

## Model SM600 Series

### SUPERPROX® Ultrasonic Proximity Sensors

### Long-range Proximity Sensing



**Now there's a reliable ultrasonic solution for those tough proximity sensing applications.**

When short-range sensing applications demand repeatable and reliable on/off control performance, the high-frequency, fixed-window SUPERPROX® Model SM600 series ultrasonic proximity sensors is the ideal solution. These noncontact, self-contained sensors are unmatched for the reliable detection of objects of all kinds, transparent or opaque, liquid or solid, and as small as 1.6 mm (0.06") rod diameter, regardless of color or shape. Offering a variety of sensing ranges, up to 254 mm (10"), and fixed sensing windows, this series provides for the convenient placement of SM600 sensors throughout the plant.

Given the capability to "back off" from formerly "nearly-touching" mounting positions, these sensors are the solution for such applications as: metal parts as close as 25 mm (1"), moving back-to-back at speeds in excess of 2000 per minute. Others include: cap presence and/or tilt detection, fill-level checking, fill-tube-presence monitoring, downed container detection, case inspection, detection of container edges, web

monitoring, CD case inspection where opacity, color, and height vary, and wherever there's a need to upgrade a metal prox function.

With protection ratings of NEMA 4X (indoor use only) and IP67, these sensors are impervious to changing light conditions, colors, noise, dust, 100% humidity, caustic chemicals, and other hostile environments. They are resistant to most acids and bases, including most food products. The sensing transducer is made of silicone rubber and the sensors are CE certified. Easy to install, the sensors are available in two different housing styles: the 18mm barrel housing sensor available in either ULTEM® plastic (standard) or SS303 stainless steel and the flat-profile housing available only in ULTEM® plastic. As with all SUPERPROX® sensors, cable and connector styles are available.

For sensing applications requiring connection to a DeviceNet network, the flat-profile models in this series are available with this capability as an optional selection.

Operating on 12 to 24 VDC, these 500 kHz sensors are equipped with sinking type (NPN) and sourcing type (PNP) outputs, a green LED to indicate power "on" and an amber LED to indicate when the object is detected within the fixed window.

- **High resolution**  
500 kHz ultrasonic frequency
- **Fast response -**  
as fast as 0.5 ms sampling rate
- **Self-contained, 18 mm barrel or flat-profile housing styles**
- **Field programmable capability in 18 mm and flat-profile models**
- **DeviceNet capability available in flat-profile models**
- **CE certified**

Built from the world's finest and most reliable ultrasonic technology, the SUPERPROX® Model SM600 barrel and flat-profile-style proximity sensors are the answer for improved productivity throughout the plant.

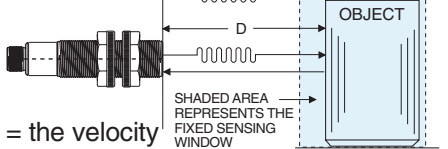
#### Operation

The Model SM600 series is a self-contained, pulse-echo device that both transmits and receives sonic energy over a sensing range of up to 254 mm (10"). These sensors use the latest ultrasonic technology with a discriminating microprocessor that allows the sensor to ignore all surrounding sonic

interference and detect only the designated object. An object is detected when it is at or within the fixed sensing window.

### How does it work?

During setup and operation, these SM600 series sensors continually and accurately measure the elapsed time of every pulse echo reception between each pulse transmission. The transmitted pulse begins a time clock to register the elapsed times for the received pulse echoes. Given the elapsed time, the sensor software calculates the distance traveled out to the object and back to the sensor, using the formula,  $D = TVs/2$ , where: D = distance from the sensor to the object; T = elapsed time between the pulse transmission and its echo receptions, Vs



= the velocity of sound, approximately 1100 feet per second.

During operation, the calculated distance (D) between the sensor and the object is compared to the distances between the sensor and the fixed window limits. These limits are shown in the illustration as Dwi and Dwo. If D is at or within the fixed window limits, an output change takes place and remains unchanged until the echo either does not return or it returns from outside the fixed window limits.

As shown below, Hyde Park offers normally open (N.O.) or normally closed (N.C.) output models available for discrete on/off sensing applications.

## Model Reference Guide - SM600 Series

Use the guide below to ensure the correct model number is specified for the application. Please note that not all sensor model combinations are available.

### EXAMPLE MODEL:

**SM6 0 0 A - 2 16 - 00 S**

#### Ultrasonic Miniature Proximity Series

#### Power/Connection Type

- 0...12 to 24 VDC / cable style
- 5...12 to 24 VDC / "micro" connector style
- 6...12 to 24 VDC / "micro" connector style (output pins reversed)

#### Sensing Function

- 0...Proximity Style - no on/off delay

#### Design Level

- A...Applies to all models

#### Sensing Range (Far Limit)

- 2...51 mm (2")
- 3...77 mm (3")
- 4...102 mm (4")
- 5...127 mm (5")
- 6...152 mm (6")
- 7...178 mm (7")
- B...254 mm (10")

#### Sensing Window (Distance from Far Limit to Near Limit)\*\*

- 02...3.2 mm (1/8")
- 04...6.4 mm (1/4")
- 08...13 mm (1/2")
- 12...19 mm (3/4")
- 16...25 mm (1")
- 32...51 mm (2")
- 48...77 mm (3")
- 80...127 mm (5")
- 96...152 mm (6")
- OB...203 mm (8")

#### Functionality

- 00...Standard on/off, N.O. output
- 10...N.C. output

[Contact the factory for additional functionality options]

#### Housing Types

- ...No letter indicates standard ULTEM® plastic - 18 mm barrel housing
- FP...ULTEM® flat-profile housing
- S...SS303 stainless steel - 18 mm barrel housing

ULTEM® is a registered trademark of The General Electric Company.

\*\*Not allowed inside the deadband. Deadband is 0.75" for ranges - 7", and 1.25" for ranges > 7"

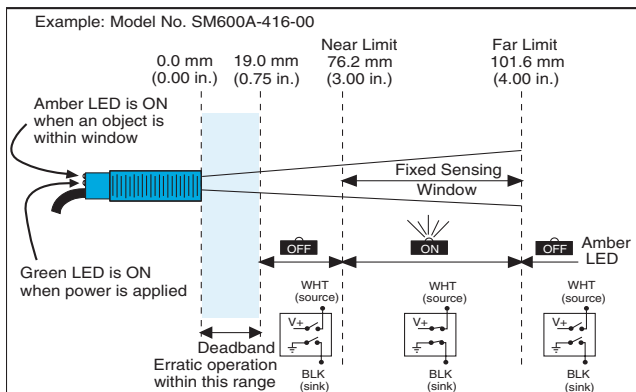
Field configurable and DeviceNet Model Reference Guides start on page 4-145.

## Electrical Wiring

Regardless of model style, the wiring and conductor colors for the Model SM600 series sensors are the same.

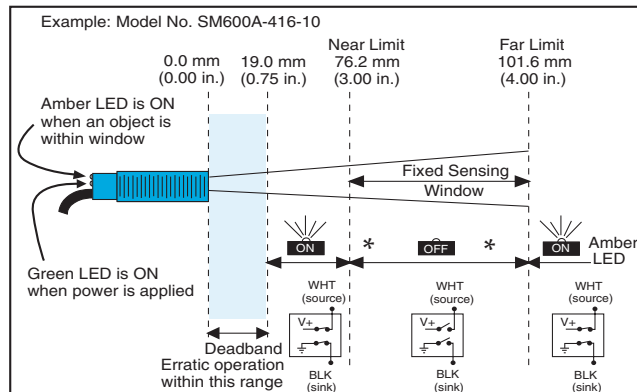
### Normally Open Output

The sensor output is "On" with the object in the fixed sensing window.



### Normally Closed Output

The sensor output is "Off" with the object in the fixed sensing window.



\* For connector style, LED states are reversed

## Mounting

The Model SM600 series sensors should be mounted in brackets that allow them to be adjusted for proper alignment. Hyde Park offers the:

**Model AC226** stainless and polyamide conveyor-rail clamp/bracket set

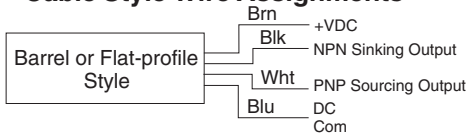
**Model AC227** large, right-angle, stainless mounting bracket

**Model AC228** small, right-angle, stainless, mounting bracket

**Model AC231** straight, stainless, mounting bracket

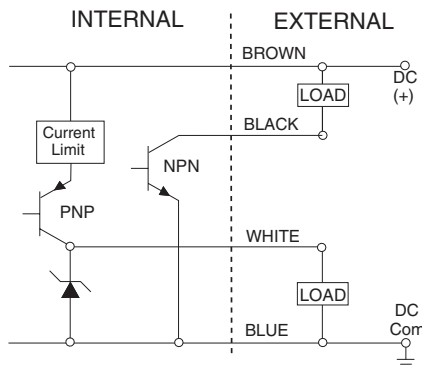
**Model AC232** s-shaped, stainless, mounting bracket which are illustrated, with dimensions, on Pages 4-74 and 4-75.

