Specification Sheet

SHLD 1®
Rotary Shutter Source Holder

Application Area
The SHLD 1 sourceholder is designed for radiation-based measurement of applications including density, weight, and continuous and point level. The most common industries for the SHLD 1 include:

- Offshore
- Petrochemical
- Waste and Wastewater
- Pulp and Paper
- Plastics
- Power
- Cement
- Asphalt
- Chemical
- Mining

Advantages
Recognizable benefits include:

- Rotary shutter mechanism
- Wide range of collimation angles
- Polyester powder coated carbon steel
- Wide range of accessories
- Available with General License
- Stainless steel housing (optional)

Function
The SHLD 1 is a gamma radiation device secured in a fixed position near a vessel or pipe and is responsible for directing radiation through the process material.

Technical Data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Cs-137 Activity</td>
<td>7.4 GBq (200 mCi) for 50 uSv@305 mm (5 mR/hr@12&quot;)</td>
</tr>
<tr>
<td>Fire Resistance</td>
<td>+538 °C (+1000 °F) for 5 minutes</td>
</tr>
<tr>
<td>Shielding Material</td>
<td>Lead</td>
</tr>
<tr>
<td>Handle/Shutter</td>
<td>Rotary</td>
</tr>
<tr>
<td>Colimation Angle</td>
<td>0°, 15°, 30°, 45°, 60°</td>
</tr>
<tr>
<td>Housing Material</td>
<td>Carbon Steel with Polyester Powder Coating 316 Stainless Steel (optional)</td>
</tr>
<tr>
<td>Temperature</td>
<td>-50 ... +105 °C (-58 ... +221 °F)</td>
</tr>
<tr>
<td>Weight</td>
<td>29.5 kg (65 lbs.)</td>
</tr>
<tr>
<td>Accessories</td>
<td>Interlock Shutter Actuator Captive Lock and Lanyard Shutter Micro Limit Switch</td>
</tr>
</tbody>
</table>

Materials
The shielding material is lead.

Housing Versions
The housing is available in low carbon steel with polyester powder coating or an optional 316 stainless steel.

Approvals
The source holders are regulated by the U.S. Nuclear Regulatory Commission (NRC). Compliance certificates are issued by the State of Ohio under an agreement with the NRC.

Operation
The SHLD 1 is used to position and protect a radioactive source near a process vessel or pipe. Radiation from the source is directed through the process by an integral collimator. A radiation detector placed opposite the source holder measures radiation fluctuations caused by process condition changes. The detector correlates radiation levels to process conditions such as level and density.
Speciﬁcation Sheet

You can ﬁnd additional information about VEGA product offerings from our home page, www.vega-americas.com. Brochures, operating instructions, quick reference guides, speciﬁcation sheets, and drawings are also available from the Downloads section of our homepage.

Device Selection

The Downloads section of our home page, www.vega-americas.com provides application data sheets so you can select the measuring principle or product for your particular application.

Contact

Please call 1-513-272-0131, Monday through Friday, 8:00 A.M.-5:00 P.M., EST (Eastern Standard Time) if you have any questions. For emergencies after hours, call the number above and follow the voice mail instructions.

All information is subject to change without notice.

Dimensions

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