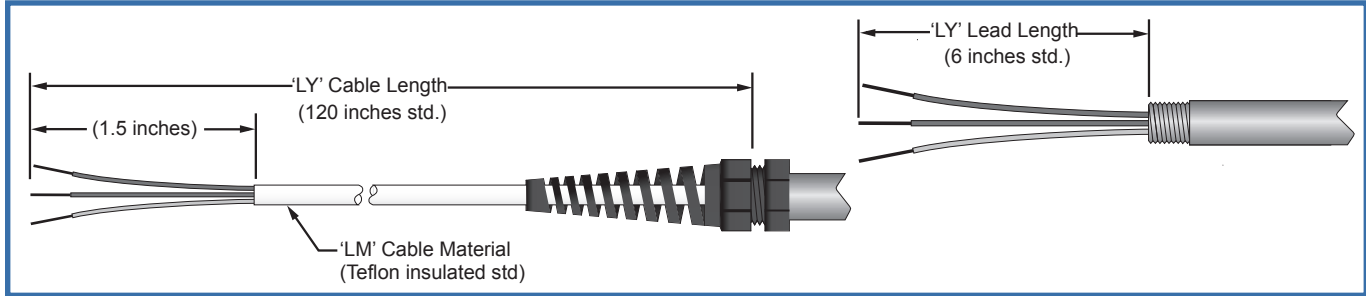


## Leadwire Options



### L Lead Wire Options

#### Lead Wire Length ('Y' option)

Y \_\_\_\_\_ Specify lead wire length in one inch increments  
 example: For a 12 inch 'Y' length specify 012, For a 15 foot 'Y' length specify Y180  
 cable designs: Minimum 12.0 inches (Y012) Maximum 300.0 inches (Y300)  
 lead wire designs: Minimum 3.0 inches (Y003) Maximum 36.0 inches (Y036)

Lead wire configuration ('C' option) available only when -NA cable design is specified

C20	Shielded Cable ( Stainless Steel braided shield)
C23	Shielded Cable ( Kapton® polyimide film foil shield with drain wire)
C30	Cable with Stainless Steel overbraid

## Calibration Options

Burns Engineering is a NVLAP accredited (Lab code 200706-0) temperature calibration facility, staffed with qualified technicians and NIST traceable measurement equipment. Burns has the capability to meet your all of your validation requirements and future periodic calibration needs. Consult the factory for additional calibration options.

### C Calibration Options

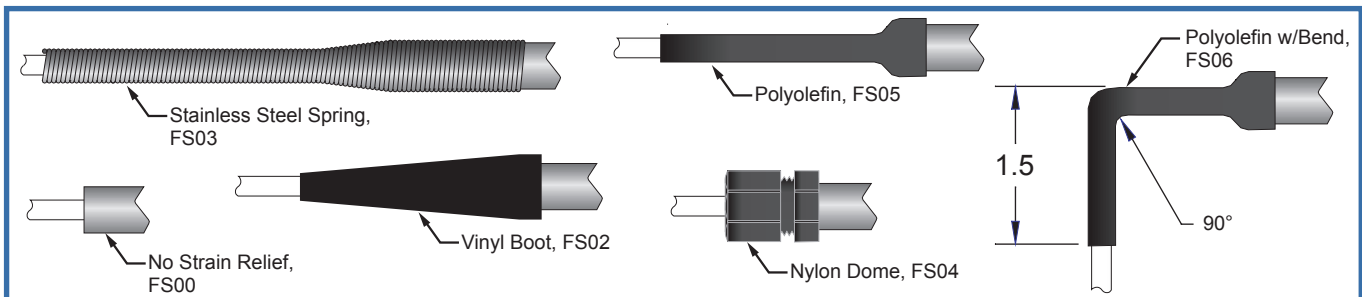
#### Industrial RTD Calibration in °C ('I' option)

I25	Calibration Points: -38, 0, 50, 100 RvsT table and certificate of calibration included
I26	Calibration Points: -38, 0, 100, 200 RvsT table and certificate of calibration included
I35	Calibration Points: 0, 50, 100 RvsT table and certificate of calibration included
I36	Calibration Points: 0, 100, 200 RvsT table and certificate of calibration included

