



Drilling Consoles – Manifolds – Mud Pumps – Cementing – Fracturing – Choke Consoles

The HDI 2000 *PanelGage* offers safety, accuracy, reliability, and low maintenance in a precise digital readout driller's pressure gauge. The *HDI PanelGage* is built to operate in the extreme temperatures and harsh conditions common in the oilfield. The threat of hydraulic tube ruptures and fluid leaks, serious operational and safety concerns, are eliminated with the *HDI PanelGage*. The electronic pressure transducer is connected to the gauge by electrical cable and can be located up to 250 feet away. HDI's advanced technology provides precise pressure indications to within 0.5% over the entire pressure range. The gauge reads both the minimum and maximum 10 PSI to the same degree of accuracy, ensuring that hydrostatic head pressure is precisely measured. Unlike hydraulic gauges, which fail to read low pressures, the *HDI PanelGage* maximizes low pressure safety with accurate pressure readings as low as 10 PSI. At high pressures, "kicks" can be assessed quickly. Bottomhole differential bit pressure indications are accurately obtained, a key advantage in horizontal and directional drilling. Because the gauge has no moving parts, downtime is significantly reduced. Maintenance costs are low because no field calibration is required and the HDI technology eliminates the Bourdon tube assembly, costly deboosters, check valves, swivels, and knuckles.

