DNV·GL

Certificate No:
TAE000000Y

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Gland

with type designation(s)
CMP

Issued to
CMP Products Limited
Northumberland, United Kingdom

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

Hazardous areas cable glands. The manufacturer's installation description to be followed. Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2020-10-07**.

Issued at **Høvik** on **2015-10-08**

for **DNV GL**

DNV GL local station: **Newcastle-upon-Tyne**

Approval Engineer: **Ludovico Gullifa**

Marit Laumann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-009667-5**
Certificate No: **TAE000000Y**

Product description

Type	**A2F**
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb/ Exe IIC Gb / Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1068X SIRA 13ATEX 4074X IEC Ex SIR 13.0023X
Continuous operating temperature range	-60° C to +130° C When fitted with standard seal -20° C to +200° C When fitted with the high temperature seal
Ingress protection	IP66, IP67 &IP68 (10m depth)
Gland material	Brass (option of stainless steel or aluminium versions)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured or braid.
Deluge protection	To DTS 01:91
Gland sizes	16, 20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**A2E**
Design Specification	EN62444:2013
Classification	Hazardous Area Ex e IIC Gb/ Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , IEC60079-7:2006 (EN:2007), IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1068X SIRA 13ATEX 4074X IEC Ex SIR 13.0023X
Continuous operating temperature range	-60° C to +130° C When fitted with standard seal -20° C to +200° C When fitted with the high temperature seal
Ingress protection	IP66, IP67 &IP68 (10m depth)
Gland material	Brass (option of stainless steel or aluminium versions)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured or braid.
Deluge protection	To DTS 01:91
Gland sizes	20s/16, 20s, 20, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**A2FRC**
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb/ Exe IIC Gb / Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1068X SIRA 13ATEX 4074X IEC Ex SIR 13.0023X

Continuous operating temperature range	-60° C to +130° C When fitted with standard seal -20° C to +200° C When fitted with the high temperature seal
Ingress protection	IP66
Gland material	Brass (option of stainless steel or aluminium)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured or braid.
Gland sizes	20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**E1F## or E1F##D (W ; X ; U) D=Deluge protection**
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb / Exe IIC Gb / Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1071X SIRA 13ATEX 4077X IEC Ex SIR 13.0026X
Continuous operating temperature range	-60°C to +130° C When fitted with standard seal -20°C to +200° C When fitted with the high temperature seal
Ingress protection	IP66
Gland material	Brass (option of stainless steel or aluminium)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured, armoured or braid.
Deluge protection	To DTS 01:91
Gland sizes	16, 20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**E2F## or E2F##D (W ; X ; U) D=Deluge protection**
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb / Exe IIC Gb / Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1071X SIRA 13ATEX 4077X IEC Ex SIR 13.0026X
Continuous operating temperature range	-60°C to +130° C When fitted with standard seal -20°C to +200° C When fitted with the high temperature seal
	IP66
Gland material	Brass (option of stainless steel or aluminium)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured, armoured or braid.
Deluge protection	To DTS 01:91
Gland sizes	16, 20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130

Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb/ Ex e IIC Gb/ Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1072X SIRA 13ATEX 4078X IEC Ex SIR 13.0027X
Continuous operating temperature range	-60°C to +85°C
	IP66, IP67 &IP68 (10m depth)
Gland material	Brass (option of stainless steel or aluminium)
Seal material	Epoxy putty and LSF Thermoplastic Elastomer
Cable type	Unarmoured, armoured or braid.
Deluge protection	To DTS 01:91
Gland sizes	20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb / Ex e IIC Gb/ Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1069X SIRA 13ATEX 4075X IEC Ex SIR 13.0024X
Continuous operating temperature range	-60°C to +130° C When fitted with standard seal -20°C to +200° C When fitted with the high temperature seal
Ingress protection	IP66
Gland material	Brass (option of stainless steel or aluminium)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured or braid.
Deluge protection	To DTS 01:91
Gland sizes	16, 20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TMC**
Design Specification	UL514B, U886, UL2225
Classification	Hazardous Area Ex e II/ Ex td A21 IP66
Compliance Code	UL514B; U886; CSA Standard C22.2 No 18,174; IEC60079-0:2004 (EN:2006), IEC60079-1:2004 (EN:2006), IEC60079-7:2006(EN:2003), IEC 61241-0:2004, IEC 61241-1:2004
Certification	SIRA 07ATEX 1122X

