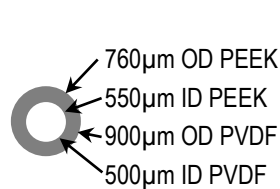
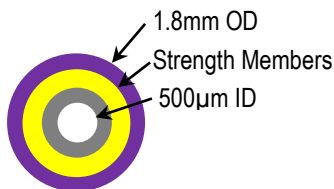


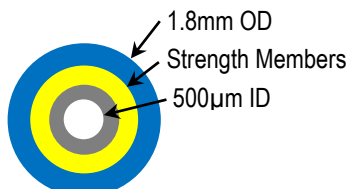
Low Outgassing Cabling



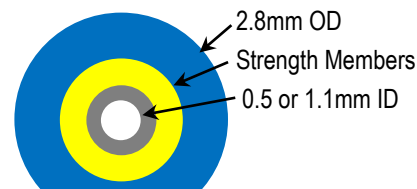
**900µm OD
PVDF or PEEK**



**1.8mm OD
PFA**



**2mm OD
PVDF**



**3mm OD
PVDF**

Tubing Overview

	Advantage	Disadvantage
900µm OD PVDF	Flexible, Inexpensive and 12 Color Options	Low Melting Temperature and Pull Strength Shrinkage Varies from Lot to Lot
900µm OD PEEK	Large Temperature Range Very Low Shrinkage	Expensive Stiffness can be a challenge to route in boxes
1.8mm OD PFA (Coastal Preferred Option)	Large Temperature Range , Flexible Very Low Shrinkage	Expensive
2mm OD PVDF	Flexible, Inexpensive and 12 Color Options	Low Melting Temperature and Pull Strength Shrinkage Varies from Lot to Lot
3mm OD PVDF	Strong, Inexpensive and 12 Color Options Stiffness limits fiber bending in high power operations	Low Melting Temperature and Pull Strength Shrinkage Varies from Lot to Lot

Tubing Properties

	900µm OD PVDF	PEEK	1.8mm PFA (Coastal Preferred Option)	2mm OD PVDF	3mm OD PVDF
Jackets (UL94 V-0)	PVDF	PEEK	PFA	PVDF	PVDF
Strength Members	None	None	Aramid and PTFE Coated Fiberglass	Aramid	Aramid
Color (Customs Available)	Natural, Blue	Natural	Violet	Violet, Blue	Violet, Blue
Minimum Bend Radius (Installation)	10mm	15mm	25mm	40mm	70mm
Minimum Bend Radius (Operating)	10mm	15mm	15mm	20mm	35mm
Relative Stiffness (Load to bend 100mm of tubing to a 25mm radius)	0 Newton (0 lbs)	0.2 Newton (0.04 lbs)	0.15 Newton (0.03 lbs)	0.25 Newton (0.05 lbs)	1 Newton (0.22 lbs)
Operating Temperature (Dependent on Fiber Used)	-40 - 85°C	-55 - 200°C	-200 - 200°C	-40 - 85°C	-40 - 85°C
Shrinkage (Typical) (On second set of 10 cycles from -40 to 85°C)	0.8% (Variable by Lot)	≤0.02%	≤0.05%	0.8% (Variable by Lot)	0.8% (Variable by Lot)
Maximum Load (Installation)	5 Newton (1.1 lbs)	15 Newton (3.4 lbs)	80 Newton (18 lbs)	88 Newton (20 lbs)	290 Newton (65 lbs)
Maximum Load (Operating)	2.5 Newton (0.56 lbs)	4.5 Newton (1 lbs)	40 Newton (9 lbs)	44 Newton (10 lbs)	145 Newton (32.5 lbs)
Cable Weight	0.52 kg / km (0.35 lbs / 1000ft)	≈0.2kg / km (0.13 lbs / 1000ft)	4kg / km (2.6 lbs / 1000ft)	2.54kg / km (1.7 lbs / 1000ft)	6.3kg / km (4.2 lbs / 1000ft)
Maximum Length (Min buy for longer lengths)	10 Meters	10 Meters	20 Meters	10 Meters	100 Meters

Values are given for design consideration. Performance is not guaranteed and therefore should be verified by testing completed cable assemblies