

## JIS C 3606 Standard Medium Voltage Cables Single Core APPLICATIONS

This product is used for an underground distribution cable for the lead-out parts of substations of general power distribution lines including high-capacity power distribution, cable tunnels, pipelines, directly embedded types, raising parts of telephone poles, etc.

### STANDARD

JIS C 3606-2003 (6600V)

### CONSTRUCTION

Conductor	Plain annealed copper with JCS C 3102.
Conductor Screen	The conductor screen consists of an extruded layer of non metallic, semi-conducting compound firmly bonded to the insulation to exclude all air voids.
Insulation:	XLPE.
Insulation Screen:	The insulation screen consists of an extruded layer of non metallic, semiconducting compound extruded over the insulation. The extruded semi-conducting layer shall consist of bonded or cold strippable semi-conducting compound capable of removal for jointing or terminating. As an option, a semi-conducting tape may be applied over the extruded semi-conducting layer as a bedding for the metallic layer. The minimum thickness is 0.5 mm. The screen is tightly fitted to the insulation to exclude all air voids and can be easily hand stripped on site.
Metallic Screen:	By sufficiently winding of a soft copper tape on an external semiconductive layer, each core shall be shielded, the tape is wound with overlapping about one-sixth of its width or the equivalent of that.
Over Sheath:	Black, PVC or PE.

### PHYSICAL PROPERTIES

Operating Temperature	up to 120°C
Cold Resistant:	-15 ± 0.5 °C

SINGLE CORE 6600V (TEST VOLTAGE=17KV)

### DIMENSIONAL DATA

NOM.CROSS-SECTION AREA	NOM. THICKNESS	INSULATION	NOM. THICKNESS	SHEATH	APPROX. DIAMETER	OVERALL	APPROX. WEIGHT		
							CV	CE	CE/F
MM <sup>2</sup>	MM		MM		MM		KG/KM		
8	4.0		1.8		16.5		365	325	355
14	4.0		1.8		17.5		460	425	450
22	4.0		1.9		18.5		525	475	510
38	4.0		2.0		21		730	685	715
60	4.0		2.0		23		1070	1010	1050
100	4.0		2.1		26		1470	1390	1450
150	4.0		2.3		29		1980	1890	1950

200	4.5	2.4	32	2550	2450	2520
250	4.5	2.5	35	3070	2950	3030
325	4.5	2.6	38	3750	3630	3710
400	4.5	2.7	40	4640	4410	4570
500	4.5	2.8	43	5550	5370	5490
600	5.0	2.9	47	6870	6710	6820
800	5.0	3.1	52	9000	8800	8940
1000	5.0	3.3	56	11000	10760	10930

**ELECTRICAL DATA**

NOM. CROSS-SECTION	MAX. CONDUCTOR RESISTANCE (20 °C)	MIN. INSULATION RESISTANCE	ELECTROSTATIC CAPACITANCE
MM <sup>2</sup>	Ω/KM	MΩ-KM	MF/ KM
8	2.29	2500	0.21
14	1.31	2500	0.24
22	0.832	2500	0.27
38	0.481	2500	0.32
60	0.305	2500	0.37
100	0.183	1500	0.45
150	0.122	1500	0.52
200	0.0915	1500	0.51
250	0.0739	1500	0.55
325	0.0568	1500	0.61
400	0.0462	1000	0.68
500	0.0369	900	0.74
600	0.0308	900	0.71
800	0.0231	800	0.81
1000	0.0185	800	0.85

**Note:** C:XLPE  
V:Vinyl  
E:PE  
F:Flame retardant