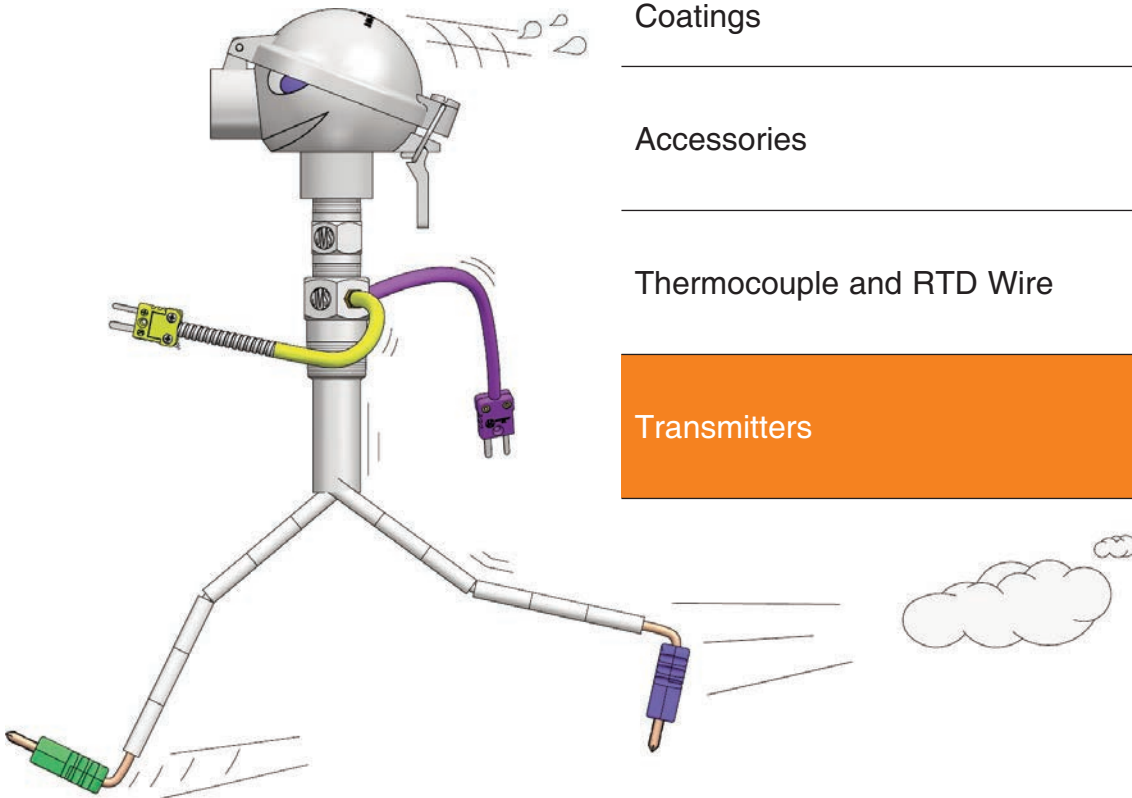


# TRANSMITTERS

## Swiftly Sensor



Miniature and Industrial Thermocouples

1

Plastics Sensors

2

Resistance Temperature Devices (RTDs)