#### Report Options ('R' option)

R10	Certificate of Calibration for RTD at 0°C
R11	Certificate of Conformance with Certified Drawing
R12	Certificate of Calibration for thermocouple at 100°C

## Strain Relief Options



### F Fitting Options

Strain Relief Options ('S' option) available only when -NA cable design is specified

S00	No Strain Relief Required
S02	Vinyl boot
S03	Stainless Steel Spring
S04	Nylon Dome
S05	Polyolefin, adhesive lined
S06	Polyolefin, adhesive lined with 90° bend

## Tagging Options

### M Miscellaneous Options

#### Sensor Tagging Options

T01	Paper Tag with Tag Number (sensor assembly)
T02	Stainless Steel Tag with Tag Number (sensor assembly)
T24	Paper Tag with Time Constant (used with S40 HTST sensors only)

# Accessories and Option Codes

## Cable Gland Options

### H Head Options

#### Cable Gland Options ('C' option)

C01	Nylon Cable Gland, 1/4" NPT, 0.080 - 0.200
C02	Nylon Cable Gland, 1/2" NPT, 0.236 - 0.473
C03	Nylon Cable Gland, 3/4" NPT, 0.472 - 0.708
C04	Nylon Hubbell, 1/2" NPT, 0.250 - 0.375
C05	Nylon Hubbell, 1/2" NPT, 0.187 - 0.250

## Cable for Remote Mount Options

### H Head Options

#### Leadwire/Cable Length ('L' option)

L012	12 inches (1 foot)
L060	60 inches (5 feet)
L120	120 inches (10 feet)
Specify in one-inch increments	

#### Material

01	Teflon™
02	Fiberglass
03	Kapton® polyimide film

#### Configuration

01	Individual insulated lead wires
10	Cable
20	Shielded cable - Stainless Steel braided shield
21	Shielded cable - Copper braided shield
23	Shielded cable - Polyester/aluminum foil shield with drain wire
30	Cable with stainless steel overbraid

## Documentation

For all Series S sensors and thermowells with a wetted surface the heat numbers of all wetted materials will be electro-etch marked on the sensor and/or thermowell extension. A Material Certification of wetted surfaces (SR01) (WE04) and a certificate of surface finish (SR03 or SR05) (WE06 or WE14) will be included automatically. A Certificate of Conformance will also be included for O-rings used in the SPS and SPA designs (SR12). No option codes are required for the above certificates they are included with every order. The options below are available only if requested at time of order.

### S Sheath Options

#### Certifications ('R' option)

R09	Certification that no ADM (animal derived material) was used on the sensor assembly per Burns Specification 101
R10	Certification that no polishing compound was used on the sensor assembly

### T Thermowell Options

#### Testing and Documentation ('W' option)

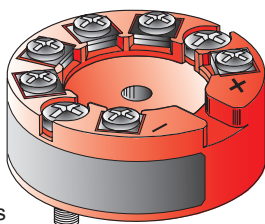
W09	Certification that no ADM (animal derived material) was used per Burns Specification 101
W10	Certification that no polishing compound was used on the Thermowell

## Transmitters

We offer a range of transmitters to meet your requirements. Our transmitters provide fast response and accurate measurements over the entire temperature range. They are designed for monitoring and control applications. For more information on our complete transmitter offering see our transmitter catalog or contact our factory.

