# AMARATHON SHEATER

**HEATERS AND THERMOCOUPLES** 

# Thermocouples & RTD Sensors



#### THERMOCOUPLES & RTD SENSORS



# MARATHON HEATER

808 Hackberry Lane—HCR 3, Box 86E Del Rio, TX 78840 (830) 775-1417 Fax (830) 775-4379

www.marathonheater.com

Marathon Heater is pleased to present our line of premium temperature sensors. We offer standard thermocouples, mineral insulated thermocouples, and RTDs. Marathon has hundreds of different models in stock and offers quick turnaround, usually 48 hours or less, on custom designed and manufactured units. We use only the highest grade materials and offer a variety of sheath materials for any environment or temperature range. All sensors are subject to rigid quality control procedures and a thorough inspection process. Expert engineering assistance is readily available for any order size, large or small. In addition to you sensor needs, Marathon can engineer a complete thermal system for you. Worldwide on site support is available through one of our many distributors or representatives.

Contact Marathon Heater today and let us help you.

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100's of Stock Items Ready for Immediate Delivery

# Adjustable Depth Thermocouples w/ Stainless Steel Armor

#### **Standard Features**

- 3/16" diameter probe
- Fits standard bayonet adapters
- 12" spring with bayonet cap
- Grounded construction
- 24 ga. Fiberglass leads with stainless steel armor
- Spade lugs

| Type J with Spade Lugs |                    | Type J with Polarized Plug |
|------------------------|--------------------|----------------------------|
| Stock Number           | <u>Lead Length</u> | Stock Number               |
| JAC24-G1-24R1          | 24"                | JAC24-G1-24R2              |
| JAC36-G1-24R1          | 36"                | JAC36-G1-24R2              |
| JAC48-G1-24R1          | 48"                | JAC48-G1-24R2              |
| JAC72-G1-24R1          | 72"                | JAC72-G1-24R2              |
| JAC96-G1-24R1          | 96"                | JAC96-G1-24R2              |
| JAC120-G1-24R1         | 120″               | JAC120-G1-24R2             |
| JAC144-G1-24R1         | 144"               | JAC144-G1-24R2             |



| Type K with Spade Lugs |             | Type K with Polarized Plug |
|------------------------|-------------|----------------------------|
| Stock Number           | Lead Length | Stock Number               |
| KAC24-G1-24R1          | 24"         | KAC24-G1-24R2              |
| KAC36-G1-24R1          | 36"         | KAC36-G1-24R2              |
| KAC48-G1-24R1          | 48"         | KAC48-G1-24R2              |
| KAC72-G1-24R1          | 72"         | KAC72-G1-24R2              |
| KAC96-G1-24R1          | 96"         | KAC96-G1-24R2              |
| KAC120-G1-24R1         | 120″        | KAC120-G1-24R2             |
| KAC144-G1-24R1         | 144"        | KAC144-G1-24R2             |

- 2 wire or 3 wire RTD
- Type T
- 1/8" diameter probe
- Custom probe length
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome

# Adjustable Depth Thermocouples w/ Stainless Steel Overbraid

#### **Standard Features**

- 3/16" diameter probe
- Fits standard bayonet adapters
- 12" spring with bayonet cap
- Grounded construction
- 24 ga. Fiberglass leads with SS overbraid
- Spade lugs

| Type J with Spade Lugs |             | Type J with Polarized Plug |
|------------------------|-------------|----------------------------|
| Stock Number           | Lead Length | Stock Number               |
| JBS24-G1-24R1          | 24"         | JBS24-G1-24R2              |
| JBS36-G1-24R1          | 36"         | JBS36-G1-24R2              |
| JBS48-G1-24R1          | 48"         | JBS48-G1-24R2              |
| JBS72-G1-24R1          | 72"         | JBS72-G1-24R2              |
| JBS96-G1-24R1          | 96"         | JBS96-G1-24R2              |
| JBS120-G1-24R1         | 120"        | JBS120-G1-24R2             |
| JBS144-G1-24R1         | 144"        | JBS144-G1-24R2             |

