



## Radiation-Based Measurement

### Source Holders

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**SHLD1**

The SHLD series source holder meets the needs of nearly all Density, Point Level and Continuous Level applications. Its lead shielding maximizes source activity while limiting size and weight. The SHLD is well-suited for applications in the chemical manufacturing and oil refining industries. SHLD features a lockable rotary shutter and may be provided with a variety of accessories including shutter automation and interlocks.



**Basic Price**

**Source Activity Size**

<b>N000</b>	No source capsule .....
<b>A001</b>	1 mCi / 37 MBq (Cs-137) .....
<b>A002</b>	2 mCi / 74 MBq (Cs-137) .....
<b>A003</b>	3 mCi / 111 MBq (Cs-137) .....
<b>A005</b>	5 mCi / 185 MBq (Cs-137) .....
<b>A007</b>	7 mCi / 259 MBq (Cs-137) .....
<b>A010</b>	10 mCi / 370 MBq (Cs-137) .....
<b>A015</b>	15 mCi / 555 MBq (Cs-137) .....
<b>A020</b>	20 mCi / 740 MBq (Cs-137) .....
<b>A030</b>	30 mCi / 1.11 GBq (Cs-137) .....
<b>A050</b>	50 mCi / 1.85 GBq (Cs-137) .....
<b>A070</b>	70 mCi / 2.59 GBq (Cs-137) .....
<b>A100</b>	100 mCi / 3.7 GBq (Cs-137) .....
<b>A150</b>	150 mCi / 5.55 GBq (Cs-137) .....
<b>A200</b>	200 mCi / 7.4 GBq (Cs-137) .....

**Source Holder Construction**

<b>A</b>	Low Carbon Steel w/Polyester powder coating .....
<b>C</b>	316L Stainless Steel .....

**Collimation Angle / Direction**

<b>A</b>	0° .....
<b>B</b>	15° (horizontal down) .....
<b>C</b>	30° (horizontal down) .....
<b>D</b>	45° (horizontal down) .....
<b>E</b>	60° (30° above and below horizontal) .....

**Shutter Control**

<b>1</b>	Standard Manual Lever .....
<b>2</b>	Air Actuator .....
<b>3</b>	Electric Actuator - 24VDC .....
<b>4</b>	Electric Actuator - 110VAC 60Hz .....
<b>5</b>	Electric Actuator - 240VAC 50Hz .....

**Electrical Contact Switch (for remote indication)**

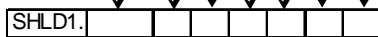
<b>X</b>	Without .....
<b>A</b>	Explosion Proof On/Off Limit Switch .....
<b>B</b>	General Purpose On/Off Limit Switch .....

**Interlock**

<b>X</b>	Without .....
<b>1</b>	Required <sup>1)</sup> .....

**Additional Equipment**

<b>X</b>	Without .....
<b>A</b>	Captive lock lanyard .....



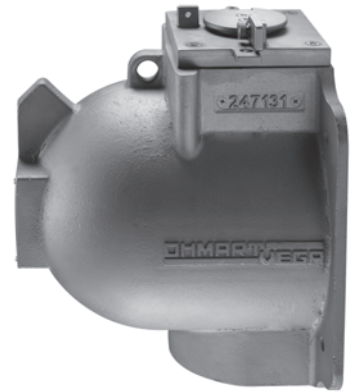
Example: SHLD1.A030CA1XXX

<sup>1)</sup> Includes interlock mounting hardware - lock not included



**SHLD2**

The SHLD series source holder meets the needs of nearly all Density, Point Level and Continuous Level applications. Its lead shielding maximizes source activity while limiting size and weight. The SHLD is well-suited for applications in the chemical manufacturing and oil refining industries. SHLD features a lockable rotary shutter and may be provided with a variety of accessories including shutter automation and interlocks.



