

# ProSense® SPT25 Series Pressure Transmitters



The ProSense SPT25 pressure transmitter series is engineered to meet many industrial, commercial, and OEM pressure measurement applications. The all stainless steel welded thin film sensing element provides very fast response time and is compatible with many different media sensing applications. With a robust design resistant to vibration, shock, and EMI/RFI, the SPT25 series provides high accuracy over a wide compensated temperature range. Pressure sensing ranges from vacuum to 5000 psig are available along with a 1/4 inch NPT male threaded process connection. Choose from linear outputs of 4-20 mA or 0-10VDC with electrical connections of either a DIN 175301-803C L-connector or 6.6 foot (2 m) integral shielded cable.

## Applications

- Process control & automation
- Pump & compressor control
- Hydraulic systems
- Pneumatic systems
- Engine monitoring
- Refrigeration equipment
- Presses
- Machine tools

## Features

- All stainless steel welded sensing element
- Fast response time
- Pressure sensing ranges from vacuum to 5000 psig
- 1/4 inch NPT male threaded process connection
- Output options: 4-20 mA or 0-10 VDC
- Integral 6.6 foot shielded cable or DIN form C electrical connections
- Made in the USA
- CE marked
- 3-year warranty

Click on the thumbnail or go to <https://www.automationdirect.com/VID-PR-0001> for a short video on ProSense Air Differential and Pressure Transmitters

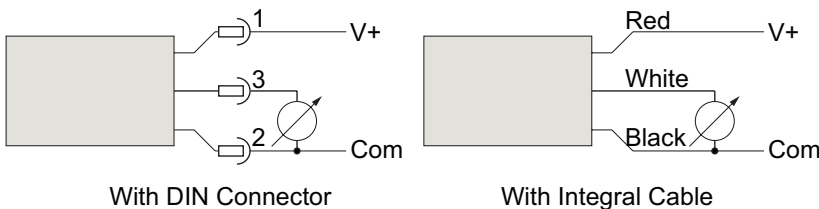


ProSense SPT25 Series Pressure Transmitters (Shielded Cable)				
Part Number	Description	Electrical Connection	Input Voltage	Wt(lb)
<a href="#">SPT25-20-V30A</a>	Pressure transmitter, 4 to 20 mA output, -14.7 vacuum to 30 psig range, 1/4" NPT male port	Integral 6.6 ft (2m) shielded cable	9 - 36 VDC	0.38
<a href="#">SPT25-20-0030A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 30 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-0060A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 60 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-0100A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 100 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-0150A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 150 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-0200A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 200 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-0300A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 300 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-0500A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 500 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-1000A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 1000 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-1500A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 1500 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-2000A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 2000 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-3000A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 3000 psig range, 1/4" NPT male port			
<a href="#">SPT25-20-5000A</a>	Pressure transmitter, 4 to 20 mA output, 0 to 5000 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-V30A</a>	Pressure transmitter, 0 to 10 V output, -14.7 vacuum to 30 psig range, 1/4" NPT male port		14 - 36 VDC	
<a href="#">SPT25-10-0030A</a>	Pressure transmitter, 0 to 10 V output, 0 to 30 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-0060A</a>	Pressure transmitter, 0 to 10 V output, 0 to 60 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-0100A</a>	Pressure transmitter, 0 to 10 V output, 0 to 100 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-0150A</a>	Pressure transmitter, 0 to 10 V output, 0 to 150 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-0200A</a>	Pressure transmitter, 0 to 10 V output, 0 to 200 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-0300A</a>	Pressure transmitter, 0 to 10 V output, 0 to 300 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-0500A</a>	Pressure transmitter, 0 to 10 V output, 0 to 500 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-1000A</a>	Pressure transmitter, 0 to 10 V output, 0 to 1000 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-1500A</a>	Pressure transmitter, 0 to 10 V output, 0 to 1500 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-2000A</a>	Pressure transmitter, 0 to 10 V output, 0 to 2000 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-3000A</a>	Pressure transmitter, 0 to 10 V output, 0 to 3000 psig range, 1/4" NPT male port			
<a href="#">SPT25-10-5000A</a>	Pressure transmitter, 0 to 10 V output, 0 to 5000 psig range, 1/4" NPT male port			

