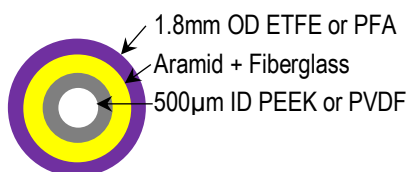
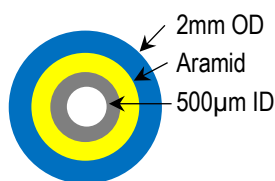


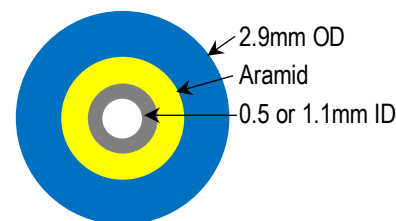
**PEEK or PVDF**



**ETFE / PEEK or PFA / PVDF**



**PVDF / PVDF**



**PVDF / PVDF**

### Tubing Overview

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

### Tubing Properties

	900µm PEEK	900µm PVDF	1.8mm ETFE / PEEK (Recommended for Space)	1.8mm PFA / PVDF	2mm PVDF / PVDF	2.9mm PVDF / PVDF
<b>Jackets (UL94 V-0)</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Strength Members</b>	None	None	Aramid and PTFE Coated Fiberglass	Aramid and PTFE Coated Fiberglass	Aramid	Aramid
<b>Color (Customs Available)</b>	Natural	Natural, Blue	Violet	Violet	Violet, Blue	Violet, Blue
<b>Minimum Bend Radius (With Tension)</b>	18mm	18mm	36mm	36mm	40mm	60mm
<b>Minimum Bend Radius (No Tension)</b>	9mm	9mm	18mm	18mm	20mm	30mm
<b>Relative Stiffness (100mm tubing to 25mm radius)</b>	0.2 Newton (0.04 lbs)	0 Newton (0 lbs)	0.22 Newton (0.05 lbs)	0.15 Newton (0.03 lbs)	0.25 Newton (0.05 lbs)	1 Newton (0.22 lbs)
<b>Operating Temperature (Dependent on fiber used)</b>	-55 - 200°C Optically to -40°	-40 - 85°C Optically to -10°	-55 - 165°C Optically to -40°	-55 - 125°C Optically to -10°	-40 - 85°C Optically to -10°	-40 - 85°C Optically to -10°
<b>Shrinkage (Typical) (10 - 20X from -40 to 85°C)</b>	≈0.02%	≈1%	≈0.03%	≈0.05%	≈1%	≈1%
<b>Maximum Load (Short Term)</b>	15 Newton (3.4 lbs)	5 Newton (1.1 lbs)	80 Newton (18 lbs)	80 Newton (18 lbs)	88 Newton (20 lbs)	290 Newton (65 lbs)
<b>Maximum Load (Long Term)</b>	4.5 Newton (1 lbs)	2.5 Newton (0.0 lbs)	40 Newton (9 lbs)	40 Newton (9 lbs)	44 Newton (10 lbs)	145 Newton (32.5 lbs)
<b>Cable Weight</b>	≈0.2kg / km (0.13 lbs / 1000ft)	0.52 kg / km (0.35 lbs / 1000ft)	3.5kg / km (2.35 lbs / 1000ft)	4kg / km (2.7 lbs / 1000ft)	3.8kg / km (2.55 lbs / 1000ft)	6.3kg / km (4.2 lbs / 1000ft)
<b>Maximum Length</b>	10 Meters	10 Meters	20 Meters	20 Meters	10 Meters	100 Meters

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

Coastal Connections custom engineers cables to the tightest specifications in the industry.