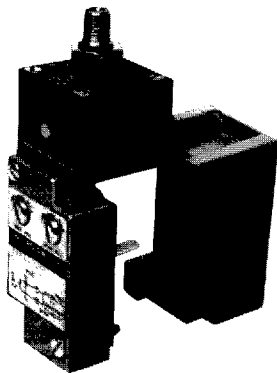


Pressure Sensors

Heavy Duty DC Adjustable, 2-Wire Analog

SSPB Series



FEATURES

- Silicon sensor chip is enclosed in stainless steel welded diaphragm
- Rugged diecast zinc plug-in limit switch style housing
- 2-wire, 4-20 mA output current linearly proportional to pressure
- Sealed to meet NEMA 1, 3, 3R, 4, 6, 6P, 12, 13
- Field adjustable zero and span
- Field adjustable up to 15% of total range
- Protected against false pulse, transients and industrial noise
- 0 to +50°C operating and compensated temperature
- UL Listed.

SSPB SERIES PERFORMANCE CHARACTERISTICS, 25°C

	Min.	Typ.	Max.	Units
Supply Voltage	12.0	---	36.0	VDC
Hysteresis & Repeatability @ nominal span	---	---	±0.5	%Span
@ max. span comp.	---	---	±1.5	
Temperature Error @ nom. span & max. comp.	---	±6.0	±10.0	%Span
Response Time	---	---	2.0	msec
Weight	414 grams (.91 lb.) Note: w/o receptacle			
Change in Current	4 to 20 mA proportional to pressure			
Null Pressure Setting (4 mA output)	0 psia up to 15% of nominal pressure range @ full scale pressure			
Full pressure Setting (20 mA output)	25 to 100% of nominal pressure range @ 0 psia Null			

ENVIRONMENTAL SPECIFICATIONS

Storage Temperature	-25° to +85°C (-13° to +185°F)
Operating and Compensated Temperature	0° to 50°C (32° to 122°F)
Sealing	NEMA 1, 3, 3R, 4, 6, 6P, 12, 13*
Media	Petroleum product, water and alcohol

SSPB SERIES ORDER GUIDE, GAGE PRESSURE

Catalog Listing	Nominal Pressure Range psig	Over Pressure Max. psi	Sensitivity (1) Range mA/psi
SSPB0015V	0-15	30	1.07 to 4.27
SSPB0100V	0-100	200	0.16 to 0.64
SSPB0250V	0-250	500	0.064 to 0.256

Order Mating Receptacles page 48.

16 mA

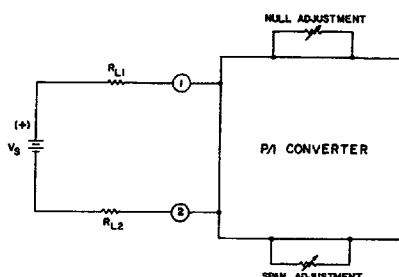
(1) NOTE: Sensitivity = $\frac{16 \text{ mA}}{\text{Upper Pressure Setting} - \text{Lower Pressure Setting}}$

ELECTRICAL CONNECTIONS

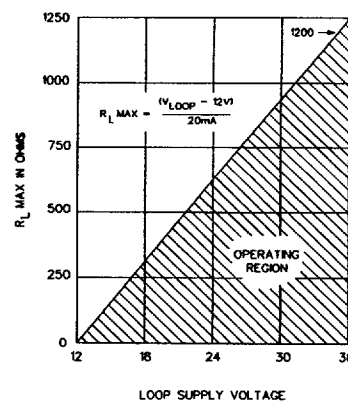
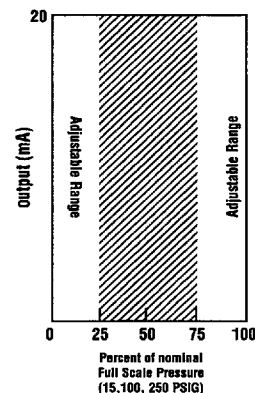
An ammeter, resistor (current output generates a voltage drop across the resistor) or any current sensing device is placed in series with a DC voltage source and the pressure sensor for proper operation. The load, represented by R_L , can be placed on either or both sides of the voltage source. Total load resistance must be within operating area. Output and Power LEDs do not require separate wiring.