# proSense® SPT25 Series Pressure Transmitters

ProSense SPT25 Series Pressure Transmitters (DIN Connector)						
Part Number	Description	Electrical Connection	Input Voltage	Wt(lb)	Price	
<b>SPT25-20-V30D</b>	Pressure transmitter, 4 to 20 mA output, -14.7 vacuum to 30 psig range, 1/4" NPT male port	DIN 175301-803C L-connector	9 - 36 VDC	0.30		
<b>SPT25-20-0030D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 30 psig range, 1/4" NPT male port					
<b>SPT25-20-0060D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 60 psig range, 1/4" NPT male port					
<b>SPT25-20-0100D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 100 psig range, 1/4" NPT male port					
<b>SPT25-20-0150D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 150 psig range, 1/4" NPT male port					
<b>SPT25-20-0200D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 200 psig range, 1/4" NPT male port					
<b>SPT25-20-0300D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 300 psig range, 1/4" NPT male port					
<b>SPT25-20-0500D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 500 psig range, 1/4" NPT male port					
<b>SPT25-20-1000D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 1000 psig range, 1/4" NPT male port					
<b>SPT25-20-1500D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 1500 psig range, 1/4" NPT male port					
<b>SPT25-20-2000D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 2000 psig range, 1/4" NPT male port					
<b>SPT25-20-3000D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 3000 psig range, 1/4" NPT male port					
<b>SPT25-20-5000D</b>	Pressure transmitter, 4 to 20 mA output, 0 to 5000 psig range, 1/4" NPT male port					
<b>SPT25-10-V30D</b>	Pressure transmitter, 0 to 10 V output, -14.7 vacuum to 30 psig range, 1/4" NPT male port				14 - 36 VDC	
<b>SPT25-10-0030D</b>	Pressure transmitter, 0 to 10 V output, 0 to 30 psig range, 1/4" NPT male port					
<b>SPT25-10-0060D</b>	Pressure transmitter, 0 to 10 V output, 0 to 60 psig range, 1/4" NPT male port					
<b>SPT25-10-0100D</b>	Pressure transmitter, 0 to 10 V output, 0 to 100 psig range, 1/4" NPT male port					
<b>SPT25-10-0150D</b>	Pressure transmitter, 0 to 10 V output, 0 to 150 psig range, 1/4" NPT male port					
<b>SPT25-10-0200D</b>	Pressure transmitter, 0 to 10 V output, 0 to 200 psig range, 1/4" NPT male port					
<b>SPT25-10-0300D</b>	Pressure transmitter, 0 to 10 V output, 0 to 300 psig range, 1/4" NPT male port					
<b>SPT25-10-0500D</b>	Pressure transmitter, 0 to 10 V output, 0 to 500 psig range, 1/4" NPT male port					
<b>SPT25-10-1000D</b>	Pressure transmitter, 0 to 10 V output, 0 to 1000 psig range, 1/4" NPT male port					
<b>SPT25-10-1500D</b>	Pressure transmitter, 0 to 10 V output, 0 to 1500 psig range, 1/4" NPT male port					
<b>SPT25-10-2000D</b>	Pressure transmitter, 0 to 10 V output, 0 to 2000 psig range, 1/4" NPT male port					
<b>SPT25-10-3000D</b>	Pressure transmitter, 0 to 10 V output, 0 to 3000 psig range, 1/4" NPT male port					
<b>SPT25-10-5000D</b>	Pressure transmitter, 0 to 10 V output, 0 to 5000 psig range, 1/4" NPT male port					

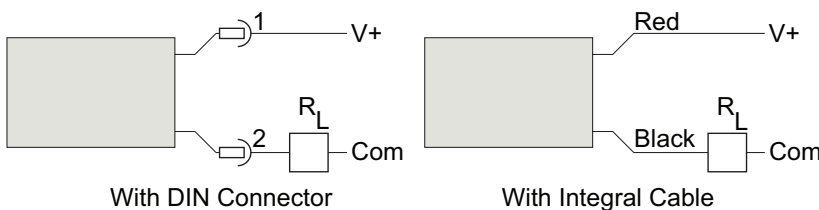
## 0 to 10 VDC Output Wiring Diagram



Shielded Cable Models Wire Designation		
Wire Color	0 - 10 VDC Output	4 - 20 mA Output
<b>Red</b>	V +	V +
<b>Black</b>	Com	Output
<b>White</b>	Output	None
<b>Bare*</b>	Shield Drain Wire	Shield Drain Wire

*\* Where shielded wiring is being used; Connect the drain wire to the guard terminal on the read out device or measuring instrument if available. In all other cases connect to the power supply negative terminal.*

## 4 to 20 mA Output Wiring Diagrams



DIN Form C Models Pin Designation		
Pin No.	0 - 10 VDC Output	4 - 20 mA Output
<b>1</b>	V+	V+
<b>2</b>	Com	Output
<b>3</b>	Output	None
<b>4</b>	Case Ground	Case Ground

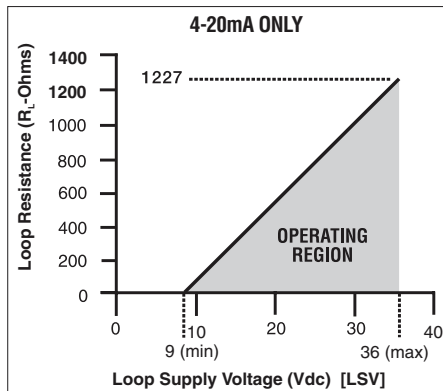
# ProSense® SPT25 Series Pressure Transmitters

