FEICHUN CABLE | CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV | 6.35/11 kV Uo/U | 3 CORE | Cu / XLPE / LSZH | SINGLE-LAYER GALV. STEEL WIRE ARMOUR | IEC 60502-2

Feichun CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV — Three-Core XLPE Copper Cable with Galvanized Steel Wire Armour

A full-English engineering guide to the CU/XLPE/CTS/LSZH/SWA/LSZH three-core medium-voltage cable construction: copper conductors, semiconducting screens, XLPE insulation, copper tape, LSZH filler, LSZH separation sheath, single-layer galvanized steel wire armour and LSZH outer sheath. The article separates the published matrix from project-level inputs that still require confirmation.

Uo/U: 6.35 / 11 kV | 3 cores | Impact resistance: Good | -20 ... 90 °C usage range | 250 °C short-circuit conductor limit | Bending factor: 12 (xD) | IEC 60332-3 Cat. C

Voltage class
6.35/11 kV
Uo/U notation supplied by the source.

Core construction
3 CORE
Three-core copper-conductor XLPE cable.

Armour
SINGLE-LAYER GALV. STEEL WIRE
Single-layer galvanized steel wire armour under LSZH outer sheath.

Published matrix
complete matrix
70, 95, 120, 150, 185, 240, 300 and 400 mm² rows are published; screen duty and project formation still require review.

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1. Engineering position: a three-core armoured MV cable with controlled data boundaries

N2XSEHRH is a three-core, XLPE-insulated, copper-conductor medium-voltage cable with copper tape as the metallic screen, LSZH filler, LSZH separation sheath, single-layer galvanized steel wire armour and LSZH outer sheath. The supplied application is fixed energy-network service in residential or industrial areas, underground routes and ducts, including routes where mechanical stresses are expected.

Electrical platform
Each phase core has a copper conductor, semiconducting conductor screen, XLPE insulation and semiconducting insulation screen. Copper tape are listed as the metallic screen.

Mechanical platform
Single-layer galvanized steel wires provide an armoured mechanical barrier around the LSZH-separated core assembly. Armour overlap, tape dimensions, bonding and installation loads need the controlled drawing.

Three-core platform
Three cores are grouped inside a LSZH filler and separation sheath. This differs from a single-core system in phase geometry, magnetic coupling, termination arrangement and fault-current paths.

Evidence platform
The record supplies voltage, operating range, impact rating, the 70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm² matrix and current ratings; screen section and route-specific ampacity still require confirmation.

Data boundary: this article does not invent a conductor size outside the supplied 70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm² rows, screen fault current, bending radius, service conductor temperature or fire class. Never fill a blank field from another size, supplier or cable family.

2. Designation and construction logic

Designation / field	Engineering reading	Design consequence	Evidence status
N2X	XLPE-insulated medium-voltage cable family context.	Coordinate insulation, semiconducting screens, terminations and tests with the stated 6.35/11 kV voltage.	Source construction
S	Metallic screen construction; source lists copper tape.	Screen continuity, earthing and fault duty require a controlled screen section and bonding design.	Source construction
RH / construction record	Do not rely on a letter-by-letter interpretation when the source already provides the actual build: LSZH filler, LSZH separation sheath, single galvanized steel wires and LSZH outer	Purchase and accessory documents should reproduce the construction sequence, not only the designation.	Construction-based interpretation

Designation / field	Engineering reading	Design consequence	Evidence status
	sheath.		
6.35/11 kV	Product family title.	The characteristic table states Uo/U as 6.35/11 kV; use the exact source notation in the project schedule.	Family title + characteristic field
3 cores	Three-core cable.	Use a three-core termination and formation design; do not apply single-core cleat or screen-bond assumptions.	Official family page / PDF

Core-by-core screen interpretation
The source lists conductor screen, XLPE, insulation screen and metallic screen before the filler. The diagram shows a screened-core concept for explanation, while the exact screen placement and dimensions remain controlled-drawing items.

LSZH material system
The source explicitly lists LSZH filler, LSZH separation sheath and LSZH outer sheath. The source also lists halogen-free, gas-corrosivity and smoke-density references; confirm the current reports.

Steel wire armour
Steel wire armour provides mechanical protection, but it is not automatically a substitute for a metallic fault-return conductor or an earthing system.

Fixed-installation boundary
The source application covers underground and duct routes. The stated 12 (xD) factor is a laying value, not a dynamic-service rating; installation controls must be obtained before installation.

3. Standard and evidence review

Reference	Role in this article	Engineering interpretation	Boundary
IEC 60502-2	Product standard listed by the source.	Use for the construction, dimensions and test-basis review of the applicable extruded-insulation MV cable.	Confirm the project-adopted edition and exact Feichun conformity file.
IEC 60332-3 Cat. C	Flame retardant reference listed by the source.	The source uses a bunched-cable vertical flame-spread test reference, Category C. It is not itself a CPR class.	Source gives the standard number without an edition.
LSZH system	LSZH filler, separation sheath and outer sheath.	Review smoke, corrosive gas, halogen, fire stopping and local building requirements from the actual product documentation.	LSZH and halogen-free construction are specified; confirm the current compound and test reports.
Impact resistance	Good.	Useful as a product characteristic, but route-specific impact, compression and installation loads still require design.	No detailed impact test value is supplied.
CPR fire class	Cca is stated in the supplied family title.	Use Cca as the stated class; do not add unprovided smoke, droplet or acidity qualifiers.	Not published.

IEC scope check: the official IEC 60502-2 record describes extruded-insulation cables from 6 kV up to 30 kV for fixed installations such as distribution networks and industrial installations. N2XSEHRH is listed by the product source under IEC 60502-2; the exact edition and project conformity evidence still need to be controlled.

