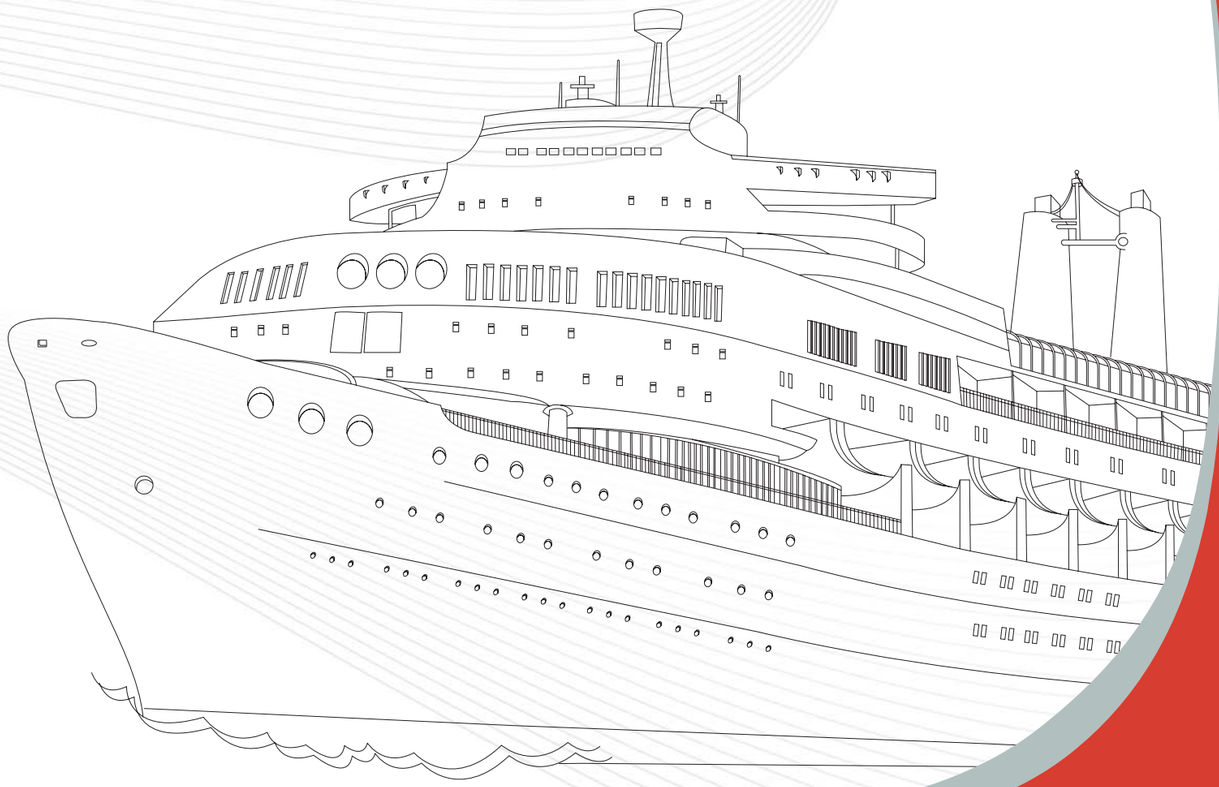
JS Cable

www.jscable.co.kr

Halogen Free Shipboard Cables

(XLPE Insulation / SHF1 Sheath Cables)

IEC 60092-350 / IEC 60092-353 / IEC 60092-376



■ Products & Systems of JS Cable


Marine & Offshore Cables


Rubber & Specialty Cables


Electric Cables


Data Cables


Copper Rod

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JS Cable

The Innovative Challenger For
Your Dream

P r e f a c e

A new beginning to deliver the dream of customers - JS Cable

A new name of endless innovation and creative ideas - JS Cable

Since its foundation in 1968, JS Cable has been a pioneer in rubber cable industry and known for its excellence in quality and technology.

JS Cable is a world class leader in shipboard and offshore cable products with state of art facilities. We pursue global standard quality, safety and health and environment with full compliance of ISO 9001 (Quality Management), ISO 14001 (Environment Management) and OHSAS 18001 (Safety and Healthy working Environment Management) standards.

We continue to strive for a pace setter in cable manufacturing industry by implementing state of art R&D Center, best practice HR Program, and a new ERP initiative.

A mission to deliver light, energy, and information to global communities - JS Cable

A great leap into the future, relentless pursue for customer value - JS Cable

With our customers, we devote our full attention to make a better world tomorrow.

■ Products & Systems of JS Cable

Marine & Offshore Cables

Rubber & Specialty Cables

Electric Cables

Data Cables

Copper Rod

We supply our best quality products to markets all over the world

Company **Profile**

1968 The company incorporated in the name of YONHAP CABLE Co., Ltd.

1978 Designated as a specialized factory for shipbuilding materials & equipment.

1984 Stock listed for public subscription.

1987 Moved to new constructed factory site located in Cheon-An.

1990 Communication cable plant completed in Mokchon.

1992 Operation of the copper smelting furnace plant commenced.

1995 ISO 9001 certification acquired (LRQA).

1996 Corporate name changed to Jinro Industries Co., Ltd.

2000 LAN cable production line started its commercial operation.

2001 TL (Telecommunication Leadership) 9000 certification acquired (LRQA).
ETL for IEEE 45 Type P Off-shore and Marine structure cables acquired.
UL for UL 1309 Type Off-shore and Marine structure cables acquired.

2002 Korean World Class Products Award for Marine Cable in 2002.
(Minister of Commerce, Industry and Energy Republic of Korea)

2004 ISO 14001 certification acquired (LRQA).

2005 OHSAS 18001 certification acquired (LRQA).
The corporate governance of the company acquired by LS Group.

2007 Corporate name changed to JS Cable Co., Ltd.

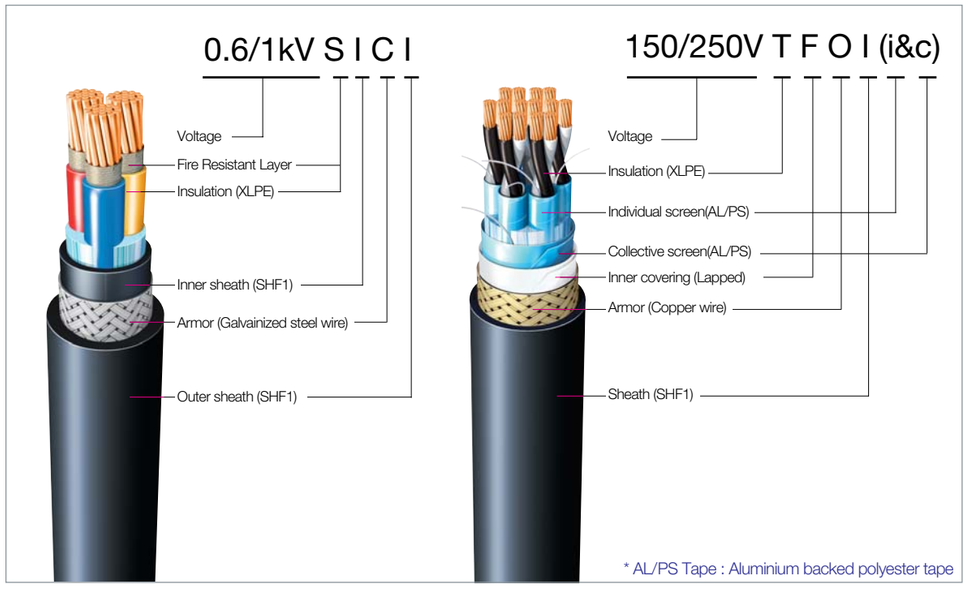


Cotents

Cable Designation

Materials	1st Letter	2nd Letter	3rd Letter	4th Letter
	Insulation	Inner covering (Inner sheath)	Armor	Sheath (Outer sheath)
XLPE	T			
MGT+XLPE	S			
Halogen Free Tape		F		
Halogen Free Thermoplastic compound (= SHF1)		I		I
Galvanized Steel Wire			C	
Copper Wire			O	
Non		X	X	
Added Abbreviation (Screen Method)				
(i)	Individual Screen			
(c)	Collective Screen			
(i & c)	Individual & Collective Screen			

Example



* AL/PS Tape : Aluminium backed polyester tape

Normal

Flame Retardant Power & Control Cable (Armored)

0.6/1kV TICI

Cable Designation

- 0.6 / 1kV TICI
- 0.6 / 1kV TIOI

Application

- This cable is designed for power, lighting & control circuits up to 0.6/1kV.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 353
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armour	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color : Black

Core Identification

No. of Cores	Method 1 (without ground core)	Method 2 (with ground core)
1C	Black	-
2C	Red, Black	-
3C / 3G	Red, Yellow, Blue	Red, Black, Green/Yellow
4C / 4G	Red, Yellow, Blue, Black	Red, Yellow, Blue, Green/Yellow
5C / 5G	Black number on White insulation	Red, Yellow, Blue, Black, Green/Yellow
6 and over (6G and over)	Black number on White insulation	Black number on White insulation, Green/Yellow

Note) 1. The letter "G" means that the cable has the ground core.
2. The other color scheme may be applicable when purchaser required.

0.6/1kV TICI (0.6/1kV TIOI)

No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
1	1.5	7 / 0.53	1.59	0.7	5.5	9.2	0.9	130	12.2	23
	2.5	7 / 0.67	2.01	0.7	5.9	9.6	0.9	150	7.56	40
	4	7 / 0.85	2.55	0.7	6.5	10.2	0.9	180	4.70	51
	6	7 / 1.04	3.12	0.7	7.0	10.7	0.9	200	3.11	52
	10	7 / 1.35	4.05	0.7	8.0	11.7	1.0	260	1.84	72
	16	7 / 1.70	5.10	0.7	9.2	12.9	1.0	340	1.16	96
	25	7 / 2.14	6.42	0.9	10.9	14.6	1.1	470	0.734	127
	35	7 / 2.52	7.56	0.9	12.3	16.0	1.1	590	0.529	157
	50	19 / 1.78	8.90	1.0	13.8	17.5	1.2	740	0.391	196
	70	19 / 2.14	10.70	1.1	16.0	19.7	1.3	990	0.270	242
	95	19 / 2.52	12.60	1.1	18.1	22.0	1.4	1,300	0.195	293
	120	37 / 2.03	14.21	1.2	20.1	24.0	1.5	1,590	0.154	339
	150	37 / 2.25	15.75	1.4	22.3	26.4	1.6	1,920	0.126	389
	185	37 / 2.52	17.64	1.6	24.5	28.8	1.7	2,340	0.100	444
	240	61 / 2.25	20.25	1.7	27.8	32.1	1.8	2,990	0.0762	522
	300	61 / 2.52	22.68	1.8	30.6	35.6	1.9	3,760	0.0607	601
2	1.5	7 / 0.53	1.59	0.7	8.9	12.6	1.0	220	12.2	20
	2.5	7 / 0.67	2.01	0.7	9.7	13.4	1.0	250	7.56	26
	4	7 / 0.85	2.55	0.7	10.9	14.6	1.1	310	4.70	34
	6	7 / 1.04	3.12	0.7	12.1	15.8	1.1	380	3.11	44
	10	7 / 1.35	4.05	0.7	14.3	18.0	1.2	510	1.84	61
	16	7 / 1.70	5.10	0.7	16.3	20.0	1.3	680	1.16	82
	25	7 / 2.14	6.42	0.9	20.1	24.0	1.5	980	0.734	108
	35	7 / 2.52	7.56	0.9	22.7	26.8	1.6	1,260	0.529	133
	50	19 / 1.78	8.90	1.0	25.9	30.2	1.7	1,620	0.391	167
	70	19 / 2.14	10.70	1.1	30.3	35.3	1.9	2,280	0.270	206
	95	19 / 2.52	12.60	1.1	34.3	39.5	2.1	2,970	0.195	249
	120	37 / 2.03	14.21	1.2	38.1	43.5	2.2	3,630	0.154	288
	150	37 / 2.25	15.75	1.4	42.5	48.1	2.4	4,410	0.126	331
	185	37 / 2.52	17.64	1.6	47.3	53.1	2.6	5,410	0.100	377
	240	61 / 2.25	20.25	1.7	53.5	59.7	2.9	6,920	0.0762	444
	300	61 / 2.52	22.68	1.8	59.1	65.5	3.1	8,470	0.0607	511
3	1.5	7 / 0.53	1.59	0.7	9.4	13.1	1.0	250	12.2	16
	2.5	7 / 0.67	2.01	0.7	10.3	14.0	1.1	290	7.56	21
	4	7 / 0.85	2.55	0.7	11.8	15.5	1.1	370	4.70	28
	6	7 / 1.04	3.12	0.7	12.8	16.5	1.2	450	3.11	36
	10	7 / 1.35	4.05	0.7	15.2	18.9	1.3	630	1.84	50
	16	7 / 1.70	5.10	0.7	17.5	21.4	1.4	870	1.16	67
	25	7 / 2.14	6.42	0.9	21.4	25.5	1.5	1,260	0.734	89
	35	7 / 2.52	7.56	0.9	24.2	28.3	1.6	1,630	0.529	110
	50	19 / 1.78	8.90	1.0	27.8	32.1	1.8	2,120	0.391	137
	70	19 / 2.14	10.70	1.1	32.3	37.5	2.0	2,990	0.270	169
	95	19 / 2.52	12.60	1.1	36.8	42.2	2.2	3,950	0.195	205
	120	37 / 2.03	14.21	1.2	41.1	46.7	2.4	4,880	0.154	237
	150	37 / 2.25	15.75	1.4	45.6	51.4	2.6	5,910	0.126	272
	185	37 / 2.52	17.64	1.6	50.8	56.8	2.8	7,280	0.100	311
	240	61 / 2.25	20.25	1.7	57.6	64.0	3.1	9,420	0.0762	365
	300	61 / 2.52	22.68	1.8	63.6	70.2	3.3	11,560	0.0607	421

Cable Type 0.6/1kV TICI (0.6/1kV TIOI)

No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
4	1.5	7 / 0.53	1.59	0.7	10.2	13.9	1.1	280	12.2	16
	2.5	7 / 0.67	2.01	0.7	11.4	15.1	1.1	350	7.56	21
	4	7 / 0.85	2.55	0.7	12.8	16.5	1.2	440	4.70	28
	6	7 / 1.04	3.12	0.7	14.2	17.9	1.2	550	3.11	36
	10	7 / 1.35	4.05	0.7	16.9	20.8	1.3	780	1.84	50
	16	7 / 1.70	5.10	0.7	19.5	23.4	1.4	1,080	1.16	67
	25	7 / 2.14	6.42	0.9	23.8	27.9	1.6	1,580	0.734	89
	35	7 / 2.52	7.56	0.9	26.9	31.2	1.7	2,070	0.529	110
	50	19 / 1.78	8.90	1.0	30.9	35.9	1.9	2,770	0.391	137
	70	19 / 2.14	10.70	1.1	36.1	41.5	2.2	3,830	0.270	169
	95	19 / 2.52	12.60	1.1	41.1	46.7	2.4	5,060	0.195	205
	120	37 / 2.03	14.21	1.2	45.7	51.5	2.6	6,230	0.154	237
	150	37 / 2.25	15.75	1.4	50.9	56.9	2.8	7,590	0.126	272
	185	37 / 2.52	17.64	1.6	56.6	63.0	3.0	9,390	0.100	311
	240	61 / 2.25	20.25	1.7	64.2	71.0	3.3	12,100	0.0762	365
	300	61 / 2.52	22.68	1.8	71.1	78.1	3.6	14,920	0.0607	421
5	1.5	7 / 0.53	1.59	0.7	11.1	14.8	1.1	320	12.2	12
6		7 / 0.53	1.59	0.7	12.3	16.0	1.1	370		12
7		7 / 0.53	1.59	0.7	12.3	16.0	1.1	380		11
8		7 / 0.53	1.59	0.7	13.3	17.0	1.2	430		11
9		7 / 0.53	1.59	0.7	14.5	18.2	1.2	480		10
10		7 / 0.53	1.59	0.7	15.7	19.4	1.3	530		10
12		7 / 0.53	1.59	0.7	16.2	19.9	1.3	580		9
14		7 / 0.53	1.59	0.7	17.2	21.1	1.3	650		9
15		7 / 0.53	1.59	0.7	17.7	21.6	1.4	680		9
16		7 / 0.53	1.59	0.7	18.1	22.0	1.4	710		8
19		7 / 0.53	1.59	0.7	19.1	23.0	1.4	790		8
20		7 / 0.53	1.59	0.7	19.9	23.8	1.5	840		8
24		7 / 0.53	1.59	0.7	22.7	26.8	1.6	1,020		7
27		7 / 0.53	1.59	0.7	23.2	27.3	1.6	1,080		7
30		7 / 0.53	1.59	0.7	24.0	28.1	1.6	1,160		7
37		7 / 0.53	1.59	0.7	26.1	30.4	1.7	1,370		7
5	2.5	7 / 0.67	2.01	0.7	12.4	16.1	1.1	400	7.56	17
6		7 / 0.67	2.01	0.7	13.5	17.2	1.2	450		17
7		7 / 0.67	2.01	0.7	13.5	17.2	1.2	470		15
8		7 / 0.67	2.01	0.7	14.8	18.5	1.2	540		15
9		7 / 0.67	2.01	0.7	15.9	19.6	1.3	590		14
10		7 / 0.67	2.01	0.7	17.5	21.4	1.4	680		13
12		7 / 0.67	2.01	0.7	18.1	22.0	1.4	750		12
14		7 / 0.67	2.01	0.7	19.0	22.9	1.4	830		12
15		7 / 0.67	2.01	0.7	19.7	23.6	1.4	880		11
16		7 / 0.67	2.01	0.7	20.2	24.1	1.5	920		11
19		7 / 0.67	2.01	0.7	21.3	25.4	1.5	1,040		11
20		7 / 0.67	2.01	0.7	21.9	26.0	1.5	1,090		10
24		7 / 0.67	2.01	0.7	25.3	29.6	1.7	1,340		10
27		7 / 0.67	2.01	0.7	25.9	30.2	1.7	1,430		9
30		7 / 0.67	2.01	0.7	26.8	31.1	1.7	1,540		9
37		7 / 0.67	2.01	0.7	29.1	33.6	1.8	1,830		9

Normal

Fire Resistance
Power & Control Cable (Armored)

0.6/1kV SICI

Cable Designation

- 0.6/1kV SICI
- 0.6/1kV SIOI

Application

- This cable is designed for power, lighting & control circuits up to 0.6/1kV.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 353
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Fire Resistance : IEC 60331 (750 ℃ or 1000 ℃)
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica / Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color : Black

Core Identification

No. of Cores	Method 1 (without ground core)	Method 2 (with ground core)
1C	Black	-
2C	Red, Black	-
3C / 3G	Red, Yellow, Blue	Red, Black, Green/Yellow
4C / 4G	Red, Yellow, Blue, Black	Red, Yellow, Blue, Green/Yellow
5C / 5G	Black number on White insulation	Red, Yellow, Blue, Black, Green/Yellow
6 and over (6G and over)	Black number on White insulation	Black number on White insulation, Green/Yellow

Note) 1. The letter "G" means that the cable has the ground core.
2. The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 0.6/1kV SICI (0.6/1kV SIOI)

