



# Pressure Transducers and Temperature Sensors

INSTALLATION AND SERVICING INSTRUCTIONS  
SD-245 / 42017



Pressure Transducers and Temperature Sensors are used in conjunction with Sporlan's S3C, Kelvin II, and PSK families of controls or other controllers to control Electric Expansion Valves, Electric Discharge Bypass Valves, Electric Evaporator Pressure Regulating Valves, relays and more.

## PRESSURE TRANSDUCERS



Pressure Range Listed on Label

1/4" SAE Flare Installation Torque: 6-8 ft.lbs.

### PRESSURE TRANSDUCER VOLTAGE

Pressure psig	DC VOLTAGE (white & green leads)			
	952572 0-150 psig Green Label	952574 0-300 psig Silver Label	952576 0-500 psig Yellow Label	952579 0-652 psig Pink Label
0	0.5	0.5	0.5	0.5
25	1.2	0.8	0.7	0.7
50	1.8	1.2	0.9	0.8
75	2.5	1.5	1.1	1.0
100	3.2	1.8	1.3	1.1
125	3.8	2.2	1.5	1.3
150	4.5	2.5	1.7	1.4
175	—	2.8	1.9	1.6
200	—	3.2	2.1	1.7
225	—	3.5	2.3	1.9
250	—	3.8	2.5	2.0
275	—	4.2	2.7	2.2
300	—	4.5	2.9	2.3
325	—	—	3.1	2.5
350	—	—	3.3	2.6
375	—	—	3.5	2.8
400	—	—	3.7	3.0
425	—	—	3.9	3.1
450	—	—	4.1	3.3
475	—	—	4.3	3.4
500	—	—	4.5	3.6
525	—	—	—	3.7
550	—	—	—	3.9
575	—	—	—	4.0
600	—	—	—	4.2
625	—	—	—	4.3
650	—	—	—	4.5

### PRESSURE TRANSDUCER

Pressure Range	Material, Label Color	Item No.	Description
0 - 150 psia	Brass, Multi-Color	953291	PSPT0150AVSP-B
0 - 150 psig	Stainless Steel, Green	952572	PSPT0150SVSP-S
0 - 300 psig	Stainless Steel, Silver	952574	PSPT0300SVSP-S
0 - 500 psig	Stainless Steel, Yellow	952576	PSPT0500SVSP-S
0 - 652 psig	Stainless Steel, Pink	952579	PSPT0652SVSP-S

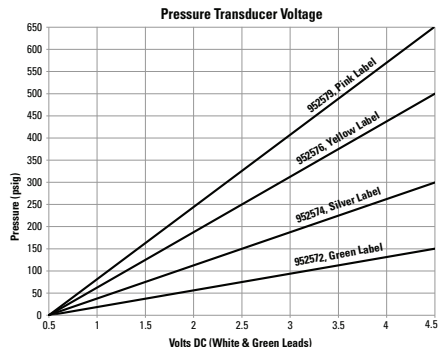
### PRESSURE TRANSDUCER CABLES

Cable Length <sup>1</sup>	Item No.	Description
2 m	953192	PSPT000000CP20
5 m	953100	PSPT000000CP50







Controller Terminal	Old Pigtail Leads	New Hermetic Cable <sup>2</sup>
1+ or 2+	Red	Black
1- or 2-	Black	Green
1S or 2S	Green	White

<sup>1</sup> If the application requires a longer cable, Sporlan recommends extending leads with a maximum of 400 ft (18 awg) wire using Scotchlok™ UR connectors. The signal accuracy should be verified with any extension and an offset be added to the control when necessary.

<sup>2</sup> The cable color code differs from the previous model cable, but can still be used in its place.



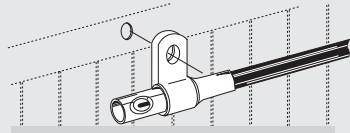
## TEMPERATURE SENSORS

TEMPERATURE SENSORS				
Sensor Type	Resistance Rating at 25°C	Cable Length <sup>1</sup>	Item No.	Illustration
Air	2k	10' (3.0 m)	952669	
Well	2k	12' (3.7 m)	952795	 Single Shielded Black Cable
Surface	2k	12' (3.7 m)	952662	 Single Shielded Black Cable
Surface or Air	3k (Recommended)	6.6' (2.0 m)	952551	
		20' (6.1 m)	952571	
	10k	20' (6.1 m)	230072 (orange)	
			230073 (green)	
			230076 (blue)	
Surface (High Temp)	98.6k	15' (4.6 m)	952565	
<b>NTC Temperature Probes for PSK</b>				
PSTPN615F200	10k	5' (1.5 m)	952899	
PSTPN630F200	10k	10' (3.0 m)	952898	

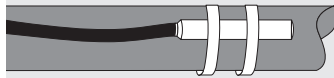
<sup>1</sup> If the application requires a longer cable, Sporlan recommends a maximum extension of 400 ft (18 awg) wire using Scotchlok™ UR connectors. The signal accuracy should be verified with any extension and an offset be added to the control when necessary.

TEMPERATURE SENSOR TEMPERATURE VS. RESISTANCE					
TEMPERATURE		Resistance (kohms)			
		Resistance Rating			
°F	°C	2K	3K	10K	98.6K
-40	-40	32.3	100	NA	NA
-20	-29.9	18.5	49.5	168.6	NA
0	-17.8	11.1	25.6	86.5	NA
20	-6.7	6.7	13.9	46.7	NA
32	0	5.1	9.8	32.9	327.5
40	4.4	4.3	7.8	26.3	261.1
60	15.6	2.8	4.6	15.4	152.1
80	26.7	1.9	2.8	9.3	91.6
100	37.8	1.3	1.7	5.8	56.9
120	48.9	0.91	1.1	3.7	36.4
140	60	0.66	0.35	2.5	23.8
160	71.1	0.48	0.25	1.7	16
212	100	NA	NA	0.7	6.3
300	148.9	NA	NA	NA	1.7

### AIR SENSOR

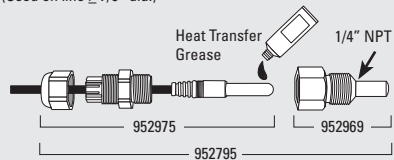


### SURFACE SENSOR



### WELL SENSOR

(Used on line ≥ 7/8" dia.)



**⚠ WARNING – USER RESPONSIBILITY**

**Failure or improper selection or improper use of the products described herein or related items can cause death, personal injury and property damage.**

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