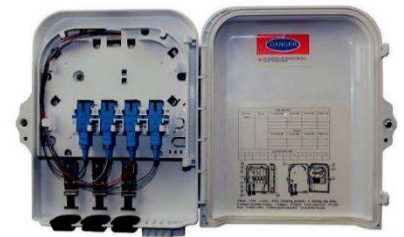
Specifications

Adapter Capacity	2SC; 4LC
Number of Cable Entrance/ Exit	1/4
Life of insertion and extraction	>1000 times
Weight	0.32 KG
Max diameter of entry cable	9mm
Dimensions (W*H*D)	167mm*102mm*31mm
Storage Temp.	-5°C~60°C

Adapter Capacity	8 SC
Number of Cable Entrance/ Exit	up to 3 cables
Life of insertion and extraction	>1000 times
Weight	1 KG
Max diameter of entry cable	12mm
Dimensions (W*H*D)	220mm*205mm*55mm
Storage Temp.	-5°C~60°C

Ordering information

P/N	Description
TB65A206	VOYGAR Outdoor FTTH Plastic Fiber Optical Cable Access Termination Box 6 Port SC Simplex/ LC Duplex Slots
TB65A208	VOYGAR Outdoor FTTH Plastic Fiber Optical Cable Access Termination Box 8 Port SC Simplex/ LC Duplex Slots



Outdoor Fiber Optic Distribution Box 16, 24 cores

This fiber optics distribution box is used as a termination point for the feeder cable to connect with drop cable in FTTx communication network system. The fiber splicing, splitting, distribution can be done in this box, and meanwhile it provides solid protection and management for the FTTx network building.

Features

- Made of high impact plastic, outdoor installation with IP65, indoor application with IP55 protection
- Wall mount and pole mount available, dust-proof design
- Widely used in FTTH access network.

Specifications

Adapter Capacity	16 SC
Number of Cable Entrance/ Exit	up to 3 cables
Life of insertion and extraction	>1000 times
Weight	1.5 KG
Max diameter of entry cable	12mm
Dimensions (W*H*D)	300mm*225mm*100mm
Storage Temp.	-40°C~60°C

Adapter Capacity	24 SC
Number of Cable Entrance/ Exit	up to 3 cables
Life of insertion and extraction	>1000 times
Weight	1.5 KG
Max diameter of entry cable	13mm
Dimensions (W*H*D)	317mm*237mm*101mm
Storage Temp.	-40°C~60°C

Ordering information

P/N	Description
TB65A216	VOYGAR Outdoor FTTH Plastic Fiber Optical Cable Access Termination Box 16 Port SC Simplex/ LC Duplex Slots
TB65A224	VOYGAR Outdoor FTTH Plastic Fiber Optical Cable Access Termination Box 24 Port SC Simplex/ LC Duplex Slots



Outdoor Fiber Optic Distribution Box 36, 48 cores

Features

- Made of high impact plastic, outdoor installation with IP65, indoor application with IP55 protection
- Wall mount and pole mount available, dust-proof design
- Widely used in FTTH access network.

Specifications

Adapter Capacity	36 SC
Number of Cable Entrance/ Exit	up to 3 cables
Life of insertion and extraction	>1000 times
Weight	1.80 KG
Max diameter of entry cable	13mm
Dimensions (W*H*D)	380X280X115
Storage Temp.	-40°C~60°C
IP Rating	65

Adapter Capacity	48 SC
Number of Cable Entrance/ Exit	up to 3 cables
Life of insertion and extraction	>1000 times
Weight	1.80 KG
Max diameter of entry cable	13mm
Dimensions (W*H*D)	350X320X120
Storage Temp.	-40°C~60°C
IP Rating	65