**Basic Price**

**Source Activity Size**

<b>N000</b>	No source capsule .....
<b>A001</b>	1 mCi / 37 MBq (Cs-137) .....
<b>A002</b>	2 mCi / 74 MBq (Cs-137) .....
<b>A003</b>	3 mCi / 111 MBq (Cs-137) .....
<b>A005</b>	5 mCi / 185 MBq (Cs-137) .....
<b>A007</b>	7 mCi / 259 MBq (Cs-137) .....
<b>A010</b>	10 mCi / 370 MBq (Cs-137) .....
<b>A015</b>	15 mCi / 555 MBq (Cs-137) .....
<b>A020</b>	20 mCi / 740 MBq (Cs-137) .....
<b>A030</b>	30 mCi / 1.11 GBq (Cs-137) .....
<b>A050</b>	50 mCi / 1.85 GBq (Cs-137) .....
<b>A070</b>	70 mCi / 2.59 GBq (Cs-137) .....
<b>A100</b>	100 mCi / 3.7 GBq (Cs-137) .....
<b>A150</b>	150 mCi / 5.55 GBq (Cs-137) .....
<b>A200</b>	200 mCi / 7.4 GBq (Cs-137) .....
<b>A300</b>	300 mCi / 11.1 GBq (Cs-137) .....
<b>A400</b>	400 mCi / 14.8 GBq (Cs-137) .....
<b>A500</b>	500 mCi / 18.5 GBq (Cs-137) .....
<b>A750</b>	750 mCi / 27.75 GBq (Cs-137) .....
<b>A01K</b>	1000 mCi / 37 GBq (Cs-137) .....
<b>A1K6</b>	1600 mCi / 59.2 GBq (Cs-137) .....
<b>A02K</b>	2000 mCi / 74 GBq (Cs-137) .....
<b>A03K</b>	3000 mCi / 111 GBq (Cs-137) .....
<b>A04K</b>	4000 mCi / 148 GBq (Cs-137) .....
<b>A05K</b>	5000 mCi / 185 GBq (Cs-137) .....

**Source Holder Construction**

- A** Low Carbon Steel w/Polyester powder coating .....
- C** 316L Stainless Steel .....

**Collimation Angle / Direction**

- A** 0° .....
- B** 15° (horizontal down) .....
- C** 30° (horizontal down) .....
- D** 45° (horizontal down) .....
- E** 60° (30° above and below horizontal) .....

**Shutter Control**

- 1** Standard Manual Lever .....
- 2** Air Actuator .....
- 3** Electric Actuator - 24VDC .....
- 4** Electric Actuator - 110VAC 60Hz .....
- 5** Electric Actuator - 240VAC 50Hz .....

**Electrical Contact Switch (for remote indication)**

- X** Without .....
- A** Explosion Proof On/Off Limit Switch .....
- B** General Purpose On/Off Limit Switch .....

**Interlock**

- X** Without .....
- 1** Required<sup>1)</sup> .....

**Additional Equipment**

- X** Without .....
- A** Captive lock lanyard .....



Example: SHLD2.A750CD1XXX

<sup>1)</sup> Includes interlock mounting hardware - lock not included



**SHF**

The SH-F series source holder features a lead-free "Fireproof" design. It is well-suited for a wide variety of applications especially in the chemical manufacturing and oil refining industries. The SH-F features a lockable rotary shutter and may be provided with a variety of accessories including shutter automation and interlocks.



**Basic Price**

**Model**

<b>SHF1A-</b>	SHF1A <sup>1)</sup>	.....
<b>SHF1B-</b>	SHF1B <sup>2)</sup>	.....
<b>SHF2-</b>	SHF2 <sup>3)</sup>	.....
<b>SHF2B-</b>	SHF2B <sup>4)</sup>	.....
<b>SHF2C-</b>	SHF2C <sup>5)</sup>	.....

