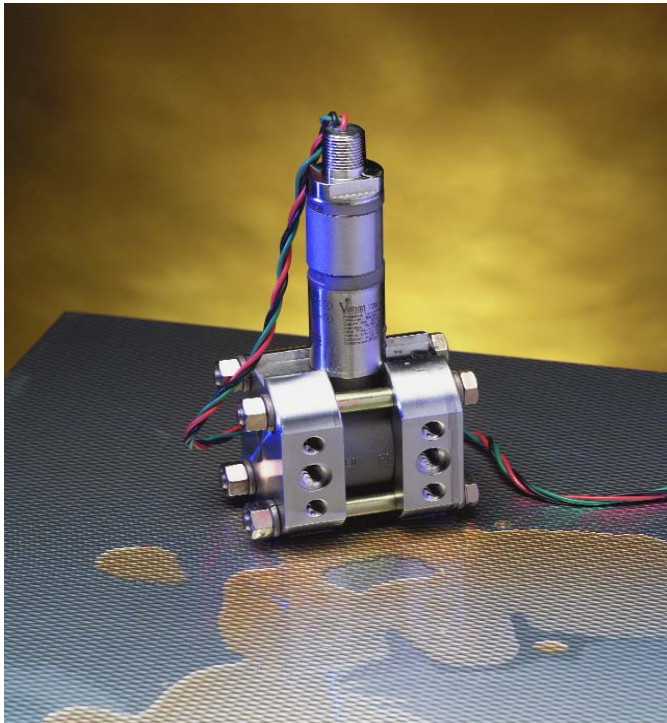


Pressure Transmitter

DIFFERENTIAL PRESSURE

MODEL # 574



The unit's small size and light weight make it ideal where there is limited panel space, as in offshore oil rigs and ships. The all welded 316 stainless steel construction allows the airtight and watertight 574 to be in corrosive environments, including salt air or caustic solutions. For more corrosive media, Viatran offers Hastelloy wetted parts as an option for all pressure ranges.

External zero, span, and calibration controls are hermetically sealed, yet are easily adjusted with Viatran's magnetically-coupled drive system. The signal conditioner in the 574 allows for 5:1 ranging of the trans-mitter's standard pressure range.

Model 574 is certified by FM as suitable for hazardous locations, by CSA as explosion proof, and as flameproof by CENELEC(NEMKO).

It is considered explosion proof even during calibration, and can be safely immersed in process fluids or exposed to vapors with appropriate electrical connections.

The 574 has also been approved by FM as intrinsically safe (entity), while a CENELEC intrinsically safe approval is pending.

A special feature of Model 574 is a calibration circuit that permits set-up and ranging in the field, without a calibrated pressure source. When the cal switch is activated, a pre-determined electronic signal is sent through the unit, simulating a specific level of pressure. A special option on the 574 is fast response, which allows the unit to warm-up in approximately one tenth of the standard time.

Viatran offers a complete family of transmitters designed for the process control industry. Model 571 measures gage and absolute pressures.

If adjustment controls are not necessary, the "70" Series are simple, low cost gage alternatives. The 573 is a flange-mounted pressure transmitter for tank liquid level measurement.

Viatran's Model 574 differential pressure transmitter employs variable capacitance sensing technology for extreme reliability and high accuracy. The 574 measures pressures from 5" WC to 100 PSI, with overpressure protection to 3000 PSI.

FEATURES

- 5" WC to 100 PSI ³P ranges
- Hermetically sealed external controls
- Small size and weight
- All 316 stainless steel wetted and external surfaces
- Field calibration circuit

TYPICAL APPLICATIONS

- Offshore oil rigs
- Oil pumping
- Shipboard/Marine
- Pulp and paper processing
- Chemical processing
- Steel production

Contact Viatran for approval options



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

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An ISO 9001: 2001 Certified Company

