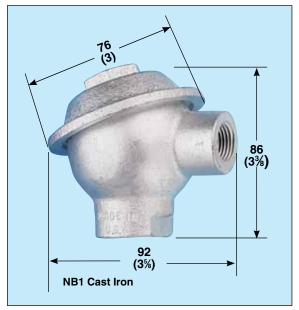
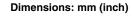
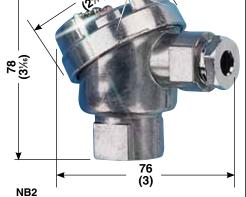
# **Thermocouple Heads**







10 Uraer		10 Oruer					
Material	Туре	Model Number					
Cast Iron	NB1	NB1-0 NB1-2 NB1-4					
Burnished Die-Cast Aluminum	NB2	NB2-0 NB2-2 NB2-4					
Aluminum	NB3	NB3-0 NB3-2 NB3-4					
Aluminum	NB4	NB4					
Cast Iron	NB5	NB5-0 NB5-2 NB5-4					
Aluminum	NB6	NB6-0 NB6-2 NB6-4					

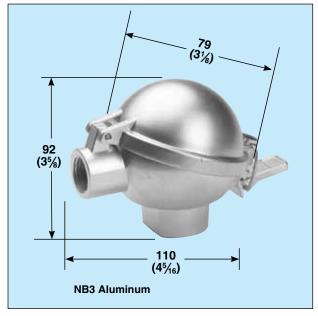


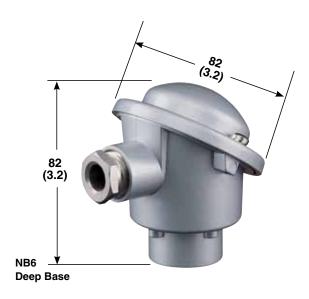
**Burnished Die Cast Aluminum** 



Ordering Examples: NB1-0, cast iron head with no terminal block.

**NB6-2**, deep base aluminum head with a 2-terminal terminal block (for 1 thermocouple element).





		Threaded Openings		
Terminals	Wt (oz)	Protection Tube Entry	Extension Wire Entry	Features
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	22 23 24	½ NPT	½ NPT	Rugged construction     Screw cover with     inside thread     Moisture and dust resistant     Ideal for outdoor use     Standard size
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	5 6 6½	½ NPT Standard	½ NPT with compression fitting for ½ to ½" OD wire	Small and lightweight     Good corrosion resistance     Gasketed, weather resistant     Burnished finish     Safety chain on cover     Medium size
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	2½ 3½ 8 9¼ 9¾	½ NPT	½ NPT	Hinge top     Lightweight aluminum     Standard size
4 = duplex element max 14-gage wire	3¼	M10 x1 works with % NPT	M16 x 1.5 with compression fitting	Metric     Miniature size     Good corrosion resistance     Uses miniature barrier     strip connector (optional)
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	56 57 58	½ NPT	½ NPT with compression fitting	Rugged cast iron     High-temperature painted finish     Safety chain on cover     Standard size
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	8¾ 9¾ 10¾	½ NPT	½ NPT with compression fitting	Deep base     Lightweight aluminum     Standard size

Bakelite CH-76.







Ceramic CH-83.



Ceramic CH-84.



Bakelite CH-77.

### **Terminal Blocks for Connection Heads**

(Order separately or included with heads with -2 or -4 suffixes)

Ceramic Block with Nickel Plated Brass Terminals for NB2 Head for Gage 14 Wire Maximum



To Order				
Model No.	Terminals	Wt g (oz)		
CH-49	2 = single	43 (1½)		
CH-50	4 = duplex	57 (2)		

Ceramic Blocks with Brass Terminals for Type NSA, NSB, NSC, and NBS Connection Heads for Max 8-Gage Wire



Model No.	Terminals	Wt g (oz)
CH-47	2 = single	85 (3)
CH-48	4 = duplex	128 (4½)