4. Complete source specification

Every user-provided field is preserved below. The article uses “Not published” or the source dash where the record does not provide a value. The official PDF adds the 250 °C short-circuit conductor temperature, while preserving the dash fields.

Specification field	Reference value	Engineering interpretation	Evidence status
Product designation	CU/XLPE/CTS/LSZH/SWA/LSZH - 6.35/11 kV - Cca Class	Three-core XLPE-insulated copper-conductor cable with copper-tape screen, LSZH filler, LSZH separation sheath, single-layer galvanized steel wire armour and LSZH outer sheath.	Supplied / official family reference
Product description	6.35/11 kV XLPE insulated, steel wire armoured, three core LSZH sheathed cables with copper conductor	A fixed-installation MV cable architecture for energy networks where low-smoke, halogen-free and flame-retardant cables are specified.	Supplied source / official family page
Product standard	BS 7835	The source lists BS 7835. Confirm the project-adopted edition, accessories and exact Feichun conformity route before release.	Supplied source — current edition to be confirmed
Conductor material	Copper	Phase conductors are identified as copper; the supplied matrix provides 70, 95, 120, 150, 185, 240, 300 and 400 mm² nominal areas.	Supplied source
Conductor shape	Circular compacted	The official 3x95 mm² record identifies a circular compacted conductor; confirm the shape for every ordered size.	Official 3x95 mm² product page / PDF
Number of cores	3	Three-core construction; phase arrangement is internal to the cable, but termination, earthing and system protection remain project-level decisions.	Supplied source / official family page
Rated Voltage Uo/U (Um)	6.35 / 11 kV	The source gives Uo/U as 6.35/11 kV; no separate Um value is printed in the supplied record.	Supplied source / official family page
Mechanical resistance to impacts	Good	Impact resistance is listed as Good; exact impact test basis and route loads must be confirmed for Feichun.	Supplied source / official family page
Operating temperature, range	-20 ... 90 °C	The source usage range; ambient, laying, accessory and sheath limits still govern the complete installation.	Supplied source / official family page
Short-circuit max. conductor temperature	250 °C	Use with conductor I²t, protection clearing time, screen duty, armour treatment and accessory capability.	Supplied source / official family PDF
Bending factor when laying	12 (xD)	The stated laying factor supports a size-specific radius screening calculation; accessory instructions and the controlled method statement remain decisive.	Supplied source / official family page

Specification field	Reference value	Engineering interpretation	Evidence status
Max. conductor temperature in service	90 °C	Continuous conductor temperature limit stated by the source; use with the actual formation, ambient and accessory limits.	Supplied source / official family page
Flame retardant	IEC 60332-3 Cat. C	Bunched-cable vertical flame-spread test reference, Category C; it is not by itself a complete CPR declaration.	Supplied source / official family page
Gases corrosivity	IEC 60754-2	Corrosivity-related fire test reference; use the current product report and route fire strategy.	Supplied source / official family page
Smoke density	IEC 61034	Smoke-density test reference as written in the supplied record; cable grouping, ventilation and enclosure geometry remain project-level fire inputs.	Supplied source / official family page
Fire performance class	Cca	Cca is the family fire-class designation. The older 3x95 mm² product record separately declares Cca-s1,d2,a1; do not generalise that sub-class to every matrix row without current product evidence.	Supplied family title / older 3x95 mm² product DoP
Conductor screen	Semi-conducting compound (XLPE)	Radial electric-field transition at the conductor-to-XLPE interface.	Supplied source
Insulation	XLPE	Primary solid dielectric layer for the stated MV voltage class.	Supplied source
Insulation screen	Semi-conducting compound (XLPE)	Controls the outer electric-field interface around each insulated core.	Supplied source
Semi-conducting tape	Crape paper	The source identifies a semi-conducting tape layer; retain the source wording and confirm material specification in the controlled drawing.	Supplied source
Metallic screen	Copper tape	Copper-tape screening is listed, but screen geometry, section and short-circuit duty are not published in the supplied matrix.	Supplied source — numerical screen data absent
Filler	LSZH	Fills the interstices of the three-core assembly and supports the circular cable build while preserving the low-smoke, halogen-free material concept.	Supplied source
Separation sheath	LSZH	Separates the three-core assembly from the galvanized steel wire armour.	Supplied source
Armour	Single layer galvanized steel wire	Provides mechanical protection; wire diameter, lay, coverage, bonding and fault-current behaviour require the released drawing.	Supplied source / official family page
Outer sheath	LSZH	Low-smoke, halogen-free external protection; the official 3x95 mm² record lists red sheath colour; exact compound, colour, thickness and fire declaration must match the released product.	Supplied source / official 3x95 mm² product page
Sheath colour	Red	The official 3x95 mm² product page lists a red outer sheath; verify colour for each ordered size and market.	Official 3x95 mm² product page
Application	Energy networks where low smoke, halogen free and flame retardant cables are specified; underground, in ducts or in air	Use for fixed routes after voltage, thermal, mechanical, fire, water, earthing and accessory conditions are closed by design.	Supplied source
Source record supplied by user	Generated 8/4/26 — www.nexans.com.tr — Page 1 / 2	Preserved exactly as supplied; revision identity must be checked against the controlled release.	Supplied source metadata
Source record continuation	CU/XLPE/CTS/LSZH/SWA/LSZH - 6.35/11 kV - Cca Class — Page 2 / 2	The supplied characteristics and 70–400 mm² matrix are treated as the user reference record for this article.	Supplied source metadata
Official family PDF record	Generated 8/4/26 — Page 1 / 2 and Page 2 / 2	The official family PDF matches the supplied family-level record; the older size-specific product PDF is retained separately below.	Official family PDF metadata
Older product PDF record	CU/XLPE/CTS/LSZH/SWA/LSZH 3x95 mm² — Generated 9/14/25	The older size-specific PDF is retained as a separate revision record. Its 3x95 mm² declaration is not automatically the declaration for every size in the current family matrix.	Older official product PDF metadata
Older 3x95 mm² product DoP	Cca-s1,d2,a1 — DoP 1000754-TRDE	The official 3x95 mm² product record reports certification date 10/18/18, AVCP System 1+ and notified body 1008. Treat this as a size-specific historical record.	Older official 3x95 mm² product page / DoP

