

# Hammer Union Pressure Transmitter Model 1502



tecsis data sheet 1502 Hammer Union 11/2018

## Applications

- Oil & Gas Drilling
- Mud Pumps / Mud Logging
- Fracturing
- Acidizing
- Cementing
- Standpipe
- Stimulation
- Well Head Measurement
- Choke & Kill
- Coiled Tubing



Shown with removable cage designed to protect the connector. This accessory is retrofittable.

Hammer Union Pressure Transmitter, Model 1502

## Special features

- 4-20 mA, 2-wire Output
- 0.25% Accuracy
- Shock & Vibration Resistant
- Zero & Span Adjustments
- Inconel X-750 Wetted Parts per NACE MR0175-2009

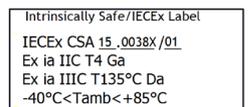
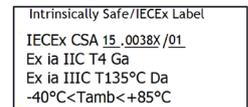
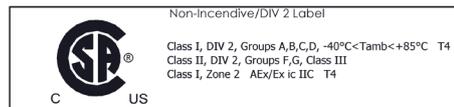
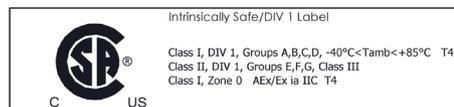
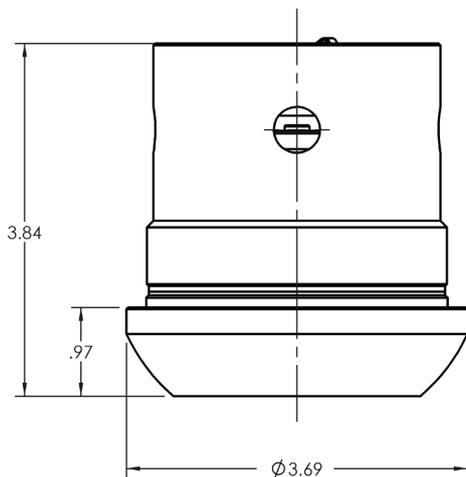
## Description

Model 1502 Hammer Union pressure sensor is designed for a variety of drilling and well servicing applications including cementing, choke and kill, BOPs, and hydraulic fracturing in shale oil and shale gas formations. The Model 1502 is built to survive with Inconel X-750 wetted parts, enhanced shock and vibration resistance, a wide operating temperature, and a NEMA 4 rating. Static accuracy is 0.25%FS (BFSL) over ranges to 0-20,000 psi. The unit provides an intrinsically safe 4-20mA 2-wire output.

# Performance Specifications

Model 1502	
Standard Ranges (psi)	0-5,000, 0-10,000, 0-15,000, 0-20,000 (Other ranges available, consult factory.)
Excitation	10-28 Vdc
Output.	4-20 mA
Zero Balance	4 mA ±1% FSO
Insulation Resistance	≥100 MegOhms
Accuracy (Combined)	±0.25% FSO
Operating Temperature Range	-40° to +185°F (-40° to +85°C)
Compensated Temperature Range	+40° to +140°F (+4 to +60°C) (Other ranges available, consult factory.)
Thermal Effects:	
on Zero	±0.01% FSO/°F ±0.01% of Reading/°F
on Span	
Proof Pressure	1.5X FS (22.5K psi max.)
Burst Pressure	3X FS (22.5K psi max.)
Wetted Parts	Inconel X-750
Standard Connector (Alternative connectors are available)	Bendix PTIH-10-6P or equivalent with protective cap
Hazardous Locations	ATEX - Intrinsic Safety IECEX - Intrinsic Safety CSA - Intrinsic Safety, Non-Incendive
Enclosure Classification	IP67
Shock Limit	100 G's
■ FSO = Full Scale Output	

## Dimensions in inches



### NOTES:

- INSTALL PER 98-1000-0000, 98-1002-0000 OR 98-1003-0000
- SEE MANUAL 98-9000-0000 FOR ADDITIONAL INSTALLATION NOTES
- Tamb MAY VARY BASED ON CONNECTOR OPTION (SEE UNIT LABEL)

# Part Number Construction\*

# C9-6120-

## Options

0	=	No HAZLOC cert.
1	=	DIV 1 LABEL
2	=	DIV 2 LABEL
3	=	DIV 1 LABEL W/ GRD TERMINAL
4	=	DIV 2 LABEL W/ GRD TERMINAL
5	=	CSA DIV 1 + IECEx LABEL

## Wiring Code

SEE BELOW

\* Consult Factory for other configurations.

