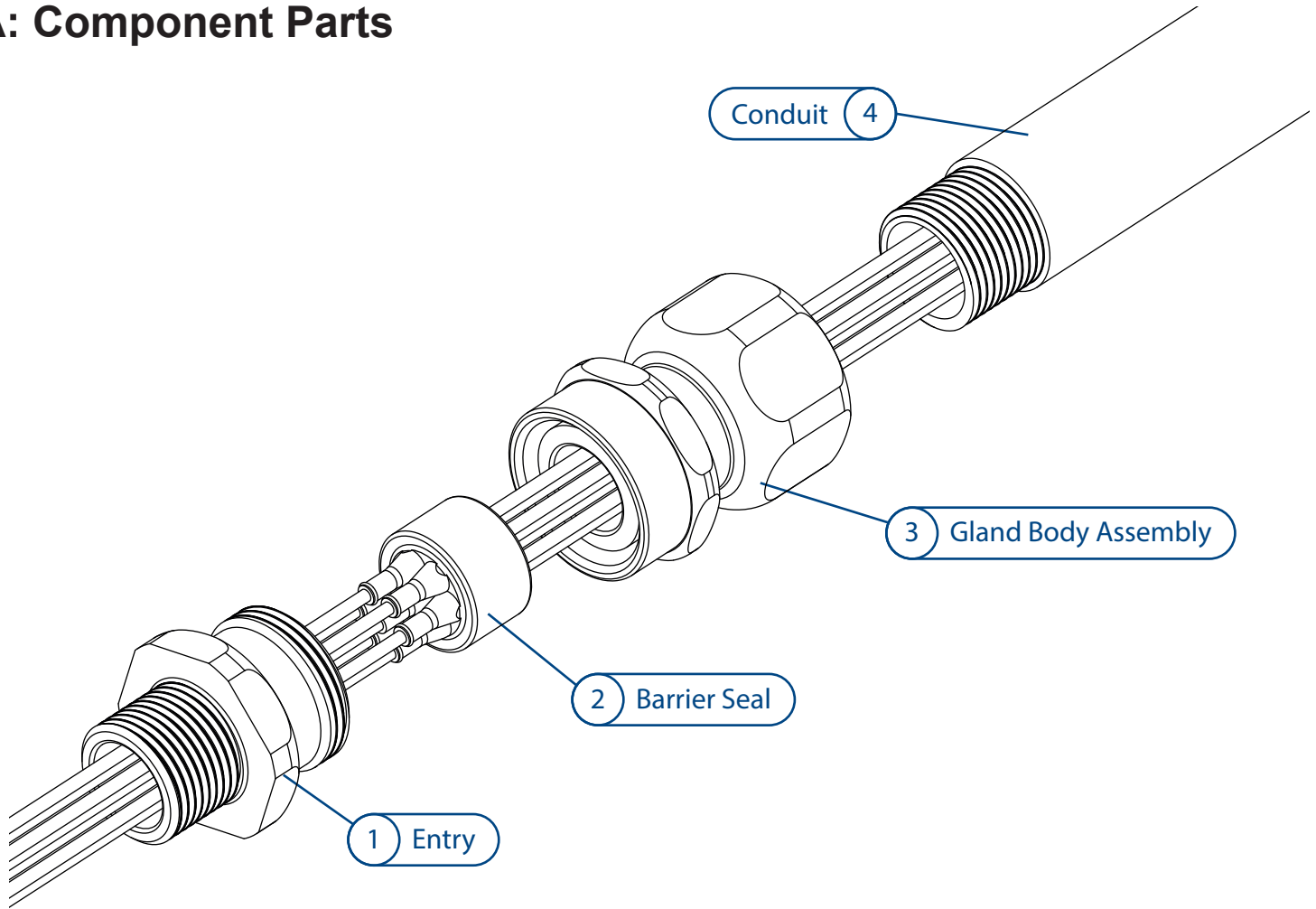


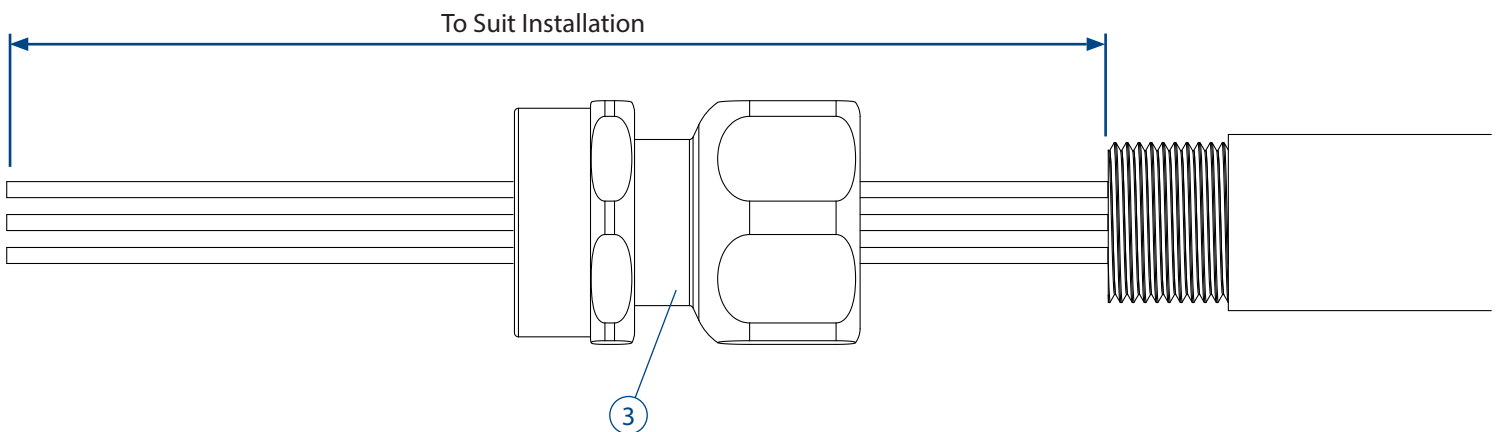
A: Component Parts



B: Installing Cable Gland

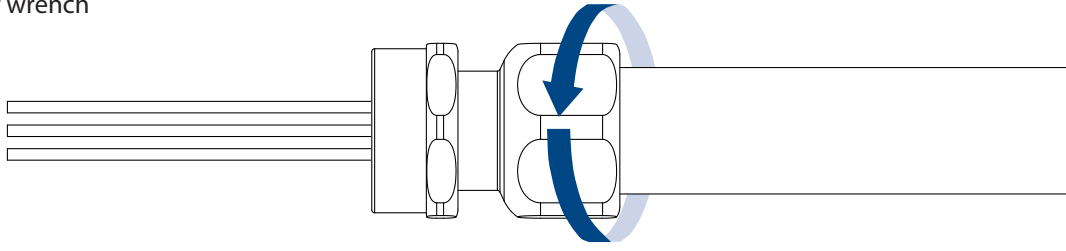
STEP 1: Pull conductors through Conduit

Pull sufficient length of conductors through the conduit to suit the installation.
Pass the conductors through the Gland Body Assembly (3).



STEP 2: Screw Backnut to Conduit

Screw Gland Body Assembly (3) onto pre-threaded conduit, or suitable flexible conduit fitting, and tighten with a spanner or wrench

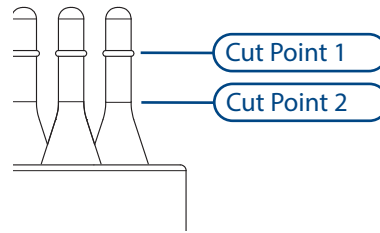


STEP 3: Prepare Seal for Installation

For all seal positions which are to be populated with conductors, cut the diaphragms down as per the instructions below. For this, Hawke recommends the use of flush cable cutters.