5. Published-data limitations and what cannot yet be calculated

Required design input	Source state	Why it matters	Required Feichun release action
Conductor cross-section	70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm²	The matrix supplies area, resistance, mass and diameter; formation-specific accessory and installation verification remain necessary.	Publish a size-specific data sheet and product code.
Continuous maximum conductor temperature	90 °C	Operating range -20 ... 90 °C is not a continuous conductor-temperature declaration.	Confirm continuous service limit with XLPE, screen, sheath and accessories.
Bending factor when laying	12 (xD)	A size-specific laying-radius screening value can be calculated; pulling and entry geometry cannot be released safely.	Publish installation factor and accessory-specific limits.
Current ratings	253–683 A in air; 220–541 A buried across the matrix	The supplied flat ratings still require recalculation for the actual formation, ambient, soil and grouping.	Publish or calculate ratings with the stated installation basis.
Screen / armour fault duty	Not supplied	Earth-fault path, screen bonding, galvanized steel wire behaviour and protection coordination remain unresolved.	Release screen section, armour details and I^2t capability.
Fire classification	Cca	The product-specific DoP declares Cca; do not infer additional s/d/a qualifiers.	Provide product-specific declaration if required by the project.

Engineering stop condition: the cable can be described and structurally reviewed from the source, but it cannot be fully sized, thermally rated or radius-released until the missing fields are closed for the exact Feichun construction.

6. Complete technical matrix — CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV Cca

The following matrix preserves all eight supplied product rows exactly. Current ratings are stated for air at 30 °C and buried flat formation at 20 °C; they are not universal ampacity values.

Cross section [mm²]	Nominal outer diameter [mm]	Approx. weight [kg/km]	Perm. current rating in air 30 °C — flat [A]	Perm. current rating buried 20 °C — flat [A]	Nominal phase capacitance [µF/km]	Nominal inductance [mH/km]	Max. DC resistance conductor at 20 °C [Ohm/km]	Short-circuit conductor 1 s [kA]	Short-circuit screen 1 s [kA]	Nexans Ref.
70	57.0	6250	253	220	0.273	0.326	0.268	10	1.74	10551043
95	61.0	7500	307	263	0.307	0.311	0.193	13.6	1.74	10551044
120	65.0	8500	352	298	0.339	0.3	0.153	17.2	1.74	10551045
150	68.0	9750	397	332	0.363	0.292	0.124	21.4	2.31	10551046
185	74.0	12500	453	374	0.396	0.284	0.099	26.5	2.31	10551047
240	80.0	14500	529	431	0.446	0.273	0.075	34.3	2.31	10551048
300	85.0	17000	599	482	0.488	0.266	0.06	42.9	2.89	10551049
400	92.0	20500	683	541	0.545	0.258	0.047	57.2	2.89	10551050

The supplied matrix is a reference record. Final Feichun dimensions, mass, electrical values, installation ratings and accessory compatibility must be released for the ordered construction.

Cross section	Published outer diameter	Derived laying calculation	Derived minimum laying radius	Mass conversion
70 mm²	12 × 57.0 mm	684.0 mm	6250 kg/km	625.0 kg/100 m
95 mm²	12 × 61.0 mm	732.0 mm	7500 kg/km	750.0 kg/100 m
120 mm²	12 × 65.0 mm	780.0 mm	8500 kg/km	850.0 kg/100 m
150 mm²	12 × 68.0 mm	816.0 mm	9750 kg/km	975.0 kg/100 m
185 mm²	12 × 74.0 mm	888.0 mm	12500 kg/km	1250.0 kg/100 m
240 mm²	12 × 80.0 mm	960.0 mm	14500 kg/km	1450.0 kg/100 m
300 mm²	12 × 85.0 mm	1020.0 mm	17000 kg/km	1700.0 kg/100 m
400 mm²	12 × 92.0 mm	1104.0 mm	20500 kg/km	2050.0 kg/100 m

Derived values: radius = 12 × nominal outer diameter; mass per 100 m = approximate kg/km ÷ 10. These are arithmetic screening values, not a substitute for the controlled installation instruction.

8. Layer-by-layer cross-section

CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV — three-core source construction

Copper conductors · XLPE insulation · copper tape · LSZH filler · LSZH separation sheath · single-layer galvanized steel wire armour · LSZH outer sheath.

Conceptual engineering reconstruction, not a manufacturing drawing. The matrix supplies 70, 95, 120, 150, 185, 240, 300 and 400 mm² conductor areas; the source does not publish screen section or layer dimensions.

1. LSZH outer sheath

External LSZH environmental and mechanical interface.

