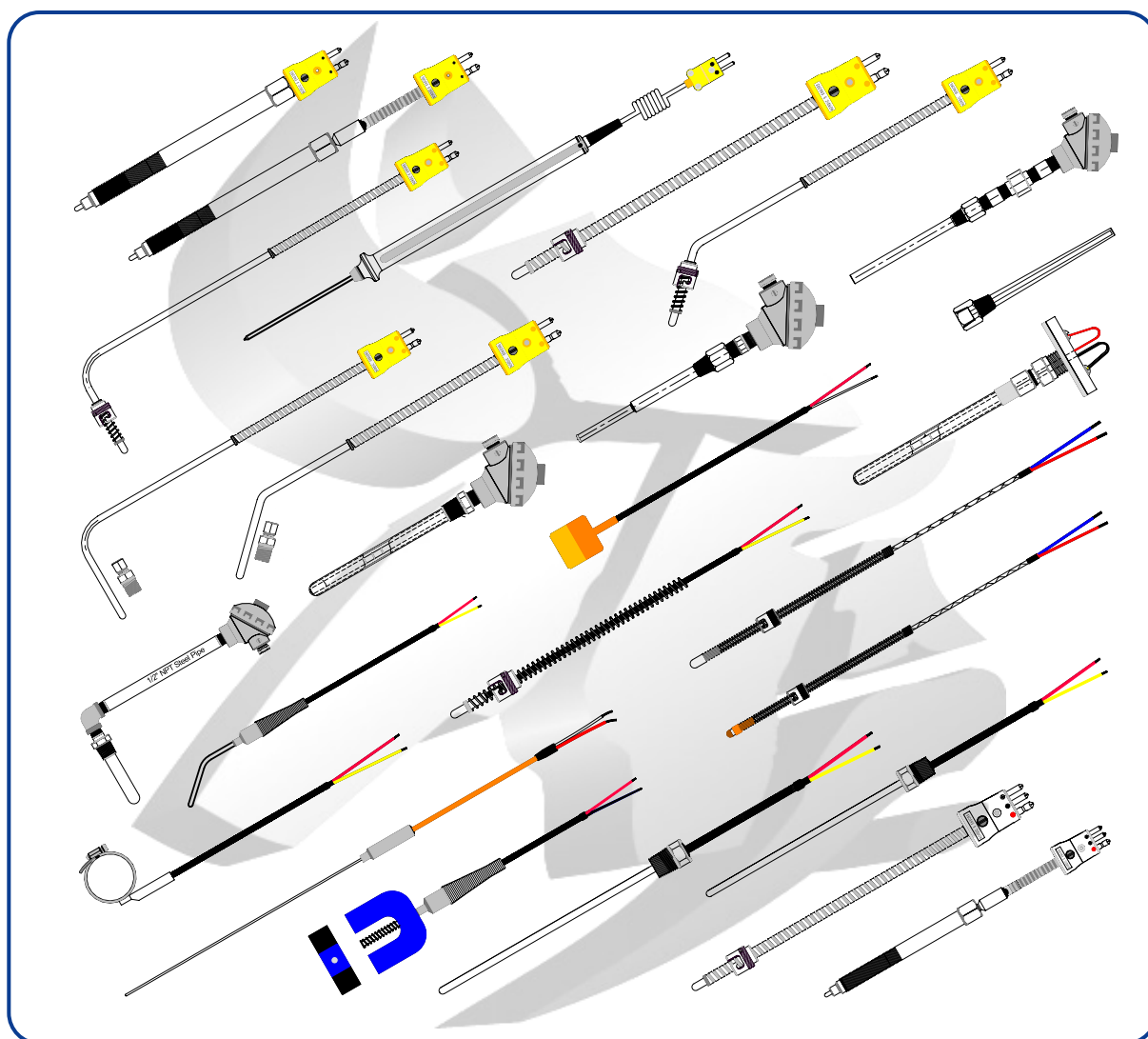




**Thermocouple & RTD Accessories
(Thermowells, Connectors & Fittings)**



Nordic Sensors Industrial Inc.
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Telephone: 1-888-667-3421 Fax: 1-888-867-9986
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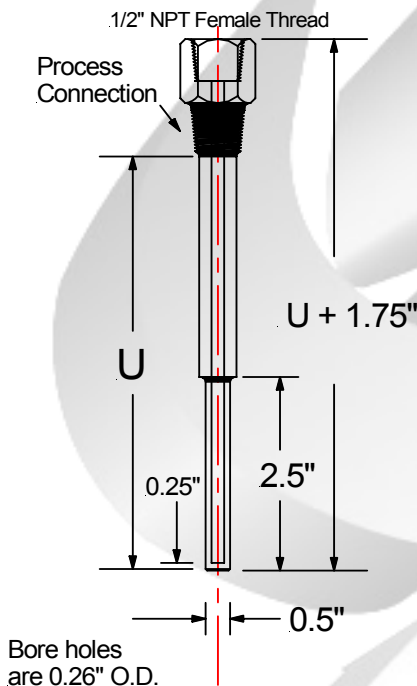
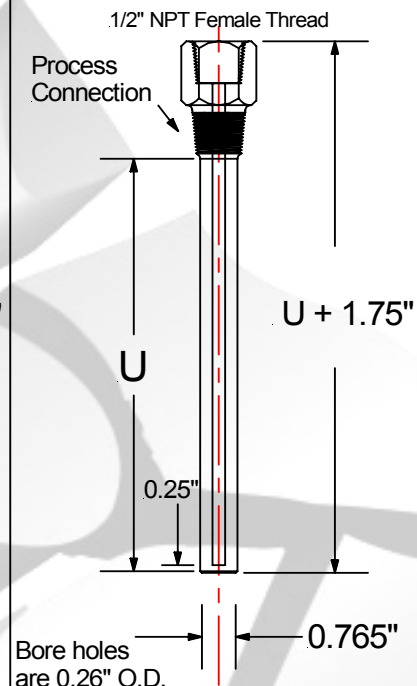
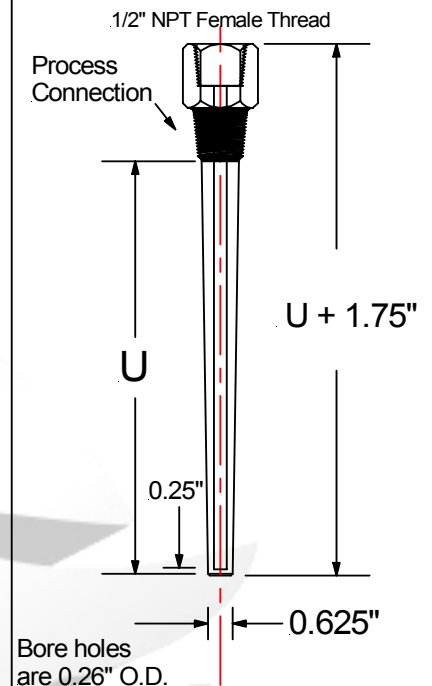
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ACCESSORIES

P-SERIES THERMOWELLS

Stepped Thermowell	Straight Thermowell	Tapered Thermowell
 1/2" NPT Female Thread Process Connection U U + 1.75" 0.25" 2.5" 0.5" Bore holes are 0.26" O.D. Model Code: PW1	 1/2" NPT Female Thread Process Connection U U + 1.75" 0.25" 0.765" Bore holes are 0.26" O.D. Model Code: PW2	 1/2" NPT Female Thread Process Connection U U + 1.75" 0.25" 0.625" Bore holes are 0.26" O.D. Model Code: PW3

