# **MTB**

### Mighty-Tuff® Band Heaters

- Stainless Steel Sheath resists oxidation
- Capable of up to 1200°F (760°C)
   Sheath Temperatures
- Highest possible application temperatures
- Capable of long life at High Watt Densities
- Thin profile (3/16") for fast response



#### Description

Rugged construction along with high temperature and high watt density capabilities allow the Mighty-Tuff Band Heater to surpass all other band heaters in providing the ever increasing temperatures required for processing today's high tech materials. The advanced design and thin profile allow the quick transfer of heat from the element to the sheath for efficient operation to 1200°F sheath temperature. Watt densities as high as 100 wp/in² on small diameters are possible. A stainless steel sheath encases a compressed mineral refractory material which surrounds a helical or sinuated resistance element. The Mighty-Tuff can stand up to shock, vibration and

many contaminants long after standard band heaters have failed. In normal use, or in the most difficult application, the Mighty-Tuff will improve machine productivity by improving band heater performance.

#### **Options**

- Full length fiberglass sleeving
- Ground Wire
- Ceramic Terminal Covers
- · Standard NEMA Plugs
- Built-in Thermocouple

#### **Terminations**

#### Type F

#### **High Temperature Leads**

12" long 850°F/450°C insulated lead wires are standard. Specify longer length. Also available with full length fiberglass sleeving.



#### Type C

#### **Armor Cable Leads**

Armor cable is the best protection for abrasion. 12" cable and 14" overall leads are standard.





# **MTB**

# Mighty-Tuff® Band Heaters *(cont'd.)*

#### **Metal Braided Leads**

Double conductor metal braid provides excellent abrasion protection and flexibility. Standard Length is 12" braid with 14"overall lead wires. Specify additional length if required. Type P and Type R are available without metal braid.



#### **Post Terminals**

Type SH
Terminals 180° from gap.

*Type SG*Terminals at gap. Minimum width - 2"



*Type B*Terminal Box. 2-1/16" H x 2-1/2" W x 2-1/8" D



# **MTB**

## Mighty-Tuff® Band Heaters *(cont'd.)*

#### **European Style High Temperature Plugs**

Maximum Voltage = 250V, Maximum Amperage = 25 Amps. Other plugs attached to leads are available.

Type 110

3-5/8" H x 1-5/16" L x 2-15/16" W



1-3/8" H x 3-7/16" L x 1-7/8" W



Receptacle PC4396-3







#### One Piece Expandable

#### Type E

(Shown with Type SG terminals) Specify termination, terminal location and other options.



#### **Two Piece Contstruction**

#### Type T

(Shown with Type A leads and optional spring loaded screws) Specify termination, terminal location and other options.



# MTB Mighty-Tuff® Band Heaters (cont'd.)

#### **Hole or Cut-Out**

Mighty-Tuff Band Heaters can be manufactured with thermocouple holes. Contact Chromalox.

Type H



#### Maximum and Minimum Physical Limitations

	Diameter		Bain i
	Minimum	Maximum	Minimum Width
Full Band	1"	14"	1"
1"	8"	275	240
One Piece Expandable (Type E)	3"	14"	1"
Type SG Terminals	1-1/2"	_	2"
Type SH Terminals	1-1/2"	_	1-1/2"
Type F Leads	1"	_	1"
Type A Leads	1"	_	1"
Type P Leads	1"	_	1"
Type R Leads	1"	_	1"
Type C Leads	1"	_	1"
Terminal Box	3-1/2"	_	1-1/2"
Type 110	3-1/2"	_	1-1/8"
Type 115	3-1/2"	_	1-1/8"

Minimum width: 1", maximum width: 6". Standard gap: 1/4" - 1" depending upon I.D.

Type MC

**Hole or Cut-Out** 

Mounting Clamp - Standard on all Mighty Tuff® Band Heaters up to 3" wide. Supplied with 1/4" socket head screw.



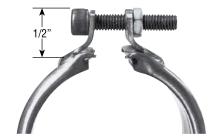


No. of Screws	Mtg. Clamp Length Per Unit	No. of Mtg. Clamps per Htr.	Actual Heater Width
1	1"	1	1" to 1-1/4"
1	1 1/4"	1	1-3/8" to-1 3/4"
1	1 3/4"	1	1-7/8" to 2-1/4"
1	2 1/4"	1	2-3/8" to 3"
2	2 3/4"	1	3-1/8" to 3 1/2"

Note: Values identical for styles MC and MCS

Type L

**Type L Mounting Flange** – Standard on Mighty-Tuff Band Heaters. Supplied with 5/16 Socket Head Cap Screw.





**Type LS Mounting Flange** – with Spring – Recommended over 18" I.D." or as application requires.



# **MTB**

# Mighty-Tuff® Band Heaters *(cont'd.)*

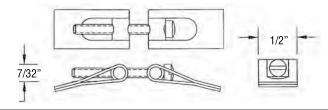
#### Type S

Mighty-Tuff Band Heaters are available with 5/8" wide straps. Some dimensional restrictions may apply based on lead type, position and width.



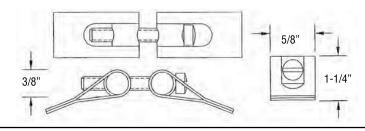
#### Type BL

Low Profile Barrel Nut Assembly Welded to Sheath with 6-32 Screw.



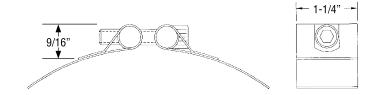
#### Type BN

Standard Profile Barrel Nut Assembly Welded to Sheath with 10-32 Screw.



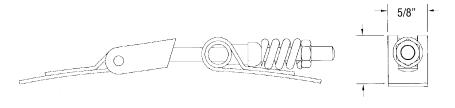
#### Type BW

1-1/4" Wide Barrel Nut Assembly Welded to Sheath with 5/16-18 Socket Head Screw.



#### Type BR

Quick Release Assembly with Spring Loaded Screw Welded to Sheath with 1/4-20 Screw.



#### Type BT

Quick Release Barrel Nut Assembly Welded to Sheath with 1/4-20 Bolt.