No. of Cores	Conductor: Nominal Area	Conductor: Strand	Conductor: Dia.	Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter: Nominal	Overall Diameter: Tolerance	Cable Weight	Conductor Resistance (at 20℃)(max.)	Current Ratings (at 45℃)
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
1	1.5	7 / 0.53	1.59	0.7	6.1	9.8	0.9	150	12.2	23
	2.5	7 / 0.67	2.01	0.7	6.5	10.2	0.9	170	7.56	40
	4	7 / 0.85	2.55	0.7	7.1	10.8	0.9	190	4.70	51
	6	7 / 1.04	3.12	0.7	7.6	11.3	1.0	220	3.11	52
	10	7 / 1.35	4.05	0.7	8.8	12.5	1.0	290	1.84	72
	16	7 / 1.70	5.10	0.7	9.8	13.5	1.0	360	1.16	96
	25	7 / 2.14	6.42	0.9	11.7	15.4	1.1	500	0.734	127
	35	7 / 2.52	7.56	0.9	12.9	16.6	1.2	620	0.529	157
	50	19 / 1.78	8.90	1.0	14.6	18.3	1.2	770	0.391	196
	70	19 / 2.14	10.70	1.1	16.8	20.7	1.3	1,040	0.270	242
	95	19 / 2.52	12.60	1.1	18.7	22.6	1.4	1,330	0.195	293
	120	37 / 2.03	14.21	1.2	20.7	24.8	1.5	1,630	0.154	339
	150	37 / 2.25	15.75	1.4	22.9	27.0	1.6	1,960	0.126	389
	185	37 / 2.52	17.64	1.6	25.3	29.6	1.7	2,400	0.100	444
	240	61 / 2.25	20.25	1.7	28.4	32.7	1.8	3,030	0.0762	522
	300	61 / 2.52	22.68	1.8	31.2	36.2	1.9	3,800	0.0607	601
2	1.5	7 / 0.53	1.59	0.7	10.1	13.8	1.1	250	12.2	20
	2.5	7 / 0.67	2.01	0.7	10.9	14.6	1.1	290	7.56	26
	4	7 / 0.85	2.55	0.7	12.3	16.0	1.1	350	4.70	34
	6	7 / 1.04	3.12	0.7	13.3	17.0	1.2	420	3.11	44
	10	7 / 1.35	4.05	0.7	15.5	19.2	1.3	560	1.84	61
	16	7 / 1.70	5.10	0.7	17.7	21.6	1.4	740	1.16	82
	25	7 / 2.14	6.42	0.9	21.3	25.4	1.5	1,050	0.734	108
	35	7 / 2.52	7.56	0.9	23.9	28.0	1.6	1,320	0.529	133
	50	19 / 1.78	8.90	1.0	27.1	31.4	1.8	1,680	0.391	167
	70	19 / 2.14	10.70	1.1	31.5	36.5	2.0	2,360	0.270	206
	95	19 / 2.52	12.60	1.1	35.7	40.9	2.1	3,070	0.195	249
	120	37 / 2.03	14.21	1.2	39.5	44.9	2.3	3,740	0.154	288
	150	37 / 2.25	15.75	1.4	43.9	49.5	2.5	4,530	0.126	331
	185	37 / 2.52	17.64	1.6	48.5	54.5	2.7	5,540	0.100	377
	240	61 / 2.25	20.25	1.7	54.9	61.1	2.9	7,070	0.0762	444
	300	61 / 2.52	22.68	1.8	60.5	67.1	3.2	8,660	0.0607	511
3	1.5	7 / 0.53	1.59	0.7	10.7	14.4	1.1	280	12.2	16
	2.5	7 / 0.67	2.01	0.7	11.8	15.5	1.1	340	7.56	21
	4	7 / 0.85	2.55	0.7	13.0	16.7	1.2	410	4.70	28
	6	7 / 1.04	3.12	0.7	14.3	18.0	1.2	500	3.11	36
	10	7 / 1.35	4.05	0.7	16.5	20.4	1.3	690	1.84	50
	16	7 / 1.70	5.10	0.7	18.8	22.7	1.4	920	1.16	67
	25	7 / 2.14	6.42	0.9	22.9	27.0	1.6	1,340	0.734	89
	35	7 / 2.52	7.56	0.9	25.7	30.0	1.7	1,730	0.529	110
	50	19 / 1.78	8.90	1.0	29.1	33.6	1.8	2,210	0.391	137
	70	19 / 2.14	10.70	1.1	33.8	39.0	2.1	3,100	0.270	169
	95	19 / 2.52	12.60	1.1	38.1	43.5	2.2	4,050	0.195	205
	120	37 / 2.03	14.21	1.2	42.4	48.0	2.4	4,990	0.154	237
	150	37 / 2.25	15.75	1.4	47.1	52.9	2.6	6,060	0.126	272
	185	37 / 2.52	17.64	1.6	52.2	58.4	2.8	7,460	0.100	311
	240	61 / 2.25	20.25	1.7	58.9	65.3	3.1	9,520	0.0762	365
	300	61 / 2.52	22.68	1.8	64.9	71.7	3.4	11,710	0.0607	421

Cable Type 0.6/1kV SICI (0.6/1kV SIOI)

No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
4	1.5	7 / 0.53	1.59	0.7	11.9	15.6	1.1	330	12.2	16
	2.5	7 / 0.67	2.01	0.7	12.8	16.5	1.2	390	7.56	21
	4	7 / 0.85	2.55	0.7	14.5	18.2	1.2	500	4.70	28
	6	7 / 1.04	3.12	0.7	15.7	19.4	1.3	600	3.11	36
	10	7 / 1.35	4.05	0.7	18.3	22.2	1.4	840	1.84	50
	16	7 / 1.70	5.10	0.7	20.9	25.0	1.5	1,160	1.16	67
	25	7 / 2.14	6.42	0.9	25.4	29.7	1.7	1,690	0.734	89
	35	7 / 2.52	7.56	0.9	28.5	33.0	1.8	2,180	0.529	110
	50	19 / 1.78	8.90	1.0	32.3	37.5	2.0	2,890	0.391	137
	70	19 / 2.14	10.70	1.1	37.6	43.0	2.2	3,940	0.270	169
	95	19 / 2.52	12.60	1.1	42.6	48.2	2.4	5,190	0.195	205
	120	37 / 2.03	14.21	1.2	47.3	53.1	2.6	6,400	0.154	237
	150	37 / 2.25	15.75	1.4	52.5	58.7	2.8	7,800	0.126	272
	185	37 / 2.52	17.64	1.6	58.2	64.6	3.1	9,590	0.100	311
	240	61 / 2.25	20.25	1.7	65.8	72.6	3.4	12,320	0.0762	365
	300	61 / 2.52	22.68	1.8	72.5	79.7	3.7	15,160	0.0607	421
5	1.5	7 / 0.53	1.59	0.7	13.0	16.7	1.2	380	12.2	12
6		7 / 0.53	1.59	0.7	14.3	18.0	1.2	440		12
7		7 / 0.53	1.59	0.7	14.3	18.0	1.2	460		11
8		7 / 0.53	1.59	0.7	15.5	19.2	1.3	510		11
9		7 / 0.53	1.59	0.7	16.8	20.7	1.3	580		10
10		7 / 0.53	1.59	0.7	18.3	22.2	1.4	650		10
12		7 / 0.53	1.59	0.7	18.9	22.8	1.4	710		9
14		7 / 0.53	1.59	0.7	20.1	24.0	1.5	790		9
15		7 / 0.53	1.59	0.7	20.6	24.7	1.5	830		9
16		7 / 0.53	1.59	0.7	21.2	25.3	1.5	870		8
19		7 / 0.53	1.59	0.7	22.5	26.6	1.6	980		8
20		7 / 0.53	1.59	0.7	23.2	27.3	1.6	1,030		8
24		7 / 0.53	1.59	0.7	26.5	30.8	1.7	1,250		7
27		7 / 0.53	1.59	0.7	27.1	31.4	1.8	1,330		7
30		7 / 0.53	1.59	0.7	28.3	32.6	1.8	1,440		7
37		7 / 0.53	1.59	0.7	30.7	35.7	1.9	1,780		7
5	2.5	7 / 0.67	2.01	0.7	14.2	17.9	1.2	460	7.56	17
6		7 / 0.67	2.01	0.7	15.5	19.2	1.3	520		17
7		7 / 0.67	2.01	0.7	15.5	19.2	1.3	550		15
8		7 / 0.67	2.01	0.7	17.0	20.9	1.3	630		15
9		7 / 0.67	2.01	0.7	18.3	22.2	1.4	700		14
10		7 / 0.67	2.01	0.7	20.1	24.0	1.5	790		13
12		7 / 0.67	2.01	0.7	20.8	24.9	1.5	880		12
14		7 / 0.67	2.01	0.7	21.8	25.9	1.5	970		12
15		7 / 0.67	2.01	0.7	22.6	26.7	1.6	1,030		11
16		7 / 0.67	2.01	0.7	23.2	27.3	1.6	1,080		11
19		7 / 0.67	2.01	0.7	24.5	28.8	1.7	1,220		11
20		7 / 0.67	2.01	0.7	25.5	29.8	1.7	1,290		10
24		7 / 0.67	2.01	0.7	29.1	33.6	1.8	1,570		10
27		7 / 0.67	2.01	0.7	29.8	34.3	1.9	1,680		9
30		7 / 0.67	2.01	0.7	31.0	36.0	1.9	1,900		9
37		7 / 0.67	2.01	0.7	33.7	38.9	2.1	2,250		9

Normal

Flame Retardant
Telephone & Instrument Cable (Non Screen)

150/250V TICI

Cable Designation

- 150/250V TICI
- 150/250V TIOI

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 150/250V TICI (150/250V TIOI)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	6.9	10.6	0.9	160	26.0	100	0.72
2 P		7 / 0.37	1.11	0.5	8.1	11.8	1.0	200			
3 P		7 / 0.37	1.11	0.5	11.4	15.1	1.1	290			
4 P		7 / 0.37	1.11	0.5	12.1	15.8	1.1	330			
5 P		7 / 0.37	1.11	0.5	13.5	17.2	1.2	380			
6 P		7 / 0.37	1.11	0.5	14.6	18.3	1.2	430			
7 P		7 / 0.37	1.11	0.5	14.6	18.3	1.2	450			
8 P		7 / 0.37	1.11	0.5	15.5	19.2	1.3	490			
10 P		7 / 0.37	1.11	0.5	17.6	21.5	1.4	600			
12 P		7 / 0.37	1.11	0.5	18.3	22.2	1.4	650			
14 P		7 / 0.37	1.11	0.5	18.9	22.8	1.4	700			
16 P		7 / 0.37	1.11	0.5	20.5	24.6	1.5	800			
19 P		7 / 0.37	1.11	0.5	21.9	26.0	1.5	900			
20 P		7 / 0.37	1.11	0.5	21.9	26.0	1.5	910			
24 P		7 / 0.37	1.11	0.5	25.3	29.6	1.7	1,130			
30 P		7 / 0.37	1.11	0.5	27.6	31.9	1.8	1,330			
1 P	1.0	7 / 0.43	1.29	0.5	7.3	11.0	0.9	170	19.2	110	0.72
2 P		7 / 0.43	1.29	0.5	8.7	12.4	1.0	220			
3 P		7 / 0.43	1.29	0.5	12.2	15.9	1.1	330			
4 P		7 / 0.43	1.29	0.5	12.9	16.6	1.2	370			
5 P		7 / 0.43	1.29	0.5	14.6	18.3	1.2	440			
6 P		7 / 0.43	1.29	0.5	15.6	19.3	1.3	490			
7 P		7 / 0.43	1.29	0.5	15.6	19.3	1.3	510			
8 P		7 / 0.43	1.29	0.5	16.8	20.7	1.3	580			
10 P		7 / 0.43	1.29	0.5	18.8	22.7	1.4	680			
12 P		7 / 0.43	1.29	0.5	19.8	23.7	1.4	760			
14 P		7 / 0.43	1.29	0.5	20.5	24.6	1.5	840			
16 P		7 / 0.43	1.29	0.5	22.2	26.3	1.6	950			
19 P		7 / 0.43	1.29	0.5	23.7	27.8	1.6	1,060			
20 P		7 / 0.43	1.29	0.5	23.7	27.8	1.6	1,080			
24 P		7 / 0.43	1.29	0.5	27.2	31.5	1.8	1,330			
30 P		7 / 0.43	1.29	0.5	29.6	34.1	1.9	1,580			
1 P	1.5	7 / 0.53	1.59	0.6	8.3	12.0	1.0	200	12.8	120	0.66
2 P		7 / 0.53	1.59	0.6	9.9	13.6	1.0	270			
3 P		7 / 0.53	1.59	0.6	14.2	17.9	1.2	420			
4 P		7 / 0.53	1.59	0.6	15.1	18.8	1.3	470			
5 P		7 / 0.53	1.59	0.6	17.1	21.0	1.3	580			
6 P		7 / 0.53	1.59	0.6	18.3	22.2	1.4	650			
7 P		7 / 0.53	1.59	0.6	18.3	22.2	1.4	680			
8 P		7 / 0.53	1.59	0.6	19.7	23.6	1.4	760			
10 P		7 / 0.53	1.59	0.6	22.3	26.4	1.6	930			
12 P		7 / 0.53	1.59	0.6	23.2	27.3	1.6	1,030			
14 P		7 / 0.53	1.59	0.6	24.1	28.2	1.6	1,120			
16 P		7 / 0.53	1.59	0.6	26.1	30.4	1.7	1,280			
19 P		7 / 0.53	1.59	0.6	28.1	32.4	1.8	1,460			
20 P		7 / 0.53	1.59	0.6	28.1	32.4	1.8	1,490			
24 P		7 / 0.53	1.59	0.6	32.2	37.4	2.0	1,930			
30 P		7 / 0.53	1.59	0.6	35.1	40.3	2.1	2,270			
1 P	2.5	7 / 0.67	2.01	0.6	9.3	13.0	1.0	240	7.86	135	0.65
2 P		7 / 0.67	2.01	0.6	10.9	14.6	1.1	330			
3 P		7 / 0.67	2.01	0.6	15.7	19.4	1.3	510			
4 P		7 / 0.67	2.01	0.6	16.9	20.8	1.3	610			
5 P		7 / 0.67	2.01	0.6	18.9	22.8	1.4	720			
6 P		7 / 0.67	2.01	0.6	20.5	24.6	1.5	840			
7 P		7 / 0.67	2.01	0.6	20.5	24.6	1.5	880			
8 P		7 / 0.67	2.01	0.6	21.9	26.0	1.5	980			
10 P		7 / 0.67	2.01	0.6	25.0	29.3	1.7	1,220			
12 P		7 / 0.67	2.01	0.6	26.0	30.3	1.7	1,350			
14 P		7 / 0.67	2.01	0.6	27.0	31.3	1.8	1,490			
16 P		7 / 0.67	2.01	0.6	29.3	33.8	1.9	1,700			
19 P		7 / 0.67	2.01	0.6	31.5	36.5	2.0	2,030			
20 P		7 / 0.67	2.01	0.6	31.5	36.5	2.0	2,080			
24 P		7 / 0.67	2.01	0.6	36.3	41.7	2.2	2,570			
30 P		7 / 0.67	2.01	0.6	39.6	45.0	2.3	3,050			

Cable Type 150/250V TICI (150/250V TIOI)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	7.3	11.0	0.9	170	26.0	100	0.72
2 T		7 / 0.37	1.11	0.5	11.6	15.3	1.1	300			
3 T		7 / 0.37	1.11	0.5	12.3	16.0	1.1	340			
4 T		7 / 0.37	1.11	0.5	13.5	17.2	1.2	400			
5 T		7 / 0.37	1.11	0.5	15.1	18.8	1.3	470			
6 T		7 / 0.37	1.11	0.5	17.1	21.0	1.3	560			
7 T		7 / 0.37	1.11	0.5	17.1	21.0	1.3	590			
8 T		7 / 0.37	1.11	0.5	18.3	22.2	1.4	650			
10 T		7 / 0.37	1.11	0.5	20.8	24.9	1.5	800			
12 T		7 / 0.37	1.11	0.5	21.9	26.0	1.5	880			
14 T		7 / 0.37	1.11	0.5	23.0	27.1	1.6	980			
16 T		7 / 0.37	1.11	0.5	24.4	28.5	1.6	1,080			
19 T		7 / 0.37	1.11	0.5	25.9	30.2	1.7	1,220			
20 T		7 / 0.37	1.11	0.5	26.9	31.2	1.7	1,290			
24 T		7 / 0.37	1.11	0.5	29.4	33.9	1.9	1,510			
30 T		7 / 0.37	1.11	0.5	32.6	37.8	2.0	1,910			
1 T	1.0	7 / 0.43	1.29	0.5	7.7	11.4	1.0	190	19.2	110	0.72
2 T		7 / 0.43	1.29	0.5	12.4	16.1	1.1	340			
3 T		7 / 0.43	1.29	0.5	13.2	16.9	1.2	390			
4 T		7 / 0.43	1.29	0.5	14.6	18.3	1.2	460			
5 T		7 / 0.43	1.29	0.5	16.1	19.8	1.3	530			
6 T		7 / 0.43	1.29	0.5	18.3	22.2	1.4	650			
7 T		7 / 0.43	1.29	0.5	18.3	22.2	1.4	680			
8 T		7 / 0.43	1.29	0.5	19.8	23.7	1.4	760			
10 T		7 / 0.43	1.29	0.5	22.5	26.6	1.6	940			
12 T		7 / 0.43	1.29	0.5	23.7	27.8	1.6	1,040			
14 T		7 / 0.43	1.29	0.5	24.9	29.2	1.7	1,170			
16 T		7 / 0.43	1.29	0.5	26.4	30.7	1.7	1,290			
19 T		7 / 0.43	1.29	0.5	28.0	32.3	1.8	1,460			
20 T		7 / 0.43	1.29	0.5	29.1	33.6	1.8	1,550			
24 T		7 / 0.43	1.29	0.5	31.8	36.8	2.0	1,890			
30 T		7 / 0.43	1.29	0.5	35.3	40.5	2.1	2,280			
1 T	1.5	7 / 0.53	1.59	0.6	9.0	12.7	1.0	230	12.8	120	0.66
2 T		7 / 0.53	1.59	0.6	14.5	18.2	1.2	430			
3 T		7 / 0.53	1.59	0.6	15.4	19.1	1.3	500			
4 T		7 / 0.53	1.59	0.6	17.1	21.0	1.3	610			
5 T		7 / 0.53	1.59	0.6	18.9	22.8	1.4	710			
6 T		7 / 0.53	1.59	0.6	21.5	25.6	1.5	870			
7 T		7 / 0.53	1.59	0.6	21.5	25.6	1.5	910			
8 T		7 / 0.53	1.59	0.6	23.2	27.3	1.6	1,030			
10 T		7 / 0.53	1.59	0.6	26.4	30.7	1.7	1,260			
12 T		7 / 0.53	1.59	0.6	28.1	32.4	1.8	1,430			
14 T		7 / 0.53	1.59	0.6	29.3	33.8	1.9	1,590			
16 T		7 / 0.53	1.59	0.6	31.3	36.3	2.0	1,860			
19 T		7 / 0.53	1.59	0.6	33.2	38.4	2.0	2,120			
20 T		7 / 0.53	1.59	0.6	34.5	39.7	2.1	2,240			
24 T		7 / 0.53	1.59	0.6	37.7	43.1	2.2	2,620			
30 T		7 / 0.53	1.59	0.6	42.0	47.6	2.4	3,190			
1 T	2.5	7 / 0.67	2.01	0.6	9.8	13.5	1.0	280	7.86	135	0.65
2 T		7 / 0.67	2.01	0.6	16.0	19.7	1.3	520			
3 T		7 / 0.67	2.01	0.6	17.2	21.1	1.3	640			
4 T		7 / 0.67	2.01	0.6	18.9	22.8	1.4	770			
5 T		7 / 0.67	2.01	0.6	21.2	25.3	1.5	930			
6 T		7 / 0.67	2.01	0.6	24.1	28.2	1.6	1,120			
7 T		7 / 0.67	2.01	0.6	24.1	28.2	1.6	1,190			
8 T		7 / 0.67	2.01	0.6	26.0	30.3	1.7	1,350			
10 T		7 / 0.67	2.01	0.6	29.6	34.1	1.9	1,670			
12 T		7 / 0.67	2.01	0.6	31.5	36.5	2.0	1,990			
14 T		7 / 0.67	2.01	0.6	33.1	38.3	2.0	2,230			
16 T		7 / 0.67	2.01	0.6	35.1	40.3	2.1	2,480			
19 T		7 / 0.67	2.01	0.6	37.2	42.6	2.2	2,830			
20 T		7 / 0.67	2.01	0.6	38.9	44.3	2.3	3,010			
24 T		7 / 0.67	2.01	0.6	42.5	48.1	2.4	3,540			
30 T		7 / 0.67	2.01	0.6	47.3	53.1	2.6	4,320			