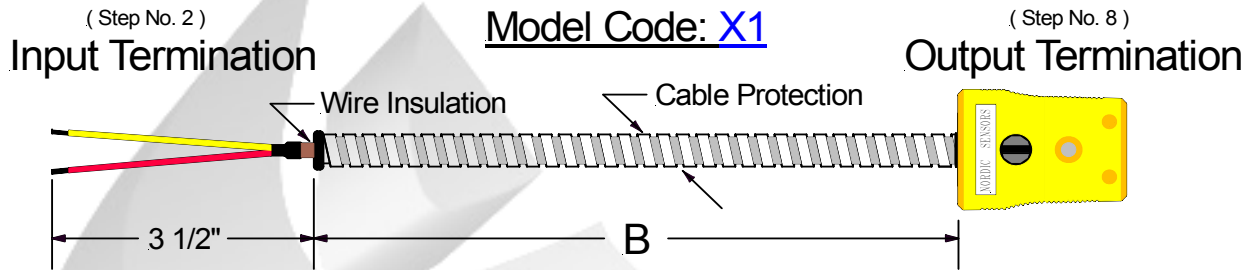
Model	A	B	C
			
Thermowell Model	A "U" Fractional Dimension	B Sheath Material	C Process Connection
1 PW1	A 1 5/8"	1 304 Stainless	A 1/2" NPT
2 PW2	B 2 1/2"	2 316 Stainless	B 3/4" NPT
3 PW3	C 4 1/2"	3 Inconel 600	C 1" NPT
	D 7 1/2"	4 Carbon Steel	
	E 10 1/2"	5 Solid Teflon	
	F 13 1/2"		
	G 16 1/2"		
	H 22 1/2"		

For all other U lengths
contact factory
for availability.

For all other materials
contact factory
for availability.

ACCESSORIES

THERMOCOUPLE EXTENTION CABLES



Model:

X1 1. 2. 3. - 4. - 5. 6. 7. 8. 9.

1.	Calibration
J	(+) Iron Vs. (-) Constantan
K	(+) Ni.-Chromium Vs. (-) Ni.-Aluminum
T	(+) Copper Vs. (-) Constantan
E	(+) Ni.-Chromium Vs. (-) Constantan
N	(+) Nicrosil Vs. (-) Nisil

2.	Input Termination Option
1	3" Split Leads & 1/2" Bare Ends.
2	3" Split Leads & No.10 Spade Lugs.
3	Standard Male Plug
4	Standard Female Jack
5	Mini Male Plug
6	Mini Female Jack

3.	Input Accessories
A	None
B	Bx Connector
C	Cable Clamp

4.	"B" Dimension
	"B"= <u>0 4 8</u> "
	Leads Wire Length In Inches

5.	Wire Gage Description
A	24 Gage Stranded Conductors
B	24 Gage Solid Conductors
C	20 Gage Stranded Conductors
D	20 Gage Solid Conductors

6.	Wire Insulation Description
1	Fiberglass Insulation Jacket
2	Teflon Insulation Jacket
3	Teflon Jacket, Tin foil Sheild & Drain Wire
4	P.V.C. Insulation Jacket
5	P.V.C. Jacket, Tin foil Sheild & Drain Wire

7.	Wire Cable Protection
N	None
S	Stanless Steel Overbraid
F	Flexible Armor Cable

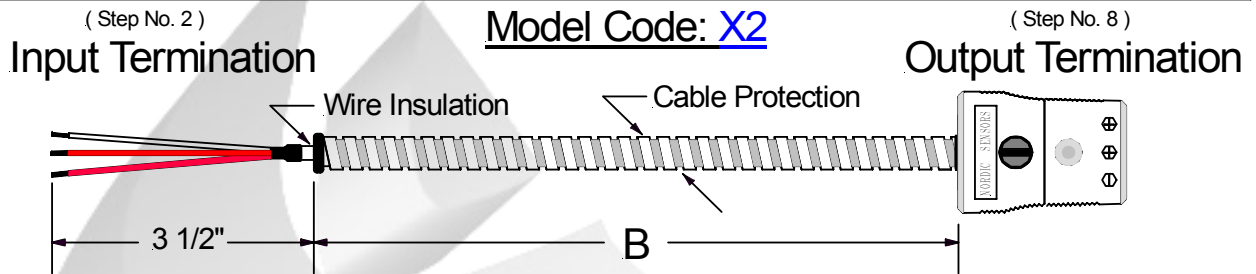
8.	Output Termination Option
1	3" Split Leads & 1/2" Bare Ends.
2	3" Split Leads & No.10 Spade Lugs.
3	Standard Male Plug
4	Standard Female Jack
5	Mini Male Plug
6	Mini Female Jack

9.	Output Accessories
A	None
B	Bx Connector
C	Cable Clamp

Nordic Sensors Ind. Inc. Tel: 1-888-667-3421 & Fax: 1-888-867-9986.

ACCESSORIES

RTD EXTENTION CABLES



Model:

X2 1. 2. 3. - 4. - 5. 6. 7. 8. 9.