Ceramic Blocks with Brass Terminals for Type NBN, NB3, NBG, NXT, NB1, and NBB Connection Heads for Max 14-Gage Wire



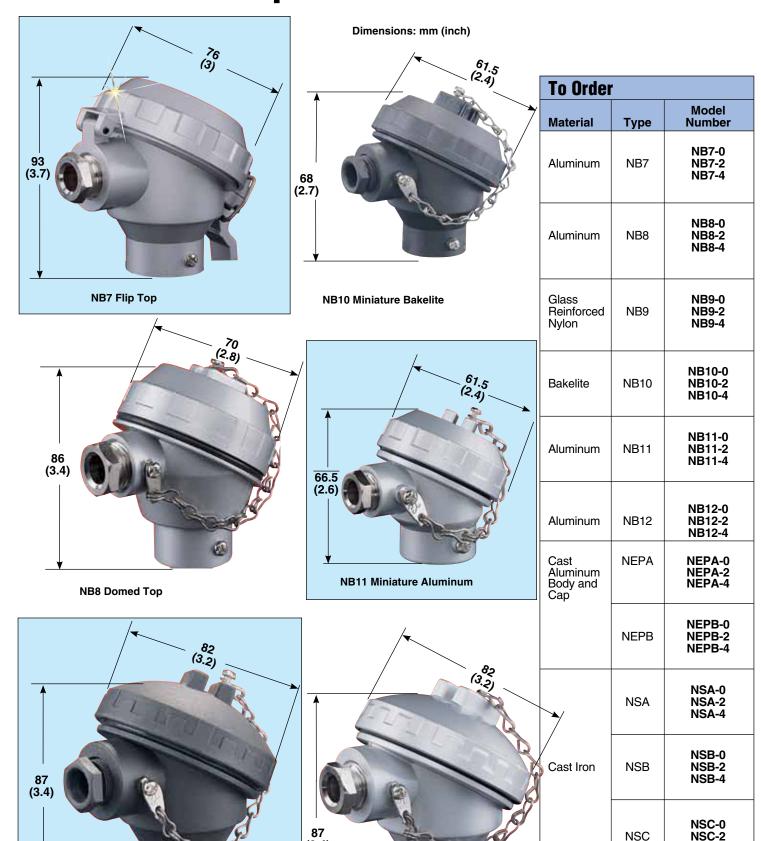
Model No.*	Terminals	Wt g (oz)
CH-73	2 = single	35 (11/4)
CH-74	4 = duplex	50 (1¾)

\*For NB1 heads, add suffix "-NB1" to model number; no additional charge.

Model† No.	Description	Material	Term	Wt g (oz)
CH-83	For NB4	Ceramic	2	28 (1)
CH-84	For NB4	Ceramic	4	28 (1)
CH-76	For NBG,	Bakelite	2	77 (2½)
CH-77	NB5, NB6, NB, NB9	Bakelite	3	77 (2½)
CH-78	and NB12	Bakelite	4	77 (2½)

†These are alternatives, not standard with "-2" or "-4" suffixes on thermocouple heads.

### **Thermocouple Heads**



**NB12 Low Profile** 

NSC-4

Ordering Examples: NB10-0, bakelite head

**NB7-4**, flip-top aluminum head with a 4-terminal terminal block (for 2 thermocouple

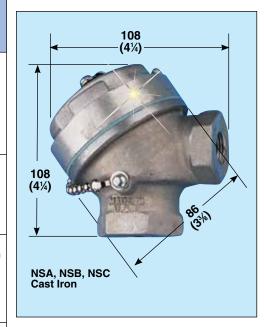
with no terminal block.

elements).

