

# BSTS and GPT

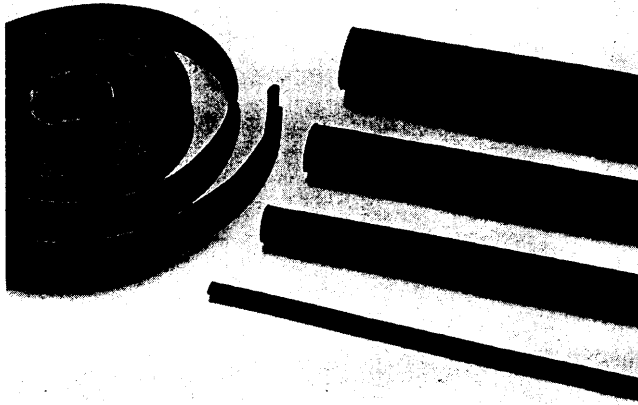
General purpose heat-shrinkable tubing

Fax-on-Demand: (800) 260-9099  
(650) 361-6523

Before ordering check with  
factory for most current data.

341 5673

DATASHEET FOR  
341 5673



## Applications

BSTS and GPT heat-shrinkable tubing is made of a rugged polymer that resists moisture, fungus, and weathering. It also has excellent electrical properties. This tubing is useful in applications where insulation, abrasion resistance, and strain relief are important. When used with SFTS tape sealant, it can provide a watertight system in nonpressurized applications.

## Features/Benefits

- Excellent thick-wall insulation and abrasion-protection.
- No adhesive—can be removed easily.
- Expansion ratios as high as 3:1.
- Availability in flame-retardant material with FR callout (see "Ordering Information and Part Numbering System" on the next page).
- GPT-FR has the following agency approvals:
  - ABS (American Bureau of Shipping)
  - DNV (Det Norske Veritas)
  - Lloyd's (Lloyd's Register of Shipping)

## Installation

Minimum shrink temperature: 90°C  
Minimum full recovery temperature: 121°C

## Specifications/Approvals

| Series  | Military                                   | Industry                                                                                           | Raychem     |
|---------|--------------------------------------------|----------------------------------------------------------------------------------------------------|-------------|
| BSTS    |                                            |                                                                                                    | Nemosyne 90 |
| BSTS-FR | MIL-DTL-23053/15A*,<br>Class 1 and Class 2 | ASTM D 685, nonburning<br>ASTM D 2863, oxygen index<br>IPCEA S-19-81, cable insulation and jackets | Nemosyne FR |
| GPT-FR  |                                            | ABS, DNV, Lloyd's Register                                                                         | RW-2017     |

\*Formerly MIL-I-23053/15A.

