

**Standard** - A PVC jacket over a flat steel ribbon monocoil is the standard cable jacket, which is an excellent combination for general purpose usage.

**Alternatives** - Interlocking Stainless Steel, Option C1, is the most popular alternative jacket, providing the highest temperature capability and maximum crush resistance with good flexibility.

**Bending Radius** - Fiber optic cables sometimes are routed thru and around machinery. A rule of thumb when specifying jackets:

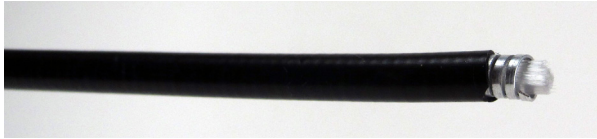
- For Option C1, minimum bend radius is 4x the jacket OD
- Flexible jackets like C3, C8, C11, minimum bend radius could be as small as 2x OD

**Vacuum** - For vacuum & cryogenic applications, low outgassing materials are required. SS Interlock, PTFE and polyolefin are good choices.

CODE	MATERIALS	TEMP RANGE	FEATURES
none	PVC over Steel Monocoil	+10 to +105 C	Good general purpose, moderate crush resistance, moderate tensile strength
C1	Interlocking Stainless Steel	-150 to +500 C	High strength & temperature range, good flexibility
C2	Silicone-Fiberglass over Steel Monocoil	-75 to +220 C	Flexible and durable, moderate crush resistance, good tensile strength, radiation resistant.
C3	Silicone-Fiberglass	-75 to +220 C	Very flexible and durable, light crush resistance, good tensile strength, excellent flex life and resistance to fatigue, radiation resistant.
C5	PVC over Interlocking Stainless Steel	+10 to +105 C	Excellent pliability, does not stretch, resists lateral pressure, twisting & pulling, withstands repeated bending.
C6	Convuluted PTFE	-150 to +260 C	Good for vacuum applications, moderate crush resistance, very flexible, MRI compatible. Opaque PTFE is available in limited sizes.
C7	PTFE	-150 to +260 C	Liquid tight vapor barrier protection, very poor flexibility. Vacuum & MRI compatible.
C8	PVC	+10 to +107 C	Small lightweight, very flexible, liquid tight, MRI compatible, no crush resistance.
C9	Annealed SS Tubing	-150 to +500 C	Semi-rigid, liquid tight, crush proof. Good for high temperature, high pressure, high vibration environments
C11	Polyolefin Shrink Tubing	-55 to +300 C	Semi-Flexible, liquid tight, thin wall vapor barrier, not crush resistant. MRI and vacuum compatible, radiation resistant.
C12	Polyolefin Over SS Interlok	-55 to +300 C	Crush proof, semi-flexible, liquid tight, thin wall vapor barrier, vacuum compatible.
C13	Furcation Tubing	+10 to +85 C	PVC over Kevlar over Polypropylene fibers prevent stretching. Good for small fiber sensors, D20 or RC20 and smaller. MRI compatible and liquid tight. Light crush resistance but not kink resistant.
C14	Miscellaneous		Customer choice for special application

# FO CABLE JACKET OPTIONS

## ■ **STANDARD - PVC over Steel Monocoil**

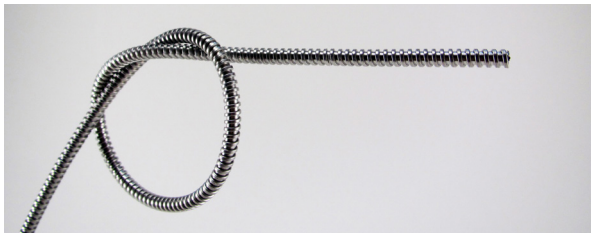


PVC over a steel helical winding. Good general purpose jacket: moderate crush resistance, liquid tight, not vacuum nor MRI compatible.

Temperature Range +10 to 107°C

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## ■ **Option C1 - Interlocking Stainless Steel**



High strength and temperature range, crush proof, flexible, vacuum compatible, not liquid tight, not MRI compatible.

Temperature Range -150 to 800°C

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## ■ **Option C2 - Silicone Coated Fiberglass (S-F) over Steel Monocoil**



Flexible and durable, good tensile strength, moderate crush resistance, radiation resistant.

Temperature Range -75 to +220°C

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## ■ **Option C3 - Silicone Coated Fiberglass**



Very flexible and durable, light crush resistance, good tensile strength, excellent flex life and resistance to fatigue, radiation resistant.

Temperature Range -75 to +220°C

# FO CABLE JACKET OPTIONS

## ■ Option C5 - PVC/SS Interlock



Optimal protection for optical fiber. Resists lateral pressure, twisting, and pulling. With excellent pliability, this conduit will withstand repeated bending, so that the interconnects will not come apart in normal use.

Temperature Range +10 to +105°C

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## ■ Option C6 - Convuluted PTFE



Good for vacuum applications, moderate crush resistance, very flexible, MRI compatible. Opaque PTFE available in limited sizes.

Temperature Range -150 to +260°C

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## ■ Option C7 - PTFE Tubing



Liquid tight vapor barrier protection, very poor flexibility. Vacuum & MRI compatible.

Temperature Range from -150 to +260°C

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## ■ Option C8 - PVC Tubing

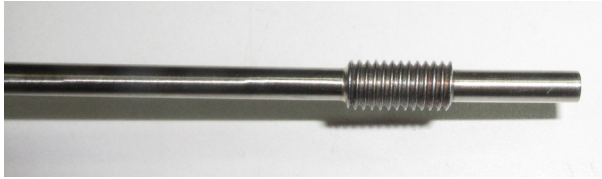


Small lightweight, very flexible, liquid tight, MRI compatible, no crush resistance.

Temperature Range +10 to 107°C

# FO CABLE JACKET OPTIONS

## ■ Option C9 - Annealed Stainless Steel Tubing

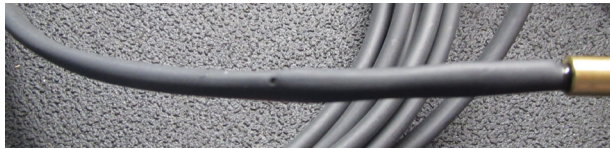


Semi-rigid, liquid tight, crush proof. Good for high temperature, high pressure, high vibration environments.

Temperature Range to 500°C

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## ■ Option C11 - Polyolefin Shrink Tubing



Semi-Flexible, liquid tight, thin wall vapor barrier, not crush proof. MRI, BIO and vacuum compatible, radiation resistant.

Temperature Range -55 to +300°C

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## ■ Option C12 - Polyolefin over SS Interlok



Crush proof, semi-flexible, liquid tight, thin wall vapor barrier, vacuum compatible.

Temperature Range -55 to +300°C

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## ■ Option C13 - Furcation Tubing



PVC over Kevlar over PolypropylenE. Kevlar fibers prevent stretching. Good for small fiber sensors, D20 & RC20 or smaller. MRI compatible, liquid tight, light crush resistance, but will kink in sharp bends.

Temperature Range +10 to 85°C

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## ■ Option C14 - Miscellaneous Jackets

For special applications a jacket material not on this list may be chosen and approved for construction.