Drilling Instrumentation

HDI 2000 PanelGage



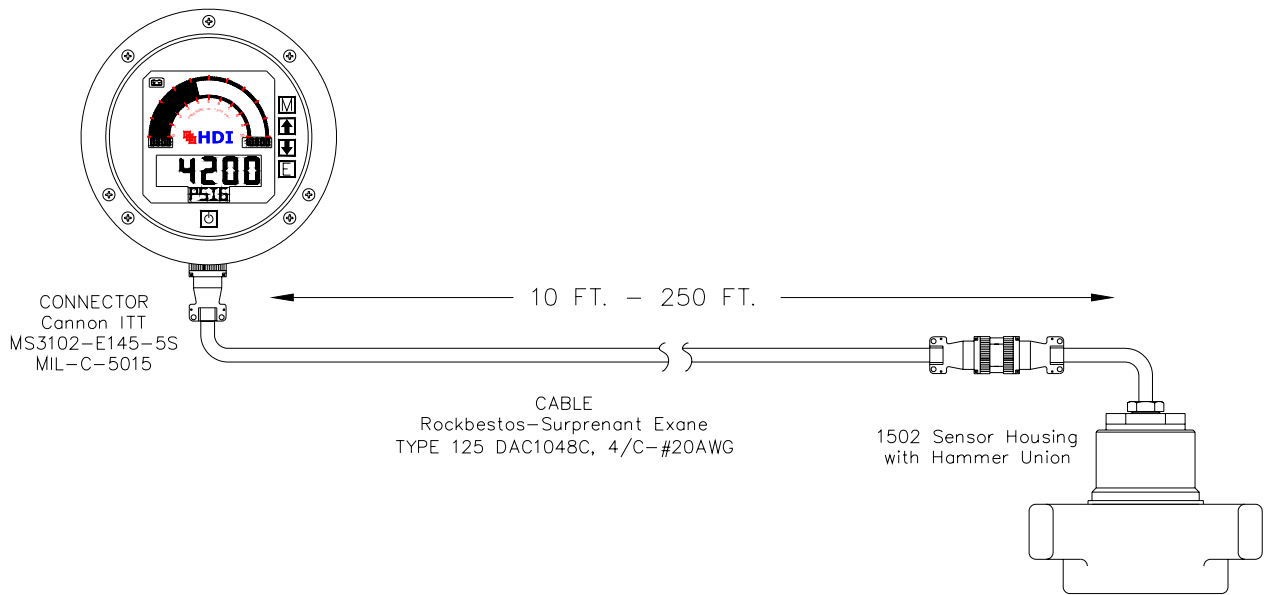
Specifications

Dimensions	6.25 in. (15.875 cm) O.D. x 4 in. (10.16 cm) deep with 7.75 in. (19.69 cm) O.D. mounting ring
Weight	3.4 Lbs. (1.55 Kgs)
Case Material	SUMIKON PM-9640 (black phenolic), aluminum optional
Front Panel Controls	Mode, Up, Down, Enter, Power
Pressure Range	0-5000 PSI standard, optional 0-10000 PSI, 0-16000 PSI
Power	Intrinsically Safe sealed HDI power pack
Battery Life	One year continuous operation
External Power	Optional +12 or +24VDC
Low Battery Indicator	Battery shaped ICON
Time Base	Quartz crystal oscillator
Maximum Cable Length	250 ft (76 m) - gauge to transducer
Accuracy	0.5% of full scale (linearity, hysteresis, and repeatability)
Resolution	10 psi (over full range from 0 psi to full scale)
Engineering Units	PSI standard / Options: bar, kpa, mpa, kg/cm ²
Media Temperature	-30 to 100°C
Storage Temperature	-40 to 100°C
Display	Liquid crystal with five-digit seven segment 0.825 inch (21 mm) digital pressure, 0.219 inch (5.56 mm) minimum / maximum digital scale, 0.383 inch (9.73 mm) alphanumeric engineering units, large 101-segment analog trend indicator, and low battery icon.
Viewing Angle	45°
Viewing Distance	30 Feet (9 Meters)
Electronics Protection	Gasket seal
Front Panel Protection	Optional thumbscrew clear lens or slip-on clear Lexan cover with phenolic ring
Sensor Housings	1502 or 2202 hammer union, API flange, NPT, autoclave
Sensor Protection	Replaceable primary and secondary diaphragms
Mounting	Standard 3-hole or 4-hole mounting patterns
Options	4-20 mA or 0-1V outputs, remote/slave configurations, backlight with rechargeable battery
CSA Certification	Intrinsically Safe for use in Class I, Groups A, B, C, and D for Hazardous Locations

