

SR

Rotary Shutter Source Holders



Application Area

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

- Chemical
- Mining
- Petrochemical
- Plastics
- Power
- Pulp and Paper
- Refining

Advantages

Recognizable benefits include:

- Lockable shutter mechanism
- Corrosion resistant polyester powder coating
- Available with General License (United States only)
- Wide range of accessories available
- Stainless steel housing (optional)

Function

The SR source holders are a component of a density or point 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

- SR-A	3.7 GBq (100 mCi) for 50 uSv@305 mm (5 mR/hr@12")
- SR-1A	55.5 GBq (1.5 Ci) for 50 uSv@305 mm (5 mR/hr@12")
- SR-2	185 GBq (5 Ci) for 50 uSv@305 mm (5 mR/hr@12")

Maximum Co-60

Activity

- SR-A	111 MBq (3 mCi) for 50 uSv@305 mm (5 mR/hr@12")
- SR-1A	555 MBq (15 mCi) for 50 uSv@305 mm (5 mR/hr@12")
- SR-2	11.5 GBq (30 mCi) for 50 uSv@305 mm (5 mR/hr@12")

Fire Resistance

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

Handle/Shutter

Rotary

Collimation Angle

0°

Temperature

-40 ... +60 °C (-40 ... +140 °F)

Weight

- SR-A	25 kg (56 lbs.)
- SR-1A	56 kg (124 lbs.)
- SR-2	108 kg (238 lbs.)

Materials

The shielding material is lead. The shutter shaft is stainless steel.

Housing Versions

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

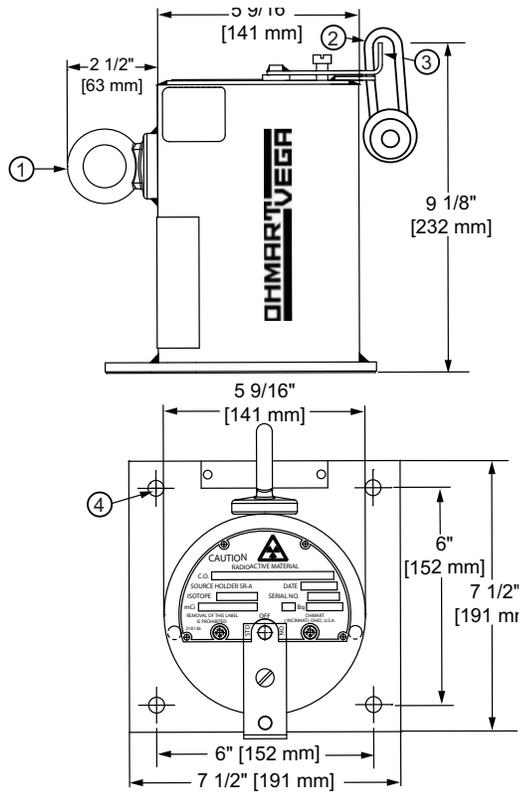
Approvals

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

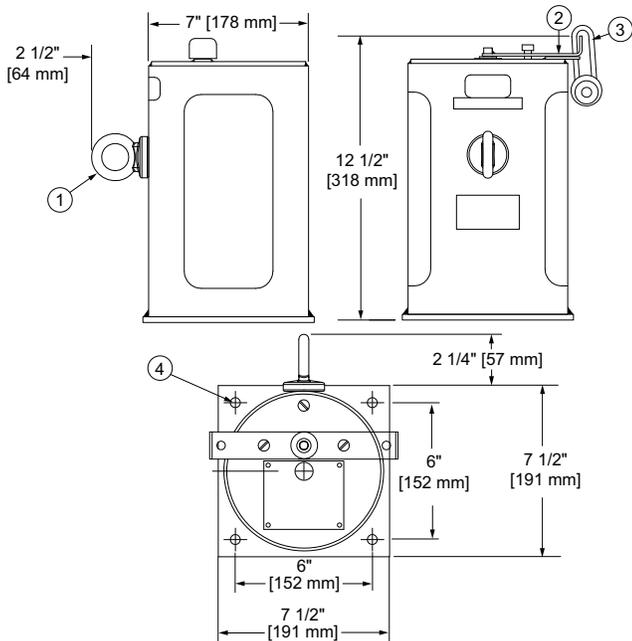
The SR source holders are used to position and protect a radioactive source near a process vessel or pipe. Radiation from the source is directed through the process by an integral collimator. A radiation detector placed opposite the source holder measures radiation fluctuations caused by process condition changes. The detector correlates radiation levels to process conditions.

Dimensions



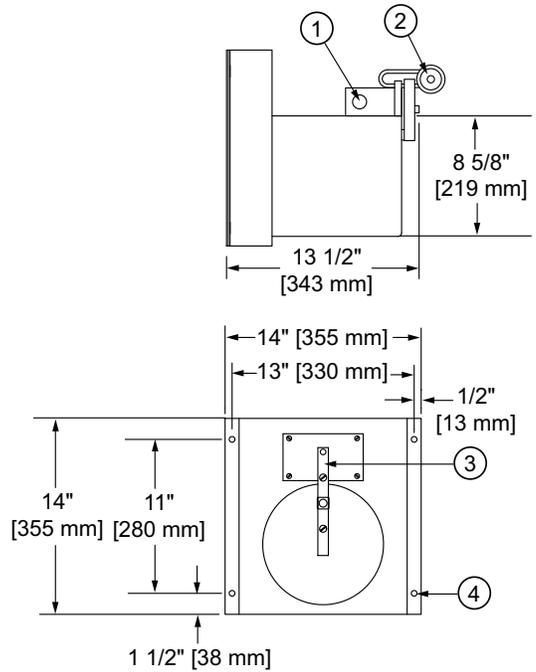
SR-A

- 1 Lifting Eye
- 2 Locking Mechanism
- 3 Handle
- 4 11 mm (7/16") Diameter Mounting Holes



SR-1A

- 1 Lifting Eye
- 2 Handle
- 3 Locking Mechanism
- 4 11 mm (7/16") Diameter Mounting Holes



SR-2

- 1 Lifting Eye
- 2 Locking Mechanism
- 3 Handle
- 4 10 mm (13/32") Diameter Mounting Holes

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.