Normal

Flame Retardant

Telephone & Instrument Cable (Individual Screen)

150/250V TICI(i)

Cable Designation

- 150/250V TICI(i)
- 150/250V TIOI(i)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 150/250V TICI(i) (150/250V TIOI(i))

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.2	10.9	0.9	170	26.0	100	0.72
2 P		7 / 0.37	1.11	0.5	10.8	14.5	1.1	280			
3 P		7 / 0.37	1.11	0.5	11.8	15.5	1.1	330			
4 P		7 / 0.37	1.11	0.5	12.5	16.2	1.1	370			
5 P		7 / 0.37	1.11	0.5	14.2	17.9	1.2	440			
6 P		7 / 0.37	1.11	0.5	15.2	18.9	1.3	500			
7 P		7 / 0.37	1.11	0.5	15.2	18.9	1.3	520			
8 P		7 / 0.37	1.11	0.5	16.1	19.8	1.3	570			
10 P		7 / 0.37	1.11	0.5	18.3	22.2	1.4	700			
12 P		7 / 0.37	1.11	0.5	19.0	22.9	1.4	770			
14 P		7 / 0.37	1.11	0.5	20.0	23.9	1.5	850			
16 P		7 / 0.37	1.11	0.5	21.4	25.5	1.5	960			
19 P		7 / 0.37	1.11	0.5	23.1	27.2	1.6	1,100			
20 P		7 / 0.37	1.11	0.5	23.1	27.2	1.6	1,120			
24 P		7 / 0.37	1.11	0.5	26.5	30.8	1.7	1,370			
30 P		7 / 0.37	1.11	0.5	28.9	33.4	1.8	1,630			
1 P	1.0	7 / 0.43	1.29	0.5	7.6	11.3	1.0	190	19.2	110	0.69
2 P		7 / 0.43	1.29	0.5	11.7	15.4	1.1	320			
3 P		7 / 0.43	1.29	0.5	12.5	16.2	1.1	370			
4 P		7 / 0.43	1.29	0.5	13.3	17.0	1.2	420			
5 P		7 / 0.43	1.29	0.5	15.1	18.8	1.3	510			
6 P		7 / 0.43	1.29	0.5	16.2	19.9	1.3	570			
7 P		7 / 0.43	1.29	0.5	16.2	19.9	1.3	600			
8 P		7 / 0.43	1.29	0.5	17.4	21.3	1.4	680			
10 P		7 / 0.43	1.29	0.5	19.7	23.6	1.4	820			
12 P		7 / 0.43	1.29	0.5	20.5	24.6	1.5	920			
14 P		7 / 0.43	1.29	0.5	21.3	25.4	1.5	1,010			
16 P		7 / 0.43	1.29	0.5	23.1	27.2	1.6	1,140			
19 P		7 / 0.43	1.29	0.5	24.9	29.2	1.7	1,320			
20 P		7 / 0.43	1.29	0.5	24.9	29.2	1.7	1,350			
24 P		7 / 0.43	1.29	0.5	28.5	33.0	1.8	1,650			
30 P		7 / 0.43	1.29	0.5	31.1	36.1	1.9	2,040			
1 P	1.5	7 / 0.53	1.59	0.6	8.8	12.5	1.0	230	12.8	120	0.66
2 P		7 / 0.53	1.59	0.6	13.4	17.1	1.2	390			
3 P		7 / 0.53	1.59	0.6	14.6	18.3	1.2	460			
4 P		7 / 0.53	1.59	0.6	15.5	19.2	1.3	530			
5 P		7 / 0.53	1.59	0.6	17.6	21.5	1.4	650			
6 P		7 / 0.53	1.59	0.6	18.9	22.8	1.4	740			
7 P		7 / 0.53	1.59	0.6	18.9	22.8	1.4	780			
8 P		7 / 0.53	1.59	0.6	20.3	24.2	1.5	870			
10 P		7 / 0.53	1.59	0.6	23.0	27.1	1.6	1,070			
12 P		7 / 0.53	1.59	0.6	24.0	28.1	1.6	1,190			
14 P		7 / 0.53	1.59	0.6	25.1	29.4	1.7	1,330			
16 P		7 / 0.53	1.59	0.6	27.0	31.3	1.8	1,500			
19 P		7 / 0.53	1.59	0.6	29.1	33.6	1.8	1,730			
20 P		7 / 0.53	1.59	0.6	29.1	33.6	1.8	1,770			
24 P		7 / 0.53	1.59	0.6	33.6	38.8	2.1	2,270			
30 P		7 / 0.53	1.59	0.6	36.6	42.0	2.2	2,700			
1 P	2.5	7 / 0.67	2.01	0.6	9.6	13.3	1.0	260	7.86	135	0.65
2 P		7 / 0.67	2.01	0.6	15.0	18.7	1.2	470			
3 P		7 / 0.67	2.01	0.6	16.0	19.7	1.3	560			
4 P		7 / 0.67	2.01	0.6	17.3	21.2	1.3	680			
5 P		7 / 0.67	2.01	0.6	19.6	23.5	1.4	820			
6 P		7 / 0.67	2.01	0.6	21.1	25.2	1.5	940			
7 P		7 / 0.67	2.01	0.6	21.1	25.2	1.5	1,000			
8 P		7 / 0.67	2.01	0.6	22.7	26.8	1.6	1,130			
10 P		7 / 0.67	2.01	0.6	25.7	30.0	1.7	1,390			
12 P		7 / 0.67	2.01	0.6	26.8	31.1	1.7	1,550			
14 P		7 / 0.67	2.01	0.6	28.0	32.3	1.8	1,730			
16 P		7 / 0.67	2.01	0.6	30.4	35.4	1.9	2,060			
19 P		7 / 0.67	2.01	0.6	32.5	37.7	2.0	2,360			
20 P		7 / 0.67	2.01	0.6	32.5	37.7	2.0	2,420			
24 P		7 / 0.67	2.01	0.6	37.5	42.9	2.2	2,970			
30 P		7 / 0.67	2.01	0.6	41.1	46.7	2.4	3,580			

Cable Type 150/250V TICI(i) (150/250V TIOI(i))

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	7.6	11.3	1.0	190	26.0	100	0.72
2 T		7 / 0.37	1.11	0.5	12.0	15.7	1.1	320			
3 T		7 / 0.37	1.11	0.5	12.7	16.4	1.2	370			
4 T		7 / 0.37	1.11	0.5	14.1	17.8	1.2	440			
5 T		7 / 0.37	1.11	0.5	15.6	19.3	1.3	520			
6 T		7 / 0.37	1.11	0.5	17.7	21.6	1.4	620			
7 T		7 / 0.37	1.11	0.5	17.7	21.6	1.4	650			
8 T		7 / 0.37	1.11	0.5	19.0	22.9	1.4	730			
10 T		7 / 0.37	1.11	0.5	21.6	25.7	1.5	890			
12 T		7 / 0.37	1.11	0.5	23.0	27.1	1.6	1,010			
14 T		7 / 0.37	1.11	0.5	24.0	28.1	1.6	1,110			
16 T		7 / 0.37	1.11	0.5	25.7	30.0	1.7	1,250			
19 T		7 / 0.37	1.11	0.5	27.0	31.3	1.8	1,390			
20 T		7 / 0.37	1.11	0.5	28.3	32.6	1.8	1,490			
24 T		7 / 0.37	1.11	0.5	30.9	35.9	1.9	1,820			
30 T		7 / 0.37	1.11	0.5	34.3	39.5	2.1	2,200			
1 T	1.0	7 / 0.43	1.29	0.5	8.0	11.7	1.0	200	19.2	110	0.69
2 T		7 / 0.43	1.29	0.5	12.7	16.4	1.2	360			
3 T		7 / 0.43	1.29	0.5	13.5	17.2	1.2	420			
4 T		7 / 0.43	1.29	0.5	15.0	18.7	1.2	510			
5 T		7 / 0.43	1.29	0.5	16.8	20.7	1.3	610			
6 T		7 / 0.43	1.29	0.5	18.9	22.8	1.4	720			
7 T		7 / 0.43	1.29	0.5	18.9	22.8	1.4	760			
8 T		7 / 0.43	1.29	0.5	20.5	24.6	1.5	870			
10 T		7 / 0.43	1.29	0.5	23.3	27.4	1.6	1,060			
12 T		7 / 0.43	1.29	0.5	24.6	28.9	1.7	1,200			
14 T		7 / 0.43	1.29	0.5	25.9	30.2	1.7	1,330			
16 T		7 / 0.43	1.29	0.5	27.7	32.0	1.8	1,490			
19 T		7 / 0.43	1.29	0.5	29.1	33.6	1.8	1,690			
20 T		7 / 0.43	1.29	0.5	30.5	35.5	1.9	1,880			
24 T		7 / 0.43	1.29	0.5	33.3	38.5	2.0	2,200			
30 T		7 / 0.43	1.29	0.5	37.0	42.4	2.2	2,660			
1 T	1.5	7 / 0.53	1.59	0.6	9.3	13.0	1.0	250	12.8	120	0.66
2 T		7 / 0.53	1.59	0.6	14.8	18.5	1.2	450			
3 T		7 / 0.53	1.59	0.6	15.8	19.5	1.3	540			
4 T		7 / 0.53	1.59	0.6	17.5	21.4	1.4	660			
5 T		7 / 0.53	1.59	0.6	19.6	23.5	1.4	790			
6 T		7 / 0.53	1.59	0.6	22.3	26.4	1.6	950			
7 T		7 / 0.53	1.59	0.6	22.3	26.4	1.6	1,010			
8 T		7 / 0.53	1.59	0.6	23.9	28.0	1.6	1,120			
10 T		7 / 0.53	1.59	0.6	27.2	31.5	1.8	1,390			
12 T		7 / 0.53	1.59	0.6	29.0	33.5	1.8	1,600			
14 T		7 / 0.53	1.59	0.6	30.5	35.5	1.9	1,860			
16 T		7 / 0.53	1.59	0.6	32.4	37.6	2.0	2,080			
19 T		7 / 0.53	1.59	0.6	34.3	39.5	2.1	2,350			
20 T		7 / 0.53	1.59	0.6	35.9	41.1	2.1	2,500			
24 T		7 / 0.53	1.59	0.6	39.2	44.6	2.3	2,930			
30 T		7 / 0.53	1.59	0.6	43.5	49.1	2.5	3,550			
1 T	2.5	7 / 0.67	2.01	0.6	10.1	13.8	1.1	300	7.86	135	0.65
2 T		7 / 0.67	2.01	0.6	16.3	20.0	1.3	550			
3 T		7 / 0.67	2.01	0.6	17.6	21.5	1.4	690			
4 T		7 / 0.67	2.01	0.6	19.6	23.5	1.4	840			
5 T		7 / 0.67	2.01	0.6	21.7	25.8	1.5	1,010			
6 T		7 / 0.67	2.01	0.6	24.9	29.2	1.7	1,240			
7 T		7 / 0.67	2.01	0.6	24.9	29.2	1.7	1,320			
8 T		7 / 0.67	2.01	0.6	26.7	31.0	1.7	1,470			
10 T		7 / 0.67	2.01	0.6	30.6	35.6	1.9	1,910			
12 T		7 / 0.67	2.01	0.6	32.4	37.6	2.0	2,180			
14 T		7 / 0.67	2.01	0.6	34.0	39.2	2.1	2,440			
16 T		7 / 0.67	2.01	0.6	36.4	41.8	2.2	2,750			
19 T		7 / 0.67	2.01	0.6	38.5	43.9	2.3	3,130			
20 T		7 / 0.67	2.01	0.6	40.1	45.7	2.3	3,320			
24 T		7 / 0.67	2.01	0.6	44.0	49.8	2.5	3,930			
30 T		7 / 0.67	2.01	0.6	48.8	54.8	2.7	4,770			

Normal

Flame Retardant
Telephone & Instrument Cable (Collective Screen)

150/250V TICI(c)

Cable Designation

- 150/250V TICI(c)
- 150/250V TIOI(c)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 150/250V TICI(c) (150/250V TIOI(c))

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.1	10.8	0.9	170	26.0	95	0.72
2 P		7 / 0.37	1.11	0.5	8.1	11.8	1.0	210			
3 P		7 / 0.37	1.11	0.5	11.4	15.1	1.1	310			
4 P		7 / 0.37	1.11	0.5	12.1	15.8	1.1	340			
5 P		7 / 0.37	1.11	0.5	13.5	17.2	1.2	400			
6 P		7 / 0.37	1.11	0.5	14.6	18.3	1.2	450			
7 P		7 / 0.37	1.11	0.5	14.6	18.3	1.2	460			
8 P		7 / 0.37	1.11	0.5	15.5	19.2	1.3	500			
10 P		7 / 0.37	1.11	0.5	17.6	21.5	1.4	610			
12 P		7 / 0.37	1.11	0.5	18.3	22.2	1.4	670			
14 P		7 / 0.37	1.11	0.5	18.9	22.8	1.4	720			
16 P		7 / 0.37	1.11	0.5	20.5	24.6	1.5	820			
19 P		7 / 0.37	1.11	0.5	21.9	26.0	1.5	920			
20 P		7 / 0.37	1.11	0.5	21.9	26.0	1.5	930			
24 P		7 / 0.37	1.11	0.5	25.3	29.6	1.7	1,150			
30 P		7 / 0.37	1.11	0.5	27.6	31.9	1.8	1,350			
1 P	1.0	7 / 0.43	1.29	0.5	7.5	11.2	0.9	180	19.2	100	0.69
2 P		7 / 0.43	1.29	0.5	8.7	12.4	1.0	230			
3 P		7 / 0.43	1.29	0.5	12.2	15.9	1.1	350			
4 P		7 / 0.43	1.29	0.5	12.9	16.6	1.2	380			
5 P		7 / 0.43	1.29	0.5	14.6	18.3	1.2	460			
6 P		7 / 0.43	1.29	0.5	15.6	19.3	1.3	510			
7 P		7 / 0.43	1.29	0.5	15.6	19.3	1.3	530			
8 P		7 / 0.43	1.29	0.5	16.8	20.7	1.3	600			
10 P		7 / 0.43	1.29	0.5	18.8	22.7	1.4	700			
12 P		7 / 0.43	1.29	0.5	19.8	23.7	1.4	780			
14 P		7 / 0.43	1.29	0.5	20.5	24.6	1.5	860			
16 P		7 / 0.43	1.29	0.5	22.2	26.3	1.6	970			
19 P		7 / 0.43	1.29	0.5	23.7	27.8	1.6	1,090			
20 P		7 / 0.43	1.29	0.5	23.7	27.8	1.6	1,110			
24 P		7 / 0.43	1.29	0.5	27.2	31.5	1.8	1,350			
30 P		7 / 0.43	1.29	0.5	29.6	34.1	1.9	1,600			
1 P	1.5	7 / 0.53	1.59	0.6	8.7	12.4	1.0	220	12.8	110	0.66
2 P		7 / 0.53	1.59	0.6	9.9	13.6	1.0	280			
3 P		7 / 0.53	1.59	0.6	14.2	17.9	1.2	430			
4 P		7 / 0.53	1.59	0.6	15.1	18.8	1.3	490			
5 P		7 / 0.53	1.59	0.6	17.1	21.0	1.3	600			
6 P		7 / 0.53	1.59	0.6	18.3	22.2	1.4	670			
7 P		7 / 0.53	1.59	0.6	18.3	22.2	1.4	700			
8 P		7 / 0.53	1.59	0.6	19.7	23.6	1.4	780			
10 P		7 / 0.53	1.59	0.6	22.3	26.4	1.6	950			
12 P		7 / 0.53	1.59	0.6	23.2	27.3	1.6	1,050			
14 P		7 / 0.53	1.59	0.6	24.1	28.2	1.6	1,140			
16 P		7 / 0.53	1.59	0.6	26.1	30.4	1.7	1,310			
19 P		7 / 0.53	1.59	0.6	28.1	32.4	1.8	1,490			
20 P		7 / 0.53	1.59	0.6	28.1	32.4	1.8	1,520			
24 P		7 / 0.53	1.59	0.6	32.2	37.4	2.0	1,960			
30 P		7 / 0.53	1.59	0.6	35.1	40.3	2.1	2,300			
1 P	2.5	7 / 0.67	2.01	0.6	9.5	13.2	1.0	260	7.86	130	0.65
2 P		7 / 0.67	2.01	0.6	10.9	14.6	1.1	340			
3 P		7 / 0.67	2.01	0.6	15.7	19.4	1.3	530			
4 P		7 / 0.67	2.01	0.6	16.9	20.8	1.3	630			
5 P		7 / 0.67	2.01	0.6	18.9	22.8	1.4	740			
6 P		7 / 0.67	2.01	0.6	20.5	24.6	1.5	860			
7 P		7 / 0.67	2.01	0.6	20.5	24.6	1.5	910			
8 P		7 / 0.67	2.01	0.6	21.9	26.0	1.5	1,010			
10 P		7 / 0.67	2.01	0.6	25.0	29.3	1.7	1,250			
12 P		7 / 0.67	2.01	0.6	26.0	30.3	1.7	1,380			
14 P		7 / 0.67	2.01	0.6	27.0	31.3	1.8	1,520			
16 P		7 / 0.67	2.01	0.6	29.3	33.8	1.9	1,730			
19 P		7 / 0.67	2.01	0.6	31.5	36.5	2.0	2,070			
20 P		7 / 0.67	2.01	0.6	31.5	36.5	2.0	2,110			
24 P		7 / 0.67	2.01	0.6	36.3	41.7	2.2	2,610			
30 P		7 / 0.67	2.01	0.6	39.6	45.0	2.3	3,090			

Cable Type 150/250V TICI(c) (150/250V TIOI(c))