| Type K with Spade Lugs |             | Type K with Polarized Plug |
|------------------------|-------------|----------------------------|
| Stock Number           | Lead Length | Stock Number               |
| KBS24-G1-24R1          | 24"         | KBS24-G1-24R2              |
| KBS36-G1-24R1          | 36"         | KBS36-G1-24R2              |
| KBS48-G1-24R1          | 48"         | KBS48-G1-24R2              |
| KBS72-G1-24R1          | 72"         | KBS72-G1-24R2              |
| KBS96-G1-24R1          | 96"         | KBS96-G1-24R2              |
| KBS120-G1-24R1         | 120″        | KBS120-G1-24R2             |
| KBS144-G1-24R1         | 144"        | KBS144-G1-24R2             |

| Type J Ungrounded with Spade Lugs |             |  |  |  |
|-----------------------------------|-------------|--|--|--|
| Stock Number                      | Lead Length |  |  |  |
| JBS24-U1-24R1                     | 24"         |  |  |  |
| JBS36-U1-24R1                     | 36"         |  |  |  |
| JBS48-U1-24R1                     | 48"         |  |  |  |
| JBS72-U1-24R1                     | 72"         |  |  |  |
| JBS96-U1-24R1                     | 96"         |  |  |  |
| JBS120-U1-24R1                    | 120"        |  |  |  |
| JBS144-U1-24R1                    | 144"        |  |  |  |

- 2 wire or 3 wire RTD
- Type T
- 1/8" diameter probe
- Custom probe length
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome



# Adjustable Depth Thermocouples w/Stainless Steel Overbraid (Metric)

#### **Standard Features**

- Fits metric bayonet adapters
- Metric bayonet cap with two slots
- Grounded construction
- 24 ga. Fiberglass leads w/ SS overbraid
- Spade lugs



#### Dimensions for 4.75 mm diameter probe

- A 4.75 mm Diameter
- **B** 12 mm Diameter
- C App. 6 mm Diameter

## Dimensions for 8 mm diameter probe

- A 8 mm Diameter
- **B** 14 mm Diameter
- C App. 8 mm Diameter

| Туре Ј           |             |          | Туре К           |
|------------------|-------------|----------|------------------|
| Stock Number     | Lead Length | Cap Size | Stock Number     |
| JBS39-G1-24R1-1  | 1 meter     | 12mm     | KBS39-G1-24R1-1  |
| JBS78-G1-24R1-1  | 2 meters    | 12mm     | KBS78-G1-24R1-1  |
| JBS118-G1-24R1-1 | 3 meters    | 12mm     | KBS118-G1-24R1-1 |
| JBS157-G1-24R1-1 | 4 meters    | 12mm     | KBS157-G1-24R1-1 |
| JBS39-G1-24R1-2  | 1 meter     | 14mm     | KBS39-G1-24R1-2  |
| JBS78-G1-24R1-2  | 2 meters    | 14mm     | KBS78-G1-24R1-2  |
| JBS118-G1-24R1-2 | 3 meters    | 14mm     | KBS118-G1-24R1-2 |
| JBS157-G1-24R1-2 | 4 meters    | 14mm     | KBS157-G1-24R1-2 |