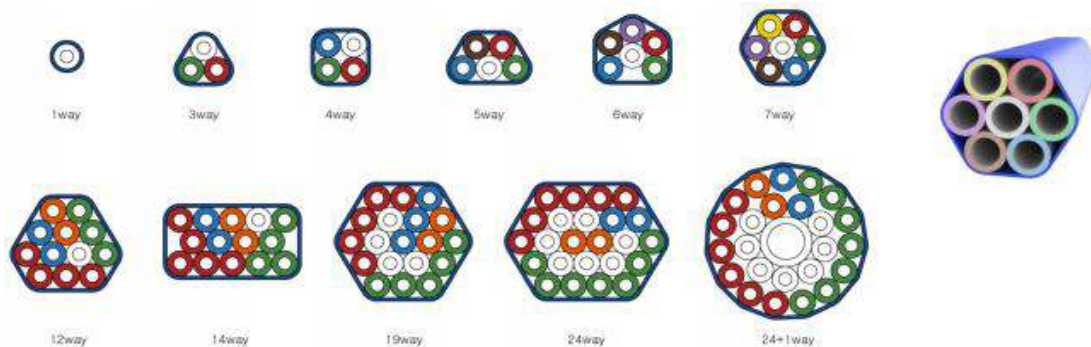


Ordering information

P/N	Description
TB65A236	VOYGAR Outdoor FTTH Plastic Fiber Optical Cable Access Termination Box 36 Port SC Simplex/ LC Duplex Slots
TB65A248	VOYGAR Outdoor FTTH Plastic Fiber Optical Cable Access Termination Box 48 Port SC Simplex/ LC Duplex Slots

ABF HDPE High Strength direct buried Micro Duct

THICK WALLED DUCT is designed for direct burial by having thicker inner tube. It has advantage for easy and fast termination with thin outer sheath. The thickness of each inner tube allows individual tubes to be used direct buried solution. This item is suitable for any construction sites such as open cut, Micro trenching, Mini trenching and HDD. This product is usually recommended to the site which requires fast and easy sheath cutting during fiber branch off from the FC.



Features

- Various configurations with different size between 7/3.5mm and 20/16mm
- Wide range of number of inner tube from 1 way to 24+1 way
- Ribbed & Smooth Type
- Insulated Locatable copper wire

Construction

INNER TUBES	Materials	HDPE Inner tube and Outer sheath
	Color options	Fully colored
	Inner surface	Smooth with silicon 0.1mm
OUTER SHEATH	Materials	HDPE (High-density Polyethylene)
	Color	Orange
	Wall thickness(mm)	1.65mm+0.1mm silicon
Pressure	(bar/psi)	15/220 (bar/psi)

Specifications

7/3.5mm	OD max mm	Max Tensile(N)	Length/drum (m)	Crush (N)	Bend Radius (mm)	Gross Weight (Kg)	Drum Size (mm)
1Way	9	500	2000	2000	110	120	900x430
2Way	16.0x9.0	910	2000	2000	110	241	1150x550
3Way	16.0x15.1	1250	2000	2000	190	324	1320x550
4Way	16.0x16.0	1580	2000	2000	200	428	1460x550
5Way	23.0x15.1	1910	2000	2000	190	497	1450x720
6Way	21.1x19.5	2240	2000	2000	240	569	1500x720
7Way	23.0x21.1	2520	2000	2000	260	649	1640x720
12Way	30.0x27.2	4060	2000	2000	330	910	1690x1120
14Way	37.0x21.1	4750	2000	2000	260	1050	1690x1120
19Way	37.0x33.3	6140	1000	2000	400	705	1600x1120
24Way	44.0x33.3	7610	1000	2000	400	858	1690x1120
24+1Way	43.6x43.6	8370	1000	2000	530	945	1960x1120

8/6mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.59	0.59	0.1365	0.094	6	12	485
2Way	0.91	0.59	0.1365	0.144	9	12	742
4Way	1.04	1.04	0.1365	0.215	10	21	1109
7Way	1.22	1.22	0.1365	0.289	12	24	1494
12Way	1.59	1.59	0.156	0.457	16	32	2357

10/8mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.67	0.67	0.1365	0.111	7	13	575
2Way	1.06	0.67	0.1365	0.174	7	21	898
4Way	1.24	1.24	0.1443	0.275	12	25	1421
7Way	1.5	1.5	0.1599	0.402	15	30	2076

