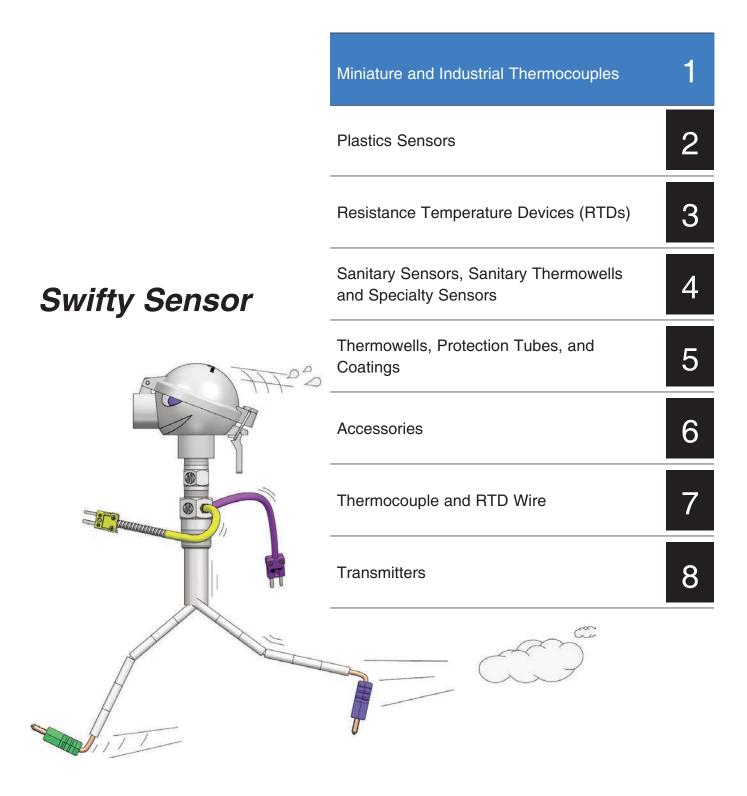
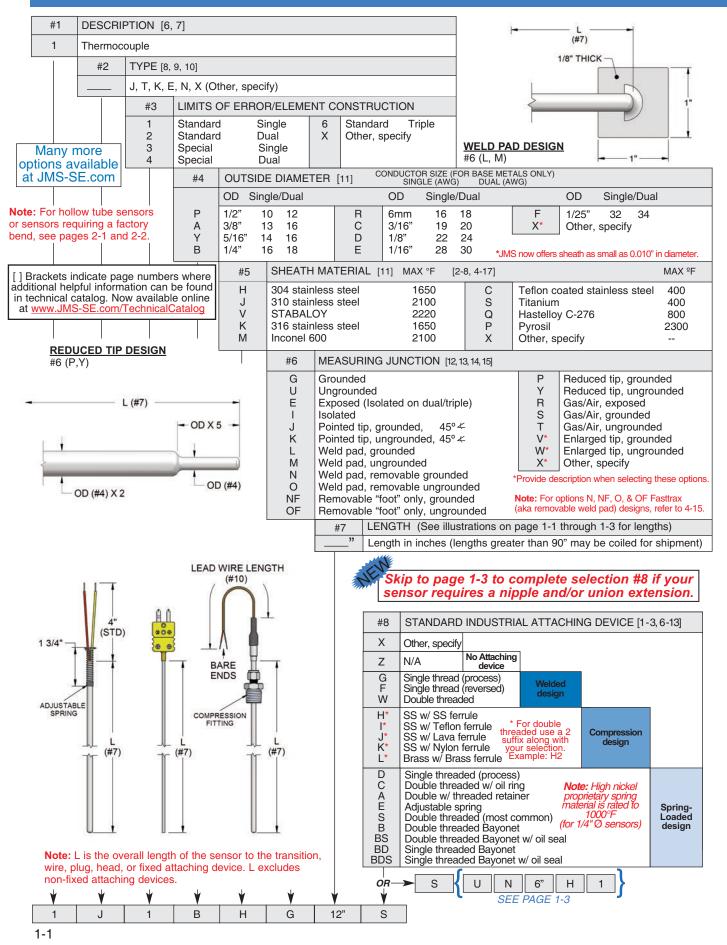
## MINIATURE AND INDUSTRIAL THERMOCOUPLES

