

SUBMERSIBLE CABLE THREE CORE (CU/PVC TAPE/PVC)

POLY CABLES BANGLADESH



CONSTRUCTION

1. CONDUCTOR Flexible, Plain annealed Copper, Class 5 to IEC 60228
 2. INSULATION PVC, PVC/A to IEC 60502-1
 COLOR OF INSULATION For Three Core Cables ■ Red ■ Yellow ■ Blue
 3. OUTER SHEATH PVC, ST-1 to IEC 60502-1
 COLOR OF SHEATH ■ Black

APPLICATION

These cables are used to connect under water Submersible Pump sets with supply line. Agriculture, Irrigation, Domestic installation, Outdoor application & Power Supply.

STANDARD: IS-894, IEC 60502-1

VOLTAGE GRADE: (1100) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA					ELECTRICAL DATA			
Nominal Cross Sectional Area of Conductor	Shape of Conductor	No. of strands & diameter of wire	Nominal thickness of insulation	Nominal thickness of sheath	Approx. Overall Diameter (DWT)	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity at 30°C ambient temp.
Cu mm ²		nos./mm	mm	mm		kg/km	Ω/km	Amps
THREE CORE								
3 × 1.0	771	32/0.20	0.8	0.8	8.8 × 4.5	80	11.5	12
3 × 1.5	771	30/0.25	0.8	0.8	11.0 × 5.0	102	12.3	15
3 × 2.5	771	30/0.25	0.7	1.0	12.5 × 6.0	154	7.88	20
3 × 4.0	771	38/0.30	0.8	1.1	16.1 × 6.7	225	4.85	25
3 × 6.0	771	34/0.30	0.8	1.1	18.0 × 7.8	305	3.20	32
3 × 10	771	30/0.40	1.0	1.7	22.0 × 8.0	488	1.81	45
3 × 16	771	12/0.40	1.0	1.8	25.2 × 10.0	700	1.21	57
3 × 25	771	10/0.40	1.2	1.5	31.2 × 12.5	1005	0.780	72
3 × 35	771	27/0.40	1.2	1.8	35.0 × 14.2	1420	0.554	90
3 × 50	771	30/0.40	1.4	1.7	41.5 × 18.2	2000	0.385	115
3 × 70	771	38/0.50	1.5	1.9	48.8 × 19.1	2805	0.272	142
3 × 95	771	47/0.50	1.8	2.0	58.0 × 21.8	3650	0.200	165

**600/1000V 2xY / A2xY OR 2xY-FR / A2xY-FR OR 2xY-FRLS / A2xY-FRLS
SINGLE CORE (CU or ALU/XLPE/PVC)
XLPE INSULATED AND PVC SHEATHED SINGLE CORE CABLE**

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : ■ Natural
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approx. Bare Conductor Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	CU	ALU	CU	ALU	CU
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
SINGLE CORE													
1 X 1.5 mm ²	1/1.80	1.38	0.70	1.40	3.10	50	40	12.10	18.10	38	28	30	22
1 X 2.5 mm ²	7/0.33	1.55	0.70	1.40	3.20	52	43	12.10	18.10	38	28	30	22
1 X 2.5 mm ²	1/1.78	1.78	0.70	1.40	3.50	53	49	7.41	12.10	47	35	38	30
1 X 2.5 mm ²	7/0.67	2.01	0.70	1.40	3.80	55	48	7.41	12.10	47	35	38	30
1 X 4.0 mm ²	7/0.85	2.55	0.70	1.40	7.00	85	55	4.81	7.41	58	44	50	38
1 X 6.0 mm ²	7/1.05	3.15	0.70	1.40	7.80	107	69	3.00	4.81	78	58	68	52
1 X 10 mm ²	7/1.80	4.05	0.70	1.40	8.80	156	80	1.89	3.00	100	75	94	70
1 X 16 mm ²	7/1.71	5.13	0.70	1.40	9.80	227	112	1.15	1.81	130	94	125	97
1 X 16 mm ²	19/1.05	6.23	0.70	1.40	10.0	230	115	1.15	1.81	130	94	125	97
1 X 25 mm ²	7/2.14	6.42	0.80	1.40	11.0	324	160	0.727	1.20	155	120	160	120
1 X 25 mm ²	19/1.30	6.60	0.80	1.40	11.2	329	163	0.727	1.20	155	120	160	120
1 X 35 mm ²	19/1.59	6.90-7.50	0.80	1.40	12.1	425	200	0.524	0.888	185	145	195	150
1 X 50 mm ²	19/1.89	7.70-8.60	1.0	1.40	13.8	584	258	0.387	0.641	225	170	245	185
1 X 70 mm ²	19/2.17	8.20-11.20	1.10	1.40	15.4	789	335	0.288	0.443	270	205	300	215
1 X 85 mm ²	19/2.52	11.00-12.00	1.10	1.60	17.1	1041	430	0.193	0.320	310	250	350	260
1 X 120 mm ²	37/2.03	12.30-13.50	1.20	1.50	18.8	1292	531	0.153	0.253	350	285	405	294
1 X 150 mm ²	37/2.27	13.70-15.00	1.40	1.50	21.0	1611	640	0.124	0.206	390	325	450	335
1 X 185 mm ²	37/2.52	15.30-16.80	1.60	1.50	23.0	1878	776	0.0901	0.164	450	368	505	382
1 X 240 mm ²	61/2.25	17.30-19.20	1.70	1.70	25.8	2538	985	0.0754	0.125	515	407	540	423
1 X 300 mm ²	61/2.52	19.70-21.60	1.80	1.80	28.3	3190	1210	0.0602	0.100	585	455	770	498
1 X 400 mm ²	61/2.88	22.30-24.60	2.00	1.80	32.0	4130	1576	0.0470	0.0778	680	480	880	534
1 X 600 mm ²	61/3.23	25.30-27.60	2.30	2.00	35.4	5134	1870	0.0336	0.0605	800	536	1030	610
1 X 800 mm ²	61/3.88	28.70-32.60	2.40	2.20	39.5	6415	2470	0.0263	0.0489	945	580	1160	698
1 X 800 mm ²	61/4.10	32.50-36.70	2.50	2.30	43.0	8138	3000	0.0221	0.0387	1085	---	1310	---
1 X 1000 mm ²	61/4.50	35.30-40.50	2.60	2.40	50.0	10198	3850	0.0178	0.031	1270	---	1480	---

**600/1000V N2xY / NA2xY OR 2xY / A2xY OR 2xY-FR / A2xY-FR OR 2xY-FRLS / A2xY-FRLS
MULTI CORE (CU or ALU/XLPE/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (TWO, THREE) CORE CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Two Core Cables ■ Red ■ Blue
For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 (Optional) Color ■ Black
- 6. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST3 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0271/3.69, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA					ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
					CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm ²	No./mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
TWO CORE												
2 X 1.5 mm ²	1/1.38	0.70	1.80	11.2	155	120	12.10	16.10	34	23	27	19
2 X 2.5 mm ²	2/0.53	0.70	1.80	11.8	182	132	12.10	16.10	34	23	27	19
2 X 2.5 mm ²	1/1.78	0.70	1.80	12.0	185	140	7.41	12.10	44	32	35	27
2 X 2.5 mm ²	2/0.67	0.70	1.80	12.5	185	155	7.41	12.10	44	32	35	27
2 X 4.0 mm ²	2/0.85	0.70	1.80	13.8	275	197	4.81	7.41	55	42	45	37
2 X 6.0 mm ²	2/1.05	0.70	1.80	14.8	343	218	3.08	4.81	74	58	62	48
2 X 10 mm ²	2/1.35	0.70	1.80	16.8	478	271	1.92	3.08	97	74	84	64
2 X 16 mm ²	2/1.71	0.70	1.80	18.1	654	341	1.15	1.91	125	97	110	86
2 X 25 mm ²	2/2.14	0.80	1.80	21.6	888	497	0.727	1.20	150	110	140	108
2 X 35 mm ²	18/1.52	0.80	1.80	23.7	1274	678	0.524	0.888	189	145	180	138
THREE CORE												
3 X 1.5 mm ²	1/1.38	0.70	1.80	11.8	182	160	12.10	16.10	30	21	23	17
3 X 2.5 mm ²	2/0.53	0.70	1.80	12.2	180	165	12.10	16.10	30	21	23	17
3 X 2.5 mm ²	1/1.78	0.70	1.80	12.3	235	195	7.41	12.10	38	28	32	24
3 X 2.5 mm ²	2/0.67	0.70	1.80	12.7	248	198	7.41	12.10	38	28	32	24
3 X 4.0 mm ²	2/0.85	0.70	1.80	14.5	321	213	4.81	7.41	48	35	41	32
3 X 6.0 mm ²	2/1.05	0.70	1.80	15.8	421	252	3.08	4.81	64	48	56	43
3 X 10 mm ²	2/1.35	0.70	1.80	17.6	588	320	1.92	3.08	83	64	75	58
3 X 16 mm ²	2/1.71	0.70	1.80	19.8	805	413	1.15	1.91	110	82	98	75
3 X 25 mm ²	2/2.14	0.80	1.80	23.0	1100	600	0.727	1.20	138	98	120	96
3 X 35 mm ²	18/1.52	0.80	1.80	22.2	1227	678	0.524	0.888	155	118	150	114
3 X 50 mm ²	18/1.89	1.00	1.80	25.1	1654	778	0.387	0.641	180	148	180	142
3 X 70 mm ²	18/2.27	1.10	1.80	28.4	2215	992	0.288	0.442	225	178	230	180
3 X 95 mm ²	18/2.52	1.10	2.00	32.2	3181	1252	0.208	0.328	260	201	270	198
3 X 120 mm ²	37/2.03	1.20	2.10	35.3	3915	1570	0.153	0.253	295	229	305	229
3 X 150 mm ²	37/2.27	1.40	2.50	38.7	4858	2080	0.124	0.206	330	258	350	262
3 X 185 mm ²	37/2.52	1.60	2.40	42.5	5978	2470	0.0951	0.164	385	300	410	305
3 X 240 mm ²	37/2.89	1.70	2.60	47.8	7594	3195	0.0754	0.125	435	332	470	348
3 X 300 mm ²	37/3.23	1.80	2.80	52.1	9541	3840	0.0601	0.100	478	368	504	408

NOTE: 0.5mm² to 25mm²: Circular Conductor; 35mm² to Above: Sector Shaped / Compacted Conductor

**600/1000V N2xY / NA2xY OR 2xY / A2xY OR 2xY-FR / A2xY-FR OR 2xY-FRLS / A2xY-FRLS
MULTI CORE (CU or ALU/XLPE/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE & HALF) CORE CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 (Optional) Color ■ Black
- 6. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0271/3.09, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Overall Diameter	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity					
				CU	ALU	CU	ALU	In Ground at 20°C	In Open Air at 20°C	CU	ALU		
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps		
THREE & HALF CORE													
3 x 25 mm ²	7/2.14	0.90	1.80	21.7	1110	837	0.377	1.20	180	88	120	85	
1 x 18 mm ²	7/1.71	0.70					1.15	1.81					
3 x 35 mm ²	10/1.58	0.90	1.80	24.0	1412	702	0.324	0.888	155	110	150	114	
1 x 18 mm ²	7/1.71	0.70					1.15	1.81					
3 x 50 mm ²	10/1.89	1.00	1.90	27.0	2086	648	0.387	0.541	180	140	190	147	
1 x 25 mm ²	7/2.14	0.90					0.727	1.20					
3 x 70 mm ²	10/2.17	1.10	1.90	30.5	2758	1201	0.288	0.443	225	178	230	188	
1 x 35 mm ²	10/1.58	0.90					0.674	0.868					
3 x 90 mm ²	10/2.62	1.10	2.10	34.8	3721	1053	0.183	0.326	260	201	270	198	
1 x 50 mm ²	10/1.89	1.00					0.387	0.541					
3 x 120 mm ²	10/2.09	1.20	2.20	38.2	4812	1889	0.153	0.253	295	228	305	229	
1 x 70 mm ²	10/2.17	1.10					0.268	0.443					
3 x 150 mm ²	10/2.27	1.40	2.30	42.1	5878	2324	0.124	0.206	330	256	350	267	
1 x 70 mm ²	10/2.17	1.10					0.153	0.253					
3 x 185 mm ²	10/2.52	1.80	2.50	47.3	7105	2831	0.0901	0.164	365	300	410	305	
1 x 85 mm ²	10/2.57	1.10					0.188	0.320					
3 x 240 mm ²	10/2.69	1.70	2.70	53.8	8219	3801	0.0734	0.125	425	332	470	343	
1 x 120 mm ²	10/2.09	1.20					0.153	0.253					
3 x 300 mm ²	10/2.73	1.80	2.80	59.8	11593	4787	0.0601	0.100	475	380	554	400	
1 x 150 mm ²	10/2.27	1.40					0.124	0.206					

**600/1000V N2xY / NA2xY OR 2xY / A2xY OR 2xY-FR / A2xY-FR OR 2xY-FRLS / A2xY-FRLS
MULTI CORE (CU or ALU/XLPE/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (FOUR) CORE CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 (Optional) Color ■ Black
- 6. OUTER SHEATH : PVC/PB-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0271/3.69, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
					CU	ALU	CU	ALU	In Ground at 30°C	In Open Air at 30°C	CU	ALU	CU
mm ²	Number	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps	
FOUR CORE													
4 x 1.5 70	1/1.98	0.70	1.00	12.1	212	165	12.10	18.10	80	21	23	17	
4 x 1.5 70	7/0.59	0.70	1.00	12.4	220	167	12.10	18.10	80	21	23	17	
4 x 2.5 70	1/2.78	0.70	1.00	18.8	390	220	7.41	12.10	98	28	32	24	
4 x 2.5 70	7/0.87	0.70	1.00	14.1	388	225	7.41	12.10	98	28	32	24	
4 x 4.0 70	7/0.85	0.70	1.00	15.4	385	240	4.01	7.41	48	38	41	30	
4 x 6.0 70	7/1.05	0.70	1.00	18.8	488	295	8.08	4.51	54	48	50	40	
4 x 10 70	7/1.35	0.70	1.00	18.2	800	378	1.80	3.08	82	54	75	56	
4 x 16 70	7/1.71	0.70	1.00	21.5	1060	493	1.15	1.81	110	82	99	76	
4 x 25 70	7/2.14	0.80	1.00	28.4	1368	616	0.727	1.31	130	98	120	95	
4 x 35 80	19/1.58	0.90	1.00	24.5	1824	735	0.524	0.868	155	118	150	114	
4 x 50 80	19/1.89	1.00	1.00	27.8	2224	870	0.387	0.641	180	148	180	142	
4 x 70 80	19/2.17	1.10	2.00	30.7	3078	1350	0.288	0.443	225	178	230	188	
4 x 95 80	19/2.52	1.10	2.10	35.8	4088	1841	0.188	0.320	280	201	270	198	
4 x 120 80	37/2.59	1.20	2.90	38.4	5080	1880	0.158	0.263	295	228	305	228	
4 x 150 80	37/2.27	1.40	2.40	42.3	6008	2488	0.124	0.208	330	255	350	262	
4 x 185 80	37/2.52	1.60	2.80	46.0	7874	3342	0.0981	0.164	385	300	410	305	
4 x 240 80	37/2.88	1.70	2.80	53.8	10712	4817	0.0754	0.125	420	32	470	349	
4 x 300 30	37/3.29	1.80	3.00	58.8	12584	4705	0.0601	0.102	478	368	584	408	

NOTE: 0.5mm² to 25mm²: Circular Conductor, 35mm² to Above: Sector Shaped / Compacted Conductor

**600/1000V 2xBaY / A2xBaY OR 2xBaY-FR / A2xBaY-FR OR 2xBaY-FRLS / A2xBaY-FRLS
SINGLE CORE (CU or ALU/XLPE/ATA/PVC)
XLPE INSULATED AND PVC SHEATHED SINGLE CORE ARMoured CABLE**



CONSTRUCTION

- | | | |
|-----------------|--|------------------|
| 1. CONDUCTOR | - Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 | |
| 2. INSULATION | - Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 | Color: ☉ Natural |
| 3. INNER SHEATH | - PVC Compound of ST2 to IEC 60502-1 | Color: ■ Black |
| 4. ARMOUR | - Double Aluminium Tape to IEC 60502-1 | |
| 5. OUTER SHEATH | - PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 | Color: ■ Black |

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Nominal Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Tape	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	In Ground at 30°C		In Open Air at 35°C		
mm ²	mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
SINGLE CORE													
1 x 25 mm ²	7/2.14	0.80	0.50	1.80	14.5	393	236	0.727	1.20	158	100	180	130
1 x 35 mm ²	8/2.53	0.85	0.50	1.80	15.6	500	280	0.514	0.869	185	145	195	150
1 x 50 mm ²	10/3.83	1.0	0.50	1.80	17.1	653	343	0.387	0.641	225	170	245	185
1 x 70 mm ²	10/2.17	1.10	0.50	1.80	18.3	870	436	0.288	0.448	270	200	300	215
1 x 95 mm ²	10/2.52	1.30	0.50	1.80	20.6	1175	540	0.213	0.323	310	250	350	260
1 x 120 mm ²	12/2.83	1.30	0.50	1.80	22.9	1410	670	0.159	0.253	350	285	405	294
1 x 150 mm ²	12/2.27	1.40	0.50	1.80	24.5	1830	805	0.124	0.206	380	325	460	335
1 x 185 mm ²	12/2.52	1.60	0.50	1.80	26.5	2225	945	0.0981	0.164	450	360	555	392
1 x 240 mm ²	12/2.25	1.70	0.50	1.80	28.1	2885	1200	0.0754	0.125	515	407	640	451
1 x 300 mm ²	12/2.62	1.80	0.50	1.80	31.8	3705	1420	0.0601	0.100	585	455	770	495
1 x 400 mm ²	12/2.83	2.00	0.50	2.00	36.0	4310	1650	0.0478	0.0776	580	483	850	594
1 x 500 mm ²	12/3.23	2.20	0.50	2.10	39.8	5230	2150	0.0330	0.0500	600	530	1000	610
1 x 630 mm ²	12/3.63	2.40	0.50	2.20	44.0	6580	2730	0.0242	0.0365	345	588	1100	688
1 x 800 mm ²	12/4.10	2.80	0.50	2.30	50.0	8915	3270	0.0221	0.0367	1050	---	1310	---
1 x 1000 mm ²	12/4.60	2.80	0.50	2.40	55.5	10875	4170	0.0175	0.0281	1270	---	1480	---

**600/1000V 2xBY / A2xBY OR 2xBY-FR / A2xBY-FR OR 2xBY-FRLS / A2xBY-FRLS
MULTI CORE (CU or ALU/XLPE/STA/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE, FOUR) CORE ARMoured CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Double Galvanized Steel Tape to IEC 60502-1
- 7. OUTER SHEATH : PVC/FR- PVC/FRLS- PVC Compound of ST2 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA								
Nominal Cross Sectional Area of Conductor	Nominal Diameter of Each Strand	Material Insulation Thickness	Nominal Thickness of Armour Tape	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity in Ground at 20°C				in Open Air at 35°C	
						CU	ALU	CU	ALU	CU	ALU	CU	ALU		
mm ²	mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps		
THREE CORE															
3 x 16 mm ²	7/1.71	0.70	0.20	1.80	20.70	853	548	1.15	1.81	110	82	88	76		
3 x 25 mm ²	7/2.14	0.80	0.20	1.80	24.20	1211	790	0.727	1.20	130	88	120	85		
3 x 35 mm ²	10/1.53	0.80	0.20	1.80	23.30	1447	778	0.524	0.868	155	110	150	114		
3 x 50 mm ²	18/1.83	1.00	0.20	1.80	28.30	1802	867	0.387	0.641	180	148	180	142		
3 x 70 mm ²	18/2.17	1.10	0.20	1.80	29.80	2818	1278	0.308	0.443	225	178	230	168		
3 x 95 mm ²	18/2.52	1.10	0.50	2.00	33.10	3438	1824	0.189	0.320	260	201	270	188		
3 x 120 mm ²	37/2.03	1.20	0.50	2.10	36.80	4355	2083	0.153	0.263	285	229	305	223		
3 x 150 mm ²	37/2.27	1.40	0.50	2.30	40.50	5371	2508	0.124	0.209	330	256	350	262		
3 x 185 mm ²	37/2.52	1.80	0.50	2.40	45.00	6586	3055	0.0981	0.164	385	300	410	305		
3 x 240 mm ²	37/2.89	1.70	0.50	2.60	49.70	8307	3753	0.0754	0.125	425	332	470	343		
3 x 300 mm ²	37/3.23	1.80	0.50	2.70	54.60	10773	4548	0.0501	0.100	478	388	554	408		
FOUR CORE															
4 x 10 mm ²	7/1.36	0.70	0.20	1.80	18.70	754	488	1.83	3.08	88	64	75	58		
4 x 16 mm ²	7/1.71	0.70	0.20	1.80	22.40	1048	641	1.15	1.81	110	82	98	76		
4 x 25 mm ²	7/2.14	0.80	0.20	1.80	26.20	1507	866	0.727	1.20	130	88	120	85		
4 x 35 mm ²	10/1.53	0.80	0.20	1.80	27.40	1804	1013	0.524	0.868	155	110	150	114		
4 x 50 mm ²	18/1.83	1.00	0.20	2.00	31.40	2301	1328	0.387	0.641	180	148	180	142		
4 x 70 mm ²	18/2.17	1.10	0.50	2.10	36.40	3686	1888	0.308	0.443	225	178	230	168		
4 x 95 mm ²	18/2.52	1.10	0.50	2.30	40.40	4737	2308	0.189	0.320	260	201	270	188		
4 x 120 mm ²	37/2.03	1.20	0.50	2.40	44.80	5886	2832	0.153	0.263	285	229	305	223		
4 x 150 mm ²	37/2.27	1.40	0.50	2.60	49.80	7373	3453	0.124	0.209	330	256	350	262		
4 x 185 mm ²	37/2.52	1.80	0.50	2.70	55.10	8988	4178	0.0981	0.164	385	300	410	305		
4 x 240 mm ²	37/2.89	1.70	0.50	2.90	61.10	11293	5153	0.0754	0.125	425	32	470	343		
4 x 300 mm ²	37/3.23	1.80	0.50	3.10	67.80	14842	6202	0.0501	0.100	478	388	554	408		

**600/1000V 2xBY / A2xBY OR 2xBY-FR / A2xBY-FR OR 2xBY-FRLS / A2xBY-FRLS
MULTI CORE (CU or ALU/XLPE/STA/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE AND HALF) CORE ARMoured CABLE**



CONSTRUCTION

- | | |
|---------------------|---|
| 1. CONDUCTOR | Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60728 |
| 2. INSULATION | Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 |
| COLOR OF INSULATION | For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Natural |
| 3. FILLER | Polypropylene Filler (Optional) |
| 4. CORE BINDER | Polypropylene Tape (Optional) |
| 5. INNER COVERING | PVC Compound of ST2 to IEC 60502-1 Color: ■ Black |
| 6. ARMOUR | Double Galvanized Steel Tape to IEC 60502-1 |
| 7. OUTER SHEATH | PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color: ■ Black |

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Type	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
						Cu	Alu	Cu	Alu	In Duct at 30°C	In Open Air at 30°C	Cu	Alu	Cu
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amper	kVAr	kVAr	kVAr	kVAr
THREE & HALF CORE														
3 X 25 TPI + 1 X 15 TPI	7/2.14	0.80	0.20	1.80	25.7	1440	850	0.727	1.20	130	88	170	95	
3 X 15 TPI + 1 X 10 TPI	7/1.71	0.70						1.15	1.81					
3 X 95 ST + 1 X 16 TPI	19/2.52	0.80	0.20	1.80	26.7	1889	919	0.324	0.558	155	119	150	114	
3 X 16 TPI + 1 X 10 TPI	7/1.71	0.70						1.15	1.81					
3 X 50 ST + 1 X 25 TPI	19/1.83	1.00	0.20	1.80	30.1	2220	1205	0.387	0.641	190	146	180	142	
3 X 25 TPI + 1 X 16 TPI	7/2.14	0.80						0.727	1.20					
3 X 70 ST + 1 X 35 TPI	19/2.17	1.10	0.50	2.00	34.2	3120	1509	0.258	0.443	225	176	230	160	
3 X 35 TPI + 1 X 16 TPI	19/1.53	0.80						0.324	0.558					
3 X 95 ST + 1 X 35 TPI	19/2.52	1.10	0.50	2.00	26.4	4209	2080	0.193	0.320	290	201	270	195	
3 X 60 TPI + 1 X 35 TPI	19/1.83	1.00						0.387	0.641					
3 X 120 ST + 1 X 70 TPI	17/2.08	1.30	0.50	2.30	47.8	5285	2545	0.153	0.253	295	229	305	228	
3 X 70 TPI + 1 X 35 TPI	19/2.17	1.10						0.258	0.443					
3 X 150 ST + 1 X 70 TPI	17/2.27	1.40	0.50	2.50	48.8	8349	3050	0.124	0.208	310	256	360	262	
3 X 70 TPI + 1 X 35 TPI	19/2.17	1.10						0.153	0.253					
3 X 195 ST + 1 X 95 TPI	17/2.52	1.50	0.50	2.50	51.5	7780	3608	0.0881	0.154	385	300	410	305	
3 X 95 TPI + 1 X 35 TPI	19/2.52	1.10						0.193	0.320					
3 X 240 ST + 1 X 120 TPI	17/2.89	1.70	0.50	2.80	57.0	9889	4571	0.0754	0.125	425	332	470	349	
3 X 120 TPI + 1 X 35 TPI	17/2.08	1.20						0.133	0.253					
3 X 300 ST + 1 X 150 TPI	17/3.29	1.80	0.50	3.00	63.2	12185	5518	0.0601	0.100	478	369	564	406	
3 X 150 TPI + 1 X 70 TPI	17/2.27	1.40						0.124	0.208					

