Application

The BS 6622 3.8/6.6kV Copper Armoured Cable is designed for medium voltage applications, suitable for fixed wiring in ships and mobile offshore units. These cables can be used for both power and control purposes, providing reliable performance in demanding maritime and offshore environments.

Performance

Electrical Performance: U_0/U: 3.8/6.6 (7.2) kV
Test Voltage (AC): 15kV (CU)
Mechanical Performance:
Minimum Bending Radius:
Single Core: 15 x overall diameter
Multi Core: 12 x overall diameter
Single Core (adjacent to joint or termination): 12 x overall diameter
Three Core (adjacent to joint or termination): 10 x overall diameter
Thermal Performance:
Maximum Service Temperature: 90℃
Maximum Short-Circuit Temperature: 250℃ (Max. 5s)
Minimum Service Temperature: -10℃
Fire Performance:
Flame Retardant according to IEC/EN 60332-1-2 Standard

Construction

Conductor: Class 2 stranded compacted copper conductor
Insulation: Semi-conductive XLPE (Cross-linked polyethylene)
Insulation Screen: Semi-conductive XLPE
Metallic Screen: Concentric copper wires and copper tape
Separator: Binding tape
Inner Sheath: PVC (Polyvinyl Chloride)
Armour:
Single Core: AWA (Aluminium Wire Armour)
Multi Core: SWA (Galvanised Steel Wire Armour)
Sheath: PVC (Polyvinyl Chloride)
Sheath Colour: Red

Specification

-BS 6622, IEC/EN 60228, IEC 60502-2 Standard

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

Physical Performance			
No. of Cores	Nominal Cross Section Area	Nominal Overall Dia.	Nominal Weight
-	mm^2	mm	kg/km
1	35	24.3	1.023
1	50	25.5	1.171
1	70	27.3	1.418
1	95	29.2	1.719
1	120	31.1	2.013
1	150	32.3	2.386
1	185	35	2.866
1	240	37.7	3.486
1	300	41.7	4.256
1	400	47.1	5.406
1	500	51.9	6.693
1	630	55.8	8.212
3	50	48	4500
3	70	52	5500
3	95	56	6500
3	120	60	7500
3	150	63	8500
3	185	67	10000
3	240	74	13000
3	300	80	15500
3	400	89	19000

Technical Parameters

Electrical Performance (Current Carrying Capacity of Copper Conductor)									
No. of Cores	Nominal Cross Section Area	Max. Resistance of Conductor at 20°c	Operating Inductance		Operating Capacity	Continuous Current Rating in Ground at 20OC		Continuous Current Rating in Air at 30OC	
			Flat	Trefoil		Flat	Trefoil	Flat	Trefoil
-	mm^2	Ω/km	mH/km	mH/km	μF/km	A	A	A	A
-	35	0.524	748	0.401	0.266	201	191	238	199
1	50	0.387	0.719	0.381	0.297	241	227	285	241
1	70	0.268	0.684	0.357	0.339	301	277	356	301
1	95	0.193	0.659	0.342	0.381	364	331	435	365
1	120	0.153	0.636	0.327	0.416	424	379	496	419
1	150	0.124	0.62	0.319	0.454	479	422	554	479
1	185	0.0991	0.602	0.31	0.495	549	476	637	543
1	240	0.0754	0.579	0.3	0.556	595	550	746	640
1	300	0.0601	0.562	0.295	0.617	626	591	831	722
1	400	0.047	0.543	0.29	0.681	675	662	920	827
1	500	0.0366	0.525	0.283	0.758	748	744	1043	949
1	630	0.0283	0.507	0.276	0.853	981	856	1180	1076

No. of Cores	Nominal Cross Section Area	Max. Resistance Of Conductor At 20°C	Operating Inductance	Operating Capacity	Continuous Current Rating in Ground at 20OC	Continuous Current Rating in Air at 30OC
-	mm^2	Ω/km	mH/km	μF/km	A	A
3	50	0.387	0.33	0.3	208	196
3	70	0.268	0.31	0.35	255	249
3	95	0.193	0.29	0.39	307	307
3	120	0.153	0.28	0.43	353	353
3	150	0.124	0.28	0.47	396	406
3	185	0.0991	0.27	0.51	447	464
3	240	0.0754	0.26	0.55	523	548
3	300	0.0601	0.26	0.57	581	632
3	400	0.047	0.26	0.59	653	726