## Cable Style Wire Assignments

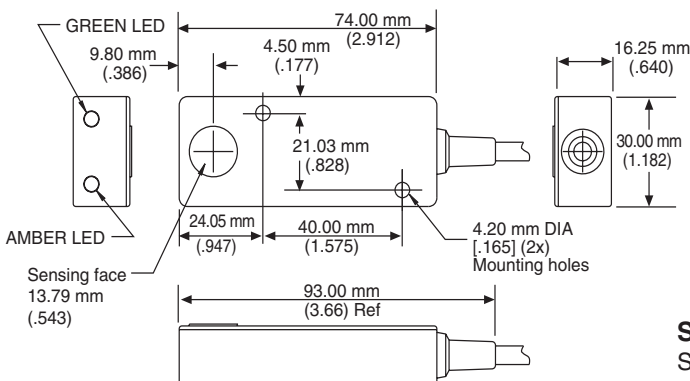
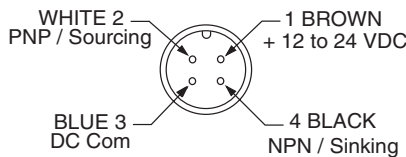


## Outputs

### NPN Sinking and PNP Sourcing



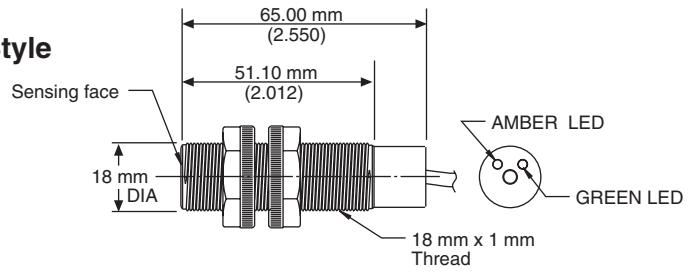
## Connector Style Pin Assignments



## Dimensions

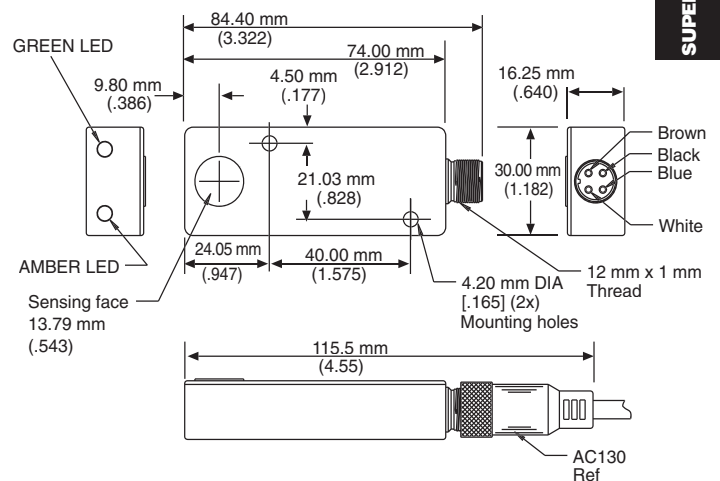
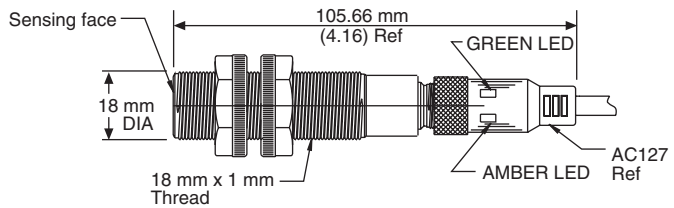
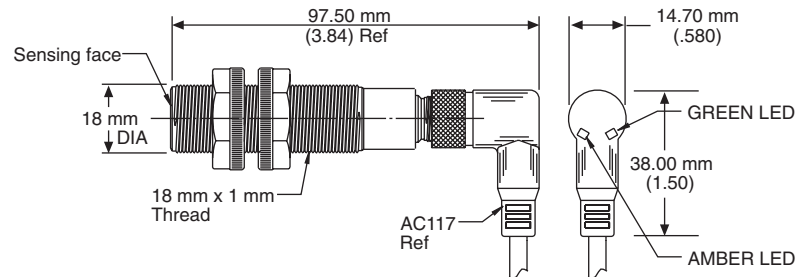
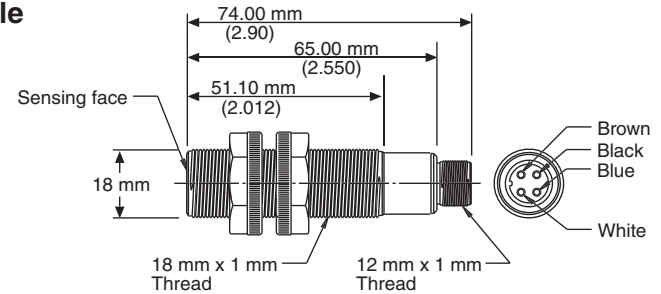
### Barrel Cable Style

(ULTEM® plastic and stainless steel)  
SM600A-XXX-XX,  
SM600A-XXX-XXS



### Barrel Connector Style

(ULTEM® plastic and stainless steel)  
SM650A-XXX-XX,  
SM650A-XXX-XXS

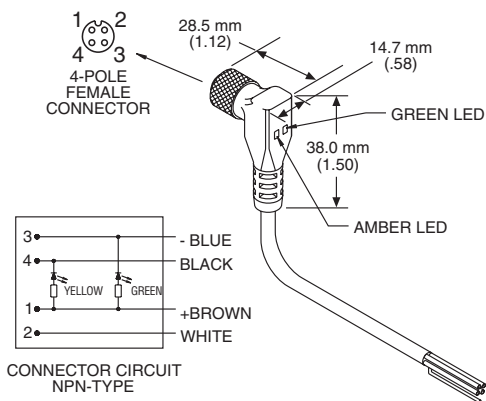


### “Flat-profile” Cable Style (ULTEM® plastic) SM600A-XXX-XXFP

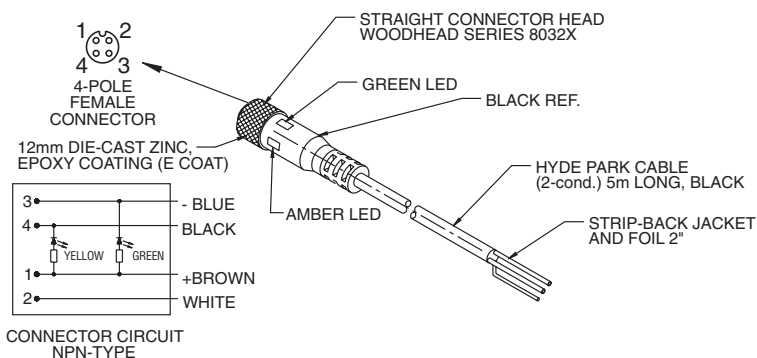
SUPERPROX® PROXIMITY SENSORS

## Mounting Accessories

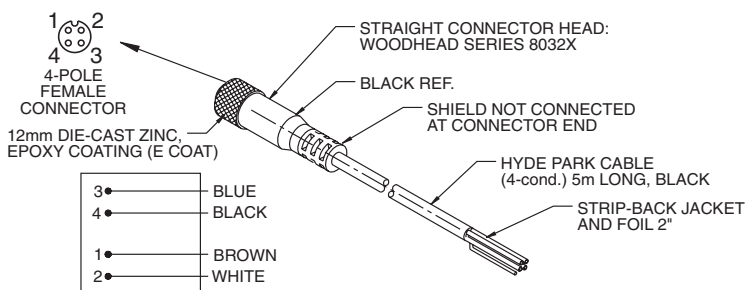
**AC117** Right-angle, M12 micro, 4-conductor, connector/cable assembly, 5 m (16'), with built-in LEDs (for barrel connector-style sensors)