	IEC Ex SIR07.0083X
Continuous operating temperature range	-60° to +130° C
Ingress protection	IP66, NEMA 4X (Oil RES II)
Gland material	Nickel plated brass or aluminium or stainless steel
Seal material	LSF Thermoplastic Elastomer
Cable type	MC/MCHL ; TECK ; CLX
Gland sizes	20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TMCX**
Design Specification	UL514B, U886, UL2225
Classification	Hazardous Area Ex d IIC / Ex e II/ Ex td A21 IP66
Compliance Code	UL514B; U886; CSA Standard C22.2 No 18,174; IEC60079-0: 2004 (EN:2006), IEC 60079-1:2003 (EN:2004), IEC60079-7:2006(EN:2003), IEC/EN 61241-0:2004, IEC/EN 61241-1:2004
Certification	SIRA 07ATEX 1122X IEC Ex SIR07.0083X
Continuous operating temperature range	-60° to +100° C
Ingress protection	IP66, NEMA 4X (Oil RES II)
Gland material	Nickel plated brass or aluminium or stainless steel
Seal material	Epoxy putty and LSF Thermoplastic Elastomer
Cable type	MC/MCHL ; TECK ; CLX
Deluge protection	To DTS 01:91
Gland sizes	20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	
Design Specification	EN62444:2013
Classification	Hazardous Area Ex e IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc (not CWe or CXe)
Compliance Code	IEC60079-0:2011(EN:2012), IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1070X SIRA 13ATEX 4076X IEC Ex SIR 13.0025X
Continuous operating temperature range	-60°C to +130° C When fitted with standard seal -20°C to +200° C When fitted with the high temperature seal
	IP66, IP67 &IP68 (10m depth)
Gland material	Brass (option of stainless steel or aluminium)
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured, armoured or braid.
Deluge protection (C2K)	To DTS 01:91
Gland sizes	16, 20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TRITON T3CDS, T3CDS/PB, D3CDS**

Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb / Ex e IIC Gb/ Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	TRITON T3**: SIRA 13ATEX1073X SIRA 13ATEX4079X IECEx SIR 13.0028X D3CDS: SIRA 06ATEX1283X IEC SIR07.0005X
Continuous operating temperature range	-60°C to +130° C When fitted with standard seal -20°C to +200° C When fitted with the high temperature seal
Ingress Protection	IP66, IP67 & IP68
Gland Material	Brass (option of stainless steel or aluminium)
Seal Material	LSF Thermoplastic Elastomer
Cable Type	S.W.A. S.T.A. & wire braid
Deluge protection	To DTS 01:91
Gland sizes	16, 20s/16, 20s, 20, 25, 32, 40, 50 S, 50, 63 S, 63,75 S, 75, 90, 100, 115 and 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TE1FU**
Design Specification	EN62444:2013
Classification	Hazardous Area Ex d IIC Gb / Ex e IIC Gb/ Ex nR IIC Gc/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), IEC/EN60079-15:2010, IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX1073X SIRA 13ATEX4079X IECEx SIR 13.0028X
Continuous operating temperature range	-60° C to +130° C When fitted with standard seal -20° C to +200° C When fitted with the high temperature seal
Ingress Protection	IP66, IP67 & IP68
Gland Material	Stainless steel
Seal Material	LSF Thermoplastic Elastomer
Cable Type	S.W.A. S.T.A. & wire braid
Deluge protection	To DTS 01:91
Gland sizes	20s/16, 20s, 20, 25S, 25, 32, 40, 50 S, 50, 63 S, 63,75 S, 75, 90, 100, 115 and 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TMC2**
Design Specification	UL514B, U886, UL2225
Classification	Ordinary and hazardous locations
Compliance Code	UL514B; U886, CSA Standard C22.2 No 18,174, IEC60079-0:2007(EN:2006), IEC60079-7:2006 (EN:2007), EN/IEC 61241-1:2004
Certification	SIRA 09ATEX 1164X IECEx SIR 09.0068X
Continuous operating temperature	-60° to +110° C

