The SUPERPROX® Model SM506A (cable style) and Model SM556A (connector style) ultrasonic, noncontact sensors with a sensing range of 51 mm (2") to 2 meters (79") are readily available. These rugged sensors monitor the distance to an object while generating a proportional analog output relative to two span limits which can be easily set with the push of a button. For applications such as maintaining a constant fill level in a filler machine, the analog output modulates the product flow into the filler as the filler speed changes. The analog output may modulate the speed of other machinery or regulate the movement of control valve actuators. Two discrete outputs, with setup and operation independent of the analog output span limits, provide alarm capability through the single sensor.

The analog output may also connect directly to programmable controller analog input modules for performing complex loop control or simple status (e.g., distance measuring) monitoring functions.

Easy to install and operate, these reliable SUPERPROX® DC-powered sensors carry the CE Mark. The sensor housing meets NEMA 4X (indoor use only), IP67 industry standards and a Dairy 3A compliant housing is available as an option.

Introduction

Hyde Park’s SUPERPROX® sensors with analog output employ the latest in piezoelectric, ultrasonic, and microprocessor technology to provide reliable, noncontact, level, distance, or size measurement sensing for a wide variety of process-control applications.

As shown in Figures 1 and 3, these sensors have a sensing range of either 51 mm to 1 m (2 to 39") or 120 mm to 2 m (4.7 to 79"), at or within which the analog span limits and alarm set points (if selected) can be set.
Sensor is Quickly and Easily Configured

This is done through four dip switches, two push-buttons, and an one-turn potentiometer located inside a watertight control compartment at the back side of the sensor (Fig. 2 and Fig.4). Access to the compartment is gained by loosening two flathead screws, inserting a small screwdriver in either the top or bottom slot, and removing the square cover. A short plastic tether prevents separation of the cover from the sensor.

Loss of Echo

Loss of echo occurs when the sensor does not receive echos from an object within its sensing range for more than one second. When this occurs, the analog signal will go to the minimum or maximum value depending on the position of configuration Switch 2. When the sensor again receives echos from within its sensing range, the analog signal is updated to a value indicating the object’s present position relative to the span limits.

“LE” Option - Function “00” & “81” or Hold Output on Loss of Echo - Function “98” & “99”

Depending on model functionality, when loss of echo occurs for more than one second, the analog signal will hold at the value of the last echo received. When the sensor again receives echos within its sensing range, the analog signal is updated to a value indicating the object’s present position relative to the span limits.

Models with Alarms

Models without Alarms

Sensor Configuration Switches

Switch 1 (all models) selects either a directly (DIR) or inversely (INV) proportional (level or distance of an object relative to the span limits) analog output. When the switch is in the DIR position, the maximum analog output occurs at the limit closest to the sensor. When the switch is in the INV position, the maximum analog output occurs at the limit farthest from the sensor.

Switch 2 selects the desired analog output on loss of echo for all models as shown in the chart below. For models with alarms, Switch 2 works with Switch 3 in selecting the state of the output. Switch 2 also determines the state of the output on power-up.

Switch 3 (models with alarms only) selects whether the analog output goes to default, minimum or maximum output, or holds on loss of echo.

Switch 4 (models with alarms only) selects either a current or voltage output. Place the switch in the VOLT position for 0-10 VDC or in the mA position for 4-20 mA.

Analog Response Time Potentiometer

As the position of a sensed object changes relative to the span limits, the analog output changes accordingly. In some applications where there is rapid and erratic object movement or irregular object profiles and surfaces, it may be desirable to reduce the rate of output.
change. A one-turn RESPONSE potentiometer, located in the control compartment, allows adjustment or damping of the analog output response to either abrupt or rapid changes in the object's position. The response is adjustable from 70 ms to 2.5 seconds, allowing smooth control regulation or speed modulation of process equipment. Figure 5 illustrates the relationship between the potentiometer setting and the output response time over the entire one-turn range.

