m-VOLT®

Technical Data Sheet

Medium Voltage

12/20 kV or 12.7/22 kV XLPE

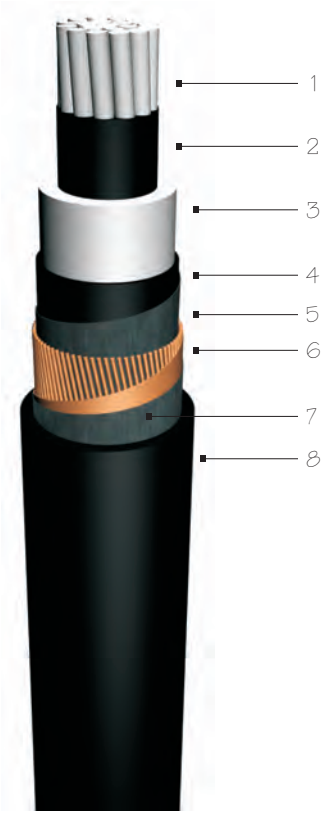
Insulated | Longitudinally Sealed | Single Core | Aluminum Conductor

// Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. If the cable gets water inside due to mechanical damage, the swellable tapes prevent the movement of the water inside the cable.

// Construction

1. Stranded aluminum conductor.
2. Inner semi-conductive layer.
3. XLPE insulation.
4. Outer semi-conductive layer.
5. Semi-conductive swellable tape.
6. Copper wire screen.
7. Swellable tape.
8. PE outer jacket.



// Cable Summary

Max. operating temperature	: 90°C
Max. short circuit temperature	: 250 °C
Rated voltage	: 12/20 kV or 12.7/12 kV
Min. bending radius	: 15 x D

D = Cable outer diameter

// Standards

IEC 60502| BS 6622 | VDE 0276

// Code

NA2XS(F)2Y | AL/XLPE/LWJ/CWS/LWJ/PE

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Electrical Properties									Dimensions & Weights			
DC Conductor Resistance @ 20 °C	DC Conductor Resistance @ 90 °C	Operation Inductance (approx.)		Operation Capacitance (approx.)	Current Carrying Capacity				Nominal Cross Section	Overall Dia. (approx.)	Net Weight (approx.)	Delivery Length
ohm/km	mH/km	mH/km ○○○	mH/km ⁂	µF/km	in Ground @ 20 °C ○○○	in Duct ⁂ @ 20 °C	in Air ○○○ @ 30 °C	in Air ⁂ @ 30 °C	mm^2	mm	kg/km	m
1.2000	1.5360	0.702	0.456	0.143	-	-	-	-	1x025/16	29.0	650	1000
0.8680	1.1110	0.676	0.436	0.157	-	-	-	-	1x035/16	30.0	700	1000
0.6410	0.8205	0.650	0.416	0.174	195	173	217	184	1x050/16	31.0	800	1000
0.4430	0.5670	0.619	0.394	0.197	237	211	270	229	1x070/16	33.0	900	1000
0.3200	0.4096	0.595	0.377	0.218	282	252	328	278	1x095/16	34.5	1000	1000
0.2530	0.3238	0.576	0.365	0.238	320	287	378	320	1x120/16	36.5	1150	1000
0.2060	0.2637	0.559	0.353	0.258	353	320	425	363	1x150/25	38.0	1350	1000
0.1640	0.2099	0.543	0.343	0.278	396	362	485	415	1x185/25	40.0	1500	1000
0.1250	0.1600	0.523	0.330	0.308	457	421	573	493	1x240/25	42.5	1700	1000
0.1000	0.1280	0.506	0.321	0.336	511	474	652	563	1x300/25	44.5	1950	1000
0.0788	0.1009	0.485	0.309	0.377	566	538	740	652	1x400/35	48.0	2400	1000
0.0605	0.0774	0.469	0.300	0.413	630	606	838	746	1x500/35	51.0	2800	1000
0.0469	0.0600	0.452	0.292	0.455	719	686	953	850	1x630/35	55.0	3250	1000

Laying / Installation method:

Linear | ○○○

Triangular | ⁂

1st ISSUE