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	7.5	11.2	0.9	190	26.0	95	0.72
2 T		7 / 0.37	1.11	0.5	11.6	15.3	1.1	310			
3 T		7 / 0.37	1.11	0.5	12.3	16.0	1.1	350			
4 T		7 / 0.37	1.11	0.5	13.5	17.2	1.2	410			
5 T		7 / 0.37	1.11	0.5	15.1	18.8	1.3	480			
6 T		7 / 0.37	1.11	0.5	17.1	21.0	1.3	580			
7 T		7 / 0.37	1.11	0.5	17.1	21.0	1.3	600			
8 T		7 / 0.37	1.11	0.5	18.3	22.2	1.4	670			
10 T		7 / 0.37	1.11	0.5	20.8	24.9	1.5	820			
12 T		7 / 0.37	1.11	0.5	21.9	26.0	1.5	900			
14 T		7 / 0.37	1.11	0.5	23.0	27.1	1.6	1,000			
16 T		7 / 0.37	1.11	0.5	24.4	28.5	1.6	1,100			
19 T		7 / 0.37	1.11	0.5	25.9	30.2	1.7	1,250			
20 T		7 / 0.37	1.11	0.5	26.9	31.2	1.7	1,310			
24 T		7 / 0.37	1.11	0.5	29.4	33.9	1.9	1,540			
30 T		7 / 0.37	1.11	0.5	32.6	37.8	2.0	1,940			
1 T	1.0	7 / 0.43	1.29	0.5	7.9	11.6	1.0	200	19.2	100	0.69
2 T		7 / 0.43	1.29	0.5	12.4	16.1	1.1	350			
3 T		7 / 0.43	1.29	0.5	13.2	16.9	1.2	400			
4 T		7 / 0.43	1.29	0.5	14.6	18.3	1.2	480			
5 T		7 / 0.43	1.29	0.5	16.1	19.8	1.3	550			
6 T		7 / 0.43	1.29	0.5	18.3	22.2	1.4	670			
7 T		7 / 0.43	1.29	0.5	18.3	22.2	1.4	700			
8 T		7 / 0.43	1.29	0.5	19.8	23.7	1.4	780			
10 T		7 / 0.43	1.29	0.5	22.5	26.6	1.6	960			
12 T		7 / 0.43	1.29	0.5	23.7	27.8	1.6	1,070			
14 T		7 / 0.43	1.29	0.5	24.9	29.2	1.7	1,190			
16 T		7 / 0.43	1.29	0.5	26.4	30.7	1.7	1,320			
19 T		7 / 0.43	1.29	0.5	28.0	32.3	1.8	1,490			
20 T		7 / 0.43	1.29	0.5	29.1	33.6	1.8	1,580			
24 T		7 / 0.43	1.29	0.5	31.8	36.8	2.0	1,920			
30 T		7 / 0.43	1.29	0.5	35.3	40.5	2.1	2,310			
1 T	1.5	7 / 0.53	1.59	0.6	9.2	12.9	1.0	250	12.8	110	0.66
2 T		7 / 0.53	1.59	0.6	14.5	18.2	1.2	440			
3 T		7 / 0.53	1.59	0.6	15.4	19.1	1.3	520			
4 T		7 / 0.53	1.59	0.6	17.1	21.0	1.3	630			
5 T		7 / 0.53	1.59	0.6	18.9	22.8	1.4	730			
6 T		7 / 0.53	1.59	0.6	21.5	25.6	1.5	890			
7 T		7 / 0.53	1.59	0.6	21.5	25.6	1.5	930			
8 T		7 / 0.53	1.59	0.6	23.2	27.3	1.6	1,050			
10 T		7 / 0.53	1.59	0.6	26.4	30.7	1.7	1,290			
12 T		7 / 0.53	1.59	0.6	28.1	32.4	1.8	1,460			
14 T		7 / 0.53	1.59	0.6	29.3	33.8	1.9	1,620			
16 T		7 / 0.53	1.59	0.6	31.3	36.3	2.0	1,890			
19 T		7 / 0.53	1.59	0.6	33.2	38.4	2.0	2,150			
20 T		7 / 0.53	1.59	0.6	34.5	39.7	2.1	2,270			
24 T		7 / 0.53	1.59	0.6	37.7	43.1	2.2	2,660			
30 T		7 / 0.53	1.59	0.6	42.0	47.6	2.4	3,230			
1 T	2.5	7 / 0.67	2.01	0.6	10.0	13.7	1.0	300	7.86	130	0.65
2 T		7 / 0.67	2.01	0.6	16.0	19.7	1.3	540			
3 T		7 / 0.67	2.01	0.6	17.2	21.1	1.3	660			
4 T		7 / 0.67	2.01	0.6	18.9	22.8	1.4	790			
5 T		7 / 0.67	2.01	0.6	21.2	25.3	1.5	950			
6 T		7 / 0.67	2.01	0.6	24.1	28.2	1.6	1,140			
7 T		7 / 0.67	2.01	0.6	24.1	28.2	1.6	1,210			
8 T		7 / 0.67	2.01	0.6	26.0	30.3	1.7	1,380			
10 T		7 / 0.67	2.01	0.6	29.6	34.1	1.9	1,700			
12 T		7 / 0.67	2.01	0.6	31.5	36.5	2.0	2,020			
14 T		7 / 0.67	2.01	0.6	33.1	38.3	2.0	2,260			
16 T		7 / 0.67	2.01	0.6	35.1	40.3	2.1	2,510			
19 T		7 / 0.67	2.01	0.6	37.2	42.6	2.2	2,870			
20 T		7 / 0.67	2.01	0.6	38.9	44.3	2.3	3,050			
24 T		7 / 0.67	2.01	0.6	42.5	48.1	2.4	3,580			
30 T		7 / 0.67	2.01	0.6	47.3	53.1	2.6	4,360			

Normal

Flame Retardant

Telephone & Instrument Cable (Individual & Collective Screen)

150/250V TICI(i & c)

Cable Designation

- 150/250V TICI(i&c)
- 150/250V TIOI(i&c)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 150/250V TICI(i&c) (150/250V TIOI(i&c))

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.1	10.8	0.9	170	26.0	95	0.72
2 P		7 / 0.37	1.11	0.5	11.0	14.7	1.1	290			
3 P		7 / 0.37	1.11	0.5	12.0	15.7	1.1	350			
4 P		7 / 0.37	1.11	0.5	12.7	16.4	1.2	390			
5 P		7 / 0.37	1.11	0.5	14.4	18.1	1.2	460			
6 P		7 / 0.37	1.11	0.5	15.4	19.1	1.3	510			
7 P		7 / 0.37	1.11	0.5	15.4	19.1	1.3	540			
8 P		7 / 0.37	1.11	0.5	16.3	20.0	1.3	590			
10 P		7 / 0.37	1.11	0.5	18.5	22.4	1.4	720			
12 P		7 / 0.37	1.11	0.5	19.2	23.1	1.4	790			
14 P		7 / 0.37	1.11	0.5	20.2	24.1	1.5	870			
16 P		7 / 0.37	1.11	0.5	21.6	25.7	1.5	980			
19 P		7 / 0.37	1.11	0.5	23.3	27.4	1.6	1,120			
20 P		7 / 0.37	1.11	0.5	23.3	27.4	1.6	1,140			
24 P		7 / 0.37	1.11	0.5	26.7	31.0	1.7	1,390			
30 P		7 / 0.37	1.11	0.5	29.1	33.6	1.8	1,660			
1 P	1.0	7 / 0.43	1.29	0.5	7.5	11.2	0.9	180	19.2	100	0.69
2 P		7 / 0.43	1.29	0.5	11.9	15.6	1.1	340			
3 P		7 / 0.43	1.29	0.5	12.7	16.4	1.2	390			
4 P		7 / 0.43	1.29	0.5	13.5	17.2	1.2	440			
5 P		7 / 0.43	1.29	0.5	15.3	19.0	1.3	530			
6 P		7 / 0.43	1.29	0.5	16.4	20.1	1.3	590			
7 P		7 / 0.43	1.29	0.5	16.4	20.1	1.3	620			
8 P		7 / 0.43	1.29	0.5	17.6	21.5	1.4	700			
10 P		7 / 0.43	1.29	0.5	19.9	23.8	1.5	850			
12 P		7 / 0.43	1.29	0.5	20.7	24.8	1.5	950			
14 P		7 / 0.43	1.29	0.5	21.5	25.6	1.5	1,040			
16 P		7 / 0.43	1.29	0.5	23.3	27.4	1.6	1,170			
19 P		7 / 0.43	1.29	0.5	25.1	29.4	1.7	1,350			
20 P		7 / 0.43	1.29	0.5	25.1	29.4	1.7	1,380			
24 P		7 / 0.43	1.29	0.5	28.7	33.2	1.8	1,680			
30 P		7 / 0.43	1.29	0.5	31.3	36.3	2.0	2,070			
1 P	1.5	7 / 0.53	1.59	0.6	8.7	12.4	1.0	220	12.8	110	0.66
2 P		7 / 0.53	1.59	0.6	13.6	17.3	1.2	410			
3 P		7 / 0.53	1.59	0.6	14.8	18.5	1.2	480			
4 P		7 / 0.53	1.59	0.6	15.7	19.4	1.3	550			
5 P		7 / 0.53	1.59	0.6	17.8	21.7	1.4	670			
6 P		7 / 0.53	1.59	0.6	19.1	23.0	1.4	760			
7 P		7 / 0.53	1.59	0.6	19.1	23.0	1.4	800			
8 P		7 / 0.53	1.59	0.6	20.5	24.6	1.5	910			
10 P		7 / 0.53	1.59	0.6	23.2	27.3	1.6	1,100			
12 P		7 / 0.53	1.59	0.6	24.2	28.3	1.6	1,220			
14 P		7 / 0.53	1.59	0.6	25.3	29.6	1.7	1,360			
16 P		7 / 0.53	1.59	0.6	27.2	31.5	1.8	1,530			
19 P		7 / 0.53	1.59	0.6	29.3	33.8	1.9	1,760			
20 P		7 / 0.53	1.59	0.6	29.3	33.8	1.9	1,810			
24 P		7 / 0.53	1.59	0.6	33.8	39.0	2.1	2,310			
30 P		7 / 0.53	1.59	0.6	36.8	42.2	2.2	2,740			
1 P	2.5	7 / 0.67	2.01	0.6	9.5	13.2	1.0	260	7.86	130	0.65
2 P		7 / 0.67	2.01	0.6	15.2	18.9	1.3	500			
3 P		7 / 0.67	2.01	0.6	16.2	19.9	1.3	590			
4 P		7 / 0.67	2.01	0.6	17.5	21.4	1.4	700			
5 P		7 / 0.67	2.01	0.6	19.8	23.7	1.4	840			
6 P		7 / 0.67	2.01	0.6	21.3	25.4	1.5	970			
7 P		7 / 0.67	2.01	0.6	21.3	25.4	1.5	1,030			
8 P		7 / 0.67	2.01	0.6	22.9	27.0	1.6	1,160			
10 P		7 / 0.67	2.01	0.6	25.9	30.2	1.7	1,420			
12 P		7 / 0.67	2.01	0.6	27.0	31.3	1.8	1,590			
14 P		7 / 0.67	2.01	0.6	28.2	32.5	1.8	1,760			
16 P		7 / 0.67	2.01	0.6	30.6	35.6	1.9	2,100			
19 P		7 / 0.67	2.01	0.6	32.7	37.9	2.0	2,400			
20 P		7 / 0.67	2.01	0.6	32.7	37.9	2.0	2,460			
24 P		7 / 0.67	2.01	0.6	37.7	43.1	2.2	3,010			
30 P		7 / 0.67	2.01	0.6	41.3	46.9	2.4	3,630			

Cable Type 150/250V TICI(i&c) (150/250V TIOI(i&c))

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	7.5	11.2	0.9	180	26.0	95	0.72
2 T		7 / 0.37	1.11	0.5	12.2	15.9	1.1	340			
3 T		7 / 0.37	1.11	0.5	12.9	16.6	1.2	390			
4 T		7 / 0.37	1.11	0.5	14.3	18.0	1.2	460			
5 T		7 / 0.37	1.11	0.5	15.8	19.5	1.3	540			
6 T		7 / 0.37	1.11	0.5	17.9	21.8	1.4	650			
7 T		7 / 0.37	1.11	0.5	17.9	21.8	1.4	670			
8 T		7 / 0.37	1.11	0.5	19.2	23.1	1.4	750			
10 T		7 / 0.37	1.11	0.5	21.8	25.9	1.5	920			
12 T		7 / 0.37	1.11	0.5	23.2	27.3	1.6	1,030			
14 T		7 / 0.37	1.11	0.5	24.2	28.3	1.6	1,130			
16 T		7 / 0.37	1.11	0.5	25.9	30.2	1.7	1,280			
19 T		7 / 0.37	1.11	0.5	27.2	31.5	1.8	1,420			
20 T		7 / 0.37	1.11	0.5	28.5	33.0	1.8	1,530			
24 T		7 / 0.37	1.11	0.5	31.1	36.1	1.9	1,850			
30 T		7 / 0.37	1.11	0.5	34.5	39.7	2.1	2,230			
1 T	1.0	7 / 0.43	1.29	0.5	7.9	11.6	1.0	200	19.2	100	0.69
2 T		7 / 0.43	1.29	0.5	12.9	16.6	1.2	380			
3 T		7 / 0.43	1.29	0.5	13.7	17.4	1.2	440			
4 T		7 / 0.43	1.29	0.5	15.2	18.9	1.3	530			
5 T		7 / 0.43	1.29	0.5	17.0	20.9	1.3	640			
6 T		7 / 0.43	1.29	0.5	19.1	23.0	1.4	750			
7 T		7 / 0.43	1.29	0.5	19.1	23.0	1.4	780			
8 T		7 / 0.43	1.29	0.5	20.7	24.8	1.5	890			
10 T		7 / 0.43	1.29	0.5	23.5	27.6	1.6	1,080			
12 T		7 / 0.43	1.29	0.5	25.0	29.3	1.7	1,240			
14 T		7 / 0.43	1.29	0.5	26.1	30.4	1.7	1,360			
16 T		7 / 0.43	1.29	0.5	27.9	32.2	1.8	1,530			
19 T		7 / 0.43	1.29	0.5	29.3	33.8	1.9	1,720			
20 T		7 / 0.43	1.29	0.5	30.7	35.7	1.9	1,910			
24 T		7 / 0.43	1.29	0.5	33.5	38.7	2.0	2,230			
30 T		7 / 0.43	1.29	0.5	37.2	42.6	2.2	2,700			
1 T	1.5	7 / 0.53	1.59	0.6	9.2	12.9	1.0	250	12.8	110	0.66
2 T		7 / 0.53	1.59	0.6	15.0	18.7	1.2	480			
3 T		7 / 0.53	1.59	0.6	16.0	19.7	1.3	560			
4 T		7 / 0.53	1.59	0.6	17.7	21.6	1.4	680			
5 T		7 / 0.53	1.59	0.6	19.8	23.7	1.4	810			
6 T		7 / 0.53	1.59	0.6	22.5	26.6	1.6	980			
7 T		7 / 0.53	1.59	0.6	22.5	26.6	1.6	1,030			
8 T		7 / 0.53	1.59	0.6	24.1	28.2	1.6	1,150			
10 T		7 / 0.53	1.59	0.6	27.6	31.9	1.8	1,430			
12 T		7 / 0.53	1.59	0.6	29.2	33.7	1.8	1,630			
14 T		7 / 0.53	1.59	0.6	30.7	35.7	1.9	1,890			
16 T		7 / 0.53	1.59	0.6	32.6	37.8	2.0	2,110			
19 T		7 / 0.53	1.59	0.6	34.5	39.7	2.1	2,380			
20 T		7 / 0.53	1.59	0.6	36.1	41.5	2.2	2,550			
24 T		7 / 0.53	1.59	0.6	39.4	44.8	2.3	2,970			
30 T		7 / 0.53	1.59	0.6	43.9	49.5	2.5	3,610			
1 T	2.5	7 / 0.67	2.01	0.6	10.0	13.7	1.0	290	7.86	130	0.65
2 T		7 / 0.67	2.01	0.6	16.5	20.4	1.3	590			
3 T		7 / 0.67	2.01	0.6	17.8	21.7	1.4	710			
4 T		7 / 0.67	2.01	0.6	19.8	23.7	1.4	870			
5 T		7 / 0.67	2.01	0.6	21.9	26.0	1.5	1,040			
6 T		7 / 0.67	2.01	0.6	25.1	29.4	1.7	1,270			
7 T		7 / 0.67	2.01	0.6	25.1	29.4	1.7	1,350			
8 T		7 / 0.67	2.01	0.6	26.9	31.2	1.7	1,500			
10 T		7 / 0.67	2.01	0.6	30.8	35.8	1.9	1,950			
12 T		7 / 0.67	2.01	0.6	32.6	37.8	2.0	2,220			
14 T		7 / 0.67	2.01	0.6	34.2	39.4	2.1	2,470			
16 T		7 / 0.67	2.01	0.6	36.6	42.0	2.2	2,800			
19 T		7 / 0.67	2.01	0.6	38.7	44.1	2.3	3,170			
20 T		7 / 0.67	2.01	0.6	40.3	45.9	2.3	3,370			
24 T		7 / 0.67	2.01	0.6	44.2	50.0	2.5	3,980			
30 T		7 / 0.67	2.01	0.6	49.2	55.2	2.7	4,850			

Normal

Fire Resistance Telephone & Instrument Cable (Non Screen)

150/250V SICI

Cable Designation

- 150/250V SICI
- 150/250V SIOI

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Fire Resistance : IEC 60331 (750℃ or 1000℃)
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor	S	Plain (or Tinned), Annealed, Stranded copper wire
Fire Resisting Layer		Mica / Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 150/250V SICI (150/250V SIOI)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.7	11.4	1.0	180	26.0	100	0.72
2 P		7 / 0.37	1.11	0.5	9.2	12.9	1.0	230			
3 P		7 / 0.37	1.11	0.5	12.9	16.6	1.2	340			
4 P		7 / 0.37	1.11	0.5	13.7	17.4	1.2	380			
5 P		7 / 0.37	1.11	0.5	15.5	19.2	1.3	450			
6 P		7 / 0.37	1.11	0.5	16.8	20.7	1.3	520			
7 P		7 / 0.37	1.11	0.5	16.8	20.7	1.3	540			
8 P		7 / 0.37	1.11	0.5	17.9	21.8	1.4	590			
10 P		7 / 0.37	1.11	0.5	20.2	24.1	1.5	710			
12 P		7 / 0.37	1.11	0.5	21.1	25.2	1.5	780			
14 P		7 / 0.37	1.11	0.5	21.9	26.0	1.5	850			
16 P		7 / 0.37	1.11	0.5	23.7	27.8	1.6	950			
19 P		7 / 0.37	1.11	0.5	25.5	29.8	1.7	1,100			
20 P		7 / 0.37	1.11	0.5	25.5	29.8	1.7	1,110			
24 P		7 / 0.37	1.11	0.5	29.2	33.7	1.8	1,360			
30 P		7 / 0.37	1.11	0.5	31.8	36.8	2.0	1,670			
1 P	1.0	7 / 0.43	1.29	0.5	8.1	11.8	1.0	190	19.2	110	0.72
2 P		7 / 0.43	1.29	0.5	9.7	13.4	1.0	250			
3 P		7 / 0.43	1.29	0.5	13.6	17.3	1.2	370			
4 P		7 / 0.43	1.29	0.5	14.7	18.4	1.2	430			
5 P		7 / 0.43	1.29	0.5	16.4	20.1	1.3	500			
6 P		7 / 0.43	1.29	0.5	17.8	21.7	1.4	580			
7 P		7 / 0.43	1.29	0.5	17.8	21.7	1.4	600			
8 P		7 / 0.43	1.29	0.5	19.0	22.9	1.4	670			
10 P		7 / 0.43	1.29	0.5	21.5	25.6	1.5	810			
12 P		7 / 0.43	1.29	0.5	22.6	26.7	1.6	900			
14 P		7 / 0.43	1.29	0.5	23.4	27.5	1.6	980			
16 P		7 / 0.43	1.29	0.5	25.4	29.7	1.7	1,120			
19 P		7 / 0.43	1.29	0.5	27.1	31.4	1.8	1,260			
20 P		7 / 0.43	1.29	0.5	27.1	31.4	1.8	1,280			
24 P		7 / 0.43	1.29	0.5	31.3	36.3	2.0	1,670			
30 P		7 / 0.43	1.29	0.5	34.1	39.3	2.1	1,970			
1 P	1.5	7 / 0.53	1.59	0.6	9.3	13.0	1.0	230	12.8	120	0.66
2 P		7 / 0.53	1.59	0.6	10.9	14.6	1.1	300			
3 P		7 / 0.53	1.59	0.6	15.7	19.4	1.3	470			
4 P		7 / 0.53	1.59	0.6	16.9	20.8	1.3	550			
5 P		7 / 0.53	1.59	0.6	18.9	22.8	1.4	650			
6 P		7 / 0.53	1.59	0.6	20.5	24.6	1.5	750			
7 P		7 / 0.53	1.59	0.6	20.5	24.6	1.5	780			
8 P		7 / 0.53	1.59	0.6	21.9	26.0	1.5	870			
10 P		7 / 0.53	1.59	0.6	25.0	29.3	1.7	1,080			
12 P		7 / 0.53	1.59	0.6	26.0	30.3	1.7	1,180			
14 P		7 / 0.53	1.59	0.6	27.0	31.3	1.8	1,290			
16 P		7 / 0.53	1.59	0.6	29.3	33.8	1.9	1,480			
19 P		7 / 0.53	1.59	0.6	31.5	36.5	2.0	1,770			
20 P		7 / 0.53	1.59	0.6	31.5	36.5	2.0	1,800			
24 P		7 / 0.53	1.59	0.6	36.3	41.7	2.2	2,230			
30 P		7 / 0.53	1.59	0.6	39.6	45.0	2.3	2,630			
1 P	2.5	7 / 0.67	2.01	0.6	10.1	13.8	1.1	270	7.86	135	0.65
2 P		7 / 0.67	2.01	0.6	12.1	15.8	1.1	370			
3 P		7 / 0.67	2.01	0.6	17.4	21.3	1.4	580			
4 P		7 / 0.67	2.01	0.6	18.5	22.4	1.4	670			
5 P		7 / 0.67	2.01	0.6	21.0	25.1	1.5	820			
6 P		7 / 0.67	2.01	0.6	22.7	26.8	1.6	940			
7 P		7 / 0.67	2.01	0.6	22.7	26.8	1.6	990			
8 P		7 / 0.67	2.01	0.6	24.2	28.3	1.6	1,100			
10 P		7 / 0.67	2.01	0.6	27.7	32.0	1.8	1,360			
12 P		7 / 0.67	2.01	0.6	28.8	33.3	1.8	1,530			
14 P		7 / 0.67	2.01	0.6	29.9	34.4	1.9	1,680			
16 P		7 / 0.67	2.01	0.6	32.4	37.6	2.0	2,000			
19 P		7 / 0.67	2.01	0.6	34.9	40.1	2.1	2,290			
20 P		7 / 0.67	2.01	0.6	34.9	40.1	2.1	2,340			
24 P		7 / 0.67	2.01	0.6	40.2	45.8	2.3	2,890			
30 P		7 / 0.67	2.01	0.6	44.1	49.9	2.5	3,470			