$$R_L(\text{max.}) = \frac{V_S - 12 \text{ volts}}{0.020 \text{ Amps}}$$

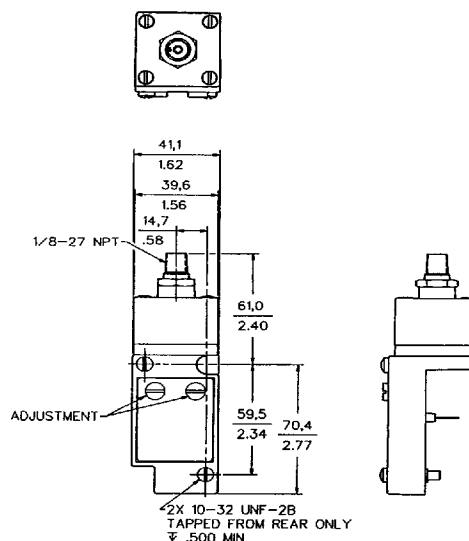
44 Honeywell • MICRO SWITCH Sensing and Control



MAXIMUM EXTERNAL LOAD RESISTANCE VERSUS SUPPLY VOLTAGE



MOUNTING DIMENSIONS (for reference only)



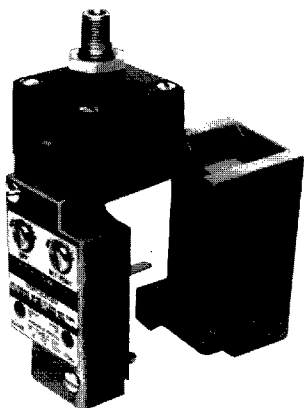
4551830 0021175 247

For application help: call 1-800-537-6945.

Pressure Sensors

Heavy Duty AC Adjustable Setpoint/2-Wire Digital

SSPC Series

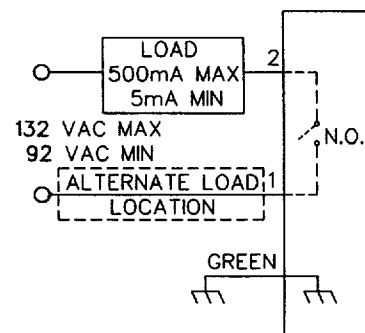


FEATURES

- Silicon sensor chip is enclosed in stainless steel welded diaphragm
- Rugged diecast zinc plug-in limit switch style housing
- Field adjustable setpoint and differential
- Sealed to meet NEMA 1, 3, 3R, 4, 6, 6P, 12, 13
- Protected against false pulse, transients, industrial noise and NEMA noise
- -25 to +85°C storage temperature
- 0 to +50°C operating and compensated temperature
- UL Listed

WIRING DIAGRAM

Output and Power LEDs do not require separate wiring.



WIRING DIAGRAM

SSPC SERIES PERFORMANCE CHARACTERISTICS, 25°C

	Min.	Typ.	Max.	Units
Supply Voltage	92.0	115	132	VAC
Repeatability @ 25°C	---	---	±0.5	% of Adjustable range
Comp. temp. range	---	---	±3.0	
Response Time Max (no time delay)	On - 20 msec		Off - 10 msec	
Rate of Operation	---	---	900	per minute
Power Dissipation	0.35 VA excluding load			
Saturation Voltage	9V max with 0.5 Amp load			
Load Current (N.O.)	0.5 Amp max. continuous over full temperature range 2.7 Amp. max. inrush			
Leakage Current (Off state)	2.0 mA RMS, max.			
Protection	False pulse, transients, Industrial noise, NEMA noise			
Weight	414 grams (.91 lb.) Note: w/o receptacle			

ENVIRONMENTAL SPECIFICATIONS

Storage Temperature	-25° to +85°C (-13° to 185°F)
Operating and Compensated Temperature	0° to 50°C (32° to 122°F)
Sealing	NEMA 1, 3, 3R, 4, 6, 6P, 12, 13
Media	Petroleum products, water and alcohol

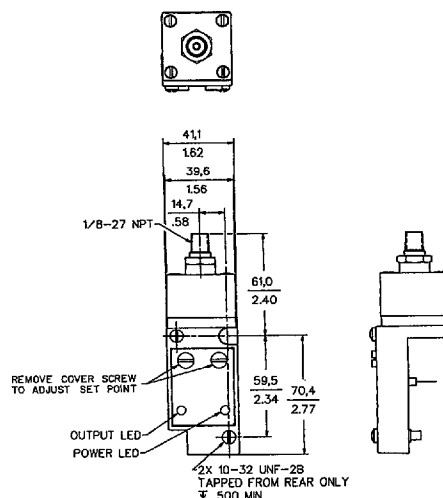
SSPC SERIES ORDER GUIDE, GAGE PRESSURE

Catalog Listing	Nominal Pressure Range psig	Over-Pressure Max. psi	Adjustable Setpoint Range	Differential Min.
SSPC0015V	0-15	30	1.5-15	30% @ 1.5 psi, 10% @ F.S.
SSPC0100V	0-100	200	10-100	10%
SSPC0250V	0-250	500	25-250	10%

Order mating receptacles page 48.