All unused positions must be left capped.

Cut Point Selection		
Seal Type	Over Insulation Diameter (mm)	Cut Point
Standard	$\geq 1.5 \leq 2.0$	1
	$> 2.0 \leq 4.0$	2
B-Size Alternative (S)	$\geq 4.5 \leq 5.5$	1
	$> 5.5 \leq 6.5$	2

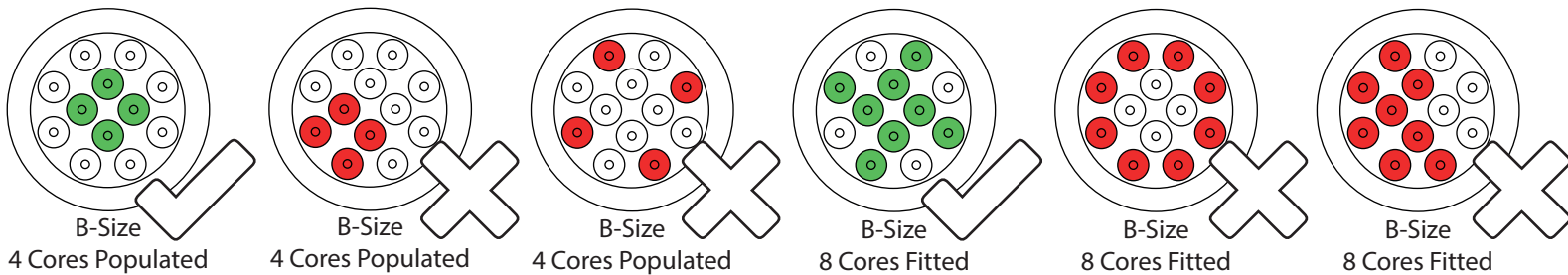


Critical Note
Applies to C-Size Seal Only

The 7x indicated positions above **must** be populated with conductors.

Hawke recommends that the seals are populated from the centre positions first, and are evenly distributed as much as possible to ensure consistent compression.

Examples of good and bad practice:

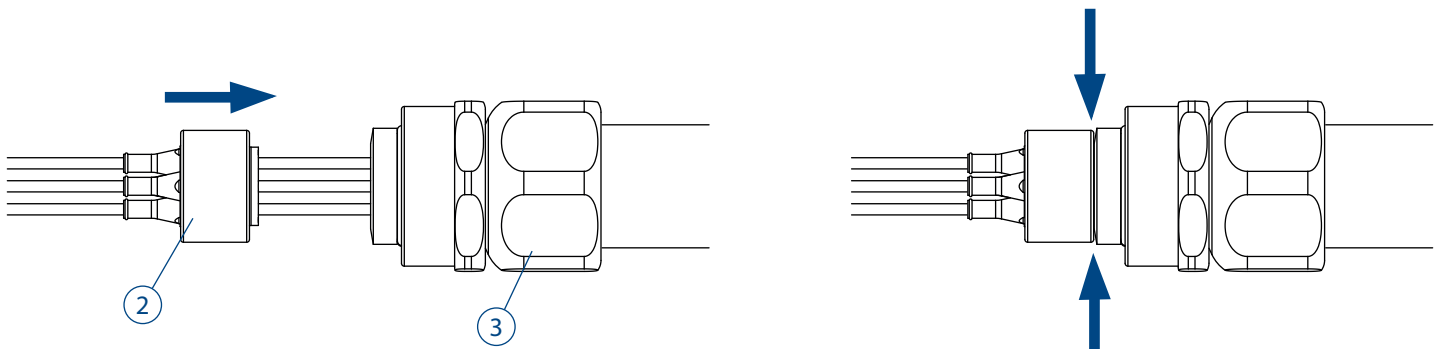


STEP 4: Install seal onto Conductors

Ensure conductors are cut straight and flat, ensuring there are no protruding strands

Feed each conductor into the correct seal diaphragm position. Ensure the diaphragm cone is in complete contact with the conductor around the full diameter. If the seal is ripped during this process, and the cone is not in complete contact with the conductor, then the seal must be replaced.

