

NEMA 4 CONNECTION HEAD WITH SPRING-LOADED ASSEMBLY AND MOUNTING HARDWARE

How to build a part number:

To order an Applied Sensor Technologies temperature sensor, select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Don't see exactly what you need? Give us a call!

SENSOR TYPE	ASSEMBLY STYLE	CONNECTION	CONNECTION LENGTH	SHEATH DIAMETER	SHEATH MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	OPTIONS

SENSOR TYPE (See page 2-2b for optional elements)

RTP1 – Platinum; DIN 0.00385; 100 ohm +/- 0.12% @ 0°C; 3-wire construction

(For dual element, add prefix "D"- e.g., DRTP1)

ASSEMBLY STYLE

45 – Sheath with cast aluminum head; spring-loaded in head; conforms to NEMA 4 requirements; 3/4" NPT conduit connection; ceramic terminal block; 1/2" NPT process connection; gasketed screw cover with stainless steel chain

CONNECTION

H – Head only; 1/2" NPT (female) instrument connection

N – 1/2" NPT carbon steel nipple only

NU – 1/2" NPT carbon steel nipple and union

NUN – 1/2" NPT carbon steel nipple, union and nipple

Add suffix **"1S"** for 304 stainless steel

Add suffix **"2S"** for 316 stainless steel

See chart below for restrictions

CONNECTION LENGTH

– (e.g., 006 = 6 inch)

See chart below for standard available lengths

SHEATH DIAMETER (in inches) (see below for restrictions)

4 – 1/8 (0.125)

6 – 3/16 (0.188)

7 – 1/4 (0.250)

9 – 3/8 (0.375)

SHEATH MATERIAL

3 – 316 stainless steel

TEMPERATURE RANGE - Minimum and maximum operating temperatures

1 – -45 to 260°C (-50 to 500°F)

2 – -45 to 482°C (-50 to 900°F)

3 – -45 to 788°C (-50 to 1450°F)

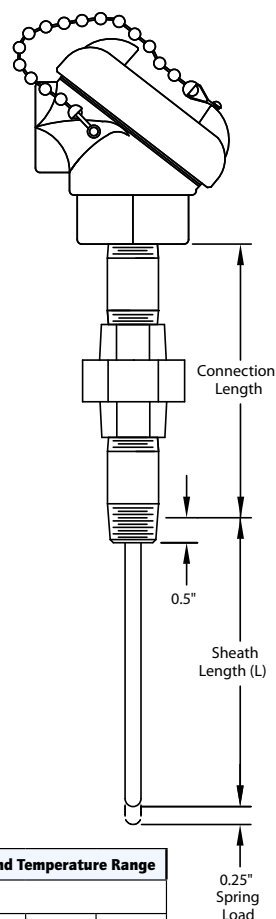
4 – -200 to 260°C (-328 to 500°F)

SHEATH LENGTH (for lengths greater than L=36", consult AST)

L# – (e.g., L6 = 6 inch sheath)

OPTIONS – see back page

STANDARD AVAILABLE CONNECTION LENGTHS		
N	NU	NUN
N/A	2.00	2.50
0.50	2.50	3.00 *
1.00	3.00	4.00 *
1.50	3.50	5.00
2.00	4.00	6.00 *
3.00	5.00	8.00
4.00	6.00	10.00
5.00	7.00	12.00
6.00	8.00	14.00
* NUN 2S OPTION AVAILABLE IN THESE LENGTHS ONLY.		
DIMENSIONS ARE GIVEN IN INCHES		



Smallest Diameter Sheath Available By Sensor Type and Temperature Range							
SINGLE							
Temp Range	RTP 1	RTP 1A	RTP 1AA	RTP 6	RTP 7	RTP 7A	RTP 7AA
1	1/8	1/8	1/8	1/8	3/16	3/16	3/16
2	3/16	3/16	3/16	3/16	3/16	3/16	3/16
3	3/16			3/16	3/16		
4	1/8			1/8	3/16		
DUAL							
Temp Range	DRTP 1	DRTP 1A	DRTP 1AA	DRTP 6	DRTP 7	DRTP 7A	DRTP 7AA
1	3/16	3/16	3/16	3/16			
2	1/4	1/4	1/4	3/16			
3	1/4			1/4			
4	3/16			3/16			

STYLE 45

AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS		
RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.		
Option Code	Accuracy (at 0°C)	Construction
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire
RTP7A	±0.06%	4-wire
RTP7AA	±0.01%	4-wire
Notes: 1. For dual element, add prefix "D" (e.g., DRTP6) 2. Additional materials, curves and resistance values are available - see Capabilities brochure.		
ASSEMBLY OPTIONS		
Option Code	Description	
TAG1	Stainless steel tag and wire	
CAL1	NIST traceable calibration [specify point(s)]	
CRT1	Certificate of conformance	
WC20	Wiring cable gland for 0.187 - 0.312 diameter cables, for terminal heads with 1/2" NPT conduit connections	
WC21	Wiring cable gland for 0.125 - 0.187 diameter cables, for terminal heads with 1/2" NPT conduit connections	
Transmitters: see Style 48		

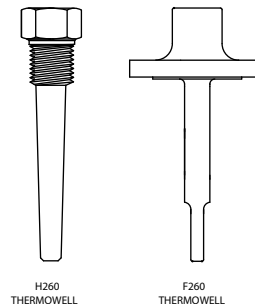
NEMA 4 OR 4X TERMINAL HEAD OPTIONS			
Head without ground screw	Head with internal ground screw	Process Connection	Conduit Connection
Cast aluminum, screw cover with chain, NEMA 4			
HD10	HD11	1/2"	1/2"
Std.	HD13	1/2"	3/4"
Epoxy-coated aluminum, screw cover with chain, NEMA 4X			
HD50	HD51	1/2"	1/2"
HD52	HD53	1/2"	3/4"
Cast iron, screw cover with chain, NEMA 4			
HD20	HD21	1/2"	1/2"
HD22	HD23	1/2"	3/4"
316 stainless steel, screw cover with chain, NEMA 4X			
HD40	HD41	1/2"	3/4"

Note:

- For former Style 46, use option HD20

THERMOWELLS & PROTECTION TUBES

For a complete offering of metal, ceramic and composite material thermowells and protection tubes, please see the Thermowell and Protection Tube sections.



Note: Many non-standard options, including additional sheath diameters and materials, may also be available – consult AST for specific requirements.