FEICHUN CABLE

TECHNICAL SPECIFICATION SHEET

Cable XHP 48 1×300/25 mm²

Manufactured in accordance with JUS Standard SRPS N.C5.230

CABLE TYPE VARIANTS

XHP 48		XHP 48-A	
Conductor Material:	Copper	**Conductor Material:**	Aluminium
Designation:	N2XSEY	**Designation:**	NA2XSEY

GENERAL SPECIFICATIONS

Nominal Voltage	Test Voltage	Configuration
U_0/U: 6/10 kV	15 kV	1×300/25 mm²

Standard:	SRPS N.C5.230	**Outer Sheath Material:**	PVC Compound
Cable Classification:	Medium Voltage Power Cable	**Standard Sheath Color:**	Black
Conductor Class:	Class 2 (SRPS N.C0.015)	**Mining Application Color:**	Red

Insulation Type:	XLPE (Cross-linked Polyethylene)	**Core Configuration:**	3 Cores Stranded

CONSTRUCTION DETAILS

Conductor:	Multi-core copper (XHP 48) or aluminium (XHP 48-A) conductor, Class 2 according to SRPS N.C0.015
Inner Semi-conductive Layer:	Extruded semi-conductive compound layer
Insulation:	Cross-linked Polyethylene (XLPE) compound
Outer Semi-conductive Layer:	Extruded semi-conductive compound
Semi-conductive Tape:	Wrapped semi-conductive tape over extruded layer, used as bedding for electrical protection
Electric Protection:	Wrapped annealed copper wires with contra-helical annealed copper tape or wrapped copper tape
Core Assembly:	together with extruded, non-hygroscopic filling layer
Filling:	Extruded, non-hygroscopic layer over the core that completely fills the space between cores
Outer Sheath:	PVC compound - black for standard use, red for mining applications

CONSTRUCTION DATA - 6/10 kV

Configuration n×q/q_1 [mm²]	XHP 48 (Copper Conductor)				XHP 48-A (Aluminium Conductor)		
	Copper Content [kg/km]	Cable Diameter [mm]	Total Mass [kg/km]	Al Content [kg/km]	Copper Content [kg/km]	Cable Diameter [mm]	Total Mass [kg/km]
1×50/16	557	29.7	1,238	145	61	29.7	917
1×70/16	749	32.0	1,528	203	61	32.0	1,079
1×95/16	998	34.6	1,901	276	61	34.6	1,291
1×120/16	1,238	36.1	2,206	348	61	36.1	1,435
1×150/25	1,534	39.2	2,663	435	94	39.2	1,680
1×185/25	1,870	40.1	3,017	537	94	40.1	1,830
1×240/25	2,424	44.1	3,773	696	94	44.1	2,232
1×300/25	**3,053**	**46.2**	**4,544**	**870**	**94**	**46.2**	**2,598**

Legend:

- n = Number of cores
- q = Nominal cross-section of conductor [mm²]
- q_1 = Cross-section of electrical protection [mm²]
- Highlighted row indicates the specified 1×300/25 mm² configuration (equivalent to single core from 3×300/25)

OPERATING PARAMETERS

Conductor Temperature Limits

Maximum Operating: +90°C

Installation Parameters

Minimum Bending Radius: 15D

Short Circuit (max 5s):	+250°C
Installation Temperature:	-5°C to +50°C

APPLICATIONS

Primary Applications: Medium voltage power cables with XLPE insulation for electrical power distribution networks.

Installation Methods:

- Indoor installations in electrical substations and distribution facilities
- Installation in cable ducts and cable management systems
- Direct burial in earth (with consideration for PVC sheath mechanical properties)
- Overhead installation in open air for distribution networks
- Industrial plant electrical distribution systems
- Electric power plant internal distribution networks

Environmental Considerations: Direct earth burial is limited by the mechanical properties of the PVC sheath. Additional mechanical protection may be required for challenging soil conditions.

Important Installation Notice: When laying cables directly in earth, consider the mechanical limitations of PVC sheath material. Proper cable protection and installation practices must be followed according to local electrical codes and standards.

COMPLIANCE & STANDARDS

Manufacturing Standard:	SRPS N.C5.230
Conductor Standard:	SRPS N.C0.015
Cable Classification:	Medium Voltage Power Cable