



Made With Pride In The U.S.A.

Lumenite Control Technology, Inc.

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Model LSPT-4220 Sanitary 4-20mA Continuous Pressure Transmitter

- 4-20mA 1-5VDC
1-10 VDC Outputs

- Highly Polished
Nema 4x Stainless
Steel Enclosure

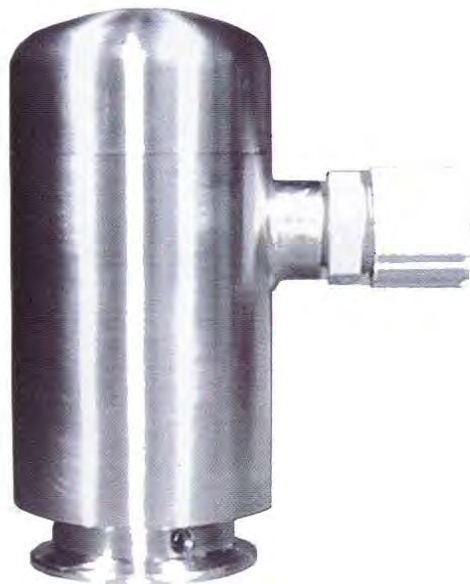
- USDA, 3A,
3rd Party
Evaluation

- Superior Linearity
Repeatability,
Accuracy, Stability,
Hysteresis,
Vibration
Specifications

The NEW Lumenite series LSPT-4220 sanitary 4-20mA continuous pressure transmitter, with optional digital readout, meets all 3A, USDA, and 3rd party testing/evaluation criteria. Designed specifically for the milk, food and pharmaceutical industry, the LSPT-4220 is ruggedly constructed of highly polished stainless steel, available in every sanitary tank connection, with measurement specifications superior to the competition.

Model LSPT-4220-C2"
Standard 4-20mA
Pressure Transmitter
w/Tri-Clamp Tank Connection

For unit with on board digital
display, specify model
LSPT-DP-4220-C2"



Series LSPT-4220 Sanitary 4-20mA Pressure Transmitter Ordering Key

(A)

(B)

(C)

(D)

MODEL-LSPT-4220

Type of Sanitary Tank Connection
C 1 1/2 = 1 1/2" Tri-Clamp
C2 = 2" Tri-Clamp
A 1 1/2 = 1 1/2" 16A Bevel Seat w/13 H Nut
A2 = 2" 16A Bevel Seat w/ 13H Nut
I 1 1/2 = 1 1/2" 16Al Cherry Fitting
I 2 = 2" 16Al Cherry Fitting
Note: Other Sanitary Fittings Available On Special Order

Standard Pressure Ranges In PSI Units
30 = 0-30psi
60 = 0-60psi
100 = 0-100psi
150 = 0-150psi
200 = 0-200psi
300 = 0-300psi
500 = 0-500psi
750 = 0-750psi
1000 = 0-1000psi

Fitted With On Board Digital Display
DP

Note: Other Ranges And Units Of Measure Available On Special Order.

A
B
C
Example : Model LSPT-4220-C2-100 PSI
 Lumenite Sanitary 4-20mA Continuous
 Pressure Transmitter With 2" Tri-Clamp
 Tank Connection And 0-100PSI Range

NOTE : Specify LSPT-4220-C2-100PSI-DP For Unit Fitted With On Board Digital Display.

**SERIES LSPT-4220
4-20mA SANITARY
PRESSURE TRANSMITTER**

STANDARD SPECIFICATIONS

Accuracy – 0.25% Independent of range

Repeatability – 0.07%

Hysteresis – 0.15% or better

Linearity - ± 0.08 BFSL or better

Stability - $\pm 0.2\%$ of calibrated range for 1 year

Over-Range Rating – 2 times base range, at burst of 800%

Zero/Span Adjustments - $\pm 10\%$

Process Temperature Range - 20° F to 300° F

Storage Temperature - -65° F to 250° F

Operating Temperature - 0° F to 180° F

Durability – 10^7 cycles with negligible performance change

Humidity Effect – No performance effect at 95% relative humidity
non-condensing

Vibration Sweep – Less than $\pm 0.1\%$ F.S. effect for 0-2000HZ at 20 g's
in any axis

