



HARSH ENVIRONMENTS  
FO CONNECTIVITY



**EXPANDED BEAM**  
**MILITARY & INDUSTRIAL ASSEMBLIES**  
**2-4 CH, MIL-M83526/20&21**

## Expanded Beam Military & Industrial Assemblies - 2/4 Channels

### MIL-M83526/20&21

HMA (Hermaphroditic Multi-Channel Assembly) connectors the Expanded Beam are fiber optic connectors designed for harsh environments.

The PROCON connectors have the best optical performance on the market. This is achieved with Micropol's lens technology, state of the art production and alignment process.

The PROCON Junior expanded beam connectors—JR Plug, JR D-hole, and JR Square—are the only PROCON Junior-Size Connectors Compliant with MIL-M83526/20 & MIL-M83526/21 junior-sized connectors in the world offering 1–4 fiber configurations, with approved beam sizes in accordance with MIL-M83526/20(Plug) and MIL-M83526/21(Receptacle) standards.



### Features

- Insertion loss <1,5 dB
- Temperature range 57°C – +85°C
- Hermaphroditic interconnection
- Rugged connector design
- Keyed boot for blind mating
- No adaptors needed
- Easy clean, no special tools

### Compatibility

- FIBRECO Junior
- QPC Q - Mini
- TE PRO-BEAM - Junior
- Amphenol TacBeam
- Stratos HMA

### Mechanical and Environmental Specifications

Coupling type	Hermaphroditic
Material	Hard anodized aluminum (MIL-A-8625 TYPE III CLASS 2)
Durability	3000 mating cycles (MIL-DTL-83526)
Free fall	500 falls from 1,2 meters height (IEC 68-2-32-P II)
Vibration	5-500Hz, 0,75mm amplitude at 10G
Shaking	390 m/S numbers of shakes 3x4000

Shock pulse length	11ms, half sine at 35g, axis: 3 (x, y, z)
Operating temperature	-57°C to +85°C
Water immersion	IP67
Air pressure	<25kPa -55°C during 4h
Corrosion resistance	500h salt spray
Flammability	DOD-STD-1678, method 5010
Compliant	ROHS & REACH

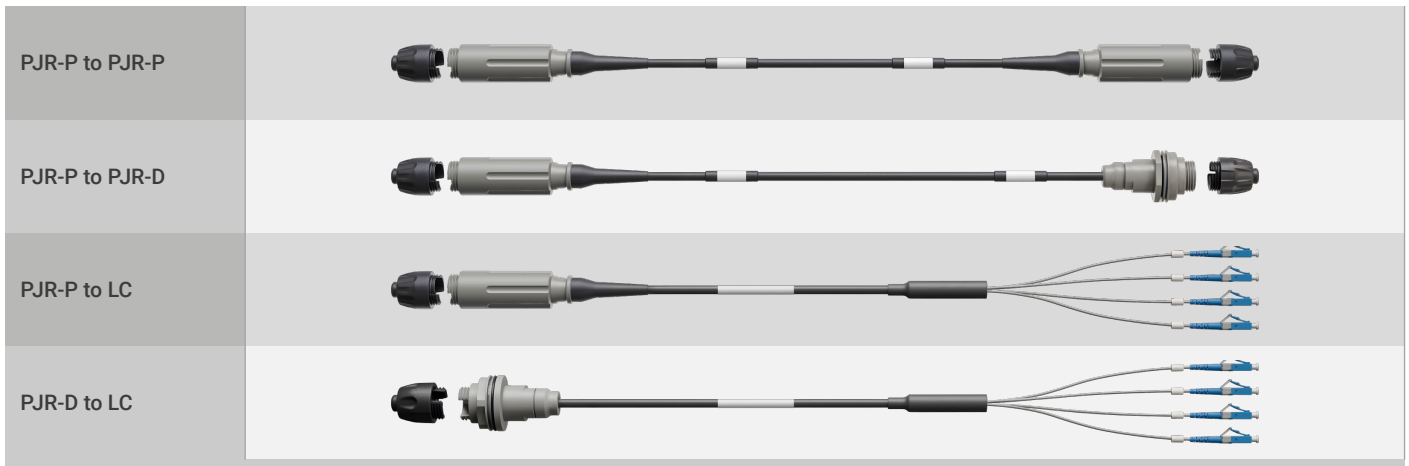
### Channel Options on Connectors



2 Channels

4 Channels

### Patchcord and Hybrid Assemblies



Order Codes								
TAC-ASSY-	PC-	04CH-	A1-	<b>PJR-P</b>	/	<b>PJR-P</b>	-XXXM	Patch Assembly
		02CH	A1	<b>PJR-P</b>		<b>PJR-P</b>		
		04CH	M3	<b>PJR-D</b>		<b>PJR-D</b>		
				<b>PJR-S</b>		<b>PJR-S</b>		
						<b>LC-DX</b>		
						<b>LC-SX</b>		

