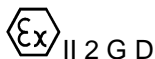




## EU Type Examination Certificate CML 19ATEX1167X Issue 3

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **A Range of Cable Glands with Compression Seals**  
**501/421; 501/421 "Size 2K"; 501/423; 501/453 RAC; PSG 553 RAC;**  
**501/414; SB474**
- 3 Manufacturer **Hawke International (A Division of Hubbell Limited) (A member of the Hubbell group of Companies)**
- 4 Address **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**  
**United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
  
The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:  
  
EN IEC 60079-0:2018                      EN 60079-1:2014                      EN 60079-31:2014  
  
EN IEC 60079-7:2015+A1:2018
- 10 The equipment shall be marked with the following:



II 2 G D

Ex db IIC Gb

Ex eb IIC Gb

Ex tb IIIC Db

IP 66/67/X8 – 10m/24h

See conditions of use for service temperature range





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## 11 Description

Each of the following gland types may be manufactured in brass, nickel plated brass, stainless steel or aluminium and may be supplied with agreed alternative entry thread forms.

**The Type 501/421 Cable Gland** is intended for use with an effectively filled and circular unarmoured cables and comprises the following components: -

- a) An entry component in the size range Os to J
- b) A compressible sealing ring
- c) A compression spigot
- d) A back nut
- e) An optional earth continuity device for use with metallic sheathed cables

**The Type 501/421 'Size 2K' Gland** comprises the following components only: -

- a) A dedicated entry component
- b) A compressible sealing ring
- c) A nylon skid washer
- d) A threaded compression spigot

**The Type 501/423 Cable Gland** is intended for use with effectively filled and circular unarmoured cables and comprises the following components: -

- a) An entry component, in the size range Os to J
- b) Two compressible sealing rings
- c) Two compression spigots
- d) A middle nut
- e) A back nut
- f) An optional earth continuity device for use with metallic sheathed cables

**The Type 501/453 RAC Cable Gland** is intended for use with armoured, unarmoured, or braided cable and comprises the following components:

- a. An entry component, in the size range Os to J
- b. A compressible sealing ring.
- c. A combined compression spigot and armour clamping cone.
- d. A reversible armour clamping ring.
- e. A middle nut
- f. An outer seal assembly (sleeve seal and support cage)
- g. A back nut
- h. An optional earth continuity device for use with metallic inner sheathed cables

**The Type PSG 553 RAC Cable Gland** is intended for use with armoured, unarmoured, or braided cables of unspecified construction and comprises the following components: -

- a) An entry component in the size range Os to C
- b) A compressible seal designed to accept a number of individual conductors
- c) A combined compression spigot and armour clamping cone
- d) A reversible armour clamping ring.
- e) A middle nut
- f) An outer seal assembly (sleeve seal and support cage)
- g) A back nut



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**The Type 501/414 Conduit Stopping Gland** is intended for use with an effectively filled and circular unarmoured cable enclosed within a conduit and comprises the following components: -

- a) An entry component in the size range Os to F
- b) A compressible sealing ring
- c) A compression assembly comprising a compression spigot with a female thread at the rear and integral back nut

**The Type SB474 Conduit Stopping Gland** is intended for use with a number of circular conductors enclosed within a conduit and comprises the following components: -

- a) An entry component in the size range O to C
- b) A compressible seal designed to accept a number of individual conductors
- c) A compression assembly comprising a compression spigot with a female thread at the rear and integral back nut.

#### **Design option**

1. The use of a 3M cold Shrink tubing to be fitted to the outer sheath of specific non-circular cables as specified in the drawing 320000, and fitted into 'Os', 'O' and 'A' sizes of the 501/453 cable glands. To ensure that the IP sealing arrangement utilizing the cable shrink tube assembly does not affect the assigned IP rating of the glands. The selection of the relevant cable gland to meet the protection concept for the cable and the enclosure it is fitted on to as detailed in EN 60079-14 remain un-affected.
2. The gland assemblies as described above are rated for ingress protection IP66 and 67.
3. Cable glands may be fitted with an optional external clamp or a second accessory option type Hawke Gland Mounted Clamp (GMC).
4. Where marked IIC or IIIC, the equipment can also be marked for gas groups IIA or IIB and for dust groups IIIA or IIIB.