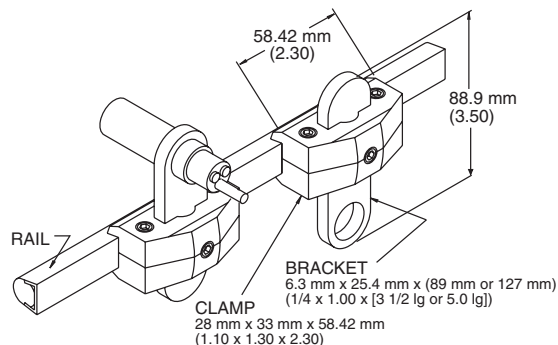
**AC127** Straight, M12 micro, 4-conductor, connector/cable assembly, 5 m (16'), with built-in LEDs (for barrel connector-style sensors)



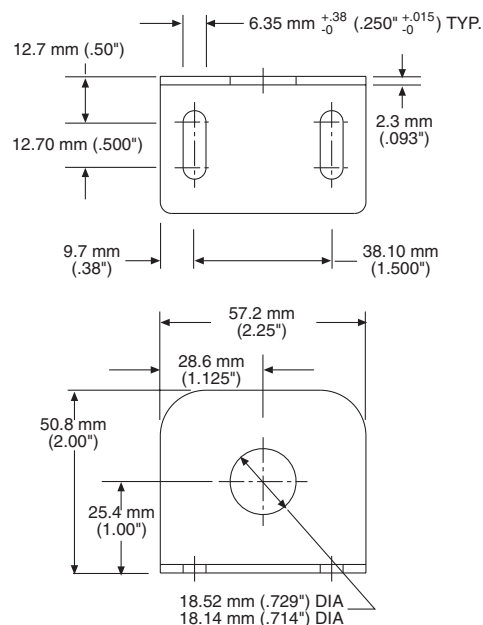
**AC130** Straight, M12 micro, 4-conductor, connector/cable assembly, 5 m (16') (for flat-profile connector-style sensors)



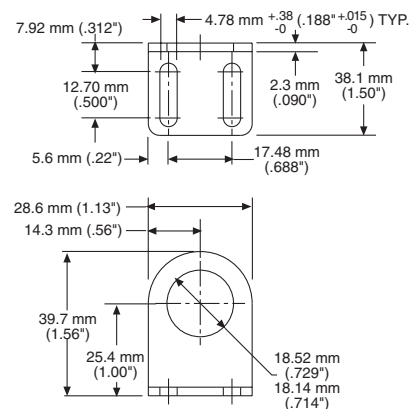
**AC226** Stainless and polyamide conveyor-rail clamp/bracket set (for 18 mm barrel sensors)



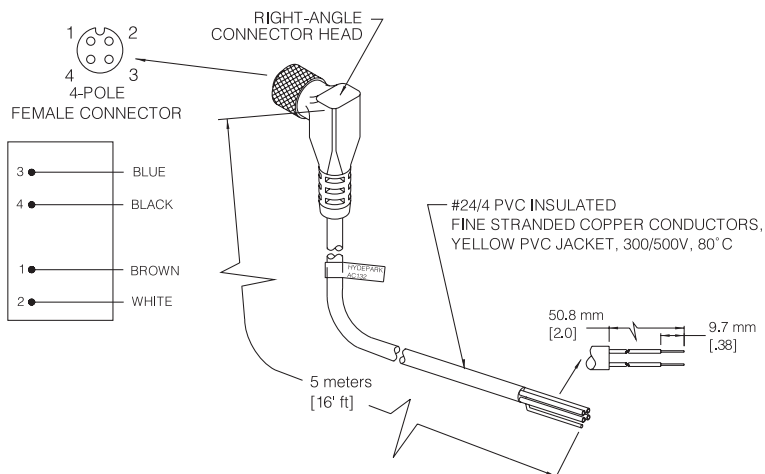
**AC227** Large, right-angle, stainless, mounting bracket (for 18 mm barrel sensors)



**AC228** Small, right-angle, stainless, mounting bracket (for 18 mm barrel sensors)

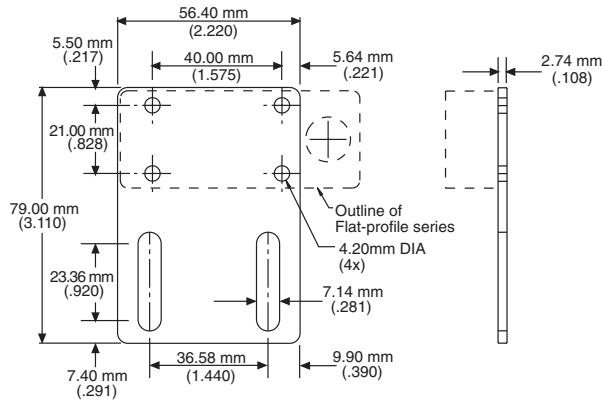


**AC132** Right-angle, M12 micro, 4-conductor, connector/cable assembly, 5 m (16'), for flat-profile connector-style sensors

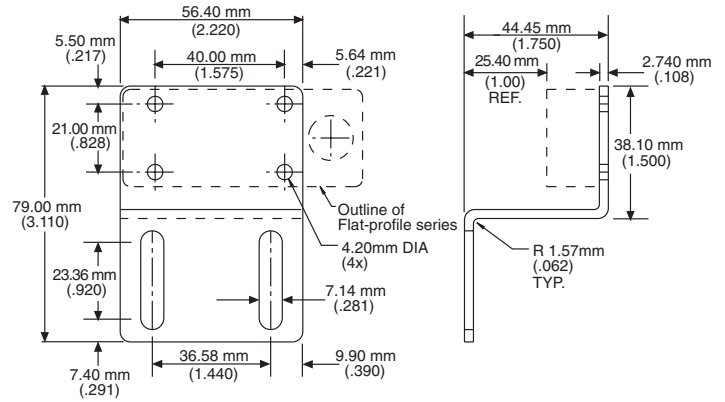




## AC231 Straight, stainless mounting bracket (for flat-profile sensors)



## AC232 S-shaped, stainless mounting bracket (for flat-profile sensors)



## General Specifications

### Sensing

- Ranges:
  - Up to 254 mm (10")
- Spans:
  - From 3.18 mm (1/8") to 228.6 mm (9")
- Window Position, Initial Accuracy:
  - ± 1.59 mm (0.062") max.
- Window Position Repeatability:
  - ± 0.69 mm (0.027") max.
- Detection benchmarks:
  - Models with ranges to 177.8 mm (7"):
    - 1.59 mm (1/6") diameter rod at a distance of 63.5 mm (2.5")
    - Max. ± 10° tilt of large flat object at a distance of 127 mm (5")
  - Models with ranges from over 177.8 mm (7") to 254 mm (10"):
    - 1.59 mm (1/6") diameter rod at a distance of 76.2 mm (3")
    - Max. ± 10° tilt of large flat object at a distance of 203.2 mm (8")
- Sonic Frequency: 500 kHz
- Sonic Cone Angle: 7° (see beam plots, page 4-64)

### Power Requirements

- Supply Voltage:
  - 12 VDC to 24 VDC ± 10%, regulated supply
- Current Consumption:
  - Cable Model: 50 mA max. (excluding load)
  - Connector Model: 60 mA max. (excluding load)
- Power Consumption:
  - 1 W max. (excluding load)

### Output

- NPN Sinking: 0 to 30 V
  - Maximum on-state voltage 0.2 volts @ 100 mA
- PNP Sourcing: 100 mA @ 24 VDC, max.

### Response Time

- "On" 5 ms, "Off" 5 ms (standard)
- "On" 2.0 ms, "Off" 2.0 ms (optional)

### Indicators

- Green LED: power "On"
- Amber LED: "On" if object is detected within the window, regardless of output polarity (N.O./N.C.) style. Connector model using cable with built-in LEDs: "On" if NPN output is low.

### Connections

- Cable Style Models:
  - 24 AWG, foil shield, lead-free, PVC jacket
  - 4-conductor, 3 meters (10') long
- Connector Style Models:
  - 24 AWG, foil shield, lead-free, PVC jacket,
  - 4-conductor, right-angle "Micro" style

- Transducer Face: Silicone rubber - gray
- Sensor Cables: Lead-free PVC jacket, black (Model AC117)
- LED: Polycarbonate

\* ULTEM® is a registered trademark of the General Electric Co.

### Protection

- Power Supply: current-limited over-voltage, ESD, reverse polarity
- Outputs: current-limited over-voltage, ESD, over-current

### Environmental

- Operating Temperature Range:
  - 0° to 60°C @ 12 VDC supply
  - 0° to 50°C @ 24 VDC supply
- Storage Temperature Range: -40° to 100°C (-40° to 212°F)
- Operating Humidity: 100%
- Protection Ratings: NEMA 4X (indoor use only), IP67
- Chemical Resistance: Resists most acids and bases, including most food products.

