

MEDICAL HEAT SHRINK TUBING

Raychem Product Portfolio



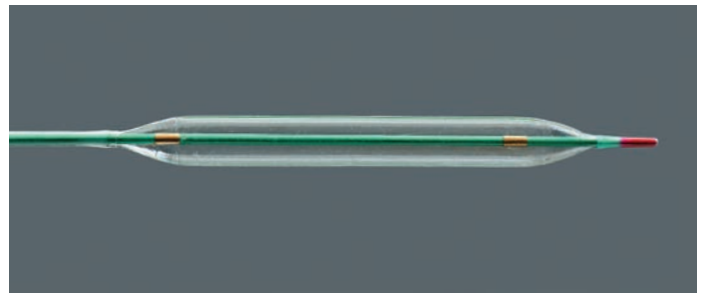
Medical Grade Tubing Engineered to Maintain Integrity, Meet Rigorous Standards and Satisfy Customers' Needs.

TE CONNECTIVITY DELIVERS RELIABILITY FOR MEDICAL GRADE USES.

Medical device OEMs and CMs have been relying on our Raychem crosslinking technology for years to provide protective insulation for a wide range of medical grade applications. Our medical heat shrink tubing provides a versatile solution for process aids, bonding of joints, chemical resistance and electro-mechanical protection for critical medical components.

Raychem Medical Tubing Features

- Unique formulations for broad range of medical applications
- Robust and chemical resistant
- Stable, maintains integrity in high temperature conditions
- Compliant to RoHS and USP class VI biocompatibility
- Select products registered with FDA through the master file system (MAF)
- Manufactured to ISO 10993 standards



ADVANTAGES OF TE HEAT SHRINK TUBING

- THIN-WALL POLYOLEFINS
- HIGH TEMPERATURE,
FLEXIBLE AND SEMI-RIGID
FLUOROPOLYMERS
- SINGLE- AND DUAL-WALL
CONSTRUCTIONS
- CONTROLLED LONGITUDINAL
SHRINKAGE
- CLEAR AND COLOR OPTIONS
AVAILABLE

A Wide Range of Medical Applications

As a leader in medical heat shrink tubing, we have many products to suit different material requirements and almost any design situation. Whether you need tubing only or a complete integrated solution for your medical device, we have the engineering expertise, manufacturing capability and products to simplify your supply chain. Your medical device needs can be fulfilled all in house, from one company, and we can customize our products to fit your requirements.

Crosslinked Raychem medical heat shrink tubing is compatible for use with gamma and ETO sterilization. Here are just some examples of the types, capabilities and quality of our heat shrink tubing products:

Abrasion Protection for Medical Instruments

MT1000 and MT3000—Useful in areas where abrasion resistance is needed; improves reliability in high-contact applications.

Balloon and Stent Process Aid

MT-LWA—For use in laser-welding operations of stents and balloons, hot jaw bonding or other secondary value-add processes. This heat shrink tubing holds joints in place during operation and removes easily without residue or damage to the end product.

Laparoscopic-Electrosurgical Device Insulation

MT2000 and MT5000—Can achieve high performance insulation and chemical resistance for a wide range of applications, with high expansion ratio capability.

Protection and Insulation of Highly Flexible Joints

MT5500 and MT3000—Provides durability through repeated use and additional flexibility while maintaining integrity of insulation to help protect medical devices from high temperatures, fluids and chemicals.

Sterilization Versatility

Tubing products support various types of sterilization to meet device end use requirements.

TE MEDICAL TUBING

Raychem Tubing Properties Comparison Charts

| Base Polymer | Product Family | Medical Grade | Standard Colors Available | Radio-opaque & Adhesive | Expansion Ratio | | | Recovery Temperature | | | Sterilization | | | | |
|--------------|----------------|---------------|---------------------------|-------------------------|-----------------|-----|-----|----------------------|--------|-----|---------------|-------|----------------|-------|----------|
| | | | | | 2:1 | 3:1 | 4:1 | High | Medium | Low | Auto-clave | Gamma | Ethylene Oxide | Steam | Dry Heat |
| PVDF | MT1000 | • | • | • | • | | | • | | | • | • | • | • | • |
| HDPE | MT2000 | • | • | • | • | • | | | • | | | • | • | | |
| PVDF | MT3000 | • | • | • | • | | | | • | | | • | • | | • |
| LDPE | MT5000 | • | • | • | • | | • | | | • | | • | • | | |
| EMA | MT5500 | • | • | • | • | | | • | | | • | • | | | |
| LDPE | MTLWA | • | • | • | • | • | • | | | • | N/A | N/A | N/A | N/A | N/A |

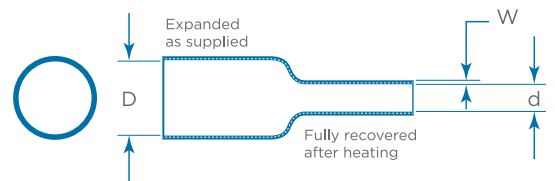
| Base Polymer | Product Family | Design Market | Insulation Performance | Recovery Temperature | Process Aid | Product Flexibility | Strain Relief | Color Coding Medical Instruments | Abrasion Protection | Pushability/Rigidity (shaft) |
|--------------|----------------|----------------|------------------------|----------------------|-------------|---------------------|---------------|----------------------------------|---------------------|------------------------------|
| PVDF | MT1000 | Surgical | Better | 175°C | N/A | Rigid | Better | Standard | Better | Best |
| HDPE | MT2000 | Surgical | Best | 140°C | Average | Rigid | Limited | Standard | Best | Good |
| PVDF | MT3000 | Surgical | Better | 150°C | N/A | Flexible | Better | Standard | Good | Limited |
| LDPE | MT5000 | Surgical | Good | 110°C | N/A | Flexible | Best | Best | Better | Limited |
| EMA | MT5500 | Surgical | Good | 110°C | N/A | Very Flexible | Better | Standard | Better | Limited |
| LDPE | MTLWA | Interventional | Good | 110°C | Best | Flexible | Limited | Standard | Good | Limited |



Ordering Information

Our experts can guide you in material selection and tubing specifications, as well as value-add technology adhesives, radio-opaques, custom inspections, and custom cut lengths to fit your specific heat shrink tubing requirements.

- Colors available: Black, blue, brown, green, gray, orange, red, violet, yellow, white, and clear
- Size selection: Always order the largest size that will recover snugly over the substrate. Special orders are available upon request.
- Sample description: MT5000-3/16-0-SP (MT5000 = material type, 3/16 = EID, 0 = black, SP = spool)



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Medical heat shrink tubing headquarters:

WILSONVILLE, OREGON

Phone: 1-800-468-2023

TE's Medical Global Support

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| | |
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