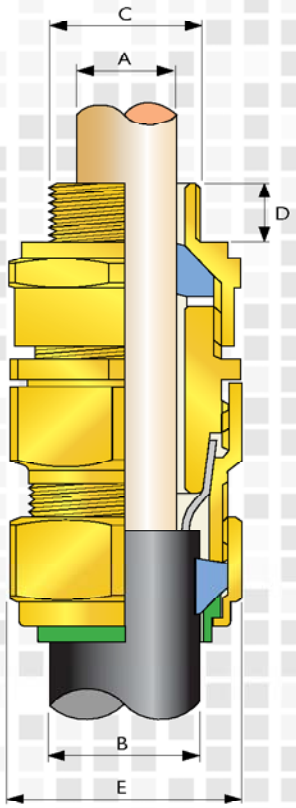
1391

E1FW Flameproof EEx d & Increased Safety EEx e Cable Gland

Dual Certified Flameproof (Type 'd') and Increased Safety (Type 'e') indoor and outdoor cable gland for use in Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas with all types of SWA cable providing a Flameproof seal on the cable inner sheath and an environmental seal on the cable outer sheath. The gland also provides mechanical cable retention and electrical continuity via armour wire termination.

TECHNICAL DATA	
TYPE	E1FW
CENELEC (ATEX) CERTIFICATION DETAIL	SIRA01ATEX1286X, SIRA01ATEX3287X
CODE OF PROTECTION CATEGORY	ATEX Ex II 2 GD EEx d IIC & EEx e II, EQUIPMENT ZONE 1, ZONE 2, ZONE 21, & ZONE 22 - GAS GROUPS IIA, IIB, IIC
COMPLIANCE STANDARDS	EN50014, EN50018, EN50019, EN50281-1-1
CONTINUOUS OPERATING TEMP. RANGE	-60°C TO +130°C
INGRESS PROTECTION	IP66
GLAND MATERIAL	BRASS
SEAL MATERIAL	CMP SOLO LSF
CABLE TYPE	STEEL WIRE ARMOUR
ARMOUR CLAMPING	TWO PART ARMOUR LOCK (THREE PART OPTION AVAILABLE).
SEALING TECHNIQUE	CMP DISPLACEMENT SEAL CONCEPT
SEALING AREA(S)	INNER & OUTER SHEATH
OPTIONAL ACCESSORIES	SHROUD, LOCKNUT, EARTH TAG ENTRY THREAD SEAL, SERRATED WASHER ADAPTOR/REDUCER

* SOLO Option with LSF Shrouds also Available.
Integral Entry Thread Seal Option Available
(for this option pre-fix gland type with 'R', e.g. 25RE1FW)



RE1FW version colour coded with red ferrule for ease of identification

ADDITIONAL APPROVALS	
MARINE APPROVALS	LLOYDS, DNV, ABS
GOST APPROVAL	2002 . C256
SAQAS APPROVAL	AUS EX764
CEPEL/IMMETRO APPROVAL	EX-024

Gland Size	Standard Entry Threads 'C'			Minimum Thread Length 'D'	Cable Dia 'A'		Cable Dia 'B'		Armour Wire Dia	Across Corners Dia 'E' Max	Ordering Reference (Metric)	PVC Shroud Ref.
	Metric	NPT	PG		Min	Max	Min	Max				
20/16	20	1/2"	PG11	15	3.1	8.6	6.0	13.4	0.9	24.4	20/16E1FW	PVC02
20S	20	1/2"	PG13.5	15	6.1	11.6	9.5	15.9	0.9/1.25	26.6	20SE1FW	PVC04
20	20	1/2"	PG16	15	6.5	13.9	12.5	20.9	0.9/1.25	33.3	20E1FW	PVC06
25	25	3/4"	PG21	15	11.1	19.9	17.0	26.2	1.25/1.6	40.5	25E1FW	PVC09
32	32	1"	PG29	15	17.0	26.2	22.9	33.9	1.6/2.0	51.0	32E1FW	PVC11
40	40	1-1/4"	PG36	15	22.0	32.1	26.0	40.4	1.6/2.0	61.0	40E1FW	PVC15
50S	50	1-1/2"	PG36	15	29.5	38.1	35.0	46.7	2.0/2.5	66.5	50SE1FW	PVC18
50	50	2"	PG42	15	35.6	44.0	38.0	53.1	2.0/2.5	78.6	50E1FW	PVC21
63S	63	2"	PG48	15	40.1	49.9	45.6	59.4	2.5	83.2	63SE1FW	PVC23
63	63	2-1/2"	-	15	47.2	55.9	54.6	65.9	2.5	89.0	63E1FW	PVC25
75S	75	2-1/2"	-	15	52.8	61.9	57.0	72.1	2.5	101.6	75SE1FW	PVC28
75	75	3"	-	15	59.1	67.9	60.4	78.5	2.5/3.15	111.1	75E1FW	PVC30
90	90	3"	-	15	66.6	79.3	69.2	90.4	3.15	128.6	90E1FW	PVC32