3

Sanitary Sensors, Sanitary Thermowells  
and Specialty Sensors

4

Thermowells, Protection Tubes, and  
Coatings

5

Accessories

6

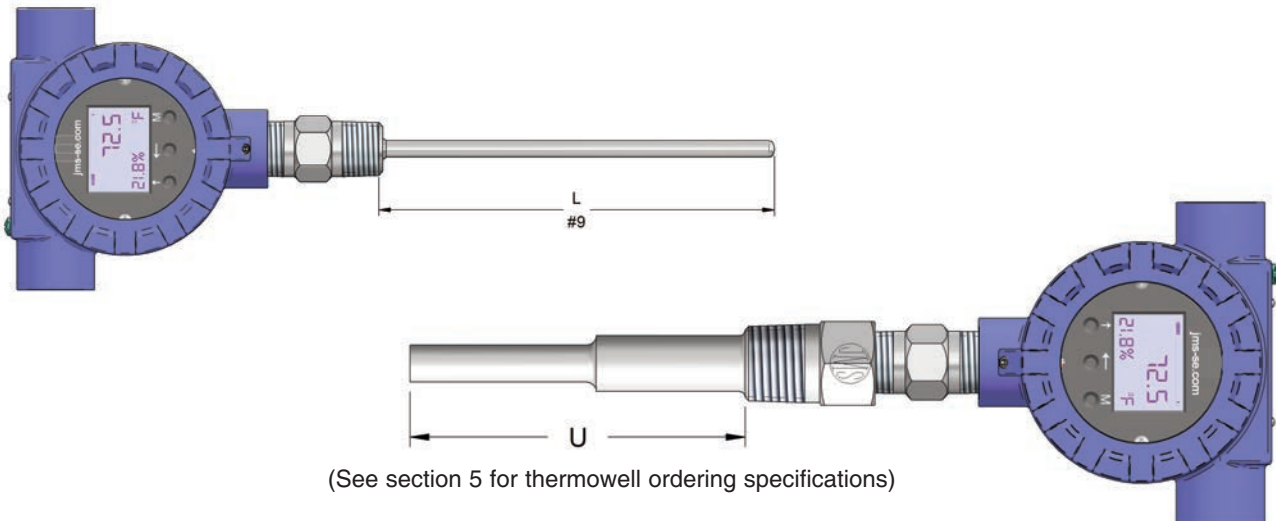
Thermocouple and RTD Wire

7

Transmitters

8

# INTEGRAL TRANSMITTERS WITH HOUSING AND INDICATOR



(See section 5 for thermowell ordering specifications)

The 888 series specified with these ordering symbols include a temperature sensor assembly with an integral transmitter and indicator. The sensors are 316 stainless steel and 1/4" outside diameter. Thermocouples have ungrounded junctions. RTD's have a 3 wire configuration and a 0.00385 alpha. The most popular assembly features a spring-loaded fitting with a thermowell.

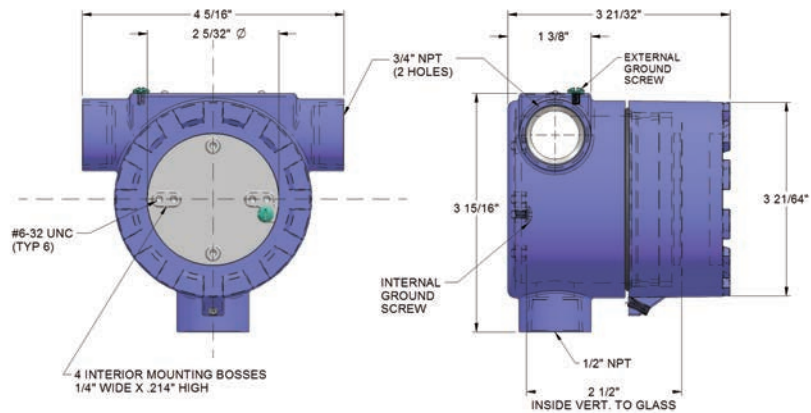
#1	DESCRIPTION [18]	
888	Transmitter (Includes housing and digital indicator). (Specifications for GS & GV housing styles see illustrations on page 8-2)	
#2	TYPE OF TRANSMITTER [8-18]	
H	Isolated (Standard)	*FM intrinsically safe class I, Div. 1&2, Groups A,B,C,D, class I, zone 0, AExia IIC T6
N	Non-isolated	
I	Hart Protocol	
E	Intrinsically safe*	
D	Intrinsically safe/Hart Protocol*	
X	Other, specify	
#3	SINGLE INPUT	
J	Iron/Constantan thermocouple	
T	Copper/Constantan thermocouple	
K	Chromel/Alumel thermocouple	
E	Chromel/Constantan thermocouple	
S	Platinum 10% Rhodium/Pure Platinum thermocouple	
R	Platinum 13% Rhodium/Pure Platinum thermocouple	
B	Platinum 6% Rhodium/Platinum 30% Rhodium thermocouple	
N	Nicrosil/Nisil thermocouple	
C	Tungsten 5% Rhenium/Tungsten 26% Rhenium thermocouple	
3	3 wire, 100Ω, Platinum, α=.00385, RTD	
4	4 wire, 100Ω, Platinum, α=.00385, RTD	
X	Other, specify	
#4	TEMPERATURE RANGE	
_ to _°C	List desired temperature span	<input checked="" type="checkbox"/> Other, specify
_ to _°F	List desired temperature span	
Z	N/A	
#5	SIGNAL OUTPUT	
F	Fieldbus	<input checked="" type="checkbox"/> Other, specify
P	Profibus	
4	4 to 20 mA	
#6	INDICATION	
D	Digital, 4-20 mA (Standard)	
Z	No indication	