#### **Variation 1**

This variation introduces the following modifications:

- i. Update GA drawings.
- ii. Add accessory optional item GMC 'Gland Mounted Clamp'.
- iii. Clarify the ingress protection, IP ratings.
- iv. To review and update the cable glands against the latest standard.
- v. To include the 501/453 RAC type cable Gland.
- vi. To permit the update to gland sizes.
- vii. Update the marking.
- viii. To revise the equipment title.
- ix. To revise the product description.
- x. To revise the specific conditions of use.

#### **Variation 2**

This variation introduces the following modifications, and it is applicable to Type PSG 553 RAC Cable Gland and Type SB474 Conduit Stopping Gland.

- i. To introduce a new seal design for PSG/553/RAC, sizes Os to C and SB 474, sizes O to C; as a result the product description was amended.



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- ii. To introduce a new compressible seal which has an increased service temperature of -60°C to +100°C; to reflect this modification the product description and Specific Conditions of Use were updated.
- iii. To permit minor editorial updates to the Product Description.
- iv. To permit changes to the Specific Conditions of Use.
- v. To remove cable gland types 501/452 RAC and PSG 421; as a result, the product description was amended.

### **Variation 3**

This variation introduces the following modifications:

- i. To modify the core diameter range on sizes O/A/B/C and B-ALT of the PSG 553 RAC and SB474 gland types and modify certification documentation.

### **12 Certificate history and evaluation reports**

<b>Issue</b>	<b>Date</b>	<b>Associated report</b>	<b>Notes</b>
0	04 June 2019	R11908A/00	The issue of the prime certification.
1	28 Sept 2021	R13593A/00	The introduction of variation 1. (UKEX)
2	31 Mar 2022	R14930A/00	The introduction of variation 2
3	23 Aug 2023	R16380A/00	The introduction of variation 3

Note: Drawings that describe the equipment or component are listed in the Annex.

### **13 Conditions of Manufacture**

None

### **14 Specific Conditions of Use (Special Conditions)**

The following conditions relate to safe installation and/or use of the equipment.

- i. The PSG/553/RAC and SB 474 cables glands are limited to an operating temperature range of -60°C to +80°C, unless marked "P PSG/553/RAC" and "P SB 474" respectively. In these cases, they are suitable for use with an operating temperature range of -60°C to +100°C. All other cable gland types are suitable for use with an operating temperature range of -60°C to +100°C.
- ii. When the glands are used for increased safety or dust protection the entry thread shall be suitably sealed (in accordance with IEC 60079-14) to maintain the ingress protection rating of the associated enclosure. Not applicable when Hawke IP 66/67 seal is used.
- iii. Glands for use with conduit, unarmoured or braided cables are only suitable for fixed installations, the cable for which must be effectively clamped to prevent pulling and twisting (does not apply when fitted with rear clamping device or Hawke Gland Mounted Clamp (GMC)).

## Certificate Annex

**Certificate Number** CML 19ATEX1167X  
**Equipment** A Range of Cable Glands with Compression Seals  
501/421; 501/421 "Size 2K"; 501/423; 501/453 RAC; PSG  
553 RAC; 501/414; SB474  
**Manufacturer** Hawke International (A Division of Hubbell Limited) (A  
member of the Hubbell group of Companies)



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
501 421	1 to 2	L	04 June 2019	General Arrangement for Unarmoured 501 421 Gland
501 421 Oversized	1 of 1	H	04 June 2019	General Arrangement for Unarmoured 501 421 Oversized Gland
501 423	1 of 1	L	04 June 2019	General Arrangement for 501/423 Gland
501 423 Oversized	1 of 1	H	04 June 2019	General Arrangement for 501/423 Oversized Gland
501 414	1 of 1	L	04 June 2019	General Arrangement for 501/414 Conduit Stopper Box (using Compression Seal)
501 452 RAC X	1 of 1	A	04 June 2019	General Arrangement of Gland Type 501/452/RAC-X
501 453 RAC X	1 of 1	A	04 June 2019	General Arrangement of Gland Type 501/453/RAC-X
PSG 553 RAC X	1 of 1	A	04 June 2019	General Arrangement for PSG 553 Gland
PSG 421	1 of 1	B	04 June 2019	General Arrangement for Unarmoured PSG 421 Gland
SB 474	1 of 1	L	04 June 2019	General Arrangement for SB 474 Gland