(3.4)

**NB9 Glass Reinforced Nylon** 

		Threaded Openings			
	Wt	Protection Extension			
Terminals	(oz)	Tube Entry	Wire Entry	Features	
0 = no terminal block 2 = single element 4 = duplex element	8¾ 9¾ 10¾	½ NPT	½ NPT	Lightweight aluminum construction     Flip top     Moisture and dust resistant     Ideal for outdoor use     Standard size	
max 14-gage wire					
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	8 9 10	½ NPT	½ NPT with compression fitting	Small and lightweight     Domed top     Gasketed, weather resistant     Secure screw thread     Safety chain on cover     Medium size	
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	5 6 7	½ NPT	½ NPT wtih compression fitting	Very lightweight construction     Safety chain on cover     Good corrosion resistance     Standard size	
0 = no terminal block	2%				
2 = single element 4 = duplex element	3% 4%	½ NPT	% NPT	Ultra lightweight construction     Safety chain on cover     High temperature plastic	
max 14-gage wire	47/			Miniature size	
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	4% 5% 6%	½ NPT	% NPT with compression fitting	Miniature size     IP 67 Sealed     Safety chain on cover     Lightweight construction     Miniature size	
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	9¾ 10¾ 11¾	½ NPT	½ NPT	Low profile     Safety chain on cover     Lightweight construction     Standard size	
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	16½ 17¾ 18¼	¾ NPT	¾ NPT	Explosion resistant head*     Rated for: Class III     Class I, Group C, D     Class II, Groups E, F, G     Screw cover	
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	21½ 22¾ 23¼	½ NPT	½ NPT	Moisture and dust resistant     Ideal for outdoor use     Utilizes barrier strip connector (optional)	
0 = no terminal block 2 = single element 4 = duplex element max 8-gage wire	42 46 48	½ NPT	¾ NPT	Rugged construction     Screw cover with inside thread     Moisture and dust resistant	
0 = no terminal block 2 = single element 4 = duplex element max 8-gage wire	40 44 46	¾ NPT	¾ NPT	Ideal for outdoor use     Standard TRODEKS     heavy-duty head     Cover equipped with safety	
0 = no terminal block 2 = single element 4 = duplex element max 8-gage wire	36 40 42	1 NPT	¾ NPT	chain (readily removed without tools) • Standard size	





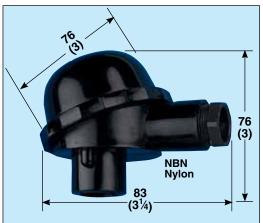
#### Discount Schedule

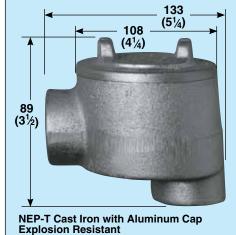
1-10 Units . . . . Net 11-24 Units . . . . 5% 25-100 Units . . 10%

NEMA 4X (IP66)
Rated Heads Available.
Please Consult our
Technical Quotations
Department

\*Note: The use of explosion resistant heads does not imply that a complete assembly is either explosion proof or intrinsically safe. It is the user's responsibility to determine suitability of materials for an installation.

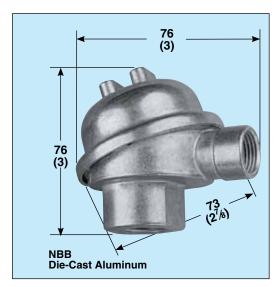
## **Thermocouple Heads**













Dimensi	ions:	mm (	(inch)
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Discount Schedule					
1-10 Units Net 11-24 Units 5% 25-100 Units 10%	101 and Up, Consult Sales				

To Order					
Material	Туре	Model Number			
Nylon	NBN	NBN-0 NBN-2 NBN-4			
Bakelite Glass Fiber	NBG	NBG-0 NBG-2 NBG-4			
Die-Cast Aluminum	NBB	NBB-0 NBB-2 NBB-4			
Cast Iron with Aluminum Cap	NEP-T	NEP-T0 NEP-T2 NEP-T4			
Aluminum	NXT	NXT-0 NXT-2 NXT-4			
Feraloy® Iron Alloy	HEP-TX	HEP-TX-0 HEP-TX-2 HEP-TX-4 HEP-TX70			

**Note:** Barrier strips are utilized when more than 4 connections are required. e.g.: dual element 3-wire RTD.

Transmitter may be mounted in most heads. Transmitter may not be mounted in NB4 and only the smallest transmitters can fit the NB2 head by special order.

