



U.S. Department
of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0673/S-96, REVISION 3**

East Building, PHH-23
1200 New Jersey Avenue Southeast
Washington, D.C. 20590

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Models XN30/0, XN30/1, and XN30/2 (All models manufactured on or after May 22, 1980).
2. Source Description - Cylindrical single encapsulations made of stainless steel and tungsten inert gas or laser seal welded. Approximate exterior dimensions are 6.0 mm (0.24 in.) in diameter and 10.3 mm (0.41 in.) in length. Minimum wall thickness is 0.47 mm (0.02 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA10251, Rev. A (2 pages).
3. Radioactive Contents - No more than either 4.44 GBq (120.0 mCi) of Cesium-137 (Model XN30/0), or 18.5 GBq (500.0 mCi) of Americium-241 (Model XN30/1), or 18.5 MBq (500.0 uCi) of Cobalt-60 (Model XN30/2). The Cs-137 is either chemically bonded within a borosilicate glass polymer or is in the form of a solid resin bead. The Am-241 is in the form of an oxide mixed with a beryllium powder that is then pressed into a solid pellet. The Co-60 is in the form of a metal.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires on November 30, 2018.

¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

CERTIFICATE USA/0673/S-96, REVISION 3

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the December 03, 2013 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

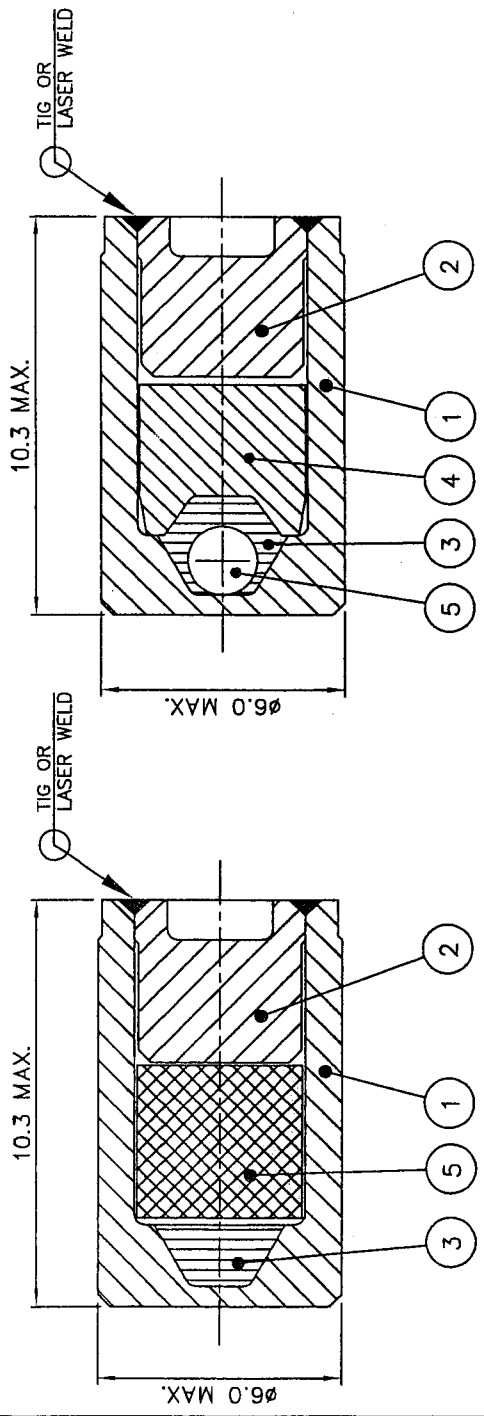


Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Dec 17 2013
(DATE)