All Dimensions in Millimetres

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx SIR 06.0043X issue No.:3

Status: **Current**

Date of Issue: **2007-08-30** Page 1 of 4

Certificate history:
Issue No. 3 (2007-8-30)
Issue No. 2 (2007-6-25)
Issue No. 1 (2007-1-23)

Applicant: **CMP Products Limited**
Glasshouse Street
St Peters, Newcastle-upon-Tyne
Tyne and Wear NE6 1BS
United Kingdom

Electrical Apparatus: **E** Type Range of Cable Glands**
Optional accessory:

Type of Protection: **Flameproof, Increased Safety and Dust**

Marking: **Ex d IIC/Ex e II /Ex nR II or Ex d I/Ex e I or**
Ex d IIC or Ex d I or
Ex e II or Ex e I or
Ex nR II
Ex tD A21 IP66

Approved for issue on behalf of the IECEx Certification Body: D R Stubbings

Position: Certification Manager

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

IECEx Certificate of Conformity

Certificate No.: IECEx SIR 06.0043X

Date of Issue: **2007-08-30** Issue No.: **3**

Manufacturer:

CMP Products Limited
Glasshouse Street
St Peters, Newcastle-upon-Tyne
Tyne and Wear NE6 1BS
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture'rs quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 60079-15 : 2005-03 Edition: Ed 3	Electrical apparatus for explosive gas atmospheres Part 15: Contruction, test and Marking of Type of Protection "n" electrical apparatus
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/SIR/ExTR06.0061/00
GB/SIR/ExTR07.0002/00
GB/SIR/ExTR07.0042/00

Quality Assessment Report:
GB/SIR/QAR06.0011/00

IECEx Certificate of Conformity

Certificate No.: IECEx SIR 06.0043X

Date of Issue: **2007-08-30** Issue No.: **3**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The E** series Type ranges of cable glands consist of a male-threaded front entry component containing an Evoprene Super G621 elastomeric sealing ring and a Nylon 6 skid washer which effect flameproof sealing onto the cable inner sheath and is intended to screw into an entry point of its associated enclosure in accordance with relevant codes of practice. The flameproof seal is actuated by an adjoining coupling component. The coupling component is attached to a main body. Their mating thread may be fitted with an optional 'O' ring seal to provide increased ingress protection. Clamping of the armoured or braided cable is effected by a combination of the coupling component, main body and the different optional armour cone and armour sleeve combinations being fastened together. An outer seal nut, containing an Evoprene Super G621 elastomeric sealing ring and a Nylon 6 ferrule, threads onto the main body and effects environmental sealing onto the cable outer sheath.
Cable clamping is achieved with the outer seal arrangement.

Refer to Annex for more details

CONDITIONS OF CERTIFICATION: YES as shown below:

The E** type cable glands shall only be used where the temperature, at the point of entry, is between -60℃ to +130℃.
The E** type cable glands terminated on braided cables are not suitable for group I applications.
All body components of the E** type cable glands are to be fully tightened using all available threads of engagement until against their adjoining component part shoulder to maintain Ingress protection rating IP66.
The E** type cable glands are fitted with one specific size of FLP sealing ring per gland size as supplied.
The E** type cable glands used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
The E** type of cable gland entry component threads may need additional sealing to maintain the ingress protection rating as applicable to the associated equipment in which it will be attached.

IECEx Certificate of Conformity

Certificate No.: IECEx SIR 06.0043X

Date of Issue: **2007-08-30** Issue No.: **3**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Original dated 2006-09-20	
Issue 1 dated 2007-01-23	
1	The introduction of an alternative, outer sealing arrangement; the compression nut length and consequently body length are reduced, in addition, the internal, tapered ferrule is replaced by a flat ferrule.
Issue 2	**dated 2007-06-25**
2	The introduction of Ex nR II and Ex tD coding The recognition of alternative armour cone diameters The removal of the manufacturer's address from the product marking The use of the E** Cable glands with pliable wire armour cables
Issue 3	**dated 2007-08-30**
3	Correction of description in Annex to include 25/32 size in table. Omitted in error.