<table>
<thead>
<tr>
<th>Analog Models:</th>
<th>Switch 2 set at:</th>
<th>Switch 3 set at:</th>
<th>State of the Analog Output on Loss of Echo</th>
</tr>
</thead>
<tbody>
<tr>
<td>With alarms</td>
<td>MIN M-M</td>
<td>4 mA or 0 V</td>
<td>(Alarms non-sinking and on)</td>
</tr>
<tr>
<td>(See note 2 for models with suffix 198.)</td>
<td>MAX M-M</td>
<td>20 mA or 10 V</td>
<td>(Alarms non-sinking and on)</td>
</tr>
<tr>
<td>MIN HLD</td>
<td>No change¹</td>
<td>(and no change in alarms)</td>
<td></td>
</tr>
<tr>
<td>MAX HLD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Without alarms and no LE suffix
(See note 2 for models with suffix 118 & 188.)

| MIN | Not used | 4 mA or 0 V |
| MAX |          | 20 mA or 10 V |

Without alarms and with LE suffix

| MIN | Not used | No change³ |
| MAX |          | |

¹ Loss of echo occurs when sensor does not receive any echoes within its sensing range for more than one second.
² These sensor models ignore all echoes outside the programmed span.
³ Means the output will hold at value of last echo received. When sensor again receives echoes within its sensing range, the outputs are updated to a value indicating the object’s present position.

NOTE: On power-up, the analog output near limit, the analog output reaches 19.2 mA… or, (20 mA - 4 mA) .95 + 4 mA. Figure 6 illustrates the output response characteristics for 1.25 and 2.5 seconds.

The LIMITS & ALARMS Push-buttons

The LIMITS push-button is used to set both near and far limits of the analog span within which object detection and control takes place. After the limits have been set, the sensor continuously emits either a 0 to 10 VDC or 4 to 20 mA output that is in proportion to the object’s position relative to the span limits. For example, if the output selected is 4-20 mA and the object is detected halfway between the analog span limits, the output is 12 mA. The output range adjusts to the size of the analog span and remains proportional regardless of where the limits are set for the analog span.

The output response is the time period required for the output signal to match 95% of a monitored abrupt change in object position. For example, assume Switch 1 is set to DIR and the potentiometer is set for a response time of 2.5 seconds (fully CW). At the far span limit the output is 4 mA. The object being detected has been stable at the far limit but then moves to the near span limit very rapidly. Two and one-half seconds after the object reaches the

Figure 5

The LIMITS & ALARMS Push-buttons

The LIMITS push-button is used to set both near and far limits of the analog span within which object detection and control takes place. After the limits have been set, the sensor continuously emits either a 0 to 10 VDC or 4 to 20 mA output that is in proportion to the object’s position relative to the span limits. For example, if the output selected is 4-20 mA and the object is detected halfway between the analog span limits, the output is 12 mA. The output range adjusts to the size of the analog span and remains proportional regardless of where the limits are set for the analog span.

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Figure 6

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Multicolored LED status

When setting analog span limits:

- Amber - sensing solid, stable object
- Red - sensing unstable object or no object
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:**

SM5 06 A - 481 - FS NS 4

### SUPERPROX® Product Series

<table>
<thead>
<tr>
<th>Power/Connection Type</th>
<th>0...15 to 24 VDC / cable style</th>
</tr>
</thead>
<tbody>
<tr>
<td>5...15 to 24 VDC / connector style</td>
<td></td>
</tr>
</tbody>
</table>

### Sensing Function

<table>
<thead>
<tr>
<th>6...Proximity - analog</th>
</tr>
</thead>
</table>

### Design Level

<table>
<thead>
<tr>
<th>A...Applies to all models</th>
</tr>
</thead>
</table>

### Sensing Range

| 1...51 to 1 m (2 to 39”)           |
| 4...120 mm to 2 m (4.7 to 79”)     |

### Functionality

| 00...4 to 20 mA                    |
| 18...4 to 20 mA, ignore objects outside of span limits |
| 81...0 to 10 VDC                   |
| 88...0 to 10 VDC, ignore objects outside of span limits, Hold output on Loss-of-echo |
| 98...Disable/enable loss of echo with high/low alarms, ignore objects outside of span limits |
| 99...Disable/enable loss of echo with high/low alarms |