2. Single-layer galvanized steel wire armou

Armour system for mechanical protection; exact tape geomet

3. LSZH separation sheath

Separates the three-core assembly from the galvanized steel

4. Copper tape

Metallic screen around the insulated core construction; exact

5. LSZH filler

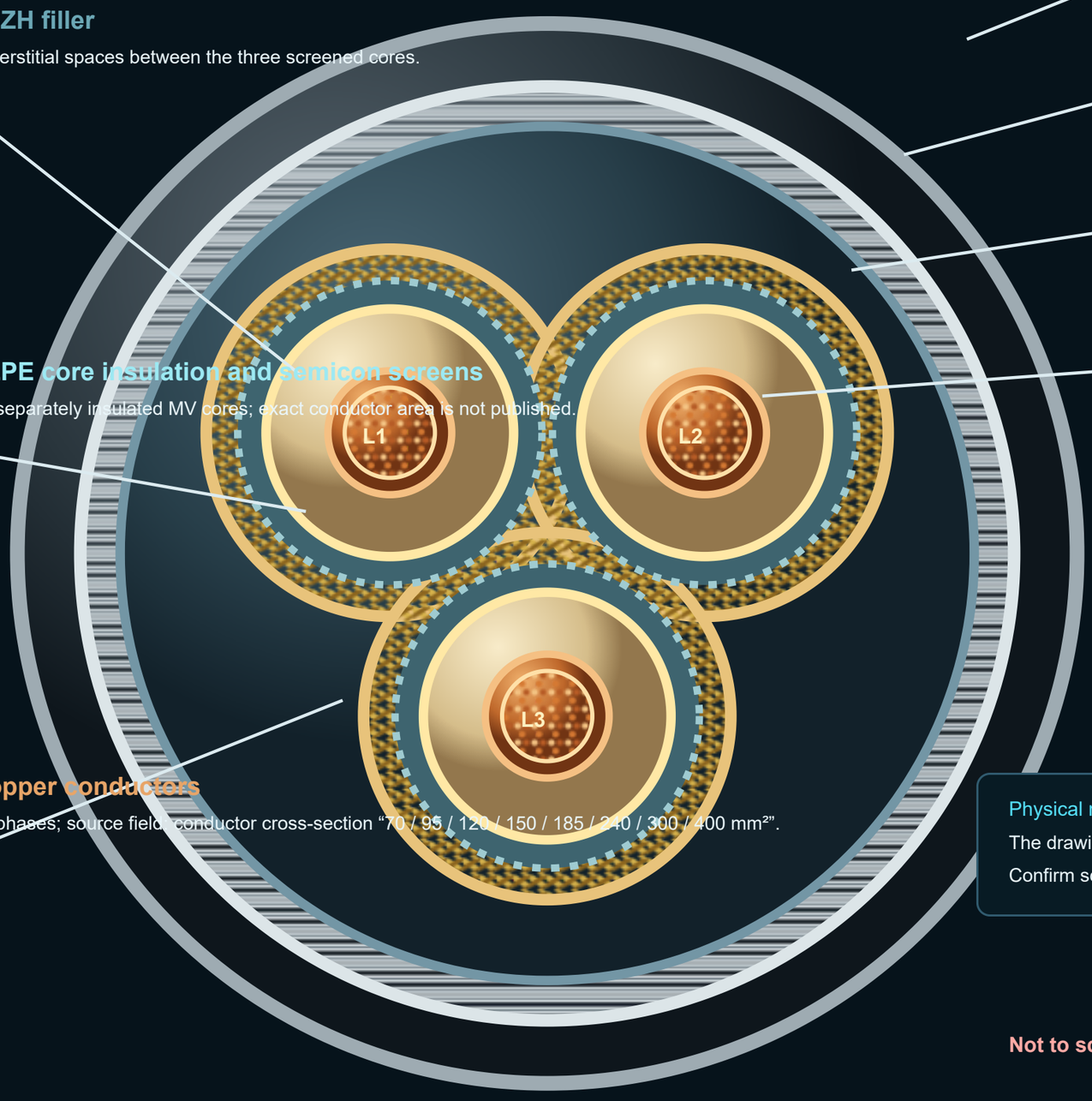
Fills interstitial spaces between the three screened cores.

6. XLPE core insulation and semicon screens

Three separately insulated MV cores; exact conductor area is not published.

7. Copper conductors

Three phases; source field: conductor cross-section “70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm²”.



Physical note:

The drawing shows an individual screened-core concept for explanation.

Confirm screen placement and dimensions from the released manufacturing drawing.

Not to scale · no numerical layer thickness or conductor area is inferred.

The source sequence is: copper conductor; semiconducting conductor screen; XLPE insulation; semiconducting insulation screen; copper tape metallic screen; LSZH filler; LSZH separation sheath; single galvanized steel wires; LSZH outer sheath. The cross-section is intentionally labelled as a conceptual screened-core arrangement because the source does not publish exact screen placement, core dimensions or armour geometry.

Three insulated cores
Each phase is shown with the listed conductor screen, XLPE insulation and insulation screen. The source does not publish the conductor area.

Copper metallic screen
Screen continuity and bonding are part of MV electric-field and earth-fault design. The source does not publish a screen section or short-circuit current.