Cable Type 150/250V SICI (150/250V SIOI)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	8.1	11.8	1.0	190	26.0	100	0.72
2 T		7 / 0.37	1.11	0.5	13.2	16.9	1.2	350			
3 T		7 / 0.37	1.11	0.5	14.2	17.9	1.2	400			
4 T		7 / 0.37	1.11	0.5	15.5	19.2	1.3	470			
5 T		7 / 0.37	1.11	0.5	17.3	21.2	1.3	560			
6 T		7 / 0.37	1.11	0.5	19.7	23.6	1.4	670			
7 T		7 / 0.37	1.11	0.5	19.7	23.6	1.4	700			
8 T		7 / 0.37	1.11	0.5	21.1	25.2	1.5	780			
10 T		7 / 0.37	1.11	0.5	24.0	28.1	1.6	950			
12 T		7 / 0.37	1.11	0.5	25.5	29.8	1.7	1,080			
14 T		7 / 0.37	1.11	0.5	26.6	30.9	1.7	1,180			
16 T		7 / 0.37	1.11	0.5	28.4	32.7	1.8	1,310			
19 T		7 / 0.37	1.11	0.5	29.9	34.4	1.9	1,470			
20 T		7 / 0.37	1.11	0.5	31.3	36.3	2.0	1,650			
24 T		7 / 0.37	1.11	0.5	34.2	39.4	2.1	1,920			
30 T		7 / 0.37	1.11	0.5	37.9	43.3	2.2	2,310			
1 T	1.0	7 / 0.43	1.29	0.5	8.7	12.4	1.0	220	19.2	110	0.72
2 T		7 / 0.43	1.29	0.5	14.1	17.8	1.2	390			
3 T		7 / 0.43	1.29	0.5	15.0	18.7	1.2	450			
4 T		7 / 0.43	1.29	0.5	16.4	20.1	1.3	520			
5 T		7 / 0.43	1.29	0.5	18.4	22.3	1.4	630			
6 T		7 / 0.43	1.29	0.5	20.9	25.0	1.5	770			
7 T		7 / 0.43	1.29	0.5	20.9	25.0	1.5	800			
8 T		7 / 0.43	1.29	0.5	22.6	26.7	1.6	900			
10 T		7 / 0.43	1.29	0.5	25.7	30.0	1.7	1,110			
12 T		7 / 0.43	1.29	0.5	27.1	31.4	1.8	1,240			
14 T		7 / 0.43	1.29	0.5	28.5	33.0	1.8	1,380			
16 T		7 / 0.43	1.29	0.5	30.4	35.4	1.9	1,620			
19 T		7 / 0.43	1.29	0.5	32.0	37.2	2.0	1,820			
20 T		7 / 0.43	1.29	0.5	33.5	38.7	2.0	1,930			
24 T		7 / 0.43	1.29	0.5	36.6	42.0	2.2	2,260			
30 T		7 / 0.43	1.29	0.5	40.6	46.2	2.3	2,720			
1 T	1.5	7 / 0.53	1.59	0.6	9.8	13.5	1.0	260	12.8	120	0.66
2 T		7 / 0.53	1.59	0.6	16.0	19.7	1.3	480			
3 T		7 / 0.53	1.59	0.6	17.2	21.1	1.3	580			
4 T		7 / 0.53	1.59	0.6	18.9	22.8	1.4	680			
5 T		7 / 0.53	1.59	0.6	21.2	25.3	1.5	830			
6 T		7 / 0.53	1.59	0.6	24.1	28.2	1.6	990			
7 T		7 / 0.53	1.59	0.6	24.1	28.2	1.6	1,040			
8 T		7 / 0.53	1.59	0.6	26.0	30.3	1.7	1,180			
10 T		7 / 0.53	1.59	0.6	29.6	34.1	1.9	1,460			
12 T		7 / 0.53	1.59	0.6	31.5	36.5	2.0	1,730			
14 T		7 / 0.53	1.59	0.6	33.1	38.3	2.0	1,940			
16 T		7 / 0.53	1.59	0.6	35.1	40.3	2.1	2,140			
19 T		7 / 0.53	1.59	0.6	37.2	42.6	2.2	2,430			
20 T		7 / 0.53	1.59	0.6	38.9	44.3	2.3	2,590			
24 T		7 / 0.53	1.59	0.6	42.5	48.1	2.4	3,030			
30 T		7 / 0.53	1.59	0.6	47.3	53.1	2.6	3,680			
1 T	2.5	7 / 0.67	2.01	0.6	10.7	14.4	1.1	300	7.86	135	0.65
2 T		7 / 0.67	2.01	0.6	17.7	21.6	1.4	590			
3 T		7 / 0.67	2.01	0.6	18.9	22.8	1.4	710			
4 T		7 / 0.67	2.01	0.6	21.0	25.1	1.5	870			
5 T		7 / 0.67	2.01	0.6	23.5	27.6	1.6	1,040			
6 T		7 / 0.67	2.01	0.6	26.7	31.0	1.7	1,270			
7 T		7 / 0.67	2.01	0.6	26.7	31.0	1.7	1,340			
8 T		7 / 0.67	2.01	0.6	28.8	33.3	1.8	1,530			
10 T		7 / 0.67	2.01	0.6	33.0	38.2	2.0	1,990			
12 T		7 / 0.67	2.01	0.6	34.9	40.1	2.1	2,240			
14 T		7 / 0.67	2.01	0.6	36.6	42.0	2.2	2,500			
16 T		7 / 0.67	2.01	0.6	39.1	44.5	2.3	2,810			
19 T		7 / 0.67	2.01	0.6	41.4	47.0	2.4	3,200			
20 T		7 / 0.67	2.01	0.6	43.1	48.7	2.4	3,380			
24 T		7 / 0.67	2.01	0.6	47.3	53.1	2.6	3,990			
30 T		7 / 0.67	2.01	0.6	52.6	58.8	2.9	4,890			

Normal

Fire Resistance Telephone & Instrument Cable (Individual Screen)

150/250V SICI(i)

Cable Designation

- 150/250V SICI(i)
- 150/250V SIOI(i)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Fire Resistance : IEC 60331 (750℃ or 1000℃)
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica / Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 150/250V SICI(i) (150/250V SIOI(i))

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	8.0	11.7	1.0	190	26.0	100	0.72
2 P		7 / 0.37	1.11	0.5	12.4	16.1	1.1	330			
3 P		7 / 0.37	1.11	0.5	13.2	16.9	1.2	370			
4 P		7 / 0.37	1.11	0.5	14.3	18.0	1.2	430			
5 P		7 / 0.37	1.11	0.5	16.0	19.7	1.3	510			
6 P		7 / 0.37	1.11	0.5	17.4	21.3	1.4	590			
7 P		7 / 0.37	1.11	0.5	17.4	21.3	1.4	620			
8 P		7 / 0.37	1.11	0.5	18.5	22.4	1.4	680			
10 P		7 / 0.37	1.11	0.5	21.0	25.1	1.5	830			
12 P		7 / 0.37	1.11	0.5	21.8	25.9	1.5	910			
14 P		7 / 0.37	1.11	0.5	22.9	27.0	1.6	1,000			
16 P		7 / 0.37	1.11	0.5	24.6	28.9	1.7	1,130			
19 P		7 / 0.37	1.11	0.5	26.5	30.8	1.7	1,290			
20 P		7 / 0.37	1.11	0.5	26.5	30.8	1.7	1,320			
24 P		7 / 0.37	1.11	0.5	30.6	35.6	1.9	1,710			
30 P		7 / 0.37	1.11	0.5	33.4	38.6	2.0	2,030			
1 P	1.0	7 / 0.43	1.29	0.5	8.4	12.1	1.0	210	19.2	110	0.72
2 P		7 / 0.43	1.29	0.5	13.1	16.8	1.2	360			
3 P		7 / 0.43	1.29	0.5	14.2	17.9	1.2	430			
4 P		7 / 0.43	1.29	0.5	15.1	18.8	1.3	490			
5 P		7 / 0.43	1.29	0.5	17.1	21.0	1.3	590			
6 P		7 / 0.43	1.29	0.5	18.4	22.3	1.4	670			
7 P		7 / 0.43	1.29	0.5	18.4	22.3	1.4	700			
8 P		7 / 0.43	1.29	0.5	19.8	23.7	1.4	790			
10 P		7 / 0.43	1.29	0.5	22.4	26.5	1.6	960			
12 P		7 / 0.43	1.29	0.5	23.3	27.4	1.6	1,060			
14 P		7 / 0.43	1.29	0.5	24.2	28.3	1.6	1,160			
16 P		7 / 0.43	1.29	0.5	26.3	30.6	1.7	1,330			
19 P		7 / 0.43	1.29	0.5	28.3	32.6	1.8	1,520			
20 P		7 / 0.43	1.29	0.5	28.3	32.6	1.8	1,550			
24 P		7 / 0.43	1.29	0.5	32.5	37.7	2.0	2,000			
30 P		7 / 0.43	1.29	0.5	35.4	40.6	2.1	2,360			
1 P	1.5	7 / 0.53	1.59	0.6	9.6	13.3	1.0	250	12.8	120	0.66
2 P		7 / 0.53	1.59	0.6	15.0	18.7	1.2	440			
3 P		7 / 0.53	1.59	0.6	16.0	19.7	1.3	510			
4 P		7 / 0.53	1.59	0.6	17.3	21.2	1.3	610			
5 P		7 / 0.53	1.59	0.6	19.6	23.5	1.4	740			
6 P		7 / 0.53	1.59	0.6	21.1	25.2	1.5	840			
7 P		7 / 0.53	1.59	0.6	21.1	25.2	1.5	890			
8 P		7 / 0.53	1.59	0.6	22.7	26.8	1.6	1,000			
10 P		7 / 0.53	1.59	0.6	25.7	30.0	1.7	1,220			
12 P		7 / 0.53	1.59	0.6	26.8	31.1	1.7	1,360			
14 P		7 / 0.53	1.59	0.6	28.0	32.3	1.8	1,500			
16 P		7 / 0.53	1.59	0.6	30.4	35.4	1.9	1,800			
19 P		7 / 0.53	1.59	0.6	32.5	37.7	2.0	2,050			
20 P		7 / 0.53	1.59	0.6	32.5	37.7	2.0	2,090			
24 P		7 / 0.53	1.59	0.6	37.5	42.9	2.2	2,580			
30 P		7 / 0.53	1.59	0.6	41.1	46.7	2.4	3,090			
1 P	2.5	7 / 0.67	2.01	0.6	10.4	14.1	1.1	290	7.86	135	0.65
2 P		7 / 0.67	2.01	0.6	16.3	20.0	1.3	520			
3 P		7 / 0.67	2.01	0.6	17.7	21.6	1.4	640			
4 P		7 / 0.67	2.01	0.6	18.9	22.8	1.4	740			
5 P		7 / 0.67	2.01	0.6	21.5	25.6	1.5	910			
6 P		7 / 0.67	2.01	0.6	23.3	27.4	1.6	1,050			
7 P		7 / 0.67	2.01	0.6	23.3	27.4	1.6	1,110			
8 P		7 / 0.67	2.01	0.6	25.0	29.3	1.7	1,260			
10 P		7 / 0.67	2.01	0.6	28.4	32.7	1.8	1,540			
12 P		7 / 0.67	2.01	0.6	29.6	34.1	1.9	1,740			
14 P		7 / 0.67	2.01	0.6	31.0	36.0	1.9	2,010			
16 P		7 / 0.67	2.01	0.6	33.5	38.7	2.0	2,290			
19 P		7 / 0.67	2.01	0.6	36.1	41.5	2.2	2,650			
20 P		7 / 0.67	2.01	0.6	36.1	41.5	2.2	2,710			
24 P		7 / 0.67	2.01	0.6	41.6	47.2	2.4	3,330			
30 P		7 / 0.67	2.01	0.6	45.4	51.2	2.5	3,980			

Cable Type 150/250V SICI(i) (150/250V SIOI(i))

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	8.4	12.1	1.0	210	26.0	100	0.72
2 T		7 / 0.37	1.11	0.5	13.5	17.2	1.2	370			
3 T		7 / 0.37	1.11	0.5	14.5	18.2	1.2	430			
4 T		7 / 0.37	1.11	0.5	16.0	19.7	1.3	510			
5 T		7 / 0.37	1.11	0.5	17.9	21.8	1.4	610			
6 T		7 / 0.37	1.11	0.5	20.3	24.2	1.5	730			
7 T		7 / 0.37	1.11	0.5	20.3	24.2	1.5	760			
8 T		7 / 0.37	1.11	0.5	21.8	25.9	1.5	860			
10 T		7 / 0.37	1.11	0.5	25.0	29.3	1.7	1,070			
12 T		7 / 0.37	1.11	0.5	26.4	30.7	1.7	1,200			
14 T		7 / 0.37	1.11	0.5	27.7	32.0	1.8	1,320			
16 T		7 / 0.37	1.11	0.5	29.5	34.0	1.9	1,480			
19 T		7 / 0.37	1.11	0.5	31.2	36.2	1.9	1,740			
20 T		7 / 0.37	1.11	0.5	32.5	37.7	2.0	1,860			
24 T		7 / 0.37	1.11	0.5	35.7	40.9	2.1	2,170			
30 T		7 / 0.37	1.11	0.5	39.6	45.0	2.3	2,610			
1 T	1.0	7 / 0.43	1.29	0.5	9.0	12.7	1.0	230	19.2	110	0.72
2 T		7 / 0.43	1.29	0.5	14.4	18.1	1.2	420			
3 T		7 / 0.43	1.29	0.5	15.4	19.1	1.3	490			
4 T		7 / 0.43	1.29	0.5	17.1	21.0	1.3	600			
5 T		7 / 0.43	1.29	0.5	18.9	22.8	1.4	700			
6 T		7 / 0.43	1.29	0.5	21.5	25.6	1.5	850			
7 T		7 / 0.43	1.29	0.5	21.5	25.6	1.5	890			
8 T		7 / 0.43	1.29	0.5	23.3	27.4	1.6	1,000			
10 T		7 / 0.43	1.29	0.5	26.5	30.8	1.7	1,230			
12 T		7 / 0.43	1.29	0.5	28.2	32.5	1.8	1,400			
14 T		7 / 0.43	1.29	0.5	29.4	33.9	1.9	1,550			
16 T		7 / 0.43	1.29	0.5	31.5	36.5	2.0	1,820			
19 T		7 / 0.43	1.29	0.5	33.3	38.5	2.0	2,060			
20 T		7 / 0.43	1.29	0.5	34.7	39.9	2.1	2,170			
24 T		7 / 0.43	1.29	0.5	37.9	43.3	2.2	2,550			
30 T		7 / 0.43	1.29	0.5	42.3	47.9	2.4	3,100			
1 T	1.5	7 / 0.53	1.59	0.6	10.1	13.8	1.1	270	12.8	120	0.66
2 T		7 / 0.53	1.59	0.6	16.3	20.0	1.3	510			
3 T		7 / 0.53	1.59	0.6	17.6	21.5	1.4	620			
4 T		7 / 0.53	1.59	0.6	19.6	23.5	1.4	750			
5 T		7 / 0.53	1.59	0.6	21.7	25.8	1.5	890			
6 T		7 / 0.53	1.59	0.6	24.9	29.2	1.7	1,090			
7 T		7 / 0.53	1.59	0.6	24.9	29.2	1.7	1,150			
8 T		7 / 0.53	1.59	0.6	26.7	31.0	1.7	1,280			
10 T		7 / 0.53	1.59	0.6	30.6	35.6	1.9	1,680			
12 T		7 / 0.53	1.59	0.6	32.4	37.6	2.0	1,900			
14 T		7 / 0.53	1.59	0.6	34.0	39.2	2.1	2,110			
16 T		7 / 0.53	1.59	0.6	36.4	41.8	2.2	2,380			
19 T		7 / 0.53	1.59	0.6	38.5	43.9	2.3	2,680			
20 T		7 / 0.53	1.59	0.6	40.1	45.7	2.3	2,850			
24 T		7 / 0.53	1.59	0.6	44.0	49.8	2.5	3,370			
30 T		7 / 0.53	1.59	0.6	48.8	54.8	2.7	4,070			
1 T	2.5	7 / 0.67	2.01	0.6	11.0	14.7	1.1	320	7.86	135	0.65
2 T		7 / 0.67	2.01	0.6	18.1	22.0	1.4	630			
3 T		7 / 0.67	2.01	0.6	19.5	23.4	1.4	770			
4 T		7 / 0.67	2.01	0.6	21.4	25.5	1.5	930			
5 T		7 / 0.67	2.01	0.6	24.0	28.1	1.6	1,120			
6 T		7 / 0.67	2.01	0.6	27.3	31.6	1.8	1,360			
7 T		7 / 0.67	2.01	0.6	27.3	31.6	1.8	1,440			
8 T		7 / 0.67	2.01	0.6	29.5	34.0	1.9	1,650			
10 T		7 / 0.67	2.01	0.6	33.8	39.0	2.1	2,140			
12 T		7 / 0.67	2.01	0.6	36.0	41.4	2.2	2,450			
14 T		7 / 0.67	2.01	0.6	37.6	43.0	2.2	2,710			
16 T		7 / 0.67	2.01	0.6	40.2	45.8	2.3	3,070			
19 T		7 / 0.67	2.01	0.6	42.5	48.1	2.4	3,470			
20 T		7 / 0.67	2.01	0.6	44.5	50.3	2.5	3,720			
24 T		7 / 0.67	2.01	0.6	48.6	54.6	2.7	4,370			
30 T		7 / 0.67	2.01	0.6	54.2	60.4	2.9	5,330			