**600/1000V 2xRaY / A2xRaY OR 2xRaY-FR / A2xRaY-FR OR 2xRaY-FRLS / A2xRaY-FRLS
SINGLE CORE (CU or ALU/XLPE/AWA/PVC)
XLPE INSULATED AND PVC SHEATHED SINGLE CORE ARMOURED CABLE**



CONSTRUCTION

- | | |
|-----------------|--|
| 1. CONDUCTOR | Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 |
| 2. INSULATION | Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 Color ■ Natural |
| 3. INNER SHEATH | PVC Compound of ST2 to IEC 60502-1 Color ■ Black |
| 4. ARMOUR | Round Aluminium Wire to IEC 60502-1 |
| 4. BINDER | Polypropylene Tape (Optional) |
| 5. OUTER SHEATH | PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black |

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armored Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current-Carrying Capacity (A) Graded at 30°C			
						CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm ²	mm/Strand	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
SINGLE CORE													
1 x 25 mm ²	19/1.53	0.80	1.25	1.80	17.5	809	857	0.524	0.609	185	145	195	150
1 x 50 mm ²	19/1.93	1.00	1.25	1.80	19.8	774	471	0.387	0.541	225	170	245	185
1 x 75 mm ²	19/2.17	1.10	1.25	1.80	20.8	988	575	0.298	0.443	270	205	300	215
1 x 95 mm ²	19/2.52	1.10	1.25	1.80	23.0	1907	762	0.193	0.320	310	250	350	260
1 x 120 mm ²	37/2.09	1.20	1.60	1.80	24.7	1076	860	0.159	0.259	380	285	405	294
1 x 150 mm ²	37/2.27	1.40	1.60	1.80	26.5	1901	992	0.124	0.205	390	295	440	322
1 x 185 mm ²	37/2.52	1.60	1.60	1.80	28.8	2286	1108	0.0991	0.164	450	368	555	380
1 x 240 mm ²	51/2.25	1.70	1.60	1.90	31.5	2850	1405	0.0754	0.125	515	407	640	491
1 x 300 mm ²	51/2.52	1.90	2.00	1.90	35.1	3588	1754	0.0601	0.100	585	455	770	496
1 x 400 mm ²	51/2.89	2.00	2.00	2.10	38.5	4688	2212	0.0470	0.0778	680	489	800	554
1 x 500 mm ²	51/3.23	2.20	2.00	2.20	42.4	5857	2927	0.0380	0.0605	800	538	1030	610
1 x 630 mm ²	51/3.63	2.40	2.00	2.30	46.8	7274	3411	0.0297	0.0488	945	588	1190	698
1 x 800 mm ²	51/4.10	2.80	2.50	2.50	53.9	8880	4198	0.0221	0.0387	1085	---	1310	---
1 x 1000 mm ²	51/4.60	2.90	2.50	2.70	58.8	11008	4957	0.0176	0.0291	1270	---	1480	---

NOTE: 0.5mm² to 25mm² Circular Conductor, 35mm² to Above: Circular Compacted Conductor

**600/1000V 2xRGY / A2xRGY OR 2xRGY-FR / A2xRGY-FR OR 2xRGY-FRLS / A2xRGY-FRLS
MULTI CORE (CU or ALU/XLPE/SWA/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE, FOUR) CORE ARMoured CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminum, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION: For Three Core Cables ■ Red ■ Yellow ■ Blue
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Round Galvanized Steel Wire to IEC 60502-1
- 7. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductors at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	In Duct at 30°C	In Open Air at 30°C	CU	ALU
mm ²	Nos./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
THREE CORE													
3 x 1.5 mm ²	7/0.58	0.70	0.80	1.00	14.7	378	280	12.10	18.10	30	21	23	17
3 x 2.5 mm ²	7/0.67	0.70	0.80	1.00	15.2	446	333	7.41	12.10	38	28	32	24
3 x 4.0 mm ²	7/0.85	0.70	1.25	1.00	17.1	821	645	4.81	7.41	48	38	41	32
3 x 6.0 mm ²	7/1.05	0.70	1.25	1.60	18.7	734	621	3.08	4.81	64	48	58	43
3 x 10 mm ²	7/1.35	0.70	1.25	1.60	19.7	919	728	1.88	3.08	83	64	75	58
3 x 16 mm ²	7/1.71	0.70	1.25	1.60	22.8	1314	1011	1.16	1.81	110	82	88	78
3 x 25 mm ²	7/2.14	0.90	1.60	1.60	25.5	1648	1095	0.727	1.20	130	98	120	95
3 x 35 mm ²	10/1.83	0.90	1.60	1.60	25.4	1901	1288	0.524	0.868	155	119	150	114
3 x 50 mm ²	10/1.83	1.00	1.60	1.60	27.8	2476	1536	0.387	0.641	190	146	180	142
3 x 70 mm ²	15/2.17	1.10	2.00	2.00	32.0	3245	1919	0.268	0.443	225	178	230	168
3 x 95 mm ²	19/2.52	1.10	2.00	2.10	35.7	4425	2620	0.183	0.320	260	201	270	198
3 x 120 mm ²	37/2.03	1.20	2.00	2.20	38.6	5922	3051	0.153	0.253	285	229	305	223
3 x 150 mm ²	37/2.27	1.40	2.50	2.40	43.8	6435	3580	0.124	0.208	295	256	350	262
3 x 185 mm ²	37/2.52	1.60	2.50	2.50	49.5	8175	4972	0.0981	0.164	385	300	410	305
3 x 240 mm ²	37/2.89	1.70	2.50	2.70	54.8	10675	6529	0.0754	0.125	425	32	470	343
3 x 300 mm ²	37/3.23	1.80	2.50	2.90	59.1	12227	6546	0.0601	0.100	478	368	564	408
FOUR CORE													
4 x 1.5 mm ²	7/0.58	0.70	0.80	1.00	15.4	355	210	12.10	18.10	30	21	23	17
4 x 2.5 mm ²	7/0.67	0.70	0.80	1.00	16.4	347	262	7.41	12.10	38	28	32	24
4 x 4.0 mm ²	7/0.85	0.70	1.25	1.00	18.1	433	333	4.81	7.41	48	38	41	32
4 x 6.0 mm ²	7/1.05	0.70	1.25	1.60	18.4	538	387	3.08	4.81	64	48	58	43
4 x 10 mm ²	7/1.35	0.70	1.25	1.60	21.1	729	471	1.88	3.08	83	64	75	58
4 x 16 mm ²	7/1.71	0.70	1.60	1.60	24.2	1575	1168	1.16	1.81	110	82	88	78
4 x 25 mm ²	7/2.14	0.90	1.60	1.60	25.5	1995	1304	0.727	1.20	130	98	120	95
4 x 35 mm ²	10/1.83	0.90	1.60	1.60	27.8	2418	1536	0.524	0.868	155	119	150	114
4 x 50 mm ²	10/1.83	1.00	2.00	1.60	31.3	3145	1987	0.387	0.641	180	146	180	142
4 x 70 mm ²	15/2.17	1.10	2.00	2.10	35.0	4285	2528	0.268	0.443	225	178	230	168
4 x 95 mm ²	19/2.52	1.10	2.50	2.70	40.5	5808	3211	0.183	0.320	260	201	270	198
4 x 120 mm ²	37/2.03	1.20	2.50	2.40	44.8	6848	3819	0.153	0.253	285	229	305	223
4 x 150 mm ²	37/2.27	1.40	2.50	2.60	50.5	8148	4991	0.124	0.208	295	256	350	262
4 x 185 mm ²	37/2.52	1.60	2.50	2.70	55.0	10411	5747	0.0981	0.164	385	300	410	305
4 x 240 mm ²	37/2.89	1.70	2.50	2.90	61.4	13042	6943	0.0754	0.125	425	32	470	343
4 x 300 mm ²	37/3.23	1.80	2.50	3.10	66.6	15759	8122	0.0601	0.100	478	368	564	408

**600/1000V 2xRGY / A2xRGY OR 2xRGY-FR / A2xREY-FR OR 2xRGY-FRLS / A2xRGY-FRLS
MULTI CORE (CU or ALU/XLPE/SWA/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE AND HALF) CORE ARMoured CABLE**



CONSTRUCTION

- | | |
|---------------------|---|
| 1. CONDUCTOR | : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 |
| 2. INSULATION | : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 |
| COLOR OF INSULATION | : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Natural |
| 3. FILLER | : Polypropylene Filler (Optional) |
| 4. CORE BINDER | : Polypropylene Tape (Optional) |
| 5. INNER COVERING | : PVC Compound of ST2 to IEC 60502-1 Color ■ Black |
| 6. ARMOUR | : Round Galvanized Steel Wire to IEC 60502-1 |
| 7. BINDER | : With or Without Helically Applied Galvanized Steel Tape (Optional) |
| 8. OUTER SHEATH | : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black |

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Twisted and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armored Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current-Carrying Capacity				
							CU	ALU	In Ground at 30°C		In Open Air at 35°C		
mm ²	mm	mm	mm	mm	mm	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps	
THREE & HALF CORE													
3 X 25 TMC	7/2.14	0.90	1.00	1.80	27.5	1818	1.231	0.727	1.20	130	88	120	85
1 X 18 TMC	7/1.71	0.70						1.15	1.31				
3 X 35 STM	15/2.53	0.90	1.00	1.80	28.3	2388	1.998	0.424	0.888	193	118	150	114
1 X 16 TMC	7/1.73	0.70						1.15	1.51				
3 X 50 STM	18/2.89	1.00	2.00	2.00	31.8	3105	1.995	0.387	0.641	199	149	190	147
1 X 26 TMC	7/2.14	0.80						0.727	1.30				
3 X 75 STM	19/2.17	1.10	2.00	2.10	37.8	4158	2.585	0.268	0.449	225	178	230	169
1 X 85 TMC	19/1.53	0.90						0.524	0.888				
3 X 85 STM	18/2.52	1.10	2.00	1.80	42.1	5372	3.251	0.168	0.329	260	201	270	195
1 X 58 TMC	19/1.83	1.00						0.387	0.641				
3 X 120 STM	37/2.03	1.20	2.50	2.40	48.8	6821	4.137	0.158	0.293	285	229	305	223
1 X 70 TMC	19/2.17	1.10						0.268	0.449				
3 X 150 STM	37/2.27	1.40	2.50	2.50	50.2	6078	4.777	0.124	0.208	330	256	350	262
1 X 70 TMC	19/2.17	1.10						0.153	0.263				
3 X 185 STM	37/2.32	1.60	2.50	2.70	55.1	6855	5.543	0.0981	0.164	385	303	410	305
1 X 85 TMC	19/2.62	1.10						0.193	0.329				
3 X 240 STM	37/2.89	1.70	2.50	2.80	61.1	11952	6.518	0.0754	0.125	425	332	470	343
1 X 120 TMC	37/2.03	1.20						0.158	0.293				
3 X 300 STM	37/2.73	1.80	2.50	3.00	67.0	14683	7.837	0.0591	0.100	478	389	504	400
1 X 150 TMC	37/2.27	1.40						0.124	0.208				

NOTE: 0.5mm² to 25mm² Circular Conductor, 35mm² to Above: Sector Shaped / Compacted Conductor

**600/1000V 2xFGY / A2xFGY OR 2xFGY-FR / A2xFGY-FR OR 2xFGY-FRLS / A2xFGY-FRLS
MULTI CORE (CU or ALU/XLPE/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE, FOUR) CORE ARMoured CABLE**



CONSTRUCTION

- | | |
|---------------------|---|
| 1. CONDUCTOR | - Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 |
| 2. INSULATION | - Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 |
| COLOR OF INSULATION | - For Three Core Cables ■ Red ■ Yellow ■ Blue
- For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Natural |
| 3. FILLER | - Polypropylene Filler (Optional) |
| 4. CORE BINDER | - Polypropylene Tape (Optional) |
| 5. INNER COVERING | - PVC Compound of ST2 to IEC 60502-1 Color ■ Black |
| 6. ARMOUR | - Flat Galvanized Steel Wire to IEC 60502-1 |
| 7. BINDER | - With or Without Helically Applied Galvanized Steel Tape (Optional) |
| 8. OUTER SHEATH | - PVC-FR-PVC-FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black |

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BOS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA							
Nominal Core Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity to Ground at 30°C					
							CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps	
THREE CORE														
3 x 1.5 mm ²	7/1.71	0.70	0.80	1.80	23.0	1250	940	1.15	1.91	110	97	99	78	
3 x 2.5 mm ²	7/2.14	0.90	0.80	1.80	24.8	1487	1071	0.727	1.20	180	95	120	95	
3 x 3.5 mm ²	19/1.53	0.90	0.80	1.80	26.4	1757	1117	0.524	0.866	155	114	150	114	
3 x 5.0 mm ²	19/1.83	1.00	0.80	1.90	27.7	2339	1804	0.387	0.641	180	140	180	142	
3 x 7.0 mm ²	19/2.17	1.10	0.80	2.00	30.4	2888	1850	0.288	0.443	225	170	220	180	
3 x 9.5 mm ²	19/2.52	1.10	0.80	2.10	35.2	4196	2059	0.193	0.320	280	201	270	180	
3 x 12.0 mm ²	37/2.09	1.20	0.80	2.00	38.0	5025	2410	0.159	0.263	295	220	305	220	
3 x 15.0 mm ²	37/2.27	1.40	0.80	2.40	42.2	6141	2892	0.124	0.208	330	250	350	262	
3 x 18.5 mm ²	37/2.52	1.40	0.80	2.50	48.0	7358	3398	0.0981	0.164	385	300	410	305	
3 x 24.0 mm ²	37/2.88	1.70	0.80	2.70	51.8	8584	4147	0.0754	0.129	425	32	470	340	
3 x 30.0 mm ²	37/3.23	1.80	0.80	2.80	58.5	11821	4900	0.0601	0.100	478	365	504	405	
FOUR CORE														
4 x 1.5 mm ²	7/1.71	0.70	0.80	1.80	24.5	1460	1050	1.15	1.91	110	97	99	78	
4 x 2.5 mm ²	7/2.14	0.90	0.80	1.80	26.3	1800	1415	0.727	1.20	130	95	120	95	
4 x 3.5 mm ²	19/1.53	0.90	0.80	1.80	27.1	2218	1475	0.524	0.866	155	119	150	114	
4 x 5.0 mm ²	19/1.83	1.00	0.80	2.00	32.0	3118	1822	0.387	0.641	180	140	180	142	
4 x 7.0 mm ²	19/2.17	1.10	0.80	2.10	35.5	4113	2227	0.288	0.443	225	170	220	180	
4 x 9.5 mm ²	19/2.52	1.10	0.80	2.20	39.7	5378	2702	0.193	0.320	280	201	270	180	
4 x 12.0 mm ²	37/2.09	1.20	0.80	2.40	48.6	7140	3198	0.159	0.263	295	220	305	220	
4 x 15.0 mm ²	37/2.27	1.40	0.80	2.60	47.5	7898	3720	0.124	0.208	330	250	350	262	
4 x 18.5 mm ²	37/2.52	1.40	0.80	2.70	53.0	9874	4408	0.0981	0.164	385	300	410	305	
4 x 24.0 mm ²	37/2.88	1.70	0.80	3.00	58.8	12412	5347	0.0754	0.129	425	32	470	340	
4 x 30.0 mm ²	37/3.23	1.80	0.80	3.00	68.1	14788	6291	0.0601	0.100	478	365	504	405	

**600/1000V 2xFGY / A2xFGY OR 2xFGY-FR / A2xFGY-FR OR 2xFGY-FRLS / A2xFGY-FRLS
MULTI CORE (CU or ALU/XLPE/FSA/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE AND HALF) CORE ARMoured CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60328
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Flat Galvanized Steel Wire to IEC 60502-1
- 7. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST3 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						Cu	Alu	Cu	Alu	Cu	Alu	Cu	Alu
mm ²	Str./Dia.	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
THREE & HALF CORE													
3 X 25 mm ²	7/2.14	0.80	0.80	1.80	25.9	1744	1299	0.727	1.30	180	98	120	95
1 X 18 mm ²	7/1.71	0.75						1.35	1.81				
3 X 35 mm ²	19/1.53	0.80	0.60	1.80	27.7	2028	1385	0.574	0.808	155	110	150	114
1 X 18 mm ²	7/1.71	0.75						1.35	1.81				
3 X 50 mm ²	19/1.88	1.00	0.80	1.90	31.3	2815	1807	0.387	0.641	180	145	180	147
1 X 25 mm ²	7/2.14	0.80						0.727	1.30				
3 X 70 mm ²	18/2.17	1.10	0.80	2.00	35.3	3783	1823	0.288	0.443	225	178	230	188
1 X 35 mm ²	19/1.53	0.80						0.574	0.868				
3 X 95 mm ²	19/2.52	1.10	0.80	2.25	40.0	4882	2262	0.189	0.320	260	201	270	198
1 X 50 mm ²	18/1.88	1.00						0.387	0.641				
3 X 120 mm ²	37/2.03	1.25	0.80	2.30	45.4	6252	2888	0.153	0.253	295	228	305	228
1 X 70 mm ²	18/2.17	1.10						0.288	0.443				
3 X 150 mm ²	37/2.27	1.40	0.80	2.40	47.3	7828	3205	0.124	0.208	330	255	350	265
1 X 70 mm ²	18/2.17	1.10						0.288	0.253				
3 X 185 mm ²	37/2.52	1.60	0.80	2.60	52.7	8975	3808	0.0991	0.164	385	300	410	305
1 X 95 mm ²	19/2.52	1.10						0.183	0.320				
3 X 240 mm ²	27/2.89	1.70	0.80	2.80	58.5	10598	4600	0.0754	0.125	425	322	470	343
1 X 120 mm ²	37/2.03	1.20						0.153	0.253				
3 X 300 mm ²	37/3.23	1.80	0.80	3.00	65.6	13883	5435	0.0501	0.100	478	368	504	400
1 X 150 mm ²	37/2.27	1.40						0.124	0.208				

NOTE: 0.5mm² to 25mm²: Circular Conductor; 35mm² to Above: Sector Shaped / Compacted Conductor

**600/1000V N2xCY OR 2xCY OR N2xCY-FR OR N2xCY-FRLS
MULTI CORE (CU/XLPE/CWS/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE) CORE CONCENTRIC CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Circular / Shaped, Plain Annealed Copper, Class-1 & 2 to IEC 60228
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color ■ Black
- 6. METALLIC SCREEN : Plain Annealed Copper Wire Concentric
- 7. BINDER : Helically Applied Copper Tape / Overlap Polypropylene Tape
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for increase electrical and also mechanical protection are required. These cables are installed in open air, in underground, in water, indoors and in cable ducts, energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA						ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Min. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
mm ²	No./mm	mm	mm	mm	kg/km	Ω/km	In Ground at 30°C	In Open Air at 35°C
							Amps	Amps
THREE CORE								
3x2.5/	7/0.67	0.70	1.60	14.8	284	7.41	38	32
3x2.50	13/0.50							
3x4.0/	7/0.85	0.70	1.80	15.3	357	4.83	48	41
3x4.00	20/0.50							
3x6.0/	7/1.05	0.70	1.80	17.2	472	3.08	54	56
3x6.00	31/0.50							
3x10/	7/1.35	0.70	1.80	18.7	605	1.93	83	74
3x100	20/0.80							
3x16/	7/1.71	0.70	1.80	22.1	681	1.18	110	88
3x160	41/0.80							
3x25/	7/2.14	0.90	1.80	25.0	1274	0.777	140	120
3x180	31/0.80							
3x35/	13/1.54	0.90	1.80	24.3	1497	0.524	155	150
3x150	31/0.80							
3x50/	13/1.89	1.00	1.80	27.3	2095	0.387	180	160
3x250	60/0.80							
3x70/	19/2.17	1.10	1.80	30.0	2800	0.288	225	200
3x300	70/0.80							
3x95/	19/2.57	1.10	2.10	34.9	3772	0.188	260	270
3x350	60/1.05							
3x120/	37/2.04	1.20	2.20	38.2	4940	0.153	295	305
3x700	71/1.10							
3x150/	37/2.27	1.40	2.20	41.3	5715	0.124	330	350
3x900	71/1.10							
3x185/	37/2.52	1.60	2.20	47.0	7140	0.0991	395	410
3x450	67/1.35							
3x240/	37/2.89	1.70	2.80	51.5	8084	0.0754	425	470
3x1200	67/1.58							
3x300/	37/2.20	1.80	2.80	57.2	121262	0.0601	470	584
3x1500	72/1.58							

**600/1000V N2xCRY OR 2xCRY OR N2xCRY-FR OR N2xCRY-FRLS
MULTI CORE (CU/XLPE/CWS/PVC/SWA/PVC)
XLPE INSULATED AND PVC SHEATHED MULTI (THREE) CORE CONCENTRIC ARMoured CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Circular / Shaped, Plain Annealed Copper, Class-1 & 2 to IEC 60228.
- 2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color: ■ Black
- 6. METALLIC SCREEN : Plain Annealed Copper Wire Concentric
- 7. BINDER : Helically Applied Copper Tape / Overlap Polypropylene Tape
- 8. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color: ■ Black
- 9. ARMOUR : Round Galvanized Steel Wire to IEC 60502-1
- 10. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 11. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST3 to IEC 60502-1 Color: ■ Black

APPLICATION

Power cables for increase electrical and also mechanical protection are required. These cables are installed in open air, in underground, in water, indoors and in cable ducts, energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA		
Nominal Core Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Conduit Carrying Capacity		
							Max. DC Resistance of Conductor at 20°C	In Ground at 20°C	In Open Air at 20°C
mm ²	No./mm	mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
THREE CORE									
3x2.5	7/0.87	0.70	0.80	1.80	19.8	712	7.41	38	32
3x2.5C	19/0.80								
3x4.0	7/1.05	0.70	1.25	1.80	20.6	816	4.81	48	41
3x4.0C	20/0.80								
3x6.0	7/1.25	0.70	1.25	1.80	22.6	1068	3.68	64	55
3x6.0C	31/0.80								
3x10	7/1.35	0.70	1.25	1.80	25.1	1350	1.83	83	74
3x10C	20/0.80								
3x16	1/1.71	0.70	1.25	1.80	27.8	1684	1.13	110	98
3x16C	31/0.80								
3x25	7/2.14	0.80	1.60	2.00	31.4	2227	0.727	130	120
3x25C	31/0.80								
3x35	19/1.53	0.80	1.80	1.80	33.3	2421	0.624	155	150
3x35C	31/0.80								
3x50	19/1.83	1.00	1.80	2.00	34.3	3326	0.387	180	180
3x50C	50/0.80								
3x70	19/2.17	1.10	2.00	2.20	39.1	4280	0.300	220	230
3x70C	70/0.80								
3x95	19/2.57	1.10	2.00	2.30	42.2	5424	0.193	260	270
3x95C	58/1.05								
3x120	37/2.03	1.20	2.00	2.40	46.8	6662	0.153	290	305
3x120C	71/1.13								
3x150	37/2.27	1.40	2.60	2.50	50.3	8188	0.124	330	350
3x150C	71/1.13								
3x185	37/2.52	1.60	2.50	2.80	53.0	9808	0.0801	385	410
3x185C	87/1.35								
3x240	37/2.89	1.70	2.50	2.80	61.3	12231	0.0754	425	470
3x240C	87/1.39								
3x300	37/2.89	1.80	2.500	2.10	68.9	14998	0.0601	470	584
3x300C	77/1.83								

NOTE: 0.5mm² to 25mm²: Circular Conductor; 35mm² to Above: Sector Shaped / Compacted Conductor

600/1000V N2xCBY OR 2xCBY OR N2xCBY-FR OR N2xCBY-FRLS

MULTI CORE (CU/XLPE/CWS/PVC/STA/PVC)

XLPE INSULATED AND PVC SHEATHED MULTI (THREE) CORE CONCENTRIC ARMoured CABLE



CONSTRUCTION

1. CONDUCTOR : Circular / Shaped, Plain Annealed Copper, Class-1 & 2 to IEC 60228.
2. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
3. FILLER : Polypropylene Filler (Optional)
4. CORE BINDER : Polypropylene Tape (Optional)
5. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color ■ Black
6. METALLIC SCREEN : Plain Annealed Copper Wire Concentric
7. BINDER : Helically Applied Copper Tape / Overlap Polypropylene Tape
8. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 Color ■ Black
9. ARMOUR : Double Galvanized Steel Tape to IEC 60502-1
10. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color ■ Black

APPLICATION

Power cables for increase electrical and also mechanical protection are required. These cables are installed in open air, in underground, in water, indoors and in cable ducts. energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA		
Nominal Core Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Conductor	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
								In Ground at 30°C	In Open Air at 20°C
mm ²	No./mm	mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
THREE CORE									
3x6.0/	7/1.03	0.70	0.20	1.80	19.5	835	3.08	84	88
3x8.00	21/0.50								
3x10/	7/1.35	0.70	0.20	1.80	21.9	845	2.83	93	74
3x10C	20/0.80								
3x15/	7/1.71	0.70	0.20	1.90	24.4	1117	2.15	110	88
3x15C	21/0.80								
3x25/	7/2.14	0.90	0.20	1.80	27.9	1542	0.927	100	120
3x25C	31/0.80								
3x35/	19/1.53	0.90	0.20	1.90	26.0	1792	0.624	155	150
3x35C	21/1.00								
3x50/	18/1.83	1.00	0.20	1.90	30.1	2380	0.487	160	190
3x50C	50/0.90								
3x70/	18/2.17	1.10	0.20	2.00	33.9	3188	0.368	225	233
3x70C	70/0.90								
3x95/	19/2.52	1.10	0.30	2.20	38.4	4322	0.282	260	270
3x95C	58/1.05								
3x120/	27/2.03	1.20	0.30	2.30	41.7	5347	0.213	295	304
3x120C	71/1.13								
3x150/	27/2.27	1.40	0.30	2.40	45.9	6418	0.174	330	350
3x150C	71/1.13								
3x185/	37/2.52	1.60	0.30	2.60	50.9	7926	0.0991	385	410
3x185C	87/1.34								
3x240/	37/2.94	1.70	0.30	2.80	56.4	10081	0.0754	435	470
3x240C	87/1.38								
3x300/	37/3.15	1.80	0.30	3.00	61.7	12292	0.0551	478	504
3x300C	72/1.33								

600/1000V N2xY-1/N2xRY-1/N2xBY-1/2xBY-1

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- | | |
|-------------------|--|
| 1. CONDUCTOR | : Solid / Circular Plain Annealed Copper, Class-1 & 2 to IEC 60228 |
| 2. INSULATION | : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 |
| 3. FILLER | : Polypropylene Filler (Optional) |
| 4. CORE BINDER | : Polypropylene Tape (Optional) |
| 5. INNER COVERING | : PVC Compound of ST2 to IEC 60502-1 Color: ■ Black |
| 6. ARMOUR | : Round Galvanized Steel Wire / Flat Galvanized Steel Tape to IEC 60502-1 |
| 7. BINDER | : Polypropylene Tape (Optional) |
| 8. OUTER SHEATH | : PVC/FR-PVC/FRLS-PVC Compound of ST2 to IEC 60502-1 Color: ■ Black |

APPLICATION

Suitable for use as a control cables, indoors, outdoors, in cable ducts or Tray or underground and in water for remote or auto control of electrical facilities at power plant or factory, etc., for continuous permissible service voltage of 720/1200 volts.