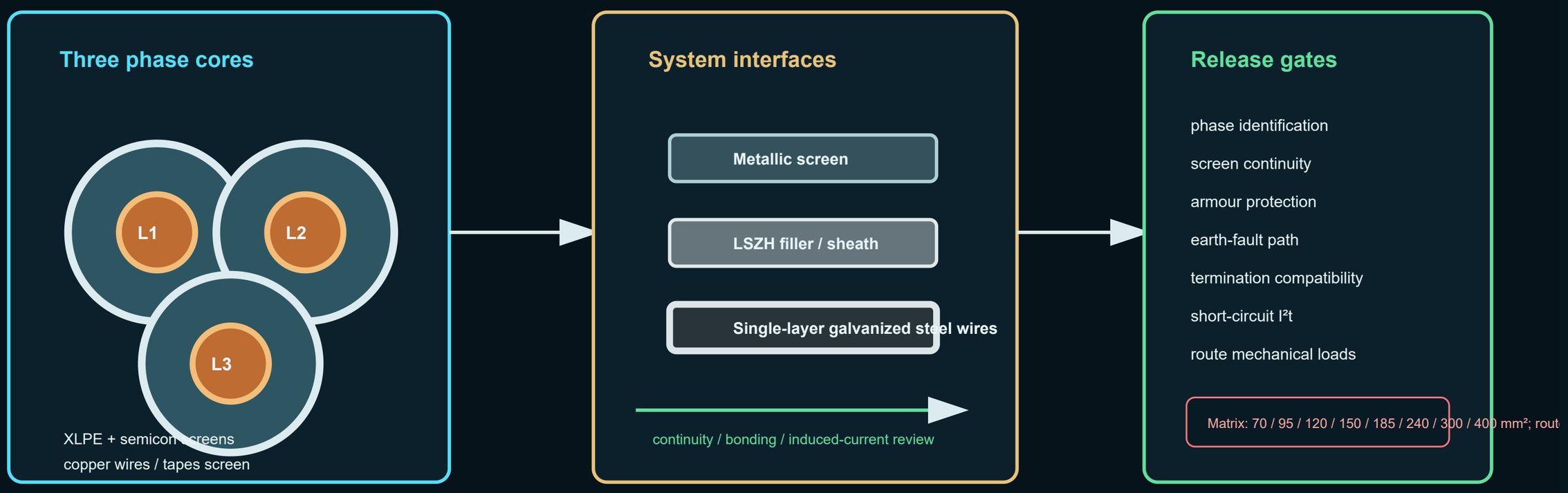
LSZH filler
Filler maintains assembly geometry and supports the separation sheath. Filler selection influences circularity, sheath interface and termination preparation.

Single-layer galvanized steel wire armour
Armour provides mechanical protection but exact overlap, tape width, thickness, lay and bonding must come from the controlled construction drawing.

9. Three-core electrical and mechanical system

CU/XLPE/CTS/LSZH/SWA/LSZH three-core system — electric field, screen and armour review

Three-core construction simplifies phase grouping, but the metallic screen, steel wire armour, terminations and earth-fault path still require a controlled system design.



Do not fill unpublished screen section, armour duty or route-specific rating data from another cable; use the supplied 70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm² matrix.

Phase geometry
Three-core construction fixes the relative phase geometry inside one cable. Do not reuse single-core flat or trefoil assumptions for cleats, screen currents or induced effects.

Screen path
Copper tape are listed as metallic screen. The system requires continuity through joints and terminations, plus a defined earthing and fault-return arrangement.

Steel wire armour behaviour
Steel wire armour is a mechanical barrier. Its electrical treatment, bonding and possible circulating-current behaviour need the actual design and standard basis.

Impact versus movement
Good impact resistance does not establish a repeated-motion rating. The stated 12 (xD) laying factor does not establish a dynamic-service rating.

10. Thermal, voltage-drop and short-circuit design

Thermal rating cannot be copied
The matrix publishes 70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm², current ratings and 90 °C service temperature; recalculate for the actual formation rather than borrowing a rating from another cable.

Voltage drop needs conductor data
A 6.35/11 kV label does not provide conductor resistance, inductance or load capacity. The project needs conductor area, route length, power factor, load profile and installation formation.

Short-circuit boundary
The official PDF states a 250 °C maximum short-circuit conductor temperature, and the matrix supplies the conductor 1 s short-circuit value for each listed size; verify protection clearing time and the exact ordered row.

Installation method
Underground, ducts and residential / industrial areas have different thermal, mechanical, fire and water conditions. The actual route must be the design basis.

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Three-phase voltage-drop screening relation:
ΔU ≈ √3 × I × (R_ac × cos ϕ + X × sin ϕ) × L

Thermal acceptance:
I_load ≤ I_z(actual conductor area, formation, ambient, soil, grouping, duct, screen and accessory limits)

Short-circuit coordination:
I²t_protection ≤ I²t_conductor / screen / armour / joint / termination system

For this supplied N2XSEHRH record, conductor area, DCR, current ratings, mass, diameter and conductor 1 s fault values are published. Impedance, screen / armour fault duty and the actual installation formation still require project calculation.
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11. Fire and LSZH performance boundary

IEC 60332-3 Cat. C
The source lists a bunched-cable vertical flame-spread reference, Category C. It is not a substitute for the product-specific Cca declaration or the project fire strategy.

LSZH outer system
The source lists LSZH filler, LSZH separation sheath and LSZH outer sheath, together with IEC 60754-2 and IEC 61034 references. Confirm the product reports and project fire strategy.

Project fire dossier
Confirm the current product declaration, fire barriers, penetrations, supports, cable grouping, enclosure and local construction requirements.