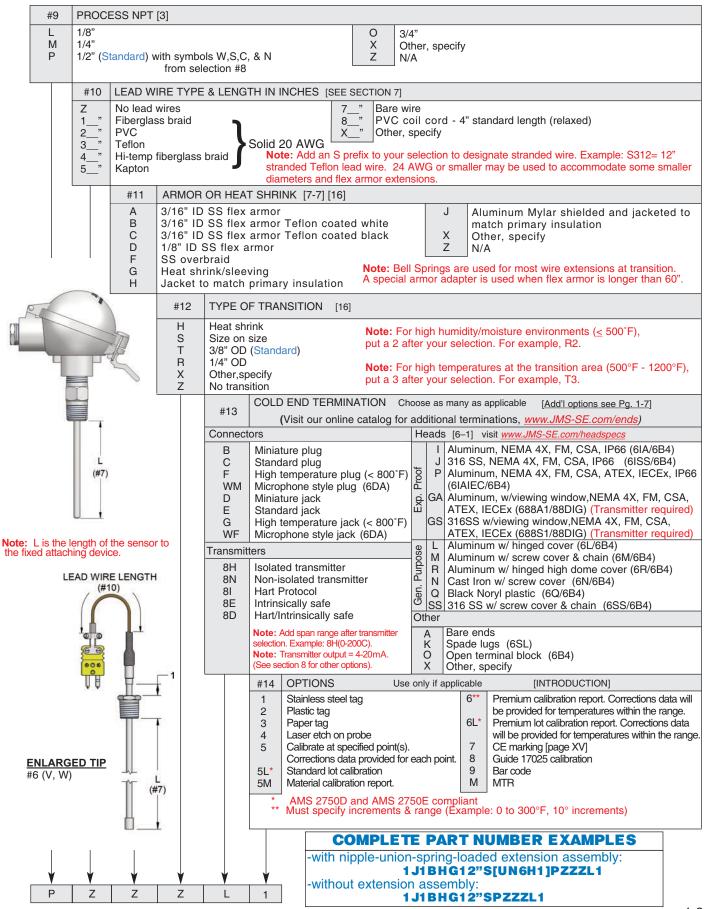


Due to space limitations we have excluded some part number selections from publication. Additional selections are available via JMS catalog cut sheets posted at www.JMS-SE.com. It is the final reference for JMS part numbers. Custom products are also available with drawings to suit your application. Call 1-800-873-1835 or email <u>Sensors@JMS-SE.com</u> for more information.

## MINIATURE AND INDUSTRIAL THERMOCOUPLES



### MINIATURE AND INDUSTRIAL THERMOCOUPLES



### **CUSTOM NIPPLE/UNION EXTENSION CONFIGURATOR**

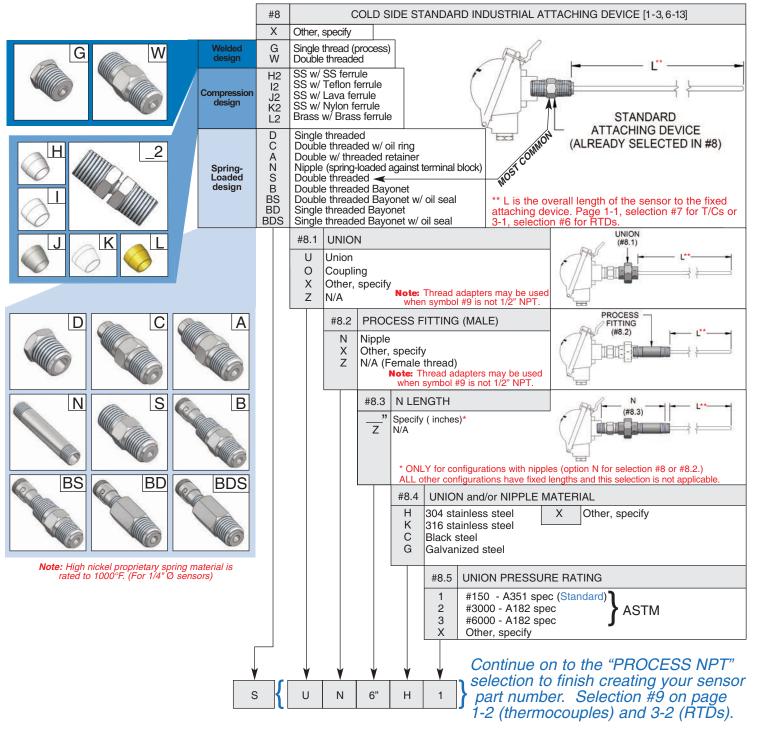
An extension assembly provides extra length extending the sensor head past insulation and away from heat. Standard unions are 1/2" FNPT on both ends. The union joins two nipples in an extension assembly and has a standard pressure rating of 150 PSIG.