Normal

Fire Resistance

Telephone & Instrument Cable (Collective Screen)

150/250V SICI(c)

Cable Designation

- 150/250V SICI(c)
- 150/250V SIOI(c)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Fire Resistance : IEC 60331 (750℃ or 1000℃)
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain (or Tinned), Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica / Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

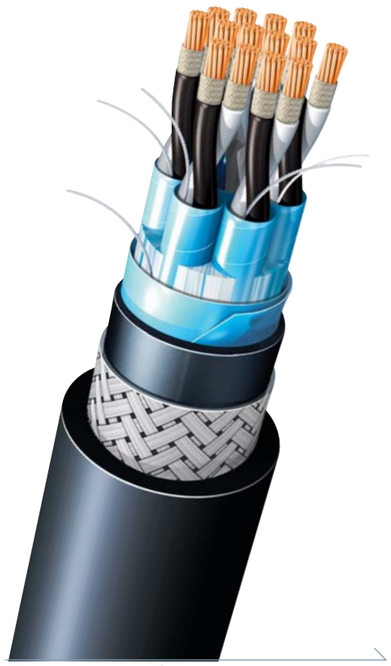
* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 150/250V SICI(c) (150/250V SIOI(c))

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.9	11.6	1.0	190	26.0	95	0.72
2 P		7 / 0.37	1.11	0.5	9.2	12.9	1.0	240			
3 P		7 / 0.37	1.11	0.5	12.9	16.6	1.2	350			
4 P		7 / 0.37	1.11	0.5	13.7	17.4	1.2	390			
5 P		7 / 0.37	1.11	0.5	15.5	19.2	1.3	470			
6 P		7 / 0.37	1.11	0.5	16.8	20.7	1.3	540			
7 P		7 / 0.37	1.11	0.5	16.8	20.7	1.3	550			
8 P		7 / 0.37	1.11	0.5	17.9	21.8	1.4	610			
10 P		7 / 0.37	1.11	0.5	20.2	24.1	1.5	720			
12 P		7 / 0.37	1.11	0.5	21.1	25.2	1.5	800			
14 P		7 / 0.37	1.11	0.5	21.9	26.0	1.5	870			
16 P		7 / 0.37	1.11	0.5	23.7	27.8	1.6	980			
19 P		7 / 0.37	1.11	0.5	25.5	29.8	1.7	1,120			
20 P		7 / 0.37	1.11	0.5	25.5	29.8	1.7	1,130			
24 P		7 / 0.37	1.11	0.5	29.2	33.7	1.8	1,390			
30 P		7 / 0.37	1.11	0.5	31.8	36.8	2.0	1,700			
1 P	1.0	7 / 0.43	1.29	0.5	8.3	12.0	1.0	200	19.2	100	0.69
2 P		7 / 0.43	1.29	0.5	9.7	13.4	1.0	260			
3 P		7 / 0.43	1.29	0.5	13.6	17.3	1.2	390			
4 P		7 / 0.43	1.29	0.5	14.7	18.4	1.2	450			
5 P		7 / 0.43	1.29	0.5	16.4	20.1	1.3	520			
6 P		7 / 0.43	1.29	0.5	17.8	21.7	1.4	600			
7 P		7 / 0.43	1.29	0.5	17.8	21.7	1.4	620			
8 P		7 / 0.43	1.29	0.5	19.0	22.9	1.4	690			
10 P		7 / 0.43	1.29	0.5	21.5	25.6	1.5	840			
12 P		7 / 0.43	1.29	0.5	22.6	26.7	1.6	930			
14 P		7 / 0.43	1.29	0.5	23.4	27.5	1.6	1,000			
16 P		7 / 0.43	1.29	0.5	25.4	29.7	1.7	1,140			
19 P		7 / 0.43	1.29	0.5	27.1	31.4	1.8	1,280			
20 P		7 / 0.43	1.29	0.5	27.1	31.4	1.8	1,310			
24 P		7 / 0.43	1.29	0.5	31.3	36.3	2.0	1,700			
30 P		7 / 0.43	1.29	0.5	34.1	39.3	2.1	2,000			
1 P	1.5	7 / 0.53	1.59	0.6	9.5	13.2	1.0	250	12.8	110	0.66
2 P		7 / 0.53	1.59	0.6	10.9	14.6	1.1	310			
3 P		7 / 0.53	1.59	0.6	15.7	19.4	1.3	490			
4 P		7 / 0.53	1.59	0.6	16.9	20.8	1.3	570			
5 P		7 / 0.53	1.59	0.6	18.9	22.8	1.4	670			
6 P		7 / 0.53	1.59	0.6	20.5	24.6	1.5	770			
7 P		7 / 0.53	1.59	0.6	20.5	24.6	1.5	810			
8 P		7 / 0.53	1.59	0.6	21.9	26.0	1.5	890			
10 P		7 / 0.53	1.59	0.6	25.0	29.3	1.7	1,100			
12 P		7 / 0.53	1.59	0.6	26.0	30.3	1.7	1,210			
14 P		7 / 0.53	1.59	0.6	27.0	31.3	1.8	1,320			
16 P		7 / 0.53	1.59	0.6	29.3	33.8	1.9	1,510			
19 P		7 / 0.53	1.59	0.6	31.5	36.5	2.0	1,790			
20 P		7 / 0.53	1.59	0.6	31.5	36.5	2.0	1,830			
24 P		7 / 0.53	1.59	0.6	36.3	41.7	2.2	2,270			
30 P		7 / 0.53	1.59	0.6	39.6	45.0	2.3	2,660			
1 P	2.5	7 / 0.67	2.01	0.6	10.3	14.0	1.1	280	7.86	130	0.65
2 P		7 / 0.67	2.01	0.6	12.1	15.8	1.1	380			
3 P		7 / 0.67	2.01	0.6	17.4	21.3	1.4	610			
4 P		7 / 0.67	2.01	0.6	18.5	22.4	1.4	690			
5 P		7 / 0.67	2.01	0.6	21.0	25.1	1.5	850			
6 P		7 / 0.67	2.01	0.6	22.7	26.8	1.6	960			
7 P		7 / 0.67	2.01	0.6	22.7	26.8	1.6	1,010			
8 P		7 / 0.67	2.01	0.6	24.2	28.3	1.6	1,120			
10 P		7 / 0.67	2.01	0.6	27.7	32.0	1.8	1,390			
12 P		7 / 0.67	2.01	0.6	28.8	33.3	1.8	1,560			
14 P		7 / 0.67	2.01	0.6	29.9	34.4	1.9	1,710			
16 P		7 / 0.67	2.01	0.6	32.4	37.6	2.0	2,030			
19 P		7 / 0.67	2.01	0.6	34.9	40.1	2.1	2,320			
20 P		7 / 0.67	2.01	0.6	34.9	40.1	2.1	2,370			
24 P		7 / 0.67	2.01	0.6	40.2	45.8	2.3	2,930			
30 P		7 / 0.67	2.01	0.6	44.1	49.9	2.5	3,510			

Cable Type 150/250V SICI(c) (150/250V SIOI(c))

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	8.3	12.0	1.0	210	26.0	95	0.72
2 T		7 / 0.37	1.11	0.5	13.2	16.9	1.2	360			
3 T		7 / 0.37	1.11	0.5	14.2	17.9	1.2	420			
4 T		7 / 0.37	1.11	0.5	15.5	19.2	1.3	480			
5 T		7 / 0.37	1.11	0.5	17.3	21.2	1.3	580			
6 T		7 / 0.37	1.11	0.5	19.7	23.6	1.4	690			
7 T		7 / 0.37	1.11	0.5	19.7	23.6	1.4	710			
8 T		7 / 0.37	1.11	0.5	21.1	25.2	1.5	800			
10 T		7 / 0.37	1.11	0.5	24.0	28.1	1.6	970			
12 T		7 / 0.37	1.11	0.5	25.5	29.8	1.7	1,100			
14 T		7 / 0.37	1.11	0.5	26.6	30.9	1.7	1,200			
16 T		7 / 0.37	1.11	0.5	28.4	32.7	1.8	1,340			
19 T		7 / 0.37	1.11	0.5	29.9	34.4	1.9	1,500			
20 T		7 / 0.37	1.11	0.5	31.3	36.3	2.0	1,680			
24 T		7 / 0.37	1.11	0.5	34.2	39.4	2.1	1,950			
30 T		7 / 0.37	1.11	0.5	37.9	43.3	2.2	2,340			
1 T	1.0	7 / 0.43	1.29	0.5	8.9	12.6	1.0	230	19.2	100	0.69
2 T		7 / 0.43	1.29	0.5	14.1	17.8	1.2	410			
3 T		7 / 0.43	1.29	0.5	15.0	18.7	1.2	470			
4 T		7 / 0.43	1.29	0.5	16.4	20.1	1.3	540			
5 T		7 / 0.43	1.29	0.5	18.4	22.3	1.4	650			
6 T		7 / 0.43	1.29	0.5	20.9	25.0	1.5	790			
7 T		7 / 0.43	1.29	0.5	20.9	25.0	1.5	820			
8 T		7 / 0.43	1.29	0.5	22.6	26.7	1.6	930			
10 T		7 / 0.43	1.29	0.5	25.7	30.0	1.7	1,140			
12 T		7 / 0.43	1.29	0.5	27.1	31.4	1.8	1,260			
14 T		7 / 0.43	1.29	0.5	28.5	33.0	1.8	1,410			
16 T		7 / 0.43	1.29	0.5	30.4	35.4	1.9	1,650			
19 T		7 / 0.43	1.29	0.5	32.0	37.2	2.0	1,850			
20 T		7 / 0.43	1.29	0.5	33.5	38.7	2.0	1,970			
24 T		7 / 0.43	1.29	0.5	36.6	42.0	2.2	2,300			
30 T		7 / 0.43	1.29	0.5	40.6	46.2	2.3	2,760			
1 T	1.5	7 / 0.53	1.59	0.6	10.0	13.7	1.0	270	12.8	110	0.66
2 T		7 / 0.53	1.59	0.6	16.0	19.7	1.3	500			
3 T		7 / 0.53	1.59	0.6	17.2	21.1	1.3	600			
4 T		7 / 0.53	1.59	0.6	18.9	22.8	1.4	700			
5 T		7 / 0.53	1.59	0.6	21.2	25.3	1.5	850			
6 T		7 / 0.53	1.59	0.6	24.1	28.2	1.6	1,010			
7 T		7 / 0.53	1.59	0.6	24.1	28.2	1.6	1,060			
8 T		7 / 0.53	1.59	0.6	26.0	30.3	1.7	1,210			
10 T		7 / 0.53	1.59	0.6	29.6	34.1	1.9	1,490			
12 T		7 / 0.53	1.59	0.6	31.5	36.5	2.0	1,760			
14 T		7 / 0.53	1.59	0.6	33.1	38.3	2.0	1,970			
16 T		7 / 0.53	1.59	0.6	35.1	40.3	2.1	2,170			
19 T		7 / 0.53	1.59	0.6	37.2	42.6	2.2	2,460			
20 T		7 / 0.53	1.59	0.6	38.9	44.3	2.3	2,620			
24 T		7 / 0.53	1.59	0.6	42.5	48.1	2.4	3,070			
30 T		7 / 0.53	1.59	0.6	47.3	53.1	2.6	3,720			
1 T	2.5	7 / 0.67	2.01	0.6	10.9	14.6	1.1	320	7.86	130	0.65
2 T		7 / 0.67	2.01	0.6	17.7	21.6	1.4	610			
3 T		7 / 0.67	2.01	0.6	18.9	22.8	1.4	730			
4 T		7 / 0.67	2.01	0.6	21.0	25.1	1.5	890			
5 T		7 / 0.67	2.01	0.6	23.5	27.6	1.6	1,070			
6 T		7 / 0.67	2.01	0.6	26.7	31.0	1.7	1,290			
7 T		7 / 0.67	2.01	0.6	26.7	31.0	1.7	1,370			
8 T		7 / 0.67	2.01	0.6	28.8	33.3	1.8	1,550			
10 T		7 / 0.67	2.01	0.6	33.0	38.2	2.0	2,020			
12 T		7 / 0.67	2.01	0.6	34.9	40.1	2.1	2,270			
14 T		7 / 0.67	2.01	0.6	36.6	42.0	2.2	2,540			
16 T		7 / 0.67	2.01	0.6	39.1	44.5	2.3	2,840			
19 T		7 / 0.67	2.01	0.6	41.4	47.0	2.4	3,230			
20 T		7 / 0.67	2.01	0.6	43.1	48.7	2.4	3,420			
24 T		7 / 0.67	2.01	0.6	47.3	53.1	2.6	4,030			
30 T		7 / 0.67	2.01	0.6	52.6	58.8	2.9	4,930			



Normal

Fire Resistance Telephone & Instrument Cable (Individual & Collective Screen)

150/250V SICI(i & c)

Cable Designation

- 150/250V SICI(i&c)
- 150/250V SIOI(i&c)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Fire Resistance : IEC 60331 (750℃ or 1000℃)
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor	S	Plain (or Tinned), Annealed, Stranded copper wire
Fire Resisting Layer		Mica / Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Sheath	I	Halogen Free Thermoplastic compound (SHF1) as per IEC 60092-359
Armor	C or O	Galvanized Steel Wire Braid (C) Copper Wire Braid (O)
Outer Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 150/250V SICI(i&c) (150/250V SIOI(i&c))

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.9	11.6	1.0	200	26.0	95	0.72
2 P		7 / 0.37	1.11	0.5	12.6	16.3	1.2	340			
3 P		7 / 0.37	1.11	0.5	13.4	17.1	1.2	390			
4 P		7 / 0.37	1.11	0.5	14.5	18.2	1.2	450			
5 P		7 / 0.37	1.11	0.5	16.2	19.9	1.3	530			
6 P		7 / 0.37	1.11	0.5	17.6	21.5	1.4	610			
7 P		7 / 0.37	1.11	0.5	17.6	21.5	1.4	640			
8 P		7 / 0.37	1.11	0.5	18.7	22.6	1.4	700			
10 P		7 / 0.37	1.11	0.5	21.2	25.3	1.5	850			
12 P		7 / 0.37	1.11	0.5	22.2	26.3	1.6	940			
14 P		7 / 0.37	1.11	0.5	23.1	27.2	1.6	1,030			
16 P		7 / 0.37	1.11	0.5	25.0	29.3	1.7	1,170			
19 P		7 / 0.37	1.11	0.5	26.7	31.0	1.7	1,320			
20 P		7 / 0.37	1.11	0.5	26.7	31.0	1.7	1,350			
24 P		7 / 0.37	1.11	0.5	30.8	35.8	1.9	1,740			
30 P		7 / 0.37	1.11	0.5	33.6	38.8	2.1	2,060			
1 P	1.0	7 / 0.43	1.29	0.5	8.3	12.0	1.0	220	19.2	100	0.69
2 P		7 / 0.43	1.29	0.5	13.3	17.0	1.2	380			
3 P		7 / 0.43	1.29	0.5	14.4	18.1	1.2	450			
4 P		7 / 0.43	1.29	0.5	15.3	19.0	1.3	510			
5 P		7 / 0.43	1.29	0.5	17.3	21.2	1.3	620			
6 P		7 / 0.43	1.29	0.5	18.6	22.5	1.4	690			
7 P		7 / 0.43	1.29	0.5	18.6	22.5	1.4	720			
8 P		7 / 0.43	1.29	0.5	20.0	23.9	1.5	810			
10 P		7 / 0.43	1.29	0.5	22.6	26.7	1.6	990			
12 P		7 / 0.43	1.29	0.5	23.5	27.6	1.6	1,090			
14 P		7 / 0.43	1.29	0.5	24.4	28.5	1.6	1,190			
16 P		7 / 0.43	1.29	0.5	26.5	30.8	1.7	1,360			
19 P		7 / 0.43	1.29	0.5	28.5	33.0	1.8	1,570			
20 P		7 / 0.43	1.29	0.5	28.5	33.0	1.8	1,600			
24 P		7 / 0.43	1.29	0.5	32.7	37.9	2.0	2,040			
30 P		7 / 0.43	1.29	0.5	35.8	41.0	2.1	2,420			
1 P	1.5	7 / 0.53	1.59	0.6	9.5	13.2	1.0	260	12.8	110	0.66
2 P		7 / 0.53	1.59	0.6	15.2	18.9	1.3	460			
3 P		7 / 0.53	1.59	0.6	16.2	19.9	1.3	540			
4 P		7 / 0.53	1.59	0.6	17.5	21.4	1.4	630			
5 P		7 / 0.53	1.59	0.6	19.8	23.7	1.4	760			
6 P		7 / 0.53	1.59	0.6	21.3	25.4	1.5	870			
7 P		7 / 0.53	1.59	0.6	21.3	25.4	1.5	910			
8 P		7 / 0.53	1.59	0.6	22.9	27.0	1.6	1,020			
10 P		7 / 0.53	1.59	0.6	25.9	30.2	1.7	1,250			
12 P		7 / 0.53	1.59	0.6	27.0	31.3	1.8	1,390			
14 P		7 / 0.53	1.59	0.6	28.2	32.5	1.8	1,530			
16 P		7 / 0.53	1.59	0.6	30.6	35.6	1.9	1,830			
19 P		7 / 0.53	1.59	0.6	32.7	37.9	2.0	2,090			
20 P		7 / 0.53	1.59	0.6	32.7	37.9	2.0	2,130			
24 P		7 / 0.53	1.59	0.6	37.7	43.1	2.2	2,620			
30 P		7 / 0.53	1.59	0.6	41.3	46.9	2.4	3,130			
1 P	2.5	7 / 0.67	2.01	0.6	10.3	14.0	1.1	300	7.9	130	0.65
2 P		7 / 0.67	2.01	0.6	16.5	20.4	1.3	550			
3 P		7 / 0.67	2.01	0.6	17.9	21.8	1.4	660			
4 P		7 / 0.67	2.01	0.6	19.1	23.0	1.4	770			
5 P		7 / 0.67	2.01	0.6	21.7	25.8	1.5	940			
6 P		7 / 0.67	2.01	0.6	23.5	27.6	1.6	1,080			
7 P		7 / 0.67	2.01	0.6	23.5	27.6	1.6	1,140			
8 P		7 / 0.67	2.01	0.6	25.2	29.5	1.7	1,290			
10 P		7 / 0.67	2.01	0.6	28.6	33.1	1.8	1,590			
12 P		7 / 0.67	2.01	0.6	29.8	34.3	1.9	1,770			
14 P		7 / 0.67	2.01	0.6	31.2	36.2	1.9	2,050			
16 P		7 / 0.67	2.01	0.6	33.7	38.9	2.1	2,330			
19 P		7 / 0.67	2.01	0.6	36.3	41.7	2.2	2,690			
20 P		7 / 0.67	2.01	0.6	36.3	41.7	2.2	2,750			
24 P		7 / 0.67	2.01	0.6	41.8	47.4	2.4	3,370			
30 P		7 / 0.67	2.01	0.6	45.6	51.4	2.6	4,030			

Cable Type 150/250V SICI(i&c) (150/250V SIOI(i&c))