### Special Features

| ...No letter indicates standard sensor with no special features |
| LE...No change in output on loss of echo |
| FS...Fluorosilicone transducer face |
| AA...Remote limit setup (Available on cable models only.) |
| AB...RS232, 4-digit/2-decimal place output (Available on cable models only.) |
| AD...Limits push-button disabled |
| AE...RS232, 5-digit/3-decimal place output (Available on cable models only.) |
| AF...No LEDs |

### Housing Types

| ...No letter indicates standard ULTEM® plastic housing |
| LE...No change in output on loss of echo |
| NS...NORYL® Dairy 3A gray plastic housing |

### Remote Type

| ...No letter indicates standard housing |
| LE...No change in output on loss of echo |
| RR...Right-angle sensing head with armor cable |
| SS...Straight sensing head with armor cable |

### Remote Cable Length

| 1...254 mm (10”)                      |
| 2...508 mm (20”)                     |
| 3...762 mm (30”)                     |
| 4...1016 mm (40”)                    |
| 5P...1270 mm (50”)                   |
| 6P...1524 mm (60”)                   |

### Red LED status during setup and operation:

**During setup of sensor, the red LED has no significance. During operation, the brightness of the red LED indicates the relative value of the analog output. The red LED is off when the output is minimum and brightest red when the output is maximum.**

### Electrical Wiring

These analog sensors are available as either three-wire or five-wire devices, depending on the configuration selected. The model with remote limits setup is either a four- or six-wire device, available only as a cable style model. NOTE: In order to avoid unwanted electrical interference, the sensor wires must be run in conduit separate from any AC power or control wires.
**3-Wire Sensor Wire Colors**

<table>
<thead>
<tr>
<th>Power (+)</th>
<th>15 to 24 VDC</th>
<th>RED</th>
<th>BROWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Output</td>
<td>(4 to 20 mA or 0 to 10 VDC)</td>
<td>WHITE</td>
<td>BLACK</td>
</tr>
<tr>
<td>Power Common</td>
<td>BLACK</td>
<td>BLUE</td>
<td></td>
</tr>
<tr>
<td>Signal Common</td>
<td>WHITE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote Push-button Not Available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**5-Wire Sensor Wire Colors**

<table>
<thead>
<tr>
<th>Power (+)</th>
<th>15 to 24 VDC</th>
<th>RED</th>
<th>BROWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Output</td>
<td>(4 to 20 mA or 0 to 10 VDC)</td>
<td>WHITE</td>
<td>BLACK</td>
</tr>
<tr>
<td>Common</td>
<td>BLACK</td>
<td>BLUE</td>
<td></td>
</tr>
<tr>
<td>Near-Alarm Limit</td>
<td>GREEN</td>
<td>WHITE</td>
<td></td>
</tr>
<tr>
<td>Far-Alarm Limit</td>
<td>BROWN</td>
<td>ORANGE</td>
<td></td>
</tr>
<tr>
<td>Remote Push-button Not Available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions**

**3-Wire Connections**

- Red Output LED
- DC (+) to 24 VDC

**4-Wire Connections**

- Red Output LED
- DC (+) to 24 VDC

**5-Wire Connections**

- Red Output LED
- DC (+) to 24 VDC

**Note:** Illustrated models may not be the exact representation for these sensors due to possible design modifications.

**WARNING:**

The analog output “COMMON” is internally connected to earth ground. An isolated signal transmitter is required when using the controller with ungrounded analog input process control devices.