ProSense SPT25 Series General Specifications	
<b>Housing Material</b>	20% Glass Reinforced Nylon, Fire retardant to UL94 V1 / 304 Series Stainless steel
<b>Materials (wetted parts)**</b>	304 Series Stainless steel / 17-4PH Stainless Steel
<b>Operating Temperature</b>	-40 to 257°F (-40 to 125°C)
<b>Medium Temperature</b>	-40 to 257°F (-40 to 125°C)
<b>Storage Temperature</b>	-40 to 257°F (-40 to 125°C)
<b>Protection</b>	IP 67 for cabled models IP 65 For DIN connector models
<b>Accuracy*</b>	± 0.50% of full range
<b>Temperature Coefficient</b>	0.15% of full range / 10°F (0.25% of full range / 10°C)
<b>Reference Temperature</b>	70°F ± 1°F (21°C ± 1°C)
<b>Compensated Temperature</b>	-4 to 185°F (-20 to 85°C)
<b>Insulation Resistance</b>	Greater than 100 megohms at 100 VDC
<b>Shock Resistance</b>	100 gs, 6 ms
<b>Vibration Resistance</b>	Random vibration (20 g) over temperature range (-40° to 125°C). Exceeds typical MIL. STD. requirements
<b>Drop Test</b>	Withstands 1 meter on concrete 3 axis
<b>Response Time</b>	Less than 1 msec
<b>Warm-up time</b>	Less than 500 msec
<b>Position Effect</b>	Less than ±0.01% span, typical
<b>Insulation Breakdown Voltage</b>	100 VAC
<b>Reverse Polarity &amp; Miswired Protected</b>	Yes
<b>Durability</b>	Tested to 50 million cycles
<b>Humidity</b>	0 to 100% R.H., no effect
<b>Stability</b>	Less than ±0.25% full range / year
<b>Agency Approvals</b>	CE
<i>*Note - Includes non-linearity, hysteresis &amp; non-repeatability.</i>	
<i>** Not cleaned for oxygen service</i>	

DIN Connector Specifications	
<b>Number of contacts</b>	3 + PE
<b>Cable glands</b>	PG 7
<b>Conductor size max.</b>	0.75 mm <sup>2</sup> / 18AWG
<b>Type of termination</b>	Screw
<b>Suitable cables</b>	4.5 mm to 6mm
<b>Standard DIN</b>	EN 175 301-803-C

ProSense SPT25 Series Technical Specifications	
<b>Technical Specifications SPT25-20-xxxx</b>	
<b>Operating Voltage</b>	9 – 36 VDC
<b>Analog Output</b>	4 – 20 mA
<b>Maximum Load</b>	Determine Maximum Loop Resistances $V_L - 9 \text{ VDC} = R_L \times 0.022 \text{ amps}$ For example $[(24 \text{ VDC} - 9 \text{ VDC}) / 0.022 \text{ amps}] = 681\Omega$
<b>Technical Specifications SPT25-10-xxxx</b>	
<b>Operating Voltage</b>	14 – 36 VDC
<b>Current Consumption</b>	4 mA
<b>Minimum Load</b>	10 kΩ

Power Supply Voltage vs Loop Resistance

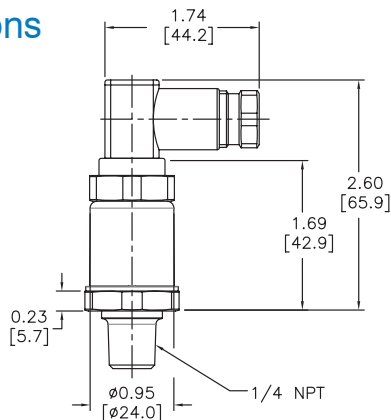


ProSense SPT25 Proof & Burst Pressures		
	<b>Proof</b>	<b>Burst</b>
<b>500 psig &amp; below</b>	200% full scale	1000% full scale
<b>1000 – 2000 psig</b>	200% full scale	500% full scale
<b>3000 psig</b>	200% full scale	500% full scale
<b>5000 psig</b>	150% full scale	500% full scale

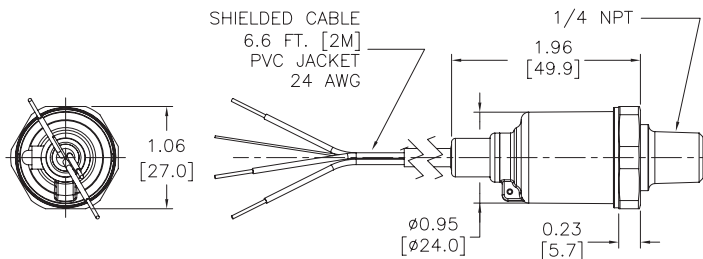
See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

## Dimensions

inches [mm]



DIN Connector Models



Shielded Cable Models