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Sheath	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	8.3	12.0	1.0	210	26.0	95	0.72
2 T		7 / 0.37	1.11	0.5	13.7	17.4	1.2	390			
3 T		7 / 0.37	1.11	0.5	14.7	18.4	1.2	450			
4 T		7 / 0.37	1.11	0.5	16.2	19.9	1.3	530			
5 T		7 / 0.37	1.11	0.5	18.1	22.0	1.4	640			
6 T		7 / 0.37	1.11	0.5	20.5	24.6	1.5	770			
7 T		7 / 0.37	1.11	0.5	20.5	24.6	1.5	800			
8 T		7 / 0.37	1.11	0.5	22.2	26.3	1.6	900			
10 T		7 / 0.37	1.11	0.5	25.2	29.5	1.7	1,100			
12 T		7 / 0.37	1.11	0.5	26.6	30.9	1.7	1,220			
14 T		7 / 0.37	1.11	0.5	27.9	32.2	1.8	1,350			
16 T		7 / 0.37	1.11	0.5	29.7	34.2	1.9	1,510			
19 T		7 / 0.37	1.11	0.5	31.4	36.4	2.0	1,770			
20 T		7 / 0.37	1.11	0.5	32.7	37.9	2.0	1,890			
24 T		7 / 0.37	1.11	0.5	35.9	41.1	2.1	2,210			
30 T		7 / 0.37	1.11	0.5	39.8	45.2	2.3	2,650			
1 T	1.0	7 / 0.43	1.29	0.5	8.9	12.6	1.0	240	19.2	100	0.69
2 T		7 / 0.43	1.29	0.5	14.6	18.3	1.2	440			
3 T		7 / 0.43	1.29	0.5	15.6	19.3	1.3	510			
4 T		7 / 0.43	1.29	0.5	17.3	21.2	1.3	620			
5 T		7 / 0.43	1.29	0.5	19.1	23.0	1.4	720			
6 T		7 / 0.43	1.29	0.5	21.7	25.8	1.5	870			
7 T		7 / 0.43	1.29	0.5	21.7	25.8	1.5	910			
8 T		7 / 0.43	1.29	0.5	23.5	27.6	1.6	1,030			
10 T		7 / 0.43	1.29	0.5	26.7	31.0	1.7	1,260			
12 T		7 / 0.43	1.29	0.5	28.4	32.7	1.8	1,430			
14 T		7 / 0.43	1.29	0.5	29.6	34.1	1.9	1,580			
16 T		7 / 0.43	1.29	0.5	31.7	36.7	2.0	1,850			
19 T		7 / 0.43	1.29	0.5	33.5	38.7	2.0	2,090			
20 T		7 / 0.43	1.29	0.5	34.9	40.1	2.1	2,210			
24 T		7 / 0.43	1.29	0.5	38.1	43.5	2.2	2,590			
30 T		7 / 0.43	1.29	0.5	42.5	48.1	2.4	3,140			
1 T	1.5	7 / 0.53	1.59	0.6	10.0	13.7	1.0	280	12.8	110	0.66
2 T		7 / 0.53	1.59	0.6	16.5	20.4	1.3	540			
3 T		7 / 0.53	1.59	0.6	17.8	21.7	1.4	640			
4 T		7 / 0.53	1.59	0.6	19.8	23.7	1.4	770			
5 T		7 / 0.53	1.59	0.6	21.9	26.0	1.5	920			
6 T		7 / 0.53	1.59	0.6	25.1	29.4	1.7	1,120			
7 T		7 / 0.53	1.59	0.6	25.1	29.4	1.7	1,180			
8 T		7 / 0.53	1.59	0.6	26.9	31.2	1.7	1,310			
10 T		7 / 0.53	1.59	0.6	30.8	35.8	1.9	1,710			
12 T		7 / 0.53	1.59	0.6	32.6	37.8	2.0	1,940			
14 T		7 / 0.53	1.59	0.6	34.2	39.4	2.1	2,140			
16 T		7 / 0.53	1.59	0.6	36.6	42.0	2.2	2,420			
19 T		7 / 0.53	1.59	0.6	38.7	44.1	2.3	2,720			
20 T		7 / 0.53	1.59	0.6	40.3	45.9	2.3	2,890			
24 T		7 / 0.53	1.59	0.6	44.2	50.0	2.5	3,410			
30 T		7 / 0.53	1.59	0.6	49.2	55.2	2.7	4,140			
1 T	2.5	7 / 0.67	2.01	0.6	10.9	14.6	1.1	340	7.9	130	0.65
2 T		7 / 0.67	2.01	0.6	18.3	22.2	1.4	660			
3 T		7 / 0.67	2.01	0.6	19.7	23.6	1.4	790			
4 T		7 / 0.67	2.01	0.6	21.6	25.7	1.5	960			
5 T		7 / 0.67	2.01	0.6	24.2	28.3	1.6	1,150			
6 T		7 / 0.67	2.01	0.6	27.7	32.0	1.8	1,410			
7 T		7 / 0.67	2.01	0.6	27.7	32.0	1.8	1,490			
8 T		7 / 0.67	2.01	0.6	29.7	34.2	1.9	1,680			
10 T		7 / 0.67	2.01	0.6	34.0	39.2	2.1	2,180			
12 T		7 / 0.67	2.01	0.6	36.2	41.6	2.2	2,500			
14 T		7 / 0.67	2.01	0.6	37.8	43.2	2.2	2,760			
16 T		7 / 0.67	2.01	0.6	40.4	46.0	2.3	3,110			
19 T		7 / 0.67	2.01	0.6	42.7	48.3	2.4	3,520			
20 T		7 / 0.67	2.01	0.6	44.7	50.5	2.5	3,760			
24 T		7 / 0.67	2.01	0.6	48.8	54.8	2.7	4,420			
30 T		7 / 0.67	2.01	0.6	54.6	60.8	2.9	5,410			

Light Weight

Flame Retardant Power & Control Cable (Armored)

0.6/1kV TFOI

Cable Designation

- 0.6/1kV TFOI

Application

- This cable is designed for power, lighting & control circuits up to 0.6/1kV.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 353
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Covering	F	Halogen Free Tape (Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color : Black

Core Identification	No. of Cores	Method 1 (without ground core)	Method 2 (with ground core)
	1C	Black	-
	2C	Red, Black	-
	3C / 3G	Red, Yellow, Blue	Red, Black, Green/Yellow
	4C / 4G	Red, Yellow, Blue, Black	Red, Yellow, Blue, Green/Yellow
	5C / 5G	Black number on White insulation	Red, Yellow, Blue, Black, Green/Yellow
	6 and over (6G and over)	Black number on White insulation	Black number on White insulation, Green/Yellow

Note) 1. The letter "G" means that the cable has the ground core.
2. The other color scheme may be applicable when purchaser required.

Cable Type 0.6/1kV TFOI

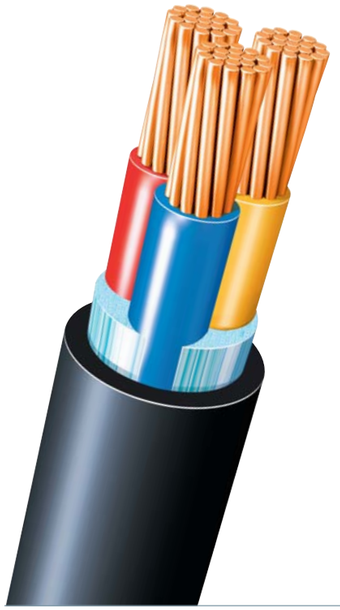
No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.) Plain	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
1	1.5	7 / 0.53	1.59	0.7	3.7	7.0	0.8	80	12.1	23
	2.5	7 / 0.67	2.01	0.7	4.1	7.4	0.8	90	7.41	40
	4	7 / 0.85	2.55	0.7	4.7	8.1	0.8	110	4.61	51
	6	7 / 1.04	3.12	0.7	5.2	8.6	0.8	140	3.08	52
	10	7 / 1.35	4.05	0.7	6.2	9.8	0.9	190	1.830	72
	16	C.C *	4.80	0.7	6.9	10.5	0.9	250	1.150	96
	25	C.C	6.10	0.9	8.6	12.4	1.0	370	0.828	127
	35	C.C	7.20	0.9	9.7	13.6	1.0	470	0.524	157
	50	C.C	8.30	1.0	11.0	15.6	1.1	650	0.387	196
	70	C.C	10.00	1.1	12.9	17.7	1.2	880	0.268	242
	95	C.C	11.80	1.1	14.7	19.6	1.3	1,150	0.1930	293
	120	C.C	13.20	1.2	16.3	21.4	1.4	1,430	0.1530	339
	150	C.C	14.80	1.4	18.3	23.7	1.4	1,720	0.1240	389
	185	C.C	16.35	1.6	20.3	25.7	1.5	2,110	0.0991	444
	240	C.C	18.85	1.7	23.0	28.6	1.6	2,720	0.0754	522
	300	C.C	20.90	1.8	25.2	31.0	1.7	3,350	0.0601	601
2	1.5	7 / 0.53	1.59	0.7	6.8	10.4	0.9	140	12.1	20
	2.5	7 / 0.67	2.01	0.7	7.6	11.2	0.9	170	7.41	26
	4	7 / 0.85	2.55	0.7	8.8	12.6	1.0	220	4.61	34
	6	7 / 1.04	3.12	0.7	9.8	13.7	1.0	280	3.08	44
	10	7 / 1.35	4.05	0.7	11.8	16.4	1.2	430	1.830	61
	16	C.C	4.80	0.7	13.2	18.1	1.2	580	1.150	82
	25	C.C	6.10	0.9	16.6	21.7	1.4	840	0.828	108
	35	C.C	7.20	0.9	18.8	23.9	1.5	1,080	0.524	133
	50	C.C	8.30	1.0	21.4	26.8	1.6	1,400	0.387	167
	70	C.C	10.00	1.1	25.2	31.0	1.7	1,920	0.268	206
	95	C.C	11.80	1.1	28.8	34.8	1.9	2,520	0.1930	249
3	1.5	7 / 0.53	1.59	0.7	7.3	10.9	0.9	170	12.1	16
	2.5	7 / 0.67	2.01	0.7	8.1	11.9	1.0	210	7.41	21
	4	7 / 0.85	2.55	0.7	9.4	13.3	1.0	270	4.61	28
	6	7 / 1.04	3.12	0.7	10.5	15.1	1.1	380	3.08	36
	10	7 / 1.35	4.05	0.7	12.7	17.5	1.2	550	1.830	50
	16	C.C	4.80	0.7	14.2	19.1	1.3	750	1.150	67
	25	C.C	6.10	0.9	17.8	23.2	1.4	1,110	0.828	89
	35	C.C	7.20	0.9	20.2	25.6	1.5	1,450	0.524	110
	50	C.C	8.30	1.0	23.0	28.6	1.6	1,890	0.387	137
	70	C.C	10.00	1.1	27.1	32.9	1.8	2,590	0.268	169
	95	C.C	11.80	1.1	31.0	37.8	2.0	3,540	0.1930	205
	120	C.C	13.20	1.2	34.4	41.6	2.2	4,420	0.1530	237
	150	C.C	14.80	1.4	38.7	46.2	2.3	5,330	0.1240	272
	185	C.C	16.35	1.6	43.4	51.3	2.6	6,560	0.0991	311
	240	C.C	18.85	1.7	49.3	57.9	2.8	8,540	0.0754	365
	300	C.C	20.90	1.8	54.0	62.8	3.0	10,490	0.0601	421

* C.C means circular compacted conductor.

Cable Type 0.6/1kV TFOI

No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.) Plain	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
4	1.5	7 / 0.53	1.59	0.7	8.1	11.9	0.976	200	12.1	16
	2.5	7 / 0.67	2.01	0.7	9.0	12.9	1.016	250	7.41	21
	4	7 / 0.85	2.55	0.7	10.5	15.1	1.104	370	4.61	28
	6	7 / 1.04	3.12	0.7	11.7	16.3	1.152	470	3.08	36
	10	7 / 1.35	4.05	0.7	14.1	19.0	1.260	670	1.83	50
	16	C.C *	4.80	0.7	15.8	20.9	1.336	950	1.15	67
	25	C.C	6.10	0.9	19.9	25.3	1.512	1,410	0.828	89
	35	C.C	7.20	0.9	22.6	28.2	1.628	1,850	0.524	110
	50	C.C	8.30	1.0	25.7	31.5	1.760	2,420	0.387	137
	70	C.C	10.00	1.1	30.3	37.1	1.984	3,440	0.268	169
	95	C.C	11.80	1.1	34.6	41.8	2.172	4,570	0.193	205
	120	C.C	13.20	1.2	38.5	46.0	2.340	5,700	0.153	237
	150	C.C	14.80	1.4	43.7	51.6	2.564	6,920	0.124	272
	185	C.C	16.35	1.6	48.6	57.0	2.780	8,510	0.0991	311
	240	C.C	18.85	1.7	55.1	64.1	3.064	11,080	0.0754	365
	300	C.C	20.90	1.8	60.4	69.9	3.296	13,680	0.0601	421
5		7 / 0.53	1.59	0.7	9.0	12.9	1.0	230		12
6		7 / 0.53	1.59	0.7	9.9	13.8	1.1	260		12
7		7 / 0.53	1.59	0.7	9.9	13.8	1.1	280		11
8		7 / 0.53	1.59	0.7	10.8	15.4	1.1	350		11
9		7 / 0.53	1.59	0.7	11.8	16.4	1.2	390		10
10		7 / 0.53	1.59	0.7	13.0	17.9	1.2	450		10
12		7 / 0.53	1.59	0.7	13.5	18.4	1.2	490		9
14		7 / 0.53	1.59	0.7	14.3	19.2	1.3	540		9
15	1.5	7 / 0.53	1.59	0.7	14.7	19.6	1.3	570	12.1	9
16		7 / 0.53	1.59	0.7	15.2	20.3	1.3	610		8
19		7 / 0.53	1.59	0.7	16.1	21.2	1.3	680		8
20		7 / 0.53	1.59	0.7	16.7	21.8	1.4	710		8
24		7 / 0.53	1.59	0.7	19.2	24.3	1.5	860		7
27		7 / 0.53	1.59	0.7	19.7	24.8	1.5	920		7
30		7 / 0.53	1.59	0.7	20.5	25.9	1.5	1,010		7
33		7 / 0.53	1.59	0.7	21.4	26.8	1.6	1,080		7
37		7 / 0.53	1.59	0.7	22.3	27.9	1.6	1,190		7
5		7 / 0.67	2.01	0.7	10.1	14.7	1.1	330		17
6		7 / 0.67	2.01	0.7	11.1	15.7	1.1	380		17
7		7 / 0.67	2.01	0.7	11.1	15.7	1.1	400		15
8		7 / 0.67	2.01	0.7	12.2	16.8	1.2	450		15
9		7 / 0.67	2.01	0.7	13.2	18.1	1.2	510		14
10		7 / 0.67	2.01	0.7	14.6	19.5	1.3	570		13
12		7 / 0.67	2.01	0.7	15.1	20.2	1.3	640		12
14		7 / 0.67	2.01	0.7	16.0	21.1	1.3	710		12
15	2.5	7 / 0.67	2.01	0.7	16.5	21.6	1.4	750	7.41	11
16		7 / 0.67	2.01	0.7	17.1	22.2	1.4	790		11
19		7 / 0.67	2.01	0.7	18.1	23.5	1.4	900		11
20		7 / 0.67	2.01	0.7	18.7	23.8	1.5	950		10
24		7 / 0.67	2.01	0.7	21.6	27.0	1.6	1,150		10
27		7 / 0.67	2.01	0.7	22.1	27.5	1.6	1,240		9
30		7 / 0.67	2.01	0.7	23.0	28.6	1.6	1,350		9
33		7 / 0.67	2.01	0.7	24.1	29.7	1.7	1,460		9
37		7 / 0.67	2.01	0.7	25.1	30.9	1.7	1,610		9

* C.C means circular compacted conductor.



Light Weight

Flame Retardant Power & Control Cable (Un-Armored)

0.6/1kV TXXI

Cable Designation

• 0.6/1kV TXXI

Application

• This cable is designed for power, lighting & control circuits up to 0.6/1kV.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 353
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color : Black

Core Identification

No. of Cores	Method 1 (without ground core)	Method 2 (with ground core)
1C	Black	-
2C	Red, Black	-
3C / 3G	Red, Yellow, Blue	Red, Black, Green/Yellow
4C / 4G	Red, Yellow, Blue, Black	Red, Yellow, Blue, Green/Yellow
5C / 5G	Black number on White insulation	Red, Yellow, Blue, Black, Green/Yellow
6 and over (6G and over)	Black number on White insulation	Black number on White insulation, Green/Yellow

Note) 1. The letter "G" means that the cable has the ground core.
2. The other color scheme may be applicable when purchaser required.

Cable Type 0.6/1kV TXXI

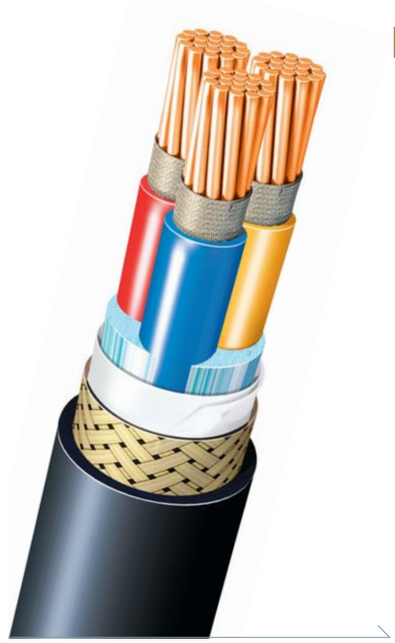
No. of Cores	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.) Plain	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	A
1	1.5	7 / 0.53	1.59	0.7	5.4	0.8	40	12.1	23
	2.5	7 / 0.67	2.01	0.7	5.8	0.8	60	7.41	40
	4	7 / 0.85	2.55	0.7	6.4	0.8	70	4.61	51
	6	7 / 1.04	3.12	0.7	6.9	0.8	100	3.08	52
	10	7 / 1.35	4.05	0.7	8.0	0.8	140	1.830	72
	16	C.C *	4.80	0.7	8.9	0.9	200	1.150	96
	25	C.C	6.10	0.9	10.6	0.9	300	0.828	127
	35	C.C	7.20	0.9	11.9	1.0	410	0.524	157
	50	C.C	8.30	1.0	13.3	1.0	530	0.387	196
	70	C.C	10.00	1.1	15.4	1.1	750	0.268	242
	95	C.C	11.80	1.1	17.4	1.2	1,010	0.1930	293
	120	C.C	13.20	1.2	19.1	1.3	1,260	0.1530	339
	150	C.C	14.80	1.4	21.3	1.4	1,540	0.1240	389
	185	C.C	16.35	1.6	23.6	1.4	1,900	0.0991	444
	240	C.C	18.85	1.7	26.3	1.6	2,490	0.0754	522
	300	C.C	20.90	1.8	28.7	1.6	3,100	0.0601	601
2	1.5	7 / 0.53	1.59	0.7	9.0	0.9	90	12.1	20
	2.5	7 / 0.67	2.01	0.7	9.8	0.9	120	7.41	26
	4	7 / 0.85	2.55	0.7	11.0	0.9	160	4.61	34
	6	7 / 1.04	3.12	0.7	12.2	1.0	210	3.08	44
	10	7 / 1.35	4.05	0.7	14.5	1.1	320	1.830	61
	16	C.C	4.80	0.7	15.9	1.1	450	1.150	82
	25	C.C	6.10	0.9	19.6	1.3	680	0.828	108
	35	C.C	7.20	0.9	22.0	1.4	900	0.524	133
	50	C.C	8.30	1.0	24.6	1.5	1,190	0.387	167
	70	C.C	10.00	1.1	28.9	1.7	1,680	0.268	206
	95	C.C	11.80	1.1	32.7	1.8	2,240	0.1930	249
3	1.5	7 / 0.53	1.59	0.7	9.5	0.9	110	12.1	16
	2.5	7 / 0.67	2.01	0.7	10.3	0.9	150	7.41	21
	4	7 / 0.85	2.55	0.7	11.8	1.0	210	4.61	28
	6	7 / 1.04	3.12	0.7	13.0	1.0	280	3.08	36
	10	7 / 1.35	4.05	0.7	15.4	1.1	420	1.830	50
	16	C.C	4.80	0.7	17.1	1.2	620	1.150	67
	25	C.C	6.10	0.9	21.0	1.3	940	0.828	89
	35	C.C	7.20	0.9	23.7	1.4	1,250	0.524	110
	50	C.C	8.30	1.0	26.5	1.6	1,660	0.387	137
	70	C.C	10.00	1.1	31.0	1.7	2,340	0.268	169
	95	C.C	11.80	1.1	35.1	1.9	3,150	0.1930	205
	120	C.C	13.20	1.2	39.0	2.1	3,990	0.1530	237
	150	C.C	14.80	1.4	43.5	2.2	4,860	0.1240	272
	185	C.C	16.35	1.6	48.3	2.4	6,030	0.0991	311
	240	C.C	18.85	1.7	54.6	2.7	7,900	0.0754	365

* C.C means circular compacted conductor.