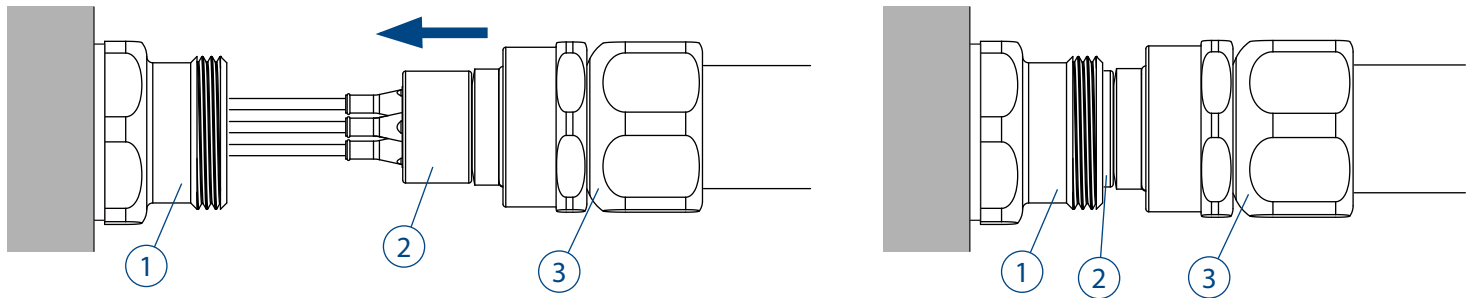
Slide the seal (2) down the conductors until it is properly seated into the gland body (3) as shown below.



STEP 5: Install Barrier seal into Entry

Fit entry (1) to enclosure. If required, use the appropriate IP washer.

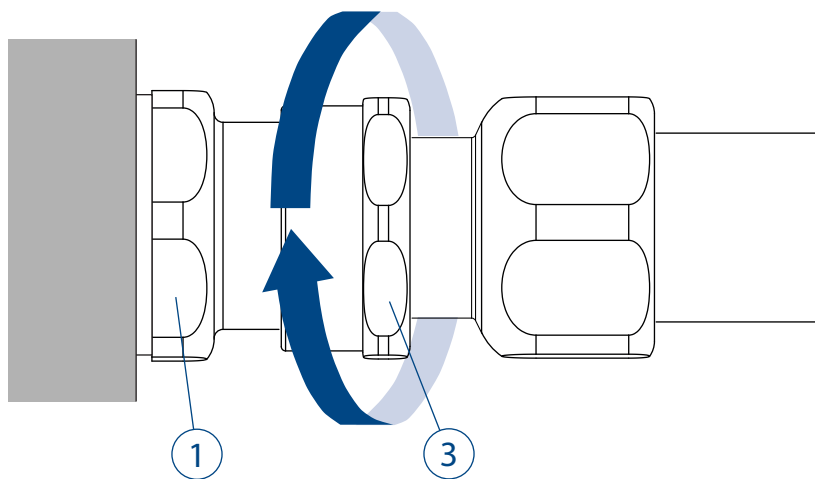
Feed the conductors through the entry (1) and seat the seal (2) into the entry (1) until it meets the base of the entry bore.



STEP 8: Compress Barrier Seal

With the seal fully seated into the entry, tighten up the running coupler nut by hand until resistance is felt.

Using a wrench/spanner tighten the middle nut (5) the correct number of turns, refer to barrier seal compression table.