### On Reel Patchcord Assemblies



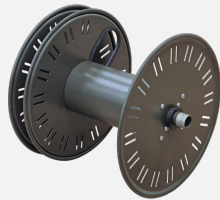
Order Codes								
TAC-ASSY-	SCR1-	04CH-	A1-	<b>PJR-P</b>	/	<b>PJR-P</b>	-XXXM	On Reel Assembly
	SCR1	02CH	A1	<b>PJR-P</b>		<b>PJR-P</b>		
	SCR2	04CH	M3	<b>PJR-D</b>		<b>PJR-D</b>		
	SCR3			<b>PJR-S</b>		<b>PJR-S</b>		
				<b>LC-DX</b>		<b>LC-DX</b>		
				<b>LC-SX</b>		<b>LC-SX</b>		

**Harsh Environment On Reel Cable Assemblies**

MT02698  
SCR1-250 Handheld Cable Reel  
(With Stand)  
Suitable for 5.6mm Diameter  
cables up to 250 meters



MT19156  
SCR2-500 Universal Cable Reel  
Suitable for 5.6mm Diameter  
cables up to 500 meters



MT19418  
SCR3-MP-HT-385 Handheld Cable  
Reel (With Stand)  
Suitable for 5.6mm Diameter  
cables up to 500 meters



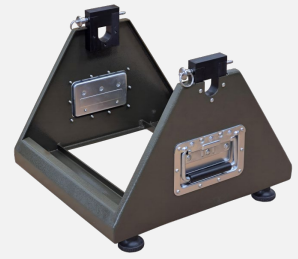
MT19416-1  
SSF2-500 Cable Reeling/Unreeling  
Stand Frame



MT19415  
SBF1-500 Backpack Reel Carrier  
Frame,  
Suitable for SCR2-500 Cable Reels



MT19416  
SSF1-500 Cable Reeling/Unreeling  
Stand Frame  
Suitable for SCR2-500 Cable Reels



MT19417  
SCR2 Cable Reel Winding Handle  
Suitable for SCR2-500 Cable Reels



## Portable Field Deployable Fiber Optic Cable Reel

This tactical portable cable reel is made of metal and has an embedded stand, a crank and a brake screw. The portable cable reel is suitable for fiber optic and copper cables and it is designed for field, military and tactical applications, where quick cable deployment is essential.

### Features

- Made of Steel that is both light and strong.
- Stackable Frame Design
- Double flange for easy access to the inner end
- Foldable Crank handle
- Central brake knob to prevent unwanted rotation
- Integrated carrying and unwinding stand
- Stand protection feet to prevent damage from the surface