Check transmitter dimensions identified by individual product specifications as well as the internal dimensions for the head given .

Ordering Example: NEP-T4, cast iron thermocouple head with aluminum cap.

		Threaded Openings		
	Wt	Protection	Extension	
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	( <b>oz</b> ) 3 4 5	1/2 NPT	Supplied with nylon bushing for plastic covered extension wire to 0.24 to 0.40" OD	Easy access to terminal block     Suitable for use in ambient     temperatures to 121°C (250°)°F     Moisture and dust-resistant     Ideal for chemical plant use     Excellent corrosion resistance     Very light weight     Standard size
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	6 7 8	½ NPT	½ NPT	Noncombustible Heat proof Acid resistant Alkali resistant Standard size
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	6 7 8	½ NPT	½ NPT	Good corrosion resistance     Lightweight     Bayonet cover readily removed without tools     Easy access to terminal block     Moisture and dust-resistant     Standard size
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	75 76 76	½ NPT	½ NPT	Explosion resistant head*     Rated for     Class I, Group C, D     Class III     Screw cover with inside thread     Moisture and dust resistant     Ideal for outdoor use     Utilizes barrier strip connector (optional)
0 = no terminal block 2 = single element 4 = duplex element max 14-gage wire	11 12 <sup>1</sup> / <sub>4</sub> 12 <sup>3</sup> / <sub>4</sub>	½ NPT	½ NPT	Tall cover with hinge top Ideal for big transmitters Utilizes barrier strip connector (optional) Medium size
0 = no terminal block 2 = single element 4 = duplex element 70 = for mounting TX70 Transmitter max 14-gage wire	62 64 64 66	1 NPT	1 NPT	Explosion resistant head for 2-wire transmitter*     Rated for: Class I, Div 1&2, Groups C, D Class II, Div 1 Groups E, F, G, Class III     Moisture/dust-resistant     Utilizes barrier strip connector (optional)

\*Note: The use of explosion resistant heads does not imply that a complete assembly is either explosion proof or intrinsically safe. It is the user's responsibility to determine suitability of materials for an installation.

To Order				
300 mm (12") Long with Insulation, Plus 13 mm (½") Stripped Ends Standard				
AWG Wire Size	Type K	Type E	Type J	
14	XC-14-K-12	XC-14-E-12	XC-14-J-12	
20	XC-20-K-12	XC-20-E-12	XC-20-J-12	
24	XC-24-K-12	XC-24-E-12	XC-24-J-12	

<sup>\* 6&</sup>quot; = 150 mm

### **Bi-Metal Thermometers for Head and Well Assemblies**

Additional Models Available.



#### Model J (Shown)

21/2, 4 and 6" Lengths

Shown smaller than actual size.

- Head Can Be Tilt-**Adjusted Through** a Full 90° Angle
- ✓ All Stainless Steel **Welded Construction** 
  - External Recalibration
  - ✓ Rust and Corrosion Proof, Leakproof, **Hermetically Sealed**
  - ✓ Sensitive Bi-Metal **Element Silicone**
- ✓ Dampened for Minimum Pointer Vibration and **Maximum Heat Transfer**
- ✓ Accuracy—1% of Range
- ✓ Use of Thermowell Is Recommended for **Pressure Applications**
- ✓ Overrange Protection— 50% Up to 500°F

**Thermowells Accept:** Models A, B, G, H, L, R and S

#### **Ceramic Fiber Insulated Thermocouple Elements** for Head & Well Assemblies

- ✓ Standard 12" Long **Thermocouple Elements**
- ✓ Insulation Temperature Rating Up to 2200°F
- Available In Type K, E and J Calibrations

Additional probes available.

**XC Series** 

Ordering Example: XC-20-K-12, 20 AWG Type K thermocouple, 300 mm (12') long with high temperaturté Nextel™ braided ceramic fiber insulation.