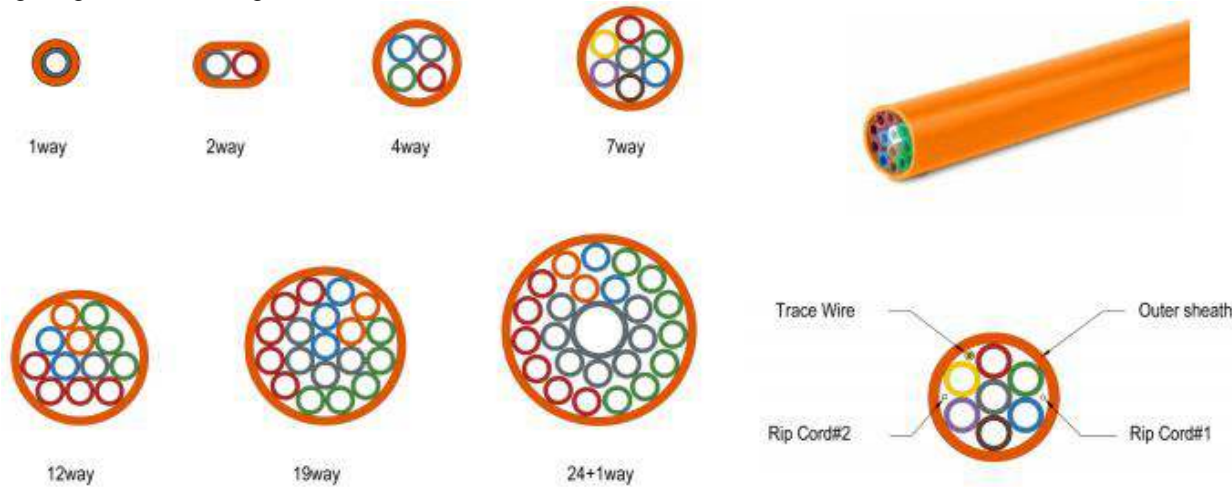
12/10mm	OD max inch	OD min inch	Sheath Thickness (Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.76	0.76	0.1365	0.146	8	15	756
2Way	1.24	0.76	0.1365	0.23	8	25	1185
4Way	1.49	1.49	0.1638	0.401	15	30	2073
7Way	1.76	1.76	0.1638	0.534	18	35	2756

Ordering information

P/N	Description
HBHS7501	HDPE High Strength Microduct Tube Bundle Direct Buried 1-ways 7/3.5mm
HBHS7502	HDPE High Strength Microduct Tube Bundle Direct Buried 2-ways 7/3.5mm
HBHS7503	HDPE High Strength Microduct Tube Bundle Direct Buried 3-ways 7/3.5mm
HBHS7504	HDPE High Strength Microduct Tube Bundle Direct Buried 4-ways 7/3.5mm
HBHS7505	HDPE High Strength Microduct Tube Bundle Direct Buried 5-ways 7/3.5mm
HBHS7506	HDPE High Strength Microduct Tube Bundle Direct Buried 6-ways 7/3.5mm
HBHS7507	HDPE High Strength Microduct Tube Bundle Direct Buried 7-ways 7/3.5mm
HBHS7512	HDPE High Strength Microduct Tube Bundle Direct Buried 12-ways 7/3.5mm
HBHS7514	HDPE High Strength Microduct Tube Bundle Direct Buried 14-ways 7/3.5mm
HBHS7519	HDPE High Strength Microduct Tube Bundle Direct Buried 19-ways 7/3.5mm
HBHS7524	HDPE High Strength Microduct Tube Bundle Direct Buried 24-ways 7/3.5mm
HBHS7524+1	HDPE High Strength Microduct Tube Bundle Direct Buried 24-ways 7/3.5mm (+1x12/10mm)
HBHS8601	HDPE High Strength Microduct Tube Bundle Direct Buried 1-ways 8/6mm
HBHS8602	HDPE High Strength Microduct Tube Bundle Direct Buried 2-ways 8/6mm
HBHS8604	HDPE High Strength Microduct Tube Bundle Direct Buried 4-ways 8/6mm
HBHS8607	HDPE High Strength Microduct Tube Bundle Direct Buried 7-ways 8/6mm
HBHS8612	HDPE High Strength Microduct Tube Bundle Direct Buried 12-ways 8/6mm
HBHS1801	HDPE High Strength Microduct Tube Bundle Direct Buried 1-ways 10/8mm
HBHS1802	HDPE High Strength Microduct Tube Bundle Direct Buried 2-ways 10/8mm
HBHS1804	HDPE High Strength Microduct Tube Bundle Direct Buried 4-ways 10/8mm
HBHS1807	HDPE High Strength Microduct Tube Bundle Direct Buried 7-ways 10/8mm
HBHS2101	HDPE High Strength Microduct Tube Bundle Direct Buried 1-ways 12/10mm
HBHS2102	HDPE High Strength Microduct Tube Bundle Direct Buried 2-ways 12/10mm
HBHS2104	HDPE High Strength Microduct Tube Bundle Direct Buried 4-ways 12/10mm
HBHS2107	HDPE High Strength Microduct Tube Bundle Direct Buried 7-ways 12/10mm

