IEC 60502-1 Armoured (SWA) Fire retardant

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

STANDARDS

Product IEC 60228; IEC 60502-1

Test IEC 60332-3-22 Cat.A

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 mm²

Stranded plain copper : 1.5 to 630 mm²

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

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

Rated Voltage Uo/U (Um)	Mechanical resistance to impacts	Fire retardant	Oil resistance	Max.conductor temp.in service	Operating temp.
0,6/1 kV	**Good**	**EN IEC 60332-3-22 (cat A)**	**Yes**	**90 °C**	**-20 ... 60 °C**

CONTACT

Market information
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IEC 60502-1 Armoured (SWA) Fire retardant

CHARACTERISTICS

Construction characteristics	
Conductor material	Plain copper
Insulation	XLPE (Cross-linked Polyethylene)
Inner sheath	PVC
Outer sheath	PVC
Protection	Yes
Electrical characteristics	
Rated Voltage Uo/U (Um)	0,6/1 kV
Mechanical characteristics	
Mechanical resistance to impacts	Good
Usage characteristics	
Fire retardant	EN IEC 60332-3-22 (cat A)
Oil resistance	Yes
Max. conductor temperature in service	90 °C
Operating temperature, range	-20 ... 60 °C

ALUMINIUM WIRES ARMOURED PRODUCTS

Reference	Nb. of cores	Cross section [mm²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Green/ Yellow core
10108608	1	25	16.8	18.6	560	No
10108609	1	35	17.75	19.6	668.51	No
10108610	1	50	19.01	21.0	822.55	No
10108611	1	70	20.76	22.9	1046.88	No
10108612	1	95	22.31	24.6	1320.52	No
10108613	1	120	23.96	26.4	1585.83	No
10108614	1	150	25.61	28.2	1874.83	No
10108615	1	185	27.64	30.5	2277.21	No
10108616	1	240	30.26	33.4	2874.64	No
10108617	1	300	32.98	36.4	3514.46	No
10108618	1	400	36.96	40.8	4429.73	No
10108619	1	500	40.74	44.9	5545.78	No
10108620	1	630	45.59	50.3	7017.94	No


Rated Voltage Uo/U (Um)
0,6/1 kV


Mechanical resistance to impacts
Good


Fire retardant
EN IEC 60332-3-22 (cat A)


Oil resistance
Yes


Max.conductor temp.in service
90 °C


Operating temp.
-20 ... 60 °C

IEC 60502-1 Armoured (SWA) Fire retardant

GALVANIZED WIRES ARMOURED PRODUCTS

Reference	Nb. of cores	Cross section [mm²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Green/ Yellow core
10108621	2	1.5	12.88	14.2	343.28	No
10108622	2	1.5	13.19	14.6	357.73	No
10108623	2	2.5	13.58	15.0	388.38	No
10108624	2	2.5	14.06	15.5	412.6	No
10108625	2	4	14.47	16.0	454.42	No
10108626	2	4	15.13	16.7	491.32	No
10108627	2	6	15.91	17.5	562.43	No
10108628	2	10	18.33	20.2	830.98	No
10108629	2	16	20.27	22.4	1043.63	No
10108630	2	25	24.15	26.6	1575.88	No
10108631	2	35	26.09	28.8	1899.2	No
10108632	2	50	28.71	31.7	2330.85	No
10108633	2	70	32.59	36.0	3024.76	No
10108634	2	95	36.96	40.8	4086.1	No
10108635	2	120	40.45	44.6	4885.99	No
10108636	2	150	43.94	48.5	5772.38	No
10108637	2	185	49.76	54.9	7515.26	No
10108638	2	240	55.1	60.8	9278.01	No
10108639	2	300	60.72	67.0	11248.32	No
10108640	3	1.5	13.32	14.7	367.69	No
10108641	3	1.5	13.65	15.1	387.84	No
10108642	3	2.5	14.06	15.5	426.19	No
10108643	3	2.5	14.59	16.1	450.99	No
10108644	3	4	15.04	16.6	505.54	No
10108645	3	4	15.71	17.3	543.14	No
10108646	3	6	16.59	18.3	630.57	No
10108647	3	10	19.11	21.1	941.98	No
10108648	3	16	21.24	23.4	1214.01	No
10108649	3	25	25.41	28.0	1826.58	No
10108650	3	35	27.45	30.3	2229.59	No
10108651	3	50	30.46	33.6	2792.45	No
10108652	3	70	35.6	39.3	3948.74	No
10108653	3	95	39.28	43.3	4958.72	No
10108654	3	120	43.07	47.5	5980.69	No
10108655	3	150	48.4	53.4	7627.71	No