***Application Note:** Enclosures are based, in general, on the broad definitions outlined in NEMA standards. Therefore, it will be necessary for the user to determine that a particular enclosure is adequate when exposed to the specific conditions that might exist in intended applications. Except as might otherwise be noted, all references to products relative to NEMA enclosure types are based on MICRO SWITCH evaluation only.

MOUNTING DIMENSIONS (for reference only)



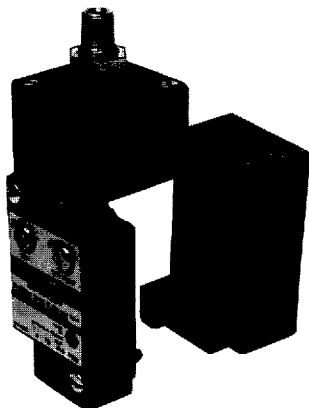
4551830 0021176 183

For application help: call 1-800-537-6945.

Honeywell • MICRO SWITCH Sensing and Control 45

Amplified

Heavy Duty DC Adjustable Setpoint, 4-Wire Current Sinking



FEATURES

- Silicon sensor chip is enclosed in stainless steel welded diaphragm
- Rugged diecast zinc plug-in limit switch style housing
- Field Adjustable setpoint and differential
- Sealed to meet NEMA 1, 3, 3R, 4, 6, 6P, 12, 13
- Protected against false pulse, transients and industrial noise
- -25 to +85°C storage temperature
- 0 to +50° operating and compensated temperature
- UL Listed

SSPD SERIES PERFORMANCE CHARACTERISTICS, 25°C

Supply Voltage	10 to 30 VDC
Load Current (N.O. & N.C.)	200 mA Max (NPN)
Leakage current, N.C. state	10 µA Max
Voltage Drop, Max	1.25V with 200 mA load
Response Time, Max	15 Milliseconds
Protection	Power up protection, transients, industrial noise
Repeatability (Stability)	± 0.5% of Set Points (@25°C) ± 3.0% of Set Points (0°C to +50°C)

ENVIRONMENTAL SPECIFICATIONS

Storage Temperature	-25° to +85°C (-13° to 185°F)
Operating and Compensated Temperature	0° to 50°C (32° to 122°F)
Sealing	NEMA 1, 3, 3R, 4, 6, 6P, 12, 13*
Media	Petroleum products, water and alcohol

***Application Note:** Enclosures are based, in general, on the broad definitions outlined in NEMA standards. Therefore, it will be necessary for the user to determine that a particular enclosure is adequate when exposed to the specific conditions that might exist in intended applications. Except as might otherwise be noted, all references to products relative to NEMA enclosure types are based on MICRO SWITCH evaluation only.

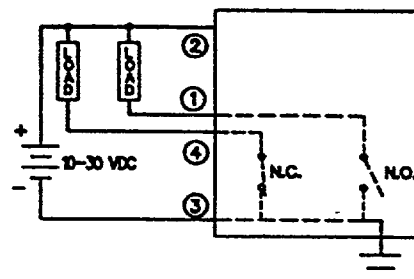
SSPD SERIES ORDER GUIDE, GAGE PRESSURE

Catalog Listing	Input Pressure Max. psig	Over-Pressure Max. psi	Adjustable Setpoint Range	Differential Min.
SSPD0015V	1.5-15	30	15	30% @ 1.5 psi, 10% @ F.S.
SSPD0100V	100	200	10-100	10%
SSPD0250V	250	500	25-250	10%

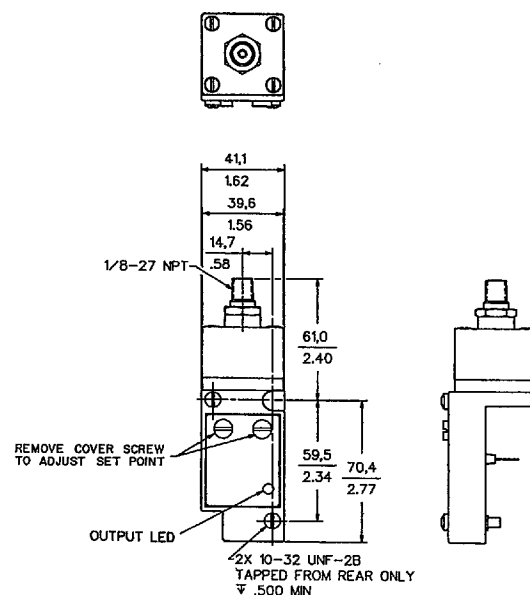
Order mating receptacles page 48.