### Agency Approvals

- CE Mark: CE conformity is declared to: EN61326:1997 (annex A, industrial) including amendment A1:1998. EN55011 Group1 Class A.
- Declaration of Conformity available upon request

### Construction

- Dimensions:
  - Barrel
    - Cable Model: 18 mm dia. x 1 mm threaded housing x 102 mm (4") long, including connector/cable assembly
  - Flat-profile
    - Cable Model: 30 mm (1.182") H x 16.25 mm (0.640") W x 93 mm (3.66") L
    - Connector Model: 30 mm (1.182") H x 16.25 mm (0.640") W x 84.40 mm (3.322") L
- Housing:
  - Shock and vibration resistant
  - Case: ULTEM® plastic - (FDA Approved) (SS303 stainless steel available only in 18 mm barrel-style)

## Accessories

### 18 mm Barrel Mounting Hardware and Cables

- Model AC117**, Right-angle, M12 micro, 4-conductor, connector/cable assembly, 5 m (16') with built-in LEDs for barrel connector-style prox sensors
- Model AC127**, Straight, M12 micro, 4-conductor, connector/cable assembly, 5 m (16') with built-in LEDs for barrel connector-style prox sensors
- Model AC226**, Stainless and polyamide conveyor- rail clamp/bracket set
- Model AC227**, Large, right-angle, stainless, mounting bracket
- Model AC228**, Small, right-angle, stainless, mounting bracket

### Flat-profile Mounting Hardware and Cables

- Model AC130**, Straight, M12 micro, 4-conductor, connector/cable assembly, 5 m (16'), for flat profile, connector-style prox sensors
- Model AC132**, Right-angle, M12 micro, 4-conductor, connector/cable assembly, 5 m (16'), for flat-profile, connector-style prox sensors
- Model AC231**, Straight, stainless, mounting bracket
- Model AC232**, S-shaped, stainless, mounting bracket

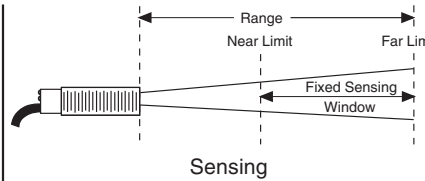
See page 7-1 for accessory photos.



# Selection Chart

## SM600 Series (cont.) Proximity

| Model No.        | Power     |       | Connection Style |                           | Range      | Sensing Window | Transducer |             | Housing Materials |                     | Special Features            |             |
|------------------|-----------|-------|------------------|---------------------------|------------|----------------|------------|-------------|-------------------|---------------------|-----------------------------|-------------|
|                  | 12-24 VDC | Cable | Connector        | Connector Output Pins Rev |            |                | Silicone*  | 18mm ULTEM® | 18mm Stainless    | Flat-profile ULTEM® | Standard On/Off N.O. Output | N.C. Output |
| SM600A-408-10    | ■         | ■     |                  |                           | 102mm (4") | 13mm (1/2")    | ■          | ■           |                   |                     |                             |             |
| SM600A-408-10FP  | ■         | ■     |                  |                           | 102mm (4") | 13mm (1/2")    | ■          |             |                   |                     |                             |             |
| SM600A-408-10S   | ■         | ■     |                  |                           | 102mm (4") | 13mm (1/2")    | ■          |             | ■                 |                     |                             |             |
| SM600A-412-00    | ■         | ■     |                  |                           | 102mm (4") | 19mm (3/4")    | ■          | ■           |                   |                     |                             |             |
| SM600A-412-00FP  | ■         | ■     |                  |                           | 102mm (4") | 19mm (3/4")    | ■          |             |                   | ■                   |                             |             |
| SM600A-412-00S   | ■         | ■     |                  |                           | 102mm (4") | 19mm (3/4")    | ■          |             | ■                 |                     |                             |             |
| SM600A-412-10    | ■         | ■     |                  |                           | 102mm (4") | 19mm (3/4")    | ■          | ■           |                   |                     |                             |             |
| SM600A-412-10FP  | ■         | ■     |                  |                           | 102mm (4") | 19mm (3/4")    | ■          |             |                   | ■                   |                             |             |
| SM600A-412-10S   | ■         | ■     |                  |                           | 102mm (4") | 19mm (3/4")    | ■          |             | ■                 |                     |                             |             |
| SM600A-416-00    | ■         | ■     |                  |                           | 102mm (4") | 25mm (1")      | ■          | ■           |                   |                     |                             |             |
| SM600A-416-00FP  | ■         | ■     |                  |                           | 102mm (4") | 25mm (1")      | ■          |             |                   | ■                   |                             |             |
| SM600A-416-00S   | ■         | ■     |                  |                           | 102mm (4") | 25mm (1")      | ■          |             | ■                 |                     |                             |             |
| SM600A-416-10    | ■         | ■     |                  |                           | 102mm (4") | 25mm (1")      | ■          | ■           |                   |                     |                             |             |
| SM600A-416-10FP  | ■         | ■     |                  |                           | 102mm (4") | 25mm (1")      | ■          |             |                   | ■                   |                             |             |
| SM600A-416-10S   | ■         | ■     |                  |                           | 102mm (4") | 25mm (1")      | ■          |             | ■                 |                     |                             |             |
| SM600A-432-00    | ■         | ■     |                  |                           | 102mm (4") | 51mm (2")      | ■          | ■           |                   |                     |                             |             |
| SM600A-432-00FP  | ■         | ■     |                  |                           | 102mm (4") | 51mm (2")      | ■          |             |                   | ■                   |                             |             |
| SM600A-432-00S   | ■         | ■     |                  |                           | 102mm (4") | 51mm (2")      | ■          |             | ■                 |                     |                             |             |
| SM600A-432-10    | ■         | ■     |                  |                           | 102mm (4") | 51mm (2")      | ■          | ■           |                   |                     |                             |             |
| SM600A-432-10FP  | ■         | ■     |                  |                           | 102mm (4") | 51mm (2")      | ■          |             |                   | ■                   |                             |             |
| SM600A-432-10S   | ■         | ■     |                  |                           | 102mm (4") | 51mm (2")      | ■          |             | ■                 |                     |                             |             |
| SM600A-448-00•   | ■         | ■     |                  |                           | 102mm (4") | 77mm (3")      | ■          | ■           |                   |                     |                             |             |
| SM600A-448-00FP• | ■         | ■     |                  |                           | 102mm (4") | 77mm (3")      | ■          |             |                   | ■                   |                             |             |
| SM600A-448-00S•  | ■         | ■     |                  |                           | 102mm (4") | 77mm (3")      | ■          |             | ■                 |                     |                             |             |
| SM600A-448-10    | ■         | ■     |                  |                           | 102mm (4") | 77mm (3")      | ■          | ■           |                   |                     |                             |             |
| SM600A-448-10FP  | ■         | ■     |                  |                           | 102mm (4") | 77mm (3")      | ■          |             |                   | ■                   |                             |             |
| SM600A-448-10S   | ■         | ■     |                  |                           | 102mm (4") | 77mm (3")      | ■          |             | ■                 |                     |                             |             |
| SM600A-501-00    | ■         | ■     |                  |                           | 127mm (5") | 1.6mm (1/16")  | ■          | ■           |                   |                     |                             |             |
| SM600A-501-00FP  | ■         | ■     |                  |                           | 127mm (5") | 1.6mm (1/16")  | ■          |             |                   | ■                   |                             |             |
| SM600A-501-00S   | ■         | ■     |                  |                           | 127mm (5") | 1.6mm (1/16")  | ■          |             |                   | ■                   |                             |             |
| SM600A-501-10    | ■         | ■     |                  |                           | 127mm (5") | 1.6mm (1/16")  | ■          | ■           |                   |                     |                             |             |
| SM600A-501-10FP  | ■         | ■     |                  |                           | 127mm (5") | 1.6mm (1/16")  | ■          |             |                   | ■                   |                             |             |
| SM600A-501-10S   | ■         | ■     |                  |                           | 127mm (5") | 1.6mm (1/16")  | ■          |             | ■                 |                     |                             |             |
| SM600A-508-00    | ■         | ■     |                  |                           | 127mm (5") | 13mm (1/2")    | ■          | ■           |                   |                     |                             |             |
| SM600A-508-00FP  | ■         | ■     |                  |                           | 127mm (5") | 13mm (1/2")    | ■          |             |                   | ■                   |                             |             |
| SM600A-508-00S   | ■         | ■     |                  |                           | 127mm (5") | 13mm (1/2")    | ■          |             | ■                 |                     |                             |             |
| SM600A-508-10    | ■         | ■     |                  |                           | 127mm (5") | 13mm (1/2")    | ■          | ■           |                   |                     |                             |             |
| SM600A-508-10FP  | ■         | ■     |                  |                           | 127mm (5") | 13mm (1/2")    | ■          |             |                   | ■                   |                             |             |
| SM600A-508-10S   | ■         | ■     |                  |                           | 127mm (5") | 13mm (1/2")    | ■          |             | ■                 |                     |                             |             |
| SM600A-512-00    | ■         | ■     |                  |                           | 127mm (5") | 19mm (3/4")    | ■          | ■           |                   |                     |                             |             |
| SM600A-512-00FP  | ■         | ■     |                  |                           | 127mm (5") | 19mm (3/4")    | ■          |             |                   | ■                   |                             |             |
| SM600A-512-00S   | ■         | ■     |                  |                           | 127mm (5") | 19mm (3/4")    | ■          |             | ■                 |                     |                             |             |
| SM600A-512-10    | ■         | ■     |                  |                           | 127mm (5") | 19mm (3/4")    | ■          | ■           |                   |                     |                             |             |
| SM600A-512-10FP  | ■         | ■     |                  |                           | 127mm (5") | 19mm (3/4")    | ■          |             |                   | ■                   |                             |             |
| SM600A-512-10S   | ■         | ■     |                  |                           | 127mm (5") | 19mm (3/4")    | ■          |             | ■                 |                     |                             |             |
| SM600A-516-00    | ■         | ■     |                  |                           | 127mm (5") | 25mm (1")      | ■          | ■           |                   |                     |                             |             |
| SM600A-516-00FP  | ■         | ■     |                  |                           | 127mm (5") | 25mm (1")      | ■          |             |                   | ■                   |                             |             |
| SM600A-516-00S   | ■         | ■     |                  |                           | 127mm (5") | 25mm (1")      | ■          |             | ■                 |                     |                             |             |
| SM600A-516-10    | ■         | ■     |                  |                           | 127mm (5") | 25mm (1")      | ■          | ■           |                   |                     |                             |             |
| SM600A-516-10FP  | ■         | ■     |                  |                           | 127mm (5") | 25mm (1")      | ■          |             |                   | ■                   |                             |             |
| SM600A-516-10S   | ■         | ■     |                  |                           | 127mm (5") | 25mm (1")      | ■          |             | ■                 |                     |                             |             |
| SM600A-532-00    | ■         | ■     |                  |                           | 127mm (5") | 51mm (2")      | ■          | ■           |                   |                     |                             |             |
| SM600A-532-00FP  | ■         | ■     |                  |                           | 127mm (5") | 51mm (2")      | ■          |             |                   | ■                   |                             |             |
| SM600A-532-00S   | ■         | ■     |                  |                           | 127mm (5") | 51mm (2")      | ■          |             | ■                 |                     |                             |             |
| SM600A-532-10    | ■         | ■     |                  |                           | 127mm (5") | 51mm (2")      | ■          | ■           |                   |                     |                             |             |
| SM600A-532-10FP  | ■         | ■     |                  |                           | 127mm (5") | 51mm (2")      | ■          |             |                   | ■                   |                             |             |
| SM600A-532-10S   | ■         | ■     |                  |                           | 127mm (5") | 51mm (2")      | ■          |             | ■                 |                     |                             |             |
| SM600A-548-00    | ■         | ■     |                  |                           | 127mm (5") | 77mm (3")      | ■          | ■           |                   |                     |                             |             |
| SM600A-548-00FP  | ■         | ■     |                  |                           | 127mm (5") | 77mm (3")      | ■          |             |                   | ■                   |                             |             |
| SM600A-548-00S   | ■         | ■     |                  |                           | 127mm (5") | 77mm (3")      | ■          |             | ■                 |                     |                             |             |
| SM600A-548-10    | ■         | ■     |                  |                           | 127mm (5") | 77mm (3")      | ■          | ■           |                   |                     |                             |             |
| SM600A-548-10FP  | ■         | ■     |                  |                           | 127mm (5") | 77mm (3")      | ■          |             |                   | ■                   |                             |             |
| SM600A-548-10S   | ■         | ■     |                  |                           | 127mm (5") | 77mm (3")      | ■          |             | ■                 |                     |                             |             |

