

HEXLON

Explosion-Proof Terminal Boxes, Cable Glands & Conduit Fittings Selection Guide

A practical buyer guide for hazardous area terminal boxes, cable entry, conduit connection, and sealing requirements.

Includes selection factors, inquiry checklist, and product category overview.

1. Where These Products Are Used

Explosion-proof terminal boxes and cable entry products help maintain enclosure integrity when power, control, or instrument cables enter equipment installed in hazardous areas. Buyers usually need to confirm the product type together with the area classification, certification requirement, cable construction, thread, material, and environmental conditions.

Typical industries

Oil and gas, petrochemical, chemical processing, marine, grain handling, pharmaceutical, and other hazardous area projects.

Common applications

Cable entry into explosion-proof enclosures, conduit routing, branch connections, and sealing points in hazardous locations.

Buyer priority

Confirm compliance first, then match installation details such as thread, cable diameter, material, ingress protection, and temperature.

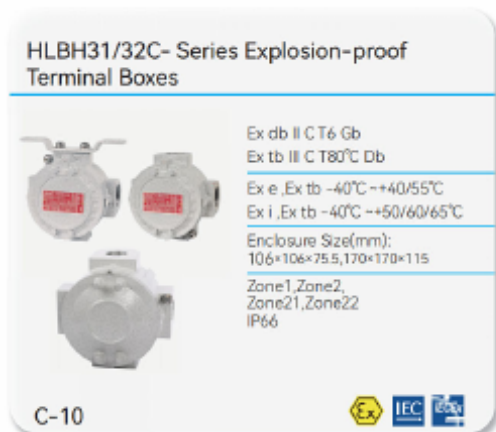
Best next step

Send the inquiry checklist in this guide before requesting a quote. It reduces back-and-forth and helps identify suitable options faster.

2. Match Product Type To Installation Need

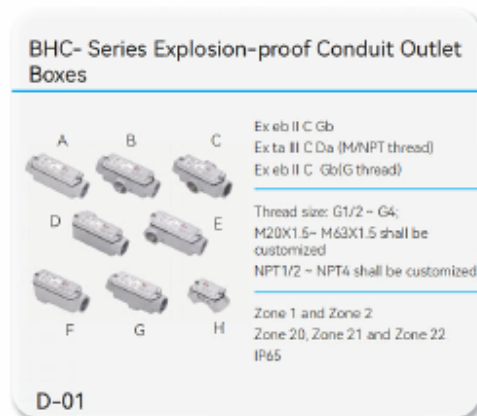
Start with the installation function. Terminal boxes, cable glands, conduit fittings, and sealing fittings solve different problems, even when they appear in the same hazardous area cable entry system.

Terminal boxes



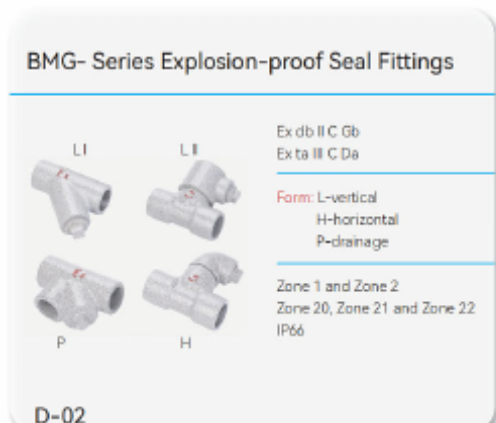
- Used for wiring termination, branching, and enclosure connection in hazardous areas.
- Check terminal quantity, entry size, certification, IP rating, and temperature requirement.

Conduit outlet boxes



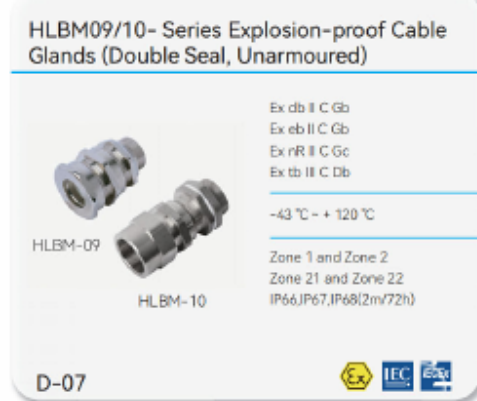
- Used for conduit direction changes, branching, and installation access.
- Check thread type, conduit size, zone requirement, and enclosure protection.

Seal fittings



- Used where sealing is required in conduit systems.
- Check installation orientation and sealing compound requirements.
- Often specified near hazardous area boundaries or equipment entries.

Cable glands



- Used where cables enter certified enclosures.
- Check cable type, seal type, thread, material, and IP rating.
- HEXLON HLBM series includes armoured, unarmoured, single seal, double seal, and compound barrier options.

3. Choose Cable Entry Products By Hazardous Area Requirement

A cable entry product should be selected around the certified protection method and the exact installation environment. A part that fits mechanically is not enough if the certification, zone, material, or temperature requirement is wrong.

