### Mini 3-Pole (Patent Pending)

Miniature Thermocouple Connectors for easy mating of small diameter sheathed thermocouple to extension wires where an electrical interference noise shield is required.

Featuring reliable, easy hook-up Jab-in<sup>®</sup> thermocouple terminals with built-in shield wire connection.





These 3-pole miniature thermocouple connectors are the most functional terminations available. Developed by temperature instrumentation experts in response to user requirements, these connectors achieve dependable connections between small diameter metal sheathed thermocouples and shield extension wires. Fine wires found in these units are easily handled and an automatically terminated shield wire circuit is provided. The premium materials of which these connectors are made make them unusually suitable for harsh environments even where extreme temperature tolerance is not a factor.

The real cost of a connector includes the time required for installation and reliability in service. The mini 3-pole connectors give you the best performance at the lowest cost.



Feature/Function	Benefit
<ol> <li>Jab-in<sup>®</sup> terminals/ Wire is sandwiched between contacts of alloy material without damage.</li> </ol>	Even the very fine wires (.003") of .020" diameter sheathed thermocouples can be installed quickly and reliably without special tools or set-ups. Jab-in <sup>®</sup> terminals require only ¼" of insulation to be removed. Looped wire ends are eliminated.
<ol> <li>Built-in Shield wire connection/ Shield circuit is connected to 3rd-pole of connector via ground link.</li> </ol>	The need for a special shield circuit wire to connect the sheath or the extension wire is eliminated resulting in a dependable, time-saving installation.
<ol> <li>Removable shield wire connection/ Built-in shield wire connection can be eliminated when not required.</li> </ol>	After the built-in shield link is removed the shield from the extension wire or a 3-wire RTD can be easily and quickly installed using the Jab-in® terminal which accepts up to 24 gauge (.020") wire.
<ol> <li>Offset hex entrance/ Accepts braze-on or crimp-on hex sheath adapters, external sheath adaptors, and wire clamps.</li> </ol>	The fine wires of the small diameter sheathed thermocouples are not strained. Technicians work with same-length wires for ease of installation.
<ol> <li>Molded body/ Connector body and cap are molded of thermo- set, glass-reinforced compounds that are color coded.</li> </ol>	Thermoset molded connectors will withstand severe temperature environments without melting or deforming. Color codes allow easy thermocouple type identification which helps prevent mis-applica- tions of connectors.
<ol> <li>Polarized pins and double-wipe inserts/ Connectors are virtually impossible to mismate. Inserts are spring loaded with funnel type entrances.</li> </ol>	Elimination of mismated connectors saves time in trouble-shooting instrumentation. Tight grip assures low signal loss. The entrance provides easy mating.
<ol> <li>Mounting Hole/ Through hole provides clearance for #3 screw.</li> </ol>	Surface mounting and stacking, if required can be made without special fixtures or secondary operations to the connector.



Specifications (Patent Pending):

- Mini 3-Pole Thermocouple Connector plugs and jacks provide rapid, dependable connections between small diameter sheathed thermocouples and extension wires with shield terminals an integral part of the system. In its all-copper version the 3-pole mini is ideal for 3-wire RTD applications.
- The thermocouple alloys of the prongs and inserts match ANSI standards to maintain thermocouple integrity. The thermocouple alloy-type letter code, polarity and shield terminal are identified by symbols that are molded into the connector body.

T/C Type Code	Connector Positive (+) T/C Alloy	Connector Negative (-) T/C Alloy	Shield Terminal Alloy	Body Color Code
т	Copper	Constantan	Copper	Blue
J	Iron	Constantan	Copper	Black
E	Chromel	Constantan	Copper	Violet
к	Chromel	Alumel	Copper	Yellow
N	Nicrosil	Nisil	Copper	Orange
R	Copper	#11 Alloy	Copper	Green
S	Copper	#11 Alloy	Copper	Green
U	Copper	Copper	Copper	White
С	#405 Alloy	#426 Alloy	Copper	Brown
1,2,3	Copper	Copper	Copper	White
ALL H	-TEMP CONN	ECTORS		Red

- Polarized pins are virtually impossible to mismate.
- Large double-wipe jack inserts assure tight grip and low signal loss. With an isolated screw design, contact is all thermocouple alloy from wire entrance to wire exit.