STANDARD: BDS 901, BS 5467, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA												ELECTRICAL DATA		
Nominal Core Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	UNARMOUR			STEEL WIRE ARMOUR			STEEL TAPE ARMOUR			Max. Operating Temperature at Conductor at 20°C	Current Carrying Capacity	
			TYPE: N2xY-1/2xY-1			TYPE: N2xRY-1/2xRY-1			TYPE: N2xBY-1/2xBY-1				In Ground at 30°C	In Case at 35°C
			Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable			
mm ²	No./mm	mm	mm	mm	kg/km	mm	mm	kg/km	mm	mm	kg/km	°C/min	Amps	Amps
2CX1.0	7/0.44	0.70	3.00	11.00	152	1.80	13.20	296	---	---	---	18.00	23	19
2CX1.5	7/0.53	0.70	3.00	11.00	174	1.80	13.00	328	---	---	---	12.10	34	27
2CX2.5	7/0.67	0.70	3.00	12.00	216	1.80	14.00	365	---	---	---	7.41	44	35
2CX4.0	7/0.85	0.70	3.00	13.00	300	1.80	16.00	455	---	---	---	4.01	55	45
3CX1.0	7/0.44	0.70	3.00	10.00	117	1.80	13.00	315	---	---	---	18.00	20	15
3CX1.5	7/0.53	0.70	3.00	10.70	141	1.80	14.50	355	---	---	---	12.10	30	23
3CX2.5	7/0.67	0.70	3.00	11.00	185	1.80	16.00	421	---	---	---	7.41	38	32
3CX4.0	7/0.85	0.70	3.00	12.00	239	1.80	17.50	604	---	---	---	4.01	48	41
4CX1.0	7/0.44	0.70	3.00	10.70	139	1.80	14.50	363	---	---	---	18.00	20	15
4CX1.5	7/0.53	0.70	3.00	11.60	169	1.80	16.30	399	---	---	---	12.10	30	23
4CX2.5	7/0.67	0.70	3.00	12.70	223	1.80	17.40	588	---	---	---	7.41	38	32
4CX4.0	7/0.85	0.70	3.00	13.90	309	1.80	19.00	700	---	---	---	4.01	48	41
5CX1.0	7/0.44	0.70	3.00	11.50	160	1.80	16.00	380	---	---	---	18.00	19	8
5CX1.5	7/0.53	0.70	3.00	12.80	190	1.80	17.00	547	---	---	---	12.10	20	14
5CX2.5	7/0.67	0.70	3.00	13.00	261	1.80	18.40	654	---	---	---	7.41	26	21
5CX4.0	7/0.85	0.70	3.00	15.00	352	1.80	19.70	788	---	---	---	4.01	33	27
6CX1.0	7/0.44	0.70	3.00	12.00	183	1.80	17.00	535	---	---	---	18.00	19	8
6CX1.5	7/0.53	0.70	3.00	13.20	225	1.80	17.90	602	---	---	---	12.10	19	13
6CX2.5	7/0.67	0.70	3.00	14.70	305	1.80	19.40	730	---	---	---	7.41	25	20
6CX4.0	7/0.85	0.70	3.00	16.20	411	1.80	20.90	884	---	---	---	4.01	31	25
7CX1.0	7/0.44	0.70	3.00	12.00	188	1.80	17.00	540	---	---	---	18.00	17	8
7CX1.5	7/0.53	0.70	3.00	13.20	233	1.80	17.90	610	---	---	---	12.10	18	13
7CX2.5	7/0.67	0.70	3.00	14.70	320	1.80	19.40	744	---	---	---	7.41	23	19
7CX4.0	7/0.85	0.70	3.00	16.20	436	1.80	20.90	889	---	---	---	4.01	29	24
8CX1.0	7/0.44	0.70	3.00	13.10	209	1.80	17.00	588	---	---	---	18.00	11	8
8CX1.5	7/0.53	0.70	3.00	14.00	259	1.80	18.70	659	---	---	---	12.10	16	12
8CX2.5	7/0.67	0.70	3.00	15.70	359	1.80	20.40	808	---	---	---	7.41	22	18
8CX4.0	7/0.85	0.70	3.00	17.30	490	1.80	22.70	1107	1.80	19.00	878	4.01	27	23
10CX1.0	7/0.44	0.70	3.00	14.10	245	1.80	18.00	640	---	---	---	18.00	8	7
10CX1.5	7/0.53	0.70	3.00	15.30	300	1.80	19.00	745	---	---	---	12.10	14	11
10CX2.5	7/0.67	0.70	3.00	17.00	427	1.80	22.40	1043	1.80	19.30	899	7.41	20	15
10CX4.0	7/0.85	0.70	3.00	18.90	594	1.80	24.30	1370	1.80	21.10	789	4.01	25	21

600/1000V N2xY-1/N2xRY-1/N2xBY-1/2xBY-1



CONSTRUCTION

- | | |
|-------------------|---|
| 1. CONDUCTOR | : Solid / Circular Plain Annealed Copper, Class-1 G-2 to IEC 60228 |
| 2. INSULATION | : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 |
| 3. FILLER | : Polypropylene Filler (Optional) |
| 4. CORE BINDER | : Polypropylene Tape (Optional) |
| 5. INNER COVERING | : PVC Compound of ST2 to IEC 60502-1 Color: ■ Black |
| 6. ARMOUR | : Round Galvanized Steel Wire / Flat Galvanized Steel Tape to IEC 60502-1 |
| 7. BINDER | : Polypropylene Tape (Optional) |
| 8. OUTER SHEATH | : PVC/FR-PVC/FLS-PVC Compound of ST2 to IEC 60502-1 Color: ■ Black |

APPLICATION

Suitable for use as a control cables, indoors, outdoors, in cable ducts or Tray or underground and in water for remote or auto control of electrical facilities at power plant or factory, etc., for continuous permissible service voltage of 720/1200 volts.

STANDARD: BDS 901, BS 5467, IEC 60502-1, IEC 60332, IEC 61024
VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA													ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	UNARMED			STEEL WIRE ARMOUR			STEEL TAPE ARMOUR			Max. Discharge at 1000 V (kA/Sec)	Current Carrying Capacity		
			TYPE N2xY-1/2xY-1			TYPE N2xRY-1/2xRY-1			TYPE N2xBY-1/2xBY-1				In Ground at 30°C	In Open Air at 30°C	
			Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable				
mm ²	No./mm	mm	mm	mm	kg/km	mm	mm	kg/km	mm	mm	kg/km	mm	Amps	Amps	
100XL0	7/0.44	0.70	1.00	19.00	270	1.80	19.00	729	---	---	---	10.50	0	7	
120XL5	7/0.53	0.70	1.80	16.00	355	1.80	21.00	600	---	---	---	12.10	10	10	
120XL5	7/0.67	0.70	1.80	18.00	500	1.80	22.70	1155	1.80	20.50	600	7.41	18	14	
120XL0	7/0.85	0.70	1.80	20.00	1094	1.80	26.70	1437	1.80	22.50	907	4.61	20	10	
140XL0	7/0.44	0.70	1.80	15.00	314	1.80	20.00	775	---	---	---	18.50	8	6	
140XL5	7/0.53	0.70	1.80	17.20	400	1.80	22.60	1017	1.80	19.50	584	12.10	12	9	
140XL5	7/0.67	0.70	1.80	19.40	567	1.80	24.80	1282	1.80	21.80	770	7.41	17	13	
160XL0	7/0.44	0.70	1.80	16.70	348	1.80	21.40	823	---	---	---	18.50	8	6	
160XL5	7/0.53	0.70	1.80	18.10	446	1.80	23.50	1100	1.80	20.40	646	12.10	12	8	
160XL5	7/0.67	0.70	1.80	20.40	632	1.80	25.80	1385	1.80	22.70	892	7.41	15	12	
180XL0	7/0.44	0.70	1.80	17.80	389	1.80	23.30	1040	1.80	20.30	608	18.50	7	5	
180XL5	7/0.53	0.70	1.80	19.40	510	1.80	24.80	1210	1.80	21.00	737	12.10	11	8	
180XL5	7/0.67	0.70	1.80	21.80	735	1.80	27.30	1576	1.80	24.10	985	7.41	14	11	
210XL0	7/0.44	0.70	1.80	18.50	451	1.80	24.00	1110	1.80	20.80	829	18.50	7	5	
210XL5	7/0.53	0.70	1.80	20.10	557	1.80	25.80	1284	1.80	22.40	772	12.10	10	8	
210XL5	7/0.67	0.70	1.80	22.80	801	1.80	28.40	1643	1.80	25.00	1041	7.41	14	11	
240XL0	7/0.44	0.70	1.80	19.50	481	1.80	24.80	1178	1.80	21.80	690	18.50	7	5	
240XL5	7/0.53	0.70	1.80	21.20	623	1.80	26.70	1389	1.80	23.60	860	12.10	10	8	
240XL5	7/0.67	0.70	1.80	24.10	862	1.80	29.70	1783	1.80	26.30	1155	7.41	13	10	
270XL0	7/0.44	0.70	1.80	20.50	533	1.80	25.80	1287	1.80	22.70	747	18.50	8	5	
270XL5	7/0.53	0.70	1.80	22.80	652	1.80	27.70	1500	1.80	24.60	870	12.10	9	7	
270XL5	7/0.67	0.70	1.80	25.80	1000	2.00	31.10	1352	1.80	27.50	1258	7.41	12	9	
300XL0	7/0.44	0.70	1.80	21.80	577	1.80	26.80	1254	1.80	23.80	808	18.50	8	5	
300XL5	7/0.53	0.70	1.80	23.80	758	1.80	28.80	1519	1.80	25.80	1009	12.10	8	7	
300XL5	7/0.67	0.70	1.80	26.40	1095	2.00	32.20	2087	1.80	28.80	1384	7.41	11	8	
370XL0	7/0.44	0.70	1.80	23.20	669	1.80	29.00	1555	1.80	25.50	988	18.50	5	4	
370XL5	7/0.53	0.70	1.80	25.40	808	1.80	31.00	1847	1.80	27.80	1178	12.10	8	6	
370XL5	7/0.67	0.70	1.80	28.10	1138	2.10	35.70	2849	2.30	31.50	1858	7.41	8	6	
480XL0	7/0.44	0.70	1.80	25.80	864	2.00	31.70	1887	1.80	28.80	1150	18.50	4	3	
480XL5	7/0.53	0.70	1.80	28.50	1193	2.10	35.10	2434	1.80	30.80	1480	12.10	8	5	
480XL5	7/0.67	0.70	2.00	32.70	1705	2.20	38.70	3228	2.10	35.80	2211	7.41	7	6	
610XL0	7/0.44	0.70	1.80	28.80	1080	2.10	35.50	2380	2.30	31.80	1389	18.50	3	2	
610XL5	7/0.53	0.70	2.00	31.80	1442	2.20	38.80	2935	2.10	34.80	1827	12.10	4	3	
610XL5	7/0.67	0.70	2.10	36.56	2135	2.40	43.70	3887	2.20	38.70	2700	7.41	5	4	

**600/1000V N2xY-FiR / NA2xY-FiR OR 2xY-FiR / A2xY-FiR
SINGLE CORE (CU or ALU/Mica Tape/XLPE/FR-PVC)
XLPE INSULATED AND FR-PVC SHEATHED SINGLE CORE FIRE SURVIVAL CABLE**



CONSTRUCTION

- | | |
|-----------------|--|
| 1. CONDUCTOR | Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 |
| 2. FIRE BARRIER | Mica Tape (Synthetic or Glass Fiber) |
| 3. INSULATION | Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1 Color: ■ Natural |
| 4. OUTER SHEATH | Flame Retardant (FR) PVC, Type ST2 to IEC 60502-1 |
| COLOR OF SHEATH | ■ Red ■ Orange |

APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed. During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034
VOLTAGE GRADE: 600/1000 (1200) V**

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
SINGLE CORE													
1 X 1.5 FR	1/1.58	≥ 0.10	0.70	1.40	8.2	68	60	12.10	18.10	36	28	30	22
1 X 1.5 FR	7/0.58	≥ 0.10	0.70	1.40	6.5	61	51	12.10	18.10	36	28	30	22
1 X 2.5 FR	1/1.78	≥ 0.10	0.70	1.40	8.7	73	58	7.41	12.10	47	36	39	30
1 X 2.5 FR	7/0.67	≥ 0.10	0.70	1.40	6.9	78	60	7.41	12.10	47	36	39	30
1 X 4.0 FR	7/0.85	≥ 0.10	0.70	1.40	7.5	98	71	4.61	7.41	68	44	51	39
1 X 6.0 FR	7/1.05	≥ 0.10	0.70	1.40	8.1	121	83	3.08	4.61	78	58	68	52
1 X 10 FR	7/1.35	≥ 0.10	0.70	1.40	9.9	185	98	1.89	3.08	100	75	94	70
1 X 15 FR	7/1.71	≥ 0.10	0.70	1.40	10.1	235	134	1.15	1.91	130	94	126	97
1 X 15 FR	18/1.08	≥ 0.10	0.70	1.40	10.8	242	187	1.15	1.91	130	94	126	97
1 X 25 FR	7/2.14	≥ 0.10	0.90	1.40	11.6	342	189	0.727	1.29	155	120	160	120
1 X 25 FR	19/1.30	≥ 0.10	0.90	1.40	12.1	348	198	0.727	1.29	155	120	160	120
1 X 35 FR	18/1.53	≥ 0.10	0.90	1.40	12.3	431	210	0.524	0.898	185	145	200	160
1 X 50 FR	19/1.88	≥ 0.10	1.0	1.40	13.7	585	270	0.387	0.641	225	170	245	185
1 X 70 FR	18/2.17	≥ 0.10	1.10	1.40	15.4	783	380	0.288	0.440	270	205	300	215
1 X 95 FR	19/2.52	≥ 0.10	1.10	1.60	17.1	1040	441	0.199	0.320	310	250	350	250
1 X 120 FR	27/2.09	≥ 0.10	1.20	1.60	18.8	1256	539	0.153	0.253	350	285	405	254
1 X 150 FR	27/2.27	≥ 0.10	1.40	1.60	21.0	1612	688	0.124	0.200	390	325	480	329
1 X 185 FR	37/2.52	≥ 0.10	1.60	1.60	23.0	1878	812	0.0991	0.164	450	368	555	382
1 X 240 FR	41/2.25	≥ 0.10	1.70	1.70	25.6	2537	1007	0.0754	0.125	515	402	640	421
1 X 300 FR	41/2.52	≥ 0.10	1.80	1.60	28.9	3140	1221	0.0601	0.100	585	465	770	488
1 X 400 FR	41/2.88	≥ 0.10	2.00	1.60	32.0	4137	1812	0.0470	0.078	680	483	880	534
1 X 500 FR	41/3.23	≥ 0.10	2.20	2.00	35.4	5342	1988	0.0380	0.0605	800	538	1030	610
1 X 630 FR	41/3.53	≥ 0.10	2.40	2.20	38.9	6648	2452	0.0298	0.0488	940	588	1180	688
1 X 800 FR	41/4.10	≥ 0.10	2.80	2.80	48.1	8828	3288	0.0221	0.0357	1085	---	1310	---
1 X 1000 FR	41/4.80	≥ 0.10	2.80	2.40	58.5	10450	4141	0.0176	0.0281	1275	---	1480	---

NOTE - 0.5mm² to 25mm²: Circular Conductor; 35mm² to Above: Circular Compacted Conductor

**600/1000V N2xY-FIR / NA2xY-FIR OR 2xY-FIR / A2xY-FIR
MULTI CORE (CU or ALU/Mica Tape/XLPE/FR-PVC)
XLPE INSULATED AND FR-PVC SHEATHED MULTI (TWO, THREE) CORE FIRE SURVIVAL CABLE**



CONSTRUCTION

- 1. CONDUCTOR: Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. FIRE BARRIER: Mica Tape (Synthetic or Glass Fiber)
- 3. INSULATION: Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION: For Three Core Cables: ■ Red ■ Blue
For Four Core Cables: ■ Red ■ Yellow ■ Blue
- 4. FILLER: Polypropylene Filler (Optional)
- 5. CORE BINDER: Polypropylene Tape (Optional)
- 6. INNER COVERING: PVC Compound of ST2 to IEC 60502-1 (Optional) Color: ■ Black
- 7. OUTER SHEATH: Flame Retardant (FR) PVC, Type ST2 to IEC 60502-1
- COLOR OF SHEATH: ■ Red ■ Orange

APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed. During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	CU	ALU	CU	ALU	CU
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
TWO CORE													
2 x 1.5 mm ²	1/1.38	≥ 0.10	0.70	1.00	13.2	210	102	12.10	18.10	34	20	27	19
2 x 1.5 mm ²	7/0.53	≥ 0.10	0.70	1.00	13.5	215	106	12.10	18.10	34	20	27	19
2 x 2.5 mm ²	1/1.38	≥ 0.10	0.70	1.00	14.0	245	114	7.41	12.10	44	32	35	27
2 x 2.5 mm ²	7/0.67	≥ 0.10	0.70	1.00	14.4	252	120	7.41	12.10	44	32	35	27
2 x 4.0 mm ²	7/0.86	≥ 0.10	0.70	1.00	15.6	304	154	4.81	7.41	55	45	45	37
2 x 6.0 mm ²	7/1.05	≥ 0.10	0.70	1.00	16.6	365	180	3.08	4.81	74	58	62	49
2 x 10 mm ²	7/1.35	≥ 0.10	0.70	1.00	18.4	478	252	1.83	3.08	92	74	84	64
2 x 15 mm ²	7/1.71	≥ 0.10	0.70	1.00	20.6	640	437	1.15	1.83	125	97	110	89
2 x 25 mm ²	7/2.14	≥ 0.10	0.90	1.00	24.2	890	671	0.727	1.30	150	110	140	108
2 x 35 mm ²	15/1.53	≥ 0.10	0.90	1.00	25.5	1100	868	0.524	0.868	180	145	190	136
THREE CORE													
3 x 1.5 mm ²	1/1.38	≥ 0.10	0.70	1.00	13.6	235	107	12.10	18.10	36	21	29	17
3 x 1.5 mm ²	7/0.53	≥ 0.10	0.70	1.00	14.0	240	111	12.10	18.10	36	21	29	17
3 x 2.5 mm ²	1/1.38	≥ 0.10	0.70	1.00	14.6	260	113	7.41	12.10	38	26	32	24
3 x 2.5 mm ²	7/0.67	≥ 0.10	0.70	1.00	14.6	260	113	7.41	12.10	38	26	32	24
3 x 4.0 mm ²	7/0.86	≥ 0.10	0.70	1.00	16.0	350	173	4.81	7.41	48	39	41	32
3 x 6.0 mm ²	7/1.05	≥ 0.10	0.70	1.00	17.4	430	222	3.08	4.81	64	48	53	43
3 x 10 mm ²	7/1.35	≥ 0.10	0.70	1.00	19.2	588	319	1.83	3.08	85	64	75	58
3 x 15 mm ²	7/1.71	≥ 0.10	0.70	1.00	21.5	805	438	1.15	1.83	110	82	99	75
3 x 25 mm ²	7/2.14	≥ 0.10	0.90	1.00	25.5	1160	677	0.727	1.30	150	96	130	95
3 x 35 mm ²	15/1.53	≥ 0.10	0.90	1.00	26.0	1260	880	0.524	0.868	165	115	150	114
3 x 50 mm ²	19/1.83	≥ 0.10	1.00	1.00	28.5	1650	1164	0.387	0.641	180	146	180	142
3 x 70 mm ²	19/2.17	≥ 0.10	1.10	1.00	30.7	2040	1487	0.288	0.443	225	178	230	168
3 x 95 mm ²	19/2.52	≥ 0.10	1.10	1.00	33.6	2710	1954	0.199	0.320	240	201	270	198
3 x 120 mm ²	17/2.89	≥ 0.10	1.20	1.10	37.4	4130	1826	0.159	0.263	285	220	305	229
3 x 150 mm ²	17/3.27	≥ 0.10	1.40	1.20	41.5	5340	2273	0.124	0.209	330	266	350	262
3 x 185 mm ²	17/3.52	≥ 0.10	1.60	1.40	44.4	6035	2718	0.0991	0.164	385	300	410	305
3 x 240 mm ²	17/3.89	≥ 0.10	1.70	1.60	50.2	8065	3499	0.0754	0.125	425	332	470	343
3 x 300 mm ²	17/4.23	≥ 0.10	1.80	1.80	54.5	8600	4064	0.0601	0.100	478	369	504	400

**600/1000V N2xY-FIR / NA2xY-FIR OR 2xY-FIR / A2xY-FIR
MULTI CORE (CU or ALU/Mica Tape/XLPE/FR-PVC)
XLPE INSULATED AND FR-PVC SHEATHED MULTI (THREE AND HALF) CORE FIRE SURVIVAL CABLE**



CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. FIRE BARRIER : Mica Tape (Synthetic or Glass Fiber)
- 3. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 4. FILLER : Polypropylene Filler (Optional)
- 5. CORE BINDER : Polypropylene Tape (Optional)
- 6. INNER COVERING : PVC Compound of ST2 to IEC 60502-1 (Optional) Color: Black
- 7. OUTER SHEATH : Flame Retardant (FR) PVC, Type ST2 to IEC 60502-1
- COLOR OF SHEATH : ■ Red ■ Orange

APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed. During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034
VOLTAGE GRADE: 600/1000 (1200) V**

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	In Dry at 30°C	In Open Air at 30°C	CU	ALU
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
THREE & HALF CORE													
3 X 25 mm ²	7/7.14	± 0.10	0.90	1.60	25.8	1072	800	0.777	1.20	130	80	130	95
1 X 16 mm ²	7/3.73		0.70					1.15	1.81				
3 X 35 mm ²	19/1.53	± 0.10	0.90	1.60	26.5	1638	800	0.574	0.868	155	118	150	114
1 X 16 mm ²	7/3.73		0.70					1.15	1.81				
3 X 60 mm ²	19/1.89	± 0.10	1.00	1.80	28.3	2216	1320	0.387	0.641	180	146	180	142
1 X 25 mm ²	7/2.14		0.90					0.777	1.20				
3 X 70 mm ²	18/2.17	± 0.10	1.10	1.80	34.6	3016	1500	0.289	0.443	220	178	230	188
1 X 35 mm ²	10/1.53		0.80					0.574	0.868				
3 X 95 mm ²	19/2.52	± 0.10	1.30	2.10	37.1	3986	1812	0.193	0.320	260	201	270	196
1 X 50 mm ²	14/1.89		1.00					0.387	0.641				
3 X 120 mm ²	37/2.03	± 0.10	1.20	2.30	40.6	5030	2016	0.159	0.253	295	229	305	229
1 X 70 mm ²	18/2.17		1.10					0.389	0.643				
3 X 160 mm ²	37/2.27	± 0.10	1.40	2.90	44.0	5986	2650	0.124	0.208	330	266	360	263
1 X 70 mm ²	18/2.17		1.10					0.389	0.643				
3 X 185 mm ²	37/2.52	± 0.10	1.50	2.90	48.4	7405	3181	0.0993	0.164	380	300	410	300
1 X 85 mm ²	19/2.52		1.10					0.389	0.643				
3 X 240 mm ²	37/2.89	± 0.10	1.70	2.70	54.7	9545	3927	0.0754	0.125	425	352	470	342
1 X 100 mm ²	27/2.03		1.20					0.159	0.253				
3 X 300 mm ²	37/3.23	± 0.10	1.80	2.90	60.8	11785	4818	0.0601	0.100	478	388	504	408
1 X 150 mm ²	37/2.27		1.40					0.124	0.208				

NOTE: 0.5mm² to 25mm² Circular Conductor, 35mm² to Above Sector Shaped / Compacted Conductor

