



Ruggedized Simplex

## INTRODUCTION

CarlisleIT introduces the LITEflight® EP (Enhanced Performance) family of aerospace grade fiber optic cables. The new LITEflight® EP series provides all the performance and benefits of its predecessor necessary to function in the harsh environments of your aerospace and military applications but with lower loss, tighter bend radius, improved thermal stability and better handling during termination and installation. Unlike tight structure cables, the LITEflight® EP semi-loose structured cables are compatible with all commercially available fiber optic termini and connectors. LITEflight® EP is available in multiple sizes, configurations and temperature ratings to 260°C in order to meet the most demanding application requirements.

LITEflight® EP Characteristics	NFO(EP)-125-1	NFO(EP)-125-3M4
	Typical Value	Typical Value
<b>Outside Diameter</b>	1.8 mm	1.8 mm
<b>Cable Weight</b>	4.6 kg/km	4.6 kg/km
<b>Minimum Bend Radius</b>		
Short Term (Installation)	6.0 mm	6.0 mm
Long Term (Operation / Storage)	9.0 mm	9.0 mm
<b>Attenuation</b>		
850 nm	2.8 dB/km	2.9 dB/km
1300 nm	0.6 dB/km	0.8 dB/km
<b>Temperature Cycling</b>	0.10 dBΔ/30 m	0.10 dBΔ/10 m
<b>Thermal Shock</b>	0.10 dBΔ/30 m	0.10 dBΔ/10 m
<b>Buffer Push-In Force</b>	2.0 N/45 mm	2.0 N/45 mm
<b>Cable Kink Resistance</b>		
6.3 mm Loop Diameter	0.18 dBΔ	0.19 dBΔ

All testing performed in accordance with EN-3745 or ARINC 802 Methods.

## STANDARDS CONFIGURATIONS OVERVIEW

### Simplex

Actual Size / 1.8mm ●



### Ruggedized Simplex

Actual Size / 2.74mm ●



### Ruggedized Duplex

Actual Size / 4.95mm ●



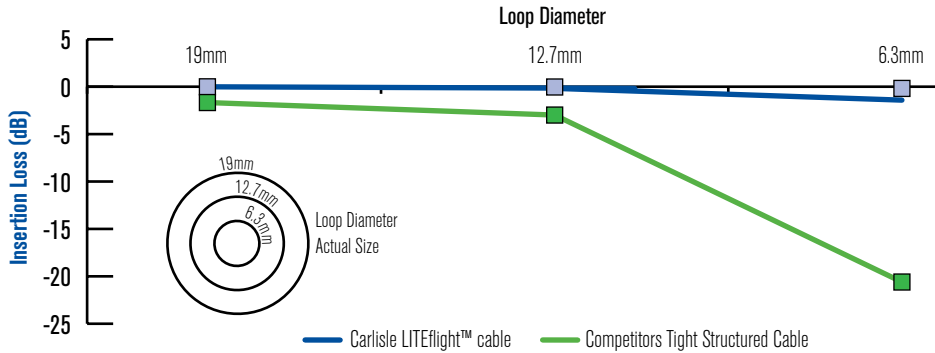
### Ruggedized Quad

Actual Size / 5.72mm ●

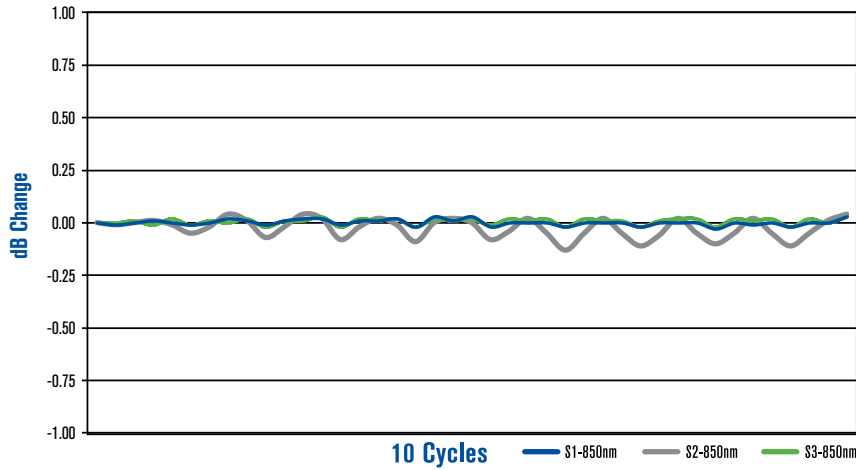


## PERFORMANCE EXAMPLES

### Cable Kink Performance Loss (per EN3745-509)



### Temperature Cycling / NFO(EP)-125-3M4 / 10m Cable Sample; -65C to +125C



## PART NUMBER GUIDE

Base Part Number

**NFO(EP) - X - Y - Z** — Applicable only for Ruggedized Configurations

X	Temperature Rating	Y	Fiber Type	Z	Ruggedized Configurations
125	125C Rated Acrylate	0	900 um Buffered 62.5/125 Multimode	1	Double Jacket 2.74mm
150	150C Rated Acrylate	1	1.8mm Jacketed 62.5/125 Multimode	2	Duplex Double Jacket 4.95mm
260	260C Rated Polyimide	2	900um Buffered 50/125 Multimode OM2*	4	Quad Double Jacket 5.72mm
		2M3	900um Buffered 50/125 Multimode OM3*		
		2M4	900um Buffered 50/125 Multimode OM4*		
		3	1.8mm Jacketed 50/125 Multimode OM2*		
		3M3	1.8mm Jacketed 50/125 Multimode OM3*		
		3M4	1.8mm Jacketed 50/125 Multimode OM4*		
		4	900um Buffered Singlemode		
		4B	900um Buffered Singlemode Bend-Insensitive		
		5	1.8mm Jacketed Singlemode		
		5B	1.8mm Jacketed Singlemode Bend-Insensitive		