An ISO 9001:2000 Registered Company

Specifications subject to change without notice



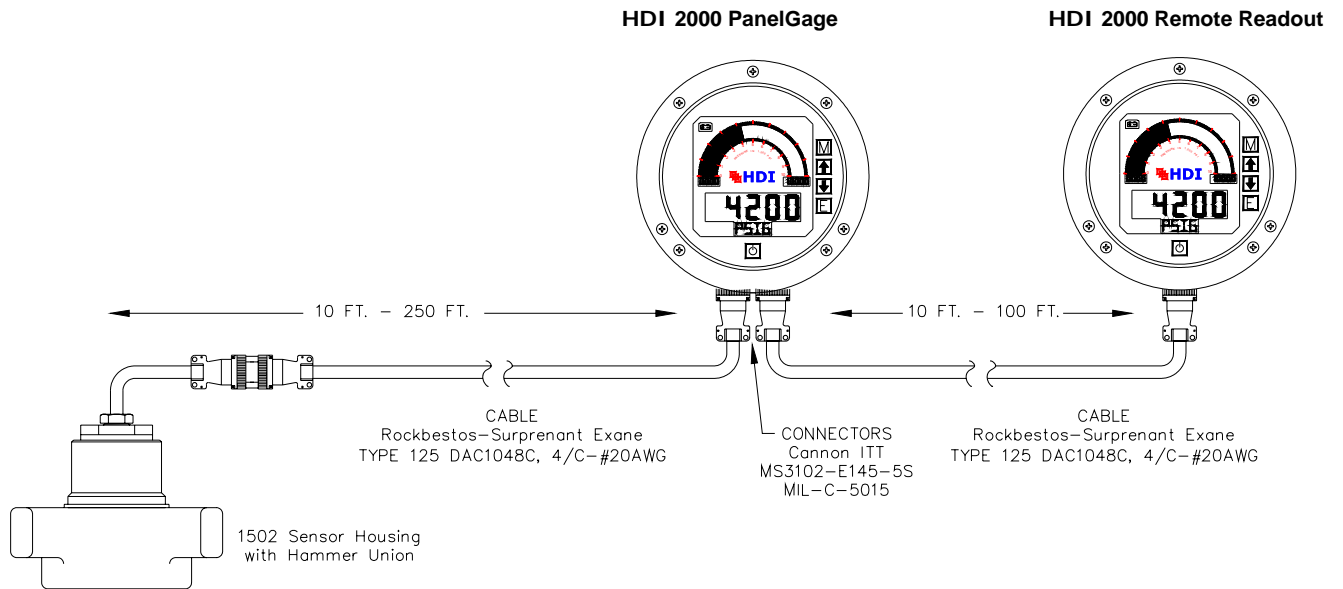


HDI 2000 PANELGAUGE

Standard Configuration With 1502 Hammer Union

EXTERNAL POWER CONNECTOR NOT SHOWN

Specifications subject to change without notice
© 2003 Houston Digital Instruments, Inc.
All rights reserved.
Printed in USA 12/03



HDI 2000 PANELGAGE WITH REMOTE READOUT

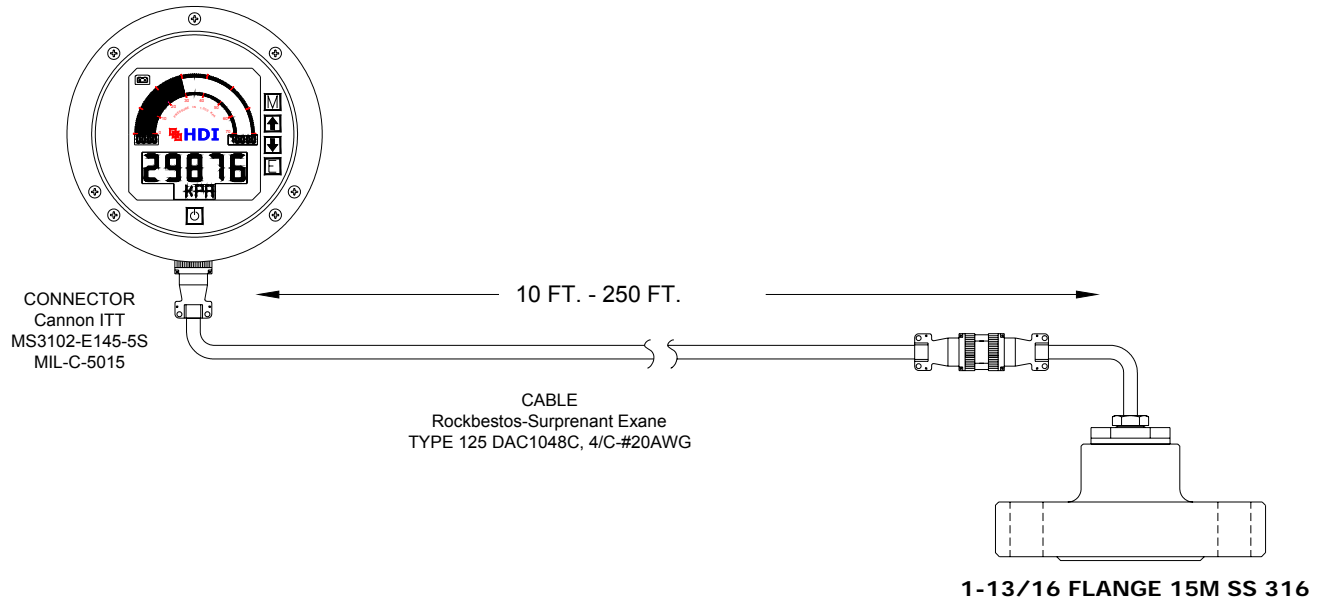
Standard Configuration With 1502 Hammer Union And Remote Readout

EXTERNAL POWER CONNECTOR NOT SHOWN

Specifications subject to change without notice
© 2003 Houston Digital Instruments, Inc.
All rights reserved.
Printed in USA 12/03



HDI 2000BL PanelGage



HDI 2000 PANELGAGE

Standard Configuration With 1-13/16" Flange Sensor

EXTERNAL POWER CONNECTOR NOT SHOWN

Specifications subject to change without notice
© 2003 Houston Digital Instruments, Inc.
All rights reserved.
Printed in USA 12/03