- 2 wire RTD
- 3 wire RTD
- Type T
- Polarized plug or jack

- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome

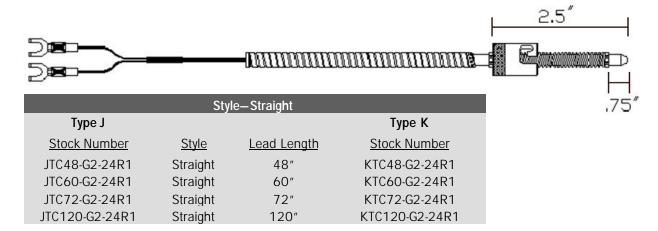
# **Fixed Depth Thermocouples**

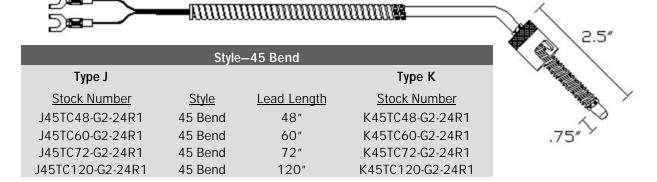
#### Standard Features

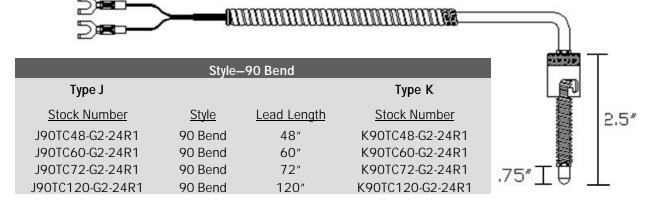
- 3/16" diameter probe
- Fits standard bayonet adapters
- 2 1/2" fixed depth

- 2 wire RTD
- 3 wire RTD
- Type T
- 1/8" diameter probe
- Custom probe length

- Grounded construction
- 24 ga. Fiberglass leads with SS armor
- Spade lugs
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome







# Washer Style Surface Thermocouples

#### **Standard Features:**

- 3/16" stud size available
- 5/16" stud size available
- 24 ga. Fiberglass leads w/ stainless steel overbraid
- Grounded construction
- Spade lugs

#### Available Options:

- 2 wire or 3 wire RTD
- Type T
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome

| 3/16" Stud Size |             |             | 5/16" Stud Size |
|-----------------|-------------|-------------|-----------------|
| Stock Number    | <u>Type</u> | Lead Length | Stock Number    |
| JWN36-G1-24R1   | J           | 36"         | JWQ36-G1-24R1   |
| JWN48-G1-24R1   | J           | 48"         | JWQ48-G1-24R1   |
| JWN60-G1-24R1   | J           | 60"         | JWQ60-G1-24R1   |
| JWN72-G1-24R1   | J           | 72"         | JWQ72-G1-24R1   |
| JWN96-G1-24R1   | J           | 96"         | JWQ96-G1-24R1   |
| JWN120-G1-24R1  | J           | 120″        | JWQ120-G1-24R1  |
| KWN36-G1-24R1   | K           | 36"         | KWQ36-G1-24R1   |
| KWN48-G1-24R1   | K           | 48"         | KWQ48-G1-24R1   |
| KWN60-G1-24R1   | K           | 60"         | KWQ60-G1-24R1   |
| KWN72-G1-24R1   | K           | 72"         | KWQ72-G1-24R1   |
| KWN96-G1-24R1   | K           | 96"         | KWQ96-G1-24R1   |
| KWN120-G1-24R1  | Κ           | 120″        | KWQ120-G1-24R1  |





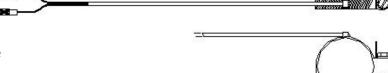
# **Hose Clamp Style Thermocouples**

#### Standard Features:

- 1/2" wide stainless steel clamp
- 7/16" hexagon & screw drive slot
- 48" 24 ga. Fiberglass leads with stainless steel overbraid
- Spade lugs
- Grounded construction

- 2 wire or 3 wire RTD
- Type T
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Custom orders welcome
- Additional lead lengths available

| Type J        |                   | Type K        |
|---------------|-------------------|---------------|
| Stock Number  | Clamping Range    | Stock Number  |
| JHC48-G0-24R1 | 3/8" - 7/8"       | KHC48-G0-24R1 |
| JHC48-G1-24R1 | 11/16" - 1 1/2"   | KHC48-G1-24R1 |
| JHC48-G2-24R1 | 1 9/16" x 2 1/2"  | KHC48-G2-24R1 |
| JHC48-G3-24R1 | 2 1/2" - 3 3/8"   | KHC48-G3-24R1 |
| JHC48-G4-24R1 | 2 13/16" - 3 3/4" | KHC48-G4-24R1 |
| JHC48-G5-24R1 | 3 9/16" - 4 1/2"  | KHC48-G5-24R1 |
| JHC48-G6-24R1 | 4 5/8" - 5 1/2"   | KHC48-G6-24R1 |
| JHC48-G7-24R1 | 5 5/8" - 6 1/2"   | KHC48-G7-24R1 |