ABF HDPE High Strength direct install Micro Duct

DIRECT INSTALL HIGH STRENGTH duct is designed for installation duct and sub duct. This product will install in the existed infrastructure with high crush resistance. The thin wall of inner tube can make it easy to bend or fix inside of cabinet or closure. Flexibility of tube is excellent for bending or fixing inside of cabinet or closure. It is strong against lighting, electrical surge.



Features

- Various configurations with different size between 5/3.5mm and 12/10mm
- Wide range of number of inner tube from 1 way to 24 way
- Ribbed & Smooth Type
- Insulated Locatable copper wire

Construction

INNER TUBES	Materials	HDPE (High-density Polyethylene)
	Color options	Fully colored
	Inner surface	Smooth with silicon 0.1mm
OUTER SHEATH	Materials	HDPE (High-density Polyethylene)
	Color	Orange, or customized
	Wall thickness(mm)	0.9mm

Specifications

5/3.5mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.31	0.31	0.0585	0.026	3	6	132
2Way	0.51	0.31	0.0585	0.042	5	10	215
4Way	0.59	0.59	0.0585	0.066	6	12	340
7Way	0.71	0.71	0.0585	0.093	7	14	482
12Way	0.92	0.92	0.0585	0.14	9	18	724
19Way	1.07	1.07	0.0585	0.197	11	21	1016
24Way	1.30	1.3	0.0585	0.267	13	26	1380

8/6mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.43	0.43	0.0585	0.042	4	9	215
2Way	0.75	0.43	0.0585	0.071	8	15	367
4Way	0.88	0.88	0.0585	0.117	9	18	607
7Way	1.06	1.06	0.0585	0.173	11	21	891
12Way	1.41	1.41	0.0663	0.281	14	28	1449

10/8mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.51	0.51	0.0585	0.052	5	10	267
2Way	0.91	0.51	0.0585	0.089	9	18	458
4Way	1.11	1.11	0.078	0.174	11	22	898
7Way	1.35	1.35	0.0819	0.257	14	27	1328

12/10mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.59	0.59	0.0585	0.061	6	12	315
2Way	1.06	0.59	0.0585	0.106	11	21	548
4Way	1.30	1.3	0.078	0.208	13	26	1075
7Way	1.58	1.58	0.0819	0.309	16	32	1594