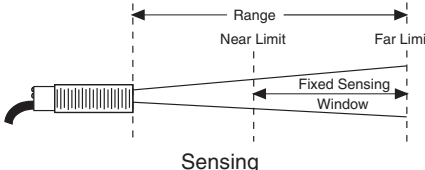


SUPERPROX® PROXIMITY  
SENSORS

# Selection Chart

## SM600 Series (cont.)

### Proximity

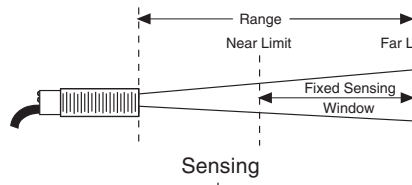
| Model No.        | Power     |   | Connection Style |           | Sensing   | Range           |               | Window |           | Materials   |                |                     |                             | Special Features |  |
|------------------|-----------|---|------------------|-----------|---|-----------------|---------------|--------|-----------|-------------|----------------|---------------------|-----------------------------|------------------|--|
|                  | 12-24 VDC |   | Cable            | Connector |   | Output Pins Rev | Range         | Window | Silicone* | 18mm ULTEM® | 18mm Stainless | Flat-profile ULTEM® | Standard On/Off N.O. Output | N.C. Output      |  |
| SM600A-601-00    | ■         | ■ |                  |           |  | 152mm (6")      | 1.6mm (1/16") | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-601-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 1.6mm (1/16") | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-601-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 1.6mm (1/16") | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-601-10    | ■         | ■ |                  |           |   | 152mm (6")      | 1.6mm (1/16") | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-601-10FP  | ■         | ■ |                  |           |   | 152mm (6")      | 1.6mm (1/16") | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-601-10S   | ■         | ■ |                  |           |   | 152mm (6")      | 1.6mm (1/16") | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-608-00    | ■         | ■ |                  |           |   | 152mm (6")      | 13mm (1/2")   | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-608-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 13mm (1/2")   | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-608-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 13mm (1/2")   | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-608-10    | ■         | ■ |                  |           |   | 152mm (6")      | 13mm (1/2")   | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-608-10FP  | ■         | ■ |                  |           |   | 152mm (6")      | 13mm (1/2")   | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-608-10S   | ■         | ■ |                  |           |   | 152mm (6")      | 13mm (1/2")   | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-612-00    | ■         | ■ |                  |           |   | 152mm (6")      | 19mm (3/4")   | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-612-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 19mm (3/4")   | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-612-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 19mm (3/4")   | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-612-10    | ■         | ■ |                  |           |   | 152mm (6")      | 19mm (3/4")   | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-612-10FP  | ■         | ■ |                  |           |   | 152mm (6")      | 19mm (3/4")   | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-612-10S   | ■         | ■ |                  |           |   | 152mm (6")      | 19mm (3/4")   | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-616-00    | ■         | ■ |                  |           |   | 152mm (6")      | 25mm (1")     | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-616-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 25mm (1")     | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-616-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 25mm (1")     | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-616-10    | ■         | ■ |                  |           |   | 152mm (6")      | 25mm (1")     | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-616-10FP  | ■         | ■ |                  |           |   | 152mm (6")      | 25mm (1")     | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-616-10S   | ■         | ■ |                  |           |   | 152mm (6")      | 25mm (1")     | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-632-00    | ■         | ■ |                  |           |   | 152mm (6")      | 51mm (2")     | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-632-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 51mm (2")     | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-632-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 51mm (2")     | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-632-10    | ■         | ■ |                  |           |   | 152mm (6")      | 51mm (2")     | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-632-10FP  | ■         | ■ |                  |           |   | 152mm (6")      | 51mm (2")     | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-632-10S   | ■         | ■ |                  |           |   | 152mm (6")      | 51mm (2")     | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-648-00    | ■         | ■ |                  |           |   | 152mm (6")      | 77mm (3")     | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-648-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 77mm (3")     | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-648-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 77mm (3")     | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-648-10    | ■         | ■ |                  |           |   | 152mm (6")      | 77mm (3")     | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-648-10FP  | ■         | ■ |                  |           |   | 152mm (6")      | 77mm (3")     | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-648-10S   | ■         | ■ |                  |           |   | 152mm (6")      | 77mm (3")     | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-680-00    | ■         | ■ |                  |           |   | 152mm (6")      | 127mm (5")    | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-680-00FP  | ■         | ■ |                  |           |   | 152mm (6")      | 127mm (5")    | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-680-00S   | ■         | ■ |                  |           |   | 152mm (6")      | 127mm (5")    | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-680-10•   | ■         | ■ |                  |           |   | 152mm (6")      | 127mm (5")    | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-680-10FP• | ■         | ■ |                  |           |   | 152mm (6")      | 127mm (5")    | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-680-10S•  | ■         | ■ |                  |           |   | 152mm (6")      | 127mm (5")    | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-701-00    | ■         | ■ |                  |           |   | 178mm (7")      | 1.6mm (1/16") | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-701-00FP  | ■         | ■ |                  |           |   | 178mm (7")      | 1.6mm (1/16") | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-701-00S   | ■         | ■ |                  |           |   | 178mm (7")      | 1.6mm (1/16") | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-701-10    | ■         | ■ |                  |           |   | 178mm (7")      | 1.6mm (1/16") | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-701-10FP  | ■         | ■ |                  |           |   | 178mm (7")      | 1.6mm (1/16") | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-701-10S   | ■         | ■ |                  |           |   | 178mm (7")      | 1.6mm (1/16") | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-708-00    | ■         | ■ |                  |           |   | 178mm (7")      | 13mm (1/2")   | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-708-00FP  | ■         | ■ |                  |           |   | 178mm (7")      | 13mm (1/2")   | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-708-00S   | ■         | ■ |                  |           |   | 178mm (7")      | 13mm (1/2")   | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-708-10    | ■         | ■ |                  |           |   | 178mm (7")      | 13mm (1/2")   | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-708-10FP  | ■         | ■ |                  |           |   | 178mm (7")      | 13mm (1/2")   | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-708-10S   | ■         | ■ |                  |           |   | 178mm (7")      | 13mm (1/2")   | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-712-00    | ■         | ■ |                  |           |   | 178mm (7")      | 19mm (3/4")   | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-712-00FP  | ■         | ■ |                  |           |   | 178mm (7")      | 19mm (3/4")   | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-712-00S   | ■         | ■ |                  |           |   | 178mm (7")      | 19mm (3/4")   | ■      |           | ■           |                | ■                   |                             |                  |  |
| SM600A-712-10    | ■         | ■ |                  |           |   | 178mm (7")      | 19mm (3/4")   | ■      | ■         |             |                |                     |                             | ■                |  |
| SM600A-712-10FP  | ■         | ■ |                  |           |   | 178mm (7")      | 19mm (3/4")   | ■      |           |             | ■              |                     |                             | ■                |  |
| SM600A-712-10S   | ■         | ■ |                  |           |   | 178mm (7")      | 19mm (3/4")   | ■      |           | ■           |                |                     |                             | ■                |  |
| SM600A-716-00    | ■         | ■ |                  |           |   | 178mm (7")      | 25mm (1")     | ■      | ■         |             |                | ■                   |                             |                  |  |
| SM600A-716-00FP  | ■         | ■ |                  |           |   | 178mm (7")      | 25mm (1")     | ■      |           |             | ■              | ■                   |                             |                  |  |
| SM600A-716-00S   | ■         | ■ |                  |           |   | 178mm (7")      | 25mm (1")     | ■      |           | ■           |                | ■                   |                             |                  |  |



