



# PLUGS AND JACKS

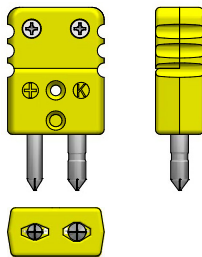
Connector bodies are molded of glass-filled thermoset compounds (will not melt) for high strength and dependability. The standard connectors will withstand ambient temperatures to 400°F continuous and 500°F intermittent. High temperature connectors will withstand ambient temperatures to 800°F continuous and 1000°F intermittent. Standard plugs are color coded per ANSI standards. High temperature plugs are color coded rust. High temperature connectors have nickel plated prongs; and therefore, are good for use in corrosive environments. Other high temperature plugs and jacks are made of ceramic material and can be color coded.

Alloys of prongs match ANSI calibrations to maintain sensing accuracy. Alloys and polarity are identified by symbols molded into the body.

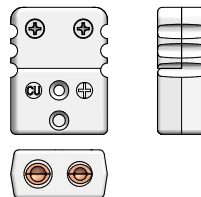
#1	DESCRIPTION [6-18, 6-19]	
6A	Accessories plugs and jacks	<b>Note:</b> Call JMS for high temp. vacuum applications and multi-pin connectors. Thermocouple plugs are normally two pin and RTD plugs are three pin. See page 6-4 for preferred RTD quick connectors.
#2	CONNECTOR DESIGN	
1*	Standard	<425°F
2	High temperature	<800°F
3*	Heavy duty (solid pin)	<425°F
4*	Heavy duty (jab-in & solid pin)	<425°F (Std size only)
5	Ultra high temperature (glazed)	<1200°F
6*	Low noise	<425°F
7	Ultra high temperature (unglazed)	<1200°F
8	High temperature jab in	< 800 F
9	Locking	< 425°F.
		<p><b>*Add a W suffix to symbol #2 for a write-on window connector. (Example: 1W=Standard connector with write-on window.)</b></p> <p>Locking Standard Size      Locking Mini Size</p>  
#3	STYLE	
B	Mini plug	
D	Mini jack	
C	Standard plug	
E	Standard jack	
#4	# OF CIRCUITS	
2	2 pole	
3*	3 pole	
		<b>*For thermocouples, 3 pole design will include a copper ground pin. (see 6A1C3J illustration below)</b>
#5	TYPE	COLOR CODE
J	Iron/Constantan	Black
T	Copper/Constantan	Blue
K	Chromel/Alumel	Yellow
E	Chromel/Constantan	Purple
S	Copper/#11 Alloy	Green
R	Copper/#11 Alloy	Green
N	Nicrosil/Nisil	Orange
C	405/A426	Brown
A*	Copper/Copper (for type B and RTDs)	White
		<b>*Note: 2 pole will be Copper/ Copper for type B TCs. 3 pole will be plated copper for RTDs.</b>

**Note:** See page 6-17 and 6-19 on the web for plug wiring standards.

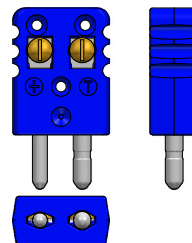
6A1C (MALE-PLUG)



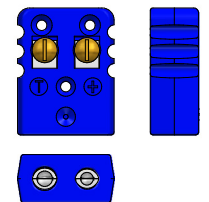
6A1E2A (FEMALE-JACK)



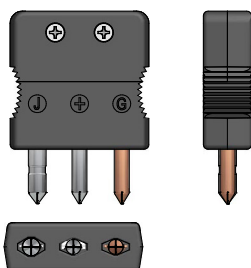
6A4C2T (MALE-PLUG)



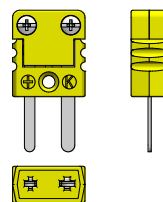
6A4E2T (FEMALE-JACK)



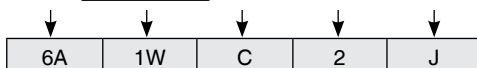
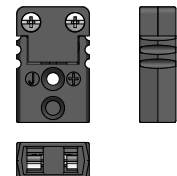
6A1C3J (MALE-PLUG)



6A1B2K (MALE- MINI PLUG)



6A1D2J (FEMALE-MINI JACK)



# ADDITIONAL TERMINATIONS

**COLD END TERMINATION** [SEE SECTION 6] Choose as many as applicable (**JMS part number prefixes are shown in parenthesis**)

**Connectors**

<b>Plugs</b>		<b>Jacks</b>	
B	Miniature plug (6A1B)	D	Miniature jack (6A1D)
BH	Miniature high temperature plug (6A2B) <800°F	DH	Miniature high temperature jack (6A2D) <800°F
C	Standard plug (6A1C)	E	Standard jack (6A1E)
F	Standard high temperature plug (6A2C) <800°F	G	Standard high temperature jack (6A2E) <800°F
WM	Microphone style plug (6DA)	WF	Microphone style jack (6DA)
WA	Solid pin plug, heavy duty (6A3C)	WB	Solid pin jack, heavy duty (6A3E)
WC	Jab in plug (6A4C)	WD	Jab in jack (6A4E)
WE	Ultra high temperature plug, glazed (6A5C) <1200°F	WG	Ultra high temperature jack, glazed (6A5E) <1200°F
WH	Ultra high temperature plug, unglazed (6A7C) <1200°F	WI	Ultra high temperature jack, unglazed (6A7E) <1200°F
WJ	Low noise plug (6A6C) <425°F	WK	Low noise jack (6A6E) <425°F
WL	DIN-IEC microphone plug (6DB)	WN	DIN-IEC microphone style jack (6DB)
V	Molded/water resistant plug (6DC)	VF	Molded/water resistant jack (6DC)
Y	M12 Male connector (6DY)	YF	M12 Female connector (6DY)
WQ	Miniature locking plug (6A8B2)	WR	Miniature locking jack (6A1DL2)
WS	Standard plug, locking (6A8C2)	WT	Standard jack, locking (6A8E2)

