SE-45 TRUWIDE WIDEBAND ULTRASONIC SENSOR

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Table 1
SE-45-*-10 SENSOR DIMENSIONS

<table>
<thead>
<tr>
<th>SENSOR MODEL*</th>
<th>A SENSOR BANDWIDTH</th>
<th>B</th>
<th>C HOUSING LENGTH</th>
<th>D REF</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-45-7-10</td>
<td>66.2 [2.61]</td>
<td>61.2 [2.41]</td>
<td>188.2 [7.05]</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SE-45-11-10</td>
<td>107.0 [4.21]</td>
<td>81.5 [3.21]</td>
<td>229.0 [9.02]</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Figure 1
SE-45-7-10 SENSOR WITHOUT SENSOR MOUNTING
(SENSOR MODEL SE-45-18-10 SHOWN IN PHANTOM)
MINIMUM BEND RADIUS OF THE OPTIONAL ETHERNET CABLE IS 90mm [3.54 IN]. MINIMUM BEND RADIUS IS SMALLER FOR THE OUTPUT AND AUXILIARY CABLES.

SENSOR MUST BE INSTALLED PERPENDICULAR TO THE WEB AS SHOWN.

Figure 2
SE-45-7-10 SENSOR WITH OPTIONAL M-17 OR M-18 SENSOR MOUNTING (SENSOR MODEL SE-45-18-10 SHOWN IN PHANTOM)
NOTE:
It is recommended that the SE-45 sensor be installed at an angle of 15° minimum or greater off of perpendicular (90°) to the web pass line for optimal performance.

Table 2
SE-45-*-10 SENSOR DIMENSIONS

<table>
<thead>
<tr>
<th>SENSOR MODEL*</th>
<th>E TYPICAL</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-45-7-10</td>
<td>175.2 [6.90]</td>
<td>N/A</td>
</tr>
<tr>
<td>SE-45-11-10</td>
<td>216.0 [8.50]</td>
<td>N/A</td>
</tr>
<tr>
<td>SE-45-31-10</td>
<td>420.0 [16.54]</td>
<td>210.00 [8.268]</td>
</tr>
<tr>
<td>SE-45-52-10</td>
<td>624.0 [24.57]</td>
<td>420.00 [16.535]</td>
</tr>
</tbody>
</table>

Table 3
M-17 OR M-18 SENSOR MOUNTING DIMENSIONS

<table>
<thead>
<tr>
<th>SENSOR MOUNTING ASSEMBLY</th>
<th>SQUARE BAR MAXIMUM LENGTH</th>
<th>BB</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-17</td>
<td>19.1 [0.75]</td>
<td>1524 [60.00]</td>
<td>15.9 [0.63]</td>
</tr>
<tr>
<td>M-18</td>
<td>25.4 [1.00]</td>
<td>2184 [86.00]</td>
<td>19.1 [0.75]</td>
</tr>
</tbody>
</table>

Figure 3
SE-45-*-10 SENSOR
SHOWN WITH OPTIONAL M-17 OR M-18 SENSOR MOUNTING AND ALTERNATE SENSOR MOUNTINGS
Product Specifications

The Fife SE-45 TruWide wideband ultrasonic sensor is ideal for guiding demanding materials, multiple webs and web widths. The TruWide sensor provides center or edge guiding of both opaque or clear materials with proportional bandwidths ranging from 66mm [2.60"] to 515mm [20.28"] with 16-bit resolution. Output options include analog output for stand-alone monitoring or digital output for multiple edge and web width detection.

Supply Voltage: +10.5 to +51VDC (X2 Connector)

Maximum Supply Current: at 10.5VDC
- SE-45-7-10: 0.225A
- SE-45-11-10: 0.235A
- SE-45-18-10: 0.245A
- SE-45-31-10: 0.285A
- SE-45-52-10: 0.335A

Sensor Signal Source: Ultrasonic at 300KHz

Output Analog Signal: 0 to 10mA
Sensor configurable to 0 to 20mA or 4 to 20mA

Output Digital Signal: MaxNet over Ethernet

Proportional Bandwidth:
- SE-45-7-10: 66mm [2.60”]
- SE-45-11-10: 107mm [4.21”]
- SE-45-18-10: 178mm [7.01”]
- SE-45-31-10: 311mm [12.24”]
- SE-45-52-10: 515mm [20.28”]

Operating Ambient Temperature Range: 0 to 60°C (32 to 140°F)

Operating Humidity Range: 15 to 90% relative humidity with no condensation

Linearity: 0.37% over entire sensor bandwidth

Protection Class: IP-50

Certification: CE

General Information

NOTES:
1. All dimensions and specifications are in mm [inches] unless specified otherwise.
2. The SE-45 sensor requires no schedule maintenance. When necessary the surface of the transducers may be cleaned using a clean cloth dampened with water. A mild soap solution may be used to dampen the cloth if needed.

WARNING:
Do NOT use chemical cleaners or solvents when cleaning the transducers. They may cause permanent damage to the sensor transducers.

3. The SE-45 sensor must be installed perpendicular (90°) to the web as shown. See Figure 2.
4. It is recommended that the SE-45 sensor be installed at an angle of 15° minimum as shown or greater off of perpendicular (90°) to the web pass line for optimal performance. See Figure 3.
5. It is intended that any external input power be applied to the X2 Connector. Power on the X3 connector is intended to be supplied by a Fife Controller. (Reference Note 7 on Drawing 208004).

WARNING:
Do NOT apply external power to the X3 connector. Damage to the SE-45 sensor may occur.
Auxiliary Sensor Cable Connections

SENSOR CABLE P/N 206717
Power Only Auxiliary Cable

SENSOR CABLE P/N 206720
Power and Width Auxiliary Cable

SENSOR CABLE P/N 207664
Width Only Auxiliary Cable
Analog Sensor Cable Connections

SENSOR CABLE P/N 208003
Three Analog Signals Cable With Power
(Power To Be Supplied By Fife Controller)

SENSOR CABLE P/N 208130
Three Analog Signals Cable Without Power
(Customer Supplied Power Provided On X2 Connector)