### Model T51 & T55

PC Programmable  
Custom Input/Linearization  
  
FM, CSA, CE Approval  
  
Provide "Matching" Capabilities  
0.05% Accuracy



T51 RTD Transmitter  
T55 RTD Transmitter, Matching Capabilities, HART Communication

#### Calibration Type

M	Transmitter and Sensor matched for improved performance (Only available with T55 Transmitter)
(blank)	Not matched

#### Temperature Range

{Tmin to Tmax}	Tmin = Temperature for 4mA output Tmax = Temperature for 20mA output
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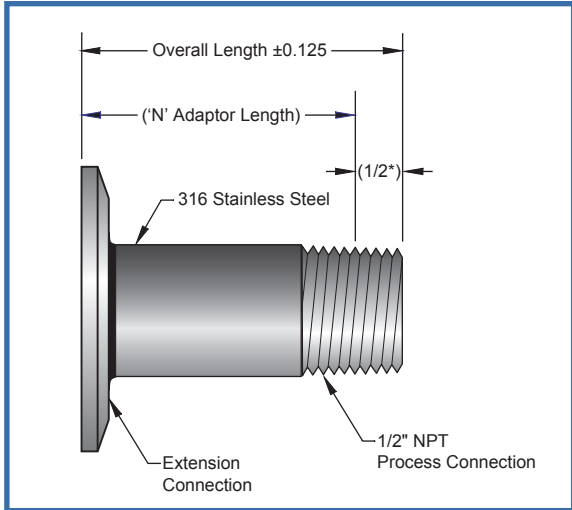
#### Temperature Units

C	Degrees Celsius
F	Degrees Fahrenheit

# Sanitary Accessories

## Adaptors

Burns Sanitary Adaptors allow you to modify any existing NPT connection to a sanitary connection, giving you the capability to select and use the Series S standard and N.E.T. Solution™ sensors with existing systems. The Sanitary Adaptor is available in several different connection sizes and lengths ranging from 1.5 to 6.0 inches.



\*1/2 inch is nominal thread engagement for the 1/2" NPT thread size

SAA	Sanitary Adaptor	
Extension Connection Size		(Used with tube sizes)
-05	1/2"	1/2" 3/4"
-15	1 1/2"	1", 1 1/2"
-20	2"	2"
-25	2 1/2"	2 1/2"
-30	3"	3"
-40	4"	4"

Extension Connection Material	
03	316 Stainless Steel
06	316L Stainless Steel

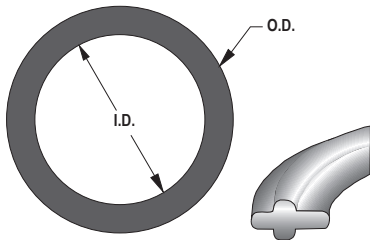
  

'N' Adaptor Length*	
-0150	1.50 inch 'N' Length (OAL = 2.00 inches)
-0175	1.75 inch 'N' Length (OAL = 2.25 inches)
-0300	3.00 inch 'N' Length (OAL = 3.50 inches)

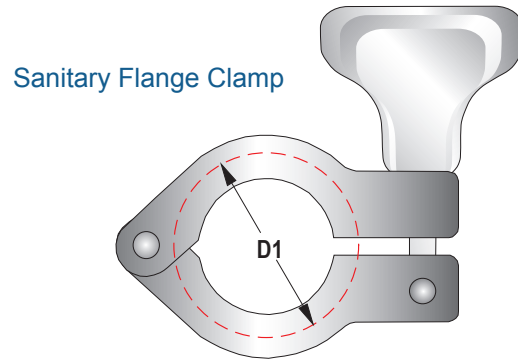
\*Minimum length 1.0 inches, -100 / maximum length 6.0 inches -600

## Other Support Components

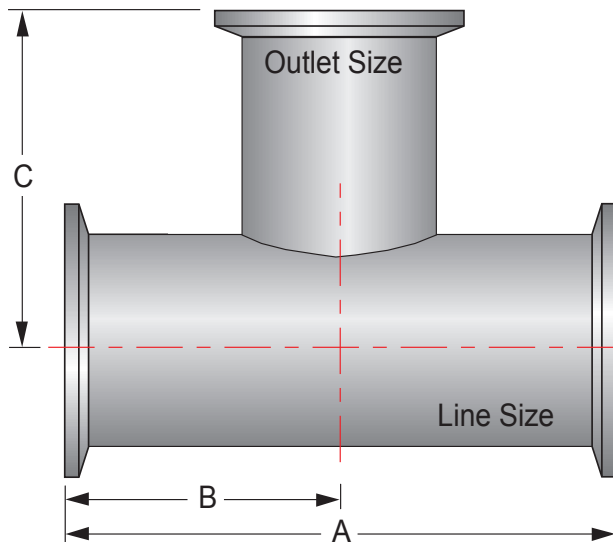
Consult the factory.