When a nipple-union-nipple assembly is selected and spring-loading of the thermocouple element is required, there are two different methods of spring-loading the sensor. JMS's standard, recommended method is to use the machined 1/2" x 1/2" NPT spring-loaded stainless steel fitting as one of the nipples. With this design, the probe is secured within the fitting and mounted to the head in a rigid manner instead of spring-loading against a terminal block, as is the case with a standard nipple-union-nipple. Due to stress exerted by spring, selection #8, option N "nipple" should never be used with an in-head transmitter. Any of the other options within option #8 are compatible with in-head transmitters.

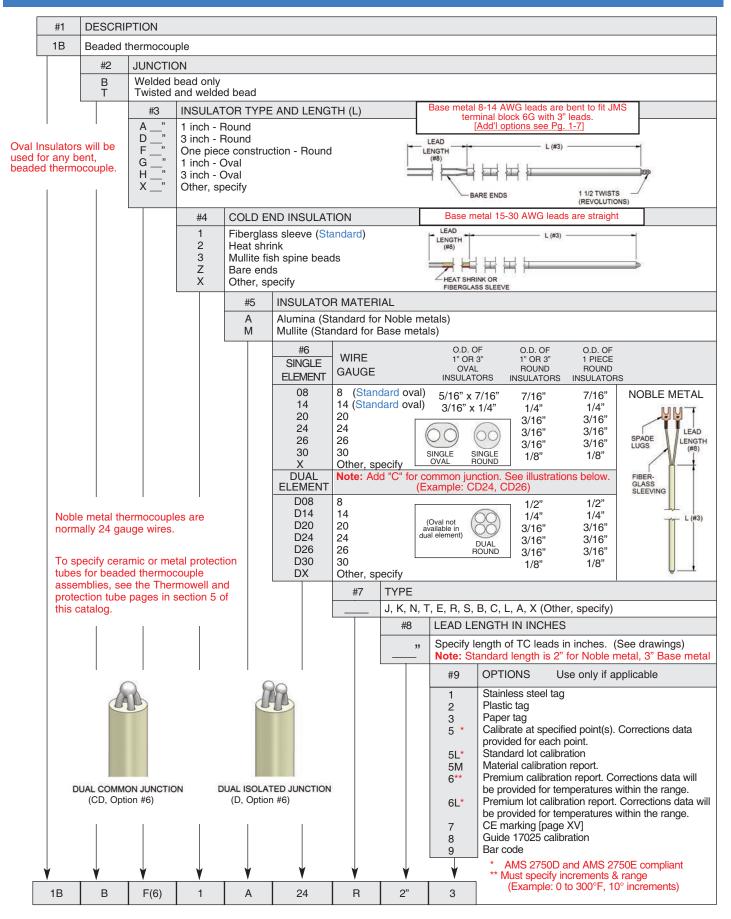
#### Notes:

-The standard JMS spring designed specifically for a 1/4" OD sensor is made of high nickel proprietary spring wire which allows users to successfully maintain 1/2" of spring-loading even up to 1000°F.