**Cs-137**

<b>000-</b>	No Source	.....
<b>001-</b>	1 mCi / 0.037 GBq	.....
<b>002-</b>	2 mCi / 0.074 GBq	.....
<b>003-</b>	3 mCi / 0.111 GBq	.....
<b>005-</b>	5 mCi / 0.19 GBq	.....
<b>007-</b>	7 mCi / 0.259 GBq	.....
<b>010-</b>	10 mCi / 0.37 GBq	.....
<b>015-</b>	15 mCi / 0.555 GBq	.....
<b>020-</b>	20 mCi / 0.74 GBq	.....
<b>030-</b>	30 mCi / 1.11 GBq	.....
<b>050-</b>	50 mCi / 1.85 GBq	.....
<b>070-</b>	70 mCi / 2.59 GBq	.....
<b>100-</b>	100 mCi / 3.7 GBq	.....
<b>150-</b>	150 mCi / 5.55 GBq	.....
<b>200-</b>	200 mCi / 7.4 GBq	.....
<b>300-</b>	300 mCi / 11.1 GBq	.....
<b>400-</b>	400 mCi / 14.8 GBq	.....
<b>500-</b>	500 mCi / 18.5 GBq	.....
<b>750-</b>	750 mCi / 27.8 GBq	.....
<b>01K-</b>	1000 mCi / 37 GBq	.....
<b>1K6-</b>	1600 mCi / 59.2 GBq	.....
<b>02K-</b>	2000 mCi / 74 GBq	.....

**Collimation Angle**

<b>00</b>	0 degrees	.....
<b>30</b>	30 degrees	.....
<b>45</b>	45 degrees	.....
<b>60</b>	60 degrees	.....
<b>75</b>	75 degrees	.....

**Housing Material**

<b>D-</b>	Cast iron w/Blue Polyester powder coating	.....
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**Options (3 Fields Required)**

<b>X</b>	No options	.....
<b>A</b>	Air Actuated Shutter	.....
<b>B</b>	Electric Actuated Shutter	.....
<b>C</b>	Ex-Proof On/Off Limit Switch	.....
<b>D</b>	General Purpose On/Off Limit Switch	.....
<b>G</b>	Interlock Mounting Hardware Kit <sup>6)</sup>	.....
<b>H</b>	Captive Lock with Lanyard	.....
<b>K</b>	Source Retaining Security Plate	.....
<b>L</b>	Yellow Epoxy powder coating	.....
<b>M</b>	Magenta Epoxy powder coating	.....

**Label**

<b>-0</b>	Standard Brady label	.....
<b>-3</b>	Engraved 316SS label	.....

**Packing**

<b>0</b>	Cardboard Box/Open Skid	.....
<b>1</b>	Closed Wood crate	.....
<b>2</b>	Sealed Wood crate	.....



Example: SHF1A-010-45D-XXX-00

<sup>1)</sup> Max 50 mCi (1.85 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>2)</sup> Max 100 mCi (3.7 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>3)</sup> Max 500 mCi (18.5 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>4)</sup> Max 1000 mCi (37 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>5)</sup> Max 2000 mCi (74 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>6)</sup> Interlock(s) not included



**SHGL**

The SHGL series source holder features a lead-free "Fireproof" design. Compact and lightweight, it is well-suited for a wide variety of applications when "low-level" sources are suitable. The SHGL features 304 stainless steel construction.



**Model**

**Basic Price**

Cs-137 <sup>1)</sup>

- 000- No Source .....
- 001- 1 mCi / 0.0037 GBq .....
- 002- 2 mCi / 0.074 GBq .....

**Collimation Angle**

- 00 0 degrees .....
- 10 10 degrees .....
- 30 30 degrees .....

**Housing Material**

- B- 304SST (standard) .....
- C- 316SST .....

**Options (3 Fields Required)**

- X No options .....

**Label**

- 0 Standard Brady label .....
- 3 Engraved 316SS label .....

**Packing**

- 0 Cardboard Box/Open Skid .....
- 1 Closed Wood crate .....
- 2 Sealed Wood crate .....