1.	Number Of Conductors
A	2 Conductors
B	3 Conductors
C	4 Conductors

2.	Input Termination Option
1	3" Split Leads & 1/2" Bare Ends.
2	3" Split Leads & No.10 Spade Lugs.
3	Standard Male Plug 2 & 3 Wire Cable, Only
4	Standard Female Jack 2 & 3 Wire Cable, Only
5	Mini Male Plug 2 & 3 Wire Cable, Only
6	Mini Female Jack 2 & 3 Wire Cable, Only

3.	Input Accessories
A	None
B	Bx Connector
C	Cable Clamp

4.	"B" Dimension
"B"= 0 4 8 "	
Leads Wire Length In Inches	

5.	Wire Gage Description
A	26 Gage Stranded Conductors
B	24 Gage Stranded Conductors
C	20 Gage Stranded Conductors

6.	Wire Insulation Description
1	Fiberglass Insulation Jacket
2	Teflon Insulation Jacket
3	Teflon Jacket, Tin foil Sheild & Drain Wire
4	P.V.C. Insulation Jacket
5	P.V.C. Jacket, Tin foil Sheild & Drain Wire

7.	Wire Cable Protection
N	None
S	Stanless Steel Overbraid
F	Flexible Armor Cable

8.	Output Termination Option
1	3" Split Leads & 1/2" Bare Ends.
2	3" Split Leads & No.10 Spade Lugs.
3	Standard Male Plug 2 & 3 Wire Cable, Only
4	Standard Female Jack 2 & 3 Wire Cable, Only
5	Mini Male Plug 2 & 3 Wire Cable, Only
6	Mini Female Jack 2 & 3 Wire Cable, Only

9.	Output Accessories
A	None
B	Bx Connector
C	Cable Clamp

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ACCESSORIES

STANDARD CONNECTORS



Temperature rating 425° F Max

MALE (2-PIN)

PART #	CALIBRATIONS
LP - ()	J, K, T, R, U, E, N



FEMALE (2-PIN)

PART #	CALIBRATIONS
LJ - ()	J, K, T, R, U, E, N



MALE (3-PIN)

PART #	CALIBRATIONS
LP3 - ()	J, K, T, R, U, E, N

FEMALE (3-PIN)

PART #	CALIBRATIONS
LJ3 - ()	J, K, T, R, U, E, N

HIGH TEMPERATURE

High temperature rating 800° F continuous (1000° F intermittent)

MALE (2-PIN)

PART #	CALIBRATIONS
HTLP - ()	J, K, T, R, U, E, N,

FEMALE (2-PIN)

PART #	CALIBRATIONS
HTLJ - ()	J, K, T, R, U, E, N,

MALE (3-PIN)

PART #	CALIBRATIONS
HTLP3 - ()	J, K, T, R, U, E, N,

FEMALE (3-PIN)

PART #	CALIBRATIONS
HTLJ3 - ()	J, K, T, R, U, E, N,

PANEL JACKS



Temperature rating 400° F (max)

2 - PIN

PART #	CALIBRATIONS
H 30 - _	J, K, T, R, U, E, N

3 - PIN

PART #	CALIBRATIONS
H 303 - _	J, K, T, R, U, E, N

CIRCULAR (2-PIN)

PART #	CALIBRATIONS
H 32 - _	J, K, T, R, U, E, N

HIGH TEMPERATURE

High temperature rating 550° F (max)

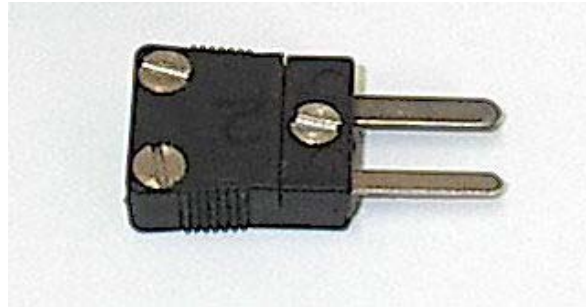
STANDARD (2-PIN)

PART #	CALIBRATIONS
HTH30 - _	J, K, T, R, U, E, N

CIRCULAR (2-PIN)