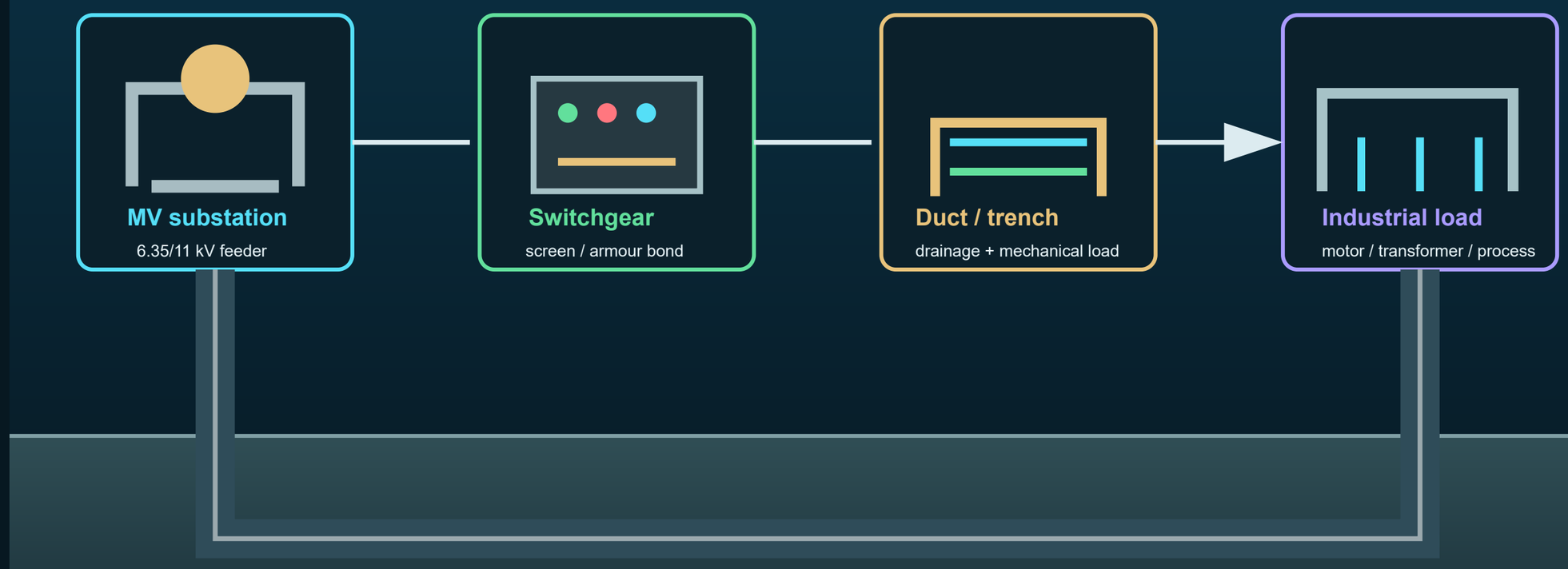
Mechanical and fire trade-off
Galvanized steel wire armour and LSZH provide a different design profile from aluminium-armoured constructions. Selection should be made against the actual mechanical, fire and environmental priority.

Procurement rule: do not upgrade the stated Cca class to Cca, B2ca or unprovided s/d/a qualifiers; the exact Feichun construction still requires a matching current declaration and test report.

12. Fixed-route application architecture

CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV — fixed-route application architecture

Three-core XLPE copper cable with single-layer galvanized steel wire armour for residential / industrial areas, underground routes and ducts.



N2XSEHRH route: fixed, armoured and supported

The published application includes underground and duct routes; 12 (xD) is a laying factor, not a continuous-flex rating.

Port / plant boundary: evaluate as fixed shore-side MV infrastructure only after the route, fire, earthing and mechanical design are approved.

Energy-network feeder
The source identifies low dielectric losses and networks with sudden load changes. Final selection still needs conductor area, load profile and protection study.

Underground and ducts
Review pulling route, water exposure, drainage, impact, backfill, duct fill, cable spacing, fire stopping and joint access.

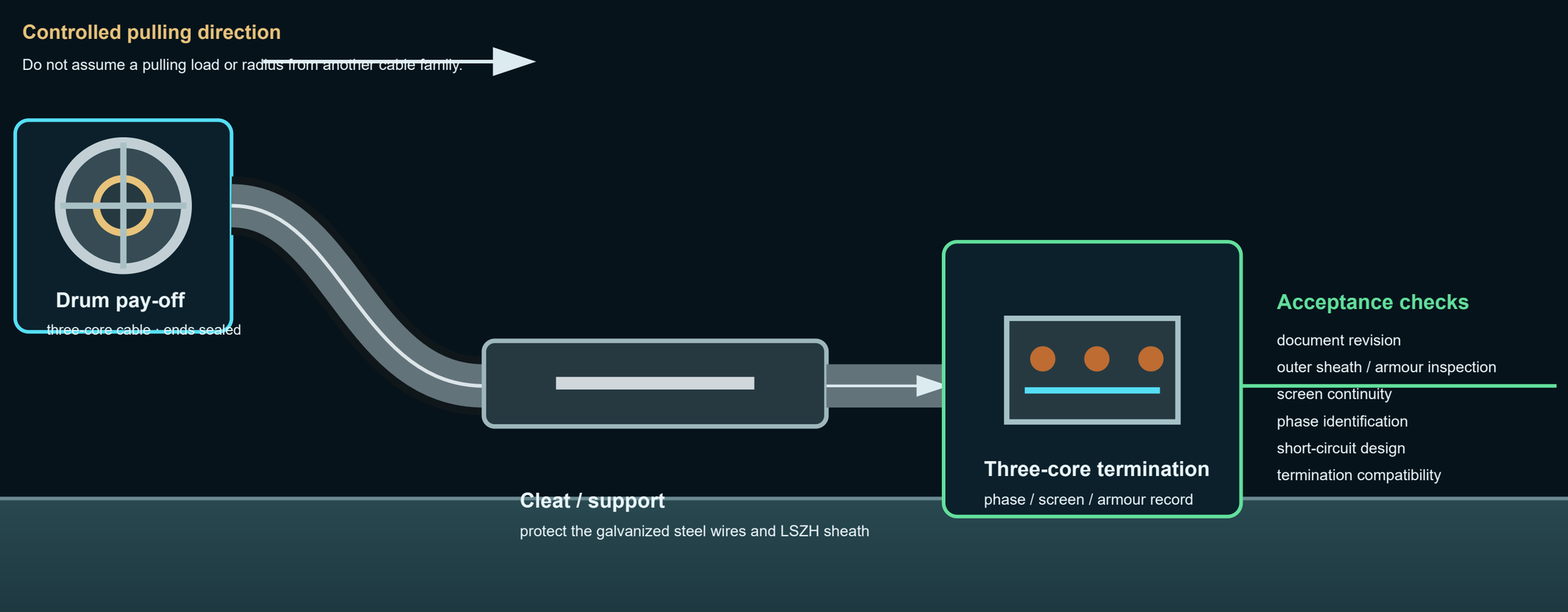
Industrial and port shore-side route
Evaluate fixed substation and plant feeders for mechanical stress, impact, LSZH fire behaviour, corrosion, flooding and maintenance access.

