

**Viatran 811 Hammer Union Pressure Transducer for measuring pump discharge pressure for drilling, fracturing, acidizing, cementing and nitrogen injection.**

- Patented<sup>†</sup> Design to withstand extreme vibration and abusive impact
- Impervious to Fluid Ingress with patented angled connector base, drain holes, and sealing method
- Easy Access Connector Housing - 77% greater area
- Expanded compensated temperature range
- Improved sealing method for connector pins
- RoHS compliant



#### PERFORMANCE

Full Scale Pressure Ranges.....	0-5K, 0-6K, 0-10K, 0-15K, 0-20K PSIS (0-350, 410, 700, 1000, 1400 Bar)
Combined Accuracy (RSS)	
(Non-Linearity, Hysteresis & Repeatability).....	$\leq \pm 0.25\%$ FSO
Full Scale Output (FSO) .....	$\geq 15$ mV @10 Vdc @70° F
Zero Balance.....	0.0 mV $\pm 1\%$ FSO
Compensated Temperature Range.....	+40°F to 140°F (4°C to 60°C)
Operating Temperature Range.....	-40°F to 185°F (-40°C to 85°C)
Storage Temperature Range.....	-67°F to 302°F (-55°C to 150°C)
Long Term Stability (%FSO) .....	$\leq \pm 0.25\%$ FSO per 6 months
Thermal Effect on Zero .....	$\leq \pm 1\%$ FSO per 100°F Typical
Thermal Effect on Span .....	$\leq \pm 1\%$ FSO per 100°F Typical

#### ELECTRICAL

Output Signal .....	$\geq 1.5$ mV/V @70°F
Supply Voltage .....	10 Vdc nominal, 15 Vdc maximum

<sup>†</sup> Patents.

<sup>†</sup>US Patents D711266, US 9,607,596 B2

<sup>†</sup>EU Patent No. 002334250-001

<sup>†</sup>CN Patent ZL 201330527540.1

# Model 811

## HAMMER UNION PRESSURE TRANSDUCER

### ELECTRICAL (cont.)

Insulation Resistance.....	<5 nS
Response Time.....	<1 millisecond to reach 90% of FSO
Bridge Resistance.....	10K ohms, nominal
Standard Electrical Connection.....	Mates with 6 pin, Hermetic, Box Mount, Shell Size 10, MIL-C-26482 Amphenol type connector

### MECHANICAL

Standard Pressure Port.....	Male hammer union 2 inch #1502
Pressure Cavity Volume .....	Standard: 0.45 cubic inches
Zero Effect from Installation .....	<±0.3% FSO w/200 ft-lbs torque on union #1502
Shock Sensitivity .....	1000 g, 0.5 ms half sine wave pulse shall not cause change in calibration
Proof Pressure .....	1.67X range or 22,500 PSI max
Burst Pressure .....	3 times full scale pressure range, limited by union #1502: 22.5K PSI

### MATERIALS OF CONSTRUCTION

Wetted Materials .....	NACE compliant Inconel 718 wetted material as standard (MR0175/ISO 15156-3:2009(E))
Enclosure Material.....	304 Stainless Steel
Identification .....	Laser marked on body of unit
Weight.....	5.6 lbs. nominal

### OPTIONS

DC .....	Extended Compensated Temperature Range (Cold) -40°F to 140°F (-40°C to 60°C)
DD.....	Standardized Output
DE.....	Shunt Cal
	Range Calibration Signal...100% FSO ±10% by shorting pins E&F
	Calibration Signal Accuracy...Readings on calibration certificate are within ±0.2% FSO of actual Cal signal output
DG .....	Improved temperature compensation ( $\leq \pm 0.5\%$ FSO per 100°F Typical)
DH .....	Special Range
DK .....	Special Calibration Shunt Value
DQ .....	Cleaning for Oxygen Service
EA.....	Special Calibration Run
EH.....	Extended Compensated Temperature Range (Hot) +40°F to 180°F (4°C to 82°C)
LW.....	Narrow adapter for banding
NA.....	Carrying handle attached
NH .....	Customer specific identification
NP.....	Protective ring cage
NQ.....	Protective criss-cross cage
PW .....	Calibrate item with meter/display
Z() .....	Special connectors