PART #	CALIBRATIONS
HTH32 - _	J, K, T, R, U, E, N

MINI MALE PLUG



Temperature rating 400° F

2-PIN

PART #	CALIBRATIONS
MP -(_)	J, K, T, R, U, E, N,

3-PIN

PART #	CALIBRATIONS
MP3 -(_)	J, K, T, R, U, E, N,

HIGH TEMPERATURE MINI PLUG

High temperature rating 550° F

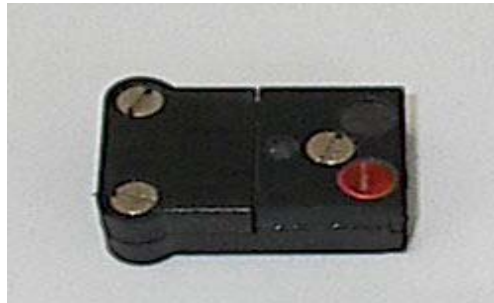
2-PIN

PART #	CALIBRATIONS
HTMP -(_)	J, K, T, R, U, E, N,

3-PIN

PART #	CALIBRATIONS
HTMP3 -(_)	J, K, T, R, U, E, N,

MINI JACK (FEMALE)



Temperature rating 400° F

2-PIN

PART #	CALIBRATIONS
MJ -(_)	J, K, T, R, U, E, N,

3-PIN

PART #	CALIBRATIONS
MJ3 -(_)	J, K, T, R, U, E, N,

HIGH TEMPERATURE MINI JACK

High temperature rating 550° F

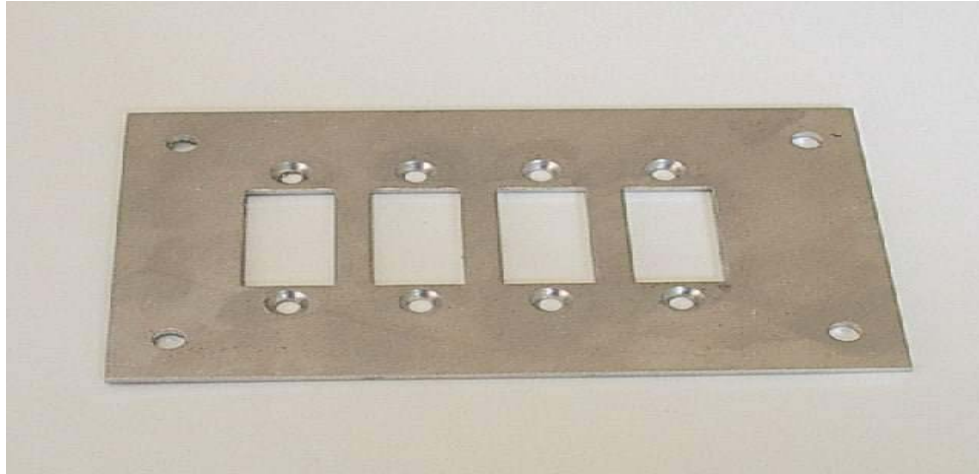
2-PIN

PART #	CALIBRATIONS
HTMJ - (_)	J, K, T, R, U, E, N,

3-PIN

PART #	CALIBRATIONS
HTMJ3 - (_)	J, K, T, R, U, E, N,

STANDARD PANELS FOR OUTLET BOXES



No	PART#	# OF JACKS	SIZE
1	H510	0	2 3/4" x 4 1/2"
2	H511	1	2 3/4" x 4 1/2"
3	H512	2	2 3/4" x 4 1/2"
4	H513	3	2 3/4" x 4 1/2"
5	H514	4	2 3/4" x 4 1/2"
6	H515	5	2 3/4" x 4 1/2"
7	H516	6	2 3/4" x 4 1/2"
8	H550	5	3 1/4" x 5 3/4"
9	H551	6	3 1/4" x 5 3/4"
10	H551-1	6	2 5/8" x 5 3/4"
11	H552	8	3 1/4" x 7 1/4"
12	H553	10	3 1/4" x 8 3/4"
13	H554	12	3 1/4" x 10 1/4"
14	H555	20	3 1/2" x 19"
15	H555-16	16	3 1/2" x 19"
16	H555-18	18	3 1/2" x 19"
17	H556 (2 rows of 20)	40	5 1/4" x 19"
18	H557 (4 rows of 20)	80	8 3/4" x 19"