**Remote Sensing Models**

- Stainless steel sensing probe 254 mm (10") long x 13 mm (1/2") diameter
- Stainless steel armor cable 254 mm (10"), 500 mm (20"), 762 mm (30"), 1016 mm (40") long x 5 mm (3/16") diameter

**SuperProx® Proximity Sensors**

**Connector Model**

- 4 stainless steel screw (SEM retained) 2x
- 1/2" NPT pipe thds. for conduit mg.
- Access door to control compartment w/ gasket & retaining cable

**Cable Model**

- 4 stainless steel screw (SEM retained) 2x
- 7/8"-16 UNF threads
- 35 mm DIA (1.37)
- Sealed cable 3 meters long (10 ft)
- Access door to control compartment w/ gasket & retaining cable
General Specifications

Sensing
Ranges: 51 to 1000 mm (2" to 39")
120 mm to 2 m (4.7" to 79") - DC model only
Sonic Frequency: 200 kHz
Maximum Plane-reflector Angle:
± 10° on 305 mm x 305 mm (12" x 12") flat target at a distance of 305 mm (12")
Sonic Cone Angle: 26°

Analog Output Electrical Specifications
(Test conditions: 24 VDC, Ta = 20°C, large flat target, still air)
current voltage
output1 output2 units
Output Range 4-20 mA 0-10 V
Load Resistance 10 to 1 K 200 to 500 Ohms
Resolution± 0.004 mA 2.5 mVDC
Accuracy± ±0.50 ±0.40 % of span
Linearity ±0.10 ±0.10 % of span
Temperature ±0.006 ±0.004 % of span/°C

1 tested with 250 Ohm load
2 tested with 470 Ohm load; a low value is recommended to minimize noise pickup
3 resolution = span/4000; maximum: 0.08 mm (0.003")
4 best accuracy may be limited to +1/32 +0.794 mm (0.03125") due to wave-skip phenomena

Power Requirements
15 to 24 VDC ± 10% @ 80 mA excluding output load

Outputs
Switch selectable for either 4 to 20 mA or 0 to 10 VDC in alarm models only. Other models dedicated to either 4 to 20 mA or 0 to 10 VDC. Non-isolated
Sinking Outputs:
Maximum on-state voltage drop @ 60mA: 0.25 v
Maximum load current: 100 mA
Maximum applied voltage: 35 VDC

Response Time
0.07 to 2.5 seconds
(See analog output response curves.)

Indicators
Multicolored (Amber, Red, Green) LED:
Indicates Limits-set and operational modes
Red LED: Visual indicator for analog output;
intensity varies as output magnitude changes.

Connections
Cable Style Models:
DC: 24 AWG, PVC jacket, 3-, 4-, or 5-conductor,
3 meters (10') long, standard
Connector Style Models:
DC: 24 AWG, 4- or 5-pin "mini" style

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

Environmental
Operating Temperature Range:
0° to 50°C (32° to 122°F)
Storage Temperature Range:
-40° to 100°C (-40° to 212°F)
Operating Humidity: 100%

Chemical Resistance:
Resists most acids and bases, including most food products. Fluorosilicone transducer face is available to provide resistance to aromatic and petroleum-based hydrocarbons.

Agency Approvals
CE Mark: CE conformity is declared to:
EN61010-1: 1990 including amend. No.1:1992
EN55011 Group 1 Class A, EN50082-1.
Declaration of conformity available upon request.
AC Models SM520/570 carry the ETL safety label.

Construction
Dimensions (overall)
92 mm (3.625") L x 44 mm (1.75") W x 91mm (3.6") H cable style
Housing:
Shock and vibration resistant
Case: ULTEM®, (FDA approved)
Optional: NORYL® (USDA-Dairy 3A Sanitary Standards compliant)
Transducer Face: Silicone rubber (FDA approved)
Optional: Fluorosilicone rubber
Sensor Cable: PVC jacket
LED: Polycarbonate

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Mounting Accessories

<table>
<thead>
<tr>
<th>Dimensions (overall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92 mm (3.625&quot;) L x 44 mm (1.75&quot;) W x 91mm (3.6&quot;) H cable style</td>
</tr>
</tbody>
</table>

