

# COMPONENT SPECIFICATIONS

## 2-12 SSF™ Multimode OM3 ACS 9.0mm Jacketed Armored PE Distribution Cable



Type OM3, PE Product Type

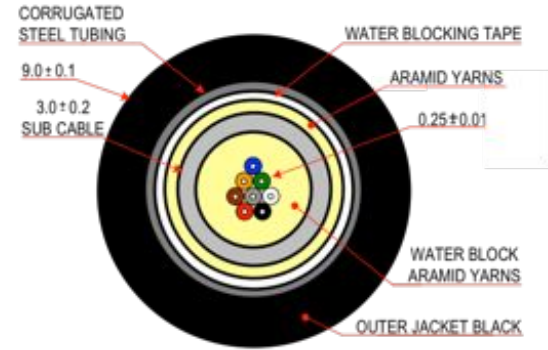
Cleerline SSF™ advanced optical glass fibers are much stronger, safer, and faster terminating than typical fibers. This distribution style cable provides the ultimate in durability and bend in a very compact size. SSF™ fibers are always protected at the glass level as a result of their integral polymeric 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

## Typical Cross Section

Part: 12ACSS50125OM3PE



## CONSTRUCTION

### FIBER

Fiber Count = 2-12  
50/125 Multimode OM3  
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

## 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™ conforms to the requirement of IEC 60793-2-10 A1a.3, ISO/IEC 11801 & ITU-T G.651.1. 850 nm Laser-Optimized 50 µm core multimode fiber for 10 Gb/s & above applications

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:**

MMF	Wavelength (nm)		850 ± 20	1300 ± 20
	Max. Attenuations Loss (dB/km)		< 3.5 (Typ. 3.0)	< 1.0 (Typ. 0.8)
	Macro Bending Loss	Radius	15mm	
		Bending Turns	2	
		Max. Bending Loss@850nm(dB)	1	
Max. Bending Loss@1300nm(dB)		1		

### **Fiber/Cable Performance Summary:**

Type	Item	Standards Compliance & Condition	MM(ΔLoss)
Fiber	High Humidity Aging	IEC 60793-1-50, 85°C/85%RH 30days	<0.2dB/km
	Thermal Aging	IEC 60793-1-51, 85°C 30days	<0.2dB/km
	Temperature Cycling	IEC 60793-1-52, -10°C~85°C, 21 cycles	<0.2dB/km
	Water soak	IEC 60793-1-53, 23°C/soak into water, 30days	<0.2dB/km
	Hydrogen Aging	IEC 60793-2-50, 23°C/ Hydrogen loading 0.01 atm	NA
Cable	Cyclic Flexing Test	TIA/EIA-455-104A, Sheave diameter: 20D (D=cable diameter) Flexing angel: ±90° /cycles Flexing speed: 30 cycles/min No. of flexing cycles: 2000 cycles Load: 5 kg	<0.3dB/km
	Impact Test	TIA/EIA-455-25B, No. of flexing cycles: 1500 cycles Flexing speed: 30±1 cycles/min.	<0.3dB/km
	Compressive Loading Resistance Test	TIA/EIA-455-41A, 220kgf/mm for 10 minutes	<0.3dB/km

#### **PART NUMBERS – OM3 FIBERS SSF™**

Fiber Count	Part Number
2	2ACS50125OM3PE
6	6ACS50125OM3PE
12	12ACS50125OM3PE