### Reel Capacity

Cable Capacity	Cable Diameter
200 m	5.6 mm
300 m	4.8 mm

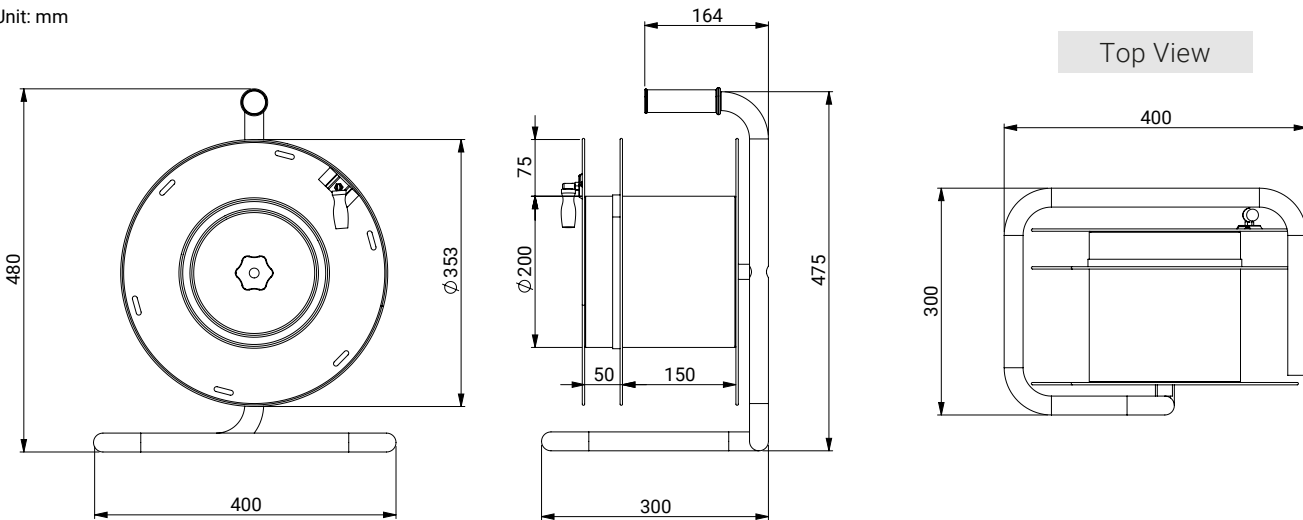
### Reel Specifications

Model Number	Reel Weight
MT02698	12 kg



### Dimensions

Unit: mm



## SCR2-500 Cable Reel

SCR2-500 Cable Reel is a professional reel system developed specifically for military and industrial applications, enabling efficient transport and rapid field deployment of fiber optic cables.

Its lightweight structure and ergonomic design ensure easy handling and improved operational efficiency when using reel-based cable systems. The robust construction provides reliable performance under harsh field conditions.

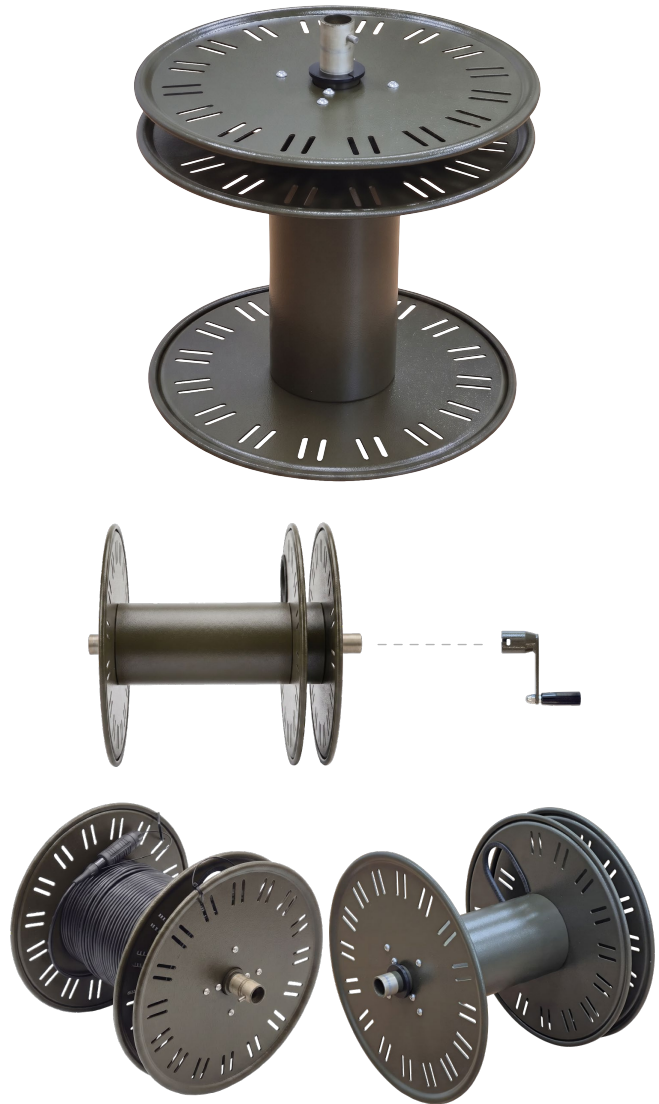
The system is suitable for use in various applications, including mobile emergency telecommunication stations, broadcast operations, mining activities, and exploration missions.

