

SIP-3 SIPn-3 AAsXS AAsXSn Description

SIP-3 (AAsXS) are self-supporting insulated wires with a conductor made of aluminum alloy and insulation made of light-stabilized cross-linked polyethylene.

SIPn-3 (AAsXSn) are self-supporting protected wires with a conductor made of aluminum alloy and insulation made of light-stabilized cross-linked polyethylene, which does not spread combustion.

They are designed for overhead power transmission lines with a rated voltage of 20 kV (for networks with a voltage of 10, 15 and 20) kV and 35 kV (for networks with a voltage of 35 kV) with a rated frequency of 50 Hz.

INTERPRETATION OF WIRES SIP-3, SIPN-3, AASXS, AASXSN

S – self-supporting;

I – insulated;

P – wire.

SIP-3 – with protective insulation;

n – does not support combustion.

A – aluminum conductor;

s – self-supporting wire;

XS – XLPE insulation;

n – does not support combustion.

SIP-3 SIPn-3 AAsXS AAsXSn Detailed

SIP-3 (AAsXS) is a self-supporting protected insulated wire with a conductor made of aluminum alloy and protective insulation made of cross-linked polyethylene.

The main difference between this wire and other types of self-supporting wires is the voltage for which it is designed. So, if the wires SIP-1, SIP-2, SIP-4, SIP-5 are intended for power and lighting networks for an alternating voltage of 0.6 / 1.0 kV, then SIP-3 is a high-voltage wire used in networks with a rated voltage of 20 kV and 35 kV with a rated frequency of 50 Hz.

SIP-3 SIPn-3 AAsXS AAsXSn Applicability scope

SIP-3 and AAsXS are designed for overhead power transmission lines in areas with temperate, cold and tropical climates. They are used for laying highways of overhead power transmission lines with a voltage of 20-35 kV and linear branches thereof.

SIP-3 began to be used for the installation of power lines instead of traditional uninsulated wires A and AS and immediately provided greater safety for maintenance personnel, lower operating costs and reduced line breakdown rates by minimizing damage to wires and the absence of their entanglement with each other and with tree branches. Due to insulation, even if you accidentally touch the wire, the risk of electric shock is minimal, and in the event of an emergency falling trees or twisting wires, the uninterrupted supply of electricity does not stop.

SIP-3, AAsXS wires are safe to use and do not emit harmful substances into the air even in case of significant heating.

SIPn-3 and AAsXSn are non-flammable types of wire that do not spread combustion and do not form burning particles.

SIP-3, SIPn-3, AAsXS, AAsXSn Select rated voltage, 20 kV Parameter

Number of conductors and nominal cross-section, mm ²	Nominal outer diameter, mm	Estimated weight of 1 km of wire, kg
1x35	11,7	168
1x50	12,9	210
1x70	14,4	277
1x95	16,3	367
1x120	17,7	446
1x150	19,0	520
1x185	20,9	649
1x240	22,9	798

SIP-3, SIPn-3, AAsXS, AAsXSn Select rated voltage, 35 kV Parameter

Number of conductors and nominal cross-section, mm ²	Nominal outer diameter, mm	Estimated weight of 1 km of wire, kg
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cross-section, mm ²		
1x35	14,1	219
1x50	15,3	266
1x70	16,8	339
1x95	18,7	437
1x120	20,1	522
1x150	21,4	600
1x185	23,3	737
1x240	25,3	894