





[1] EC-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protected System Intended for use in Potentially explosive atmospheres Directive 94/9/EC

[3] EC-Type Examination Certificate Number: Nemko 03ATEX1458X Issue No.: 2

[4] Equipment or Protective System: Reducer

[5] Applicant / Manufacturer:
[6] Address:
Warak-Dong, Sasang-Gu, Pusan

Korea

- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] Nemko AS, notified body number 0470 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 175671

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2006 / IEC 60079-0: 2004, EN 60079-1:2004 / IEC 60079-1: 2003, EN 60079-7 :2007 / IEC 60079-1 :2006, EN 61241-0: 2006 / IEC61241-0: 2004, EN 61241-1: 2004 / IEC61241-1: 2004

- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment or protective system shall include the following:

 $\langle \epsilon_x \rangle$

II 2 G Ex d IIC

Ex e II

II 2 D Ex tD A21 IP66/67

Oslo, 2011-06-22

This certificate replaces version dated 2011-05-25. Misprint in technical data corrected.

Asle Usastad

p. p. Rolf Hoel

Certification Manager, Ex-products

This certificate may only be reproduced in its entirety and without any change, schedule included.





Date: 2011-06-22

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE No Nemko 03ATEX1458X Issue 2

[15] Description of Equipment or Protective System

This certificate covers a range of brass reducers for cable entries or conduit entries in flameproof/increased safety enclosures.

Type Designation/Technical Data

Type	Metric		NPT, PF		PG		
	Entry size (Female)	Entry size (Male)	Entry size (Female)	Entry size (Male)	Entry size (Female)	Entry size (Male)	
					PG7 PG9	PG11	
OSRA 20	M16x1,5	M20x1,5			PG7		
		,			PG9	PG13,5	
					PG11		
OSRA 25	M16x1,5				PG9		
	M20x1,5	M25x1,5	1/2"	3/4"	PG11	PG16	
	, and the second				PG13,5		
	M16x1,5		1/2"	1"	PG11		
OSRA 32	M20x1,5	M32x1,5	3/4"		PG13,5	PG21	
	M25x1,5				PG16		
	M20x1,5		1/2"	1-1/4"	PG13,5		
OSRA 40	M25x1,5	M40x1,5	3/4"		PG16	PG29	
	M32x1,5		1"		PG21		
OSRA 50	M25x1,5	M50x1,5	3/4"	1-1/2"	PG16	PG36	
	M32x1,5		1		PG21		
	M40x1,5		1-1/4"		PG29		
OSRA 63	M32x1,5	M63x1,5	1"	2"	PG21	PG42	
	M40x1,5		1-1/4"		PG29		
	M50x1,5		1-1/2"		PG36		
OSRA 75	M40x1,5	M75x1,5 M75x2,0	1-1/4"	2-1/2"	PG29	PG48	
	M50x1,5		1-1/2"		PG36		
	M63x1,5	W173X2,0	2"		PG42		
OSRA 90	M50x1,5	M90x1,5	1-1/2"	3"			
	M63x1,5		2"				
	M75x1,5 or	M90x2,0	2-1/2"				
	M75x2,0						
OSRA 100	M63x1,5		2"				
	M75x1,5 or	M100 1 5	2-1/2"				
	M75x2,0	M100x1,5		3-1/2"			
	M90x1,5 or	M100x2,0	3"				
	M90x2,0						

Ingress Protection Code

IP66/67 according to EN 60529

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Nemko 03ATEX1458X Issue 2



Date: 2011-06-22

[16] **Report No.** 175671

Certificate History and Associated Nemko Reports

Issue	Date	Report	Description
0	2003-08-25	11048	Prime Certificate released
1	2009-11-26	136532	New design and new thread types/sizes
2	2011-05-25	175671	IP66 included

Descriptive Documents

OSRA-01 1 2011-05-25 Ex OSRA TYPE 1 OSRA-02 1 2011-05-25 Ex OSRA TYPE 1 OSRA-03 1 2011-05-25 Ex OSRA TYPE 1 OSRA-M-01 1 2011-05-25 Ex OSRA TYPE(METRIC) 1 OSRA-M-02 1 2011-05-25 Ex OSRA TYPE(METRIC) 1	Name/Number	Rev.	Date	Title/Description	Sheets
OSRA-03 1 2011-05-25 Ex OSRA TYPE 1 OSRA-M-01 1 2011-05-25 Ex OSRA TYPE(METRIC) 1	OSRA-01	1	2011-05-25	Ex OSRA TYPE	1
OSRA-M-01 1 2011-05-25 Ex OSRA TYPE(METRIC) 1	OSRA-02	1	2011-05-25	Ex OSRA TYPE	1
	OSRA-03	1	2011-05-25	Ex OSRA TYPE	1
OSRA-M-02 1 2011-05-25 Ex OSRA TYPE(METRIC) 1	OSRA-M-01	1	2011-05-25	Ex OSRA TYPE(METRIC)	1
	OSRA-M-02	1	2011-05-25	Ex OSRA TYPE(METRIC)	1
OSRA-M-03 1 2011-05-25 Ex OSRA TYPE(METRIC) 1	OSRA-M-03	1	2011-05-25	Ex OSRA TYPE(METRIC)	1
OSRA-N/P-01 1 2011-05-25 Ex OSRA TYPE(NPT, PF) 1	OSRA-N/P-01	1	2011-05-25	Ex OSRA TYPE(NPT, PF)	1
OSRA-N/P-02 1 2011-05-25 Ex OSRA TYPE(NPT, PF) 1	OSRA-N/P-02	1	2011-05-25	Ex OSRA TYPE(NPT, PF)	1
OSRA-N/P-03 1 2011-05-25 Ex OSRA TYPE(NPT, PF) 1	OSRA-N/P-03	1	2011-05-25	Ex OSRA TYPE(NPT, PF)	1
OSRA-PG-01 1 2011-05-25 Ex OSRA TYPE(PG) 1	OSRA-PG-01	1	2011-05-25	Ex OSRA TYPE(PG)	1
OSRA-PG-02 1 2011-05-25 Ex OSRA TYPE(PG) 1	OSRA-PG-02	1	2011-05-25	Ex OSRA TYPE(PG)	1
OSRA-PG-03 1 2011-05-25 Ex OSRA TYPE(PG) 1	OSRA-PG-03	1	2011-05-25	Ex OSRA TYPE(PG)	1

[17] Special Conditions for Safe Use

- 1. The gasket is suitable for use within a service temperature range of -20°C to 110 °C.
- 2. The entry thread should be suitably sealed in order to maintain the IP rating.

[18] Essential Health and Safety Requirements See item 9

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