

# SHLM CR

## Single Point Insertion Source Holder



### Application Area

The SHLM CR source holder is designed for radiation-based measurement of applications including density, interface, and continuous and point level. The most common industries for the SHLM CR include:

- Chemical
- Petrochemical
- Offshore
- Refining

### Advantages

Recognizable benefits include:

- Rugged construction for harsh environments
- Standard ANSI flange for easy drywell mounting
- Convenient lifting lugs facilitate installation

### Function

The SHLM CR source holder is used for critically high pressure applications when the vessel walls are too thick for other sources. The SHLM CR source holder uses a stainless steel cable actuator to place a source inside the vessel by way of a dry well.

### Technical Data

#### Maximum Cs-137 Activity

- SHLM CR1	3.7 GBq (100 mCi) for 50 uSv@305 mm (5mR/hr@12")
- SHLM CR2	37 GBq (1000 mCi) for 50 uSv@305 mm (5mR/hr@12")
- SHLM CR3	185 GBq (5000 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM CR4	370 GBq (10000 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM CR4A	370 GBq (10000 mCi) for 50 uSv@305mm (5mR/hr@12")

#### Maximum C0-60 Activity

- SHLM CR1	185 MBq (5 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM CR2	555 MBq (15 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM CR3	2.2 GBq (60 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM CR4	4.4 GBq (120 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM CR4A	376 GBq (1000 mCi) for 50 uSv@305mm (5mR/hr@12")

#### Fire Resistance

+538 °C (+1000 °F) for 5 minutes

#### Temperature

-40 ... +60 °C (-40 ... +140 °F)

#### Weight

- SHLM CR1	50 kg (110 lbs.)
- SHLM CR2	84 kg (185 lbs.)
- SHLM CR3	141 kg (310 lbs.)
- SHLM CR4	218 kg (480 lbs.)
- SHLM CR4A	235 kg (517 lbs)

### Materials

The shielding material is lead. The cable is either stainless steel, Hastelloy, or Inconel.

### Housing Versions

The housing is available in carbon steel with polyester powder coating. A stainless steel housing is also available.

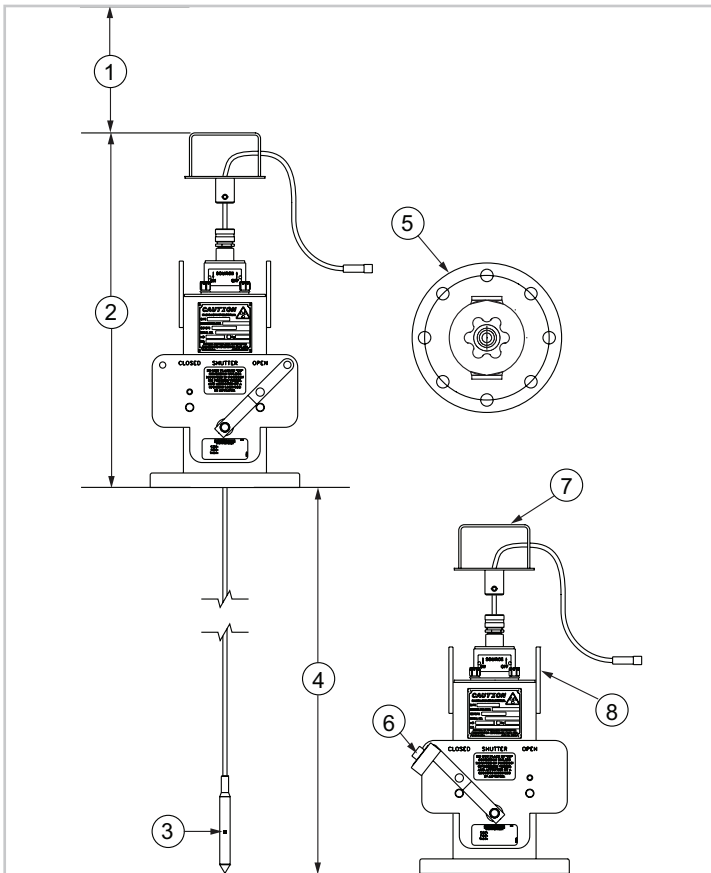
## Approvals

The source holder is 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

Licensed technicians are required in order to insert the source cable from the source holder into the drywell. Before inserting the cable, the technician must remove the locking mechanism.

## Dimensions



### SHLM CR

- 1 Recommended Clearance 500 mm (20")
- 2a Overall Length SHLM CR1 - 577 mm (22.7")
- 2b Overall Length SHLM CR2 - 584 mm (23.0")
- 2c Overall Length SHLM CR3 - 597 mm (23.5")
- 2d Overall Length SHLM CR4 - 610 mm (24.0")
- 3 Source Capsule
- 4 Insertion Length - Consult Factory
- 5a SHLM CR1 - 4" ANSI 150# Flange
- 5b SHLM CR2 - 6" ANSI 150# Flange
- 5c SHLM CR3 - 8" ANSI 150# Flange
- 5d SHLM CR4 - 10.0" ANSI 150# Flange
- 6 Locking Mechanism
- 7 Handle
- 8 Lifting Eye

## Information

You can find additional information about VEGA product offerings from our home page, [www.vega.com](http://www.vega.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.com](http://www.vega.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.*