range	
Ingress protection	IP66, NEMA 4X (Oil RES II)
Gland material	Nickel plated brass or aluminium or stainless steel
Seal material	LSF Thermoplastic Elastomer
Cable type	MC/MCHL ; TECK ; CLX
Gland sizes	20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TMC2X**
Design Specification	UL514B, U886, UL2225
Classification	Ordinary and hazardous locations
Compliance Code	UL514B; U886, CSA Standard C22.2 No 18,174, IEC60079-0:2007(EN:2006), EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), EN/IEC 61241-1:2004
Certification	SIRA 09ATEX 1165X IECEx SIR 09.0069X
Continuous operating temperature range	-60° to +85° C
Ingress protection	IP66, NEMA 4X (Oil RES II)
Gland material	Nickel plated brass or aluminium or stainless steel
Seal material	Polyurethane resin and LSF Thermoplastic Elastomer
Cable type	MC/MCHL ; TECK ; CLX
Gland sizes	20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**TC**
Design Specification	UL514B, U886, UL2225
Classification	Ordinary and hazardous locations
Compliance Code	UL514B; U886, CSA Standard C22.2 No 18,174, IEC60079-0:2007 (EN:2006), EN/IEC60079-1:2007, IEC60079-7:2006 (EN:2007), EN/IEC 61241-1:2004, EN 61241-0:2006
Certification	SIRA 09ATEX 1092X IECEx SIR 09.0042X
Continuous operating temperature range	-60° to +110° C
Ingress protection	IP66, NEMA 4X
Gland material	Nickel plated brass or aluminium or stainless steel
Seal material	LSF Thermoplastic Elastomer
Cable type	Unarmoured or braid
Gland sizes	16, 20s/16, 20s, 20, 25s, 25, 32, 40, 50s, 50, 63s, 63, 75s, 75, 90, 100, 115, 130
Optional accessories	Shroud, Locknut, Earth tag, Entry thread seal, serrated washer, Adaptor/Reducer.

Type	**747 (Type A & Type B)**
Design Specification	BS 6121: Part 1: 1989, EN62444:2013
Classification	Hazardous Area Ex d IIC Gb (not for nylon) / Ex e IIC Gb/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007 IEC60079-7:2006 (EN:2007), IEC60079-31:2008 (EN:2009)

Certification	SIRA 13ATEX 1265X IECEx SIR 13.0094X
Continuous operating temperature range	-60° to +200° C (-20° to +60° C Nylon version)
Ingress protection	IP66
Gland material	Brass or nickel plated brass or aluminium or stainless steel or nylon
Thread size	M16x1.5, M20x1.5, M25x1.5, M32x1.5, M40x1.5, M50x1.5, M63x1.5, M75x1.5, M90x2, M100x2

Type	**757**
Design Specification	BS 6121: Part 1: 1989, EN62444:2013
Classification	Hazardous Area Ex d IIC Gb (not for nylon) / Ex e IIC Gb/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007 IEC60079-7:2006 (EN:2007), IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1265X IECEx SIR 13.0094X
Continuous operating temperature range	-60° to +200° C (-20° to +60° C Nylon version)
Ingress protection	IP66 or IP68 when fitted with CMP 'O' Ring or entry Thread Sealing Washer
Gland material	Brass or nickel plated brass or aluminium or stainless steel or nylon
Thread size	M16x1.5, M20x1.5, M25x1.5, M32x1.5, M40x1.5, M50x1.5, M63x1.5, M75x1.5, M90x2, M100x2
Optional accessories	Locknut, Serrated washer, Earth tag, Entry thread sealing washer

Type	**767**
Design Specification	BS 6121: Part 1: 1989, EN62444:2013
Classification	Hazardous Area Ex d IIC Gb (not for nylon) / Ex e IIC Gb/ Ex ta IIIC Da
Compliance Code	IEC60079-0:2011 (EN:2012) , EN/IEC60079-1:2007 IEC60079-7:2006 (EN:2007), IEC60079-31:2008 (EN:2009)
Certification	SIRA 13ATEX 1265X IECEx SIR 13.0094X
Continuous operating temperature range	-60° to +200° C (-20° to +60° C Nylon version)
Ingress protection	IP66 or IP68 when fitted with CMP 'O' Ring or entry thread sealing washer
Gland material	Brass or nickel plated brass or aluminium or stainless steel or nylon
Thread size	M16x1.5, M20x1.5, M25x1.5, M32x1.5, M40x1.5, M50x1.5, M63x1.5, M75x1.5, M90x2, M100x2
Seal material	
Optional accessories	Locknut, Serrated washer, Earth tag, Entry thread sealing washer

Application/Limitation

Manufacturer's application instructions to be followed.
Manufacturer's assembly instructions to be followed.
The information related to Ex certification from recognised test institution is given as information only.

Type Approval documentation

Tests carried out

Type tests in according to IEC 60079-0, IEC 60079-1, and IEC 60079-7, UL standard.

Marking of product

CMP – type designation – Ex rating

Periodical assessment

The scope of the periodical assessment survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the periodical assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment to be performed at least every second year.

END OF CERTIFICATE