# Nissei Nozzle Thermocouples

#### Standard Features:

- 30, 40 or 50 mm diameter
- 40 mm will fit 1.5" diameter
- 3/16" wide band
- Spade lugs
- 24 ga. Fiberglass leads with S/S braid
- Grounded construction

#### **Available Options:**

- 2 wire or 3 wire RTD
- Type T
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Custom diameters and additional lead lengths available

|                  |                 |             | <b>-</b> "         |
|------------------|-----------------|-------------|--------------------|
| Type J           |                 |             | Туре К             |
| Stock Number     | <u>Diameter</u> | Lead Length | Stock Number       |
| JNS48-G1-24R1    | 30mm            | 48"         | KNS48-G1-24R1      |
| JNS72-G1-24R1    | 30mm            | 72"         | KNS72-G1-24R1      |
| JNS144-G1-24R1   | 30mm            | 144"        | KNS144-G1-24R1     |
| JNS48-G1.5-24R1  | 40mm            | 48"         | KNS48-G1.5-24R1    |
| JNS72-G1.5-24R1  | 40mm            | 72"         | KNS72-G1.5-24R1    |
| JNS144-G1.5-24R1 | 40mm            | 144"        | KNS144-G1.5-24R1   |
| JNS48-G2-24R1    | 50mm            | 48"         | KNS48-G2-24R1      |
| JNS72-G2-24R1    | 50mm            | 72"         | KNS72-G2-24R1      |
| JNS144-G2-24R1   | 50mm            | 144"        | KNS144-G2-24R1     |
| 5 <b>80</b> —    | >               |             |                    |
| <i>5</i> 78      |                 |             |                    |
|                  |                 |             | ( + ) <del>*</del> |

# **Newbury Nozzle Thermocouples**

#### **Standard Features:**

- 1/8" diameter probe
- 1" long x 90 degree bend with spring strain relief
- 24 ga. Fiberglass leads with stainless steel overbraid
- Spade lugs
- Grounded construction

| Stock Number  | <u>Type</u>                |
|---------------|----------------------------|
| JNB48-G2-24R1 | Newbury 48" overall length |
| JNB72-G2-24R1 | Newbury 73" overall length |

- 2 wire or 3 wire RTD
- Type T
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome



# **Shallow Nozzle Thermocouples**

#### Standard Features

- 1/4-28 N F thread
- 24 ga. Fiberglass leads w/ SS braid
- Spade lugs
- Grounded construction

| Туре Ј        |                              |             |               |               | Type K        |
|---------------|------------------------------|-------------|---------------|---------------|---------------|
| Stock Number  | <u>Lead</u><br><u>Length</u> | Thread Size | Dimension (A) | Dimension (B) | Stock Number  |
| JNZ48-G1-24R1 | 48                           | 1/4-28 NF   | .375          | .455          | KNZ48-G1-24R1 |
| JNZ72-G1-24R1 | 72                           | 1/4-28 NF   | .375          | .455          | KNZ72-G1-24R1 |



#### **Available Options**

- M6 x 1 thread
- M8 x 1.25 thread
- 2 wire or 3 wire RTD
- Type T
- Polarized plug or jack

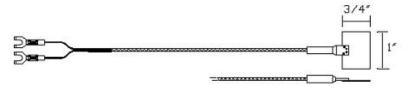
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome

# Shim Style Surface Thermocouples

#### **Standard Features**

- Stainless steel shim
- 24 ga. Fiberglass leads w/SS braid
- Spade lugs
- Grounded construction

| Type J        |             | Type K        |
|---------------|-------------|---------------|
| Stock Number  | Lead Length | Stock Number  |
| JSH48-G1-24R1 | 48          | KSH48-G1-24R1 |
| JSH72-G1-24R1 | 72          | KSH72-G1-24R1 |



- 2 wire RTD
- 3 wire RTD
- Type T
- Polarized plug or jack
- Mini plug or jack
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Custom orders welcome

# **Bendable Probe Thermocouples**

#### **Standard Features**

- 1/8" or 3/16" diameter probe
- 6" and 12" probe lengths
- 24 ga. Fiberglass leads w/ SS armor
- Spade lugs

| Туре Ј           | Also available i | n 1/8″ prol                     | oe diameter | Туре К           |
|------------------|------------------|---------------------------------|-------------|------------------|
| Stock Number     | Probe Length     | <u>Probe</u><br><u>Diameter</u> | Lead Length | Stock Number     |
| JBPD48-G6-24R1   | 6"               | 3/16"                           | 48"         | KBPD48-G6-24R1   |
| JBPD72-G6-24R1   | 6"               | 3/16"                           | 72″         | KBPD72-G6-24R1   |
| JBPD120-G6-24R1  | 6"               | 3/16"                           | 120″        | KBPD120-G6-24R1  |
| JBPD48-G12-24R1  | 12"              | 3/16"                           | 48"         | KBPD48-G12-24R1  |
| JBPD72-G12-24R1  | 12"              | 3/16"                           | 72″         | KBPD72-G12-24R1  |
| JBPD120-G12-24R1 | 12"              | 3/16"                           | 120″        | KBPD120-G12-24R1 |

#### 1/8" NPT Compression Fitting Supplied





#### **Available Options**

- 2 wire RTD
- 3 wire RTD
- Type T
- Polarized plug or jack
- Mini plug or jack

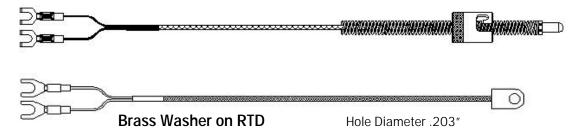
- Ungrounded construction
- 20 ga. Lead wire
- Additional lead lengths available
- Additional probe lengths available
- Custom orders welcome

# **RTD Sensors**

#### Standard Features

- 2 wire or 3 wire
- Flexible probe
- Adjustable depth up to 10"
- Stainless steel braid
- Spade lugs
- RTD probe also available in other TC styles

| Stock Number     | Lead Length |
|------------------|-------------|
| RTDBS120-G1-24R1 | 120         |
| RTDBS144-G1-24R1 | 144         |
| RTDBS24-G1-24R1  | 24          |
| RTDBS48-G1-24R1  | 48          |
| RTDBS72-G1-24R1  | 72          |
| RTDBS96-G1-24R1  | 96          |



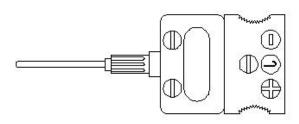
#### **Mineral Insulated Elements**

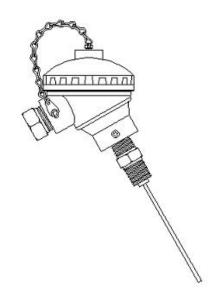
Mineral Insulated Thermocouples are manufactured at Marathon Heater to address your higher temperature requirements. Since the calibration wire is encased within a metal sheath packed with magnesium oxide the thermocouples can withstand higher temperatures and depending on the application will last longer since they are more durable. One excellent feature of Mineral Insulated Thermocouples is faster response time.



