

SHIELD WITH ELECTRICALLY OPERATED SHUTTER LB 7488-1

Technical Information

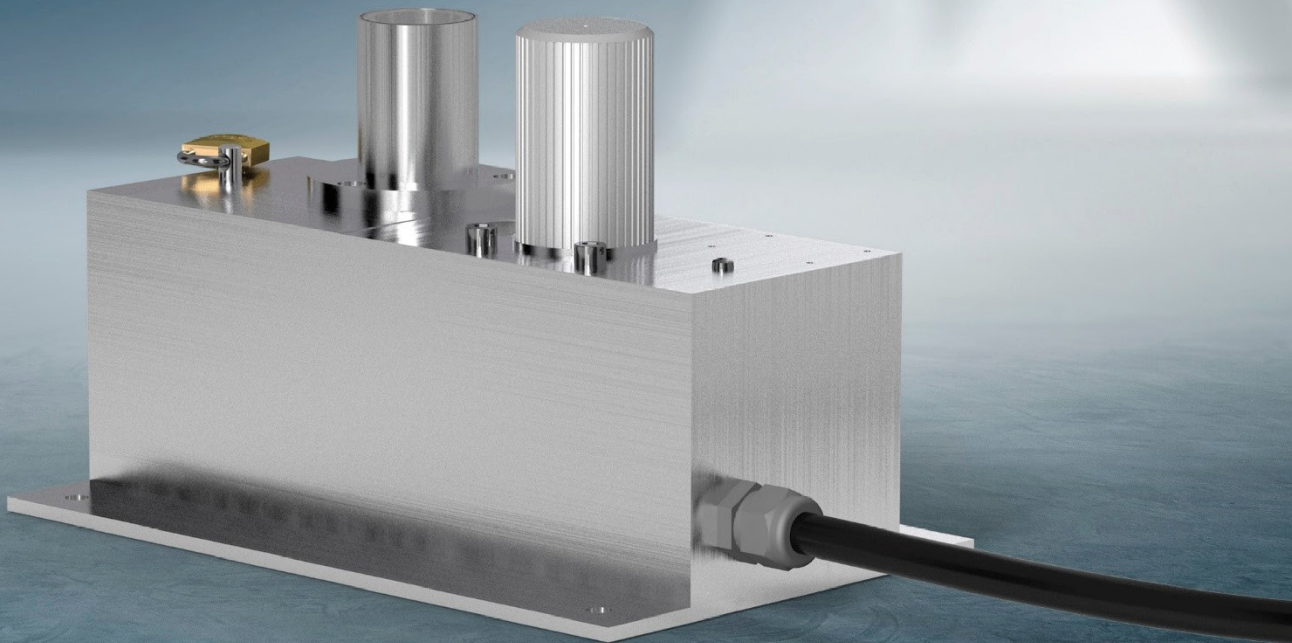


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1. Maximum permissible activity during transport

The activities indicated here are the maximum activities with which the individual shields can be loaded according to the international dose rate limit for the transport of radioactive substances. (Dose rate limits according to IATA-DGR, 2000 $\mu\text{Sv/h}$ at the surface and 100 $\mu\text{Sv/h}$ at a distance of one meter from the surface of the package).

Shield model	Maximum activity (Am-241)	
26150	48 Ci	1.776.000MBq
Theoretically calculated values		

NOTICE



National dose rate limits for the operation of measurement systems are usually significantly lower and only allow loading with significantly lower activities. The national provisions must be complied with.

2. Ambient conditions

Technical Data	
Area of application	suitable for indoor use
Operating, Storage and transport temperature	0...+70°C (32...+158°F)
Temperature during assembly	0...+70°C (32...+158°F)
Ambient pressure	Atmospheric pressure
Fireproof	IEC 62598 Fire resistance class N
	The Am-241 sources currently in use have a maximum activity of 300mCi. Even when unshielded, this results in a maximum dose rate of approx. 0.04mSv/h at 1m. This ensures that the requirement from IEC 62598 of <10mSv/h at 1m is met due to the nuclide and the activity used.