[ ] Brackets indicate page numbers where additional helpful information can be found in technical catalog. Now available online at [www.JMS-SE.com/TechnicalCatalog](http://www.JMS-SE.com/TechnicalCatalog)

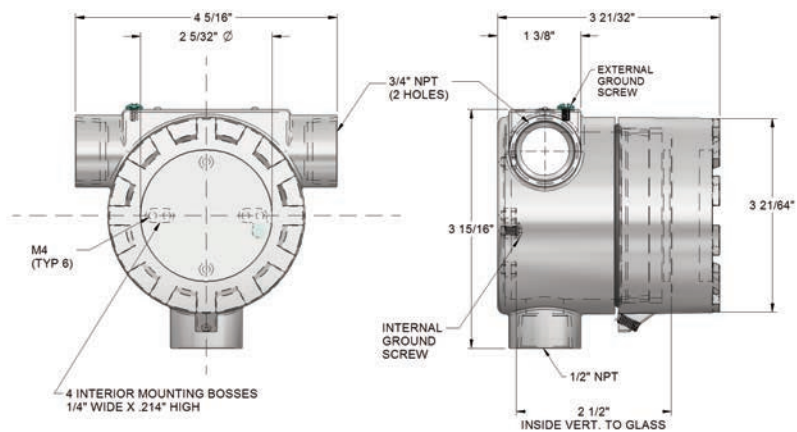
**Note:** Many other transmitter options are available.  
(see pages 1-1 & 1-2 for TC)  
(see pages 3-1 & 3-2 for RTD)  
(see page 8-3 for stand alone transmitters)

# INTEGRAL TRANSMITTERS WITH HOUSING AND INDICATOR

**GA** Housing Style (#7)  
Detailed View



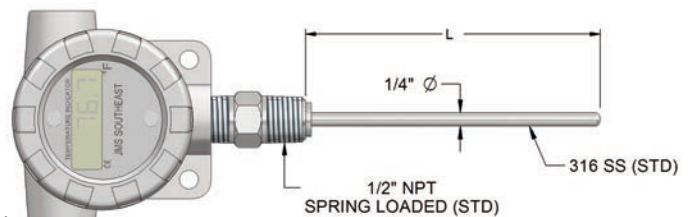
**GS** Housing Style (#7)  
Detailed View



#7	HOUSING
GS	Explosion proof, NEMA 4X, ATEX/IECEX, FM/CSA, 316SS, threaded cap with glass viewing window
GA	Explosion proof, NEMA 4X, ATEX/IECEX, FM/CSA, Aluminium, threaded cap with glass viewing window
X	Other, specify <b>NOTE: Different housing options available. (see section 6)</b>
#8	FITTING TYPE [6-13]
S	Spring-loaded 1/2"x1/2" (NPT)
W	Welded 1/2"x1/2" (NPT)
N*	Nipple-Union-Nipple 1/2"x1/2" (NPT)
X*	Other, specify <b>*See page 1-3 for extension assembly configurations</b>
Z	N/A
#9	IMMERSION LENGTH IN INCHES (L)
4	4"
6	6"
9	9"
12	12"
X	Other, specify
Z	Not applicable/probe not included (example: field mounted transmitter)



**Polycarbonate  
General Purpose  
Enclosure with  
Battery Powered  
Digital Display**



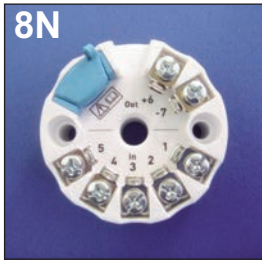
To order, simply specify JMS part #: DWG21551- followed by the length(L).  
(Example: DWG21551-12 for a 12" immersion)