Rated Voltage Uo/U (Um)
0,6/1 kV

Mechanical resistance to impacts
Good

Fire retardant
EN IEC 60332-3-22 (cat A)

Oil resistance
Yes

Max.conductor temp.in service
90 °C

Operating temp.
-20 ... 60 °C

IEC 60502-1 Armoured (SWA) Fire retardant

Reference	Nb. of cores	Cross section [mm²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Green/ Yellow core
10108656	3	185	52.96	58.4	9203.82	No
10108657	3	240	59.07	65.2	11530.68	No
10108658	3	300	64.89	71.6	13978.43	No
10108659	4	1.5	14.02	15.5	410.5	No
10108660	4	1.5	14.4	15.9	427.29	No
10108661	4	2.5	14.86	16.4	479.43	No
10108662	4	2.5	15.42	17.0	505.89	No
10108663	4	4	15.91	17.5	579.08	No
10108664	4	4	16.78	18.5	620.63	No
10108665	4	6	18.33	20.2	836.64	No
10108666	4	10	20.47	22.6	1092.76	No
10108667	4	16	23.47	25.9	1568.84	No
10108668	4	25	27.35	30.2	2168.36	No
10108669	4	35	29.97	33.1	2701.73	No
10108670	4	50	33.27	36.7	3381.73	No
10108671	4	70	38.99	43.0	4807.06	No
10108672	4	95	42.87	47.3	6065.77	No
10108673	4	120	48.6	53.6	7845.31	No
10108674	4	150	52.86	58.3	9312.72	No
10108675	4	185	58.1	64.1	11310.72	No
10108676	4	240	64.89	71.6	14243.14	No
10108677	4	300	71.39	78.8	17273.25	No
10108678	5	1.5	14.7	16.3	467	Yes
10108679	5	1.5	15.23	16.8	479.87	Yes
10108680	5	2.5	15.7	17.3	546	Yes
10108681	5	2.5	16.39	18.1	569.43	Yes
10108682	5	4	17.7	19.5	774	Yes
10108683	5	4	18.53	20.4	816.12	Yes
10108684	5	6	19.59	21.6	957.12	Yes
10108685	5	10	21.92	24.2	1248.98	Yes
10108686	5	16	25.22	27.8	1819.87	Yes
10108687	5	25	29.58	32.6	2530.39	Yes
10108688	5	35	32.4	35.7	3185.25	Yes
10108689	5	50	37.34	41.2	4353.79	Yes
10108690	5	70	42.49	46.9	5703.15	Yes
10108691	5	95	48.11	53.1	7718.63	Yes

Rated Voltage Uo/U (Um)
0,6/1 kV

Mechanical resistance to impacts
Good

Fire retardant
EN IEC 60332-3-22 (cat A)

Oil resistance
Yes

Max.conductor temp.in service
90 °C

Operating temp.
-20 ... 60 °C

IEC 60502-1 Armoured (SWA) Fire retardant

Reference	Nb. of cores	Cross section [mm²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Green/ Yellow core
10108692	5	120	52.96	58.4	9320.07	Yes
10108693	5	150	57.81	63.8	11067.05	Yes
10108694	5	185	64.02	70.6	13536.51	Yes
10108695	5	240	71.1	78.4	16953.91	Yes
10108696	5	300	79.93	88.2	21738.65	Yes
10108697	7	1.5	15.81	17.4	518.34	No
10108706	7	2.5	17.75	19.6	731.73	No
10108698	10	1.5	19.4	21.4	795.67	No
10108707	10	2.5	21.15	23.3	969.21	No
10108699	12	1.5	19.88	21.9	863.97	No
10108708	12	2.5	21.63	23.9	1047.03	No
10108700	14	1.5	20.56	22.7	922.26	No
10108709	14	2.5	22.5	24.8	1136.25	No
10108701	19	1.5	22.21	24.5	1080.37	No
10108710	19	2.5	25.12	27.7	1512.48	No
10108702	24	1.5	25.8	28.5	1491.14	No
10108711	24	2.5	28.42	31.4	1852.44	No
10108703	27	1.5	26.19	28.9	1559.4	No
10108712	27	2.5	28.91	31.9	1945.69	No
10108704	30	1.5	26.97	29.7	1643.95	No
10108713	30	2.5	29.97	33.1	2088.7	No
10108705	37	1.5	28.71	31.7	1869.75	No
10108714	37	2.5	31.91	35.2	2380.63	No

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 Uo/U (Um)
0,6/1 kV


Mechanical resistance to impacts
Good


Fire retardant
EN IEC 60332-3-22 (cat A)


Oil resistance
Yes


Max.conductor temp.in service
90 °C


Operating temp.
-20 ... 60 °C