

CERTIFICATE NUMBER 16-LD1478091-PDA DATE 23 Feb 2016

ABS TECHNICAL OFFICE London Engineering Department

CERTIFICATE OF

DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

CMP PRODUCTS LTD.

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Cable, Glands and Accessories

Model: CWe, CXe, A2E, C2KX, B2KX, C2K

This Product Design Assessment (PDA) Certificate 16-LD1478091-PDA, dated 23/Feb/2016 remains valid until 22/Feb/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

CMP PRODUCTS LTD.

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NELSON PARK EAST

CRAMLINGTON

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Fax: +44 1670 715 646

Email: customerserivices@cmp-products.com

Web: www.cmp-products.com

Tier: 3 - Type Approved, unit certification not required

TC

Product:

Cable, Glands and Accessories

Model:

CWe, CXe, A2E, C2KX, B2KX, C2K

Intended Service:

ABS Classed Vessels and Offshore Installations in accordance with the listed ABS Rules and International Standards.

Description:

Cable Glands and connectors Certified for Increased-Safety Type, Models CWe, CXe, A2E, C2KX, B2KX (when installed in compliance with NEC requirements), C2K

Rating:

A2E: Ex e IIC Gb; Ex ta IIIC Da, Ex nR IIC Gc. C2K: Ex e IIC Gb, Ex ta IIIC Da, Ex nR IIC Gc. CWe & CXe: Ex e IIC Gb & Ex ta IIIC Da.

C2KX: Ex e IIC Gb, Ex ta IIIC Da, Ex nR IIC Gc.

Ambient temperature -60 C to +130 C degrees when fitted with the standard seal and -20 C to +200 C degrees when fitted with the high temperature seal.

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

For NEC installations, marine shipboard cable may be used instead of rigid conduit, if installed fittings are approved for the specific hazardous location and cable type.

Explosion Proof and Flameproof equipment - Explosion Proof equipment must be approved as meeting UL 1203. Flameproof equipment must be approved as meeting IEC 60079-1.

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. CMP_EN62444_IEC62444 Sira _Certificate 10Y9148U_Iss3, Sira _Certificate 10Y9148U_Iss3, Revision: -, Pages: 3

Drawing No. CMP A2F A2FRC A2E A2FFC IECEx SIR 13, Sira certificate IECEx Sir 13.0023X, Revision: 3,

Pages: 8

Drawing No. CMP CWe CXe C2K IECEx SIR 13, Sira Certificate IECEx SIR 13.0023X, Revision: 0, Pages: 5 Drawing No. GB-SIR EXTR14.0282.00, Variation to certificate numbers IECEx SIR 13.0023X, Sira 13ATEX1068X and Sira 13ATEX4074X

Drawing No. GB/SIR/ExTR13.0066/00, Assessment of a number of ranges of cable glands for ATEX and IECEx cartification. Payision: 0. Pages: 62

certification, Revision: 0, Pages: 62
Drawing No. GB/Sir/ExTR14.0307/00, Variation to certificate numbers IECEx SIR 13.0023X, Sira 13ATEX1068X and Sira 13ATEX4074X, Revision: 0, Pages: 14

Terms of Validity:

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STANDARDS

ABS Rules:

-Steel Vessel Rules (2016): 1-1-4/7.7, 1-1-A3&A4, 4-8-3/13.3, 4-8-4/27.5.1

-Steel Vessels Under 90 Meters (295 Feet) in Length (2016): 1-14/7.7, 1-1-A3&A4, 4-6-1/3.9.2

-Offshore Support Vessels (2016): 1-1-4/7.7, 1-1-A3&A4, 1-1-A3&A4, 4-8-3/13.3, 4-8-4/27.5.1 -Mobile Offshore Drilling Units Rules (2016): 1-1-4/9.7, 1-1-A2&A3, 4-3-1/3.7

-Steel Vessels for Service on Rivers and Intracoastal Waterways (2015): 1-1-4/7.7, 1-1-A3&A4

-High-Speed Craft (2016): 1-1-4/11.9, 1-1-A2&A3 -Steel Barge Rules (2016): -1-4/7.7, 1-1-A3&A4

EN 62444:2013, BS 6121, BS EN 60079 Part 0, 7; UL514B (Only C2KX, B2KX)

International:

USCG CFR - 46 (Section 33 of IEEE Std 45); EN 60079-1: 2007 Ed. 6.0; EN 60079-7:2006 ed. 4.0; EN 60079-15: 2010 Ed. 4.0; EN 60079-31:2008 Ed. 4.0; IEC 62444: 2010 Ed 1.0

Government:

NA

EUMED:

NA

OTHERS:

NA