Ordering information

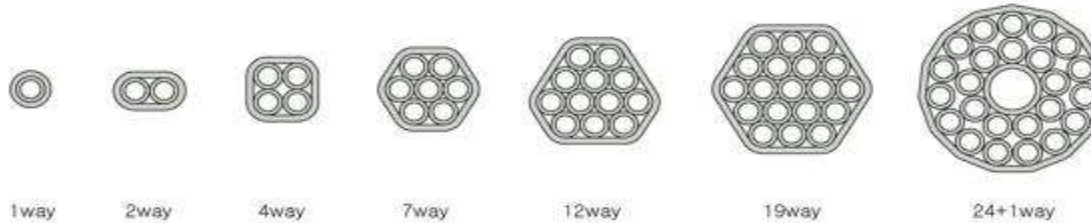
P/N	Description
HIHS5501	HDPE High Strength Microduct Tube Bundle Direct Install 1-ways 5/3.5mm
HIHS5502	HDPE High Strength Microduct Tube Bundle Direct Install 2-ways 5/3.5mm
HIHS5504	HDPE High Strength Microduct Tube Bundle Direct Install 4-ways 5/3.5mm
HIHS5507	HDPE High Strength Microduct Tube Bundle Direct Install 7-ways 5/3.5mm
HIHS5512	HDPE High Strength Microduct Tube Bundle Direct Install 12-ways 5/3.5mm
HIHS5524	HDPE High Strength Microduct Tube Bundle Direct Install 24-ways 5/3.5mm (+1x12/10mm)
HIHS8601	HDPE High Strength Microduct Tube Bundle Direct Install 1-ways 8/6mm
HIHS8602	HDPE High Strength Microduct Tube Bundle Direct Install 2-ways 8/6mm
HIHS8604	HDPE High Strength Microduct Tube Bundle Direct Install 4-ways 8/6mm
HIHS8607	HDPE High Strength Microduct Tube Bundle Direct Install 7-ways 8/6mm
HIHS8612	HDPE High Strength Microduct Tube Bundle Direct Install 12-ways 8/6mm
HIHS1801	HDPE High Strength Microduct Tube Bundle Direct Install 1-ways 10/8mm
HIHS1802	HDPE High Strength Microduct Tube Bundle Direct Install 2-ways 10/8mm
HIHS1804	HDPE High Strength Microduct Tube Bundle Direct Install 4-ways 10/8mm
HIHS1807	HDPE High Strength Microduct Tube Bundle Direct Install 7-ways 10/8mm
HIHS2101	HDPE High Strength Microduct Tube Bundle Direct Install 1-ways 12/10mm
HIHS2102	HDPE High Strength Microduct Tube Bundle Direct Install 2-ways 12/10mm
HIHS2104	HDPE High Strength Microduct Tube Bundle Direct Install 4-ways 12/10mm
HIHS2107	HDPE High Strength Microduct Tube Bundle Direct Install 7-ways 12/10mm

LSZH High Strength direct install Micro Duct

LSZH micro ducts, each with low friction performance are suitable for fiber blowing. The RISER micro duct is surrounded with a sheath of RISER material, giving excellent performance in a fire. The lightweight, metal-free, flexible RISER micro duct is intended for indoor installation.

UL 2024 Standard for Signalling, Optical Fiber and Communications Raceways and Cable Routing Assemblies Riser Listed Certificate

This certification is a requirement for indoor micro duct installations that are placed in the building riser raceway in the USA.



Features

- Wide range of number of inner tube from 1 way to 24+1 way
- Ribbed & Smooth Type
- Indoor use with flame retardant properties (IEC 60332 Part 1&3)
- Low smoke emissions
- Contains no Halogens.
- Low friction internal coating for maximum fiber blowing distance

Construction

INNER TUBES	Materials	LSZH Compound
	Color options	White or Ivory Colors
	Inner surface	Smooth with silicon 0.1mm
OUTER SHEATH	Materials	LSZH Compound
	Color	White or Ivory Colors
	Wall thickness(mm)	0.9mm

Specifications

5/3.5mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.28	0.28	0.1365	0.03	3	6	81
2Way	0.49	0.29	0.1365	0.056	5	10	152
4Way	0.49	0.49	0.1365	0.088	5	10	237
7Way	0.69	0.63	0.1365	0.129	7	14	347
12way	0.88	0.8	0.1482	0.195	9	18	524
19way	1.08	0.97	0.1482	0.28	11	22	754
24way	1.26	1.26	0.1482	0.377	13	25	1015
8/6mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)s	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.41	0.41	0.1365	0.043	4	8	116
2Way	0.41	0.72	0.1365	0.076	4	8	204
4Way	0.72	0.72	0.1365	0.047	7	14	126
7Way	0.96	1.04	0.1365	0.059	10	17	159