### Features

- Ergonomic and lightweight design (approx. 3.2 kg)
- Up to 500 m cable capacity
- Suitable for easy winding and unwinding operations
- Aluminum body with anti-corrosion coating
- Compatible with RCH-01 reel crank handle

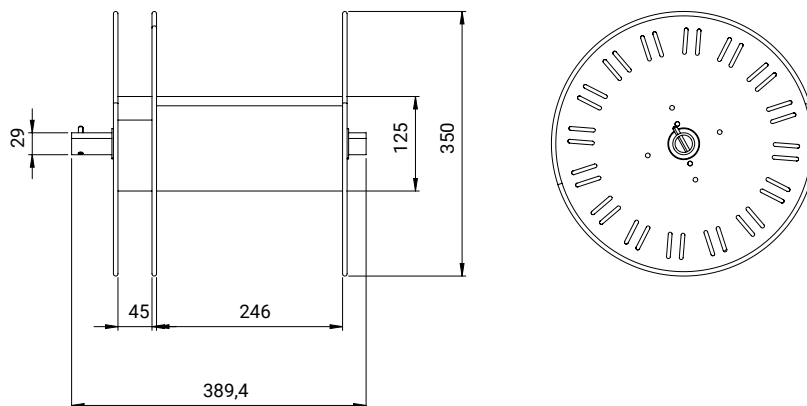
### Ordering Codes

Item Code	Description
MT19156	SCR2-500 Universal Cable Reel



### Dimensions

Unit: mm



## SSF1-500 Cable Reeling/Unreeling Stand Frames

SSF1-500 Cable Reeling/Unreeling Stand Frames are professional hand-carried reel platform systems developed specifically for military and industrial applications, enabling efficient transport and rapid field deployment of fiber optic cables.

Its lightweight structure and ergonomic design ensure easy handling and improved operational efficiency when carrying reel-based cable systems. The robust construction provides reliable performance under harsh field conditions.

The system is suitable for use in various applications, including mobile emergency telecommunication stations, broadcast operations, mining activities, and exploration missions.



### Features

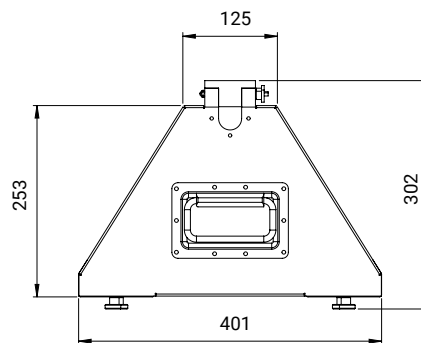
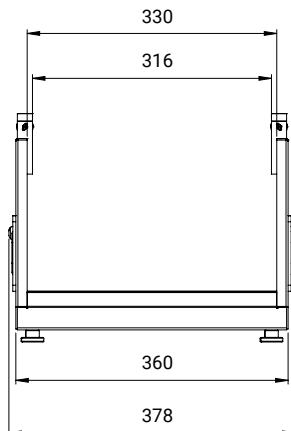
- Used with SAMM SCR2 Reels
- Ergonomic and lightweight design. 4.0 kg (approx.)
- Adjustable carrying straps
- Easy setup and rewinding (take-up) operation
- Stable reel stand
- Aluminum body with anti-corrosion coating
- Easy reel installation and removal
- Hand-crank winding and unwinding system

### Ordering Codes

Item Code	Description
MT19416	SSF1-500 Cable Reeling/Unreeling Stand Frame

### Dimensions

Unit: mm



## SSF2-500 Cable Reeling/Unreeling Stand Frames

SSF2-500 Cable Reeling/Unreeling Stand Frames are professional hand-carried reel platform systems developed specifically for military and industrial applications, enabling efficient transport and rapid field deployment of fiber optic cables.

Its lightweight structure and ergonomic design ensure easy handling and improved operational efficiency when carrying reel-based cable systems. The robust construction provides reliable performance under harsh field conditions.

The system is suitable for use in various applications, including mobile emergency telecommunication stations, broadcast operations, mining activities, and exploration missions.