SSPD Series has one bicolor Output LED.

WIRING DIAGRAM



MOUNTING DIMENSIONS (for reference only)

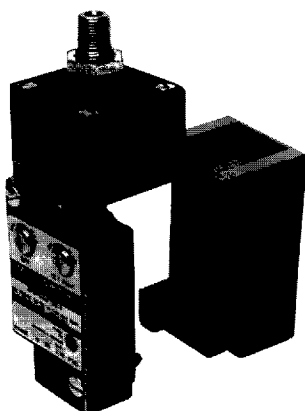


4551830 0021177 01T

Pressure Sensors

SSPE Series

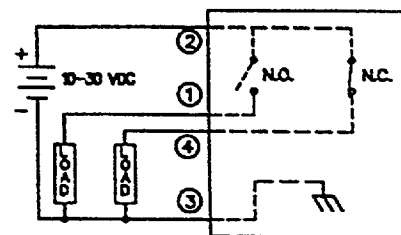
Heavy Duty DC Adjustable Setpoint, 4-Wire Current Sourcing



FEATURES

- Silicon sensor chip is enclosed in stainless steel welded diaphragm
- Rugged diecast zinc plug-in limit switch style housing
- Field Adjustable setpoint and differential
- Sealed to meet NEMA 1, 3, 3R, 4, 6, 6P, 12, 13
- Protected against false pulse, transients and industrial noise
- -25 to +85°C storage temperature
- 0 to +50° operating and compensated temperature
- UL Listed

WIRING DIAGRAM



SSPE SERIES PERFORMANCE CHARACTERISTICS, 25°C

Supply Voltage	10 to 30 VDC
Load Current (N.O. & N.C.)	200 mA Max (sourcing)
Leakage current, N.C. state	10 µA Max
Voltage Drop, Max	1.25V with 200 mA load
Response Time, Max	15 Milliseconds
Protection	Power up protection, transients, industrial noise
Repeatability (Stability)	± 0.5% of Set Points (@ 25°C) ± 3.0% of Set Points (0°C to +50°C)

ENVIRONMENTAL SPECIFICATIONS

Storage Temperature	-25° to +85°C (-13° to 185°F)
Operating and Compensated Temperature	0° to 50°C (32° to 122°F)
Sealing	NEMA 1, 3, 3R, 4, 6, 6P, 12, 13*
Media	Petroleum products, water and alcohol

***Application Note:** Enclosures are based, in general, on the broad definitions outlined in NEMA standards. Therefore, it will be necessary for the user to determine that a particular enclosure is adequate when exposed to the specific conditions that might exist in intended applications. Except as might otherwise be noted, all references to products relative to NEMA enclosure types are based on MICRO SWITCH evaluation only.

SSPE SERIES ORDER GUIDE, GAGE PRESSURE

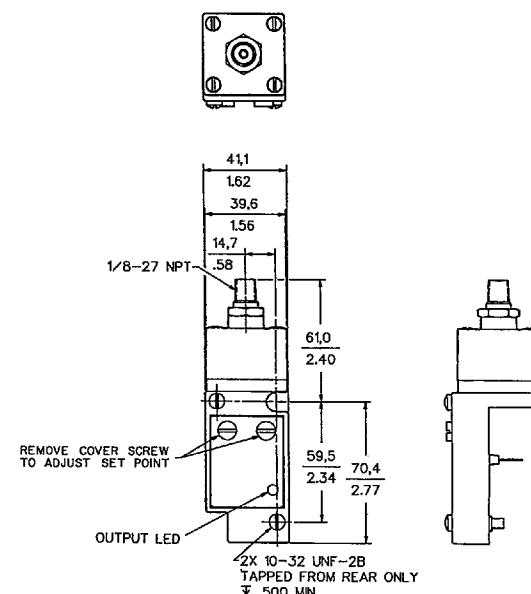
Catalog Listing	Input Pressure Max. psig	Over-Pressure Max. psi	Adjustable Setpoint Range	Differential Min.
SSPE0015V	15	30	1.5-15	30% @ 1.5 psi, 10% @ F.S.
SSPE0100V	100	200	10-100	10%
SSPE0250V	250	500	25-250	10%

Order mating receptacles page 48.

SSPE Series has one bicolor Output LED

MOUNTING DIMENSIONS

(for reference only)



4551830 0021178 T56

For application help: call 1-800-537-6945.

Honeywell • MICRO SWITCH Sensing and Control 47

Amplified