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.

Technical Data

<table>
<thead>
<tr>
<th>Maximum Cs-137 Activity</th>
<th>Maximum C0-60 Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHLM BR1 &amp; CR1</strong></td>
<td>3.7 GBq (100 mCi) for 50 uSv@305 mm (5mR/hr@12&quot;)</td>
</tr>
<tr>
<td><strong>SHLM BR2 &amp; CR2</strong></td>
<td>37 GBq (1000 mCi) for 50 uSv@305 mm (5mR/hr@12&quot;)</td>
</tr>
<tr>
<td><strong>SHLM BR3 &amp; CR3</strong></td>
<td>185 GBq (5000 mCi) for 50 uSv@305mm (5mR/hr@12&quot;)</td>
</tr>
<tr>
<td><strong>SHLM BR1 &amp; CR1</strong></td>
<td>185 MBq (5 mCi) for 50 uSv@305mm (5mR/hr@12&quot;)</td>
</tr>
<tr>
<td><strong>SHLM BR2 &amp; CR2</strong></td>
<td>555 MBq (15 mCi) for 50 uSv@305mm (5mR/hr@12&quot;)</td>
</tr>
<tr>
<td><strong>SHLM BR3 &amp; CR3</strong></td>
<td>2.2 GBq (60 mCi) for 50 uSv@305mm (5mR/hr@12&quot;)</td>
</tr>
</tbody>
</table>

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

Temperature: -40 ... +60 °C (-40 ... +140 °F)

Weight

- **SHLM BR1 & CR1**: 25 kg (56 lbs.)
- **SHLM BR2 & CR2**: 44 kg (96 lbs.)
- **SHLM BR3 & CR3**: 394 kg (208 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 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

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. Source Capsule
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
4d. 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

**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.