

Pressure Sensing Solutions

OIL AND GAS



 Viatran



Because Viatran has been designing and manufacturing pressure-sensing instruments for the Oil & Gas Industry for over half a century, we are intimately familiar with the demanding performance, reliability and adaptability requirements for secondary recovery, drilling, offshore and land-based production. What's more, our professional sales and applications engineers are dedicated to making sure you get pressure sensing solutions that are a perfect fit for your applications.

DESIGNED FOR RUGGED ENVIRONMENTAL CONDITIONS

Temp extremes | Shock and vibration | Moisture and chemical



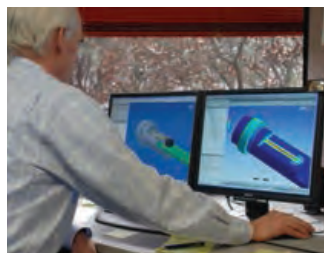
Essential needs always designed in:

- ◆ Maximized productivity
- ◆ High % ROI
- ◆ Safety in operation



Multiple Viatran sensing technologies:

- ◆ Measure pressure from draft to 689 Mpa
- ◆ Handle rugged media without damaging or clogging sensor
- ◆ Remain accurate after exposure to high overpressures



Wide variety of configurations

- ◆ Gage, absolute, vacuum, differential formats
- ◆ mA, mV/V, V, Canbus, Hart outputs
- ◆ Modified outputs, custom wiring, special pressure ranges



Approvals and hazardous location certifications from FM, ATEX, CSA, CE, GOST and IECEx

- ◆ Explosion proof
- ◆ Non-Incendive
- ◆ Intrinsically safe

HYDRAULIC FRACTURING



HAMMER UNION MODELS 510, 511 and 520
Pump discharge pressure for fracturing, acidizing, cementing and nitrogen injection

- ◆ 8 gage sensor design eliminates mounting stress
- ◆ Wetted surface resists corrosion and cracking during acidizing
- ◆ Rugged, withstands extreme shock and vibration



GENERAL PURPOSE MODEL 347
Lube oil and transmission pressure

- ◆ Popular pressure ranges in stock for quick turnaround
- ◆ Economical, with quick shipment options
- ◆ CE compliant with excellent RFI protection



FLUSH TIP MODEL 385
Manifold charge pressure, pump suction

- ◆ Advanced design minimizes torque effect on the diaphragm
- ◆ Withstands pressure spikes up to 5x pressure range
- ◆ Long lasting, rugged stainless steel diaphragm

DRILLING

511 HAMMER UNION MWD, Mud Pump Pressure



- ◆ Able to detect 689 Kpa pulse through 41 Mpa pressure in well.
- ◆ EMI/RFI filtering device reduces effect of noise on small pressure pulses
- ◆ Patented Vibration and Shock Resistant Design
CN Patent ZL201330527540.1
- ◆ Repairable

PT332 HIGH TEMPERATURE Downhole Drill Tool

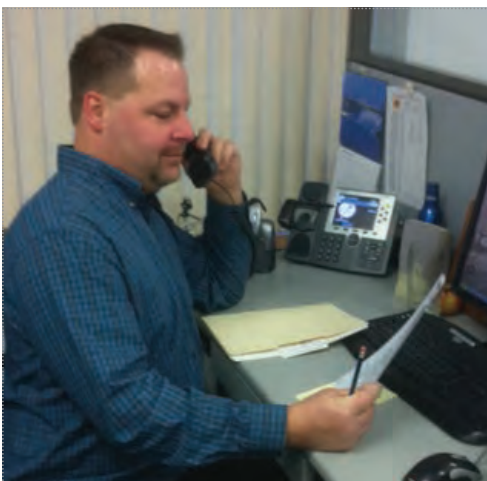


- ◆ Minimum pressure 3500 Kpa
- ◆ Maximum pressure 241 Mpa
- ◆ Temperature compensated up to 232°C
- ◆ Inconel 718 wetted surface

570 HAZARDOUS LOCATION Hookload Pressure



- ◆ Hazardous approvals required for drilling sites
- ◆ Compact, accurate and reliable
- ◆ Other applications include floor wrenches, automated power catwalks, annulus



Talk to a Live Applications Specialist

With our decades of Oil and Gas experience, Viatran's applications specialists are probably very familiar with your application or something similar.

Ask us about: special materials, enhanced accuracy, submersible sensors, special connections, space-saving configurations . . . anything about pressure sensing that is related to your application. Take advantage of our expertise and knowledge. There are no extra charges for this service.

For application support call: 1-716-629-3800

Email: solutions@viatran.com

OFFSHORE

RIG SAFETY, WELLHEAD CONTROL, FLOWLINE



- ◆ Measurements for wellhead control and rig safety
- ◆ Withstands extreme weather conditions
- ◆ Reliability out of the box, no tolerance for fallout

MODEL	DESCRIPTION
570	Fixed range
571	Manually adjustable
970	Dual seal Hart

LAND BASED PRODUCTION

WELL OPTIMIZATION, PRODUCED WATER, CASING AND TUBING



- ◆ Measurements for casing and tubing pressures
- ◆ Remote locations that require solar or battery powered devices
- ◆ Liquid tank measurements require high accuracy level measurements

MODEL	DESCRIPTION
LP748	High accuracy, reads down to 508 mmWC, low current consumption