#### **Design Options**

- .040", .062", .125" and .187" diameter
- Grounded or ungrounded junction
- Type J or K calibration
- 304 stainless sheath or Inconel 600
- High pressure and high temperature rated
- Spade lugs, lead wires, plugs and jacks
- Flip-top housings, 2 or 4 pole





Below is a chart of suggested maximum temperatures that can assist you in selecting the proper thermocouple for your application.

| 304 SS and 316 SS |        |          |
|-------------------|--------|----------|
| <u>Diameter</u>   | Ţ      | <u>K</u> |
| .040"             | 500 F  | 1290 F   |
| .062′             | 825 F  | 1650 F   |
| .125"             | 970 F  | 1650 F   |
| .187"             | 1150 F | 1650 F   |
| .250"             | 1330 F | 1650 F   |
| .375"             | 1330 F | 1650 F   |

| <u>Diameter</u> <u>J</u> <u>K</u><br>.040" 750 F 1650 F |
|---|
|   |
| 0/0/ 1000 5 1050 5                                      |
| .062' 1000 F 1850 F                                     |
| .125" 1250 F 2000 F                                     |
| .187" 1400 F 2200 F                                     |
| .250" 1400 F 2200 F                                     |
| .375" 1400 F 2200 F                                     |

# **Hot Melt Nozzle Thermocouples**

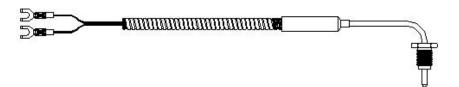
For direct temperature readings of hot plastic melt inside the nozzle.

#### Standard Features

- Style F mounts flush with internal nozzle bore
- Style M protrudes 1/4" into melt stream
- 3/8-24 thread
- 48" 24 ga. Teflon leads with stainless steel armor
- Supplied with lava seal

#### Available options

- Type J, Type K
- Polarized plugs or jacks
- Mini plugs or jacks
- 24 gauge lead wire at desired lengths

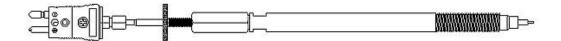


# **Retractable Melt Bolt Thermocouples**

Retractable Melt Bolts offer an adjustable immersion depth during full operation at maximum flow rates and pressures. Thermocouple junction can be centered in hot melt stream. Maximum temperature rating of 900 F.

#### **Standard Features**

- Available in 3", 5" or 7" lengths
- 1/8" Diameter MGO tip
- 1/2-20 UNF thread
- Grounded, exposed or ungrounded junctions available
- Type J or K calibration
- High pressure & high temperature rated
- RTD Style available
- Immersion available from 1/8" to 1"
- Polarized plug or jack
- Replacement elements available



# **Cartridge Type Thermocouples**

#### **Standard Features**

- Side sensing design
- .184"" diameter x 1" long SS probe

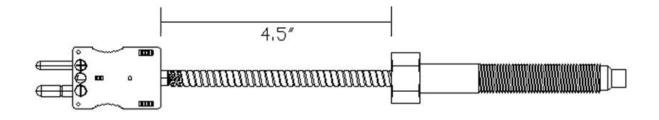
- Type J, Type K, Type T
- 2 or 3 wire RTD
- 24 gauge lead wire at desired lengths
- Polarized plugs or jacks
- Mini plugs or jacks

# **Fixed Melt Bolt Thermocouples**

#### **Standard Features**

- 1/8" diameter MGO tip
- Grounded junction
- High pressure and temperature rated
- Rigid or flexible
- 1/2–20 UNF thread
- Polarized plug or jack
- Custom lead lengths available

|               | Flexible E  | Extension  |               |
|---------------|-------------|------------|---------------|
| Type J        |             |            | Type K        |
| Stock Number  | Body Length | Tip Length | Stock Number  |
| JMBF3-GA-24R2 | 3"          | Flush      | KMBF3-GA-24R2 |
| JMBF3-GB-24R2 | 3"          | 1/8″       | KMBF3-GB-24R2 |
| JMBF3-GC-24R2 | 3"          | 3/16"      | KMBF3-GC-24R2 |
| JMBF6-GA-24R2 | 6"          | Flush      | KMBF6-GA-24R2 |
| JMBF6-GB-24R2 | 6"          | 1/8″       | KMBF6-GB-24R2 |
| JMBF6-GC-24R2 | 6"          | 3/16"      | KMBF6-GC-24R2 |
| JMBF9-GA-24R2 | 9"          | Flush      |               |
| JMBF9-GB-24R2 | 9"          | 1/8″       |               |
| JMBF9-GC-24R2 | 9"          | 3/16"      |               |

