

COMPONENT SPECIFICATIONS

2-12 SSF™ Singlemode OS2 ACS 9.0mm Jacketed Armored PE Distribution Cable



Type OS2. Product Type G.657.A2, G657.B2, and G.652 .D

Cleerline SSF™ advanced optical glass fibers are much stronger, safer, and faster terminating than typical fibers. This distribution style cable provides the ultimate in durability and bend in a very compact size. SSF™ fibers are always protected at the glass level as a result of their integral polymeric coating, increasing both bend and tensile strength to unprecedented levels. Cleerline SSF™ fibers are compatible with all common connector systems on the market for standard 50/125 multimode and 9/125 Singlemode fibers.

Features And Benefits:

- * High mechanical strength and superior fatigue & durability
- * Integral coating eliminates stripping, provides glass protection
- * Bend longevity for 10,000X longer life time than normal fibers
- * Increased safety factor due to the incredible bend insensitivity
- * Glass fiber remains protected at all times from the elements
- * Simplified termination process designed for ease of use
- * Ultra low Attenuation loss on tight bend radius

CONSTRUCTION

FIBER

Fiber Count = 2-12
9/125 Singlemode OS2
250um "Soft Peel" S-Type coating
Color Coding per TIA/EIA 568C

JACKET

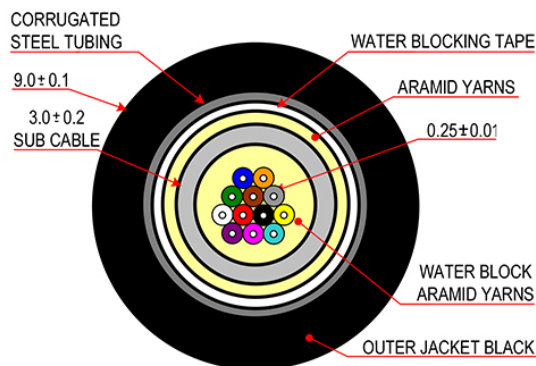
PE – UV, moisture resistant outer jacket
Jacket diameter 9.0mm
Black jacket
Sequential footage markings
Aramid Yarns = Kevlar + Water Block

PHYSICAL DATA

Storage Temperature Range	= -30°C to +60°C
Operating Temperature Range	= -20°C to +75°C
Max Tensile Load for Installation	= 2000 (450) N (lbf)
Max Tensile Long Load term	= 600 (135) N (lbf)
Allowable Bend Radius	= Dynamic 20D
Cable Package	= Spool
Crush Resistance (N/100mm)	= 3000 N

Typical Cross Section

Part: 12ACS9125OS2PE



PRODUCT DETAIL

Cleerline SSF™ Corrugated Armored Steel Distribution cable consists of a PE overall jacket with 2-12 fibers and water blocking kevlar yarns. The core is protected by a corrugated armored steel tube that offers easy installation and high crush resistance. The cable jacketing is UV resistant and is designed to withstand rugged environments including direct burial, is rodent resistant, and withstands abuse while protecting the encased fibers. This product offers superior bend performance beyond EIA SP-2840A, superior crush resistance, and superior pull.

SSF™ complies or exceeds the ITU-T recommendations G.657 A2, G657 B2 and G.652 D, the IEC International Standard 60793-2-50 type B.1.3 and B.6.A&B Optical Fiber

CABLE CHARACTERISTICS

Fiber Count	2 / 6 / 12
Cable Outside Diameter, Nom.	9.0mm
Sub Unit	3.0mm Loose Tube
Construction	Loose Tube, Corrugated Steel Tube
Water Mitigation	Kevlar + Water Block
Weight	150 kg/km

Fiber Optics Characteristics:

SMF	Wavelength (nm)		1260	1310	1383	1550	1625
	Max. Attenuations Loss (dB/km)		< 0.45	< 0.40	< 0.35	< 0.3(Typ. 0.25)	< 0.35
	Macro Bending Loss	Bending Diameters		15mm	10mm	7.5mm	
		Bending Turns		10	1	1	
		Max. Bending Loss@1550nm(dB)		0.03	0.1	0.5	
		Max. Bending Loss@1625nm(dB)		0.1	0.2	1.0	

Fiber/Cable Performance Summary:

Type	Item	Standards Compliance & Condition	SM(Δ Loss)
Fiber	High Humidity Aging	IEC 60793-1-50, 85°C/85%RH 30days	<0.05dB/km
	Thermal Aging	IEC 60793-1-51, 85°C 30days	<0.05dB/km
	Temperature Cycling	IEC 60793-1-52, -10°C~85°C, 21 cycles	<0.05dB/km
	Water soak	IEC 60793-1-53, 23°C/soak into water, 30days	<0.05dB/km
	Hydrogen Aging	IEC 60793-2-50, 23°C/ Hydrogen loading 0.01 atm	<0.40dB/km
Cable	Tensile Test	TIA/EIA-455-33A, 100kg tensile loading, for 10 minutes	<0.20dB/km
	Repeat Bending	TIA/EIA-455-104A, Bending Diameter:60mm, 25 times	<0.20dB/km
	Impact Test	TIA/EIA-455-25B, 1kgf for 20 times	<0.20dB/km
	Twist Test	TIA/EIA-455-85A, 1 m for 10 times	<0.20dB/km
	Crush Test	TIA/EIA-455-41A, 1kgf/mm for 10 minutes	<0.20dB/km
	Water Penetration	TIA/EIA-455-82B, 1m static water pressure, 3m sample for 4 hours, No water leaked.	
	Temperature Cycling	TIA/EIA-455-3A, -40°C~70°C	<0.20dB/km
	Flammability	IEEE 383-1974, Flame propagation < 1.8 meters	

PART NUMBERS – OM3 FIBERS SSF™

Fiber Count	Part Number
2	2ACS9125OS2PE
6	6ACS9125OS2PE
12	12ACS9125OS2PE