Housing:
Shock and vibration resistant
Case: ULTEM® (FDA approved)
Optional: NORYL® (USDA-Dairy 3A Sanitary Standards compliant)
Transducer Face: Silicone rubber (FDA approved)
Optional: Fluorosilicone rubber
Sensor Cable: PVC jacket
LED: Polycarbonate

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## Accessories

- **Model AC105**: Straight, 7/8-16 mini, 4-conductor, mating connector cable, 4 m (12’), for connector-style sensors
- **Model AC105-50**: Straight, 7/8-16 mini, 4-conductor, mating connector cable, 15 m (50’), for connector-style sensors
- **Model AC115**: Straight, 7/8-16 mini, 5-conductor, mating connector cable, 4 m (12’), for Model SM556A-X9X series analog, connector-style prox sensors with alarms
- **Model AC115-50**: Straight, 7/8-16 mini, 5-conductor, mating connector cable, 15 m (50’), for Model SM556A-X9X series analog, connector-style prox sensors with alarms
- **Model AC213**: Stainless and Teflon, remote sensing probe mounting bracket
- **Model AC222**: Standard, stainless mounting bracket assembly, slotted for vertical adjustment
- **Model AC229**: Stainless, plate-style, right-angle, mounting bracket, with base slotted for forward/reverse adjustment and side slotted for sensor adjustment
- **Model AC230**: Three-piece, stainless, mounting bracket assembly with O-ring mount for sensor models with remote heads.

---

### Power Version

<table>
<thead>
<tr>
<th>Connection Style</th>
<th>Sensing Range</th>
<th>Transducer Style</th>
<th>Analog Output</th>
<th>Selectable</th>
<th>Silicone*</th>
<th>Fluorosilicone*</th>
<th>ULTEM®</th>
<th>Loss of Echo</th>
<th>Alarm</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/24 VDC Cable</td>
<td>0-10 VDC</td>
<td>Remote</td>
<td>4-20 mA</td>
<td>Selectable</td>
<td></td>
<td></td>
<td></td>
<td>MeanWire</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2m (79”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High/Low Alarm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 m (39”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ignore object</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>outside of span limits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Special Features

- Remote limit setup
- Disable/enable loss of echo
- Remote limit setup
- Disable/enable loss of echo, Remote limit setup
- Disable/enable loss of echo
- Disable/enable loss of echo, Remote limit setup
- Disable/enable loss of echo
- Disable/enable loss of echo, Remote limit setup
- Disable/enable loss of echo
- Disable/enable loss of echo
- Disable/enable loss of echo
- Disable/enable loss of echo

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**Model SM506A-100**
- RS232 output