Moving crane equipment
This record has no bending factor and is not established as a reeling, festoon, drag-chain or continuous-torsion cable.

13. Handling and termination

CU/XLPE/CTS/LSZH/SWA/LSZH installation controls — 12 (xD) laying factor

The supplied source displays “12 (xD)”. A controlled method statement must define the radius, pulling limits and accessory geometry.



Bending factor: 12 (xD)
The 12 (xD) laying factor gives screening radii of 684.0 to 1104.0 mm across the 70–400 mm² matrix; confirm the controlled installation method.

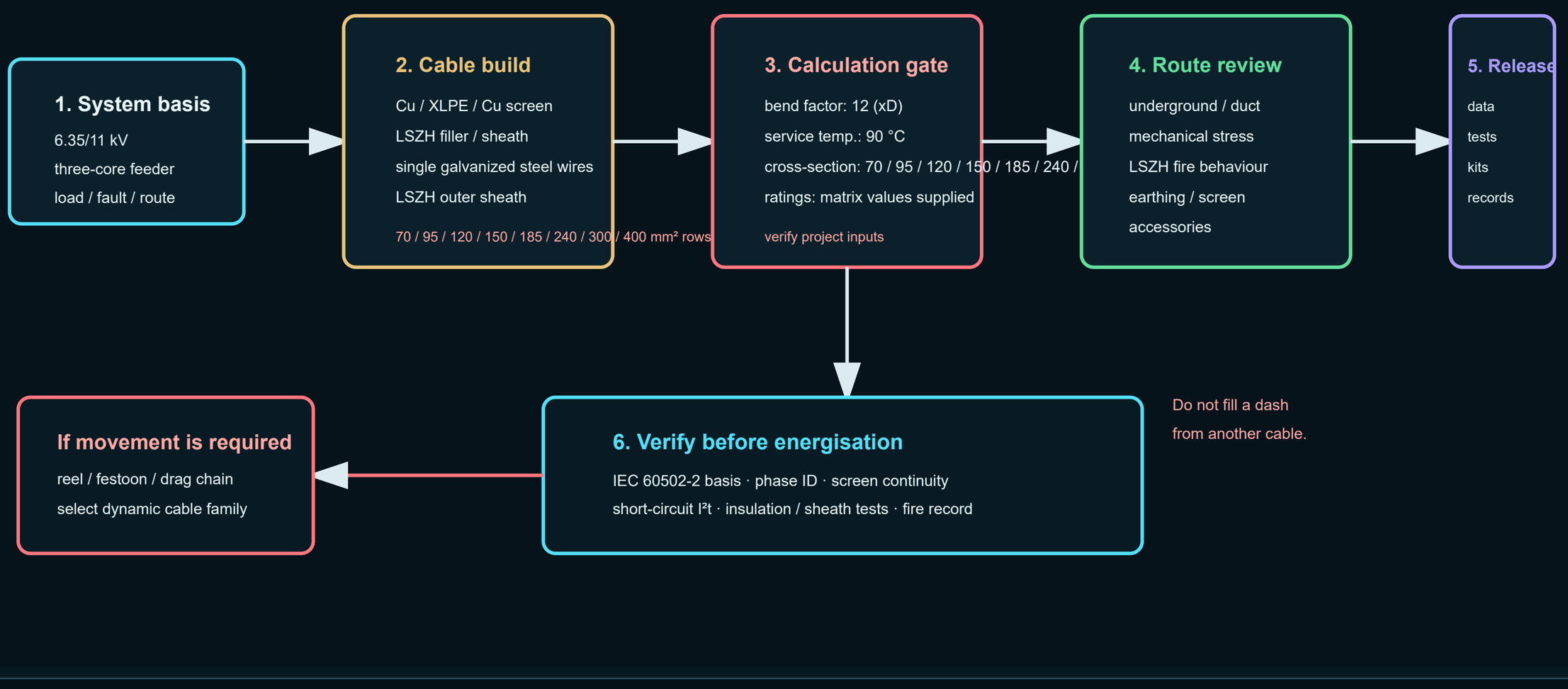
The 90 °C service limit is published; recalculate continuous loading for the actual formation, ambient, grouping, screen losses and accessories.

1. Confirm the exact product code, current source revision, cable length, conductor area, outside diameter, mass and end seals before unloading.
2. Do not use a calculated bend radius: the source states `12 (xD)`. Obtain the controlled installation factor and accessory method statement before laying.
3. Align the drum and pay off in the marked direction. Prevent reverse winding, flange impact, uncontrolled twist and local LSZH sheath damage.
4. Use controlled rollers and pulling equipment. Verify pulling load, sidewall pressure, support spacing, trench entry, duct entry and armour loading.
5. Prepare the three-core termination with the correct phase identification, screen continuity, LSZH separation, steel wire armour treatment and gland / accessory dimensions.
6. Bond the metallic screen and armour according to the approved earthing design. Record continuity, torque, phase identity and test results.
7. Before energisation, complete conductor resistance, screen continuity, insulation / sheath tests, MV withstand or partial-discharge tests where specified, phase identification, accessory inspection and as-built records.

Installation release: no minimum radius, conductor service temperature or conductor size should appear in a Feichun installation method statement until the current controlled data sheet closes the dash fields.