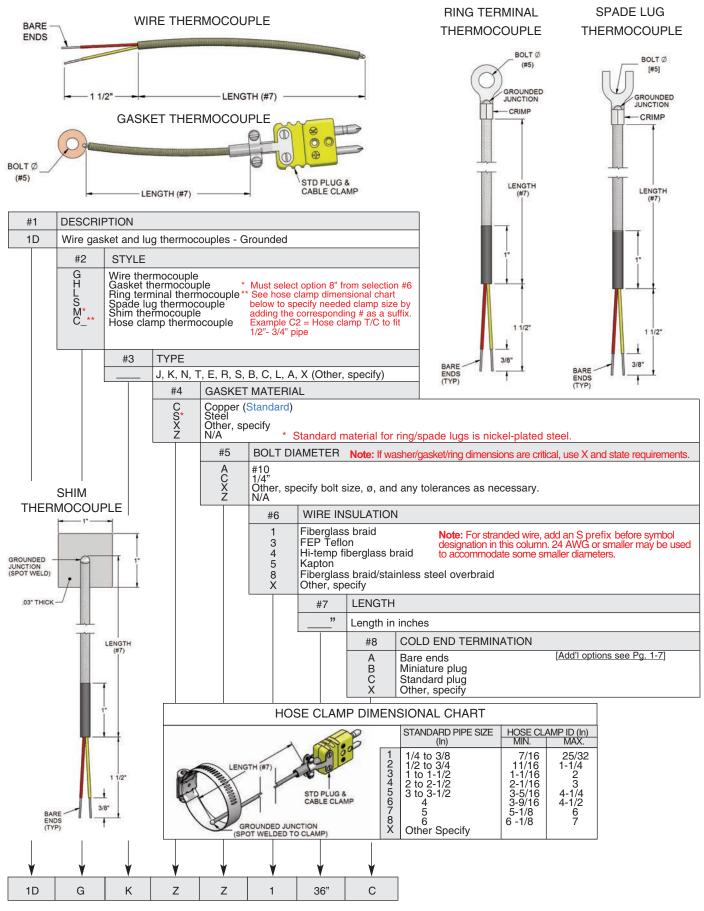
-Spring-loaded extension assemblies should not be used with ceramic protection tubes.