Sanitary O-Ring Seal



Sanitary Flange Clamp



Various Sanitary T's

# Connection Head Descriptions

## Standard Enclosures

Burns Engineering offers an extensive array of connection heads to complement the sensor and its operational environment. Choose from a wide variety of materials, sizes and ratings. Each connection head configuration can be specified with traditional NPT threads or our N.E.T. Solution NPSM threads.

Cast iron weather proof, connection head NEMA type 4 enclosure. For use with single element, three wire dual element RTDs and DIN B sized transmitters.

**Burns 1C** (1/2" NPT head to sensor connection)  
**Burns 1EN** (1/2" NPSM head to sensor connection)

Polypropylene weather proof NEMA type 4X connection head. For use with single element, three wire dual element RTDs and DIN B sized transmitters.

**Burns 9P** (1/2" NPT head to sensor connection)  
**Burns 9PN** (1/2" NPSM head to sensor connection)

316 stainless steel connection head CSA and FM rated as explosion proof Class I, Div 1, Group B,C,D: dust ignition proof for Div II, Group E,F,G: NEMA 4X. For use with single and dual sensing element and DIN B sized transmitters.

**Burns 14S** (1/2" NPT head to sensor connection)  
**Burns 14SN** (1/2" NPSM head to sensor connection)

Miniature aluminum connection head. For use with single element RTDs.

**Burns 16AN**  
 (3/8"-24 UNF head to sensor connection)

Cast aluminum weather proof connection head NEMA type 4X enclosure. For use with single element, three wire dual element RTDs and DIN B sized transmitters.

**Burns 2A** (1/2" NPT head to sensor connection)  
**Burns 2E** (epoxy coated, 1/2" NPT head to sensor connection)  
**Burns 2EN** (epoxy coated, 1/2" NPSM head to sensor connection)

Cast aluminum connection head FM rated as explosion proof Class I, Div 1, Group A,B,C,D: Class II, Div 1, Group E,F,G: Class III, Div 1, NEMA 4X. For use with single and dual sensing element, DIN B sized and model TL transmitters.

**Burns 3A** (1/2" NPT head to sensor connection w/waterproof kit)  
**Burns 3E** (epoxy coated, 1/2" NPT head to sensor connection w/waterproof kit)  
**Burns 5A** (1/2" NPT head to sensor connection)  
**Burns 5E** (epoxy coated, 1/2" NPT head to sensor connection)  
**Burns 5EN** (epoxy coated, 1/2" NPSM head to sensor connection)

## Enclosures with LED Indicator

Burns Engineering offers loop powered and battery powered Indicators which incorporate a high efficiency display in an enclosure. The unit is microprocessor based and set-up is achieved by means of three push buttons located on the underside of the module following a simple menu structure. It can be driven by the Burns Model T51 or T55 transmitters which sit in the same head underneath the indicator making a compact efficient package. Or it can be configured to run from any 4 to 20 mA source and display the desired process variable. Contact the factory for details on the battery powered option.

Plastic NEMA type 4X weather proof connection head with 4 digit LED Indicator. For use with single sensing elements only. Requires a DIN B sized transmitter for display.

**Burns 20P** (1/2" NPT head to sensor connection)  
**Burns 20PN** (1/2" NPSM head to sensor connection)

Cast aluminum connection head with 4 digit LED Indicator FM rated as explosion proof Class I, Div 1, Group A,B,C,D: Class II, Div 1, Group E,F,G: Class III, Div 1, NEMA 4X. For use with single sensing elements only. Requires a DIN B sized transmitter for display.

**Burns 19A** (1/2" NPT head to sensor connection)  
**Burns 19AN** (1/2" NPSM head to sensor connection)