# Selection Chart

## SM600 Series (cont.) Proximity

| Model No.        | Power     |       | Connection |       | Range      | Window        | Transducer |             | Materials      |                     | Housing | Special Features |
|------------------|-----------|-------|------------|-------|------------|---------------|------------|-------------|----------------|---------------------|---------|------------------|
|                  | 12-24 VDC | Cable | Connector  | Style |            |               | Silicone*  | 18mm ULTEM® | 18mm Stainless | Flat-profile ULTEM® |         |                  |
| SM600A-716-10    | ■         | ■     |            |       | 178mm (7") | 25mm (1")     | ■          | ■           |                |                     |         | ■                |
| SM600A-716-10FP  | ■         | ■     |            |       | 178mm (7") | 25mm (1")     | ■          |             |                | ■                   |         | ■                |
| SM600A-716-10S   | ■         | ■     |            |       | 178mm (7") | 25mm (1")     | ■          |             | ■              |                     |         | ■                |
| SM600A-732-00    | ■         | ■     |            |       | 178mm (7") | 51mm (2")     | ■          | ■           |                |                     |         |                  |
| SM600A-732-00FP  | ■         | ■     |            |       | 178mm (7") | 51mm (2")     | ■          |             |                | ■                   |         |                  |
| SM600A-732-00S   | ■         | ■     |            |       | 178mm (7") | 51mm (2")     | ■          |             | ■              |                     |         |                  |
| SM600A-732-10    | ■         | ■     |            |       | 178mm (7") | 51mm (2")     | ■          | ■           |                |                     |         |                  |
| SM600A-732-10FP  | ■         | ■     |            |       | 178mm (7") | 51mm (2")     | ■          |             |                | ■                   |         |                  |
| SM600A-732-10S   | ■         | ■     |            |       | 178mm (7") | 51mm (2")     | ■          |             | ■              |                     |         |                  |
| SM600A-748-00    | ■         | ■     |            |       | 178mm (7") | 77mm (3")     | ■          | ■           |                |                     |         |                  |
| SM600A-748-00FP  | ■         | ■     |            |       | 178mm (7") | 77mm (3")     | ■          |             |                | ■                   |         |                  |
| SM600A-748-00S   | ■         | ■     |            |       | 178mm (7") | 77mm (3")     | ■          |             | ■              |                     |         |                  |
| SM600A-748-10    | ■         | ■     |            |       | 178mm (7") | 77mm (3")     | ■          | ■           |                |                     |         |                  |
| SM600A-748-10FP  | ■         | ■     |            |       | 178mm (7") | 77mm (3")     | ■          |             |                | ■                   |         |                  |
| SM600A-748-10S   | ■         | ■     |            |       | 178mm (7") | 77mm (3")     | ■          |             | ■              |                     |         |                  |
| SM600A-780-00    | ■         | ■     |            |       | 178mm (7") | 127mm (5")    | ■          | ■           |                |                     |         |                  |
| SM600A-780-00FP  | ■         | ■     |            |       | 178mm (7") | 127mm (5")    | ■          |             |                | ■                   |         |                  |
| SM600A-780-00S   | ■         | ■     |            |       | 178mm (7") | 127mm (5")    | ■          |             | ■              |                     |         |                  |
| SM600A-780-10    | ■         | ■     |            |       | 178mm (7") | 127mm (5")    | ■          | ■           |                |                     |         |                  |
| SM600A-780-10FP  | ■         | ■     |            |       | 178mm (7") | 127mm (5")    | ■          |             |                | ■                   |         |                  |
| SM600A-780-10S   | ■         | ■     |            |       | 178mm (7") | 127mm (5")    | ■          |             | ■              |                     |         |                  |
| SM650A-201-00    | ■         | ■     |            |       | 51mm (2")  | 1.6mm (1/16") | ■          | ■           |                |                     |         |                  |
| SM650A-201-00FP  | ■         | ■     |            |       | 51mm (2")  | 1.6mm (1/16") | ■          |             |                | ■                   |         |                  |
| SM650A-201-00S   | ■         | ■     |            |       | 51mm (2")  | 1.6mm (1/16") | ■          |             | ■              |                     |         |                  |
| SM650A-201-10    | ■         | ■     |            |       | 51mm (2")  | 1.6mm (1/16") | ■          | ■           |                |                     |         |                  |
| SM650A-201-10FP  | ■         | ■     |            |       | 51mm (2")  | 1.6mm (1/16") | ■          |             |                | ■                   |         |                  |
| SM650A-201-10S   | ■         | ■     |            |       | 51mm (2")  | 1.6mm (1/16") | ■          |             | ■              |                     |         |                  |
| SM650A-208-00    | ■         | ■     |            |       | 51mm (2")  | 13mm (1/2")   | ■          | ■           |                |                     |         |                  |
| SM650A-208-00FP  | ■         | ■     |            |       | 51mm (2")  | 13mm (1/2")   | ■          |             |                | ■                   |         |                  |
| SM650A-208-00S   | ■         | ■     |            |       | 51mm (2")  | 13mm (1/2")   | ■          |             | ■              |                     |         |                  |
| SM650A-208-10    | ■         | ■     |            |       | 51mm (2")  | 13mm (1/2")   | ■          | ■           |                |                     |         |                  |
| SM650A-208-10FP  | ■         | ■     |            |       | 51mm (2")  | 13mm (1/2")   | ■          |             |                | ■                   |         |                  |
| SM650A-208-10S   | ■         | ■     |            |       | 51mm (2")  | 13mm (1/2")   | ■          |             | ■              |                     |         |                  |
| SM650A-212-00    | ■         | ■     |            |       | 51mm (2")  | 19mm (3/4")   | ■          | ■           |                |                     |         |                  |
| SM650A-212-00FP  | ■         | ■     |            |       | 51mm (2")  | 19mm (3/4")   | ■          |             |                | ■                   |         |                  |
| SM650A-212-00S   | ■         | ■     |            |       | 51mm (2")  | 19mm (3/4")   | ■          |             | ■              |                     |         |                  |
| SM650A-212-10    | ■         | ■     |            |       | 51mm (2")  | 19mm (3/4")   | ■          | ■           |                |                     |         |                  |
| SM650A-212-10FP  | ■         | ■     |            |       | 51mm (2")  | 19mm (3/4")   | ■          |             |                | ■                   |         |                  |
| SM650A-212-10S   | ■         | ■     |            |       | 51mm (2")  | 19mm (3/4")   | ■          |             | ■              |                     |         |                  |
| SM650A-216-00*   | ■         | ■     |            |       | 51mm (2")  | 25mm (1")     | ■          | ■           |                |                     |         |                  |
| SM650A-216-00FP* | ■         | ■     |            |       | 51mm (2")  | 25mm (1")     | ■          |             |                | ■                   |         |                  |
| SM650A-216-00S*  | ■         | ■     |            |       | 51mm (2")  | 25mm (1")     | ■          |             | ■              |                     |         |                  |
| SM650A-216-10    | ■         | ■     |            |       | 51mm (2")  | 25mm (1")     | ■          | ■           |                |                     |         |                  |
| SM650A-216-10FP  | ■         | ■     |            |       | 51mm (2")  | 25mm (1")     | ■          |             |                | ■                   |         |                  |
| SM650A-216-10S   | ■         | ■     |            |       | 51mm (2")  | 25mm (1")     | ■          |             | ■              |                     |         |                  |
| SM650A-301-00    | ■         | ■     |            |       | 77mm (3")  | 1.6mm (1/16") | ■          | ■           |                |                     |         |                  |
| SM650A-301-00FP  | ■         | ■     |            |       | 77mm (3")  | 1.6mm (1/16") | ■          |             |                | ■                   |         |                  |
| SM650A-301-00S   | ■         | ■     |            |       | 77mm (3")  | 1.6mm (1/16") | ■          |             | ■              |                     |         |                  |
| SM650A-301-10    | ■         | ■     |            |       | 77mm (3")  | 1.6mm (1/16") | ■          | ■           |                |                     |         |                  |
| SM650A-301-10FP  | ■         | ■     |            |       | 77mm (3")  | 1.6mm (1/16") | ■          |             |                | ■                   |         |                  |
| SM650A-301-10S   | ■         | ■     |            |       | 77mm (3")  | 1.6mm (1/16") | ■          |             | ■              |                     |         |                  |
| SM650A-308-00    | ■         | ■     |            |       | 77mm (3")  | 13mm (1/2")   | ■          | ■           |                |                     |         |                  |
| SM650A-308-00FP  | ■         | ■     |            |       | 77mm (3")  | 13mm (1/2")   | ■          |             |                | ■                   |         |                  |
| SM650A-308-00S   | ■         | ■     |            |       | 77mm (3")  | 13mm (1/2")   | ■          |             | ■              |                     |         |                  |
| SM650A-308-10    | ■         | ■     |            |       | 77mm (3")  | 13mm (1/2")   | ■          | ■           |                |                     |         |                  |
| SM650A-308-10FP  | ■         | ■     |            |       | 77mm (3")  | 13mm (1/2")   | ■          |             |                | ■                   |         |                  |
| SM650A-308-10S   | ■         | ■     |            |       | 77mm (3")  | 13mm (1/2")   | ■          |             | ■              |                     |         |                  |
| SM650A-312-00    | ■         | ■     |            |       | 77mm (3")  | 19mm (3/4")   | ■          | ■           |                |                     |         |                  |
| SM650A-312-00FP  | ■         | ■     |            |       | 77mm (3")  | 19mm (3/4")   | ■          |             |                | ■                   |         |                  |
| SM650A-312-00S   | ■         | ■     |            |       | 77mm (3")  | 19mm (3/4")   | ■          |             | ■              |                     |         |                  |