14. Selection comparison for engineers

Requirement	N2XSEHRH reference	What must be verified	Engineering decision
Three-phase fixed MV feeder	Three-core copper / XLPE construction; 6.35/11 kV Uo/U.	Conductor area, current rating, voltage drop, fault duty, termination and phase identification.	Potentially suitable after data release.
Mechanically exposed fixed route	Good impact resistance; single-layer galvanized steel wire armour.	Impact level, compression, armour overlap, pulling load, support and trench / duct entry.	Candidate subject to mechanical design.
Underground / duct route	Application listed by the source.	Water exposure, drainage, soil thermal resistance, duct fill, fire stopping and joint access.	Confirm route construction.
Fire-sensitive building or tunnel	IEC 60332-3 Cat. C listed; LSZH sheath system.	Current fire declaration, smoke / corrosive gas evidence, grouping and local requirements.	Use the Cca declaration and exact project fire requirements.
Continuous current sizing	Conductor cross-section, 90 °C service limit and 12 (xD) laying factor are published.	Use the supplied matrix, then recalculate for the actual formation and route.	Calculate for the actual route.
Reeling / festoon / drag chain	12 (xD) laying factor; fixed-route application wording.	Cycles, torsion, speed, acceleration, rollers and dynamic bend radius.	Select a dedicated dynamic cable family.



15. Failure mode and effects analysis

Wrong conductor size: the cable is ordered without resolving the “70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm²” field, making ampacity, voltage drop and accessory selection impossible.

Radius assumption: a 15×D or 12×D value from another cable is copied even though this record states “12 (xD)”.

Continuous temperature substitution: 90 °C is used without checking formation, ambient, grouping and accessory limits.

Screen fault path: copper screen and steel wire armour are assumed to carry a known earth-fault current without a section or bonding study.

Fire-class substitution: IEC 60332-3 Cat. C is treated as a substitute for the product Cca declaration or the route fire strategy.

Armour damage: incorrect rollers, pulling or trench entries deform the single galvanized steel wires or LSZH sheath.

Revision confusion: the family-level 8/4/26 record and the older 3x95 mm² product PDF generated 9/14/25 are merged without verifying which controlled document governs.

Dynamic misuse: the fixed-installation cable is placed in reeling, festoon or energy-chain service without a dynamic qualification.

16. Feichun Cable certification and project assurance

Engineered for maximum safety in demanding environments, Feichun Cable cable systems comply with global standards including **ATEX, IECEx, VDE, CE, UKCA, EAC, and the Russian Fire Safety Certificate**. They are the trusted choice for heavy-duty mining equipment, ship-to-shore cranes, RTG/RMG cranes, and conveyor systems where high reliability is non-negotiable.

For a Feichun N2XSEHRH release
Confirm conductor area, conductor flexibility, outer diameter, mass, DCR, current rating, voltage-drop data, screen section, screen / armour fault duty, bending factor, service conductor temperature, fire classification and accessory compatibility.

Certification is configuration-specific
Certification capability does not make every N2XSEHRH size automatically IEC 60502-2, IECEx, ATEX, EAC or fire-certified. The exact three-core construction and documentation must match.

Three-core armour dossier
The controlled release should identify screen geometry, LSZH filler, separation sheath, single galvanized steel wire dimensions and overlap, armour treatment, glands, termination preparation and earthing method.

Feichun engineering value
Feichun can develop the three-core XLPE / copper-screen / LSZH / galvanized-steel-wire architecture around the actual conductor size, route mechanics, protection system and market documentation instead of copying an incomplete reference label.

Release condition: this article does not invent a Feichun certificate number, conductor cross-section, current rating, radius, service temperature, screen fault current, fire class or product-specific test report.

17. Source and revision audit

Source	Use in this article	Status and limitation
Nexans Türkiye CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV family page	Product title, IEC 60502-2 listing, application, construction, three-core field, voltage, impact, operating range, dash fields and IEC 60332-3 Cat. C.	Manufacturer family reference; confirm current revision and exact ordered product.
Nexans N2XSEHRH two-page family PDF	Page-1 construction and page-2 characteristics, including 250 °C short-circuit conductor temperature and dash fields.	The family PDF and supplied copy are both generated 8/4/26; the older 3x95 mm² product PDF is generated 9/14/25 and reports -20 ... 90 °C. Keep the records separate.
BS 7835	Product standard listed by the supplied family record; the BSI record identifies BS 7835:2007.	Confirm the project-adopted edition and the exact Feichun conformity file.
Nexans 3x95 mm² product page; product PDF; product DoP	Older size-specific 3x95 mm² record: Cca-s1,d2,a1, DoP 1000754-TRDE, certification date 10/18/18, AVCP System 1+ and notified body 1008.	Size- and revision-specific evidence; do not generalise its detailed declaration to every matrix row.
IEC 60332-3-24:2018; IEC 60754-2; IEC 61034	Official standard records used as related test context for Category C flame spread, corrosive gases and smoke density.	Test references only; product-specific compound, report and project fire requirements control.
IEC 60502-2 official consolidated publication record	Standard scope for extruded-insulation cables from 6 kV up to 30 kV in fixed installations.	Confirm adopted edition and the exact Feichun conformity route.
IEC 60332-3-24:2018 official publication record	Bunched-cable vertical flame-spread test context for Category C.	The source gives the standard number without an edition; product documentation controls the applicable edition.
User-supplied source record	All supplied N2XSEHRH values, construction sequence, source metadata and page labels reproduced in this article.	Preserved; missing or dashed fields are not filled from another cable.

This article is for preliminary engineering, technical search and comparison. The final Feichun CU/XLPE/CTS/LSZH/SWA/LSZH 6.35/11 kV Cca release must be checked against the current product data sheet, IEC 60502-2 basis, conductor size, current ratings, bending instructions, screen / armour design, fire documentation, accessories, installation method and local authority requirements.

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This article separates supplied values, official source additions, blank fields and Feichun project-confirmation values. Missing fields are not filled from another supplier or cable size.