RTD element  
(Local indication only)

# NON-ISOLATED TRANSMITTERS

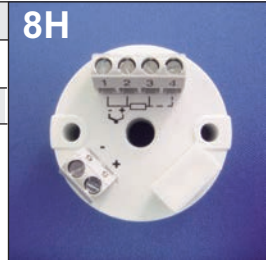
Although non-isolated transmitters are available for thermocouples, JMS always recommends the customer use isolated transmitters for their application. See below for isolation values to 2500 volts

#1	DESCRIPTION [8-13]				
8N	Transmitter, Non-Isolated				
#2	INPUT				
J*	Iron/Constantan thermocouple	N*	Nicrosil/Nisil thermocouple		
T*	Copper/Constantan thermocouple	C*	Tungsten 5% Rhenium/Tungsten 26% Rhenium thermocouple		
K*	Chromel/Alumel thermocouple	2	100Ω, Platinum, a=.00385, RTD, 2 Wire		
E*	Chromel/Constantan thermocouple	3	100Ω, Platinum, a=.00385, RTD, 3 Wire		
S*	Platinum 10% Rhodium/Pure Platinum thermocouple	4	100Ω, Platinum, a=.00385, RTD, 4 Wire		
R*	Platinum 13% Rhodium/Pure Platinum thermocouple	X	Other, specify		
B*	Platinum 6% Rhodium/Platinum 30% Rhodium thermocouple				
*All non-isolated thermocouple transmitters should be used with ungrounded junctions to prevent ground loops and noise interference.					
#3	TEMPERATURE RANGE				
_ to _°C	List desired temperature span	X	Other, specify		
_ to _°F	List desired temperature span	Z	N/A (customer to span)		
#4	OUTPUT				
1	1 to 5 VDC	X	Other, specify		
4	4 to 20 mA				
#5	MOUNTING				
A	Dual mounting bracket			} For panel mounting	
B	Dual mounting bracket with 12" cuttable mounting track				
X	Other, specify				
Z	N/A				
#6	SOFTWARE & CABLES INCLUDED? [8-19]				
A	Yes			Z	No



# ISOLATED TRANSMITTERS

#1	DESCRIPTION [8-14 through 8-17]				8H
8	Transmitter (Add "R" for DIN rail style for transmitter)				
#2	TYPE OF TRANSMITTER	I/O ISOLATION	SUPPLY VOLTAGE		
H	Standard	1000 VAC	12 to 35 VDC		
I	Hart Protocol	2500 VAC	11 to 30 VDC		
E	Intrinsically safe	2500 VAC	11 to 30 VDC		
D	Intrinsically safe/Hart Protocol	2500 VAC	11 to 30 VDC		
X	Other, specify				
#3	INPUT				
J	Iron/Constantan thermocouple	N	Nicrosil/Nisil thermocouple		
T	Copper/Constantan thermocouple	C	Tungsten 5% Rhenium/Tungsten 26% Rhenium T/C		
K	Chromel/Alumel thermocouple	2	100Ω, Platinum, a=.00385, RTD, 2 Wire		
E	Chromel/Constantan thermocouple	3	100Ω, Platinum, a=.00385, RTD, 3 Wire		
S	Platinum 10% Rhodium/Pure Platinum thermocouple	4	100Ω, Platinum, a=.00385, RTD, 4 Wire		
R	Platinum 13% Rhodium/Pure Platinum thermocouple	X	Other, specify		
B	Platinum 6% Rhodium/Platinum 30% Rhodium T/C	Z	N/A		
#4	TEMPERATURE RANGE				
_ to _°C	List desired temperature span	X	Other, specify		
_ to _°F	List desired temperature span	Z	N/A (customer to span)		
#5	OUTPUT				
1	1 to 5 VDC	F	Fieldbus		
4	4 to 20 mA	X	Other, specify		
P	Profibus				
#6	SOFTWARE & CABLES INCLUDED?				
A	Yes			Z	No
Z*	No			*Standard for I, E, & D type transmitters.	
#7	PLUG IN INDICATION				
P*	Yes			Z	No
* Only available with "puck" styled models I, E, or D in selection #2.					



Note: DIN rail style(8R) available for all isolated transmitter types.