**600/1000V N2xY-FIR / NA2xY-FIR OR 2xY-FIR / A2xY-FIR
MULTI CORE (CU or ALU/Mica Tape/XLPE/FR-PVC)
XLPE INSULATED AND FR-PVC SHEATHED MULTI (FOUR) CORE FIRE SURVIVAL CABLE**

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60328
- 2. FIRE BARRIER : Mica Tape (Synthetic or Glass Fiber)
- 3. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-1
- COLOR OF INSULATION : For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Natural
- 4. FILLER : Polypropylene Filler (Optional)
- 5. CORE BINDER : Polypropylene Tape (Optional)
- 6. INNER COVERING : PVC Compound of ST7 to IEC 60502-1 (Optional) Color: ■ Black
- 7. OUTER SHEATH : Flame Retardant (FR) PVC, Type ST7 to IEC 60502-1
- COLOR OF SHEATH : ■ Red ■ Orange

APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed. During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire-fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 81034
VOLTAGE GRADE: 600/1000 (1200) V**

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm ²	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
FOUR CORE													
4 x 1.5 FR	1/1.38	≥ 0.10	0.70	1.80	14.4	370	243	12.10	18.10	30	21	23	17
4 x 1.5 FR	7/0.58	≥ 0.10	0.70	1.80	14.9	280	252	12.10	18.10	30	21	23	17
4 x 2.5 FR	1/1.76	≥ 0.10	0.70	1.80	15.5	560	270	7.41	12.10	38	28	32	24
4 x 2.5 FR	7/0.87	≥ 0.10	0.70	1.80	16.0	345	283	7.41	12.10	38	28	32	24
4 x 4.0 FR	7/0.85	≥ 0.10	0.70	1.80	17.3	415	276	4.81	7.41	48	36	41	32
4 x 6.0 FR	7/1.05	≥ 0.10	0.70	1.80	18.8	575	332	3.03	4.81	64	48	56	43
4 x 10 FR	7/1.35	≥ 0.10	0.70	1.80	21.0	730	418	1.83	3.03	83	64	75	58
4 x 16 FR	7/1.71	≥ 0.10	0.70	1.80	23.2	1000	493	1.15	1.81	110	87	98	75
4 x 25 FR	7/2.14	≥ 0.10	0.90	1.80	27.8	1450	578	0.727	1.20	138	95	120	95
4 x 35 FR	19/1.53	≥ 0.10	0.90	1.80	27.0	1775	885	0.524	0.868	155	110	150	114
4 x 50 FR	19/1.83	≥ 0.10	1.00	1.90	28.5	2380	1125	0.387	0.541	190	146	190	143
4 x 70 FR	19/2.17	≥ 0.10	1.10	2.00	35.2	3320	1492	0.269	0.448	225	178	230	169
4 x 95 FR	19/2.52	≥ 0.10	1.10	2.10	38.9	4910	1983	0.190	0.320	260	201	270	198
4 x 120 FR	37/2.03	≥ 0.10	1.20	2.30	42.2	6455	2357	0.163	0.253	295	225	305	225
4 x 150 FR	37/2.27	≥ 0.10	1.40	2.40	44.8	6700	2880	0.124	0.209	300	258	360	267
4 x 185 FR	37/2.52	≥ 0.10	1.60	2.60	51.2	8205	3308	0.0981	0.164	385	300	410	308
4 x 240 FR	37/2.83	≥ 0.10	1.70	2.80	58.0	10800	4325	0.0754	0.125	425	32	470	343
4 x 300 FR	37/3.23	≥ 0.10	1.80	3.00	62.8	13100	5217	0.0613	0.100	478	368	564	409

3.6/6.0(7.2) kV SINGLE & THREE CORE-2xHSY/A2xHSY or 2xHSZY/A2xHSZY

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- | | | | |
|----------------------|---|--------|------------------|
| 1. CONDUCTOR | Circular, Plain Annealed Copper or Aluminum, Class-2 to IEC 60228 | | |
| 2. CONDUCTOR SCREEN | Semi-Conducting Polyethylene Compound | | |
| 3. INSULATION | Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 | Color: | ■ Natural |
| 4. INSULATION SCREEN | Semi-Conducting Polyethylene Compound | | |
| 5. METALLIC SCREEN | Plain Annealed Copper Tape / Copper Wire (Customer Required) | | |
| 6. FILLER | Polypropylene Filler (For Three Core Only) | | |
| 7. CORE BINDER | Polypropylene Tape (Optional) | | |
| 8. INNER COVERING | PVC Compound of ST2 to IEC 60502-2 | Color: | ■ Black |
| 9. OUTER SHEATH | PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 | Color: | ■ Black
■ Red |

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 3.6/6.6kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 3.6/6 (7.2) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 3.6/6.6 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor @ 70°C		Max. AC Resistance of Conductor @ 70°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/100m	kg/100m	D/100	D/100	D/100	D/100			In Ground @ 25°C	In Open Air @ 25°C	In Ground @ 30°C	In Open Air @ 30°C
mm ²	mm	mm	mm	kg/100m	kg/100m	D/100	D/100	D/100	D/100	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSY / A2xHSY or 2xHSZY / A2xHSZY															
1 x 25 mm ²	2.50	1.80	19.0	540	350	0.727	1.20	0.927	1.540	0.262	0.387	140	108	100	127
1 x 35 mm ²	2.50	1.80	20.2	660	450	0.524	0.868	0.608	1.310	0.291	0.413	166	129	100	154
1 x 50 mm ²	2.50	1.80	21.3	870	622	0.387	0.641	0.484	0.877	0.321	0.464	188	162	208	184
1 x 70 mm ²	2.50	1.80	22.8	1030	810	0.288	0.448	0.342	0.668	0.371	0.500	230	188	208	230
1 x 95 mm ²	2.50	1.80	24.6	1300	790	0.192	0.320	0.247	0.421	0.427	0.544	295	221	261	280
1 x 120 mm ²	2.50	1.80	26.1	1560	830	0.153	0.268	0.188	0.325	0.468	0.630	325	252	417	324
1 x 150 mm ²	2.50	1.80	27.5	1850	540	0.124	0.206	0.138	0.265	0.494	0.720	361	281	473	308
1 x 185 mm ²	2.50	1.80	29.4	2210	1090	0.0891	0.164	0.127	0.211	0.548	0.809	400	317	543	474
1 x 240 mm ²	2.80	2.00	32.2	2780	1390	0.0754	0.125	0.088	0.167	0.585	0.900	488	387	641	502
1 x 300 mm ²	2.80	2.10	35.1	3400	1580	0.0603	0.100	0.078	0.130	0.602	0.994	529	418	785	577
1 x 400 mm ²	3.00	2.20	38.6	4400	1980	0.0470	0.0778	0.063	0.102	0.627	0.985	630	470	571	678
1 x 500 mm ²	3.20	2.30	42.1	5410	2380	0.0338	0.0585	0.052	0.080	0.654	0.981	640	518	600	757
1 x 600 mm ²	3.20	2.50	46.7	6700	2800	0.0283	0.0480	0.041	0.064	0.720	0.972	712	569	668	876
1 x 800 mm ²	3.20	2.60	51.2	8340	3500	0.0221	0.0387	0.038	0.051	0.788	0.968	781	655	732	1005
1 x 1000 mm ²	3.20	2.80	55.8	10770	4200	0.0178	0.0291	0.029	0.044	0.855	0.955	841	723	780	1188
THREE CORE															
2xSEYY / A2xSEYY or 2xSEYZY / A2xSEYZY															
3 x 25 mm ²	2.50	2.10	38.8	1880	1280	0.727	1.20	0.927	1.540	0.262	0.387	129	100	140	110
3 x 35 mm ²	2.50	2.20	39.5	2080	1440	0.524	0.868	0.608	1.310	0.291	0.413	153	119	170	132
3 x 50 mm ²	2.50	2.30	42.0	2590	1870	0.387	0.641	0.484	0.877	0.321	0.464	181	140	204	168
3 x 70 mm ²	2.50	2.40	45.7	3000	2010	0.288	0.448	0.342	0.668	0.371	0.500	221	171	253	198
3 x 95 mm ²	2.50	2.50	49.8	4190	2410	0.192	0.320	0.247	0.421	0.427	0.544	282	203	304	236
3 x 120 mm ²	2.50	2.70	53.7	5010	2810	0.153	0.268	0.188	0.325	0.468	0.597	298	232	351	275
3 x 150 mm ²	2.50	2.80	56.4	6880	3230	0.124	0.206	0.138	0.265	0.494	0.789	324	260	388	308
3 x 185 mm ²	2.50	2.90	60.3	7120	3730	0.0891	0.164	0.127	0.211	0.548	0.880	377	284	455	355
3 x 240 mm ²	2.80	3.10	66.3	8940	4540	0.0754	0.125	0.088	0.167	0.585	0.870	434	340	521	418
3 x 300 mm ²	2.80	3.30	72.6	10850	5450	0.0603	0.100	0.078	0.130	0.602	0.907	489	384	500	475

NOTE: - 25mm² to Above: Circular Compacted Conductor

6/10(12) kV SINGLE & THREE CORE-2xHSY/A2xHSY or 2xHSZY/A2xHSZY

POLY CABLES BANGLADESH

POLY CABLES BANGLADESH

CONSTRUCTION

1. CONDUCTOR	Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color ■ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)
6. FILLER	Polypropylene Filler (For Three Core Only)
7. CORE BINDER	Polypropylene Tape (Optional)
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2 Color ■ Black
9. OUTER SHEATH	PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color ■ Red ■ Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 6.35/11kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 6/10 (12) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 6.35/11 kV

PHYSICAL DATA								ELECTRICAL DATA							
Nominal Core Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance to Cable	Approx. Inductance to Cable	Current-Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Ground at 25°C	In Open Air at 25°C	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	µF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSY / A2xHSY or 2xHSZY / A2xHSZY															
1 X 25 mm ²	3.40	1.80	31.1	830	470	0.337	1.20	0.807	1.540	0.308	0.452	140	108	155	127
1 X 35 mm ²	3.40	1.80	22.9	140	870	0.524	0.868	0.898	1.113	0.309	0.490	166	129	190	154
1 X 50 mm ²	3.40	1.80	23.2	300	855	0.387	0.841	0.494	0.877	0.312	0.401	196	152	230	184
1 X 70 mm ²	3.40	1.80	24.5	1170	855	0.258	0.443	0.342	0.588	0.318	0.378	230	180	256	230
1 X 95 mm ²	3.40	1.80	29.8	1380	870	0.192	0.337	0.247	0.411	0.323	0.359	285	221	303	280
1 X 120 mm ²	3.40	1.80	28.1	1840	870	0.153	0.259	0.186	0.325	0.359	0.344	323	252	417	324
1 X 150 mm ²	3.40	1.90	29.7	1950	1050	0.124	0.206	0.159	0.285	0.360	0.332	361	281	472	368
1 X 185 mm ²	3.40	2.00	31.6	2370	1200	0.0991	0.164	0.127	0.211	0.416	0.323	406	317	543	424
1 X 240 mm ²	3.40	2.00	34.0	2880	1420	0.0754	0.125	0.099	0.187	0.460	0.327	488	387	641	502
1 X 300 mm ²	3.40	2.10	38.8	3480	1870	0.0601	0.100	0.078	0.130	0.508	0.305	538	414	726	577
1 X 400 mm ²	3.40	2.20	39.4	4450	2037	0.0470	0.0778	0.038	0.103	0.581	0.281	590	470	871	673
1 X 500 mm ²	3.40	2.30	42.8	5430	2410	0.0336	0.0505	0.030	0.080	0.625	0.283	640	518	803	737
1 X 630 mm ²	3.40	2.40	48.5	6710	2560	0.0289	0.0459	0.041	0.084	0.838	0.274	712	588	886	818
1 X 800 mm ²	3.40	2.60	51.6	8970	3500	0.0221	0.0367	0.038	0.081	1.100	0.288	781	608	103	1005
1 X 1000 mm ²	3.40	2.80	58.2	12310	4250	0.0174	0.0291	0.038	0.083	0.880	0.282	841	723	108	1128
THREE CORE															
2xSEYY / A2xSEYY or 2xSEYZY / A2xSEYZY															
3 X 25 mm ²	3.40	2.80	41.8	1970	1510	0.777	1.20	0.827	1.540	0.308	0.418	129	100	147	110
3 X 35 mm ²	3.40	2.40	44.2	2380	1730	0.524	0.868	0.888	1.113	0.329	0.391	153	119	170	132
3 X 50 mm ²	3.40	2.40	48.6	2890	1980	0.387	0.841	0.484	0.877	0.352	0.384	181	140	204	158
3 X 70 mm ²	3.40	2.80	50.4	3840	2350	0.288	0.443	0.343	0.588	0.368	0.344	221	171	253	198
3 X 95 mm ²	3.40	2.70	54.2	4520	2280	0.192	0.337	0.247	0.411	0.323	0.327	282	209	304	236
3 X 120 mm ²	3.40	2.80	57.1	3380	3180	0.153	0.259	0.186	0.325	0.359	0.314	298	232	351	275
3 X 150 mm ²	3.40	2.90	51.6	6970	3620	0.124	0.206	0.103	0.285	0.560	0.304	354	290	398	308
3 X 185 mm ²	3.40	3.10	55.0	7650	4180	0.0991	0.164	0.127	0.211	0.416	0.295	377	284	455	355
3 X 240 mm ²	3.40	3.20	70.4	9050	4950	0.0754	0.125	0.099	0.187	0.460	0.284	434	340	501	415
3 X 300 mm ²	3.40	3.40	70.8	11310	5810	0.0601	0.100	0.078	0.130	0.508	0.275	488	384	608	475

8.7/15(17.5) kV SINGLE & THREE CORE-2xHSY/A2xHSY or 2xHSZY/A2xHSZY



CONSTRUCTION

1. CONDUCTOR	: Circular, Plain Annealed Copper or Aluminum, Class-2 to IEC 60228
2. CONDUCTOR SCREEN	: Semi-Conducting Polyethylene Compound
3. INSULATION	: Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color Natural
4. INSULATION SCREEN	: Semi-Conducting Polyethylene Compound
5. METALLIC SCREEN	: Plain Annealed Copper Tape / Copper Wire (Customer Required)
6. FILLER	: Polypropylene Filler (For Three Core Only)
7. CORE BINDER	: Polypropylene Tape (Optional)
8. INNER COVERING	: PVC Compound of ST2 to IEC 60502-2 Color Black
9. OUTER SHEATH	: PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 9.2/16.3kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7096-2, IEC 60502-2

VOLTAGE GRADE: 8.7/15 (17.5) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 9.2/16.3 kV

PHYSICAL DATA								ELECTRICAL DATA							
Nominal Core Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Approximate Weight of Cable		Max DC Resistance of Conductor at 20°C		Max AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/km	kg/m	Ω/km	Ω/m	Ω/km	Ω/m			μF/km	mH/km	In Ground at 20°C	In Open Air at 20°C
mm ²	mm	mm	mm	kg/km	kg/m	Ω/km	Ω/m	Ω/km	Ω/m	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE 2xHSY / A2xHSY or 2xHSZY / A2xHSZY															
1 X 25 mm ²	4.50	1.80	24.6	270	695	0.727	1.20	0.927	1.540	0.171	0.473	140	108	143	127
1 X 35 mm ²	4.50	1.80	28.0	800	990	0.524	0.968	0.908	1.113	0.187	0.491	155	129	160	154
1 X 50 mm ²	4.50	1.80	27.1	1000	760	0.387	0.641	0.484	0.822	0.204	0.470	166	152	238	184
1 X 70 mm ²	4.50	1.90	29.5	1300	865	0.288	0.443	0.342	0.565	0.222	0.396	233	188	296	230
1 X 95 mm ²	4.50	1.90	30.6	1580	1005	0.198	0.320	0.247	0.411	0.258	0.376	265	221	361	280
1 X 120 mm ²	4.50	2.00	32.9	1895	1145	0.153	0.253	0.188	0.325	0.281	0.381	326	252	417	324
1 X 150 mm ²	4.50	2.00	33.7	2175	1275	0.124	0.206	0.155	0.265	0.301	0.355	361	281	473	368
1 X 185 mm ²	4.50	2.10	36.6	2535	1445	0.097	0.164	0.127	0.211	0.328	0.338	405	317	543	424
1 X 240 mm ²	4.50	2.20	35.2	3140	1695	0.0754	0.126	0.098	0.162	0.368	0.325	459	367	641	502
1 X 300 mm ²	4.50	2.30	40.7	3780	1955	0.0601	0.100	0.078	0.130	0.398	0.324	529	414	735	577
1 X 400 mm ²	4.50	2.40	43.5	4750	2330	0.0470	0.0778	0.063	0.102	0.436	0.302	600	470	871	673
1 X 500 mm ²	4.50	2.50	45.8	5755	2735	0.0330	0.0590	0.050	0.080	0.483	0.255	640	513	800	787
1 X 630 mm ²	4.50	2.60	51.1	7080	3250	0.0280	0.0489	0.041	0.064	0.534	0.205	712	588	888	878
1 X 800 mm ²	4.50	2.80	55.8	8780	3815	0.0221	0.0387	0.038	0.051	0.590	0.177	781	655	782	1005
1 X 1000 mm ²	4.50	2.90	60.2	10890	4845	0.0176	0.0291	0.028	0.038	0.640	0.171	841	729	786	1128
THREE CORE 2xSEYY / A2xSEYY or 2xSEZY / A2xSEZY															
3 X 25 mm ²	4.50	2.60	50.4	2680	2170	0.727	1.20	0.927	1.540	0.171	0.496	179	100	147	110
3 X 35 mm ²	4.50	2.70	53.0	3015	2375	0.524	0.868	0.608	1.113	0.187	0.418	153	119	170	132
3 X 50 mm ²	4.50	2.70	55.4	3660	2860	0.387	0.641	0.484	0.822	0.204	0.387	180	140	204	158
3 X 70 mm ²	4.50	2.80	58.2	4850	3870	0.288	0.443	0.342	0.565	0.222	0.386	271	171	333	198
3 X 95 mm ²	4.50	3.00	63.1	5280	4545	0.198	0.320	0.247	0.411	0.258	0.347	262	208	304	238
3 X 120 mm ²	4.50	3.10	66.5	6180	4980	0.153	0.253	0.188	0.325	0.281	0.392	309	232	351	275
3 X 150 mm ²	4.50	3.20	69.8	7220	4470	0.124	0.206	0.155	0.265	0.301	0.322	334	260	398	309
3 X 185 mm ²	4.50	3.35	73.7	8430	5040	0.097	0.164	0.127	0.211	0.328	0.311	377	294	455	365
3 X 240 mm ²	4.50	3.50	76.2	10215	5815	0.0754	0.126	0.098	0.162	0.368	0.300	434	340	521	415
3 X 300 mm ²	4.50	3.70	84.2	12940	6940	0.0601	0.100	0.078	0.130	0.398	0.288	489	384	606	473

NOTE: 25mm² to Above: Circular Compacted Conductor

12/20(24) kV SINGLE & THREE CORE-2xHSY/A2xHSY or 2xHSZY/A2xHSZY

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- | | | |
|----------------------|---|----------------------|
| 1. CONDUCTOR | : Circular, Plain Annealed Copper or Aluminum, Class-2 to IEC 60228 | |
| 2. CONDUCTOR SCREEN | : Semi-Conducting Polyethylene Compound | |
| 3. INSULATION | : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 | Color: ■ Natural |
| 4. INSULATION SCREEN | : Semi-Conducting Polyethylene Compound | |
| 5. METALLIC SCREEN | : Plain Annealed Copper Tape / Copper Wire (Customer Required) | |
| 6. FILLER | : Polypropylene Filler (For Three Core Only) | |
| 7. CORE BINDER | : Polypropylene Tape (Optional) | |
| 8. INNER COVERING | : PVC Compound of ST2 to IEC 60502-2 | Color: ■ Black |
| 9. OUTER SHEATH | : PVC/XLPE Compound of ST2 & ST7 to IEC 60502-2 | Color: ■ Red / Black |

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 12.7/22kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 12/20 (24) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 12.7/22 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Core Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 20°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/100m	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km			μF/km	mH/km	In Ground at 20°C	In Open Air at 20°C
mm ²	mm	mm	mm	kg/100m	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSY / A2xHSY or 2xHSZY / A2xHSZY															
1 x 50 mm ²	5.50	1.30	26.2	1003	780	0.524	0.866	0.898	1.113	0.162	0.447	156	129	188	154
1 x 50 mm ²	6.50	1.90	29.0	1170	870	0.587	0.941	0.494	0.822	0.177	0.426	196	152	236	184
1 x 70 mm ²	6.50	2.00	31.1	1480	883	0.208	0.443	0.342	0.568	0.200	0.411	235	186	286	220
1 x 95 mm ²	6.50	2.00	32.8	1720	1125	0.193	0.320	0.247	0.411	0.222	0.391	265	221	361	283
1 x 120 mm ²	6.50	2.10	34.5	1995	1270	0.153	0.252	0.198	0.320	0.241	0.375	319	252	417	324
1 x 150 mm ²	6.50	2.10	35.9	2310	1400	0.124	0.208	0.155	0.265	0.257	0.354	361	281	473	369
1 x 185 mm ²	6.50	2.20	37.8	2680	1570	0.0993	0.164	0.127	0.211	0.260	0.351	406	317	543	424
1 x 240 mm ²	6.50	2.20	40.1	3260	1810	0.0754	0.125	0.098	0.162	0.307	0.339	469	367	641	502
1 x 300 mm ²	6.50	2.30	42.7	3880	2085	0.0601	0.100	0.075	0.130	0.336	0.326	525	414	706	577
1 x 400 mm ²	6.50	2.40	46.8	4900	2480	0.0470	0.0779	0.060	0.102	0.370	0.312	580	470	671	673
1 x 500 mm ²	6.50	2.50	49.8	6010	2895	0.0333	0.0505	0.030	0.060	0.408	0.305	640	519	693	767
1 x 630 mm ²	6.50	2.70	53.3	7265	3445	0.0233	0.0333	0.021	0.064	0.445	0.294	712	588	658	876
1 x 800 mm ²	6.50	2.80	57.8	8540	4140	0.0171	0.0237	0.016	0.051	0.490	0.286	781	655	792	1008
1 x 1000 mm ²	6.50	3.00	62.6	10520	4870	0.0128	0.0181	0.012	0.043	0.540	0.279	841	729	788	1138
THREE CORE															
2xSEYY / A2xSEYY or 2xSEZY / A2xSEZY															
3 x 25 mm ²	6.50	2.30	57.5	3375	2725	0.524	0.866	0.908	1.113	0.162	0.435	155	119	170	132
3 x 50 mm ²	6.50	2.90	60.3	3870	3050	0.587	0.941	0.494	0.822	0.177	0.415	181	140	204	158
3 x 70 mm ²	6.50	3.00	63.8	4770	3480	0.208	0.443	0.342	0.568	0.200	0.363	221	171	259	198
3 x 95 mm ²	6.50	3.20	67.8	5740	3985	0.193	0.320	0.247	0.411	0.222	0.369	267	209	304	236
3 x 120 mm ²	6.50	3.30	71.2	6880	4480	0.153	0.252	0.198	0.320	0.241	0.347	318	232	351	278
3 x 150 mm ²	6.50	3.40	74.5	7720	4970	0.124	0.208	0.155	0.265	0.257	0.327	354	260	388	309
3 x 185 mm ²	6.50	3.50	78.4	8800	5585	0.0993	0.164	0.127	0.211	0.300	0.315	377	294	455	355
3 x 240 mm ²	6.50	3.70	83.7	10850	6450	0.0754	0.125	0.098	0.162	0.307	0.312	434	340	583	415
3 x 300 mm ²	6.50	3.90	89.3	13080	7430	0.0601	0.100	0.075	0.130	0.336	0.301	480	384	668	475

NOTE: -25mm² to Above: Circular Compacted Conductor

18/30(36) kV SINGLE & THREE CORE-2xHSY/A2xHSY or 2xHSZY/A2xHSZY



CONSTRUCTION

1. CONDUCTOR	Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228	
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound	
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2	Color: ☐ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound	
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)	
6. FILLER	Polypropylene Filler (For Three Core Only)	
7. CORE BINDER	Polypropylene Tape (Optional)	
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2	Color: ☐ Black
9. OUTER SHEATH	PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2	Color: ☐ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 19/33kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 18/30 (36) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 19/33 kV

