16710-45

Standard Armored Interconnect Cable

Apter Power field guide covering identity capture, installed relationships, controlled replacement, commissioning and handover.

Cable identity and endpoints

16710 is the documented armored interconnect-cable family for Bently Nevada acceleration-system hardware. The 45 suffix selects a 45 ft run while retaining the three-conductor shielded 22 AWG construction.

Complete identity record

Cable family	16710 standard armored interconnect cable
Ordered length	45 ft (approximately 13.7 m)
Conductor arrangement	3 conductors plus shield
Conductor size	22 AWG (0.5 mm2)
Mechanical protection	Stainless-steel armor
Sensor-end connector	3-socket plug
Panel-end termination	Terminal lugs
Conductor identification	A white; B red; C black; shield green

Installed relationship

Cable compatibility depends on the installed Bently Nevada acceleration-system connector and receiver drawing

Long machine-to-cabinet runs

Use the 45 ft execution where the routed path exceeds shorter standard lengths.

Exposed cable routing

Apply the stainless-steel armor where the installed route requires additional mechanical protection.

Defined three-contact interfaces

Preserve the A/B/C contact identity from the plug through the receiver termination.

Maintenance replacement

Match length, connector orientation, conductor colors and lug destinations before removing the original cable.

Evidence boundary

Exact configuration	45 ft armored 22 AWG three-conductor shielded cable with three-socket plug and terminal lugs
Connection boundary	Cable compatibility depends on the installed Bently Nevada acceleration-system connector and receiver drawing
Technical reference	Bently Nevada 330450 High Temperature Acceleration System Datasheet 169885 Rev. H

Route and termination control

The sensor end uses a three-socket connector with A, B and C contacts. The opposite end presents white, red and black conductors plus a green shield lead at terminal lugs, so conductor identity must be carried through the cabinet termination record.

Readiness checks

Identify both endpoints

Photograph the three-socket connector and every terminal lug before disconnection.

Do not pull on the armor

Support the assembly and use the connector body during removal and installation.

Preserve the shield route

Restore the green shield lead exactly as shown on the approved drawing.

Protect conductor labels

Retain A, B and C identification through the complete routed length.

Check mechanical support

Secure the armored run so vibration and weight do not load the connector.

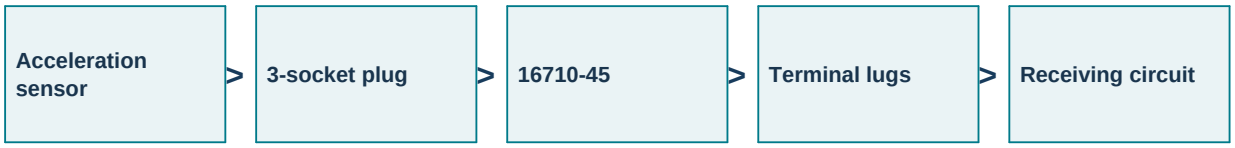
Test before energization

Verify continuity, isolation and destination for each conductor and shield.

Technical values used for fit decisions

Armor outside diameter	0.275 in (7 mm)
Cable section diameter	0.160 in (4.1 mm)
Prepared lead section	25.00 +/- 3.00 in (635 +/- 76 mm)
Ordering increment	1 ft (0.3 m)
Documented length range	3 to 99 ft (0.9 to 30 m)

Installed signal or connection path



Readiness boundary

Application scope: Use it as the documented armored connection between compatible Bently Nevada acceleration hardware and its receiving circuit.

Continuity-led installation sequence

01 Capture	Photograph the complete marking, installed position, connections and companion hardware before disturbance.
02 Isolate	Apply the approved machine or system isolation and prove the required de-energized state.
03 Compare	Check every order-code value and mechanical interface against the offered item and approved drawing.
04 Remove	Release connectors and supports without twisting, pulling or loading the sensing face, cable or armor.
05 Install	Photograph the three-socket connector and every terminal lug before disconnection. Support the assembly and use the connector body during removal and installation.
06 Reconnect	Restore the green shield lead exactly as shown on the approved drawing. Retain A, B and C identification through the complete routed length.
07 Energize	Use the approved staged procedure and monitor the expected static state before functional testing.
08 Prove	Verify continuity, isolation and destination for each conductor and shield.

Field decisions

How is the 45 ft length of 16710-45 interpreted?

The suffix is ordered in one-foot increments; 45 selects a nominal 45 ft cable, approximately 13.7 m.

Which conductors are provided in 16710-45?

The armored assembly contains three shielded 22 AWG conductors identified as A white, B red and C black, plus a green shield lead.

What termination arrangement does 16710-45 use?

One end has a three-socket plug and the opposite end has terminal lugs for the three conductors and shield.

How should the shield of 16710-45 be reconnected?

Follow the approved system drawing and reproduce the original green shield-lead destination; do not improvise a second ground point.

Further model-specific decisions

What should be checked before routing 16710-45?	Confirm the complete path length, connector access, support points, armor clearance and the receiver terminal destination.
Can the stainless-steel armor on 16710-45 carry cable tension?	No. Support the cable independently and avoid pulling, twisting or hanging the assembly by the armor or connector.
Which electrical checks are appropriate for 16710-45 before service?	Verify A/B/C continuity, conductor-to-shield isolation, shield continuity and correct point-to-point landing with the system de-energized.
What evidence should be retained after installing 16710-45?	Keep endpoint photographs, conductor and shield destinations, routed length, continuity results and the connected sensor and receiver identities.

Acceptance evidence and handover

Identity accepted	Complete order code and supplied execution agree with the approved record.
Mechanical acceptance	Mounting, insertion, routing, support and connector condition match the documented arrangement.
Electrical acceptance	Continuity, static bias or gap and receiving-channel state are within the approved baseline.
Functional acceptance	Representative measurement or connection response agrees with the recorded machine condition.
Handover record	Retain photographs, as-left values, companion identities, deviations and responsible release.

Release record

As-found evidence	Complete marking, installed position, connection map and baseline readings retained.
As-left evidence	Installed identity, mechanical datum, static reading and functional result retained.
Approval basis	Site procedure, applicable manufacturer document and responsible release recorded.

Verified related product references

Recommended product	Bently Nevada 330980-70-05
Recommended product	Bently Nevada 330425-01-00
Recommended product	Bently Nevada 330500-07-00
Recommended product	Bently Nevada 330706-005-046-10-02-00
Recommended product	Bently Nevada 200355-00-00-00

Discuss the exact marking and installed relationship with Apter Power.
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