### Features

- Ergonomic and lightweight design. 14.0 kg (approx.)
- Adjustable carrying straps
- Easy setup and rewinding (take-up) operation
- Stable reel stand
- Aluminum body with anti-corrosion coating
- Easy reel installation and removal
- Hand-crank winding and unwinding system

### Ordering Codes

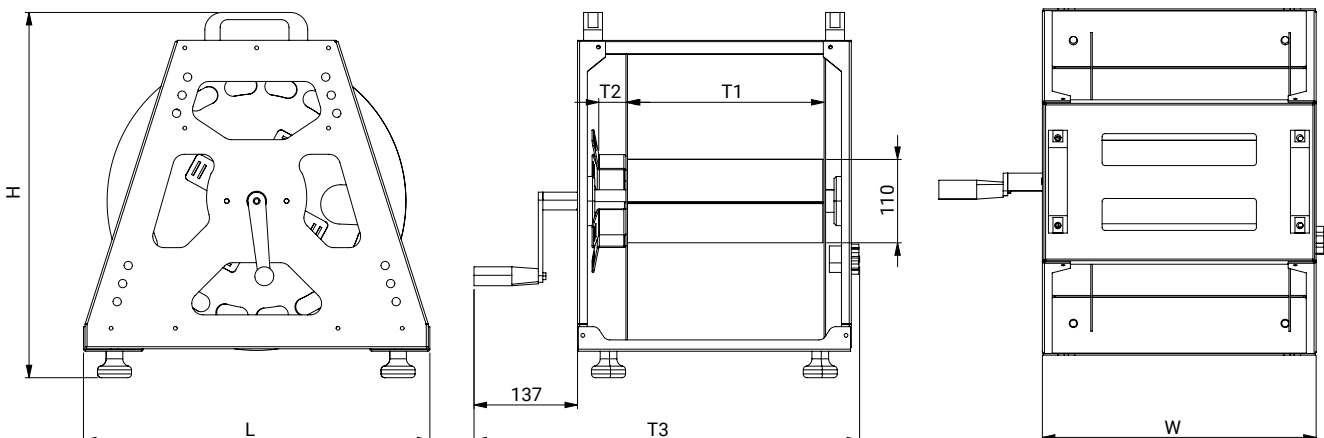
Item Code	Description
MT19416-1	SSF2-500 Cable Reeling/Unreeling Stand Frame



### Dimensions

Unit: mm

Top View



## SBPF-500 Backpack Reel Carrier Frames

SBPF-500 Backpack Reel Carrier Frames are professional backpack-type reel carrying systems developed specifically for military and industrial applications, enabling efficient transport and rapid field deployment of fiber optic cables.

Its lightweight structure and ergonomic design ensure easy handling and improved operational efficiency when carrying reel-based cable systems. The robust construction provides reliable performance under harsh field conditions.

The system is suitable for use in various applications, including mobile emergency telecommunication stations, broadcast operations, mining activities, and exploration missions.



### Features

- Ergonomic and lightweight design. 4.0 kg (approx.)
- Adjustable carrying straps
- Easy setup and rewinding (take-up) operation
- Stable reel stand
- Aluminum body with anti-corrosion coating
- Easy reel installation and removal
- Hand-crank winding and unwinding system