PHYSICAL DATA								ELECTRICAL DATA							
Nominal Core Sectional Area of Conductor	Nominal Insulation Thickness	Insulation Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor @ 20°C		Max. AC Resistance of Conductor @ 20°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current-Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Ground at 25°C	In Open Air at 25°C	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSY / A2xHSY or 2xHSZY / A2xHSZY															
1 x 35 mm ²	8.00	2.10	37.2	1650	1040	0.534	0.868	0.888	1.132	0.131	0.508	158	155	166	154
1 x 50 mm ²	8.00	2.20	38.6	1700	1450	0.387	0.641	0.494	0.622	0.130	0.474	190	152	220	194
1 x 70 mm ²	8.00	2.20	40.1	2020	1600	0.288	0.443	0.342	0.388	0.124	0.448	230	160	230	250
1 x 95 mm ²	8.00	2.30	42.0	2350	1775	0.233	0.320	0.247	0.411	0.105	0.427	285	221	301	280
1 x 120 mm ²	8.00	2.40	43.8	2650	1985	0.192	0.252	0.188	0.274	0.100	0.409	323	252	417	324
1 x 150 mm ²	8.00	2.40	45.0	3000	2180	0.154	0.206	0.150	0.265	0.094	0.385	361	281	473	368
1 x 185 mm ²	8.00	2.50	46.5	3420	2300	0.0991	0.164	0.127	0.211	0.078	0.362	405	317	543	424
1 x 240 mm ²	8.00	2.50	49.4	4040	2580	0.0754	0.121	0.098	0.162	0.079	0.347	469	367	541	502
1 x 300 mm ²	8.00	2.60	51.5	4730	2900	0.0601	0.100	0.078	0.130	0.045	0.345	525	414	735	577
1 x 400 mm ²	8.00	2.70	54.8	5700	3340	0.0470	0.0776	0.063	0.100	0.073	0.335	590	476	971	673
1 x 500 mm ²	8.00	2.80	58.0	6630	3800	0.0338	0.0605	0.050	0.080	0.050	0.328	643	515	1000	767
1 x 630 mm ²	8.00	3.00	62.4	8230	4420	0.0253	0.0485	0.041	0.064	0.037	0.315	712	588	1000	876
1 x 800 mm ²	8.00	3.10	67.0	10000	5160	0.0221	0.0387	0.033	0.051	0.030	0.307	781	655	1137	1008
1 x 1000 mm ²	8.00	3.30	71.8	12050	5980	0.0178	0.0291	0.028	0.043	0.028	0.298	841	729	1180	1138
THREE CORE															
2xSEY / A2xSEY or 2xSEZY / A2xSEZY															
3 x 35 mm ²	8.00	3.00	77.4	5510	4870	0.534	0.868	0.888	1.132	0.131	0.480	153	153	170	152
3 x 50 mm ²	8.00	3.00	80.0	6180	5260	0.387	0.641	0.494	0.622	0.128	0.448	191	140	204	158
3 x 70 mm ²	8.00	3.10	83.0	7075	5780	0.288	0.443	0.342	0.388	0.124	0.423	221	171	253	198
3 x 95 mm ²	8.00	3.20	87.5	8150	6400	0.199	0.320	0.247	0.411	0.109	0.401	262	203	304	238
3 x 120 mm ²	8.00	3.30	90.0	9170	6970	0.159	0.252	0.188	0.274	0.103	0.384	298	222	351	275
3 x 150 mm ²	8.00	3.40	94.2	10320	7580	0.124	0.206	0.150	0.265	0.094	0.371	334	262	398	308
3 x 185 mm ²	8.00	3.50	98.1	11600	8290	0.0991	0.164	0.127	0.211	0.078	0.358	377	294	455	355
3 x 240 mm ²	8.00	3.60	103.8	13760	9380	0.0754	0.121	0.098	0.162	0.073	0.342	434	340	501	415
3 x 300 mm ²	8.00	3.70	108.0	15920	10480	0.0601	0.100	0.078	0.130	0.045	0.330	489	384	506	475

NOTE: - 25mm² to Above: Circular Compacted Conductor

3.6/6.0(7.2) kV SINGLE & THREE CORE-2xHSYRaY/A2xHSYRaY or 2xHSYRaZY/A2xHSYRaZY



CONSTRUCTION

- | | | | |
|----------------------|---|-------|---------------|
| 1. CONDUCTOR | Circular, Plain Annealed Copper or Aluminum, Class-2 to IEC 60228 | | |
| 2. CONDUCTOR SCREEN | Semi-Conducting Polyethylene Compound | | |
| 3. INSULATION | Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 | Color | ■ Natural |
| 4. INSULATION SCREEN | Semi-Conducting Polyethylene Compound | | |
| 5. METALLIC SCREEN | Plain Annealed Copper Tape / Copper Wire (Customer Required) | | |
| 6. FILLER | Polypropylene Filler (For Three Core Only) | | |
| 7. CORE BINDER | Polypropylene Tape (Optional) | | |
| 8. INNER COVERING | PVC Compound of ST2 to IEC 60502-2 | Color | ■ Black |
| 9. ARMOUR | Round Aluminium Wire / Round Galvanized Steel Wire to IEC 60502-2 | | |
| 10. BINDER | Polypropylene Tape / With or Without Helically Applied Galvanized Steel Tape (Optional) | | |
| 11. OUTER SHEATH | PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 | Color | ■ Red / Black |

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 3.6/6.6kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 3.6/6 (7.2) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 3.6/6.6 kV

PHYSICAL DATA								ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor @ 20°C		Max. AC Resistance of Conductor @ 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/km	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km			In Ground @ 25°C	In Open Air @ 25°C	In Ground @ 90°C	In Open Air @ 90°C
mm ²	mm	mm	mm	kg/km	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYRaY / A2xHSYRaY or 2xHSYRaZY / A2xHSYRaZY															
1 X 25 mm ²	2.50	1.80	24.1	840	850	0.727	1.29	0.927	1.540	0.202	0.490	140	108	102	127
1 X 35 mm ²	2.50	1.80	25.2	870	780	0.574	0.868	0.688	1.113	0.201	0.452	159	129	120	154
1 X 50 mm ²	2.50	1.80	29.0	1150	845	0.387	0.541	0.484	0.822	0.221	0.452	199	152	138	184
1 X 70 mm ²	2.50	1.90	28.8	1480	1030	0.288	0.449	0.342	0.558	0.271	0.408	239	160	150	230
1 X 95 mm ²	2.50	1.90	30.5	1750	1170	0.199	0.320	0.247	0.411	0.417	0.399	295	221	201	290
1 X 120 mm ²	2.50	2.00	32.2	2040	1300	0.150	0.258	0.198	0.325	0.459	0.371	323	202	417	324
1 X 150 mm ²	2.50	2.10	34.6	2480	1580	0.124	0.206	0.158	0.286	0.494	0.361	361	281	478	369
1 X 185 mm ²	2.50	2.10	36.8	2890	1770	0.0991	0.164	0.127	0.211	0.543	0.352	409	317	543	424
1 X 240 mm ²	2.80	2.20	38.0	3520	2070	0.0754	0.125	0.098	0.162	0.688	0.340	488	367	641	502
1 X 300 mm ²	2.80	2.30	42.4	4200	2380	0.0601	0.100	0.078	0.130	0.802	0.335	539	414	735	577
1 X 400 mm ²	3.00	2.50	47.1	5440	3070	0.0470	0.0778	0.063	0.100	0.927	0.318	590	470	871	673
1 X 500 mm ²	3.20	2.60	51.2	6980	3970	0.0336	0.0606	0.050	0.080	0.854	0.318	640	518	908	757
1 X 630 mm ²	3.20	2.80	55.5	8000	4180	0.0285	0.0485	0.041	0.064	0.778	0.307	717	588	988	878
1 X 800 mm ²	3.20	2.90	60.5	9810	4970	0.0221	0.0387	0.036	0.051	0.788	0.298	781	656	737	1009
1 X 1000 mm ²	3.20	3.10	65.2	11870	5850	0.0178	0.0291	0.028	0.043	0.858	0.291	841	723	788	1138
THREE CORE															
2xSEYRGY / A2xSEYRGY or 2xSEYRGZY / A2xSEYRGZY															
3 X 25 mm ²	2.50	2.40	45.5	3690	3400	0.727	1.29	0.927	1.540	0.282	0.387	129	100	148	111
3 X 35 mm ²	2.50	2.50	48.0	4380	3740	0.574	0.868	0.688	1.113	0.281	0.368	154	110	172	133
3 X 50 mm ²	2.50	2.60	51.0	5110	4180	0.387	0.541	0.484	0.822	0.321	0.348	191	140	203	159
3 X 70 mm ²	2.50	2.70	54.7	6090	4790	0.288	0.449	0.342	0.600	0.371	0.325	220	171	253	196
3 X 95 mm ²	2.50	2.80	58.8	7110	5370	0.199	0.320	0.247	0.411	0.417	0.399	269	204	307	238
3 X 120 mm ²	2.50	3.00	62.6	8250	6050	0.150	0.258	0.198	0.325	0.459	0.297	299	232	352	274
3 X 150 mm ²	2.50	3.10	65.8	9400	6850	0.124	0.206	0.158	0.286	0.494	0.299	332	258	387	308
3 X 185 mm ²	2.50	3.20	69.7	10770	7800	0.0991	0.164	0.127	0.211	0.543	0.280	374	293	453	354
3 X 240 mm ²	2.80	3.40	77.5	13920	8920	0.0754	0.125	0.098	0.162	0.688	0.270	431	338	528	415
3 X 300 mm ²	2.80	3.70	83.8	16400	10000	0.0601	0.100	0.078	0.130	0.802	0.267	482	380	588	472

6/10(12) kV SINGLE & THREE CORE-2xHSYRaY/A2xHSYRaY or 2xHSYRn2Y/A2xHSYRn2Y



CONSTRUCTION

- | | |
|----------------------|---|
| 1. CONDUCTOR | Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228 |
| 2. CONDUCTOR SCREEN | Semi-Conducting Polyethylene Compound |
| 3. INSULATION | Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color ■ Natural |
| 4. INSULATION SCREEN | Semi-Conducting Polyethylene Compound |
| 5. METALLIC SCREEN | Plain Annealed Copper Tape / Copper Wire (Customer Required) |
| 6. FILLER | Polypropylene Filler (For Three Core Only) |
| 7. CORE BINDER | Polypropylene Tape (Optional) |
| 8. INNER COVERING | PVC Compound of ST2 to IEC 60502-2 Color ■ Black |
| 9. ARMOUR | Round Aluminium Wire / Round Galvanized Steel Wire to IEC 60502-2 |
| 10. BINDER | Polypropylene Tape/With or Without Helically Applied Galvanized Steel Tape (Optional) |
| 11. OUTER SHEATH | PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color ■ Red / Black |

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 6.35/11kV.

STANDARD: BDS IEC 60502-2, BS 6822, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 6/10 (12) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 6.35/11 kV

PHYSICAL DATA							ELECTRICAL DATA								
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				Cu	Alu	Cu	Alu	Cu	Alu			In Glycerol at 20°C	In Open Air at 30°C	Cu	Alu
mm ²	mm	mm	mm	kg/10m	kg/10m	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYRaY / A2xHSYRaY or 2xHSYRn2Y / A2xHSYRn2Y															
1 x 25 mm ²	2.40	1.80	28.10	844	790	0.727	1.20	0.927	1.540	0.208	0.501	140	108	163	127
1 x 35 mm ²	2.40	1.90	28.10	1140	930	0.524	0.868	0.688	1.113	0.229	0.478	158	129	198	154
1 x 50 mm ²	2.40	1.90	29.20	1330	1025	0.387	0.640	0.484	0.827	0.252	0.440	188	157	238	184
1 x 70 mm ²	2.40	1.90	30.90	1580	1180	0.288	0.443	0.342	0.588	0.288	0.472	209	188	280	230
1 x 95 mm ²	2.40	2.00	32.70	1890	1410	0.198	0.320	0.247	0.411	0.320	0.460	235	221	301	260
1 x 120 mm ²	2.40	2.10	35.20	2270	1560	0.158	0.253	0.198	0.326	0.358	0.384	263	257	341	324
1 x 150 mm ²	2.40	2.20	37.20	2660	1760	0.124	0.206	0.153	0.266	0.386	0.378	291	291	379	369
1 x 185 mm ²	2.40	2.20	38.80	3050	1980	0.0981	0.164	0.127	0.211	0.418	0.364	320	317	418	424
1 x 240 mm ²	2.40	2.30	41.50	3670	2230	0.0754	0.125	0.098	0.162	0.460	0.350	368	367	481	502
1 x 300 mm ²	2.40	2.40	44.00	4330	2510	0.0581	0.100	0.078	0.130	0.508	0.336	418	414	535	577
1 x 400 mm ²	2.40	2.50	47.80	5130	3080	0.0470	0.0778	0.063	0.109	0.561	0.323	480	470	611	673
1 x 500 mm ²	2.40	2.60	51.50	6020	3800	0.0388	0.0606	0.050	0.090	0.618	0.318	540	518	661	757
1 x 630 mm ²	2.40	2.80	56.00	7040	4230	0.0303	0.0483	0.041	0.064	0.688	0.308	612	588	766	876
1 x 800 mm ²	2.40	2.90	60.90	8190	5010	0.0221	0.0367	0.030	0.053	0.760	0.298	701	655	873	1008
1 x 1000 mm ²	2.40	3.10	66.60	11810	5870	0.0178	0.0281	0.020	0.043	0.860	0.292	841	723	106	1198
THREE CORE															
2xSEYRGY / A2xSEYRGY or 2xSEYRG2Y / A2xSEYRG2Y															
3 x 25 mm ²	2.40	2.60	50.80	4470	4910	0.727	1.20	0.927	1.540	0.208	0.410	128	100	143	111
3 x 35 mm ²	2.40	2.70	53.20	5020	4380	0.524	0.868	0.688	1.113	0.229	0.381	154	118	172	138
3 x 50 mm ²	2.40	2.80	55.70	5690	4770	0.387	0.640	0.484	0.827	0.252	0.368	181	140	203	158
3 x 70 mm ²	2.40	2.90	59.90	6710	5480	0.288	0.443	0.342	0.588	0.288	0.344	210	171	259	186
3 x 95 mm ²	2.40	3.00	64.60	7830	6080	0.198	0.320	0.247	0.411	0.320	0.327	248	204	307	238
3 x 120 mm ²	2.40	3.10	67.10	8990	6880	0.158	0.253	0.198	0.326	0.358	0.313	288	232	357	274
3 x 150 mm ²	2.40	3.20	70.30	10260	7890	0.124	0.206	0.153	0.266	0.386	0.304	339	258	417	308
3 x 185 mm ²	2.40	3.40	74.70	11820	8930	0.0981	0.164	0.127	0.211	0.418	0.294	374	293	453	364
3 x 240 mm ²	2.40	3.60	81.70	14060	10250	0.0754	0.125	0.098	0.162	0.460	0.284	431	338	525	415
3 x 300 mm ²	2.40	3.80	87.00	16070	1147	0.0601	0.100	0.078	0.130	0.508	0.278	487	380	585	472

NOTE - 25mm² to Above: Circular Compacted Conductor

8.7/15(17.5) kV SINGLE & THREE CORE-2xHSYRaY/A2xHSYRaY or 2xHSYRaZY/A2xHSYRaZY



CONSTRUCTION

1. CONDUCTOR : Circular, Plain Annealed Copper or Aluminum, Class-2 to IEC 60228
2. CONDUCTOR SCREEN : Semi-Conducting Polyethylene Compound
3. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color : ■ Natural
4. INSULATION SCREEN : Semi-Conducting Polyethylene Compound
5. METALLIC SCREEN : Plain Annealed Copper Tape / Copper Wire (Customer Required)
6. FILLER : Polypropylene Filler (For Three Core Only)
7. CORE BINDER : Polypropylene Tape (Optional)
8. INNER COVERING : PVC Compound of ST2 to IEC 60502-2 Color : ■ Black
9. ARMOUR : Round Aluminum Wire / Round Galvanized Steel Wire to IEC 60502-2
10. BINDER : Polypropylene Tape/With or Without Helically Applied Galvanized Steel Tape (Optional)
11. OUTER SHEATH : PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color : ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power-switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 9.2/15.3kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7000-2, IEC 60502-2

VOLTAGE GRADE: 8.7/15 (17.5) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 9.2/15.3 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor @ 20°C		Max. AC Resistance of Conductor @ 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				Cu	Alu	Cu	Alu	Cu	Alu			In Ground at 20°C	In Open Air at 20°C	In Ground at 90°C	In Open Air at 90°C
mm ²	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km	Ω/km	Ω/km	µF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYRaY / A2xHSYRaY or 2xHSYRaZY / A2xHSYRaZY															
1 x 25 mm ²	4.50	1.50	31.0	1240	1080	0.727	1.20	0.327	1.540	0.171	0.518	140	108	160	127
1 x 35 mm ²	4.50	2.00	32.2	1390	1180	0.574	0.808	0.368	1.113	0.187	0.485	155	129	190	154
1 x 50 mm ²	4.50	2.00	34.1	1560	1390	0.387	0.541	0.404	0.872	0.204	0.487	180	152	230	194
1 x 70 mm ²	4.50	2.10	36.2	1970	1650	0.266	0.443	0.342	0.568	0.227	0.437	209	168	268	230
1 x 95 mm ²	4.50	2.20	38.2	2310	1780	0.192	0.320	0.247	0.411	0.258	0.419	235	221	303	280
1 x 120 mm ²	4.50	2.20	39.7	2610	1980	0.143	0.238	0.188	0.325	0.281	0.409	270	252	347	324
1 x 160 mm ²	4.50	2.30	41.2	2970	2080	0.124	0.206	0.159	0.285	0.303	0.380	301	281	419	388
1 x 185 mm ²	4.50	2.30	43.8	3070	2250	0.0991	0.164	0.127	0.211	0.328	0.375	406	317	543	424
1 x 240 mm ²	4.50	2.50	46.8	4170	2720	0.0754	0.126	0.098	0.162	0.363	0.388	489	387	641	502
1 x 300 mm ²	4.50	2.50	48.7	4810	3180	0.0591	0.105	0.078	0.130	0.388	0.348	520	414	725	577
1 x 400 mm ²	4.50	2.60	52.8	5880	3540	0.0470	0.0779	0.062	0.102	0.438	0.338	600	470	671	672
1 x 500 mm ²	4.50	2.80	55.8	7080	4040	0.0338	0.0606	0.050	0.088	0.488	0.328	640	518	803	757
1 x 630 mm ²	4.50	2.80	60.5	8540	4730	0.0283	0.0489	0.041	0.064	0.534	0.317	717	588	888	876
1 x 800 mm ²	4.50	3.10	65.2	10270	5590	0.0221	0.0387	0.038	0.051	0.590	0.306	791	655	792	1008
1 x 1000 mm ²	4.50	3.20	68.2	12420	6380	0.0174	0.0291	0.028	0.043	0.640	0.300	841	723	788	1138
THREE CORE															
2xSEYRGY / A2xSEYRGY or 2xSEYRGZY / A2xSEYRGZY															
3 x 25 mm ²	4.50	2.60	68.8	5880	5180	0.727	1.20	0.327	1.540	0.171	0.438	129	100	143	111
3 x 35 mm ²	4.50	3.00	62.4	6240	5600	0.574	0.808	0.368	1.113	0.187	0.415	134	118	172	133
3 x 50 mm ²	4.50	3.10	65.2	6940	6040	0.387	0.541	0.404	0.872	0.204	0.385	161	140	205	159
3 x 70 mm ²	4.50	3.20	68.2	7840	6550	0.266	0.443	0.342	0.568	0.227	0.365	170	171	253	196
3 x 95 mm ²	4.50	3.40	74.2	8950	7210	0.192	0.320	0.247	0.411	0.258	0.345	193	204	307	238
3 x 120 mm ²	4.50	3.50	77.6	11180	8380	0.143	0.238	0.188	0.325	0.281	0.322	218	232	352	274
3 x 160 mm ²	4.50	3.60	81.3	12470	9720	0.124	0.206	0.159	0.285	0.303	0.322	232	258	387	308
3 x 185 mm ²	4.50	3.70	85.8	13860	10670	0.0991	0.164	0.127	0.211	0.328	0.311	374	289	463	364
3 x 240 mm ²	4.50	3.60	89.5	16250	11850	0.0754	0.125	0.098	0.162	0.363	0.289	431	338	529	415
3 x 300 mm ²	4.50	4.10	95.8	18660	13160	0.0601	0.100	0.078	0.130	0.388	0.288	482	380	588	472

NOTE: - 25mm² to Above: Circular Compacted Conductor.

12/20(24) kV SINGLE & THREE CORE-2xHSYRaY/A2xHSYRaYor 2xHSYRa2Y/A2xHSYRa2Y



CONSTRUCTION

1. CONDUCTOR	Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228	
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound	
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2	Color: ■ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound	
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)	
6. FILLER	Polypropylene Filler (For Three Core Only)	
7. CORE BINDER	Polypropylene Tape (Optional)	
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2	Color: ■ Black
9. ARMOUR	Round Aluminium Wire / Round Galvanized Steel Wire to IEC 60502-2	
10. BINDER	Polypropylene Tape / With or Without Helicly Applied Galvanized Steel Tape (Optional)	
11. OUTER SHEATH	PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2	Color: ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 12.7/22kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 12/20 (24) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 12.7/22 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductors at 20°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/km	kg/ftm	Ω/km	Ω/ftm	Ω/km	Ω/ftm			In Ground at 20°C	In Open Air at 20°C	In Ground at 20°C	In Open Air at 20°C
mm ²	mm	mm	mm	kg/km	kg/ftm	Ω/km	Ω/ftm	Ω/km	Ω/ftm	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYRaY / A2xHSYRaY or 2xHSYRa2Y / A2xHSYRa2Y															
1 x 35 mm ²	5.50	2.10	85.2	1620	1410	0.524	0.898	0.888	1.118	0.182	0.508	165	120	180	154
1 x 50 mm ²	5.50	2.10	96.7	1850	1550	0.387	0.641	0.404	0.822	0.177	0.477	180	152	228	184
1 x 70 mm ²	5.50	2.20	98.5	2140	1715	0.268	0.448	0.342	0.568	0.200	0.455	205	186	265	230
1 x 95 mm ²	5.50	2.20	40.2	2460	1885	0.183	0.320	0.247	0.411	0.222	0.432	265	221	381	280
1 x 120 mm ²	5.50	2.30	41.8	2785	2080	0.153	0.265	0.190	0.325	0.241	0.414	323	262	417	324
1 x 150 mm ²	5.50	2.40	43.5	3100	2340	0.124	0.208	0.150	0.258	0.257	0.401	381	281	478	388
1 x 185 mm ²	5.50	2.50	46.4	3720	2800	0.0993	0.164	0.127	0.213	0.290	0.385	406	317	543	424
1 x 240 mm ²	5.50	2.50	48.1	4280	2940	0.0754	0.125	0.098	0.162	0.307	0.371	465	367	641	502
1 x 300 mm ²	5.50	2.60	51.7	5100	3280	0.0601	0.100	0.078	0.130	0.335	0.365	525	414	735	577
1 x 400 mm ²	5.50	2.70	54.6	6180	3760	0.0470	0.0778	0.063	0.102	0.370	0.347	583	470	871	673
1 x 500 mm ²	5.50	2.80	57.8	7275	4250	0.0336	0.0556	0.040	0.068	0.405	0.338	640	510	903	757
1 x 630 mm ²	5.50	3.00	62.7	8800	4985	0.0263	0.0453	0.041	0.064	0.448	0.325	712	566	908	870
1 x 800 mm ²	5.50	3.10	67.2	10600	5780	0.0221	0.0387	0.032	0.051	0.480	0.315	781	655	722	1005
1 x 1000 mm ²	5.50	3.30	71.8	12710	6660	0.0176	0.0301	0.028	0.043	0.540	0.307	841	723	783	1138
THREE CORE															
2xSEYRGY / A2xSEYRGY or 2xSEYRG2Y / A2xSEYRG2Y															
3 x 35 mm ²	5.50	2.10	66.8	6870	3230	0.524	0.898	0.888	1.118	0.182	0.435	154	118	172	133
3 x 50 mm ²	5.50	2.20	68.5	7810	3600	0.387	0.641	0.404	0.822	0.177	0.408	181	140	205	159
3 x 70 mm ²	5.50	2.30	74.7	8490	3910	0.268	0.448	0.342	0.568	0.200	0.393	220	171	253	196
3 x 95 mm ²	5.50	2.30	79.5	10800	4060	0.183	0.320	0.247	0.411	0.222	0.362	263	204	307	238
3 x 120 mm ²	5.50	2.60	82.4	11895	4790	0.153	0.265	0.190	0.325	0.241	0.347	298	232	352	274
3 x 150 mm ²	5.50	2.70	85.8	13250	10810	0.124	0.208	0.150	0.258	0.257	0.337	332	265	387	309
3 x 185 mm ²	5.50	2.80	88.7	14828	11435	0.0993	0.164	0.127	0.213	0.290	0.325	374	292	453	354
3 x 240 mm ²	5.50	2.80	95.8	17100	12700	0.0754	0.125	0.098	0.162	0.307	0.312	431	338	499	415
3 x 300 mm ²	5.50	2.90	100.8	19480	14150	0.0601	0.100	0.078	0.130	0.335	0.301	482	380	509	472

