

# SHLM BR and CR

## **Single Point Insertion Source Holders**



## **Application Area**

The SHLM BR and CR sourceholders are designed for radiation-based measurement of applications including density, interface, and continuous and point level. The most common industries for the SHLM BR and 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 BR and CR source holders are used for critically high pressure applications when the vessel walls are too thick for other sources. The SHLM BR and CR source holders use a stainless steel rod or cable actuator to place a source inside the vessel by way of a dry well.

Maximum Cs-137 Activity - SHLM BR1 & CR1	3.7 GBq (100 mCi) for 50 uSv@305 mm (5mR hr@12")
- SHLM BR2 & CR2	37 GBq (1000 mCi) for 50 uSv@305 mm (5mR/hr@12")
- SHLM BR3 & CR3	185 GBq (5000 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM BR4 & CR4	370 GBq (10000 mCi) for 50 uSv@305mm (5mR/hr@12")

#### **Maximum C0-60 Activity**

- SHLM BR1 & CR1	185 MBq (5 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM BR2 & CR2	555 MBq (15 mCi) for 50 uSv@305mm (5mR/hr@12")
- SHLM BR3 & CR3	2.2 GBq (60 mCi) for 50 uSv@305mm (5mR/ hr@12")
- SHLM BR4 & CR4	4.4 GBq (120 mCi) for 50 uSv@305mm (5mR/hr@12")

-40 ... +60 °C (-40 ... +140 °F)

## Fire Resistance +538 °C (+1000 °F) for 5 minutes

## Weight

**Temperature** 

- SHLM BR1 & CR1	50 kg (110 lbs.)
- SHLM BR2 & CR2	84 kg (185 lbs.)
- SHLM BR3 & CR3	141 kg (310 lbs.)
- SHI M BR4 & CR4	218 kg (480 lbs.)

#### **Materials**

The shielding material is lead. The cable/rod is stainless steel.

## **Housing Versions**

The housing is available in carbon steel with polyester powder coating. Stainless steel housings are also available.

### **Approvals**

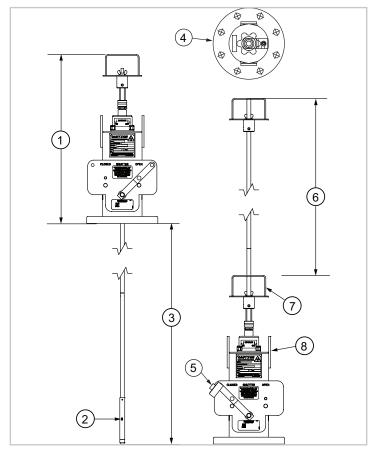
The source holders are regulated by the U.S. Nuclear Regulatory Commission (NRC). Compliance certificates are issued by the State of Ohio under an agreement with the NRC.



### Operation

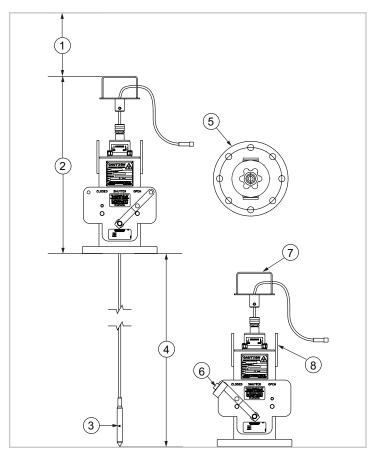
Licensed technicians must complete the insertion of the source rod or cable for the source holders. Before inserting the rod or cable, the technician must remove the locking mechanism and upon completing the insertion, the technician must secure the rod or cable in the open position with the provided screw.

### **Dimensions**



#### SHLM BR

- 1a Overall Length SHLM BR1 546 mm (21 1/2")
- 1b Overall Length SHLM BR2 552 mm (21 3/4")
- 1c Overall Length SHLM BR3 562 mm (22 1/8")
- 1d Overall Length SHLM BR4 556 mm (21 7/8")
- 2 SourceCapsule
- 3 Insertion Length Consult Factory
- 4a SHLM BR1 4" ANSI 150# Flange
- 4b SHLM BR2 6" ANSI 150# Flange
- 4c SHLM BR3 8" ANSI 150# Flange
- 4c SHLM BR4 292 mm (11 1/2" O.D.) with ANSI 3" 150# Tapped Holes
- 5 Locking Mechanism
- 6 Travel Allow Insertion Length + 300 mm (12") Clearance
- 7 Handle
- 8 Lifting Eye



#### SHLM CR

- 1 Recommended Clearance 500 mm (20")
- 2a Overall Length SHLM CR1 546 mm (21 1/2")
- 2b Overall Length SHLM CR2 552 mm (21 3/4")
- 2c Overall Length SHLM CR3 562 mm (22 1/8")
- 2d Overall Length SHLM CR4 556 mm (21 7/8")
- 4a SHLM CR1 4" ANSI 150# Flange
- 4b SHLM CR2 6" ANSI 150# Flange
- 4c SHLM CR3 8" ANSI 150# Flange
- 4d SHLM CR4 292 mm (11 1/2" O.D.) with ANSI 3" 150# Tapped Holes
- 5 Locking Mechanism
- 6 Handle
- 7 Lifting Eye

## Information

You can find additional information about VEGA product offerings from our home page, 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 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.