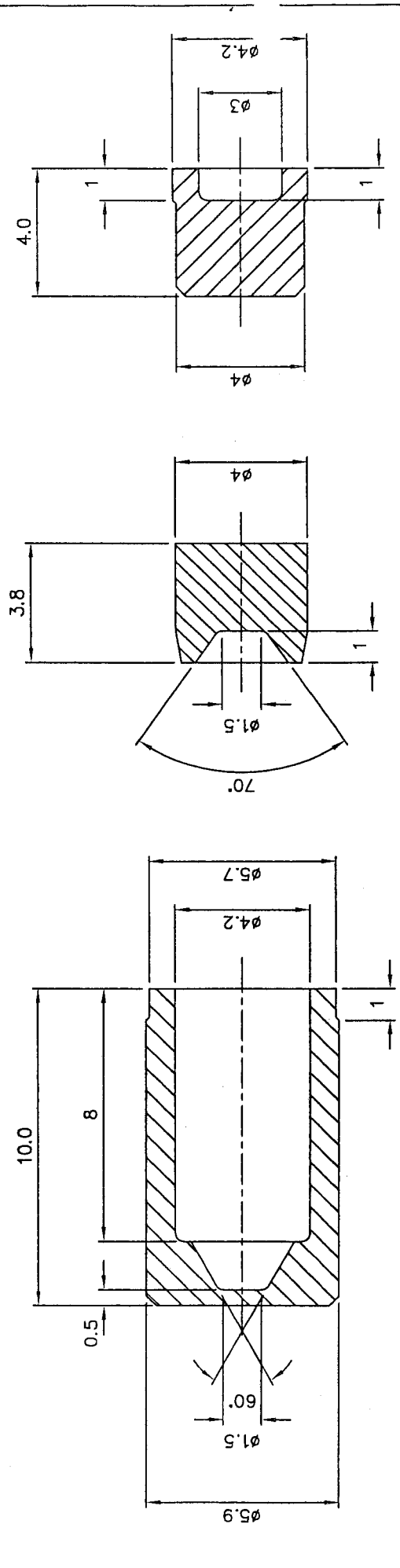
Revision 3 - Issued to extend the expiration date.

ITEM	DESCRIPTION	QTY.
1	BODY STAIN. STL.	1
2	LID STAIN. STL.	1
3	CERAMIC FIBRE PACKING A/R	1
4	SPACER ALUMINIUM ALLOY	1
5	ACTIVE MATERIAL A/R	1



XN30/0

XN30/1



ITEM 1

ITEM 4

ITEM 2

APPROVALS	
<i>R. J. Moore</i>	16/01/01
<i>L. P. ...</i>	21/01/01

DIMENSIONS IN MILLIMETERS
UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	INTERNAL	∇
X.X	±0.1	INTERNAL	∇
X.XX	±0.05	EXTERNAL	∇
ANGULAR	±5'		