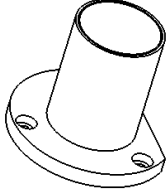
3. Technical data

Technical Data	
Housing material	Brass, nickel-plated
Material shield	Lead
Dimensions	See dimension drawing (following pages)
Weight (approx..)	8 kg (18 lbs)
Radiation beam outlet	approx. 34°
Radiation beam outlet with collimator	approx. 14°
Type of radioactive capsule used	Am1.G22, ISO 2919 classification 64546 Am1.G11, ISO 2919 classification 64546
Safety facility	Securing screws, key-operated locking bolt and padloc

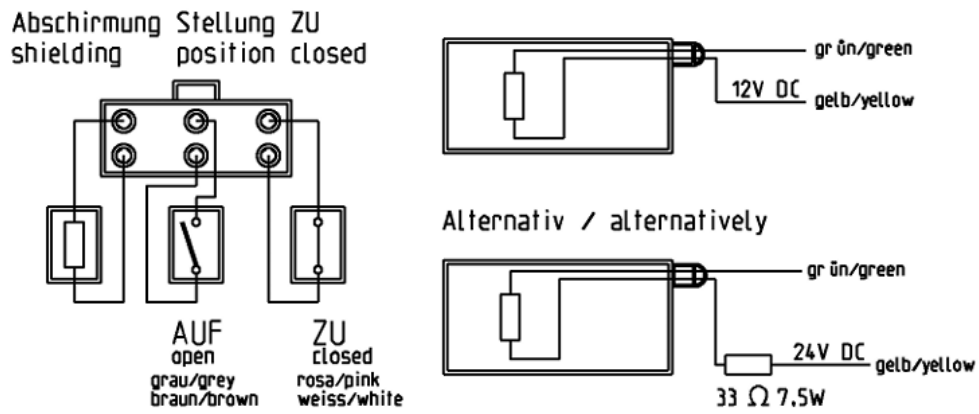
3.1. Required source holder

Mat.-No.	Description
23091	for 300mCi - Am-241 sources
23090	for 100mCi and 30mCi - Am-241 sources

3.2. Part Overview

Mat.-No.	Description
27876	Shielding container collimator 

3.4. Wiring Diagramm



Max. Belastung der Reed Relais / max. loading of the read relais
 I_{max}: 0.5A, U_{max}: 24VDC, P_{max}: 10W

3.5. Declarations of conformity



BERTHOLD TECHNOLOGIES GmbH & Co. KG
 Calmbacher Straße 22
 75323 Bad Wildbad, Germany
 Phone +49 7081 177-0
 Fax +49 7081 177-100
 info@Berthold.com
 www.Berthold.com

EU-Konformitätserklärung

EU-Declaration of Conformity

Nr./No.: CE20047-01

Hiermit erklären wir in alleiniger Verantwortung, dass die Bauart der nachfolgend bezeichneten Anlage, in der von uns in den Verkehr gebrachten Ausführung den unten genannten einschlägigen Harmonisierungsvorschriften der EU entspricht.

Durch nicht mit uns abgestimmte Änderungen oder nicht bestimmungsgemäßen Gebrauch verliert diese Erklärung ihre Gültigkeit

We hereby declare, under our sole responsibility, that the design of the following unit placed on the market by us complies with the relevant harmonized rules of the EU.

Unauthorized modifications or unintended use of the product makes this declaration invalid

Hersteller
 Manufacturer

BERTHOLD TECHNOLOGIES GmbH & Co. KG
 Calmbacher Str. 22, D-75323 Bad Wildbad, Germany

Produktbezeichnung
 Product name

Abschirmbehälter mit elektrischer Verschiebung
Shielding container with electric locking

Typenbezeichnung / Modell
 Type / model

LB 7488

Richtlinie/Verordnung directive/regulation		angewendete Normen applied standards
Maschinenrichtlinie Machinery directive	2006/42/EU	EN ISO 12100:2010
EMV-Richtlinie EMC Directive	2014/30/EU	EN IEC 61326-1:2021
RoHS	2011/65/EU	

Diese Erklärung wird in Verantwortung für den Hersteller ausgestellt durch
 This declaration is issued by the manufacturer released by

Bad Wildbad, 15.09.2025

Ort und Datum
 Place and date


 Dr. Jürgen Briggmann

Leiter F&E
 Head of R&D

Registergericht / Court of Registration	Stuttgart HRA 330991
Persönlich haftende Gesellschafterin / Fully liable Associates	Berthold Technologies Verwaltungs-GmbH
Registergericht / Court of Registration	Stuttgart HRB 331520
Geschäftsführung / Management	Christian Stöckl
USt-Id-Nr. / VAT Reg. No.	DE813050511
Deutsche Steuernummer / German Tax No.	49038/08038
WEEE-Reg. No.	DE99468690
Sparkasse Pforzheim-Calw	DE37 6665 0085 0008 0450 03 PZHSDE66XXX
Volksbank pur eG	DE37 6619 0000 0029 1282 51 GENODE61KA
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