PressureTransmitter

MODEL 948



The Model 948 pressure transmitter is a low-range, SMART, small pressure transducer. As you can see from the picture, it can be direct mounted, or it can be used as a submersible unit. Either way, the Model 948 offers you excellent options for ranges from 0-5,000 PSI.

FEATURES

- ► HART Communication
- ▶ Small size and weight
- ▶ Pressure down to 10" WC

TYPICAL APPLICATIONS

- ► Chemical Processing
- ▶ Tank Level
- ▶ Oil & Gas Refineries
- ▶ Well Production Processes

Approval Options Available. Contact Viatran for details.

SMART, RANGEABLE, ACCURATE.

Each Viatran Model 948 is digitally calibrated in the factory. This ensures unsurpassed accuracy and rangeablity down to 10" WC. HART communications allows for easier system commissioning, especially at start up. All of this in a small package ideal for the most rugged process applications.

REMOTE CALIBRATION

The HART communication system allows for simultaneous analog and digital communication. This means the Model 948 is fully compatible with existing analog systems while still offering the benefits of digital/remote calibration and communications. Communicating with the 948 can be

accomplished with a handheld device or using a PC and available software.

OPTIONAL APPROVALS

The Model 948 is all welded stainless steel which makes it perfect for corrosive environments. It can also be marked with FM, CSA and ATEX hazardous location markings.

FOR BETTER RIG REAL ESTATE

When Rig Real Estate is at a premium, the Model 948 is an excellent solution. Its small size (1.5" diameter) and all-welded 316 stainless steel construction offers durability both on and off the rig.



For product availability, or to order please call 1-800-688-0030, ext 506.

SPECIFICATIONS

Full Scale Pressure Range (FSPR)	0-3 thru 0-5K PSIA, PSIG, PSIS
Turndown	10:1 with no degradation on static accuracy or
	thermal effect
Static Accuracy	≤ ±0.1% FSO (combined linearity, hysteresis and

repeatability at ambient temperature)

Total Performance ≤±0.1% /span/±50°F < relative to 75°F at 1:1 range>

Thermal Effect over operating range: ≤0.35% at 1:1 -30°F to 185°F

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 Full Scale Output (FSO)
 16 mA ± 0.1% FSO

 Dynamic Response Time
 ≤ 300 mSec to reach 63% FSO

ELECTRICAL

PERFORMANCE

Power Supply Regulation ±0.02% FSO per Volt

Output Signal Two wire 4 to 20 mA. Digital process signal super-

imposed on a 4-20 mA signal, available to any host computer system conforming to

HART protocol.

Circuit Protection Reverse polarity protected.

Insulation Resistance ≥ 200 MegOhms between all terminals in

parallel and at the transmitter case.

RFI/EMI Suppression Negligible effect to 500 Mhz at

5 watts direct contact.

Red + Signal
Black - Signal
Green Case Ground

MECHANICAL

Pressure Connection 1/4" NPT(F)

Proof Pressure

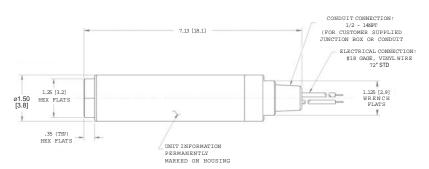
Burst Pressure

Materials of Construction

Wetted Materials316 stainless steelHousing316 stainless steelShock Limitation100 G'sWeight24 oz. ±3 oz.

Identification Laser etched into body

Mounting May be mounted by process piping, electrical conduit, or optional mounting bracket to 2" pipe.



CERTIFICATIONS Consult factory for available Options

FM Intrinsic Safety: Class I, II, III, Division 1, Groups A-G, Class

I, Zone 0, AEx ia IIC, T4 at Ta=80°C, T5 at Ta=40°C Entity,

Type 4X hazardous locations

Explosion Proof: Class I, II, III, Division 1, Groups A-G, AEx d

IIC, T5 at Ta=88°C NEMA 4X hazardous locations Nonincendive: Class I,II,III Division 2, Groups A,B,C,D,F,G, Class I, Zone 2, Group IIC, T4 at Ta=80°C T5 at Ta=40°C,

Type 4X hazardous locations

CSA Intrinsic Safety: Ex ia IIC; Class I, Zone 0; Class I, II, III,

Groups A-G; Type 4, T4 at Ta=80°C, T5 at Ta=40°C

Explosion Proof: [Ex d IIC; Class 1, Zone 1] Class I, II, III,

Groups A-G, Type 4, T5 at Ta=80°C Hazardous Locations.

Nonincendive: Ex nA IIC; Class I, Zone 2, Class I, Div 2,

Groups A,B,C,D, Class II, Div 2, Groups F, G, Class III, Div 2,

T4 at Ta=60°C, Type 4 Enclosures.

ATEX Intrinsic Safety: 😥 II 1G

EEx ia IIC, -20°C T4, Ta ≤50°C

Flameproof: ©II 2 G

EEx d IIC, T5 (-20°C ≤ Ta ≤ 80°C)

Type N: 😥 II 3 G

EEx nL IIC T4 (-20°C ≤ Ta ≤ 60°C) EMC Directive 89/336/EEC and

EMC Directive 89/336/EEC and Low Voltage Directive 72/23/EEC

EN 61010-1 (1993)/ Safety Requirements EN 61326-(2001) - EMC Requirements

PED Directive 97/23/EC
*Consult factory for details

OPTIONS

Codes

CL Extra lead length
DF Bleed port (10K PSI and below)

DQ Oxygen cleaning
EA Special calibration
NG ATEX Flameproof label
NH Customer specified CE label

NK ATEX Intrinsic Safety/Nonincendive label

NX CSA Intrinsic Safety label

NY FM Explosion Proof /Dust Ignition Proof label

 NZ
 FM Nonincendive label

 TF
 FM Intrinsic Safety label

 TJ
 CSA Div/Zone 2 label

 TK
 ATEX Type N Label

 YI
 1/8" NPT(F)

YM 1/4" high pressure tube F250-C

Note: Application of some available options may affect standard performance. Consult your Viatran representative for details

ACCESSORIES

Mounting bracket

Polyhead conduit connection box

HART communicator