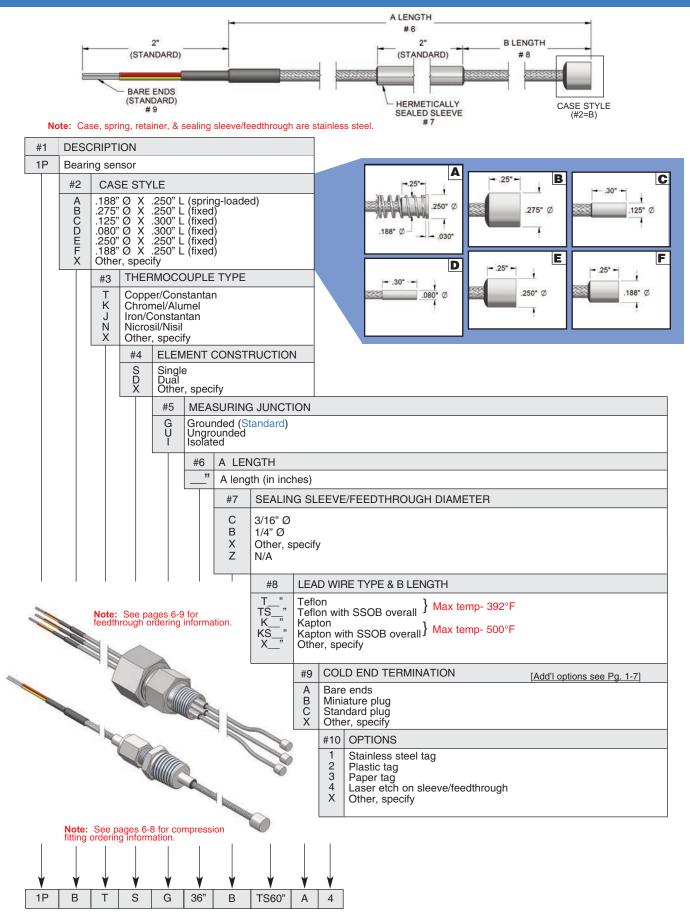
## **BEADED THERMOCOUPLES**



# WIRE, GASKET, AND LUG THERMOCOUPLES



## WIRE STYLE BEARING SENSOR



# ADDITIONAL TERMINATIONS

	COLD END TERMINATION [SEE SECTION 6] Choose as many	, as annlica	ble (JMS part number prefixes are shown in parenthesis)
Connectors			
Conneot	Plugs		Jacks
В	Miniature plug (6A1B)	D	Miniature jack (6A1D)
BH	Miniature plug (0415) 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	
WA	Solid pin plug, heavy duty (6A3C)	WB	Microphone style jack (6DA)
			Solid pin jack, heavy duty (6A3E)
WC WE	Jab in plug (6A4C)	WD	Jab in jack (6A4E)
	Ultra high temperature plug, glazed (6A5C) <1200°F Ultra high temperature plug, unglazed (6A7C) <1200°F	WG	Ultra high temperature jack, glazed (6A5E) <1200°F
WH		WI	Ultra high temperature jack, unglazed (6A7E) <1200°F
WJ	Low noise plug (6A6C) <425°F	WK	Low noise jack (6A6E) <425°F
WL V	DIN-IEC microphone plug (6DB)	WN	DIN-IEC microphone style jack (6DB)
-	Molded/hermetic plug (6DC)	VF	Molded/hermetic jack (6DC)
Y	M12 Male connector (6DY)	YF	M12 Female connector (6DY)
Heads	[6–1] Visit www.JMS-SE.com/headspecs		
	Explosion Proof		
1	Aluminum, NEMA 4X, FM, CSA, IP66 (6IA/6B4)		
J	316 stainless steel, NEMA 4X, FM, CSA, IP66 (6ISS/6B4)		
Р	Aluminum, NEMA 4X, FM, CSA, ATEX, IECEx, IP66 (6IAIEC/6B4)		
U	316 stainless steel, NEMA 4X, FM, CSA, ATEX, IECEx, IP66 (6ISSATEX/6B4)		
SI	Cast Iron, NEMA 3, 4, UL, CSA (61/6PT)		
GA	Aluminum, screw cover w/ indicating window, NEMA 4X, ATEX, IECEx, FM, CSA, IP66 (688A1)		
GS	316SS, screw cover w/ indicating window, NEMA 4X, ATEX, IECEx, FM, CSA, IP66 (688S1)		
	General Purpose		Some applications may have pre-existing threaded pipes or
L	Aluminum w/ hinged cover (6L/6B4)		protection tubes where no attaching device is needed to make
М	Aluminum w/ screw cover & chain (6M/6B4)	m 1	sensor connection. In such a case, length will be measured
R	Aluminum w/ hinged high dome cover (6R/6B4)		
N	Cast Iron w/ screw cover (6N/6B4)		
Q	Black Noryl plastic (6Q/6B4)		
SS	316 stainless steel w/ screw cover & chain (6SS/6B4)		
WP	White plastic, screw cover, Sanitary (6WP, 6B4)		
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)		* L is the overall length of the sensor to the base of the
SU	Molded plastic, mini head, 1/4" NPT, < 800F (6U)		head when no attaching device is selected. Page 1-1, selection #7 for T/Cs or 3-1, selection #6 for RTDs.
Transmitters			
8H	Isolated transmitter		
8N	Non-isolated transmitter - Add span range after transmitter selection. Example: 8H(0-200C)		
81	Hart Protocol - Transmitter output = 4 - 20 mA. (See section 8 for other options).		
8E	Intrinsically safe		
8D	Hart/Intrinsically safe		
8M	Integral transmitter (see page 3-5) RTDs ONLY		
Other			
A	Bare ends		
K	Spade lugs (6SL)		
RL	Ring lugs (6RL)		
0	Open ceramic terminal block, Brass screw terminal (6B)		► L*
OA	Open Bakelite terminal block, Nickel plated screw terminal (6BB)	a	20 mm
OB	Open ceramic terminal block for sensors with bayonet style		
00	connection, Brass screw terminal (6B or 6C/6DMD)		
OG	Ceramic terminal block, Brass screw terminal (6G)	CD1 "	
OP	Pluggable Polymide terminal block, Nickel plated screw terminal (		
OS CG	Open ceramic terminal block, Nickel plated solder terminal (6C) Cord connector/grip. Aluminum 1/2" NPT (6CC)		is the overall length of the sensor to the base of the
L C(-i L			minal block mounting plate when open terminal block cold
	Ship straight		
PS X	Ship straight Other, specify		t termination is selected without a fixed attaching device. ge 1-1, selection #7 for T/Cs or 3-1, selection #6 for RTDs.