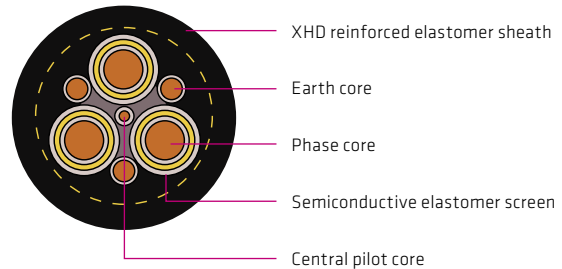


Type 441 3.3-22 kV



Cable description

Class 1 semiconductive screened cable for general use.

Application

Being a class 1 cable, this cable has lower insulation and sheath radials than class 2, and is suitable for use with materials handling equipment, and applications that call for a smaller overall diameter and mass for reeling and trailing applications. The cables are finished with a polyaramid yarn Kevlar® braid sheath reinforcement for exceptional tear and cut-through resistance. This cable is suitable for slow reeling and trailing applications.

Approvals

AS/NZS 2802

Behaviour in flame and fire

Fire retardant

Temperature range

Maximum operating temperature: +90 °C

Minimum operating temperature: -25 °C

Flexibility

Flexible

Resistance to

Chemical exposure: Very good/Frequent

Mechanical impact: Heavy

Water exposure: Immersion/Temporary coverage

Solar radiation and

weather exposure: Suitable for direct exposure

Cable design

Semiconductive elastomer screened power cores with three earth cores and one pilot core.

Core: Metal: tinned copper, three core plus three earths.

Insulation: XR-EP-90 core identification by printed numbers on black semiconductive elastomer insulation screen.

Earth: Three semiconductive elastomer covered tinned annealed copper cores disposed in the cable interstices.

Pilot: One EPR covered central extensible core.
Maximum DC resistance;
3 Ω/100 m for power conductor up to 35 mm².
2 Ω/100 m for power conductors above 35 mm².

Sheath: Extra heavy duty HD-85-PCP, incorporating a polyaramid yarn Kevlar® braid reinforcement.

Installation conditions

In free air

Mobile equipment

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Physical & electrical characteristics

Type 441 3.3-22 kV											
Voltage rating & part number	Power conductor							Earth	Cable		
	Nominal area mm ²	Nominal diameter mm	Insulation thickness mm	ac Resistance @ 90°C & 50Hz Ω/km	Reactance @ 50Hz Ω/km	3 phase voltage drop @ 90°C & 50Hz mV/A.m	Capacitance to earth μF/phase/km		Approx area (each) mm ²	Sheath thickness mm	Nominal diameter mm
Type 441.3											
25-441-3	25	7.2	2.2	0.951	0.120	1.66	0.395	5.3	4.9	45.9	320
35-441-3	35	8.4	2.2	0.698	0.115	1.23	0.437	5.3	5.2	48.8	370
50-441-3	50	9.7	2.4	0.523	0.113	0.927	0.450	8	5.7	54.4	470
70-441-3	70	12.0	2.4	0.346	0.105	0.626	0.525	12.5	6.0	59.5	595
95-441-3	95	13.3	2.4	0.271	0.100	0.500	0.563	16	6.3	62.7	685
120-441-3	120	15.3	2.4	0.210	0.0959	0.400	0.628	20	6.5	67.2	815
150-441-3	150	17.2	2.4	0.166	0.0929	0.329	0.687	27	6.6	71.3	965
185-441-3	185	18.8	2.4	0.137	0.0906	0.284	0.741	32	6.7	75.1	1105
240-441-3	240	21.7	2.4	0.107	0.0874	0.239	0.833	39.5	6.9	81.6	1350
300-441-3	300	24.3	2.4	0.0851	0.0850	0.208	0.917	50	7.0	87.4	1620
Type 441.6											
25-441-6	25	7.2	3.0	0.951	0.126	1.66	0.309	5.3	5.3	50.2	370
35-441-6	35	8.4	3.0	0.698	0.121	1.23	0.340	5.3	5.6	53.3	425
50-441-6	50	9.7	3.0	0.523	0.116	0.928	0.375	8	6.0	57.6	515
70-441-6	70	12.0	3.0	0.346	0.108	0.628	0.435	12.5	6.3	62.6	640
95-441-6	95	13.3	3.0	0.271	0.103	0.502	0.465	16	6.4	65.5	725
120-441-6	120	15.3	3.0	0.210	0.0990	0.402	0.518	20	6.6	70.1	860
150-441-6	150	17.2	3.0	0.166	0.0958	0.332	0.566	27	6.7	74.2	1015
185-441-6	185	18.8	3.0	0.137	0.0934	0.287	0.608	32	6.8	78.0	1155
240-441-6	240	21.7	3.0	0.106	0.0899	0.241	0.682	39.5	7.0	84.6	1410
300-441-6	300	24.3	3.0	0.0849	0.0877	0.211	0.754	50	7.1	90.4	1680
Type 441.11											
25-441-11	25	7.2	5.0	0.951	0.137	1.66	0.217	5.3	6.3	60.9	500
35-441-11	35	8.4	5.0	0.698	0.131	1.23	0.236	5.3	6.4	63.6	555
50-441-11	50	9.7	5.0	0.523	0.124	0.931	0.258	8	6.5	66.7	635
70-441-11	70	12.0	5.0	0.346	0.116	0.632	0.296	12.5	6.6	71.6	765
95-441-11	95	13.3	5.0	0.271	0.112	0.508	0.317	16	6.8	74.8	870
120-441-11	120	15.3	5.0	0.210	0.108	0.409	0.350	20	6.9	79.3	1010
150-441-11	150	17.2	5.0	0.166	0.104	0.339	0.381	27	7.0	83.6	1180
185-441-11	185	18.8	5.0	0.137	0.101	0.295	0.407	32	7.1	87.2	1320
240-441-11	240	21.7	5.0	0.106	0.0970	0.249	0.453	39.5	7.3	93.8	1585
300-441-11	300	24.3	5.0	0.0846	0.0942	0.219	0.499	50	7.5	100.0	1880
Type 441.22											
35-441-22	35	8.4	7.6	0.698	0.143	1.23	0.178	5.3	6.9	76.0	750
50-441-22	50	9.7	7.6	0.523	0.136	0.936	0.194	8	7.0	79.2	840
70-441-22	70	12.0	7.6	0.346	0.127	0.638	0.219	12.5	7.1	84.1	980
95-441-22	95	13.3	7.6	0.271	0.123	0.515	0.234	16	7.2	87.0	1085
120-441-22	120	15.3	7.6	0.210	0.118	0.417	0.256	20	7.3	91.7	1245
150-441-22	150	17.2	7.6	0.165	0.113	0.346	0.276	27	7.4	95.8	1415
185-441-22	185	18.8	7.6	0.136	0.110	0.303	0.294	32	7.6	99.8	1580
240-441-22	240	21.7	7.6	0.106	0.105	0.258	0.325	39.5	7.7	106	1850

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