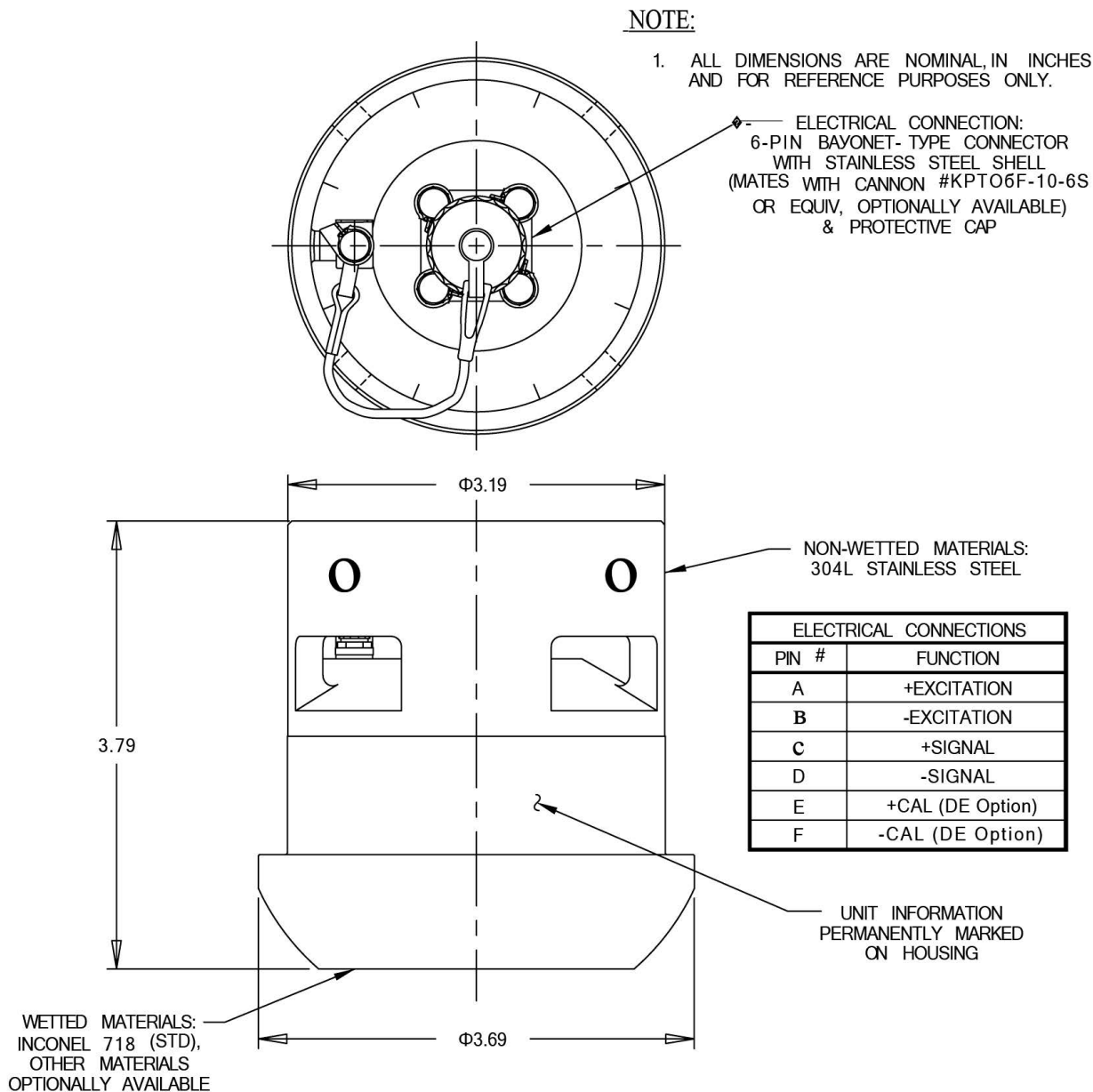




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HAMMER UNION PRESSURE TRANSDUCER

## DIMENSIONAL DATA



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## NOTES

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