NOTE: ≥25mm² to Above Circular Compacted Conductor

18/30(36) kV SINGLE & THREE CORE-2xHSYRaY/A2xHSYRaYor 2xHSYRa2Y/A2xHSYRa2Y



CONSTRUCTION

1. CONDUCTOR	Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color: ■ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)
6. FILLER	Polypropylene Filler (For Three Core Only)
7. CORE BINDER	Polypropylene Tape (Optional)
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2 Color: ■ Black
9. ARMOUR	Round Aluminium Wire /Round Galvanized Steel Wire to IEC 60502-2
10. BINDER	Polypropylene Tape/With or Without Helically Applied Galvanized Steel Tape (Optional)
11. OUTER SHEATH	PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color: ■ ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 19/33kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 18/30 (36) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 19/33 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Core Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor @ 20°C		Max. AC Resistance of Conductor @ 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current-Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Sheath at 20°C	In Open Air at 30°C	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	µF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYRaY / A2xHSYRaY or 2xHSYRa2Y / A2xHSYRa2Y															
1 x 35 mm ²	8.00	2.40	45.8	2580	2280	0.574	0.898	0.808	1.113	0.111	0.353	169	179	198	154
1 x 50 mm ²	8.00	2.50	47.0	3790	2400	0.387	0.641	0.494	0.822	0.138	0.514	188	192	238	184
1 x 70 mm ²	8.00	2.60	48.1	5150	2790	0.288	0.443	0.342	0.598	0.154	0.488	208	198	259	200
1 x 95 mm ²	8.00	2.80	50.8	6520	2980	0.213	0.323	0.247	0.411	0.190	0.467	225	221	281	220
1 x 120 mm ²	8.00	2.70	53.6	8000	3160	0.159	0.253	0.198	0.325	0.190	0.443	223	252	317	224
1 x 150 mm ²	8.00	2.70	54.0	9280	3350	0.124	0.208	0.158	0.288	0.194	0.434	261	281	373	268
1 x 185 mm ²	8.00	2.70	55.8	10700	3600	0.098	0.154	0.127	0.211	0.210	0.419	266	277	343	294
1 x 240 mm ²	8.00	2.80	58.4	14200	3970	0.0754	0.125	0.098	0.162	0.229	0.401	269	267	341	302
1 x 300 mm ²	8.00	2.80	61.3	18200	4400	0.0601	0.100	0.079	0.130	0.248	0.387	226	214	235	277
1 x 400 mm ²	8.00	3.00	64.7	23500	4880	0.0470	0.0778	0.068	0.102	0.272	0.370	280	270	271	328
1 x 500 mm ²	8.00	3.10	67.4	30000	5470	0.0386	0.0606	0.050	0.088	0.298	0.350	240	233	203	257
1 x 630 mm ²	8.00	3.30	71.8	38000	6210	0.0283	0.0468	0.041	0.064	0.327	0.349	212	200	188	238
1 x 800 mm ²	8.00	3.50	78.2	49000	7400	0.0221	0.0367	0.030	0.050	0.350	0.334	201	183	172	203
1 x 1000 mm ²	8.00	3.80	82.8	64000	8400	0.0170	0.0281	0.023	0.043	0.380	0.324	181	172	160	188
THREE CORE															
2xSEYRGY / A2xSEYRGY or 2xSEYRG2Y / A2xSEYRG2Y															
3 x 35 mm ²	8.00	3.80	88.8	11290	10650	0.574	0.898	0.808	1.113	0.111	0.480	154	115	172	122
3 x 50 mm ²	8.00	3.80	91.1	15120	11200	0.387	0.641	0.494	0.822	0.138	0.448	161	148	205	150
3 x 70 mm ²	8.00	4.00	94.8	20300	12000	0.288	0.443	0.342	0.598	0.154	0.429	170	173	253	180
3 x 95 mm ²	8.00	4.20	98.9	24980	12940	0.213	0.323	0.247	0.411	0.188	0.401	183	184	207	188
3 x 120 mm ²	8.00	4.20	102.6	29700	13870	0.159	0.253	0.198	0.325	0.183	0.384	188	203	202	214
3 x 150 mm ²	8.00	4.40	106.9	34700	14720	0.124	0.208	0.158	0.288	0.184	0.371	182	199	191	209
3 x 185 mm ²	8.00	4.40	108.8	39100	15720	0.098	0.154	0.127	0.211	0.210	0.359	174	193	193	184
3 x 240 mm ²	8.00	4.70	115.3	51500	17200	0.0754	0.125	0.098	0.162	0.229	0.343	181	188	179	218
3 x 300 mm ²	8.00	4.90	120.7	64200	18710	0.0601	0.100	0.079	0.130	0.248	0.330	180	180	169	212

3.6/6.0(7.2) kV SINGLE CORE-2xHSYBaY/A2xHSYBaYor 2xHSYBa2Y/A2xHSYBa2Y
3.6/6.0(7.2) kV THREE CORE-2xSEYBY/A2xSEYBYor 2xSEYB2Y/A2xSEYB2Y

PVC CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

1. CONDUCTOR	Gridular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228	
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound	
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2	Color: ■ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound	
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)	
6. FILLER	Polypropylene Filler (For Three Core Only)	
7. CORE BINDER	Polypropylene Tape (Optional)	
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2	Color: ■ Black
9. ARMOUR	Double Aluminium Tape / Double Galvanized Steel Tape to IEC 60502-2	
10. OUTER SHEATH	PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2	Color: ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 3.6/6.6kV

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 3.6/6 (7.2) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 3.6/6.6 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Core Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Ground at 20°C	In Open Air at 20°C	In Ground at 90°C	In Open Air at 90°C
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYBaY / A2xHSYBaY or 2xHSYBa2Y / A2xHSYBa2Y															
1 X 25 FMC	2.50	1.80	22.5	750	800	0.137	1.20	0.227	1.540	0.282	0.489	140	108	100	127
1 X 35 FMC	2.50	1.80	23.7	880	970	0.124	0.898	0.208	1.113	0.291	0.459	165	129	109	154
1 X 50 FMC	2.60	1.80	24.8	1050	1150	0.097	0.641	0.184	0.822	0.321	0.432	198	152	133	184
1 X 70 FMC	2.50	1.80	26.4	1280	1390	0.078	0.443	0.142	0.598	0.371	0.408	238	188	166	230
1 X 95 FMC	2.60	1.80	28.3	1570	1700	0.063	0.320	0.117	0.431	0.417	0.389	285	221	191	260
1 X 120 FMC	2.60	1.90	29.8	1840	1990	0.053	0.233	0.100	0.325	0.438	0.371	323	252	217	294
1 X 150 FMC	2.50	2.00	31.4	2170	2350	0.044	0.165	0.085	0.255	0.494	0.367	361	281	247	336
1 X 185 FMC	2.60	2.00	33.5	2570	2780	0.038	0.124	0.073	0.211	0.543	0.352	408	317	284	374
1 X 240 FMC	2.60	2.10	36.3	3170	3420	0.032	0.095	0.060	0.162	0.583	0.340	468	367	341	432
1 X 300 FMC	2.80	2.20	38.3	3890	4180	0.028	0.070	0.050	0.130	0.602	0.330	526	414	385	477
1 X 400 FMC	3.00	2.30	42.7	4870	5200	0.021	0.050	0.038	0.102	0.627	0.310	580	470	431	519
1 X 500 FMC	3.20	2.40	46.7	5960	6350	0.018	0.038	0.030	0.080	0.654	0.310	640	518	480	577
1 X 630 FMC	3.20	2.50	51.3	7310	7750	0.015	0.028	0.024	0.064	0.728	0.307	727	568	528	676
1 X 800 FMC	3.20	2.60	56.3	8880	9440	0.012	0.020	0.018	0.051	0.788	0.299	781	655	592	765
1 X 1000 FMC	3.20	2.80	61.8	11050	11750	0.010	0.015	0.012	0.043	0.855	0.291	841	723	659	838
THREE CORE															
2xSEYBY / A2xSEYBY or 2xSEYB2Y / A2xSEYB2Y															
3 X 25 FMC	2.50	2.30	40.5	2280	2400	0.137	1.20	0.227	1.540	0.282	0.387	129	100	143	131
3 X 35 FMC	2.50	2.30	43.8	2700	2880	0.124	0.898	0.208	1.113	0.291	0.389	164	119	172	160
3 X 50 FMC	2.60	2.40	46.8	3300	3500	0.097	0.641	0.184	0.822	0.321	0.343	181	140	196	189
3 X 70 FMC	2.50	2.50	49.8	4080	4300	0.078	0.443	0.142	0.598	0.371	0.325	220	171	253	196
3 X 95 FMC	2.60	2.70	53.7	5000	5250	0.063	0.320	0.117	0.431	0.417	0.389	265	204	307	239
3 X 120 FMC	2.60	2.80	58.1	6280	6650	0.053	0.233	0.100	0.325	0.438	0.297	299	227	353	274
3 X 150 FMC	2.50	2.90	61.4	7850	8300	0.044	0.165	0.085	0.255	0.494	0.289	332	255	387	308
3 X 185 FMC	2.60	3.10	65.4	9580	10100	0.038	0.124	0.073	0.211	0.543	0.280	374	293	453	354
3 X 240 FMC	2.60	3.30	71.3	11830	12500	0.032	0.095	0.060	0.162	0.583	0.270	431	338	520	415
3 X 300 FMC	2.80	3.50	78.6	14780	15500	0.028	0.070	0.050	0.130	0.602	0.267	482	380	589	472

NOTE: 25mm² to Above: Circular Compacted Conductor

6/10(12) kV SINGLE CORE-2xHSYBaY/A2xHSYBaY or 2xHSYBa2Y/A2xHSYBa2Y
6/10(12) kV THREE CORE-2xSEYBY/A2xSEYBY or 2xSEYB2Y/A2xSEYB2Y



CONSTRUCTION

1. CONDUCTOR	Circular, Plain Annealed Copper or Aluminium, Class-Z to IEC 60228
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color: ■ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)
6. FILLER	Polypropylene Filler (For Three Core Only)
7. CORE BINDER	Polypropylene Tape (Optional)
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2 Color: ■ Black
9. ARMOUR	Double Aluminium Tape (Double Galvanized Steel Tape to IEC 60522-2
10. OUTER SHEATH	PVC/NDPE Compound of ST2 & ST7 to IEC 60502-2 Color: ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 6.35/11kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 6/10 (12) kV

PERMISSIBLE SERVICE VOLTAGE: 6.35/11 kV

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA						ELECTRICAL DATA															
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Min. DC Resistance of Conductor at 20°C				Max. AC Resistance of Conductor at 90°C				Current Carrying Capacity							
				CU	ALU	CU	ALU	CU	ALU	CU	ALU	In Ground at 20°C	In Open Air at 20°C	CU	ALU	CU	ALU				
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	
SINGLE CORE																					
2xHSYBaY / A2xHSYBaY or 2xHSYBa2Y / A2xHSYBa2Y																					
1 X 25 MMC	3.40	1.80	24.6	940	890	0.787	1.20	0.827	1.540	0.208	0.501	140	108	169	137						
1 X 35 MMC	3.40	1.80	25.7	973	780	0.524	0.898	0.898	1.118	0.228	0.478	188	159	199	159						
1 X 50 MMC	3.40	1.80	28.8	1150	840	0.387	0.641	0.494	0.822	0.257	0.448	199	162	208	168						
1 X 70 MMC	3.40	1.80	39.8	1405	876	0.288	0.449	0.342	0.688	0.288	0.422	209	188	238	200						
1 X 95 MMC	3.40	1.80	50.3	1680	9110	0.199	0.320	0.247	0.411	0.323	0.400	265	221	281	260						
1 X 120 MMC	3.40	2.00	62.0	1976	1250	0.159	0.258	0.188	0.325	0.358	0.384	273	252	317	284						
1 X 150 MMC	3.40	2.00	83.8	2320	1410	0.124	0.208	0.158	0.285	0.380	0.318	361	361	429	388						
1 X 185 MMC	3.40	2.10	95.7	2710	1580	0.0991	0.184	0.127	0.211	0.418	0.384	408	317	548	434						
1 X 240 MMC	3.40	2.30	99.3	3310	1880	0.0754	0.121	0.088	0.167	0.480	0.359	469	367	641	502						
1 X 300 MMC	3.40	2.30	40.8	3940	2130	0.0601	0.100	0.078	0.130	0.505	0.398	528	414	735	577						
1 X 400 MMC	3.40	2.40	49.7	4560	2530	0.0470	0.0778	0.063	0.102	0.591	0.328	580	470	871	678						
1 X 500 MMC	3.40	2.50	47.3	6010	2890	0.0338	0.0605	0.050	0.080	0.618	0.318	640	518	900	767						
1 X 600 MMC	3.40	2.80	51.8	7350	3530	0.0280	0.0488	0.041	0.064	0.698	0.308	712	588	968	816						
1 X 800 MMC	3.40	2.80	58.7	9120	4280	0.0221	0.0367	0.038	0.061	0.780	0.298	781	655	1052	905						
1 X 1000 MMC	3.40	2.80	61.3	11090	5040	0.0178	0.0291	0.029	0.043	0.880	0.292	841	723	1189	1038						
THREE CORE																					
2xSEYBY / A2xSEYBY or 2xSEYB2Y / A2xSEYB2Y																					
3 X 25 MMC	3.40	2.40	45.4	2670	2210	0.787	1.20	0.827	1.540	0.208	0.410	128	100	143	111						
3 X 35 MMC	3.40	2.50	48.1	3120	2470	0.524	0.898	0.688	1.118	0.228	0.391	164	119	172	130						
3 X 50 MMC	3.40	2.80	50.7	3710	2780	0.387	0.641	0.494	0.822	0.257	0.380	181	140	203	168						
3 X 70 MMC	3.40	2.70	54.7	4550	3250	0.288	0.449	0.342	0.568	0.288	0.344	220	171	253	199						
3 X 95 MMC	3.40	2.80	59.4	5650	4110	0.199	0.320	0.247	0.411	0.323	0.327	263	204	307	268						
3 X 120 MMC	3.40	3.00	62.8	6780	4580	0.159	0.258	0.188	0.325	0.353	0.318	268	232	362	274						
3 X 150 MMC	3.40	3.10	66.8	7950	5190	0.124	0.208	0.158	0.285	0.380	0.304	332	258	467	369						
3 X 185 MMC	3.40	3.20	69.8	9320	5710	0.0991	0.184	0.127	0.211	0.418	0.304	374	293	460	384						
3 X 240 MMC	3.40	3.40	76.8	11140	6740	0.0764	0.121	0.088	0.167	0.480	0.284	431	338	529	415						
3 X 300 MMC	3.40	3.60	81.3	13290	7730	0.0601	0.100	0.078	0.130	0.506	0.278	482	380	588	472						

8.7/15(17.5) kV SINGLE CORE-2xHSYBaY/A2xHSYBaYor 2xHSYBa2Y/A2xHSYBa2Y
8.7/15(17.5) kV THREE CORE-2xSEYBY/A2xSEYBYor 2xSEYB2Y/A2xSEYB2Y



CONSTRUCTION

- 1. CONDUCTOR: Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228
- 2. CONDUCTOR SCREEN: Semi-Conducting Polyethylene Compound
- 3. INSULATION: Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color: ■ Natural
- 4. INSULATION SCREEN: Semi-Conducting Polyethylene Compound
- 5. METALLIC SCREEN: Plain Annealed Copper Tape / Copper Wire (Customer Required)
- 6. FILLER: Polypropylene Filler (For Three Core Only)
- 7. CORE BINDER: Polypropylene Tape (Optional)
- 8. INNER COVERING: PVC Compound of ST2 to IEC 60502-2 Color: ■ Black
- 9. ARMOUR: Double Aluminium Tape /Double Galvanized Steel Tape to IEC 60502-2
- 10. OUTER SHEATH: PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color: ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 9.2/16.3kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2
VOLTAGE GRADE: 8.7/15 (17.5) kV
PERMISSIBLE SERVICE VOLTAGE: 9.2/16.3 kV

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Insulation Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Ground at 20°C	In Open Air at 20°C	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/km	D/ves	D/ves	D/ves	D/ves	µF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYBaY / A2xHSYBaY or 2xHSYBa2Y / A2xHSYBa2Y															
1 X 25 MMC	4.50	1.50	28.8	1055	805	0.127	1.20	0.927	1.540	0.171	0.519	140	108	189	177
1 X 35 MMC	4.50	1.50	28.7	1100	873	0.124	0.888	0.888	1.110	0.187	0.486	160	125	193	184
1 X 50 MMC	4.50	1.90	33.8	1260	1000	0.107	0.841	0.484	0.822	0.204	0.469	180	153	238	204
1 X 70 MMC	4.50	2.00	39.0	1660	1280	0.098	0.443	0.342	0.588	0.232	0.487	200	168	286	230
1 X 95 MMC	4.50	2.10	44.9	1970	1500	0.093	0.370	0.247	0.411	0.258	0.418	225	221	301	250
1 X 120 MMC	4.50	2.10	46.4	2280	1570	0.088	0.253	0.186	0.325	0.281	0.403	222	257	417	324
1 X 160 MMC	4.50	2.30	48.0	2600	1885	0.084	0.200	0.158	0.285	0.307	0.380	261	283	473	388
1 X 185 MMC	4.50	2.30	48.7	2890	1870	0.081	0.184	0.127	0.211	0.328	0.376	400	317	543	424
1 X 240 MMC	4.50	2.90	49.3	3900	2150	0.0754	0.125	0.088	0.182	0.383	0.382	400	361	641	503
1 X 300 MMC	4.50	2.40	48.2	4800	2480	0.0601	0.100	0.070	0.130	0.308	0.348	420	414	735	577
1 X 400 MMC	4.50	2.50	48.1	6220	2800	0.0470	0.0778	0.058	0.102	0.430	0.380	500	470	971	678
1 X 500 MMC	4.50	2.90	51.3	8085	3340	0.0388	0.0605	0.050	0.090	0.480	0.370	640	510	103	767
1 X 600 MMC	4.50	2.80	50.2	7800	3800	0.0288	0.0488	0.041	0.064	0.534	0.317	732	588	108	818
1 X 800 MMC	4.50	2.90	60.7	9535	4880	0.0222	0.0387	0.038	0.051	0.590	0.308	761	655	132	1005
1 X 1000 MMC	4.50	3.10	65.4	11980	6910	0.0176	0.0281	0.029	0.043	0.640	0.300	841	733	168	1158
THREE CORE															
2xSEYBY / A2xSEYBY or 2xSEYB2Y / A2xSEYB2Y															
3 X 25 MMC	4.50	2.10	54.7	3470	3010	0.127	1.20	0.927	1.540	0.171	0.438	120	100	143	131
3 X 35 MMC	4.50	2.30	58.8	4300	3600	0.124	0.888	0.888	1.110	0.187	0.415	154	119	172	133
3 X 50 MMC	4.50	2.90	60.5	4870	4005	0.107	0.841	0.484	0.822	0.204	0.388	181	140	205	158
3 X 70 MMC	4.50	3.00	64.7	5785	4500	0.098	0.443	0.342	0.588	0.232	0.365	210	171	253	194
3 X 95 MMC	4.50	3.30	66.2	6870	5080	0.093	0.370	0.247	0.411	0.258	0.346	240	204	307	228
3 X 120 MMC	4.50	3.30	72.0	7875	5575	0.088	0.253	0.186	0.325	0.281	0.332	268	231	352	274
3 X 160 MMC	4.50	3.40	75.3	8980	6240	0.084	0.200	0.158	0.285	0.307	0.322	322	258	397	308
3 X 185 MMC	4.50	3.00	78.7	10300	6810	0.081	0.184	0.127	0.211	0.328	0.311	374	283	453	364
3 X 240 MMC	4.50	3.70	84.7	12370	7920	0.0754	0.125	0.088	0.182	0.383	0.298	431	308	529	415
3 X 300 MMC	4.50	3.80	90.1	14480	8980	0.0601	0.100	0.070	0.130	0.388	0.289	462	360	599	472

NOTE: +25mm² to Above Circular Compacted Conductor

12/20(24) kV SINGLE CORE-2xHSYBaY/A2xHSYBaY or 2xHSYBa2Y/A2xHSYBa2Y
12/20(24) kV THREE CORE-2xSEYBY/A2xSEYBY or 2xSEYB2Y/A2xSEYB2Y



CONSTRUCTION

- 1. CONDUCTOR : Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228
- 2. CONDUCTOR SCREEN : Semi-Conducting Polyethylene Compound
- 3. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color : ■ Natural
- 4. INSULATION SCREEN : Semi-Conducting Polyethylene Compound
- 5. METALLIC SCREEN : Plain Annealed Copper Tape / Copper Wire (Customer Required)
- 6. FILLER : Polypropylene Filler (For Three Core Only)
- 7. CORE BINDER : Polypropylene Tape (Optional)
- 8. INNER COVERING : PVC Compound of ST2 to IEC 60502-2 Color : ■ Black
- 9. ARMOUR : Double Aluminium Tape / Double Galvanized Steel Tape to IEC 60502-2
- 10. OUTER SHEATH : PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color : ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 12.7/22kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2
VOLTAGE GRADE: 12/20 (24) kV
PERMISSIBLE SERVICE VOLTAGE: 12.7/22 kV

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			CU	ALU	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/100m	Ω/km	Ω/100m	Ω/km	Ω/100m	µF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYBaY / A2xHSYBaY or 2xHSYBa2Y / A2xHSYBa2Y															
1 X 95 TMC	5.50	2.00	31.9	1910	1100	0.524	0.888	0.588	1.113	0.192	0.509	169	199	199	154
1 X 50 TMC	5.50	2.00	33.4	1590	1225	0.367	0.641	0.404	0.822	0.177	0.477	156	152	239	184
1 X 70 TMC	5.50	2.10	35.2	1850	1370	0.288	0.443	0.347	0.588	0.200	0.455	199	199	289	200
1 X 95 TMC	5.50	2.10	36.9	2100	1525	0.195	0.320	0.247	0.411	0.222	0.482	205	221	301	280
1 X 120 TMC	5.50	2.20	38.6	2410	1685	0.153	0.253	0.196	0.325	0.241	0.414	223	257	417	324
1 X 150 TMC	5.50	2.20	40.0	2740	1820	0.124	0.209	0.154	0.265	0.257	0.401	263	281	473	368
1 X 185 TMC	5.50	2.30	41.9	3150	2030	0.0991	0.164	0.127	0.211	0.280	0.388	408	377	543	424
1 X 240 TMC	5.50	2.40	44.8	3810	2260	0.0754	0.125	0.098	0.162	0.307	0.371	489	367	541	502
1 X 300 TMC	5.50	2.50	47.4	4480	2560	0.0601	0.101	0.078	0.132	0.336	0.388	529	434	795	577
1 X 400 TMC	5.50	2.60	50.9	5520	3100	0.0470	0.0778	0.062	0.102	0.370	0.347	580	470	571	672
1 X 500 TMC	5.50	2.70	53.9	6670	3560	0.0389	0.0628	0.050	0.080	0.408	0.308	640	512	603	757
1 X 630 TMC	5.50	2.80	58.2	8000	4180	0.0309	0.0489	0.041	0.064	0.449	0.325	712	588	668	878
1 X 800 TMC	5.50	3.00	62.9	9775	4835	0.0221	0.0382	0.033	0.051	0.490	0.318	791	655	732	1009
1 X 1000 TMC	5.50	3.10	67.4	11790	5740	0.0178	0.0301	0.028	0.043	0.540	0.307	841	722	788	1138
THREE CORE															
2xSEYBY / A2xSEYBY or 2xSEYB2Y / A2xSEYB2Y															
3 X 95 TMC	5.50	3.00	62.8	4785	4145	0.524	0.888	0.888	1.113	0.192	0.495	154	151	172	130
3 X 50 TMC	5.50	3.10	65.2	5440	4920	0.367	0.641	0.404	0.822	0.177	0.406	181	140	205	159
3 X 70 TMC	5.50	3.20	68.0	6320	5640	0.288	0.443	0.347	0.588	0.200	0.388	220	171	250	190
3 X 95 TMC	5.50	3.30	70.1	7420	6585	0.189	0.320	0.247	0.411	0.222	0.363	263	204	307	238
3 X 120 TMC	5.50	3.40	75.5	8450	7250	0.153	0.259	0.196	0.325	0.241	0.347	298	237	352	274
3 X 150 TMC	5.50	3.50	80.0	9610	8260	0.124	0.216	0.159	0.266	0.257	0.327	332	259	387	309
3 X 185 TMC	5.50	3.70	83.0	10940	9550	0.0991	0.164	0.127	0.211	0.280	0.325	374	263	459	354
3 X 240 TMC	5.50	3.80	89.2	12960	10660	0.0754	0.125	0.098	0.162	0.267	0.312	421	318	529	415
3 X 300 TMC	5.50	4.00	95.0	15230	12130	0.0601	0.101	0.078	0.132	0.336	0.301	482	360	588	472

18/30(36) kV SINGLE CORE-2xHSYBaY/A2xHSYBaY or 2xHSYBa2Y/A2xHSYBa2Y
18/30(36) kV THREE CORE-2xSEYBY/A2xSEYBY or 2xSEYB2Y/A2xSEYB2Y

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

1. CONDUCTOR	Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228		
2. CONDUCTOR SCREEN	Semi-Conducting Polyethylene Compound		
3. INSULATION	Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2	Color	■ Natural
4. INSULATION SCREEN	Semi-Conducting Polyethylene Compound		
5. METALLIC SCREEN	Plain Annealed Copper Tape / Copper Wire (Customer Required)		
6. FILLER	Polypropylene Filler (For Three Core Only)		
7. CORE BINDER	Polypropylene Tape (Optional)		
8. INNER COVERING	PVC Compound of ST2 to IEC 60502-2	Color	■ Black
9. ARMOUR	Double Aluminium Tape / Double Galvanized Steel Tape to IEC 60502-2		
10. OUTER SHEATH	PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2	Color	■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 19/33kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7000-2, IEC 60502-2

VOLTAGE GRADE: 18/30 (36) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 19/33 kV