| SM650A-312-10    | ■         | ■     |            |       | 77mm (3")  | 19mm (3/4")   | ■          | ■           |                |                     |         |                  |
| SM650A-312-10FP  | ■         | ■     |            |       | 77mm (3")  | 19mm (3/4")   | ■          |             |                | ■                   |         |                  |
| SM650A-312-10S   | ■         | ■     |            |       | 77mm (3")  | 19mm (3/4")   | ■          |             | ■              |                     |         |                  |



SUPERPROX® PROXIMITY  
SENSORS

# Selection Chart

## SM600 Series (cont.)

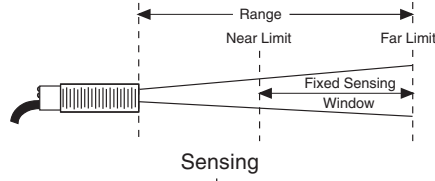
### Proximity

| Model No.        | 12-24 VDC | Power | Cable | Connection |       | Output Pins Rev | Sensing    |               | Transducer | Materials |             |                | Standard On/Off N.O. Output | Special Features |
|------------------|-----------|-------|-------|------------|-------|-----------------|------------|---------------|------------|-----------|-------------|----------------|-----------------------------|------------------|
|                  |           |       |       | Connector  | Style |                 | Range      | Window        |            | Silicone* | 18mm ULTEM® | 18mm Stainless |                             |                  |
| SM650A-316-00    | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 25mm (1")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-316-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 25mm (1")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-316-00S   | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 25mm (1")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-316-10    | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 25mm (1")     | ■          | ■         |             |                | ■                           |                  |
| SM650A-316-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 25mm (1")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-316-10S   | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 25mm (1")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-332-00    | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 51mm (2")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-332-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 51mm (2")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-332-00S   | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 51mm (2")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-332-10    | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 51mm (2")     | ■          | ■         |             |                | ■                           |                  |
| SM650A-332-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 51mm (2")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-332-10S   | ■         | ■     | ■     | ■          | ■     |                 | 77mm (3")  | 51mm (2")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-401-00    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 1.6mm (1/16") | ■          | ■         |             | ■              |                             |                  |
| SM650A-401-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 1.6mm (1/16") | ■          |           | ■           | ■              |                             |                  |
| SM650A-401-00S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 1.6mm (1/16") | ■          |           | ■           | ■              |                             |                  |
| SM650A-401-10    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 1.6mm (1/16") | ■          | ■         |             |                | ■                           |                  |
| SM650A-401-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 1.6mm (1/16") | ■          |           | ■           |                | ■                           |                  |
| SM650A-401-10S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 1.6mm (1/16") | ■          |           | ■           |                | ■                           |                  |
| SM650A-408-00    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 13mm (1/2")   | ■          | ■         |             | ■              |                             |                  |
| SM650A-408-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 13mm (1/2")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-408-00S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 13mm (1/2")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-408-10    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 13mm (1/2")   | ■          | ■         |             |                | ■                           |                  |
| SM650A-408-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 13mm (1/2")   | ■          |           | ■           |                | ■                           |                  |
| SM650A-408-10S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 13mm (1/2")   | ■          |           | ■           |                | ■                           |                  |
| SM650A-412-00    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 19mm (3/4")   | ■          | ■         |             | ■              |                             |                  |
| SM650A-412-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 19mm (3/4")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-412-00S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 19mm (3/4")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-412-10    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 19mm (3/4")   | ■          | ■         |             |                | ■                           |                  |
| SM650A-412-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 19mm (3/4")   | ■          |           | ■           |                | ■                           |                  |
| SM650A-412-10S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 19mm (3/4")   | ■          |           | ■           |                | ■                           |                  |
| SM650A-416-00    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 25mm (1")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-416-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 25mm (1")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-416-00S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 25mm (1")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-416-10    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 25mm (1")     | ■          | ■         |             |                | ■                           |                  |
| SM650A-416-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 25mm (1")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-416-10S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 25mm (1")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-432-00    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 51mm (2")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-432-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 51mm (2")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-432-00S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 51mm (2")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-432-10    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 51mm (2")     | ■          | ■         |             |                | ■                           |                  |
| SM650A-432-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 51mm (2")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-432-10S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 51mm (2")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-448-00*   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 77mm (3")     | ■          | ■         |             | ■              |                             |                  |
| SM650A-448-00FP* | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 77mm (3")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-448-00S*  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 77mm (3")     | ■          |           | ■           | ■              |                             |                  |
| SM650A-448-10    | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 77mm (3")     | ■          | ■         |             |                | ■                           |                  |
| SM650A-448-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 77mm (3")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-448-10S   | ■         | ■     | ■     | ■          | ■     |                 | 102mm (4") | 77mm (3")     | ■          |           | ■           |                | ■                           |                  |
| SM650A-501-00    | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 1.6mm (1/16") | ■          | ■         |             | ■              |                             |                  |
| SM650A-501-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 1.6mm (1/16") | ■          |           | ■           | ■              |                             |                  |
| SM650A-501-00S   | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 1.6mm (1/16") | ■          |           | ■           | ■              |                             |                  |
| SM650A-501-10    | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 1.6mm (1/16") | ■          | ■         |             |                | ■                           |                  |
| SM650A-501-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 1.6mm (1/16") | ■          |           | ■           |                | ■                           |                  |
| SM650A-501-10S   | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 1.6mm (1/16") | ■          |           | ■           |                | ■                           |                  |
| SM650A-508-00    | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 13mm (1/2")   | ■          | ■         |             | ■              |                             |                  |
| SM650A-508-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 13mm (1/2")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-508-00S   | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 13mm (1/2")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-508-10    | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 13mm (1/2")   | ■          | ■         |             |                | ■                           |                  |
| SM650A-508-10FP  | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 13mm (1/2")   | ■          |           | ■           |                | ■                           |                  |
| SM650A-508-10S   | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 13mm (1/2")   | ■          |           | ■           |                | ■                           |                  |
| SM650A-512-00    | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 19mm (3/4")   | ■          | ■         |             | ■              |                             |                  |
| SM650A-512-00FP  | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 19mm (3/4")   | ■          |           | ■           | ■              |                             |                  |
| SM650A-512-00S   | ■         | ■     | ■     | ■          | ■     |                 | 127mm (5") | 19mm (3/4")   | ■          |           | ■           | ■              |                             |                  |