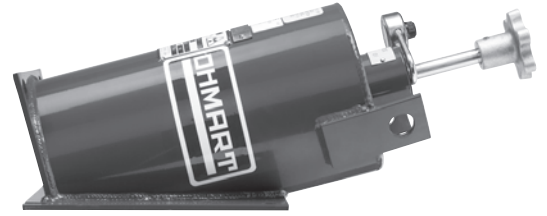
Example: SHGL-002-00B-XXX-00

<sup>1)</sup>Max 2 mCi (0.074 GBq) for 2 mR/hr @ 12" (20 µSv/hr @ 30 cm)



**SHLG**

The SHLG series source holder features lead shielding to provide maximum source activity for a variety of applications. The SHLG features a lockable push-pull shutter and may be provided with accessories including shutter automation and interlocks.



**Basic Price**

Model Type	Basic Price
SHLG1- SHLG1 <sup>1)</sup> .....	
SHLG2- SHLG2 <sup>2)</sup> .....	
SHLG3- SHLG3 <sup>3)</sup> .....	
<b>Cs-137</b>	
000- No Source .....	
001- 1 mCi / 0.037 GBq .....	
002- 2 mCi / 0.074 GBq .....	
003- 3 mCi / 0.111 GBq .....	
005- 5 mCi / 0.19 GBq .....	
007- 7 mCi / 0.259 GBq .....	
010- 10 mCi / 0.37 GBq .....	
015- 15 mCi / 0.555 GBq .....	
020- 20 mCi / 0.74 GBq .....	
030- 30 mCi / 1.11 GBq .....	
050- 50 mCi / 1.85 GBq .....	
070- 70 mCi / 2.59 GBq .....	
100- 100 mCi / 3.7 GBq .....	
150- 150 mCi / 5.55 GBq .....	
200- 200 mCi / 7.4 GBq .....	
300- 300 mCi / 11.1 GBq .....	
400- 400 mCi / 14.8 GBq .....	
500- 500 mCi / 18.5 GBq .....	
750- 750 mCi / 27.8 GBq .....	
01K- 1000 mCi / 37 GBq .....	
1K6- 1600 mCi / 59.2 GBq .....	
02K- 2000 mCi / 74 GBq .....	
03K- 3000 mCi / 111 GBq .....	
04K- 4000 mCi / 148 GBq .....	
05K- 5000 mCi / 185 GBq .....	
06K- 6000 mCi / 222 GBq .....	
07K- 7000 mCi / 259 GBq .....	
08K- 8000 mCi / 296 GBq .....	
10K- 10000 mCi / 370 GBq .....	
<b>Collimation Angle</b>	
00 0 degrees .....	
15 15 degrees .....	
30 30 degrees .....	
45 45 degrees .....	
<b>Housing Material</b>	
A- Low carbon steel w/Blue Polyester powder coating.....	
C- 316SST for SHLG-1 .....	
C- 316SST for SHLG-2 .....	
C- 316SST for SHLG-3 .....	
<b>Options (3 Fields Required)</b>	
X No options .....	
A Air Actuated Shutter .....	
C Ex-Proof On/Off Limit Sw itch .....	
D General Purpose On/Off Limit Sw itch .....	
G Interlock Mounting Hardw are Kit <sup>4)</sup> .....	
H Captive Lock w ith Lanyard .....	
J Source Holder Post Collimator .....	
L Yellow Polyester powder coating .....	
M Magenta Polyester powder coating .....	
<b>Label</b>	
-0 Standard Brady label .....	
-3 Engraved 316SS label .....	
<b>Packing</b>	
0 Cardboard Box/Open Skid .....	
1 Closed Wood crate .....	
2 Sealed Wood crate .....	



Example: SHLG1-01K-45A-XXX-00

<sup>1)</sup> Max 2K mCi (74 GBq) 5 mR/hr @ 12" (50 µSv/hr @ 30 cm)  
<sup>2)</sup> Max 8K mCi (296 GBq) 5 mR/hr @ 12" (50 µSv/hr @ 30 cm)  
<sup>3)</sup> Max 10K mCi (370 GBq) 5 mR/hr @ 12" (50 µSv/hr @ 30 cm)  
<sup>4)</sup> Interlock(s) not included





**Basic Price**

**Model Type**

- SRA- SRA <sup>1)</sup> .....
- SR1A- SR1A <sup>2)</sup> .....
- SR2- SR2 <sup>3)</sup> .....