BAYONET ADAPTORS



No	PART #	MATERIAL	LENGTH	THREADS
1	H440-7-1-NI	Steel, Nickel Pl.	7/8"	1/8 NPT
2	H440-7-3	Steel, Zinc Pl.	7/8"	3/8 x 24
3	H440-7-3-NI	Steel, Nickel Pl.	7/8"	3/8 x 24
4	H440-7-BPT	Steel, Blk. Ox	7/8"	1/8 x 28 British
5	H441-0-3-16	Steel, Zinc Pl.	1"	3/8 x 16
6	H441-2-1-NI	Steel, Nickel Pl.	1 1/4"	1/8 NPT
7	H441-3-1-NI	Steel, Nickel Pl.	1 3/8"	1/8 NPT
8	H441-3-3	Steel, Zinc Pl.	1 3/8"	3/8 x 24
9	H441-3-3-16	Steel, Zinc Pl.	1 3/8"	3/8 x 16
10	H441-4-1-NI	Steel, Nickel Pl.	1 1/2"	1/8 NPT
11	H441-6-1	Steel, Zinc Pl.	1 3/4"	1/8 NPT
12	H442-0-1-NI	Steel, Nickel Pl.	2"	1/8 NPT
13	H442-2-1-NI	Steel, Nickel Pl.	2 1/4"	1/8 NPT
14	H442-4-1-NI	Steel, Nickel Pl.	2 1/2"	1/8 NPT
15	H443-0-1-NI	Steel, Nickel Pl.	3"	1/8 NPT
16	H443-0-3	Steel, Zinc Pl.	3"	3/8 x 24
17	H443-4-1-NI	Steel, Nickel Pl.	3 1/2"	1/8 NPT
18	H443-4-3-NI	Steel, Nickel Pl.	3 1/2"	3/8 x 24
19	H444-0-1-NI	Steel, Nickel Pl.	4"	1/8 NPT
20	H444-4-1	Steel, Zinc Pl.	4 1/2"	1/8 NPT
21	H445-0-1	Steel, Zinc Pl.	5"	1/8 NPT
22	H445-4-1	Steel, Zinc Pl.	5 1/2"	1/8 NPT

STOCK METRIC ADAPTORS



PART #	SIZE & THREAD	LENGTH
EA121	M12 x 1	25 mm
EA1215	M12 x 1.5	25 mm
EA1275	M12 x 1.75	25 mm
EA141	M14 x 1	30 mm
EA1415	M14 x 1.5	38 mm
EA142	M14 x 2	30 MM
EA1615	M16 x 1.5	30 MM

* For Additional models please inquire

2-WIRE HEAD MOUNT (RTD, T/C) TRANSMITTER

TT

FEATURE

- Accuracy: RTD: 0.15%, T/C: 0.3%
- Wide selection of input / output range
- Dimension small
- Low output ripple
- Head Mount type
- High stability & low cost

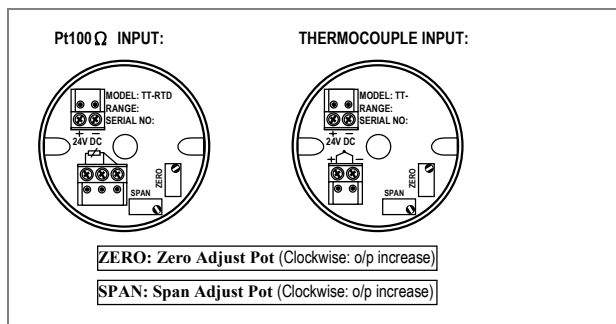


SPECIFICATION

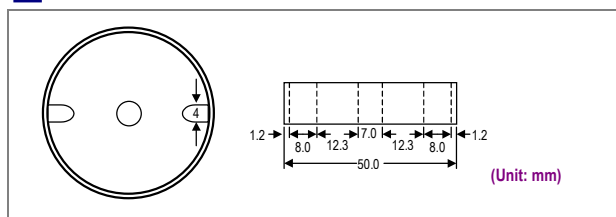
Input Range	Input Impedance	Output Range	Load Resistance
Type K 0 ~ 1200°C	≥ 1M ohm	4 ~ 20 mA	$\leq (V_s - 12) / 20\text{mA}$ (ohm)
Type J 0 ~ 1000°C	≥ 1M ohm		
Type E 0 ~ 800°C	≥ 1M ohm		
Type T -50 ~ 400°C	≥ 1M ohm		
Pt100Ω -100 ~ 800°C	≥ 10M ohm		