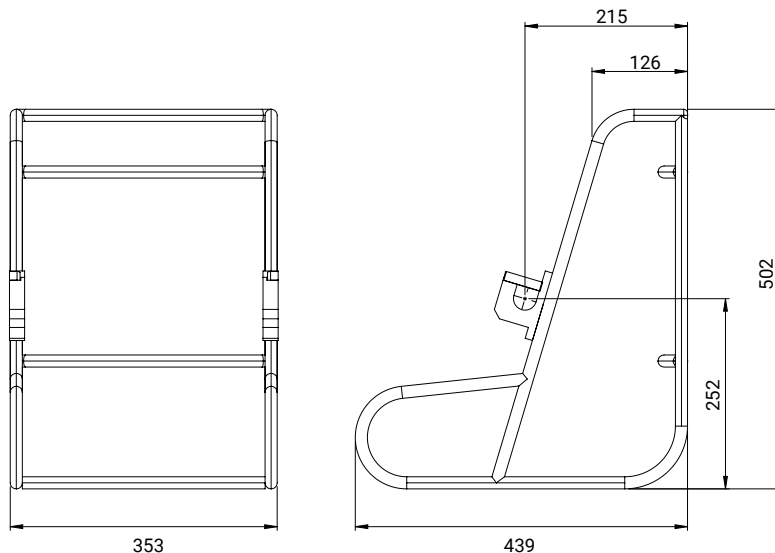
### Ordering Codes

Item Code	Description
MT19415	SBF1-500 Backpack Reel Carrier Frame



### Dimensions

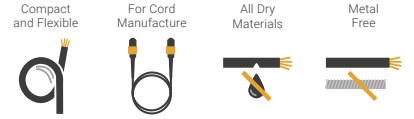
Unit: mm



## Ruggedised PUR Jacket Distribution Cable | 2-4 Fibers

Design Type **UT-WT9Q(ZN-AY)11Y**

Standards: IEC 60794-1 / IEC 60794-3 / IEC 60793-1

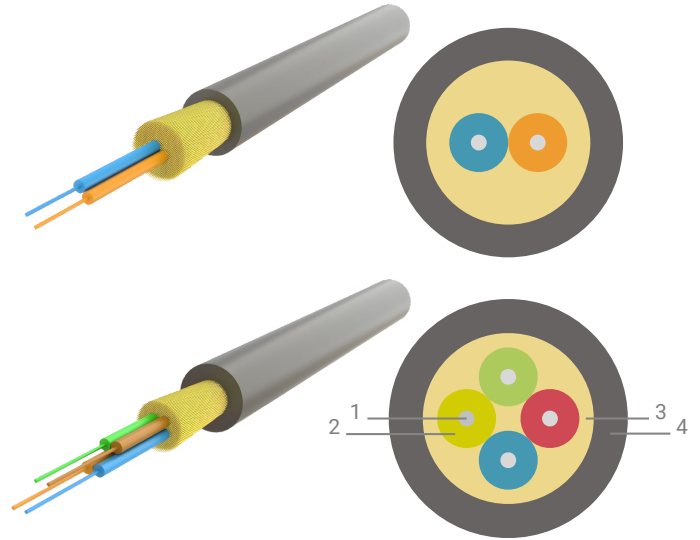


### Cable Construction

1	Fiber	Single-mode or Multi-mode 245 μ
2	Tight Buffer Tube	900μ TPE
3	Strength Member	Water Blocking Swellable Aramid yarn
4	Outer Jacket	TPU

### Properties

Universal indoor/outdoor tactical cable for harsh environments
Suitable for military tactical use
High tensile strength with crush resistance and cut-resistant
Superior mechanical and thermal stability
Lightweight, strong, flexible; easy deployment and reuse
Dry design; direct connector assembly; easy stripping; good coiling
Resistant to chemicals and UV; metal-free, halogen-free, abrasion



### Mechanical Properties

Test	Test Standard	Specified Value
Tensile Force	IEC 60794-1-21-E1	1800 N (Installation), 600 N (In Service)
Crush Resistance	IEC 60794-1-21-E3	18000 N / 10 cm
Impact	IEC 60794-1-21-E4	Wp=2.21J, R:30cm, 200 impacts
Repeated Bending	IEC 60794-1-21-E6	R= 50mm, 20000 cycles
Torsion	IEC 60794-1-21-E7	L:1 m, ±1440°, 1000 cycles
Cable Bending	IEC 60794-1-21-E11A	R= 25mm, 6 turns, 10 cycles

### Environmental Properties

Property	Test Standard	Result / Value
Temperature Range	IEC 60794-1-22-F12	-46 to +85 °C (installation), -46 to +85 °C (in service), -57 to +85 °C, (in storage)
2011/65/EC (RoHS)	-	compliant
(EU) No 305/2011 (CPR)	EN 50575	Eca

### Ordering Codes

Order Code	Fiber Count	Sub Unit Count	Tube Diameter (mm) nom.	Cable Diameter (mm) nom.	Cable Weight (kg) nom.
002F-UT-WT9Q(ZN-AY)11Y-2U090-1x2-...-Eca-1.8kN	2	2	0.9	5.6	25
004F-UT-WT9Q(ZN-AY)11Y-4U090-1x4-...-Eca-1.8kN	4	4	0.9	5.8	25

\* Sample Code: 004F-UT-WT9Q(ZN-AY)11Y-4U090-1x4-A1-BK-Eca-1.8kN

### Available Fiber Types

Fiber Type	Compliance Standards	Fiber Type	Compliance Standards
SM 9/125-A1	IEC 60793-2-50 Type B6_a1 + ITU G.657.A1	MM 50/125-OM3	IEC 60793-2-10 A1a2 + ITU G.651 BendOptimized
SM 9/125-A2	IEC 60793-2-50 Type B6_a2 + ITU G.657.A2	MM 50/125-OM4	IEC 60793-2-10 A1a3 + ITU G.651 BendOptimized

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SAMM Teknoloji İletişim San. ve Tic. A.Ş.



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