SPECIFICATIONS

Performance

Full Scale Pressure Range (FSPR)	0-5, 10, 20, 50, 100, 300, 750" WCD 0-15, 50, 100 PSID
Non-Linearity (Best Fit Straight Line)	$\leq \pm 0.15\%$ FSO
Hysteresis & Repeatability	$\leq \pm 0.10\%$ FSO
Full Scale Output (FSO)	16 mA at 70° F
Resolution	Infinite
Long Term Stability	$\leq \pm 0.1\%$ FSO per 6 months
Zero Shift with Base Pressure	$\leq \pm 2.0\%$ FSO per 1000 PSI
Span Shift with Base Pressure	$\leq \pm 1.0\%$ FSO per 1000 PSI
Zero Shift After 3000 PSI Overload	
Single Side	$\leq \pm 0.1\%$ FSO
Alternate Sides	$\leq \pm 1.0\%$ FSO
Compensated Temperature Range	0° F to +170° F
Operating Temperature Range	-10° F to +190° F
Storage Temperature Range	-65° F to +250° F
Temperature Effect on Zero	$\leq \pm 1.0\%$ FSO per 100° F
Temperature Effect on Span	$\leq \pm 1.0\%$ FSO per 100° F

Electrical

Supply Voltage	8.5 to 40 VDC
Power Supply Regulation	$\leq \pm 0.02\%$ FSO / V over supply voltage range
Output Signal	4 to 20 mA
Load Impedance	1500 Ohms maximum at 40 VDC
Zero Adjustment	-100% FSO elevation to +50% FSO suppression of the standard range
Span Adjustment	Rangeable down, 5:1 from standard range
Calibration Signal	20% of FSPR externally switched
Calibration Signal Accuracy	$\leq \pm 1\%$ of the stated value
Circuit Protection	Varistor protected across the input leads for surges above 40V and currents to 250A peak with a pulse width of 8 x 20 μ Sec. Reverse polarity protected.
Insulation Resistance	>1000 MegOhms to case ground at 50 VDC and 70° F
Response Time	See graph
RFI/EMI Suppression	<1% FSO from D.C. to 15MHz at 2V peak to peak direct contact
Electrical Connections	1/2" NPT, Male, 3 wires, 18 AWG
Red	+Signal / Power
Black	-Signal / Power
Green	Case Ground

Mechanical

Pressure Connections	1/4" NPT Female on 2-1/8" centers on flanges. 1/2" NPT Female on 2", 2-1/8", 2-1/4" centers with optional adapters.
Proof Pressure	3000 PSID and/or 3000 PSI base pressure
Burst Pressure	4500 PSID and/or 4500 PSI base pressure
Diaphragm Displacement	0.002 cubic inches at FSPR
Fill Fluid	Dow DC200 Silicone oil
Mounting	May be supported by process piping or by optional mounting bracket.
Materials of Construction	
Housing	316 stainless steel
Wetted Parts	316 stainless steel and Viton "O"-Ring
Weight	7 lbs.
Identification	Laser etched onto body

Certifications

Enclosure Classification	NEMA 3, 4, 4X, 6, 12
Intrinsically Safe	FM approved for use in Class I, II & III, Div. 1, Groups A thru G indoor and outdoor, NEMA 4X hazardous locations.
	NEMKO/CENELEC (approval pending)
	EEx ia IIC T5
Explosion Proof	FM approved suitable for use in Class I, II & III, Div. 1, Groups A thru G, hazardous locations
	CSA approved for use in Class I, Div. 1, Groups A, B, C, & D, Class II, Div. 1, Groups D, F, & G, and Class III, Div. 1 for hazardous locations
	NEMKO/CENELEC approved Flameproof
	EEx ia IIC T6

Options

Alternate Ports	
YL	1/4" NPT(F) square flange
YQ	1/8" NPT(F) square flange
YW	G1/4(F) for remote seals
Performance Options	
DG	Improved temperature performance
DJ	Submersible connector w/8' cable
DK	Special calibration setting
DQ	Cleaning for oxygen service
EA	Customer specified calibration parameters
GB	Teflon "O"-Ring
GE	Buna-N "O"-Ring
JJ	Loop powered direct mount indicator with explosion proof housing
MD	FM label
ME	CSA label
NF	Fast response time
NG	NEMKO (CENELEC) label
NH	Customer specified laser identification
PW	1/8 DIN digital indicator
QC	Hastelloy wetted parts
NSR	Non standard range

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