Accuracy:	RTD (Pt100): ±0.15% of R.O. T/C (K, J, E, T): ±0.3% of R.O.
Response time:	≤ 300 msec.
Span adjustment::	≤ 10% of R.O.
Zero adjustment::	≤ 5% of R.O.
Output ripple:	≤ 0.3% of R.O.
Power Supply:	DC 16 ~ 36V
Open circuit protection:	Upscale > 22mA
Operating temperature:	0~60 °C
Operating relative humidity:	20~95 %RH
Temperature coefficient:	≤ 100 PPM/°C
Cold junction	25±10°C, error ≤ 0.5°C
Storage temperature:	-10~70 °C
Weight:	50g

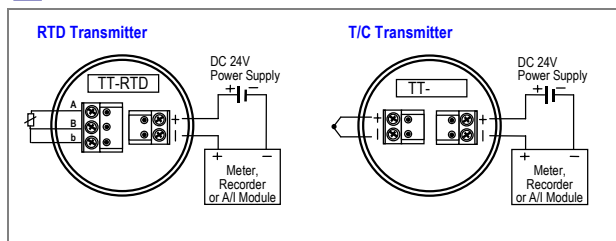
ADJUSTMENT



DIMENSIONS



CONNECTION DIAGRAM



ORDER INFORMATION

TT- Input Type — Input Range

RTD	THERMOCOUPLE	CODE	TEMPERATURE RANGE
P	K	A	-50 ~ +100°C
P	J	B	-10 ~ +40°C
P	E	C	0 ~ 50°C
P	T	D	0 ~ 100°C
P		E	0 ~ 200°C
P		F	0 ~ 400°C
P		G	0 ~ 500°C
P		H	0 ~ 600°C
P		I	0 ~ 800°C
P		J	0 ~ 1000°C
P		K	0 ~ 1200°C
P		O	Specify

NYLON BARRIER TERMINAL STRIPS

- Made Of the same glass-filled Nylon used in our thermocouple connectors (350° F - 400° F Max)
- Similar to Cinch type 141 or equivalent with 27/64" screw spacing in each section, with 6-32 terminal screws
- Nuts for the terminal screws are pressed into the back of the terminal strips.

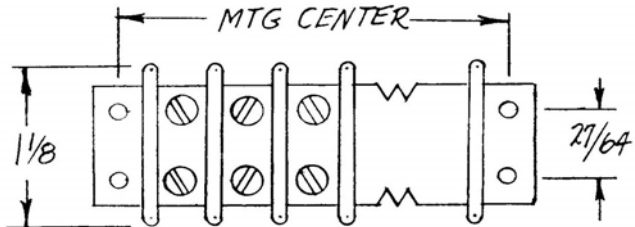
There are no terminal lugs or connecting strips between the terminal screws in each section on the basic H221-XX and H222-XX barrier terminal strips.

Series H221 - Screws are not installed, but are supplied in a separate bag ready for installation of the terminal lugs.

Series H222 - Screws are installed (there is no lug between them in each section).

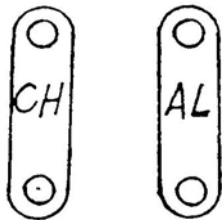
Series H223 - Has nickel plated copper lugs installed in each section. For non-thermocouple applications.

Series H224 - Has thermocouple compensating lugs installed, as specified.

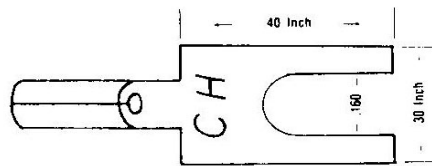


Number of Terminals	Length: Inches	Mounting Centers: Inches	Part Number Basic Strip	Part No. w/Screws Installed	Part No. w/ Nickel Plated Copper Lugs	Part Number w/TC lugs (Calibration)
2	1 5/8	1 5/16	H221-2	H222-2	H223-2	H224-2-_____
3	2 1/8	1 3/4	H221-3	H222-3	H223-3	H224-3-_____
4	2 1/2	2 1/5	H221-4	H222-4	H223-4	H224-4-_____
6	3 3/8	3 1/16	H221-6	H222-6	H223-6	H224-6-_____
8	4 1/4	3 15/16	H221-8	H222-8	H223-8	H224-8-_____
10	5 1/8	4 13/16	H221-10	H222-10	H223-10	H224-10-_____
12	6	5 11/16	H221-12	H222-12	H223-12	H224-12-_____
14	6 7/8	6 9/16	H221-14	H222-14	H223-14	H224-14-_____
16	7 3/4	7 7/16	H221-16	H222-16	H223-16	H224-16-_____
20	9 1/2	9 3/16	H221-20	H222-20	H223-20	H224-20-_____