PHYSICAL DATA					ELECTRICAL DATA										
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Ground at 25°C	In Open Air at 25°C	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/m	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
SINGLE CORE															
2xHSYBaY / A2xHSYBaY or 2xHSYBa2Y / A2xHSYBa2Y															
1 X 95 F/TC	8.00	2.00	41.5	2020	1910	0.524	0.868	0.888	1.113	0.111	0.553	168	328	188	154
1 X 95 F/TC	8.00	2.00	42.9	2210	1025	0.387	0.641	0.484	0.822	0.138	0.514	158	312	208	184
1 X 70 F/TC	8.00	2.40	44.8	2570	2150	0.388	0.643	0.342	0.588	0.154	0.488	208	368	208	200
1 X 95 F/TC	8.00	2.00	46.9	2910	2340	0.193	0.327	0.247	0.411	0.188	0.482	285	371	301	280
1 X 120 F/TC	8.00	2.30	48.2	3240	2820	0.183	0.259	0.198	0.325	0.183	0.442	328	353	417	324
1 X 150 F/TC	8.00	2.50	49.9	3680	2880	0.184	0.278	0.158	0.285	0.184	0.434	361	381	473	368
1 X 185 F/TC	8.00	2.80	52.5	4040	2920	0.0881	0.194	0.127	0.211	0.210	0.418	408	417	543	424
1 X 240 F/TC	8.00	2.70	54.0	4700	3240	0.0754	0.125	0.088	0.182	0.228	0.401	468	382	541	502
1 X 300 F/TC	8.00	2.80	57.0	5470	3650	0.0631	0.100	0.078	0.138	0.248	0.387	528	414	585	577
1 X 400 F/TC	8.00	2.80	58.8	6540	4120	0.0470	0.0778	0.082	0.102	0.273	0.370	590	470	571	678
1 X 500 F/TC	8.00	3.00	68.0	7650	4820	0.0335	0.0605	0.050	0.080	0.298	0.358	640	518	603	767
1 X 630 F/TC	8.00	3.10	67.4	8120	5300	0.0283	0.0489	0.041	0.064	0.327	0.345	718	588	688	878
1 X 800 F/TC	8.00	3.30	72.4	11220	6180	0.0221	0.0367	0.038	0.051	0.350	0.334	781	655	732	1005
1 X 1000 F/TC	8.00	3.40	77.0	13130	7080	0.0178	0.0281	0.029	0.048	0.348	0.324	841	718	786	1138
THREE CORE															
2xSEYBY / A2xSEYBY or 2xSEYB2Y / A2xSEYB2Y															
3 X 95 F/TC	8.00	3.80	82.8	7450	6810	0.524	0.868	0.888	1.113	0.111	0.488	154	318	172	188
3 X 95 F/TC	8.00	3.70	85.3	8180	7750	0.387	0.641	0.484	0.822	0.138	0.448	181	340	204	188
3 X 70 F/TC	8.00	3.80	88.0	8170	7880	0.288	0.643	0.342	0.588	0.154	0.428	220	371	253	198
3 X 95 F/TC	8.00	4.00	88.0	10350	8610	0.183	0.327	0.247	0.411	0.188	0.401	260	314	307	238
3 X 120 F/TC	8.00	4.10	86.9	11580	9380	0.183	0.259	0.198	0.325	0.183	0.384	298	332	352	274
3 X 150 F/TC	8.00	4.20	100.1	12880	10050	0.184	0.278	0.158	0.285	0.184	0.371	332	358	397	300
3 X 185 F/TC	8.00	4.30	104.0	14200	10850	0.0881	0.194	0.127	0.211	0.210	0.358	374	388	453	364
3 X 240 F/TC	8.00	4.50	108.5	16480	12380	0.0754	0.125	0.088	0.182	0.228	0.343	421	428	528	416
3 X 300 F/TC	8.00	4.70	114.9	18840	13940	0.0631	0.100	0.078	0.138	0.248	0.330	482	488	588	472

NOTE: 25mm² to Above: Circular Compacted Conductor

3.6/6.0(7.2) kV THREE CORE-2xSEYFGY/A2xSEYFGY or 2xSEYFG2Y/A2xSEYFG2Y
6/10(12) kV THREE CORE-2xSEYFGY/A2xSEYFGY or 2xSEYFG2Y/A2xSEYFG2Y

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- 1. CONDUCTOR : Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228
- 2. CONDUCTOR SCREEN : Semi-Conducting Polyethylene Compound
- 3. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color : ■ Natural
- 4. INSULATION SCREEN : Semi-Conducting Polyethylene Compound
- 5. METALLIC SCREEN : Plain Annealed Copper Tape / Copper Wire (Customer Required)
- 6. FILLER : Polypropylene Filler (For Three Core Only)
- 7. CORE BINDER : Polypropylene Tape (Optional)
- 8. INNER COVERING : PVC Compound of ST2 to IEC 60502-2 Color : ■ Black
- 9. ARMOUR : Flat Galvanized Steel Wire to IEC 60502-2
- 10. BINDER : Polypropylene Tape (With or Without Helically Applied Galvanized Steel Tape (Optional))
- 11. OUTER SHEATH : PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color : ■ ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 3.8/6.6kV & 6.35/11kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 3.6/6 (7.2) kV

PERMISSIBLE SERVICE VOLTAGE: 3.8/6.6 kV

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA

ELECTRICAL DATA

Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 70°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/km	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km			In Ground at 20°C	In Open Air at 20°C	In Ground at 70°C	In Open Air at 70°C
mm ²	mm	mm	mm	kg/km	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
THREE CORE															
2xSEYFGY / A2xSEYFGY or 2xSEYFG2Y / A2xSEYFG2Y															
3 X 25 mm ²	2.50	2.10	43.8	9080	2650	0.727	1.20	0.877	1.540	0.307	0.397	129	100	149	111
3 X 35 mm ²	2.50	2.20	45.8	9550	2940	0.524	0.858	0.658	1.118	0.201	0.265	154	110	172	139
3 X 50 mm ²	2.50	2.30	48.3	4150	3280	0.387	0.641	0.454	0.827	0.271	0.349	181	140	206	159
3 X 70 mm ²	2.50	2.40	52.8	5120	3860	0.268	0.443	0.342	0.598	0.371	0.325	220	171	253	188
3 X 95 mm ²	2.50	2.50	57.0	6250	4755	0.183	0.320	0.247	0.411	0.411	0.309	263	204	307	238
3 X 120 mm ²	2.50	2.60	60.0	7120	5070	0.153	0.259	0.188	0.325	0.458	0.237	288	232	357	274
3 X 150 mm ²	2.50	2.70	64.0	8270	5790	0.124	0.209	0.159	0.265	0.484	0.209	332	265	397	308
3 X 185 mm ²	2.50	2.80	68.0	8780	6520	0.098	0.154	0.127	0.211	0.543	0.180	374	293	453	354
3 X 240 mm ²	2.60	3.00	74.0	11000	7500	0.0754	0.122	0.098	0.157	0.593	0.170	431	338	529	415
3 X 300 mm ²	2.80	3.20	80.4	14450	8000	0.0601	0.100	0.078	0.130	0.602	0.167	482	360	588	472

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 6/10 (12) kV, OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 6.35/11 kV

PHYSICAL DATA

ELECTRICAL DATA

Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 70°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				kg/km	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km			In Ground at 20°C	In Open Air at 20°C	In Ground at 70°C	In Open Air at 70°C
mm ²	mm	mm	mm	kg/km	kg/100m	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
THREE CORE															
2xSEYFGY / A2xSEYFGY or 2xSEYFG2Y / A2xSEYFG2Y															
3 X 25 mm ²	3.40	2.30	47.5	5480	2490	0.727	1.20	0.877	1.540	0.208	0.419	129	100	149	111
3 X 35 mm ²	3.40	2.30	50.5	4020	3560	0.524	0.858	0.658	1.118	0.225	0.391	154	110	172	139
3 X 50 mm ²	3.40	2.40	53.3	4680	3870	0.387	0.641	0.484	0.827	0.257	0.363	181	140	206	159
3 X 70 mm ²	3.40	2.30	57.0	5570	4480	0.268	0.443	0.342	0.598	0.288	0.344	220	171	253	188
3 X 95 mm ²	3.40	2.70	61.5	6800	5180	0.183	0.320	0.247	0.411	0.323	0.327	263	204	307	238
3 X 120 mm ²	3.40	2.80	65.0	7750	5700	0.153	0.259	0.188	0.325	0.358	0.313	288	232	357	274
3 X 150 mm ²	3.40	2.80	68.0	8850	6380	0.124	0.208	0.159	0.265	0.380	0.304	332	265	397	308
3 X 185 mm ²	3.40	3.00	72.3	10275	7200	0.098	0.154	0.127	0.211	0.418	0.284	374	293	453	354
3 X 240 mm ²	3.40	3.20	77.5	12475	8250	0.0754	0.122	0.098	0.157	0.480	0.284	431	338	529	415
3 X 300 mm ²	3.40	3.30	80.8	14900	8500	0.0601	0.100	0.078	0.130	0.508	0.275	482	360	588	472

8.7/15(17.5) kV THREE CORE-2xSEYFGY/A2xSEYFGY or 2xSEYFG2Y/A2xSEYFG2Y
12/20(24) kV THREE CORE-2xSEYFGY/A2xSEYFGY or 2xSEYFG2Y/A2xSEYFG2Y

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH



CONSTRUCTION

- 1. CONDUCTOR : Circular, Plain Annealed Copper or Aluminum, Class-2 to IEC 60228
- 2. CONDUCTOR SCREEN : Semi-Conducting Polyethylene Compound
- 3. INSULATION : Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2 Color : ■ Natural
- 4. INSULATION SCREEN : Semi-Conducting Polyethylene Compound
- 5. METALLIC SCREEN : Plain Annealed Copper Tape / Copper Wire (Customer Required)
- 6. FILLER : Polypropylene Filler (For Three Core Only)
- 7. CORE BINDER : Polypropylene Tape (Optional)
- 8. INNER COVERING : PVC Compound of ST2 to IEC 60502-2 Color : ■ Black
- 9. ARMOUR : Flat Galvanized Steel Wire to IEC 60502-2
- 10. BINDER : Polypropylene Tape/With or Without Helically Applied Galvanized Steel Tape (Optional)
- 11. OUTER SHEATH : PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2 Color : ■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, in power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 9.2/16.3kV & 12.7/22kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 8.7/15 (17.5) kV

PERMISSIBLE SERVICE VOLTAGE: 9.2/16.3 kV

OPERATING TEMPERATURE: -20°C to +90°C

PHYSICAL DATA										ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity					
				Cu	Alu	Cu	Alu	Cu	Alu			In Ground at 25°C	In Open Air at 25°C	Cu	Alu	Cu	Alu
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	µF/km	mH/km	Amps	Amps	Amps	Amps		
THREE CORE 2xSEYFGY / A2xSEYFGY or 2xSEYFG2Y / A2xSEYFG2Y																	
3 X 25 mm ²	4.50	2.40	54.0	4100	3980	0.727	1.20	0.577	1.540	0.171	0.426	170	100	149	111		
3 X 35 mm ²	4.50	2.50	59.0	4620	4000	0.524	1.068	0.608	1.113	0.167	0.415	154	119	172	133		
3 X 50 mm ²	4.50	2.60	63.0	5350	4500	0.387	0.841	0.484	0.822	0.204	0.388	181	140	205	158		
3 X 70 mm ²	4.50	2.70	83.0	6280	5180	0.268	0.645	0.342	0.568	0.227	0.395	220	171	253	186		
3 X 95 mm ²	4.50	2.80	87.0	7000	5930	0.189	0.320	0.247	0.451	0.258	0.345	250	204	307	238		
3 X 120 mm ²	4.50	2.90	70.5	8470	6450	0.153	0.258	0.185	0.325	0.281	0.322	298	232	352	274		
3 X 150 mm ²	4.50	3.00	75.5	8650	7080	0.124	0.208	0.168	0.285	0.301	0.327	337	259	387	309		
3 X 185 mm ²	4.50	3.10	78.0	11100	8000	0.0991	0.164	0.127	0.211	0.320	0.321	374	289	453	354		
3 X 240 mm ²	4.50	3.30	83.5	13400	9200	0.0754	0.125	0.098	0.162	0.283	0.320	431	338	528	415		
3 X 300 mm ²	4.50	3.50	89.0	15700	10400	0.0601	0.100	0.078	0.130	0.288	0.320	487	380	589	472		

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 12/20 (24) kV, OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 12.7/22 kV

PHYSICAL DATA										ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 90°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity					
				Cu	Alu	Cu	Alu	Cu	Alu			In Ground at 25°C	In Open Air at 25°C	Cu	Alu	Cu	Alu
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	µF/km	mH/km	Amps	Amps	Amps	Amps		
THREE CORE 2xSEYFGY / A2xSEYFGY or 2xSEYFG2Y / A2xSEYFG2Y																	
3 X 35 mm ²	5.50	2.70	61.0	5180	4580	0.524	0.668	0.608	1.113	0.162	0.436	154	119	172	133		
3 X 50 mm ²	5.50	2.80	64.4	5900	5190	0.387	0.541	0.484	0.822	0.177	0.405	181	140	205	158		
3 X 70 mm ²	5.50	2.90	68.0	6930	5820	0.268	0.443	0.342	0.568	0.200	0.389	220	171	253	186		
3 X 95 mm ²	5.50	3.00	71.8	1070	6930	0.189	0.320	0.247	0.411	0.222	0.389	250	204	307	238		
3 X 120 mm ²	5.50	3.10	75.2	9120	7110	0.153	0.258	0.188	0.325	0.241	0.347	298	232	352	274		
3 X 150 mm ²	5.50	3.20	78.5	10380	7850	0.124	0.208	0.158	0.285	0.257	0.337	337	259	387	309		
3 X 185 mm ²	5.50	3.30	83.0	11900	9820	0.0991	0.164	0.127	0.211	0.280	0.325	374	290	453	354		
3 X 240 mm ²	5.50	3.50	88.5	14100	9900	0.0754	0.126	0.098	0.162	0.307	0.312	431	338	528	415		
3 X 300 mm ²	5.50	3.60	88.5	16600	11200	0.0601	0.100	0.075	0.130	0.308	0.301	487	380	589	472		

18/30(36) kV THREE CORE-2xSEYFGY/A2xSEYFGY or 2xSEYFGZY/A2xSEYFGZY

POLY CABLES BANGLADESH

POLY CABLES BANGLADESH

CONSTRUCTION

1. CONDUCTOR	: Circular, Plain Annealed Copper or Aluminium, Class-2 to IEC 60228		
2. CONDUCTOR SCREEN	: Semi-Conducting Polyethylene Compound		
3. INSULATION	: Cross-Linked Polyethylene Compound (XLPE) to IEC 60502-2	Color	☐ Natural
4. INSULATION SCREEN	: Semi-Conducting Polyethylene Compound		
5. METALLIC SCREEN	: Plain Annealed Copper Tape / Copper Wire (Customer Required)		
6. FILLER	: Polypropylene Filler (For Three Core Only)		
7. CORE BINDER	: Polypropylene Tape (Optional)		
8. INNER COVERING	: PVC Compound of ST2 to IEC 60502-2	Color	■ Black
9. ARMOUR	: Flat Galvanized Steel Wire to IEC 60502-2		
10. BINDER	: Polypropylene Tape/Wick or Without Helically Applied Galvanized Steel Tape (Optional)		
11. OUTER SHEATH	: PVC/MDPE Compound of ST2 & ST7 to IEC 60502-2	Color	■ Red / Black

APPLICATION

For general purpose power distribution indoors, outdoors, in cable ducts or Tray or underground and in water, to power switching stations, in industrial plants and commercial buildings and local distribution system for continuous permissible service voltage of 19/33kV.

STANDARD: BDS IEC 60502-2, BS 6622, IS 7098-2, IEC 60502-2

VOLTAGE GRADE: 18/30 (36) kV

OPERATING TEMPERATURE: -20°C to +90°C

PERMISSIBLE SERVICE VOLTAGE: 19/33 kV

PHYSICAL DATA						ELECTRICAL DATA									
Nominal Cross Sectional Area of Conductor	Material Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Max. AC Resistance of Conductor at 75°C		Approx. Capacitance of Cable	Approx. Inductance of Cable	Current Carrying Capacity			
				CU	ALU	CU	ALU	CU	ALU			In Ground at 25°C	In Open Air at 25°C	CU	ALU
mm ²	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	mH/km	Amps	Amps	Amps	Amps
THREE CORE															
2xSEYFGY / A2xSEYFGY or 2xSEYFGZY / A2xSEYFGZY															
3 x 60 mm ²	8.00	3.10	78.0	7450	6750	0.387	0.641	0.484	0.822	0.138	0.448	161	140	205	159
3 x 70 mm ²	8.00	3.20	81.6	8650	7600	0.298	0.443	0.342	0.568	0.154	0.425	221	171	253	186
3 x 95 mm ²	8.00	3.40	85.0	10060	8470	0.183	0.320	0.247	0.411	0.168	0.407	253	204	307	238
3 x 120 mm ²	8.00	3.50	88.0	11000	9020	0.153	0.259	0.188	0.325	0.183	0.384	298	230	357	274
3 x 150 mm ²	8.00	3.60	90.8	12250	9900	0.124	0.205	0.153	0.255	0.194	0.371	332	255	397	309
3 x 185 mm ²	8.00	3.70	95.0	13840	10800	0.0901	0.164	0.127	0.215	0.210	0.358	374	282	453	354
3 x 240 mm ²	8.00	3.80	100.0	16200	13000	0.0754	0.125	0.098	0.160	0.220	0.343	421	328	529	415
3 x 300 mm ²	8.00	4.00	105.8	18600	13600	0.0601	0.100	0.078	0.130	0.248	0.330	482	380	555	472

AERIAL BUNDLE CABLE (ABC) Three Core (Al/XLPE/CTS or CWS/HDPE)



CONSTRUCTION

- | | |
|----------------------|---|
| 1. CONDUCTOR | : Stranded Circular Compacted, Plain annealed Aluminum, Class-2 IEC 60228 |
| 2. CONDUCTOR SCREEN | : Semi-Conductive XLPE |
| 3. INSULATION | : Cross-Linked Polyethylene XLPE to IEC 60502-2 |
| 4. INSULATION SCREEN | : Semi-Conductive XLPE |
| 5. METALLIC SCREEN | : Copper Tape or Copper Wire to IEC 60502-2 |
| 6. OUTER SHEATH | : Polyethylene (HDPE), ST-7 to IEC 60502-2 Color: ■ Black |
-
- | | |
|-----------------|---|
| SUSPENSION UNIT | |
| 1. CONDUCTOR | : Stranded Galvanized Steel wire Class A, ASTM B498 |
| 2. INSULATION | : Polyethylene (HDPE), ST-7 to IEC 60502-2 |

APPLICATION

The three core cables are designed for distribution of electrical power with nominal voltage U_n/U ranging from 6.35/11kV and frequency 50Hz. They are suitable for installation mostly in power supply stations, indoors and in cable ducts, outdoors, underground and in water as well as for installation on cable trays for industrial, switchboards and power stations.

STANDARD: BDS IEC 60502-2, IEC 60502-2

VOLTAGE GRADE: 6/10 (12) kV, PERMISSIBLE SERVICE VOLTAGE: 6.35/11 kV

PHYSICAL DATA

Nominal Core Sectional Area of Conductor	Shape of Insulation	Conductor diameter		Nominal thickness of insulation	Metallic Screen		Nominal thickness of sheath	Approx. Diameter of single core	Number & diameter of steel wire	Minimum thickness of insulation	Approx. Diameter of core	Approx. Diameter of finished cable	Approx. weight of cable
		Copper	Aluminum		Thickness of copper tape	Area of copper wire							
Core code	-	mm	mm	mm	mm	mm ²	mm	mm	mm/10m	mm	mm	mm	kg/10m
THREE CORE													
3X35+30	TTTC	8.0	7.8	3.4	0.08	18	1.8	21.8	7/3.38	1	8.5	48.8	1800
3X50+30	TTTC	7.7	8.0	3.4	0.08	18	1.8	23.0	7/3.38	1	8.5	51.0	2000
3X70+50	TTTC	9.3	10.2	3.4	0.08	18	1.8	24.8	7/3.10	1	11.8	55.0	2650
3X95+60	TTTC	11.0	12.0	3.4	0.08	18	1.8	28.5	7/3.10	1	11.8	60.2	2900
3X120+70	TTTC	12.8	13.6	3.4	0.08	18	1.8	27.8	7/3.57	1	13.4	63.6	3300
3X150+70	TTTC	13.7	15.0	3.4	0.08	25	1.8	28.6	7/3.57	1	13.4	68.0	3800
3X185+70	TTTC	15.8	18.8	3.4	0.08	25	1.8	31.2	7/3.57	1	13.4	70.3	4120
3X240+70	TTTC	17.8	18.2	3.4	0.08	25	1.8	32.8	7/3.57	1	13.4	80.0	4800

ELECTRICAL DATA

Nominal Core Sectional Area	Maximum D.C resistance of conductor at 25°C	Maximum D.C resistance of conductor at 90°C	Short circuit rating of conductor in one second	Short circuit rating of metallic screen in one second			Approx. Capacitance of cable	Inductive reactance at 50-Hz	Minimum breaking load of messenger conductor	Current rating ambient at 40°C
				Copper	Al wire	Al wire				
mm ²	Ω/km	Ω/km	kA	kA	kA	μF/km	Ω/km	kN	Amp	
THREE CORE										
35	0.888	1.11	3.3	0.33	2.40	0.391	0.145	41.7	145	
50	0.541	0.822	4.7	0.33	2.40	0.363	0.128	41.7	170	
70	0.443	0.588	6.5	0.33	2.40	0.344	0.118	75.8	215	
95	0.370	0.411	8.9	0.33	2.40	0.327	0.113	75.8	280	
120	0.353	0.329	11.3	0.33	2.40	0.313	0.108	81.8	305	
150	0.306	0.255	14.1	0.33	3.75	0.304	0.105	81.8	340	
185	0.164	0.211	17.4	0.33	3.75	0.284	0.101	81.8	360	
240	0.125	0.187	22.6	0.33	3.75	0.284	0.097	81.8	445	

AERIAL BUNDLE CABLE (ABC) Three Core (Al/XLPE/CTS or CWS/HDPE)



CONSTRUCTION

- | | |
|----------------------|--|
| 1. CONDUCTOR | Stranded Circular Compacted, Plain annealed Aluminium, Class-2 IEC 60228 |
| 2. CONDUCTOR SCREEN | Semi-Conductive XLPE |
| 3. INSULATION | Cross-Linked Polyethylene XLPE to IEC 60502-2 |
| 4. INSULATION SCREEN | Semi-Conductive XLPE |
| 5. METALLIC SCREEN | Copper Tape or Copper Wire to IEC 60502-2 |
| 6. OUTER SHEATH | Polyethylene (HDPE), ST-7 to IEC 60502-2 |
| | Color ■ Black |
-
- | | |
|---------------|---|
| 1. CONDUCTOR | Stranded Galvanized Steel wire Class A, ASTM B498 |
| 2. INSULATION | Polyethylene (HDPE), ST-7 to IEC 60502-2 |

APPLICATION

The three core cables are designed for distribution of electrical power with nominal voltage U_0/U ranging from 12.7/22kV and frequency 50Hz. They are suitable for installation mostly in power supply stations, indoors and in cable ducts, outdoors, underground and in water as well as for installation on cable trays for industries, switchboards and power stations.

STANDARD: BDS IEC 60502-2, IEC 60502-2

VOLTAGE GRADE: 12/20 (24) kV, PERMISSIBLE SERVICE VOLTAGE: 12.7/22 kV

PHYSICAL DATA

Nominal Cross-Sectional Area of Conductor	Shape of conductor	Conductor diameter		Nominal thickness of insulation	Metallic Screen		Nominal thickness of sheath	Approx. Diameter of single wire	Number & diameter of steel wire	Minimum thickness of insulation	Approx. Diameter of core	Approx. Diameter of bundled cable	Approx. weight of cable
		Minimum	Maximum		Thickness of copper tape	Area of copper wire							
mm ²	mm	mm	mm	mm	mm	mm ²	mm	mm	mm	mm	mm	mm	kg/km
THREE CORE													
3 X 35+20	TTTC	6.6	7.3	0.4	0.06	15	1.0	26.2	7/0.28	1	8.1	58.5	2750
3 X 50+30	TTTC	7.7	8.4	0.5	0.07	18	1.0	27.2	7/0.38	1	8.1	61.0	2900
3 X 70+50	TTTC	9.3	10.2	0.5	0.08	18	1.0	28.0	7/0.50	1	11.0	64.8	3020
3 X 95+70	TTTC	11.0	12.0	0.5	0.08	18	1.3	31.0	7/0.50	1	11.0	69.0	3400
3 X 120+70	TTTC	12.3	13.5	0.5	0.08	18	1.3	33.3	7/0.57	1	13.4	72.0	3820
3 X 150+70	TTTC	13.7	15.0	0.5	0.08	25	2.0	34.2	7/0.57	1	13.4	75.1	4380
3 X 185+70	TTTC	15.3	16.8	0.6	0.08	25	2.0	35.7	7/0.57	1	13.4	80.0	4810

ELECTRICAL DATA

Nominal Cross-Sectional Area	Maximum D.C. resistance of conductor at 20°C	Minimum D.C. resistance of conductor at 90°C	Short circuit rating of conductor in one second	Short circuit rating of metallic screen in one second		Approx. Capacitance of cable	Inductive reactance at 50 Hz	Minimum breaking load of messenger conductor	Current rating ambient air at 40°C
				Copper	Co wire				
mm ²	Ohm	Ohm	kA	kA	kA	μF/km	Ohm	kN	Amp
THREE CORE									
35	0.808	1.11	3.3	0.33	2.45	0.162	0.165	41.7	145
50	0.641	0.872	4.7	0.33	2.40	0.177	0.157	41.7	170
70	0.443	0.609	6.6	0.33	2.40	0.200	0.145	28.8	215
95	0.320	0.431	8.3	0.33	2.45	0.222	0.138	70.8	280
120	0.253	0.325	11.0	0.33	2.40	0.241	0.133	81.8	305
150	0.205	0.265	14.1	0.33	3.75	0.257	0.128	81.8	340
185	0.164	0.211	17.4	0.33	3.75	0.280	0.124	81.8	390

HOUSE WIRING TELEPHONE CABLE MULTIPAIR (CU/PE/PVC) PE INSULATED PVC SHEATHED CABLE

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

CONSTRUCTION

- | | | |
|-----------------|--|----------------------|
| 1. CONDUCTOR | Solid plain annealed copper to ASTM B3 | Color Grey / Black |
| 2. INSULATION | Polystyrene (PE) to BS 6234 | |
| 3. OUTER SHEATH | PVC, TMI to BS 7655 | |

APPLICATION

Suitable for telecommunication and signal circuits. They are suitable for exposed or concealed concealed conductor installation permissible voltage 200 V.