# Selection Chart

## SM600 Series (cont.) Proximity

| Model No.        | 12-24 VDC | Cable | Connector | Connection Style | Output Pins Rev | Range      |               | Sensing Window | Transducer | Materials |             |                |                     | Standard On/Off N.O. Output | Special Features |
|------------------|-----------|-------|-----------|------------------|-----------------|------------|---------------|----------------|------------|-----------|-------------|----------------|---------------------|-----------------------------|------------------|
|                  |           |       |           |                  |                 | Range      | Window        |                |            | Silicone* | 18mm ULTEM® | 18mm Stainless | Flat-profile ULTEM® |                             |                  |
| SM650A-512-10    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-512-10FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-512-10S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-516-00    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-516-00FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-516-00S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-516-10    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-516-10FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-516-10S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-532-00    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-532-00FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-532-00S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-532-10    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-532-10FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-532-10S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-548-00    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-548-00FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-548-00S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-548-10    | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-548-10FP  | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-548-10S   | ■         | ■     | ■         | ■                | ■               | 127mm (5") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-601-00    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 1.6mm (1/16") | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-601-00FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 1.6mm (1/16") | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-601-00S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 1.6mm (1/16") | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-601-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 1.6mm (1/16") | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-601-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 1.6mm (1/16") | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-601-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 1.6mm (1/16") | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-608-00    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 13mm (1/2")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-608-00FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 13mm (1/2")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-608-00S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 13mm (1/2")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-608-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 13mm (1/2")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-608-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 13mm (1/2")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-608-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 13mm (1/2")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-612-00    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-612-00FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-612-00S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-612-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-612-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-612-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 19mm (3/4")   | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-616-00    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-616-00FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-616-00S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-616-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-616-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-616-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 25mm (1")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-632-00    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-632-00FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-632-00S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-632-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-632-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-632-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 51mm (2")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-648-00    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-648-00FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-648-00S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-648-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-648-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-648-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 77mm (3")     | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-680-00*   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 127mm (5")    | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-680-00FP* | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 127mm (5")    | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-680-00S*  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 127mm (5")    | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-680-10    | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 127mm (5")    | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-680-10FP  | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 127mm (5")    | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |
| SM650A-680-10S   | ■         | ■     | ■         | ■                | ■               | 152mm (6") | 127mm (5")    | ■              | ■          | ■         | ■           | ■              | ■                   | ■                           |                  |



SUPERPROX® PROXIMITY  
SENSORS

# Selection Chart

## SM600 Series (cont.)

### Proximity

| Model No.       | 12-24 VDC Power | Cable | Connector | Connection Style | Output Pins Rev | Sensing <sup>1</sup> |               | Transducer* Materials |             |                |                     |                 |                     |                  |
|-----------------|-----------------|-------|-----------|------------------|-----------------|----------------------|---------------|-----------------------|-------------|----------------|---------------------|-----------------|---------------------|------------------|
|                 |                 |       |           |                  |                 | Range                | Window        | Silicone*             | 18mm ULTEM® | 18mm Stainless | Flat-profile ULTEM® | Standard On/Off | Special N.O. Output | Special Features |
| SM650A-701-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 1.6mm (1/16") | ■                     | ■           |                |                     | ■               | ■                   |                  |
| SM650A-701-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 1.6mm (1/16") | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-701-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 1.6mm (1/16") | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-701-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 1.6mm (1/16") | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-701-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 1.6mm (1/16") | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-701-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 1.6mm (1/16") | ■                     |             | ■              |                     |                 |                     | ■                |
| SM650A-708-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 13mm (1/2")   | ■                     | ■           |                |                     |                 | ■                   |                  |
| SM650A-708-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 13mm (1/2")   | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-708-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 13mm (1/2")   | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-708-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 13mm (1/2")   | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-708-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 13mm (1/2")   | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-708-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 13mm (1/2")   | ■                     |             | ■              |                     |                 |                     | ■                |
| SM650A-712-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 19mm (3/4")   | ■                     | ■           |                |                     |                 | ■                   |                  |
| SM650A-712-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 19mm (3/4")   | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-712-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 19mm (3/4")   | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-712-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 19mm (3/4")   | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-712-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 19mm (3/4")   | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-712-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 19mm (3/4")   | ■                     |             | ■              |                     |                 |                     | ■                |
| SM650A-716-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 25mm (1")     | ■                     | ■           |                |                     |                 | ■                   |                  |
| SM650A-716-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 25mm (1")     | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-716-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 25mm (1")     | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-716-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 25mm (1")     | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-716-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 25mm (1")     | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-716-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 25mm (1")     | ■                     |             | ■              |                     |                 |                     | ■                |
| SM650A-732-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 51mm (2")     | ■                     | ■           |                |                     |                 | ■                   |                  |
| SM650A-732-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 51mm (2")     | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-732-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 51mm (2")     | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-732-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 51mm (2")     | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-732-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 51mm (2")     | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-732-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 51mm (2")     | ■                     |             | ■              |                     |                 |                     | ■                |
| SM650A-748-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 77mm (3")     | ■                     | ■           |                |                     |                 | ■                   |                  |
| SM650A-748-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 77mm (3")     | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-748-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 77mm (3")     | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-748-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 77mm (3")     | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-748-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 77mm (3")     | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-748-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 77mm (3")     | ■                     |             | ■              |                     |                 |                     | ■                |
| SM650A-780-00   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 127mm (5")    | ■                     | ■           |                |                     |                 | ■                   |                  |
| SM650A-780-00FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 127mm (5")    | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-780-00S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 127mm (5")    | ■                     |             | ■              |                     |                 |                     |                  |
| SM650A-780-10   | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 127mm (5")    | ■                     | ■           |                |                     |                 |                     | ■                |
| SM650A-780-10FP | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 127mm (5")    | ■                     |             |                |                     | ■               | ■                   |                  |
| SM650A-780-10S  | ■               | ■     | ■         | ■                | ■               | 178mm (7")           | 127mm (5")    | ■                     |             | ■              |                     |                 |                     | ■                |

• = Most commonly stocked sensors

\* = See definition in *Sensing Terms*.

All possible sensor configurations are not listed here.