**Cs-137**

- 000- No Source .....
- 001- 1 mCi / 0.037 GBq .....
- 002- 2 mCi / 0.074 GBq .....
- 003- 3 mCi / 0.111 GBq .....
- 005- 5 mCi / 0.19 GBq .....
- 007- 7 mCi / 0.259 GBq .....
- 010- 10 mCi / 0.37 GBq .....
- 015- 15 mCi / 0.555 GBq .....
- 020- 20 mCi / 0.74 GBq .....
- 030- 30 mCi / 1.11 GBq .....
- 050- 50 mCi / 1.85 GBq .....
- 070- 70 mCi / 2.59 GBq .....
- 100- 100 mCi / 3.7 GBq .....
- 150- 150 mCi / 5.55 GBq .....
- 200- 200 mCi / 7.4 GBq .....
- 300- 300 mCi / 11.1 GBq .....
- 400- 400 mCi / 14.8 GBq .....
- 500- 500 mCi / 18.5 GBq .....
- 750- 750 mCi / 27.8 GBq .....
- 01K- 1000 mCi / 37 GBq .....
- 1K6- 1600 mCi / 59.2 GBq .....
- 02K- 2000 mCi / 74 GBq .....
- 03K- 3000 mCi / 111 GBq .....
- 04K- 4000 mCi / 148 GBq .....
- 05K- 5000 mCi / 185 GBq .....

**Collimation Angle**

- 00 0 degrees .....

**Housing Material**

- A- Low carbon steel w/Blue Polyester powder coating .....
- C- 316SS .....

**Options (3 Fields Required)**

- X No options .....
- A Air Actuated Shutter .....
- B Electric Actuated Shutter .....
- C Ex-Proof On/Off Limit Switch .....
- D General Purpose On/Off Limit Switch .....
- G Interlock Mounting Hardware Kit <sup>4)</sup> .....
- H Captive Lock with Lanyard .....
- L Yellow Polyester powder coating .....
- M Magenta Polyester powder coating .....

**Label**

- 0 Standard Brady label .....
- 3 Engraved 316SS label .....

**Packing**

- 0 Cardboard Box/Open Skid .....
- 1 Closed Wood crate .....
- 2 Sealed Wood crate .....



Example: SRA-010-00A-XXX-00

<sup>1)</sup> Max 100 mCi (3.7 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>2)</sup> Max 1000 mCi (37 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>3)</sup> Max 5000 mCi (185 GBq) for 5 mR/hr @ 12" (50 µSv/hr @ 30cm)  
<sup>4)</sup> Interlock(s) not included



**SHLM**

The SHLM series source holder provides means for inserting sources into vessels (via drywells) to meet the most demanding applications. The SHLM's steel construction and lead shielding are suitable for a wide variety of industrial applications including reactor vessels. It is available with both cable and rod drive mechanisms. The SHLM can be configured to direct radiation "axially" or "perpendicularly."





## Accessories, Software and Spare Parts - Source Holders

### Survey Meters:

- 240940 Model 2402 general purpose survey meter w ith GM probe and 1m cable  
240943 Model 2402 general purpose survey meter w ith Scintillator probe and 1m cable  
245644 General purpose digital survey meter

### Leak Test Kit:

- 229555 Leak Test Kit for one source holder. Includes sw ab, shipping container, instructions, analysis, report.

### Manuals:

- Additional copies of manuals on CD  
Additional copies of paper manuals

### Signage:

- 238911 "Caution Radioactive Materials" w arning sign: 7" x 10" (178mm x 254mm), plastic  
Suitable for voluntary identification of radioactive material.  
Not intended for regulated notification of high radiation areas identified during surveys.