STANDARD: VDE 0615, BS 6234
VOLTAGE GRADE: 200V
PERMISSIBLE SERVICE VOLTAGE:

OPERATING TEMPERATURE: -30°C to +70°C

PHYSICAL DATA						ELECTRICAL DATA	
Number of pair (core)	Nominal cross-sectional area	No. of strands & diameter of wire	Conductor thickness of insulation	Insulation thickness of sheath	Approx. Overall diameter	Approx. weight of cable	Max. DC resistance of conductor at 20°C
	mm ²	no./mm ²	mm	mm	mm	kg/km	Ohm/km
HOUSE WIRING TELEPHONE CABLE							
1 PAIR (2 CORE)	0.125	1/0.4	0.25	1.8	4.0	19	150
2 PAIR (4 CORE)	0.125	1/0.4	0.25	2.0	4.3	24	150
3 PAIR (6 CORE)	0.125	1/0.4	0.25	1.0	5.4	35	100
4 PAIR (8 CORE)	0.125	1/0.4	0.25	1.2	6.5	47	150
5 PAIR (10 CORE)	0.125	1/0.4	0.25	1.2	7.0	50	150
6 PAIR (12 CORE)	0.125	1/0.4	0.25	1.4	7.7	67	100
7 PAIR (14 CORE)	0.125	1/0.4	0.25	1.4	8.1	74	100
8 PAIR (16 CORE)	0.125	1/0.4	0.25	1.4	8.9	80	100
10 PAIR (20 CORE)	0.125	1/0.4	0.25	1.4	9.8	97	100
15 PAIR (30 CORE)	0.125	1/0.4	0.25	1.4	13.0	130	150
20 PAIR (40 CORE)	0.125	1/0.4	0.25	1.6	13.0	170	160
30 PAIR (60 CORE)	0.125	1/0.4	0.25	1.8	14.5	229	160
1 PAIR (2 CORE)	0.287	1/0.6	0.25	0.8	4.0	27	80.8
2 PAIR (4 CORE)	0.287	1/0.6	0.25	0.8	4.8	31	80.8
3 PAIR (6 CORE)	0.287	1/0.6	0.25	1.0	5.1	44	80.8
4 PAIR (8 CORE)	0.287	1/0.6	0.25	1.2	6.8	70	80.8
5 PAIR (10 CORE)	0.287	1/0.6	0.25	1.2	7.7	75	80.8
6 PAIR (12 CORE)	0.287	1/0.6	0.25	1.4	8.2	90	80.8
7 PAIR (14 CORE)	0.287	1/0.6	0.25	1.4	8.5	98	80.8
8 PAIR (16 CORE)	0.287	1/0.6	0.25	1.4	8.5	109	80.8
10 PAIR (20 CORE)	0.287	1/0.6	0.25	1.4	10.4	130	80.8
15 PAIR (30 CORE)	0.287	1/0.6	0.25	1.4	12.0	180	80.8
20 PAIR (40 CORE)	0.287	1/0.6	0.25	1.6	14.2	245	80.8
25 PAIR (50 CORE)	0.287	1/0.6	0.25	1.8	15.7	310	80.8
30 PAIR (60 CORE)	0.287	1/0.6	0.25	1.8	18.9	353	80.8
40 PAIR (80 CORE)	0.287	1/0.6	0.25	1.8	20.3	439	80.8
50 PAIR (100 CORE)	0.287	1/0.6	0.25	1.8	20.0	530	80.8
100 PAIR (200 CORE)	0.287	1/0.6	0.25	1.8	29.5	830	80.8

A-2Y (L) 2Y
SUBSCRIBER CABLE (UNFILLED) (CU/PE/AF/PE)
PE INSULATED, AL FOIL SCREEN, PVC SHEATHED CABLE



CONSTRUCTION

- 1. CONDUCTOR : Solid plain annealed copper to ASTM B3
 - 2. INSULATION : Polyethylene (PE) to BS 6234
 - 3. IDENTIFICATION STRIP : Polyester tape
 - 4. WRAPPED : PT foil
 - 5. SCREEN : Copolymer Al foil
 - 6. OUTER SHEATH : Polyethylene (PE) to BS 6234
- Color ■ Black

APPLICATION

Suitable for telecommunication and signal circuits. They are suitable for use in underground conduits.

STANDARD: VDE 0015, BS 6234
 VOLTAGE GRADE: 200V
 PERMISSIBLE SERVICE VOLTAGE:

OPERATING TEMPERATURE: -30°C to +70°C

PHYSICAL DATA							ELECTRICAL DATA
Number of pair (pairs)	Diameter of wire	Insulation thickness of insulation	Approx. Diameter over Al foil	Thickness of Sheath	Approx. Overall diameter	Approx. weight of cable	Max. DC resistance of conductors at 20°C
	mm	mm	mm	mm	mm	kg/km	Ohm/km
A-2Y (L) 2Y							
10 Pair	0.4	0.25	0.2	1.0	10.2	100	150
	0.5	0.25	0.0	1.0	11.0	120	95.0
	0.8	0.5	0.0	1.0	12.8	160	66.6
	0.9	0.45	11.7	1.0	18.0	270	28
20 Pair	0.4	0.25	0.4	1.0	12.0	145	160
	0.5	0.25	0.2	1.0	13.5	185	95.9
	0.8	0.5	20.5	1.0	15.0	241	61.0
	0.9	0.45	10.0	1.0	20.0	400	28
30 Pair	0.4	0.25	10.0	1.0	14.0	190	150
	0.5	0.25	11.1	1.0	15.1	247	95.9
	0.8	0.5	20.2	1.0	17.5	327	66.6
	0.9	0.45	10.5	1.0	24.0	640	28
40 Pair	0.4	0.25	11.8	1.0	15.6	240	150
	0.5	0.25	12.8	1.0	16.7	308	95.9
	0.8	0.5	16.1	1.0	19.5	450	61.0
	0.9	0.45	20.5	1.0	27.0	810	28
50 Pair	0.4	0.25	13.8	1.0	16.5	280	150
	0.5	0.25	14.7	1.0	17.1	308	95.9
	0.8	0.5	18.0	1.0	20.0	402	66.6
	0.9	0.45	25.0	1.0	29.5	592	28
70 Pair	0.4	0.25	16.0	1.0	18.0	360	150
	0.5	0.25	18.4	1.0	20.6	480	95.9
	0.8	0.5	18.0	1.0	24.0	600	61.0
	0.9	0.45	17.0	1.0	21.0	475	150
100 Pair	0.5	0.25	18.7	1.0	23.5	648	95.9
	0.8	0.5	28.5	1.0	27.0	860	66.6

**INSTRUMENT (OS)
MULTI-PAIR (CU OR ATC/PVC/OS/PVC)**



CONSTRUCTION

- | | |
|----------------------|--|
| 1. CONDUCTOR | Solid/ Flexible/ Stranded Circular, plain annealed copper or Tinned Copper, Class 1 or Class 2 or Class 5 to BS 6360 |
| 2. INSULATION | Polyethylene (PE) to BS 6334 |
| 3. PAIRING | Two insulated core uniformly twisted together |
| 4. BINDER | PETP tape |
| 5. COLLECTIVE SCREEN | Aluminum/Polyester tape is applied over the laid up pairs with tinned copper drain wire |
| 6. OUTER SHEATH | PVC-FR, TM-1-FR to BS 7655 Color ■ ■ Blue / Black |

APPLICATION

These cables are generally used for indoor installation and suitable for wet and damp areas. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, typically in petroleum industry.

STANDARD: BS 5308

VOLTAGE GRADE: U₀/U: 300/500V

No. of pairs & Cross sectional area of conductor	Shape of conductor	No. of strands & Diameter of wire	Nominal thickness of insulation	Nominal thickness of Sheath	Approx. Overall diameter	Approx. weight of cable	Max. DC resistance of conductor at 20°C
Pairs mm ²	—	No./mm	mm	mm	mm	kg/km	Ω/km
INSTRUMENT (OS)							
1PXL3	FE	1/0.8	0.5	0.8	5.5	35	38.8
2PXL3	FE	1/0.8	0.5	0.8	6.9	55	38.8
3PXL3	FE	1/0.8	0.5	1.1	10.0	125	38.8
12PXL3	FE	1/0.8	0.5	1.2	14.4	215	38.8
15PXL3	FE	1/0.8	0.5	1.2	18.5	300	38.8
1PXL5	FE	16/0.2	0.0	0.8	6.7	80	38.7
2PXL5	FE	16/0.2	0.0	0.8	7.6	80	38.7
3PXL5	FE	16/0.2	0.0	1.1	11.4	215	38.7
10PXL5	FE	16/0.2	0.0	1.2	18.5	340	38.7
15PXL5	FE	16/0.2	0.0	1.3	18.2	440	38.7
1PXL75	FE	24/0.2	0.0	0.8	6.7	75	26.5
2PXL75	FE	24/0.2	0.0	0.8	8.4	100	26.5
3PXL75	FE	24/0.2	0.0	1.2	13.8	250	26.5
10PXL75	FE	24/0.2	0.0	1.3	18.4	450	26.5
15PXL75	FE	24/0.2	0.0	1.5	21.1	600	26.5
1PXL1	FE	17/1.18	0.0	0.8	8.9	95	18.4
2PXL1	FE	17/1.18	0.0	0.8	9.0	115	18.4
3PXL1	FE	17/1.18	0.0	1.7	18.5	290	18.4
10PXL1	FE	17/1.18	0.0	1.2	17.7	600	18.4
15PXL1	FE	17/1.18	0.0	1.3	20.8	970	18.4
1PXL3	FE	7/0.53	0.0	0.8	7.6	100	12.3
2PXL3	FE	7/0.53	0.0	0.8	8.0	157	12.3
3PXL3	FE	7/0.53	0.0	1.2	16.6	360	12.3
10PXL3	FE	7/0.53	0.0	1.3	20.8	680	12.3
15PXL3	FE	7/0.53	0.0	1.5	24.8	980	12.3

**INSTRUMENT (IS-OS)
MULTI-PAIR (CU OR ATC/PE/IS-OS/PVC)**



CONSTRUCTION

1. CONDUCTOR	Solid/Flexible/Stranded Circular, plain annealed copper or Tinned Copper, Class 1 or Class 2 or Class 5 to BS 5361
2. INSULATION	Polyethylene (PE) to BS 5334
3. PAIRING	Two insulated core uniformly twisted together
4. INDIVIDUAL SCREEN	Aluminium/Polyester tape is applied over the laid up pairs with tinned copper drain wire PETP Tape
5. BINDER	
6. COLLECTIVE SCREEN	Aluminium/Polyester tape is applied over the laid up pairs with tinned copper drain wire
7. OUTER SHEATH	PVC-PR, TM-3-FR to BS 7655 Color: Blue / Black

APPLICATION

These cables are generally used for indoor installation and suitable for wet and damp areas. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, typically in petroleum industry.

STANDARD: BS 5308

VOLTAGE GRADE: U₀/U: 300/500V

No. of pairs & Cross sectional area of conductor	Shape of conductor	No. of strands & Diameter of wire	Nominal thickness of insulation	Nominal thickness of Sheath	Approx. Overall Diameter	Approx. weight of cable	Max. DC resistance of conductor at 20°C
Pairs and	-	No. Strands	mm	mm	mm	kg/km	Ω/km
INSTRUMENT (IS-OS)							
2P10.5	FI	1/0.8	0.5	0.8	3.7	85	80.8
5P10.5	FI	1/0.8	0.5	1.2	13.0	150	88.8
10P10.5	FI	1/0.8	0.5	1.2	18.9	210	88.8
15P10.5	FI	1/0.8	0.5	1.2	15.7	440	88.8
2P10.5	FI	16/0.2	0.6	1.1	11.2	110	89.7
5P10.5	FI	16/0.2	0.6	1.2	14.5	250	89.7
10P10.5	FI	16/0.2	0.6	1.2	15.3	480	89.7
15P10.5	FI	16/0.2	0.6	1.5	22.5	570	89.7
2P10.75	FI	17/1.18	0.6	1.1	11.8	200	18.4
5P10.75	FI	17/1.18	0.6	1.2	16.4	290	18.4
10P10.75	FI	17/1.18	0.6	1.2	20.5	580	18.4
15P10.75	FI	17/1.18	0.6	1.3	24.1	780	18.4
2P11.0	FI	7/0.58	0.6	1.2	18.8	250	12.9
5P11.0	FI	7/0.58	0.6	1.4	17.7	450	12.9
10P11.0	FI	7/0.58	0.6	1.5	28.3	780	12.9
15P11.0	FI	7/0.58	0.6	1.7	28.0	1020	12.9

INSTRUMENT ARMoured (OS) MULTI-PAIR (CU OR ATC/PE/OS/SWA/PVC)



CONSTRUCTION

1. CONDUCTOR	Solid/ Flexible/ Stranded Circular, plain annealed copper or Tinned Copper, Class 1 or Class 2 or Class 5 to BS 6360
2. INSULATION	Polyethylene (PE) to BS 6234
3. PAIRING	Two insulated core uniformly twisted together
4. BINDER	PETP tape
5. COLLECTIVE SCREEN	Aluminium/Polyester tape is applied over the laid up pairs with tinned copper drain wire
6. INNER COVERING	Polyvinyl Chloride (PVC)
7. ARMOUR	Round Galvanized Steel wire
8. OUTER SHEATH	PVC-FR, TM 1-FR to BS 7555

Color ■ ■ Blue / Black

APPLICATION

These cables are generally used when the risk of mechanical damage is increased. The galvanized steel wire armour provides excellent protection. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, typically in petroleum industry. The armoured version are generally use for outdoor installation for direct burial or install in the duct and suitable for wet and damp areas.

STANDARD: BS 5308

VOLTAGE GRADE: U₀/U: 300/500V

No. of pairs & Core (includes size of conductor)	Insulation conductor	No. of strands & Diameter of wire	Electrical thickness of insulation	Electrical thickness of bedding	Number/Radius of round steel wire armour	Nominal thickness of sheath	Approx. Overall diameter of cable	Approx. weight of cable	Max. DC resistance of insulation at 20°C
Pairs and Core	-	no./mm	mm	mm	no	mm	mm	kg/100m	Ω/km
INSTRUMENT ARMoured (OS)									
1P1S	PE	1/0.8	0.5	0.6	0.9	1.3	9.8	230	56.8
2P1S	PE	1/0.8	0.5	0.6	0.9	1.3	11.2	250	58.8
3P1S	PE	1/0.8	0.5	1.1	0.9	1.4	15.5	400	68.8
10P1S	PE	1/0.8	0.5	1.2	1.25	1.6	20.7	780	88.8
15P1S	PE	1/0.8	0.5	1.2	1.25	1.8	22.2	1150	88.8
1P1S	PE	18/0.2	0.4	0.8	0.9	1.3	10.9	250	55.7
2P1S	PE	18/0.2	0.4	0.8	0.9	1.3	12.0	300	59.7
3P1S	PE	18/0.2	0.6	1.1	0.9	1.5	17.2	580	59.7
10P1S	PE	18/0.2	0.4	1.2	1.25	1.6	22.2	970	59.7
15P1S	PE	18/0.2	0.6	1.3	1.6	1.7	26.8	1240	59.7
1P1S	PE	24/0.2	0.6	0.8	0.9	1.4	10.8	280	70.5
2P1S	PE	24/0.2	0.6	0.9	0.9	1.4	12.6	330	76.5
3P1S	PE	24/0.2	0.6	1.2	1.25	1.6	19.3	750	76.5
10P1S	PE	24/0.2	0.6	1.3	1.6	1.8	24.9	1250	76.5
15P1S	PE	24/0.2	0.6	1.5	1.6	1.9	27.0	1490	76.5
1P1S	PE	17/1.1	0.6	0.8	0.9	1.3	11.0	280	18.4
2P1S	PE	17/1.1	0.6	0.8	0.9	1.4	12.6	345	18.4
3P1S	PE	17/1.1	0.6	1.2	1.25	1.5	19.0	790	18.4
10P1S	PE	17/1.1	0.6	1.2	1.25	1.7	23.8	1310	18.4
15P1S	PE	17/1.1	0.6	1.3	1.6	1.8	27.4	1540	18.4
1P1S	PE	7/0.53	0.8	0.8	0.9	1.3	11.5	370	12.3
2P1S	PE	7/0.53	0.8	0.9	0.9	1.4	14.1	430	17.3
3P1S	PE	7/0.53	0.8	1.2	1.25	1.6	21.5	940	12.3
10P1S	PE	7/0.53	0.8	1.3	1.6	1.7	27.4	1650	12.3
15P1S	PE	7/0.53	0.8	1.5	1.6	1.8	31.2	1870	12.3

INSTRUMENT ARMoured (IS-OS) MULTI-PAIR (CU OR ATC/PE/IS-OS/SWA/PVC)



CONSTRUCTION

1. CONDUCTOR	Solid/ Flexible/ Stranded Circular, plain annealed copper or Tinned Copper, Class 1 or Class 2 or Class 5 to BS 6360
2. INSULATION	Polyethylene (PE) to BS 6234
3. PAIRING	Two insulated core uniformly twisted together
4. INDIVIDUAL SCREEN	Aluminum/Polyester tape is applied over the laid up pairs with tinned copper drain wire
5. BINDER	Polyester tape
6. COLLECTIVE SCREEN	Aluminum/Polyester tape is applied over the laid up pairs with tinned copper drain wire
7. INNER COVERING	Polyvinyl Chloride (PVC)
8. ARMOUR	Round Galvanized Steel wire
9. OUTER SHEATH	PVC-FR, TM-1-FR to BS 7655

Color ■ ■ Blue / Black

APPLICATION

These armoured cables are generally used when the risk of mechanical damage is increased. The galvanized steel wire armour provides excellent protection. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, typically in petrochemical industry. The armoured versions are generally used for outdoor installation for direct burial or install in the duct and suitable for wet and damp areas.

STANDARD: BS 5308

VOLTAGE GRADE: U₀/U: 300/500V

OPERATING TEMPERATURE: -20°C to +70°C

No. of pairs & Cross-sectional area of conductors	Shape of Insulation	No. of strands & Diameter of wire	Nominal thickness of insulation	Nominal thickness of bedding	Nominal diameter of round steel wire armour	Nominal thickness of sheath	Approx. Overall diameter of cable	Approx. weight of cable	Max. DC resistance of conductor at 20°C
Pairs and mm ²	—	no./mm	mm	mm	mm	mm	mm	kg/km	Ω/km
INSTRUMENT ARMoured (IS-OS)									
2P/0.5	PE	1/0.8	0.5	0.8	0.9	1.4	14.8	880	35.8
5P/0.5	PE	1/0.8	0.5	1.2	1.25	1.5	18.5	840	35.8
10P/0.5	PE	1/0.8	0.5	1.7	1.35	1.7	22.8	800	35.8
15P/0.5	PE	1/0.8	0.5	2.0	1.6	1.7	26.8	1550	35.8
2P/0.5	PE	18/0.2	0.5	1.5	0.9	1.5	16.6	450	35.7
5P/0.5	PE	18/0.2	0.5	1.8	1.25	1.6	20.2	790	35.7
10P/0.5	PE	18/0.2	0.5	2.3	1.6	1.8	26.1	1000	35.7
15P/0.5	PE	18/0.2	0.5	2.5	1.6	1.8	28.4	1440	35.7
2P/0.75	PE	24/0.2	0.5	1.1	0.9	1.5	16.8	300	26.5
5P/0.75	PE	24/0.2	0.5	1.7	1.25	1.6	21.4	820	26.5
10P/0.75	PE	24/0.2	0.5	2.3	1.6	1.7	27.5	1680	26.5
15P/0.75	PE	24/0.2	0.5	2.5	1.6	1.9	31.6	1860	26.5
2P/1.0	PE	1/1.13	0.5	1.1	0.9	1.5	16.7	315	18.2
5P/1.0	PE	1/1.13	0.5	1.2	1.05	1.6	21.1	390	18.2
10P/1.0	PE	1/1.13	0.5	1.3	1.6	1.8	27.9	1030	18.2
15P/1.0	PE	1/1.13	0.5	1.5	1.6	1.9	31.1	1680	18.2
2P/1.5	PE	7/0.53	0.5	1.2	1.25	1.6	19.2	730	12.8
5P/1.5	PE	7/0.53	0.5	1.8	1.6	1.7	24.3	1180	12.8
10P/1.5	PE	7/0.53	0.5	2.5	1.5	1.9	30.8	1820	12.8
15P/1.5	PE	7/0.53	0.5	2.7	2.0	2.0	35.0	2960	12.8

**INSTRUMENT (OS)
MULTI-CORE (CU OR ATC/PVC/OS/PVC)**



CONSTRUCTION

- 1. CONDUCTOR : Flexible/ Stranded Circular, Plain annealed Copper or Tinned Copper, Class 2 or Class 5, BS 6360
- 2. INSULATION : PVC, T11 to BS 7655
- 3. BINDER : Polyester tape
- 4. COLLECTIVE SCREEN : Aluminium/Polyester tape is applied over the laid up pairs with tinned copper drain wire
- 5. OUTER SHEATH : PVC-FR, T14-1-FR to BS 7655 Color ■ ■ Blue / Black

APPLICATION

These cables are generally used for indoor installation and suitable for wet and damp areas. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, typically in petroleum industry.

STANDARD: BS 5308

VOLTAGE GRADE: U₀/U: 300/500V

No. of pairs & Cross-sectional area of conductor	Shape of conductor	No. of strands & Diameter of wire	Nominal thickness of insulation	Net/HD (Nominal) diam.	Approx. Overall diameter	Approx. weight of cable	Max. DC resistance of conductor at 20°C
Pairs/core	-	ea./mm	mm	mm	mm	kg/100m	Ω/km
INSTRUMENT (OS)							
2X0.5	TTI	16/0.2	0.8	0.8	3.2	60	39.7
3X0.5	TTI	16/0.2	0.8	0.8	4.3	75	39.7
4X0.5	TTI	16/0.2	0.8	0.8	7.2	80	39.7
6X0.5	TTI	16/0.2	0.8	0.8	8.8	110	39.7
10X0.5	TTI	16/0.2	0.8	1.1	11.2	180	39.7
30X0.5	TTI	16/0.2	0.8	1.7	14.2	310	39.7
30X0.75	TTI	24/0.2	0.8	0.8	8.7	75	29.5
30X0.75	TTI	24/0.2	0.8	0.8	7.2	90	29.5
40X0.75	TTI	24/0.2	0.8	0.8	7.3	120	29.5
60X0.75	TTI	24/0.2	0.8	0.8	9.4	140	29.5
100X0.75	TTI	24/0.2	0.8	1.1	12.2	220	29.5
200X0.75	TTI	24/0.2	0.8	1.2	15.9	380	29.5
20X1.5	TTI	7/0.53	0.8	0.8	8.0	105	12.9
30X1.5	TTI	7/0.53	0.8	0.8	8.2	135	12.9
40X1.5	TTI	7/0.53	0.8	0.8	8.5	150	12.9
60X1.5	TTI	7/0.53	0.8	1.1	11.0	205	12.9
100X1.5	TTI	7/0.53	0.8	1.2	14.0	320	12.9
200X1.5	TTI	7/0.53	0.8	1.3	17.9	500	12.9

**INSTRUMENT (OS)
MULTI-PAIR (CU OR ATC/PVC/OS/PVC)**



CONSTRUCTION

- 1. CONDUCTOR : Solid/Flexible/Stranded Circular, plain annealed copper or Tinned Copper, Class 1 or Class 3 or Class 5 to BS 6853
- 2. INSULATION : Polyethylene (PE) to BS 6234
- 3. PAIRING : Two insulated core uniformly twisted together
- 4. BINDER : PETP tape
- 5. COLLECTIVE SCREEN : Aluminium/Polyester tape is applied over the laid up pairs with tinned copper drain wire
- 6. OUTER SHEATH : PVC-FR, TM-1-FR to BS 7655 Color ■ ■ Blue / Black

APPLICATION

These cables are generally used for indoor installation and suitable for wet and damp areas. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, typically in petroleum industry.

STANDARD: BS 5308

VOLTAGE GRADE: U₀/U: 300/500V

Nr. of pairs & Cross sectional area of conductor	Shape of conductor	Pie. of strands & Diameter of wire	Twisted thickness of insulation	Insulation thickness of Screen	Approx. Overall diameter	Approx. weight of cable	Max. DC resistance of conductor at 20°C
Pairs x mm ²	mm	mm / mm	mm	mm	mm	kg/km	Ω/km
INSTRUMENT (OS)							
1P X 0.5	701	19/0.2	0.8	0.8	8.2	60	39.7
2P X 0.5	701	16/0.2	0.8	0.8	7.5	60	39.7
5P X 0.5	701	16/0.2	0.8	1.1	12.4	200	39.7
10P X 0.5	701	16/0.2	0.8	1.2	16.9	340	39.7
15P X 0.5	701	16/0.2	0.8	1.2	19.3	480	39.7
1P X 0.75	701	24/0.2	0.8	0.8	8.7	75	29.5
2P X 0.75	701	24/0.2	0.8	0.8	8.2	100	29.5
5P X 0.75	701	24/0.2	0.8	1.1	13.6	250	29.5
10P X 0.75	701	24/0.2	0.8	1.2	18.4	450	29.5
15P X 0.75	701	24/0.2	0.8	1.2	21.1	600	29.5
1P X 1.5	701	7/0.53	0.8	0.8	7.5	100	12.9
2P X 1.5	701	7/0.53	0.8	0.8	8.1	150	12.9
5P X 1.5	701	7/0.53	0.8	1.2	15.8	300	12.9
10P X 1.5	701	7/0.53	0.8	1.2	20.8	670	12.9
15P X 1.5	701	7/0.53	0.8	1.2	24.8	970	12.9