Hammer Union Pressure Transmitter Model 1502

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
- All-welded Construction
- Inconel X-750 Wetted Parts

Description

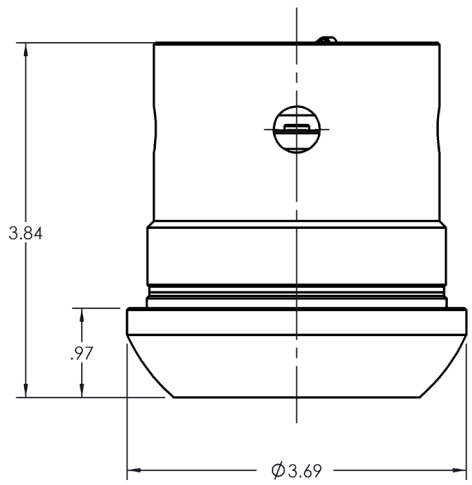
Model 1502 Hammer Union pressure sensor is designed for a variety of drilling and well servicing applications including cementing, choke and kill, BOPs, and hydraulic fracturing in shale oil and shale gas formations. The Model 1502 is built to survive with Inconel X-750 wetted parts, enhanced shock and 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							
Pressure Range (psi)	5,000	6,000	7,500	10,000	15,000	20,000	(Other ranges available, consult factory.)
Proof Pressure (psi)	7,500	9,000	11,250	15,000	22,500		
Burst Pressure (psi)	15,000	18,000	22,500				
Excitation	10-28 Vdc						
Output.	4-20 mA						
Zero Balance	4 mA ±1% FSO						
Insulation Resistance	≥100 MΩ						
Accuracy (Combined)	±0.25% FSO						
Operating Temperature Range	-40° to +185°F (-40° to +85°C)						
Compensated Temperature Range	+40° to +140°F (+5 to +60°C) (Other ranges available, consult factory.)						
Thermal Effect on Zero Point	±0.01% FSO/°F						
Thermal Effect on Span	±0.01% of Reading/°F						
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						
Hazardous Area Locations	CSA- Intrinsic Safety	Class I, Div 1, group A,B,C,D Class II, Div 1, group E,F,G, Class III Class I, Zone 0, AEx/EX ia IIC T4					
	CSA - Non-Incendive	Class I, Div 2, group A,B,C,D Class II, Div 2, group F,G, Class III Class I, Zone 2, AEx/EX ic IIC T4					
	ATEX / IECEx	Ex ia IIC T4 Ga Ex ia IIIC T135°C Da					

- FSO = Full Scale Output

Dimensions in inches



Part Number Construction*

C9-6120-

Approvals

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

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

Connector

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)

* Consult Factory for other configurations.

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 B

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

Wiring Code C

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

Wiring Code D

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

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

Wiring Code G

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

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 J

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

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

tecsis
A division of the WIKA Group

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