### Issue 1

Drawing No.	Sheets	Rev	Approved date	Title
320016*	1 of 1	A	28 Sept 2021	501/453/RAC
320021*	1 of 1	A	28 Sept 2021	501/421 schedule drawing
320026*	1 of 1	A	28 Sept 2021	501/423 schedule drawing
320028*	1 of 1	A	28 Sept 2021	501/452/RAC schedule drawing
320035*	1 of 1	A	28 Sept 2021	PSG/421 schedule drawing
320037*	1 of 1	A	28 Sept 2021	PSG/553/RAC schedule drawing
320038*	1 of 1	A	28 Sept 2021	501/414 schedule drawing
320040*	1 of 1	A	28 Sept 2021	SB 474 schedule drawing

The following component drawings are common to each of the cable gland as indicated.

# Certificate Annex

**Certificate Number** CML 19ATEX1167X

**Equipment** A Range of Cable Glands with Compression Seals

501/421; 501/421 "Size 2K"; 501/423; 501/453 RAC; PSG 553 RAC; 501/414; SB474

**Manufacturer** Hawke International (A Division of Hubbell Limited) (A member of the Hubbell group of Companies)



	Drawing No.	Sheets	Rev	Approved /issued date	Title	501/421	501/423	501/452/RAC	PSG/421	PSG/553/RAC	501/414	SB 474	CSB 656N	501/453/RAC
a	320002	1 of 1	A	28-09-2021	Armour clamping ring			X		X				X
b	320009	1 of 1	A	28-09-2021	Middle nut			X		X				X
c	320003	1 of 1	A	28-09-2021	Back nut seal					X				X
d	320010	1 of 1	A	28-09-2021	Back nut					X				X
e	320011	1 of 1	A	28-09-2021	Thread forms		X	X	X	X	X	X	X	X
f	320012	1 of 1	A	28-09-2021	External clamp	X				X				X
g	320082	1 of 1	A	28-09-2021	GMC	X	X			X				X
h	320031	1 of 1	A	28-09-2021	ALT Compound Chamber Entry								X	
i	320032	1 of 1	A	28-09-2021	ALT Compound Chamber								X	
j	320017	1 of 1	A	28-09-2021	Compression seal entry	X	X	X	X	X	X	X		X
k	320018	1 of 1	A	28-09-2021	Compression seal	X	X	X			X			X
l	320022	1 of 1	A	28-09-2021	Compression spigot	X	X		X					
m	320023	1 of 1	A	28-09-2021	Tail nut	X	X		X		X	X	X	
n	3027 2k	1 of 1	A	28-09-2021	Nylon skid washer	X								
o	3077 Os-2K	1 of 1	A	28-09-2021	Spigot 411/321/421 2K Gland	X								
p	320027	1 of 1	A	28-09-2021	Body nut		X							
q	320036	1 of 1	A	28-09-2021	PSG Seal				X	X		X		
r	320039	1 of 1	A	28-09-2021	Conduit gland body						X	X	X	

## Issue 2

	Drawing No.	Sheets	Rev	Approved date	Title
01	320036	1 of 1	B	31 Mar 2022	PSG Seal Schedule Drawing
02	320037	1 of 1	B	31 Mar 2022	PSG/553/RAC Schedule Drawing
03	320040	1 of 1	B	31 Mar 2022	SBS474 Schedule Drawing
04	320091	1 of 1	A	31 Mar 2022	PPSG Seal Schedule Drawing

## Certificate Annex

**Certificate Number** CML 19ATEX1167X  
**Equipment** A Range of Cable Glands with Compression Seals  
501/421; 501/421 "Size 2K"; 501/423; 501/453 RAC; PSG  
553 RAC; 501/414; SB474  
**Manufacturer** Hawke International (A Division of Hubbell Limited) (A  
member of the Hubbell group of Companies)



### Issue 3

Drawing No	Sheets	Rev	Approved date	Title
320091	1 of 1	B	23 Aug 2023	PPSG Seal Schedule Drawing