- Jab-In<sup>®</sup> terminals require only <sup>1</sup>/<sub>4</sub>" of insulation to be removed. Wire is sandwiched between contacts of thermocouple alloy without damage.
- For use in corrosive environments, gold or nickel plated prongs and inserts are available. Caution system errors can result from use of plated contacts if significant thermal gradients exist at the connector.
- Connector bodies are molded from glass-filled thermoset compounds (will not melt) for high strength and dependability. The color coded connector bodies will withstand ambient temperatures to 400°F (205°C) continuous duty and 500°F (260°C) intermittent use.
- High temperature connector bodies (All high temperature connector bodies are color coded RED) are made of a highly stable and inert silicone-based thermoset compound that will withstand ambient temperatures to 800°F (425°C) continuous duty and 1000°F (540°C) intermittent use. These units have proven durable in the presence of radiation, and their low-outgassing properties also make them highly satisfactory for use under vacuum.
- Surface mounting and stacking, if required, can be made by use of molded-in clearance holes.
- Shield terminals provide isolated connections of the shield circuit via the built-in sheath-to-shield link.



### Mini 3-Pole Plugs & Jacks

Code No.	\$/Each	Description
1261-*		Mini 3-pole Plug
1211-*		Mini 3-pole Jack

\*-Thermocouple Type Code T,J.E,K.N.R.S,U,123

Please note accessory options

#### "C" Mini 3-Pole Plugs & Jacks (Tungsten 5% Re/Tungsten 26% Re)

Code No.	\$/Each	Description	
1261-C		Mini 3-pole Plug	
1211-C		Mini 3-pole Jack	

### Hi-Temp Mini 3-Pole Plugs & Jacks

Code No.	\$/Each	Description
1361-*		H/T Mini 3-Pole Plug
1311-*		H/T Mini 3-Pole Jack

 Thermocouple Type Code T,J,E,K,N,R,S,U,123

Please note accessory options

#### "C" Hi-Temp Mini 3-Pole Plugs & Jacks (Tungsten 5% Re/Tungsten 26% Re)

Code No.	\$/Each	Description
1361-C		H/T Mini 3-Pole Plug
1311-C		H/T Mini 3-Pole Jack

T/C Type Code	Connector Positive (+) T/C Alloy	Connector Negative (-) T/C Alloy	Shield Terminal Alloy	Body Color Code
Т	Copper	Constantan	Copper	Blue
J	Iron	Constantan	Copper	Black
E	Chromel	Constantan	Copper	Violet
К	Chromel	Alumel	Copper	Yellow
N	Nicrosil	Nisil	Copper	Orange
R	Copper	#11 Alloy	Copper	Green
S	Copper	#11 Alloy	Copper	Green
U	Copper	Copper	Copper	White
С	#405 Alloy	#426 Alloy	Copper	Brown
1,2,3	Copper	Copper	Copper	White
ALL H	-TEMP CONN	ECTORS		Red

Gold plated contacts available at extra cost. Use suffix "G" (i.e. 1261-K-G)





Accessory

	Grommet	Wire Grip	1
Part No.	Size	\$/Each	
1279-030	.030″		
1279-062	.062"		
1279-090	.090″		

Description

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**Typical Installation** 



М	ini Braze-o	on Adapter
Part No.	Size	\$/Each
1277-000	blank	
1277-040	.040"	
1277-062	.062"	
1277-090	.090"	
1277-125	.125″	





Mi	ni Hex Cri	np Adapter	
Part No.	Size	\$/Each	
1275-000	blank		
1275-020	.020"		
1275-040	.040"		
1275-062	.062"		

Min	3-Pole Cr	Imp Adapter
Part No.	Size	\$/Each
1272-062	.062"	
1272-125	.125"	



Mini 3-Pole Wire Clamp				
Part No.	\$/Each			
1282				

Replacement Shield Link				
Part No.	\$/Each	Notes		
1261-006		for Plug		
1211-006		for Jack		

Shield Links are supplied installed at no cost when a mini 3-pole plug or jack is ordered.