Shock – Less than $\pm 0.05\%$ F.S. effect for 100 g's 20ms shock in any axis

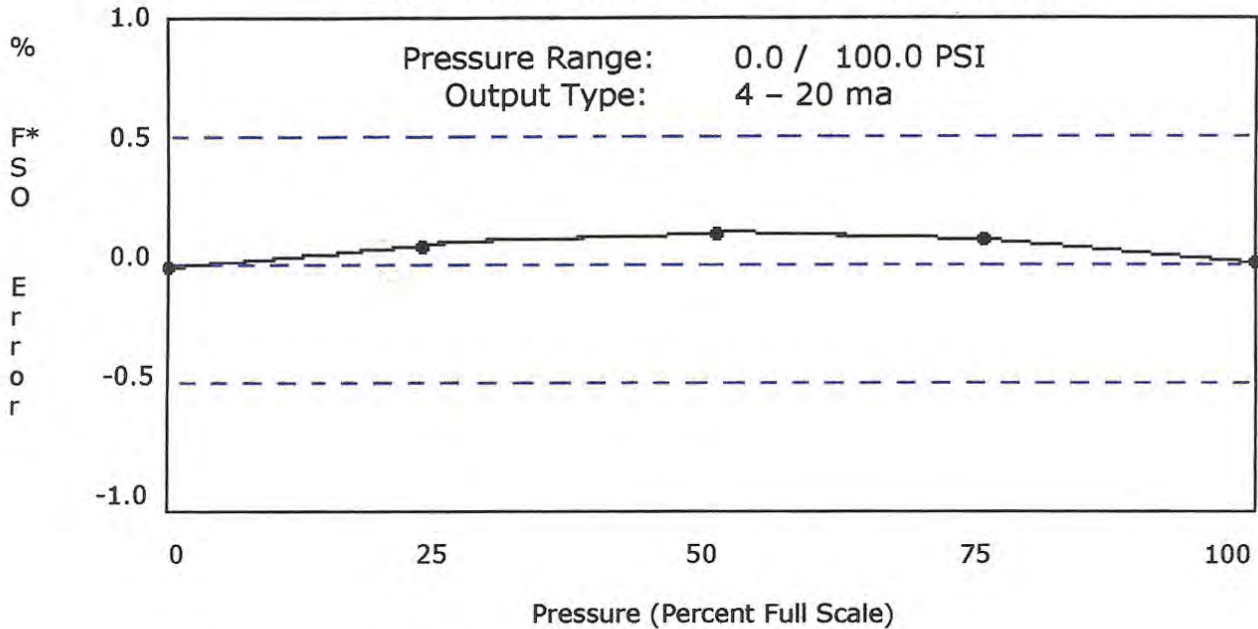
Position Effect – Less than 0.1% F.S.

Output – 4 to 20mA standard; optional 1-5VDC, 1-6VDC reverse polarity
protected

Housing – Highly polished 304SS; product contact surfaces 316SS

Approvals – Meets all 3A, FDA, USDA requirements

**LUMENITE MODEL LSPT-4220-C2" – 100 PSI
GRAPH OF PRESSURE VS. % FSO ERROR**



Pressure	Output	Error	Error
PSI	ma	%FSO	%BSL
0.0	4.000	0.01	-0.08
25.0	8.016	0.11	0.02
50.0	12.023	0.15	0.05
75.0	16.020	0.13	0.04
100.0	20.003	0.02	-0.07
75.0	16.023	0.15	0.06
50.0	12.026	0.17	0.08
25.0	8.017	0.10	0.01
0.0	3.997	0.02	-0.07

Graph Legend

Up Scale:	—————
Down Scale:	- - - - -

Excitation Voltage: 24 VDC
System Number: 4

We certify that our calibration system complies with ISO 10012-1, ANSI/NCSL ZS40-1 and that all standards used for calibration are traceable to the National Institute of Standards and Technology. Pressure Standards S/N 43759, #38126, #TN-241829 Electrical Standards DC Volts 251625, AC Volts 245061, Res 811/251319, Freq VLF WWVB, Resistor – AC 100072, DC 100071, R 100073, FWWVBULSREC.

$$V_{out} - \left[V_{FS} \times \frac{PRESSURE - PRESSURE_{0\%}}{PRESSURE_{FS}} + V_{out\ 0\%} \right]$$

$$\%FSO\ Error = \frac{\text{---}}{V_{FS}} \times 100$$

$V_{FS} = V_{out\ 100\%} - V_{out\ 0\%}$ (Theoretical Max and Min)

Reference ANSI/ISA-S51.1 & ANSI/ISA-S37.1*

Lumenite Series LSPT - 4220 Sanitary 4-20mA Pressure Transmitter

NOTE : All Lumenite pressure transmitters are calibrated at the factory. Under normal conditions, no zero or span adjustment is required.

