

# IEC 60502-1 Armoured (SWA) Fire retardant

## IEC 60502-1 Armoured (SWA) 12 x 1,5

Contact  
Market information  
industryprojects.business@nexans.com

Nexans Ref.: 10108699  
EAN 13: 3427580169045

- 0.6/1 kV Power and control cables
- Armoured with galvanized steel wires (SWA) or aluminium wires (AWA)
- **Oil resistant**

## DESCRIPTION

### Applications

These power and control cables are used for electricity supply in **low voltage installation system**. They are well adapted to underground use in industrial applications where **chemical and mechanical protections are needed** (refinery areas, chemical plants...).

### Design

#### Conductor:

- Solid plain copper : 1.5 to 4 mm<sup>2</sup>
- Stranded plain copper : 1.5 to 630 mm<sup>2</sup>

#### Insulation:

Cross-linked polyethylene (XLPE)

#### Bedding(optional):

Inner sheath acting as a filler with practically zero thickness or assembling polyester tape

#### Inner covering (inner sheath):

Polyvinyl chloride (PVC) Colour :black

#### Armour:

Galvanized steel wires (SWA) or aluminium wires (AWA) for 1 core cable

#### Outer sheath:

Polyvinyl chloride (PVC). Colour: black. Other colour on request.

### Core identification



## STANDARDS

**International** IEC 60228;  
IEC 60332-3-22 Cat.A;  
IEC 60502-1



Rated Voltage Uo/U (Um)  
**0.6/1 kV**



Mechanical resistance to impacts  
**Good**



Fire retardant  
**IEC 60332-3-22**



Oil resistance  
**Yes**



Max.conductor temp.in service  
**90 °C**



Operating temp.  
**-20 - 60 °C**

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

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1 core: black  
2x to 5G cores: according to HD 308 S2  
Above 5 cores: black core printed with white number.

## Marking

NEXANS 279 XLPE/PVC/AWA or SWA/PVC 0.6/1 kV Nber of cores and cross section Cu IEC 60332-3-22(A) MM YYYY manufacturing number + meter marking

## CHARACTERISTICS

### Construction characteristics

Conductor material	Plain copper
Type of conductor	Stranded, Class 2
Insulation	XLPE (Cross-linked Polyethylene)
Inner sheath	PVC
Armour type	Galvanized steel wires
Outer sheath	PVC
Protection	Yes
With Green/Yellow core	No

### Dimensional characteristics

Number of cores	12
Conductor cross-section	1.5 mm <sup>2</sup>
Conductor diameter	1.5 mm
Diameter over insulation	2.9 mm
Diameter over inner sheath	14.4 mm
Diameter over armour	16.9 mm
Minimum outer diameter	19.88 mm
Maximum outer diameter	21.9 mm
Approximate weight	863.97 kg/km

### Electrical characteristics

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	0.6/1 kV
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### Mechanical characteristics

Mechanical resistance to impacts	Good
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### Usage characteristics

Fire retardant	IEC 60332-3-22
Oil resistance	Yes



Rated Voltage U<sub>0</sub>/U (U<sub>m</sub>)  
0.6/1 kV



Mechanical resistance to impacts  
Good



Fire retardant  
IEC 60332-3-22



Oil resistance  
Yes



Max. conductor temp. in service  
90 °C



Operating temp.  
-20 - 60 °C

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### Usage characteristics

Max. conductor temperature in service	90 °C
Operating temperature, range	-20 - 60 °C

## SELLING AND DELIVERY INFORMATION

Other fire performances IEC 60332-1 or IEC 60332-3 -24(C) and enhanced hydrocarbon resistance on request.

Minimum bending radius:

- 1 core: 10 x outer diameter
- Multicores: 8 x outer diameter
- To be doubled during laying operations

Cables with reduced neutral on request



Rated Voltage U<sub>o</sub>/U (Um)  
0.6/1 kV



Mechanical resistance to impacts  
Good



Fire retardant  
IEC 60332-3-22



Oil resistance  
Yes



Max. conductor temp. in service  
90 °C



Operating temp.  
-20 - 60 °C

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