## Product Dimensions (mm/in)

|                                 |            |                             | Inside diameter              |                                 | Wall thickness (nominal) |                            |  |  |
|---------------------------------|------------|-----------------------------|------------------------------|---------------------------------|--------------------------|----------------------------|--|--|
| Mil-Spec approved part number** |            | Agency approved part number | Minimum expanded as supplied | Maximum recovered after heating | Expanded as supplied     | Recovered after heating*** |  |  |
| BSTS-03                         | BSTS-FR03  | GPT-FR 8/3                  | 7.62 (.300)                  | 2.54 (.100)                     | .63 (.025)               | 1.52 (.060)                |  |  |
| BSTS-04                         | BSTS-FR04  | GPT-FR 10/4                 | 10.16 (.400)                 | 3.81 (.150)                     | .63 (.025)               | 1.52 (.060)                |  |  |
| BSTS-07M                        | BSTS-FR07M | GPT-FR 19/6M                | 19.05 (.750)                 | 5.59 (.220)                     | .51 (.020)               | 1.52 (.060)                |  |  |
| BSTS-07                         | BSTS-FR07  | GPT-FR 19/6                 | 19.05 (.750)                 | 5.59 (.220)                     | .76 (.030)               | 2.41 (.095)                |  |  |
| BSTS-11M                        | BSTS-FR11M |                             | 27.94 (1.100)                | 9.52 (.375)                     | .76 (.030)               | 2.67 (.105)                |  |  |
| BSTS-11                         | BSTS-FR11  |                             | 27.94 (1.100)                | 9.52 (.375)                     | 1.02 (.040)              | 3.05 (.120)                |  |  |
| BSTS-13M                        | BSTS-FR13M | GPT-FR 33/10M               | 33.02 (1.300)                | 9.52 (.375)                     | .63 (.025)               | 2.67 (.105)                |  |  |
| BSTS-13                         | BSTS-FR13  | GPT-FR 33/10                | 33.02 (1.300)                | 9.52 (.375)                     | .89 (.035)               | 3.05 (.120)                |  |  |
| BSTS-15M                        | BSTS-FR15M |                             | 38.10 (1.500)                | 12.70 (.500)                    | .89 (.035)               | 3.05 (.120)                |  |  |
| BSTS-15                         | BSTS-FR15  |                             | 38.10 (1.500)                | 12.70 (.500)                    | 1.27 (.050)              | 3.56 (.140)                |  |  |
| BSTS-17M                        | BSTS-FR17M | GPT-FR 43/13M               | 43.18 (1.700)                | 12.70 (.500)                    | 1.02 (.040)              | 3.05 (.120)                |  |  |
| BSTS-17                         | BSTS-FR17  | GPT-FR 43/13                | 43.18 (1.700)                | 12.70 (.500)                    | 1.14 (.045)              | 3.56 (.140)                |  |  |
| BSTS-20M                        | BSTS-FR20M | GPT-FR 51/19M               | 50.80 (2.000)                | 19.05 (.750)                    | 1.27 (.050)              | 3.05 (.120)                |  |  |
| BSTS-20                         | BSTS-FR20  | GPT-FR 51/19                | 50.80 (2.000)                | 19.05 (.750)                    | 1.27 (.050)              | 3.94 (.155)                |  |  |
| BSTS-27                         | BSTS-FR27  | GPT-FR 69/23                | 65.58 (2.700)                | 22.86 (.900)                    | 1.27 (.050)              | 3.94 (.155)                |  |  |
| BSTS-30                         | BSTS-FR30  |                             | 76.20 (3.000)                | 31.75 (1.250)                   | 1.27 (.050)              | 3.94 (.155)                |  |  |
| BSTS-35                         | BSTS-FR35  | GPT-FR 89/32                | 88.90 (3.500)                | 31.75 (1.250)                   | 1.27 (.050)              | 3.94 (.155)                |  |  |
| BSTS-40                         | BSTS-FR40  |                             | 101.60 (4.000)               | 44.45 (1.750)                   | 1.27 (.050)              | 3.94 (.155)                |  |  |
| BSTS-45                         | BSTS-FR45  | GPT-FR 114/45               | 114.30 (4.500)               | 44.45 (1.750)                   | 1.27 (.050)              | 3.94 (.155)                |  |  |

\*\*M = Medium-wall tubing.

\*\*\*Wall thickness will be less if tubing recovery is restricted during shrinkage.

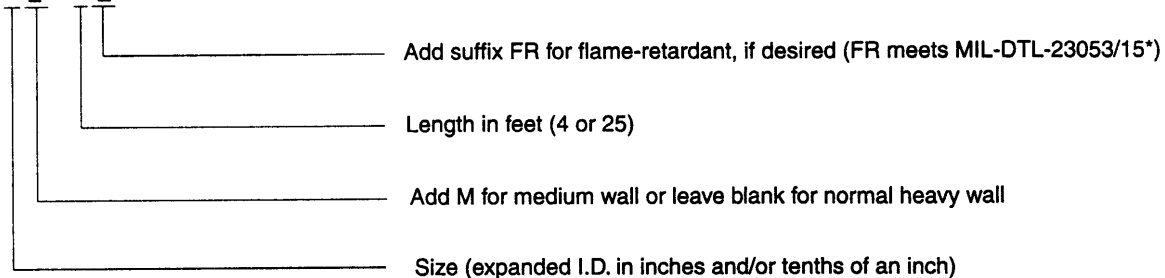
## 3-4 Tubing Raychem

Users should independently evaluate the suitability of the product for their application.

## Ordering Information and Part Numbering System

|                    |                                                                                                                                            |                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Color              | Standard                                                                                                                                   | Black (-0)                                           |
|                    | Nonstandard                                                                                                                                | Red (-2), white (-9), clear (-X not flame-retardant) |
| Size selection     | Always order the largest size that will shrink snugly over the component to be covered.<br>Special order sizes are available upon request. |                                                      |
| Standard packaging | 1.2-meter (4-foot) or 7.5-meter (25-foot) lengths.                                                                                         |                                                      |

**BSTS-11 \_ x 4 \_**



\*Formerly MIL-I-23053/15.

## Agency Approved Part Numbers

**GPT-FR 33/10 (M) 750 -0**