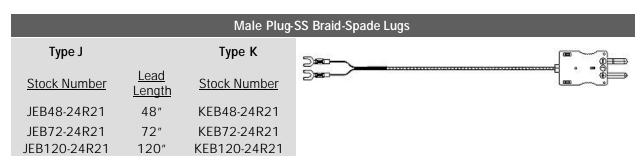


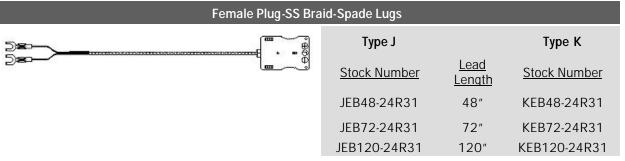
| Rigid Extension |             |            |               |
|-----------------|-------------|------------|---------------|
| Type J          |             |            | Type K        |
| Stock Number    | Body Length | Tip Length | Stock Number  |
| JMBR3-GA-24R2   | 3"          | Flush      | KMBR3-GA-24R2 |
| JMBR3-GB-24R2   | 3"          | 1/8″       | KMBR3-GB-24R2 |
| JMBR3-GC-24R2   | 3"          | 3/16"      | KMBR3-GC-24R2 |
| JMBR6-GA-24R2   | 6"          | Flush      | KMBR6-GA-24R2 |
| JMBR6-GB-24R2   | 6"          | 1/8″       | KMBR6-GB-24R2 |
| JMBR6-GC-24R2   | 6"          | 3/16"      | KMBR6-GC-24R2 |
| JMBR9-GA-24R2   | 9"          | Flush      |               |
| JMBR9-GB-24R2   | 9"          | 1/8″       |               |
| JMBR9-GC-24R2   | 9"          | 3/16"      |               |

# Thermocouple Extensions with Stainless Steel Braid

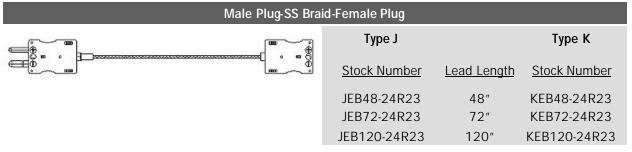
Note: Extensions available w/SS Armor under part# prefix JEA & KEA

Standard Features: 24 gage Fiberglass wire





|              |                              | Male Plug    | SS Braid-Male Plug |
|--------------|------------------------------|--------------|--------------------|
| Type J       |                              | Type K       |                    |
| Stock Number | <u>Lead</u><br><u>Length</u> | Stock Number |                    |
| JEB48-24R22  | 48"                          | KEB48-24R22  |                    |
| JEB72-24R22  | 72"                          | KEB72-24R22  |                    |
| JEB120-24R22 | 120″                         | KEB120-24R22 |                    |



|              |                              | Female Plug-S | S Braid-Female Plug |
|--------------|------------------------------|---------------|---------------------|
| Type J       |                              | Type K        |                     |
| Stock Number | <u>Lead</u><br><u>Length</u> | Stock Number  |                     |
| JEB48-24R33  | 48"                          | KEB48-24R33   |                     |
| JEB72-24R33  | 72"                          | KEB72-24R33   |                     |
| JEB120-24R33 | 120″                         | KEB120-24R33  |                     |