## Connector

## Pressure Range

1	=	5,000 psis
2	=	6,000 psis
3	=	7,500 psis
4	=	10,000 psis
5	=	15,000 psis
6	=	20,000 psis

A	=	PTIH-10-6P (SST, Welded)
B	=	PTO2E-10-6P
C	=	PTO2E-10-5P
D	=	PTO2E-8-4P
E	=	MS3102E1-4S-2P
F	=	MS3102E1-4S-6P
G	=	MS3102E1-4S-6P (SST)
H	=	REC-M-10PTN-0416
J	=	REC-M-10PTN-0720
K	=	M12, 4-PIN (SST)
P	=	MS3102E1-4S-5P
Q	=	MS3102E1-4S-7P
R	=	Glenair GC379H2-14S-5P or equiv.
S	=	Glenair GC379H2-14S-6P or equiv.
T	=	Glenair GC379H2-14S-7P or equiv.
U	=	PTO2E-10-6P (SST)

## Part Number Examples

Part Number	Options	Wiring Code	Maximum Working Pressure PSI	Electrical Connection
C9-6120-0A1K	No HAZLOC Certification	A	5,000	M12, 4- PIN (SST)
C9-6120-1C2A	DIV.1 LABEL	C	6,000	PTIH-10-6P
C9-6120-2E3D	DIV.2 LABEL	E	7,500	PTO2E-8-4P
C9-6120-3F4E	DIV.1 LABEL W/ GRD TERMINAL	F	10,000	MS3102E14S-2P
C9-6120-4H5H	DIV.2 LABEL W/ GRD TERMINAL	H	15,000	REC-M-10TPN-0416
C9-6120-3E6B	DIV.1 LABEL W/ GRD TERMINAL	E	20,000	PTO2E-10-6P

## Wiring Codes

### Wiring Code A

Pin A	=	+ PWR/SIG
Pin B	=	- PWR/SIG
Pin C	=	N/C
Pin D	=	N/C
Pin E	=	GRD

### Wiring Code D

RED	=	+ PWR/SIG
BLACK	=	- PWR/SIG
WHITE	=	- CAL**
GREEN	=	GRD

### Wiring Code F

Pin A	=	+ PWR/SIG
Pin B	=	- PWR/SIG
Pin C	=	+ CAL
Pin D	=	- CAL**
Pin E	=	GRD
PIN F	=	N/C

### Wiring Code H

Pin A	=	+ PWR/SIG
Pin B	=	- PWR/SIG
Pin C	=	N/C
Pin D	=	GRD
Pin E	=	+ CAL*
Pin F	=	- CAL**

### Wiring Code B

Pin A	=	+ PWR/SIG
Pin B	=	- PWR/SIG
Pin C	=	- CAL**
Pin D	=	N/C
Pin E	=	GRD

### Wiring Code E

Pin A	=	+ PWR/SIG
Pin B	=	- PWR/SIG
Pin C	=	N/C
Pin D	=	N/C
Pin E	=	+ CAL*
PIN F	=	- CAL*

### Wiring Code G

Pin A	=	N/C
Pin B	=	- PWR/SIG
Pin C	=	+ PWR/SIG
Pin D	=	GRD

### Wiring Code J

Pin A	=	+ PWR/SIG
Pin B	=	- PWR/SIG
Pin C	=	- CAL*
Pin D	=	+ CAL*
Pin E	=	N/C
Pin F	=	N/C

### Wiring Code C

RED	=	+ PWR/SIG
BLACK	=	- PWR/SIG

\* Shunt: Do not wire shunt circuit in hazardous locations. See drawing 98-1000-0000 or 98-1002-0000 for shunt cal wiring.  
 \*\* 98% FSO.

© 11/2018 tecs is LP, all rights reserved.  
 The specifications given in this document represent the state of engineering at the time of publishing.  
 We reserve the right to make modifications to the specifications and materials.



A division of the WIKA Group

**tecs is LP**

A division of the WIKA Group  
 771-F Dearborn Park Lane  
 Worthington, Ohio 43085  
 Tel. 614-430-0683  
 Fax 614-431-6957  
 ussales@tecs is.us  
 internationalsales@tecs is.us  
 www.tecs is.us