

SHLG

Push/Pull Shutter Source Holders



Application Area

The SHLG source holders are designed for radiation-based measurement of both level and point level applications. The most common industries for the SHLG include:

- Asphalt
- Cement
- Chemical
- Food and Beverage
- Mining
- Offshore
- Petrochemical
- Plastics
- Power
- Pulp and Paper
- Water and Wastewater

Advantages

Recognizable benefits include:

- Large design provides maximum shielding
- Wide range of collimation angles
- Corrosion resistant polyester powder coating
- Wide range of accessories
- Stainless steel housing (optional)

Function

The SHLG source holders are a component of a level measurement system. The source holders are gamma radiation devices secured in a fixed position near a vessel or pipe and are responsible for directing radiation through the process material.

Technical Data

Maximum Cs-137

Activity

- SHLG 1	74 GBq (2 Ci) for 50 uSv@305 mm (5 mR/hr@12")
- SHLG 2	333 GBq (9 Ci) for 50 uSv@305 mm (5 mR/hr@12")
- SHLG 3	370 GBq (10 Ci) for 50 uSv@305 mm (5 mR/hr@12")

Maximum Cobalt-60

Activity

- SHLG 1	925 MBq (25 mCi) for 50 uSv@305 mm (5 mR/hr@12")
- SHLG 2	3.15 GBq (85 mCi) for 50 uSv@305 mm (5 mR/hr@12")
- SHLG 3	18.5 GBq (500 mCi) for 50 uSv@305 mm (5 mR/hr@12")

Fire Resistance

+538 °C for 5 minutes (+1000 °F for 5 minutes)

Handle/Shutter

Push/Pull

Collimation Angle

0°, 30°, 45°

Temperature

-40 ... +60 °C (-40 ... +140 °F)

Weight

- SHLG 1	83 kg (182 lbs.)
- SHLG 2	156 kg (343 lbs.)
- SHLG 3	297 kg (655 lbs.)

Materials

The shielding material is lead. The source tube guide shaft is made of stainless steel. The operating shaft, connecting the stainless steel source tube assembly to the aluminum handle, is made of stainless steel. The dent/bearing block is made of low carbon steel or stainless steel. Roll pins and source tube end plugs are made of stainless steel.

Housing Versions

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

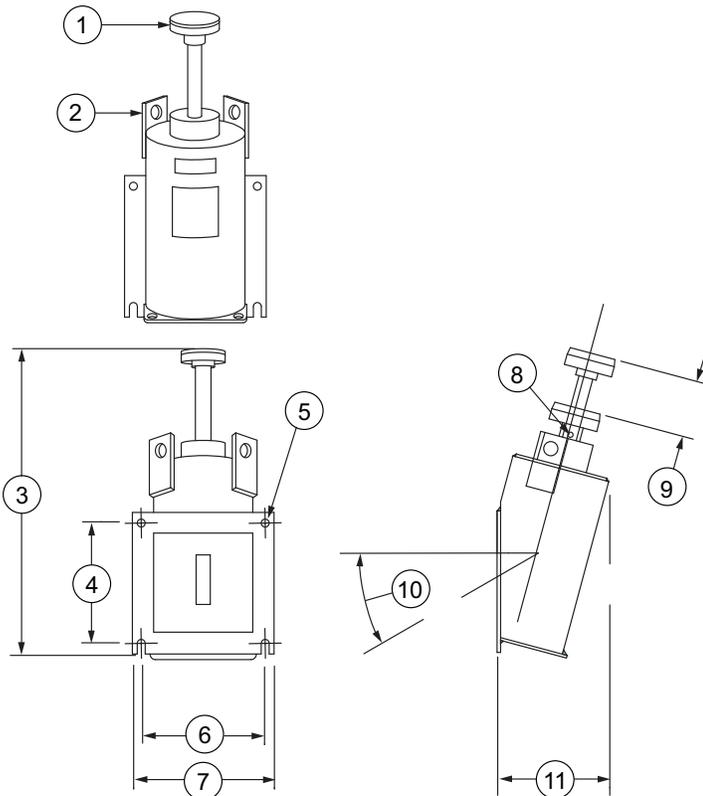
Approvals

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 SHLG source holders are 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.

Dimensions



Dimensions SHLG Series

- 1 Handle
- 2 Lifting Eye
- 3a SHLG 1 - 533 mm (21")
- 3b SHLG 2 - 635 mm (25")
- 3c SHLG 3 - 737 mm (29")
- 4a SHLG 1 - 216 mm (8 1/2")
- 4b SHLG 2 - 292 mm (11 1/2")
- 4c SHLG 3 - 368 mm (14 1/2")
- 5 14 mm (9/16") Diameter Mounting Holes
- 6a SHLG 1 - 222 mm (8 3/4")
- 6b SHLG 2 - 222 mm (8 3/4")
- 6c SHLG 3 - 311 mm (12 1/4")
- 7a SHLG 1 - 254 mm (10")
- 7b SHLG 2 - 254 mm (10")
- 7c SHLG 3 - 356 mm (14")
- 8 1/4" (6 mm) Padlock Hole
- 9a SHLG 1 - 76 mm (3") Travel
- 9b SHLG 2 - 102 mm (4") Travel
- 9c SHLG 3 - 127 mm (5") Travel
- 10 Collimation Angle
- 11a SHLG 1 - 203 mm (8")
- 11b SHLG 2 - 248 mm (9 3/4")
- 11c SHLG 3 - 308 mm (12 1/8")

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.

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.