# Thermocouple Accessories

| Thermocouple Wire |   |             |  |
|-------------------|---|-------------|--|
| Type J            |   | Type K      |  |
| Part Number       | <u>Description</u>  | Part Number |  |
| TWJ20GG           | 20 ga. Stranded Duplex Glass over Glass                     | TWK20GG     |  |
| TWJ20GGS          | 20 ga. Stranded Duplex Glass over Glass with SS overbraid   | TWK20GGS    |  |
| TWJ20TTS          | 20 ga. Stranded Duplex Teflon over Teflon with SS overbraid | TWK20TTS    |  |
| TWJ24GG           | 24 ga. Stranded Duplex Glass over Glass                     | TWK24GG     |  |
| TWJ24GGS          | 24 ga. Stranded Duplex Glass over Glass with SS overbraid   | TWK24GGS    |  |
| TWJ24TTS          | 24 ga. Stranded Duplex Teflon over Teflon with SS overbraid | TWK24TTS    |  |

| Polarized Plugs and Jacks |                    |             |             |
|---------------------------|--------------------|-------------|-------------|
|                           | Type J             | Type K      | RTD         |
| <u>Description</u>        | <u>Part Number</u> | Part Number | Part Number |
| Standard Plug             | TPH10J             | TPH10K      | TPH10RTD    |
| Standard Jack             | TPH20J             | TPH20K      | TPH20RTD    |
| Mini Plug                 | TPH110J            | TPH110K     |             |
| Mini Jack                 | TPH21J             | TPH21K      |             |

## Bayonet Caps and Springs

| Part Number  | <u>Description</u>  |
|--------------|---|
| <u>TP502</u> | 1/4 x 28 bolt and spring  |
| TP060        | Bayonet Cap for Type AC—Adjustable Conduit                        |
| TP501        | Bayonet Cap and Spring (combination) for Type BS—Adjustable Braid |
| TP058        | Bayonet Cap for Type TC —Fixed Depth Conduit                      |
| TP061        | 14mm Bayonet Cap  |
| TP072        | 12mm Bayonet Cap  |
| TPH435       | Spring for Metric Caps  |
| TPH44071     | 7/8" x 1/8" NPT Bayonet Adapter                                   |

# Compression Fittings

| Brass Compression Fittings with 1/8" NPT |                           | Transition Fittings |                    |
|--|---------------------------|---------------------|--------------------|
| Part Number                              | <u>Description</u>        | Part Number         | <u>Description</u> |
| BH111                                    | Fits 1/8" diameter probe  | TP046               | 1/8″               |
| BH112                                    | Fits 3/16" diameter probe | TP085               | 3/16"              |
| BH113                                    | Fits 1/4" diameter probe  | TP082               | 1/4"               |

| Melt Bolt Blanks | ;                       | Retractable Me | elt Bolts                   |
|------------------|-------------------------|----------------|-----------------------------|
| Part Number      | <u>Description</u>      | Part Number    | <u>Description</u>          |
| MB101-3          | 3" Long Melt Bolt Blank | RMB102-3       | 3.5" Retractable Melt Bolt  |
| MB101-6          | 6" Long Melt Bolt Blank | RMB102-5       | 5.75" Retractable Melt Bolt |
| MB101-9          | 9" Long Melt Bolt Blank | RMB102-7       | 7.75" Retractable Melt Bolt |



# **OTHER PRODUCTS**



#### **Air Heaters**

Marathon manufactures and stocks 1/2" diameter air heaters with various terminations and configurations.



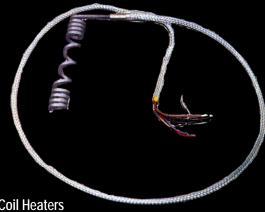
#### **OEM Replacement Heaters**

Marathon manufactures and stocks high quality and competitive priced replacement heaters for a variety of OEM equipment.



#### **Temperature Controllers**

Microprocessor based temperature controllers for all applications and price ranges.



#### **Stock Coil Heaters**

I deal for high temperature and high watt density applications.



heaters and nozzle heaters in a variety of sizes and configurations.



#### **Cartridge Heaters**

Marathon specializes in custom manufactured cartridge heaters and also carries a wide variety of stock cartridge heaters.

# MARATHON HEATER

808 Hackberry Lane—HCR 3, Box 86E Del Rio, TX 78840 (830) 775-1417 Fax (830) 775-4379 www.marathonheater.com