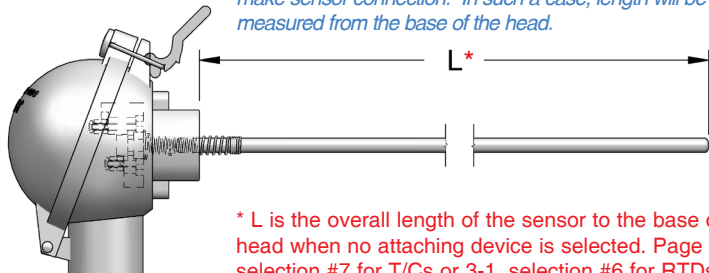
**Heads** [6-1] Visit [www.JMS-SE.com/headspecs](http://www.JMS-SE.com/headspecs)

<b>Explosion Proof</b>	
I	Aluminum, NEMA 4X, FM, CSA, IP68 (6IA)
J	316 stainless steel, NEMA 4X, FM, CSA, IP68 (6ISS)
P	Aluminum, NEMA 4X, FM, CSA, ATEX, IECEx, IP68 (6IAIEC)
U	316 stainless steel, NEMA 4X, ATEX, IP68 (6ISSATEX)
SI	Cast Iron, NEMA 3, 4, UL, CSA (6I)
GA	Aluminum, screw cover w/ indicating window, NEMA 4X, ATEX, IECEx, FM, CSA, IP68 (688A1)
GS	316SS, screw cover w/ indicating window, NEMA 4X, ATEX, IECEx, FM, CSA, IP68 (688S1)

<b>General Purpose</b>	
L	Aluminum w/ hinged cover (6L)
M	Aluminum w/ screw cover & chain (6M)
R	Aluminum w/ hinged high dome cover (6R)
N	Cast Iron w/ screw cover (6N)
Q	Black plastic (6Q)
SS	316 stainless steel w/ screw cover & chain (6SS)
WP	White plastic, screw cover, Sanitary (6WP)
SB	Nickel plated, cylinder style, 1/4" NPT (6S250)
SD	Nickel plated, cylinder style, 1/8" NPT (6S125)
SC	Stainless steel, socket cap style
ST	Molded plastic, mini head, 1/4" NPT, < 350F (6T)
SU	Molded plastic, mini head, 1/4" NPT, < 800F (6U)

*Some applications may have pre-existing threaded pipes or protection tubes where no attaching device is needed to make sensor connection. In such a case, length will be measured from the base of the head.*



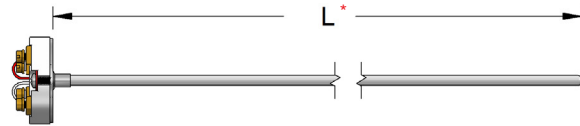
\* L is the overall length of the sensor to the base of the head when no attaching device is selected. Page 1-1, selection #7 for T/Cs or 3-1, selection #6 for RTDs.

**Transmitters** [ 8-1 to 8-3 ] **Notes:** - Add span range after transmitter selection. Example: 8H(0-200C).  
- Transmitter output = 4 - 20 mA. (See section 8 for other options).

8H	Isolated transmitter	8PA	Explosion proof, IP66/IP68, NEMA 4X, ATEX/IECEx, FM/CSA, Aluminum, threaded cap with glass viewing window, touch programmable [ 8-2 ]
8N	Non-isolated transmitter		
8I	Hart Protocol	8PS	Explosion proof, IP66/IP68, NEMA 4X, ATEX/IECEx, FM/CSA, 316 SS, threaded cap with glass viewing window, touch programmable [ 8-2 ]
8E	Intrinsically safe		
8D	Hart/Intrinsically safe		
8M	Integral transmitter (see page 3-5) <b>RTDs ONLY</b>		

**Other**

A	Bare ends		
K	Spade lugs (6SL)		
RL	Ring lugs (6RL)		
O	Open ceramic terminal block, brass screw terminal (6B)		
OA	Open Bakelite terminal block, nickel plated screw terminal (6BB)		
OB	Open ceramic terminal block for sensors with bayonet style connection, brass screw terminal (6B or 6C)		
OG	Ceramic terminal block, brass screw terminal (6G)		
OP	Pluggable polyimide terminal block, nickel plated screw terminal (6PT)		
OS	Open ceramic terminal block, nickel plated solder terminal (6C)		
CG	Cord connector/grip, aluminum 1/2" NPT (6CC)		
TB	Conduit bushing, 3/4" NPT male X 1/2" NPT female, plated steel (6IRB)		
X	Other, specify		



\* L is the overall length of the sensor to the base of the terminal block mounting plate when open terminal block cold end termination is selected without a fixed attaching device. Page 1-1, selection #7 for T/Cs or 3-1, selection #6 for RTDs.