Barrier Seal Compression		
Gland Size	Seal Type	No. of Turns
O	Standard	2
A	Standard	3
B	Standard	5
B	Alternative (S)	4
C	Standard	3

TECHNICAL DATA

Cable Gland Type: P SB 474
Equipment Type: Group II Conduit Cable Glands
Ingress Protection: IP66, IP67
Operating Temp: -60°C to +100°C

CERTIFICATION DETAILS

Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex tb IIIC Db
ATEX: CML19ATEX1167X **UKEX:** CML 21UKEX1161X
IECEX: CML19.0045X **IEEx:** 14.0272X
 No EA3C RU C-GB.HA91.B.00264/21

ACCESSORIES

Hawke offer the following accessories to enable correct sealing and ground of cable glands.

Shroud: For additional corrosion protection
Locknut: To secure gland into position
Sealing Washer: For additional ingress protection
Earth Tag: For external bonding point
Serrated Washer: To prevent vibration loosening locknuts
Hawke GMC: Gland mounted cable clamp

INSTALLATION NOTES

1. Hawke cable gland entry threads are manufactured in accordance with Metric BS3643 (Metric) or ANSI/ASME B1.20.1 (NPT).
2. All cable glands must be installed by a suitably trained and competent individual.
3. When specifying cable glands, the installer should check material compatibility with enclosure and environment.
4. In order to maintain effective sealing of an IP washer, cable gland entries must be installed perpendicular to the enclosure sealing faces and the enclosure sealing face must be smooth and free from damage.
5. For drain wire preparation please refer to AI2028 "Method 1".

SPECIAL CONDITIONS OF USE:

1. 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 IP66/67 seal is used.

TORQUE VALUES

All torque values below were generated on metallic mandrels. For cable, it is recommended that the assembly instructions are followed.

Torque Figures N/m						
Gland Size	Os	O	A	B	B (alt)	C
Gland Body Torque	7	7	7	15	27	27

CABLE GLAND SELECTION TABLE																
Size Ref.	Male Entry Thread Size		Female Entry Thread Size		Cable Acceptance Details								Compressed Length	Maximum Length	Hexagon Dimensions	
					Conductors											
	Standard Seal				Alternative Seal (S)											
	Diameter (mm)		Quantity		Diameter (mm)		Quantity									
	Min	Max	Min	Max	Min	Max	Min	Max								
O	M20 / M16	½"	M20 / M16	½"	1.5	4.0	1	4	-	-	-	-	54.5	69	24.0	26.5
A	M20	½" / ¾"	M20	½" / ¾"	1.5	4.0	1	7	-	-	-	-	56.4	69	30.0	32.5
B	M25	¾" / 1"	M25	¾" / 1"	1.5	4.0	1	12	4.5	6.5	1	5	48.2	61	36.0	39.5
C	M32	1" / 1¼"	M32	1" / 1¼"	1.5	4.0	7	19	-	-	-	-	61.6	77	46.0	50.5

EU Declaration of Conformity in accordance with European Directive 2014/34/EU and UK Statutory Instrument 2016/1107

Manufacturer: Hawke International, Oxford Street West, Ashton-under-Lyne, OL7 0NA, United Kingdom

Equipment: P SB 474

Provisions of the Directive fulfilled by the Equipment: Group II Category 2GD Ex db eb IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db – IP66 67

Harmonized Standards used: EN 60079-0:2018, EN60079-1:2014, EN60079-7:2015+A1:2018, EN60079-15:2019, EN60079-31:2014

Notified Body for EU-Type Examination: CML B.V. 2776 Amsterdam, NLD

EU-type Examination Certificate: CML19ATEX1167X, CML19ATEX4507X (Ex nR)

Notified Body for production: 0598

Approved Body for UK-Type Examination: CML B.V. 2503 Chester, UK

UK-type Examination Certificate: CML 21UKEX1161X, CML21UKEX4133X (Ex nR)

Approved Body for production: 1180

On behalf of the above named company, I declare that on the date the equipment, accompanied by this declaration, is placed on the market the equipment conforms with all technical and regulatory requirements of the above listed directives.

Andrew Reid
 Technical Manager