

# AchieVe™ LPPT Series Pressure Transmitters

## AchieVe Pressure Transmitters

The AchieVe LPPT series is a very economical pressure sensing solution for applications where overall small size, weight, and very low cost are required. A wide variety of compatible liquid and gas pressure sensing applications are possible due to the robust all stainless steel welded sensing element and wetted materials. The LPPT series transmitters feature full scale pressure ranges from 15 to 5000 psig as well as a compound range from vacuum to 30 psig. The field proven internal polysilicon thin film pressure sensor performs with a 1% Total Error Band over 32 to 185°F (0 to 85°C). The AchieVe LPPT series transmitters include a 1/4" NPT male threaded process connection and industry standard, 2-wire, 4-20mA analog output with M12 quick disconnect that simplifies interface to controls, data collection, and telemetry systems.



Part No. [LPPT25-20-0015H](#)



Part No. [LPPT25-20-5000H](#)



### Features

- Very economical solution for pressure sensing applications
- Compact size is ideal where limited installation space is available
- Full scale pressure ranges from 15 to 5000 psig. Compound range from vacuum to 30 psig
- 1% Total Error Band over 0 to 85°C
- 1/4" NPT male threaded process connection
- 4-20mA analog output
- M12 quick disconnect
- Robust stainless steel construction
- IP67 protection rating



AchieVe LPPT Series Pressure Transmitters									
Model	Range	Sensing Element	Output	Process Connection	Operating Voltage	Electrical Connection	Price	Drawing Link	Weight (lb)
<a href="#">LPPT25-20-V30H</a>	-14.7 to 30 psig	17-4 Stainless Steel	4-20mA analog	1/4" NPT male	9 to 32 VDC	4-pin M12 quick-disconnect (purchase cable separately)	\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0015H</a>	0 to 15 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0030H</a>	0 to 30 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0060H</a>	0 to 60 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0100H</a>	0 to 100 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0200H</a>	0 to 200 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0300H</a>	0 to 300 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-0500H</a>	0 to 500 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-1000H</a>	0 to 1000 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-2000H</a>	0 to 2000 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-3000H</a>	0 to 3000 psig						\$79.00	<a href="#">PDF</a>	0.16
<a href="#">LPPT25-20-5000H</a>	0 to 5000 psig						\$79.00	<a href="#">PDF</a>	0.16

See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

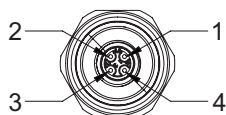
# AchieVe™ LPPT Series Pressure Transmitters

AchieVe LPPT Pressure Transmitter Technical Specifications	
Reference Temperature	72°F ± 2 °F (21°C ± 1°C)
Accuracy Class	± 1.0% Span: Includes non-linearity, hysteresis. Non-repeatability, zero offset and span setting errors at reference temperature
Total Error Band Accuracy (TEB)*	± 1.0% of Span: From 32°F to 185°F (0°C to 85°C) ± 2.0% of Span: From 185°F to 257°F (85°C to 125°C) ± 2.0% of Span: From -40°F to 32°F (-40°C to 0°C)
Stability	≤ ± 0.25% of span/year
Durability	50 million cycles
<b>Environmental</b>	
Temperature	Storage: -58°F to 257°F (-50°C to +125°C) Operating: -40°F to 257°F (-40°C to +125°C) Ambient: -40°F to 221°F (-40°C to +105°C)
Humidity	0 to 100% R.H., ± .05% typical
<b>Functional</b>	
Vibration	Random vibration (20g) RMS; 20-2000 Hz per IEC 60068-64
Shock	100gs, 6ms
Drop Test	Withstands 1 meter on concrete
<b>Functional</b>	
Response Time	< 5 msec
Warm-up Time	< 20 msec
Position Effect	< ±0.015% span typical
<b>Electrical</b>	
Insulation Withstand Voltage	500VAC
Insulation Resistance	> 100MΩ @ 100VDC
Circuit Protection	Reverse polarity and miswire protection
Output	4-20 mA, 2 wire
<b>Wetted Components</b>	
Sensor Diaphragm	17-4PH stainless steel
Process Connection	304 stainless steel
<b>Non-Wetted Components</b>	
Housing	304 stainless steel / Nylon
<b>Environmental</b>	
Protection Rating	IP67
<b>Certifications</b>	
Agency Approvals	UR, CE

\* Includes the combined effects of non-linearity (Terminal Point Method), hysteresis, non-repeatability, temperature and zero offset and span setting errors.

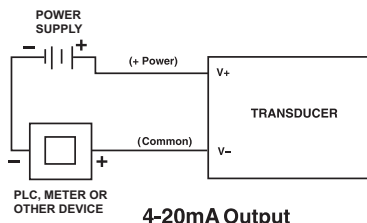
## Wiring

Standard 4-20mA



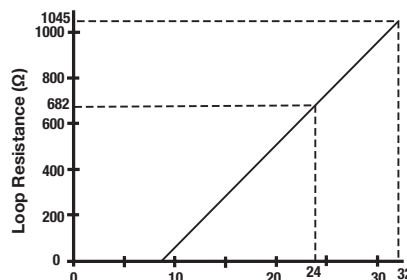
Pin #	Current Wiring
1	V+
2	Ground
3	V-
4	V-

\* Use either V- termination



Proof & Burst Pressures		
Overpressure Full Scale (FS) Range	Proof	Burst
< 100 psi	2 X Range	50 X Range
≥ 100 to 3,000 psi	2 X Range	5 X Range
≥ 3,000 to 5,000 psi	1.5 X Range	4 X Range

## Power Supply vs Loop Resistance



$$V_{MIN} = 9V + [0.022A \times (R_L)]$$

(\*includes a 10% safety factor)

$$R_L = R_S + R_W$$

$R_L$  = Loop Resistance (Ohms)  
 $R_S$  = Sense Resistance (Ohms)

For additional information see the AchieVe LPPT Series Pressure Transmitter Quick Start Guide by scanning or clicking on the QR code.