Selection factor	What to confirm before quotation
Area classification	Gas zone, dust zone, and whether the site requires Zone 1, Zone 2, Zone 21, or Zone 22 suitability.
Certification	ATEX, IECEx, or other project-specific certificates requested by the buyer, EPC, or end user.
Cable construction	Armoured or unarmoured cable, cable outside diameter, and whether a single seal, double seal, or barrier.
Thread and size	Metric, NPT, or G thread, plus the exact thread size and enclosure entry size.
Material	Aluminium alloy, brass, nickel-plated brass, stainless steel, or other material required by the environment.
Ingress protection	IP66 or other project-specified ingress protection, depending on product series and installation.
Temperature	Ambient and operating temperature range required by the project.

4. Cable Gland Options To Compare

The HEXLON catalogue includes multiple HLBM cable gland series. The correct choice depends on cable construction, sealing method, hazardous area requirement, and installation environment.

HLBM01/02-Series Explosion-proof Cable Glands



Ex eb II C Gb
Ex nR II C Gc
Ex tb III C Db

-43°C ~ +100 °C

Zone 1 and Zone 2
Zone 21 and Zone 22
IP66

HLBM-05/06 Series Explosion-proof Cable Glands (Single Seal, Armoured)



Ex eb II C Gb
Ex nR II C Gc
Ex tb III C Db

-43°C ~ +100 °C

Zone 1 and Zone 2
Zone 21 and Zone 22
IP66

HLBM-07/08 Series Explosion-proof Cable Glands (Single Seal, Unarmoured)



Ex db II C Gb
Ex eb II C Gb
Ex nR II C Gc
Ex tb III C Db

-43 °C ~ +100 °C
-60 °C ~ +120 °C (f type)

Zone 1 and Zone 2
Zone 21 and Zone 22
IP66, IP67, IP68(2m/72h)

HLBM13/14-Series Explosion-proof Cable Glands (Double Seal, Armoured, Unarmoured)



Ex db II C Gb
Ex eb II C Gb
Ex nR II C Gc
Ex tb III C Db

-43 °C ~ +120 °C

Zone 1 and Zone 2
Zone 21 and Zone 22
IP66, IP67, IP68(2m/72h)

HLBM15/16- Series Explosion-proof Cable Glands (Compound Barrier, Unarmoured)



Ex db II C Gb
Ex eb II C Gb
Ex nR II C Gc
Ex tb III C Db

-43 °C ~ +120 °C
-60 °C ~ +120 °C

Zone 1 and Zone 2
Zone 21 and Zone 22
IP66

HLBM17/18- Series Explosion-proof Cable Glands (Compound Barrier, Armoured, Unarmoured)



Ex db II C Gb
Ex eb II C Gb
Ex nR II C Gc
Ex tb III C Db

-43 °C ~ +120 °C
-60 °C ~ +120 °C

Zone 1 and Zone 2
Zone 21 and Zone 22
IP66

5. ATEX And IECEx Notes For Buyers

For hazardous area projects, buyers often use ATEX and IECEx as shorthand for safety and documentation expectations. The final requirement should always match the project specification, end-user standard, and local regulatory requirement.

ATEX

Commonly requested for projects connected to European hazardous area requirements. Confirm equipment group, category, protection concept, and temperature class.

IECEx

Commonly requested for international hazardous area projects. Confirm certificate coverage for the product type and installation environment.

Gas and dust

Do not assume gas-zone approval automatically covers dust-zone requirements. Ask for the exact gas or dust classification from the project.

Documentation

Ask for certificates, catalogue pages, datasheets, drawings, and model selection notes before final purchase approval.

Important: this guide is a practical selection aid, not a replacement for the official project specification, product certificate, or installation standard.

6. Faster RFQ Checklist

A clear inquiry helps the supplier identify the right series and reduces repeated clarification. Copy the checklist below when requesting a quote.

Item	Information to provide
Project country	Destination country and any local certification preference.
Hazardous area	Zone 1, Zone 2, Zone 21, Zone 22, or project classification document.
Product type	Terminal box, cable gland, conduit fitting, seal fitting, outlet box, or accessory.
Cable details	Armoured or unarmoured, outside diameter, sheath material, and quantity.
Thread details	Metric, NPT, G, or other thread standard and size.
Material preference	Brass, nickel-plated brass, stainless steel, aluminium alloy, or project-specified material.
Documents needed	Certificate, datasheet, drawing, catalogue page, or compliance statement.
Quantity and timing	Estimated quantity, delivery location, and target delivery date.

7. HEXLON Support Assets

This vertical guide is designed for quick product selection. For a broader product overview, use the HEXLON 2023 simplified catalogue together with the specific product series pages and certificates requested by the project.

Use this guide for

Early selection, RFQ preparation, and understanding which product category fits the installation need.

Use the full catalogue for

A wider view of HEXLON explosion-proof product families and product series references.

Before final order

Confirm certificates, model number, thread, material, cable size, quantity, and project documentation requirements.

How to request help

Reply to the email that delivered this guide with the RFQ checklist information. A suitable product option can then be checked against your requirement.

Recommended next action

Send the product type, hazardous area classification, cable details, thread requirement, material preference, quantity, destination country, and required documents. This is the fastest path to a useful quotation.