OIL & GAS PRODUCTS

	510	511	520	571	572	
						
Approvals	FM, ATEX, CSA, CE, GOST	FM*, ATEX*, CSA*, CE, GOST*	FM, ATEX, CSA, CE, GOST	FM, ATEX, CSA, CE, GOST	FM, ATEX, CSA, CE, GOST	
Features	No mounting stress Shock and vibration resistant Repairable	No mounting stress Patented Vibration and Shock resistant design, Repairable, Field Adjustable, Easy Access Housing, IP68	No mounting stress Shock and vibration resistant, Repairable	Magnetically coupled external adjustments 4:1 ranging Internal calibration shunt	Secondary containment rating to 276 Mpa Magnetically coupled external adjustments Built in field calibration signal	
Minimum Range (Kpa)	0 - 35,000 Kpa	0 - 35,000 Kpa	0 - 35,000 Kpa	0 - 700 Kpa	0 - 700 Kpa	
Maximum Range (Mpa)	0 - 138 Mpa	0 - 138 Mpa	0 - 172 Mpa	0 - 689 Mpa	0 - 138 Mpa	
Output	4 - 20 mA	4 - 20 mA HART*	4 - 20 mA	4 - 20 mA	4 - 20 mA	
Input Voltage	10.5 - 28 VDC	9 - 28 VDC	10.5 - 28 VDC	12 - 30 VDC	10 - 40 VDC	
Combined Accuracy (RSS)	.25%	.25%	.25%	.25%	.25%	
Standard Pressure Connection	1502 Hammer Union	1502 Hammer Union	2002 Hammer Union	¼" NPT (F) ≤ 15K PSI	¼" NPT (F)	
Standard Electrical Connection	6 pin bayonet	6 pin bayonet	6 pin bayonet	½" NPT (M), 18 AWG wire, 72"	½" NPT (M), 18 AWG wire, 72"	
Compensated Temperature Range	4°C to 60°C	4°C to 60°C	4°C to 60°C	21°C to 77°C	-18°C to 82°C	
Operating Temperature Range	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-23°C to 88°C	
Weight (kg)	2.5 kg	2.5 kg	2.5 kg	.68 kg	2.04 kg	
Std. Wetted Parts	Inconel X750	Inconel 718	Inconel X750	15-5PH SS ≤ 15K PH 13 - 8 Mo ≥ 20K	Hastelloy C - 276	

All specifications are subject to change at the discretion of the manufacturer. Many more features are outlined on product data sheets, this is not an all inclusive list of product features. Contact your Viatran rep for additional information.

Some models offer specific configurations which are available within 48 hours, check with your Viatran rep for details. * Pending Approvals

2/347		548/748/848		570/770/870/970		PT332		LP748		385	
CE, GOST	FM, ATEX, CSA, CE, GOST	FM, ATEX, CSA, CE, GOST		FM, ATEX, CSA, CE, GOST		FM, ATEX, CSA, CE, GOST		FM, ATEX, CSA, CE, GOST		CE, GOST	
Great Value Zero adjust	Great value Flexible configuration Ranges down to 762 mmWC	Very rugged General purpose Alternate wetted parts	Compact size Temperature compensated Rugged	Low power consumption Low pressure range	Minimal zero shift due to clamping effect 5x proof pressure Rugged stainless steel diaphragm						
0 - 20 Kpa	0 - 20 Kpa	0 - 700 Kpa	0 - 3500 Kpa	0 - 20 Kpa	0 - 350 Kpa						
0 - 138 Mpa	0 - 35 Mpa	0 - 689 Mpa	0 - 241 Mpa	0 - 35 Mpa	0 - 3.5 Mpa						
4 - 20 mA 0 - 5 VDC 0 - 10 VDC	4 - 20 mA 0 - 5 VDC 0 - 10 VDC 5 - 10 mV/V	4 - 20 mA 0 - 5 VDC 0 - 10 VDC 2 mV/V HART	2 mV/V	1 - 5 VDC	4 - 20mA						
8 - 30 VDC	9 - 30 VDC	12 - 36 VDC	5 - 15 VDC	7 - 30 VDC	8 - 30 VDC						
.50%	.25%	.25%	.25%	.25%	.50%						
1/4" NPT (F)	1/4" NPT (F)	1/4" NPT (F) ≤ 15K PSI	7/16 - 20 UNF - 2A	1/4" NPT (F)	1/2" NPT (M)						
DIN Plug 43650	1/2" NPT (M), 18 AWG wire, 72"	1/2" NPT (M), 18 AWG wire, 72"	4 COND, 30 AWG SHLD CABLE 18 (47.5) LG	1/2" NPT (M), 18 AWG wire, 72"	6 pin bayonet						
0°C to 82°C	0°C to 82°C	21°C to 77°F	21°C to 232°C	0°C to 82°C	0°C to 80°C						
-40°C to 104°C	-40°C to 85°C	-40°C to 85°C	-54°C to 232°C	-40°C to 85°C	-40°C to 125°C						
.28 kg	.28 kg	.68 kg	.05 kg	.28 kg	.23 kg						
15-5PH SS ≥ 300 PSI 316 SS < 300 PSI	316 SS	15-5PH SS ≤ 15K PH 13 - 8 Mo ≥ 20K	Inconel 718	316 SS	15-5PH and 304L						



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