**Model SM506A-100 AB**
- Remote limit setup

**Model SM506A-100 FS**
- Disable/enable loss of echo

**Model SM506A-100 LE**
- Remote limit setup

**Model SM506A-100 LER4**
- Disable/enable loss of echo

**Model SM506A-100 N**
- Remote limit setup

**Model SM506A-100 R2**
- Disable/enable loss of echo

**Model SM506A-100 S4**
- Disable/enable loss of echo

**Model SM506A-118**
- Disable/enable loss of echo

**Model SM506A-181**
- Remote limit setup

**Model SM506A-181 AA**
- Disable/enable loss of echo

**Model SM506A-181 LE**
- Remote limit setup

**Model SM506A-181 LER2**
- Disable/enable loss of echo

**Model SM506A-181 S1**
- Remote limit setup

**Model SM506A-181 S4**
- Disable/enable loss of echo

**Model SM506A-188**
- Disable/enable loss of echo

**Model SM506A-199 AA**
- Disable/enable loss of echo, Remote limit setup

**Model SM506A-199 FS**
- Remote limit setup

**Model SM506A-199 R2**
- Disable/enable loss of echo

**Model SM506A-199 R3**
- Disable/enable loss of echo

**Model SM506A-199 S4**
- Disable/enable loss of echo

**Model SM506A-200**
- Disable/enable loss of echo

**Model SM506A-200 LE**
- Disable/enable loss of echo

**Model SM506A-200 FS**
- Disable/enable loss of echo

**Model SM506A-200 LE**
- Disable/enable loss of echo

**Model SM506A-200 LEN**
- Disable/enable loss of echo

**Model SM506A-200 LER4**
- Disable/enable loss of echo

**Model SM506A-200 R4**
- Disable/enable loss of echo

**Model SM506A-200 S4**
- Disable/enable loss of echo

**Model SM506A-200 S4**
- Disable/enable loss of echo

---

**Model SM506A-188 AA**
- Disable/enable loss of echo

**Model SM506A-188 FS**
- Disable/enable loss of echo

**Model SM506A-188 LE**
- Disable/enable loss of echo

**Model SM506A-188 LEN**
- Disable/enable loss of echo

**Model SM506A-188 LER4**
- Disable/enable loss of echo

---

**Model SM506A-188 AA**
- Remote limit setup

**Model SM506A-189 AA**
- Remote limit setup

**Model SM506A-189 FS**
- Disable/enable loss of echo

**Model SM506A-189 R2**
- Remote limit setup

**Model SM506A-189 R3**
- Disable/enable loss of echo

**Model SM506A-189 S4**
- Disable/enable loss of echo

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**Model SM506A-198**
- Disable/enable loss of echo

**Model SM506A-198 AA**
- Disable/enable loss of echo

**Model SM506A-199 AA**
- Remote limit setup

**Model SM506A-199 R2**
- Disable/enable loss of echo

**Model SM506A-199 R3**
- Remote limit setup

**Model SM506A-199 S4**
- Disable/enable loss of echo

---

**Model SM506A-200**
- Disable/enable loss of echo

---

**Model SM506A-188 AA**
- Disable/enable loss of echo
<table>
<thead>
<tr>
<th>Model No.</th>
<th>Power Source</th>
<th>Connection Style</th>
<th>Sensing Style</th>
<th>Analog Output</th>
<th>Transducer Style</th>
<th>Materials</th>
<th>Housing</th>
<th>Loss of Echo</th>
<th>High/Low Alarms</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM556A-188 AD</td>
<td>15/24 VDC</td>
<td>2m (79&quot;)</td>
<td>0-10 VDC</td>
<td>Analog Output</td>
<td>Remote Straight</td>
<td>Silicone*</td>
<td></td>
<td></td>
<td></td>
<td>Limits push-button disabled</td>
</tr>
<tr>
<td>SM556A-198*</td>
<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>2m (79&quot;)</td>
<td>0-10 VDC</td>
<td>Analog Output</td>
<td>Remote Straight</td>
<td>Silicone*</td>
<td></td>
<td></td>
<td>Disable/enable loss of echo</td>
</tr>
<tr>
<td>SM556A-199*</td>
<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>1 m (39&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
<td>Silicone*</td>
<td></td>
<td></td>
<td>Disable/enable loss of echo</td>
</tr>
<tr>
<td>SM556A-199 FS</td>
<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>1 m (39&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
<td>Silicone*</td>
<td></td>
<td></td>
<td>Disable/enable loss of echo</td>
</tr>
<tr>
<td>SM556A-199 N</td>
<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>1 m (39&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
<td>Silicone*</td>
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<td>Cable Connector</td>
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<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
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<td>Cable Connector</td>
<td>2m (79&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
<td>Silicone*</td>
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<td>SM556A-400*</td>
<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>2m (79&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
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<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>2m (79&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
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<td>15/24 VDC</td>
<td>Cable Connector</td>
<td>2m (79&quot;)</td>
<td>Standard</td>
<td>Analog Output</td>
<td>Remote Straight</td>
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<td>Remote Straight</td>
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<td>Standard</td>
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<td>Remote Straight</td>
<td>Silicone*</td>
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<td>Disable/enable loss of echo</td>
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