10/8mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.49	0.49	0.047	0.070	5	10	116
2Way	0.88	0.49	0.047	0.123	9	18	204
4Way	0.88	0.88	0.047	0.202	9	18	126
7Way	1.28	1.17	0.047	0.309	13	26	159

12/10mm	OD max inch	OD min inch	Sheath Thickness(Inch)	Weight (lbs)	Supported BR (In)	Unsupported BR (in)	Safe Working Pull Strength lbs
1Way	0.57	0.57	0.047	0.085	6	11	228
2Way	1.04	0.57	0.047	0.148	10	21	398
4Way	1.04	1.04	0.047	0.244	10	21	656
7Way	1.51	1.39	0.047	0.373	15.1	30.2	1006

Ordering information

P/N	Description
LIHS5501	LSZH High Strength Microduct Tube Bundle Direct Install 1-ways 5/3.5mm
LIHS5502	LSZH High Strength Microduct Tube Bundle Direct Install 2-ways 5/3.5mm
LIHS5504	LSZH High Strength Microduct Tube Bundle Direct Install 4-ways 5/3.5mm
LIHS5507	LSZH High Strength Microduct Tube Bundle Direct Install 7-ways 5/3.5mm
LIHS5512	LSZH High Strength Microduct Tube Bundle Direct Install 12-ways 5/3.5mm
LIHS5524	LSZH High Strength Microduct Tube Bundle Direct Install 24-ways 5/3.5mm (+1x12/10mm)
LIHS5501	LSZH High Strength Microduct Tube Bundle Direct Install 1-ways 5/3.5mm
LIHS8601	LSZH High Strength Microduct Tube Bundle Direct Install 1-ways 8/6mm
LIHS8602	LSZH High Strength Microduct Tube Bundle Direct Install 2-ways 8/6mm
LIHS8604	LSZH High Strength Microduct Tube Bundle Direct Install 4-ways 8/6mm
LIHS8607	LSZH High Strength Microduct Tube Bundle Direct Install 7-ways 8/6mm
LIHS8612	LSZH High Strength Microduct Tube Bundle Direct Install 12-ways 8/6mm
LIHS1801	LSZH High Strength Microduct Tube Bundle Direct Install 1-ways 10/8mm
LIHS1802	LSZH High Strength Microduct Tube Bundle Direct Install 2-ways 10/8mm
LIHS1804	LSZH High Strength Microduct Tube Bundle Direct Install 4-ways 10/8mm
LIHS1807	LSZH High Strength Microduct Tube Bundle Direct Install 7-ways 10/8mm
LIHS2101	LSZH High Strength Microduct Tube Bundle Direct Install 1-ways 12/10mm
LIHS2102	LSZH High Strength Microduct Tube Bundle Direct Install 2-ways 12/10mm
LIHS2104	LSZH High Strength Microduct Tube Bundle Direct Install 4-ways 12/10mm
LIHS2107	LSZH High Strength Microduct Tube Bundle Direct Install 7-ways 12/10mm

Coupler-End Cap Accessories

The coupler is used for quick and easy splicing connection of micro ducts. The body is transparent to allow a visual inspection of micro cable passing through during installation. The coupler is available for 12/10mm, 10/8mm, 8/6mm, 7/3.5mm and 5/3.5mm ducts and any other sizes according to customers' demands. Micro duct end-stop cap is used for permanent or temporarily sealing of unused micro ducts to prevent water and dust getting into the duct.

VOYGAR SYSTEMS GmbH has met and maintains the rigorous standards required to become a Certified ISO 9001, ISO 14001.

VOYGAR SYSTEMS GmbH Micro duct Assemblies has been rigorously tested by Telcordia Technologies and found to be compliant to Telcordia GR-3155-CORE.



Specifications

Material	Clear PC
Leakage Pressure	15 bar (218 psi)
Negative Pressure	-750 mmHg (10 Torr)
Proof Pressure	25 bar (363 psi)
Temperature Range	-10 ~60° C

Mechanical Performance

Burst Pressure	> 25.5kgf/cm ²
Water Immersion test	Pass (Water proof)
Hydraulic pressure test	Pass
(Resisting at 13.5kgf/cm ² for 2 minutes.)	