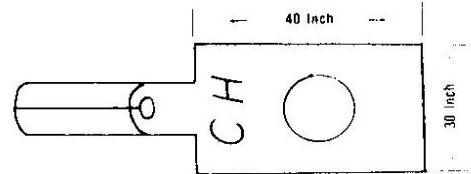
Terminal Lugs



Spade Lugs



Ring Lugs



T/C Alloy	Terminal Lug P/N	Spade Lug P/N	Ring Lug for #8 Stud P/N	Ring Lug for #10 Stud P/N
Chromel	H200-CH	H210-CH	H230-CH	H231-CH
Alumel	H200-AL	H210-AL	H230-AL	H231-AL
Iron	H200-IR	H210-IR	H230-IR	
Constantan	H200-CO	H210-CO	H230-CO	
Copper	H200-CP	H210-CP	H230-CP	
Alloy II	H200-11	H210-11	H230-11	
Nicrosil	H200-N+	H210-N+		H231-N+
Nisil	H200-N-	H210-N-		H231-N-

Compensated Terminal Lugs to Fit Barrier Terminal Blocks Compensated Spade and Ring Lugs to Accept AWG 18 Wire and Smaller. All Lugs Alloy Marked. (Sold in bags of 100)

COMPRESSION FITTINGS

- "Drilled-Thru" for Thermocouples
- Re-Adjustable Fittings use a Teflon ® ferrule
- Lava and Neoprene Ferrules Available - Inquire



PART#	BORE	MATERIAL	NPT
NCB 12	1/16"	Brass Compression Fitting	1/8
NCB 14	1/16"	Brass Compression Fitting	1/4
NCB 18	1/16"	Brass Compression Fitting	1/2
NCB 22	1/8"	Brass Compression Fitting	1/8
NCB 24	1/8"	Brass Compression Fitting	1/4
NCB 28	1/8"	Brass Compression Fitting	1/2
NCB 32	3/16"	Brass Compression Fitting	1/8
NCB 32-4.5mm	4.5mm	Brass Compression Fitting	1/8
NCB 34	3/16"	Brass Compression Fitting	1/4
NCB 38	3/16"	Brass Compression Fitting	1/2
NCB 38-4.5mm	4.5mm	Brass Compression Fitting	1/2
NCB 42	1/4"	Brass Compression Fitting	1/8
NCB 44	1/4"	Brass Compression Fitting	1/4
NCB 48	1/4"	Brass Compression Fitting	1/2
NCB 88	1/2"	Brass Compression Fitting	1/2
NCS 11	1/16"	S/S Compression Fitting	1/16
NCS 12	1/16"	S/S Compression Fitting	1/8
NCS 12T	1/16"	S/S Re-Adjustable Fitting	1/8
NCS 21	1/8"	S/S Compression Fitting	1/16
NCS 22	1/8"	S/S Compression Fitting	1/8
NCS 22T	1/8"	S/S Re-Adjustable Fitting	1/8
NCS 22-3mm	3mm	S/S Compression Fitting	1/8
NCS 24	1/8"	S/S Compression Fitting	1/4
NCS 24T	1/8"	S/S Re-Adjustable Fitting	1/4
NCS 32	3/16"	S/S Compression Fitting	1/8
NCS 32T	3/16"	S/S Re-Adjustable Fitting	1/8
NCS 34	3/16"	S/S Compression Fitting	1/4
NCS 34T	3/16"	S/S Re-Adjustable Fitting	1/4
NCS 42	1/4"	S/S Compression Fitting	1/8
NCS 42T	1/4"	S/S Re-Adjustable Fitting	1/8
NCS 42-6mm	6mm	S/S Compression Fitting	1/8
NCS 44	1/4"	S/S Compression Fitting	1/4
NCS 44T	1/4"	S/S Re-Adjustable Fitting	1/4
NCS 48	1/4"	S/S Compression Fitting	1/2
NCS 48T	1/4"	S/S Re-Adjustable Fitting	1/2
NCS 64	3/8"	S/S Compression Fitting	1/4
NCS 64T	3/8"	S/S Re-Adjustable Fitting	1/4
NCS 68	3/8"	S/S Compression Fitting	1/2
NCS 68T	3/8"	S/S Re-Adjustable Fitting	1/2