40 NORTH AVE, BURLINGTON, MA 01803

DESCRIPTIVE
DRAWING

TITLE XN30/0, /1 & /2 CAPSULE ASSEMBLY

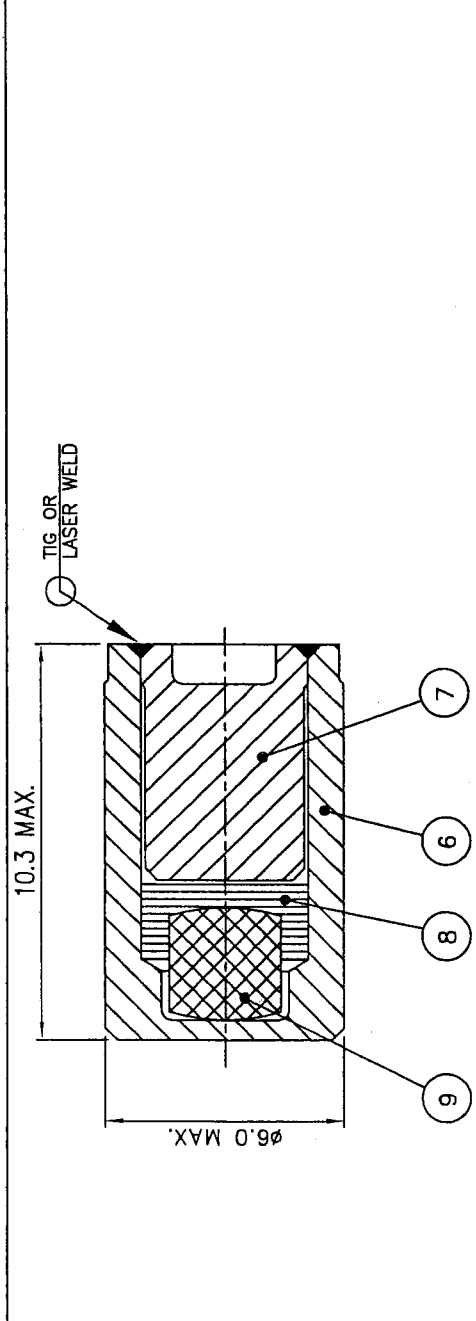
SIZE A
DWG. NO. RBA10251
SCALE: NONE

REV A

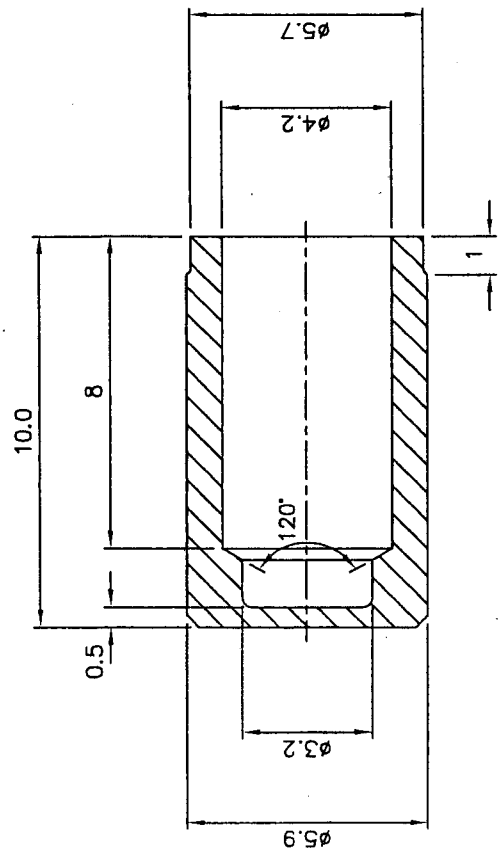
ERF # 828

SHEET 1 OF 2

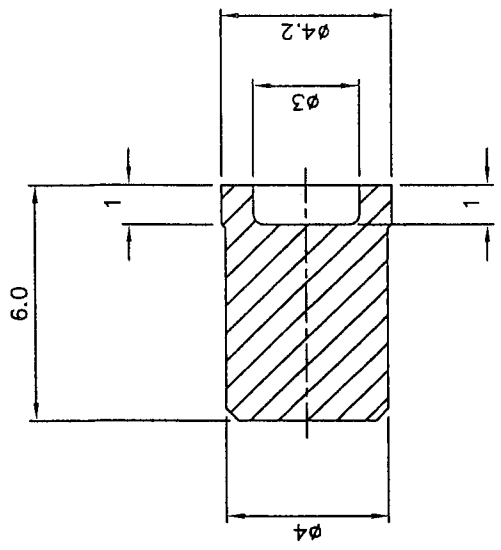
ITEM	DESCRIPTION	QTY.
6	BODY STAIN. STL.	1
7	LID STAIN. STL.	1
8	CERAMIC FIBRE PACKING	A/R
9	ACTIVE MATERIAL	A/R




XN30/2



ITEM 6



ITEM 7

		DESCRIPTIVE DRAWING	
APPROVALS <i>R. W...</i> <i>L. P...</i>		TITLE XN30/0, /1 & /2 CAPSULE ASSEMBLY	
DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES: X ±0.5 XX ±0.1 XXX ±0.05 ANGULAR ±5°		SIZE A	
INTERNAL <input checked="" type="checkbox"/> EXTERNAL <input checked="" type="checkbox"/>		DWG. NO. RBA10251	
ERF # 828		SCALE: NONE SHEET 2 OF 2	
		REV A	



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Hazardous Materials
Safety Administration**

CERTIFICATE NUMBER: USA/0673/S-96, Revision 3

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