Gas Block Coupler

Gas block micro duct connectors normally are used between indoor and outdoor environments to prevent moisture that may result in condensed water getting into the ducts. After cable installation, the connector can be gas sealed by pushing the connector ends together. This version is intended for 7mm to 18mm thick walled ducts



Transition Coupler

The reducer enables the connection fast and easily between the different size micro ducts. Simply push the micro duct into the centre of the transition coupler. No tools are required.

Ordering Information

Straight Coupler

P/N	Description
DBCO0535	Straight Coupler 5/3.5mm
DBCO0735	Straight Coupler 7/3.5mm
DBCO0806	Straight Coupler 8/6mm
DBCO1008	Straight Coupler 10/8mm
DBCO1210	Straight Coupler 12/10mm
DBCO1410	Straight Coupler 14/10mm
DBCO1412	Straight Coupler 14/12mm
DBCO1612	Straight Coupler 16/12mm
DBCO1614	Straight Coupler 16/14mm
DBCO1814	Straight Coupler 18/14mm

End Cap

P/N	Description
DBEC05	End Cap 5mm
DBEC07	End Cap 7mm
DBEC08	End Cap 8mm
DBEC10	End Cap 10mm
DBEC12	End Cap 12mm
DBEC14	End Cap 14mm
DBEC16	End Cap 16mm
DBEC18	End Cap 18mm
DBEC05	End Cap 5mm
DBEC07	End Cap 7mm

Gas Block Coupler

P/N	Description
DBGB0745	Gas Block General Purpose 7mm(1-4.6mm Cable)
DBGB1008	Gas Block General Purpose 10mm(5-8mm Cable)
DBGB1206	Gas Block General Purpose 12mm(3-6mm Cable)
DBGB1208	Gas Block General Purpose 12mm(5-8mm Cable)
DBGB1210	Gas Block General Purpose 12mm(7-10mm Cable)
DBGB1406	Gas Block General Purpose 14mm(3-6mm Cable)
DBGB1410	Gas Block General Purpose 14mm(7-10mm Cable)
DBGB1412	Gas Block General Purpose 14mm(9-12mm Cable)
DBGB0745	Gas Block General Purpose 7mm(1-4.6mm Cable)
DBGB1008	Gas Block General Purpose 10mm(5-8mm Cable)

Transition Coupler

P/N	Description
TRCO0503	Transition Coupler 5/3.5-3/2.1
TRCO0705	Transition Coupler 7/3.5-5/3.5
TRCO1210	Transition Coupler 12/10-10/8
TRCO1412	Transition Coupler 14/10-12/10
TRCO1612	Transition Coupler 16/12-12/10

Micro Duct Closure

It is designed by modular method to change the length of closure and branch direction. It is possible to assemble or Dis-assemble without any special tools. Branch closure is available and maintenance can be done without cutting the ducts, and can be completed only by reopening upper modular part. Branch closure is designed to connect two micro ducts and to branch-off tubes without any interruption of connectivity.



Features

- Protecting Micro duct (When it sets up Air-blown fiber)
- 4, 6 ports are good for Micro duct branching
- Size and bend radius by British standard
- Double clamping structure for holding duct
- Using body and cable gasket for 100% sealing performance
- High strength plastic for impact and durability
- Easy maintenance and reassemble
- Instalment: Underground, Direct buried, Aerial

Specifications

Material	Clear PC
Leakage Pressure	15 bar (218 psi)
Negative Pressure	-750 mmHg (10 Torr)
Proof Pressure	25 bar
Temperature Range	-10 ~60° C
Dimensions (mm)	316(L) x 220(W) x 70(H)
Weight (kg (lb.))	2.0 (4.4)
Micro duct dia. (mm)	Ø9~45 (Ø0.4~1.8)
Inlet port	6
Water proof IP	68

Ordering Information

P/N	Description
DBCLP04	Micro Duct Closure(4 Branches)
DBCLP06	Micro Duct Closure(6 Branches)



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