

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

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

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.

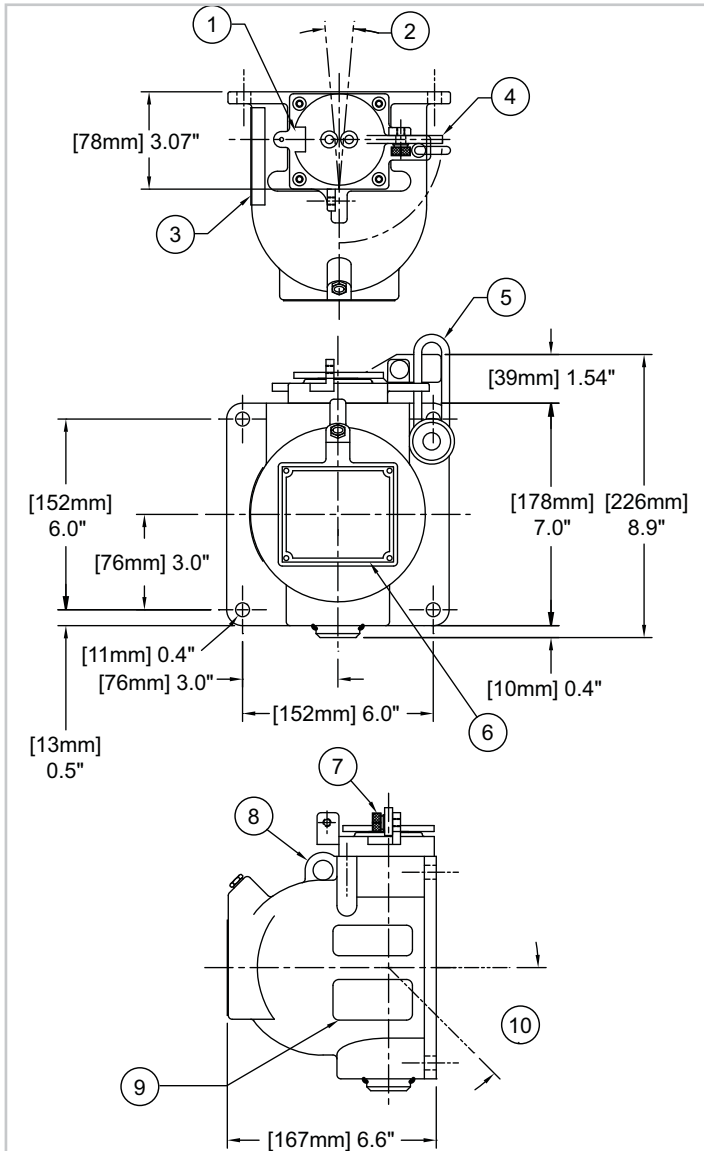
Approvals

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.

Dimensions



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.

SHLD 1

- 1 Shutter Position Indicator
- 2 10° Beam Width
- 3 Optional General License (When Applicable)
- 4 Operating Handle in Off Position
- 5 Combination Lock
- 6 Radioactive Material Identification Label
- 7 Position Screw
- 8 Lift Eye
- 9 On Condition Warning Label
- 10 Collimation Angle

Information

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.