Cable Type 0.6/1kV TXXI

No. of Cores	Conductor			Thickness of Insulation mm	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.) Plain	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm²	No./mm	mm		mm	±mm	kg/km	Ω/km	A
4	1.5	7 / 0.53	1.59	0.7	10.3	0.9	140	12.1	16
	2.5	7 / 0.67	2.01	0.7	11.2	0.9	180	7.41	21
	4	7 / 0.85	2.55	0.7	13.0	1.0	260	4.61	28
	6	7 / 1.04	3.12	0.7	14.4	1.1	350	3.08	36
	10	7 / 1.35	4.05	0.7	16.8	1.2	530	1.830	50
	16	C.C *	4.80	0.7	18.8	1.3	790	1.150	67
	25	C.C	6.10	0.9	23.4	1.4	1,220	0.828	89
	35	C.C	7.20	0.9	26.1	1.5	1,630	0.524	110
	50	C.C	8.30	1.0	29.4	1.7	2,170	0.387	137
	70	C.C	10.00	1.1	34.4	1.9	3,060	0.268	169
	95	C.C	11.80	1.1	39.2	2.1	4,140	0.1930	205
5	1.5	7 / 0.53	1.59	0.7	11.2	1.0	170	12.1	12
6		7 / 0.53	1.59	0.7	12.3	1.0	200		12
7		7 / 0.53	1.59	0.7	12.3	1.0	210		11
8		7 / 0.53	1.59	0.7	13.3	1.1	240		11
9		7 / 0.53	1.59	0.7	14.5	1.1	280		10
10		7 / 0.53	1.59	0.7	15.7	1.2	310		10
12		7 / 0.53	1.59	0.7	16.2	1.2	350		9
14		7 / 0.53	1.59	0.7	17.2	1.3	410		9
16		7 / 0.53	1.59	0.7	18.2	1.3	450		8
19		7 / 0.53	1.59	0.7	19.1	1.4	520		8
20		7 / 0.53	1.59	0.7	19.9	1.4	550		8
24		7 / 0.53	1.59	0.7	22.6	1.5	680		7
27		7 / 0.53	1.59	0.7	23.2	1.6	740		7
30		7 / 0.53	1.59	0.7	23.7	1.6	800		7
37		7 / 0.53	1.59	0.7	25.8	1.7	970		7
5	2.5	7 / 0.67	2.01	0.7	12.5	1.0	230	7.41	17
6		7 / 0.67	2.01	0.7	13.6	1.0	260		17
7		7 / 0.67	2.01	0.7	13.6	1.0	290		15
8		7 / 0.67	2.01	0.7	14.9	1.1	340		15
9		7 / 0.67	2.01	0.7	15.9	1.1	380		14
10		7 / 0.67	2.01	0.7	17.5	1.2	430		13
12		7 / 0.67	2.01	0.7	18.1	1.2	490		12
14		7 / 0.67	2.01	0.7	19.0	1.3	550		12
16		7 / 0.67	2.01	0.7	20.3	1.3	630		11
19		7 / 0.67	2.01	0.7	21.3	1.4	730		11
20		7 / 0.67	2.01	0.7	21.9	1.4	760		10
24		7 / 0.67	2.01	0.7	24.8	1.5	940		10
27		7 / 0.67	2.01	0.7	25.6	1.5	1,030		9
30		7 / 0.67	2.01	0.7	26.5	1.6	1,130		9
37		7 / 0.67	2.01	0.7	28.8	1.7	1,370		9

* C.C means circular compacted conductor.



Light Weight

Fire Resistance Power & Control Cable (Armored)

0.6/1kV SFOI

Cable Designation

• 0.6/1kV SFOI

Application

• This cable is designed for power, lighting & control circuits up to 0.6/1kV.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 353
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Covering	F	Halogen Free Tape (Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color : Black

Core Identification

No. of Cores	Method 1 (without ground core)	Method 2 (with ground core)
1C	Black	-
2C	Red, Black	-
3C / 3G	Red, Yellow, Blue	Red, Black, Green/Yellow
4C / 4G	Red, Yellow, Blue, Black	Red, Yellow, Blue, Green/Yellow
5C / 5G	Black number on White insulation	Red, Yellow, Blue, Black, Green/Yellow
6 and over (6G and over)	Black number on White insulation	Black number on White insulation, Green/Yellow

Note) 1. The letter "G" means that the cable has the ground core.
2. The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 0.6/1kV SFOI

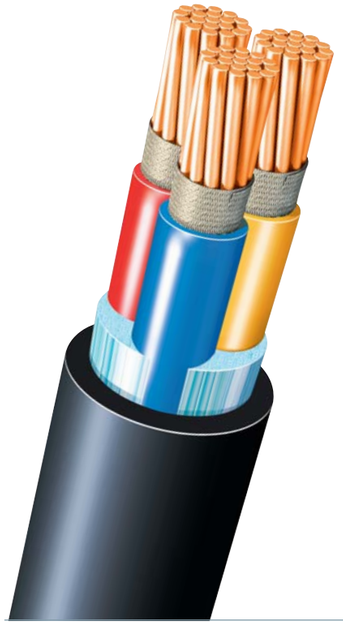
No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
1	1.5	7 / 0.53	1.59	0.7	4.3	7.7	0.8	90	12.1	23
	2.5	7 / 0.67	2.01	0.7	4.7	8.1	0.8	100	7.41	40
	4	7 / 0.85	2.55	0.7	5.3	8.9	0.9	130	4.61	51
	6	7 / 1.04	3.12	0.7	5.9	9.5	0.9	150	3.08	52
	10	7 / 1.35	4.05	0.7	6.8	10.4	0.9	200	1.830	72
	16	C.C *	4.80	0.7	7.5	11.1	0.9	270	1.150	96
	25	C.C	6.10	0.9	9.2	13.1	1.0	390	0.828	127
	35	C.C	7.20	0.9	10.3	14.9	1.1	530	0.524	157
	50	C.C	8.30	1.0	11.6	16.2	1.1	670	0.387	196
	70	C.C	10.00	1.1	13.5	18.4	1.2	910	0.268	242
	95	C.C	11.80	1.1	15.3	20.4	1.3	1,190	0.1930	293
	120	C.C	13.20	1.2	16.9	22.0	1.4	1,460	0.1530	339
	150	C.C	14.80	1.4	18.9	24.0	1.5	1,750	0.1240	389
	185	C.C	16.35	1.6	20.9	26.3	1.6	2,140	0.0991	444
	240	C.C	18.85	1.7	23.6	29.2	1.7	2,760	0.0754	522
	300	C.C	20.90	1.8	25.8	31.6	1.8	3,390	0.0601	601
2	1.5	7 / 0.53	1.59	0.7	8.0	11.8	1.0	170	12.1	20
	2.5	7 / 0.67	2.01	0.7	8.8	12.6	1.0	200	7.41	26
	4	7 / 0.85	2.55	0.7	10.0	13.9	1.1	250	4.61	34
	6	7 / 1.04	3.12	0.7	11.2	15.8	1.1	350	3.08	44
	10	7 / 1.35	4.05	0.7	13.0	17.9	1.2	480	1.830	61
	16	C.C	4.80	0.7	14.4	19.3	1.3	620	1.150	82
	25	C.C	6.10	0.9	17.8	23.2	1.4	900	0.828	108
	35	C.C	7.20	0.9	20.0	25.4	1.5	1,150	0.524	133
	50	C.C	8.30	1.0	22.6	28.2	1.6	1,470	0.387	167
	70	C.C	10.00	1.1	26.4	32.2	1.8	1,980	0.268	206
	95	C.C	11.80	1.1	30.0	36.3	2.0	2,610	0.1930	249
3	1.5	7 / 0.53	1.59	0.7	8.6	12.4	1.0	200	12.1	16
	2.5	7 / 0.67	2.01	0.7	9.4	13.3	1.0	240	7.41	21
	4	7 / 0.85	2.55	0.7	10.7	15.3	1.1	350	4.61	28
	6	7 / 1.04	3.12	0.7	12.0	16.6	1.2	430	3.08	36
	10	7 / 1.35	4.05	0.7	14.0	18.9	1.3	600	1.830	50
	16	C.C	4.80	0.7	15.5	20.6	1.3	810	1.150	67
	25	C.C	6.10	0.9	19.1	24.2	1.5	1,170	0.828	89
	35	C.C	7.20	0.9	21.5	26.9	1.6	1,510	0.524	110
	50	C.C	8.30	1.0	24.3	29.9	1.7	1,960	0.387	137
	70	C.C	10.00	1.1	28.4	34.4	1.9	2,690	0.268	169
	95	C.C	11.80	1.1	32.3	39.3	2.1	3,650	0.1930	205
	120	C.C	13.20	1.2	35.7	42.9	2.2	4,520	0.1530	237
	150	C.C	14.80	1.4	40.0	47.7	2.4	5,470	0.1240	272
	185	C.C	16.35	1.6	44.7	52.8	2.6	6,710	0.0991	311
	240	C.C	18.85	1.7	50.6	59.2	2.9	8,670	0.0754	365

* C.C means circular compacted conductor.

Cable Type 0.6/1kV SFOI

No. of Cores	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.			Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	A
4	1.5	7 / 0.53	1.59	0.7	9.5	13.4	1.0	230	12.1	16
	2.5	7 / 0.67	2.01	0.7	10.5	15.1	1.1	330	7.41	21
	4	7 / 0.85	2.55	0.7	11.9	16.5	1.2	420	4.61	28
	6	7 / 1.04	3.12	0.7	13.4	18.3	1.2	530	3.08	36
	10	7 / 1.35	4.05	0.7	15.6	20.7	1.3	740	1.830	50
	16	C.C *	4.80	0.7	17.3	22.6	1.4	1,020	1.150	67
	25	C.C	6.10	0.9	21.4	26.8	1.6	1,490	0.828	89
	35	C.C	7.20	0.9	24.0	29.6	1.7	1,930	0.524	110
	50	C.C	8.30	1.0	27.2	33.0	1.8	2,510	0.387	137
	70	C.C	10.00	1.1	31.7	38.5	2.0	3,540	0.268	169
	95	C.C	11.80	1.1	36.1	43.3	2.2	4,690	0.1930	205
	120	C.C	13.20	1.2	40.0	47.7	2.4	5,850	0.1530	237
	150	C.C	14.80	1.4	45.2	53.3	2.6	7,080	0.1240	272
	185	C.C	16.35	1.6	50.0	58.6	2.8	8,690	0.0991	311
5		7 / 0.53	1.59	0.7	10.6	15.2	1.1	310		12
6		7 / 0.53	1.59	0.7	11.7	16.3	1.2	360		12
7		7 / 0.53	1.59	0.7	11.7	16.3	1.2	380		11
8		7 / 0.53	1.59	0.7	12.8	17.6	1.2	430		11
9		7 / 0.53	1.59	0.7	14.0	18.9	1.3	480		10
10		7 / 0.53	1.59	0.7	15.4	20.5	1.3	540		10
12		7 / 0.53	1.59	0.7	16.0	21.1	1.3	590		9
14	1.5	7 / 0.53	1.59	0.7	16.9	22.0	1.4	660	12.1	9
16		7 / 0.53	1.59	0.7	18.0	23.4	1.4	740		8
19		7 / 0.53	1.59	0.7	19.1	24.2	1.5	820		8
20		7 / 0.53	1.59	0.7	19.8	25.1	1.5	870		8
24		7 / 0.53	1.59	0.7	22.8	28.4	1.6	1,060		7
27		7 / 0.53	1.59	0.7	23.4	29.0	1.7	1,130		7
30		7 / 0.53	1.59	0.7	24.3	29.9	1.7	1,220		7
33		7 / 0.53	1.59	0.7	25.4	31.2	1.7	1,330		7
37		7 / 0.53	1.59	0.7	26.5	32.3	1.8	1,440		7
5		7 / 0.67	2.01	0.7	11.7	16.3	1.2	380		17
6		7 / 0.67	2.01	0.7	12.9	17.7	1.2	450		17
7		7 / 0.67	2.01	0.7	12.9	17.7	1.2	470		15
8		7 / 0.67	2.01	0.7	14.1	19.0	1.3	530		15
9		7 / 0.67	2.01	0.7	15.4	20.5	1.3	600		14
10		7 / 0.67	2.01	0.7	17.0	22.1	1.4	670		13
12		7 / 0.67	2.01	0.7	17.6	23.0	1.4	750		12
14	2.5	7 / 0.67	2.01	0.7	18.7	23.8	1.5	840	7.41	12
15		7 / 0.67	2.01	0.7	19.3	24.4	1.5	890		11
16		7 / 0.67	2.01	0.7	19.9	25.3	1.5	940		11
19		7 / 0.67	2.01	0.7	21.1	26.5	1.6	1,060		11
20		7 / 0.67	2.01	0.7	21.8	27.2	1.6	1,110		10
24		7 / 0.67	2.01	0.7	25.2	31.0	1.7	1,370		10
27		7 / 0.67	2.01	0.7	25.8	31.6	1.8	1,470		9
30		7 / 0.67	2.01	0.7	26.9	32.7	1.8	1,590		9
33		7 / 0.67	2.01	0.7	28.1	34.1	1.9	1,730		9
37		7 / 0.67	2.01	0.7	29.3	35.4	1.9	1,890		9

* C.C means circular compacted conductor.



Light Weight

Fire Resistance Power & Control Cable (Un-Armored)

0.6/1kV SXXI

Cable Designation

• 0.6/1kV SXXI

Application

- This cable is designed for power, lighting & control circuits up to 0.6/1kV.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 353
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Fire Resistance : IEC 60331 (750℃ or 1000℃)
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor	S	Plain, Annealed, Stranded copper wire
Fire Resisting Layer		Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color : Black

Core Identification

No. of Cores	Method 1 (without ground core)	Method 2 (with ground core)
1C	Black	-
2C	Red, Black	-
3C / 3G	Red, Yellow, Blue	Red, Black, Green/Yellow
4C / 4G	Red, Yellow, Blue, Black	Red, Yellow, Blue, Green/Yellow
5C / 5G	Black number on White insulation	Red, Yellow, Blue, Black, Green/Yellow
6 and over (6G and over)	Black number on White insulation	Black number on White insulation, Green/Yellow

Note) 1. The letter "G" means that the cable has the ground core.
2. The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 0.6/1kV SXXI

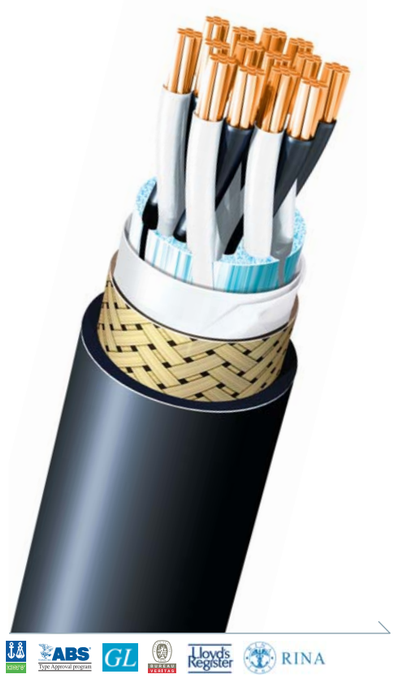
No. of Cores	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.) Plain	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	A
1	1.5	7 / 0.53	1.59	0.7	6.0	0.8	50	12.1	23
	2.5	7 / 0.67	2.01	0.7	6.4	0.8	60	7.41	40
	4	7 / 0.85	2.55	0.7	7.0	0.8	80	4.61	51
	6	7 / 1.04	3.12	0.7	7.7	0.8	110	3.08	52
	10	7 / 1.35	4.05	0.7	8.6	0.8	150	1.830	72
	16	C.C *	4.80	0.7	9.5	0.9	220	1.150	96
	25	C.C	6.10	0.9	11.2	0.9	320	0.828	127
	35	C.C	7.20	0.9	12.5	1.0	420	0.524	157
	50	C.C	8.30	1.0	13.9	1.1	550	0.387	196
	70	C.C	10.00	1.1	16.0	1.1	770	0.268	242
	95	C.C	11.80	1.1	18.1	1.2	1,030	0.1930	293
	120	C.C	13.20	1.2	19.9	1.3	1,300	0.1530	339
	150	C.C	14.80	1.4	21.9	1.4	1,570	0.1240	389
	185	C.C	16.35	1.6	23.9	1.5	1,940	0.0991	444
	240	C.C	18.85	1.7	26.9	1.6	2,530	0.0754	522
	300	C.C	20.90	1.8	29.3	1.7	3,140	0.0601	601
2	1.5	7 / 0.53	1.59	0.7	10.2	0.9	110	12.1	20
	2.5	7 / 0.67	2.01	0.7	11.0	0.9	140	7.41	26
	4	7 / 0.85	2.55	0.7	12.4	1.0	190	4.61	34
	6	7 / 1.04	3.12	0.7	13.7	1.0	240	3.08	44
	10	7 / 1.35	4.05	0.7	15.7	1.1	340	1.830	61
	16	C.C	4.80	0.7	17.3	1.2	490	1.150	82
	25	C.C	6.10	0.9	21.0	1.3	720	0.828	108
	35	C.C	7.20	0.9	23.5	1.4	950	0.524	133
	50	C.C	8.30	1.0	26.1	1.5	1,250	0.387	167
	70	C.C	10.00	1.1	30.1	1.7	1,730	0.268	206
	95	C.C	11.80	1.1	34.1	1.9	2,320	0.1930	249
3	1.5	7 / 0.53	1.59	0.7	10.8	0.9	140	12.1	16
	2.5	7 / 0.67	2.01	0.7	11.8	1.0	180	7.41	21
	4	7 / 0.85	2.55	0.7	13.2	1.0	240	4.61	28
	6	7 / 1.04	3.12	0.7	14.7	1.1	310	3.08	36
	10	7 / 1.35	4.05	0.7	16.7	1.2	450	1.830	50
	16	C.C	4.80	0.7	18.5	1.2	650	1.150	67
	25	C.C	6.10	0.9	22.3	1.4	980	0.828	89
	35	C.C	7.20	0.9	24.7	1.5	1,300	0.524	110
	50	C.C	8.30	1.0	28.0	1.6	1,730	0.387	137
	70	C.C	10.00	1.1	32.3	1.8	2,420	0.268	169
	95	C.C	11.80	1.1	36.7	2.0	3,250	0.1930	205
	120	C.C	13.20	1.2	40.3	2.1	4,080	0.1530	237
	150	C.C	14.80	1.4	45.0	2.3	4,970	0.1240	272
	185	C.C	16.35	1.6	49.8	2.5	6,160	0.0991	311
	240	C.C	18.85	1.7	56.2	2.7	8,050	0.0754	365

* C.C means circular compacted conductor.

Cable Type 0.6/1kV SXXI

No. of Cores	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.) Plain	Current Ratings (at 45℃)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	A
4	1.5	7 / 0.53	1.59	0.7	11.9	1.0	170	12.1	16
	2.5	7 / 0.67	2.01	0.7	13.0	1.0	220	7.41	21
	4	7 / 0.85	2.55	0.7	14.6	1.1	300	4.61	28
	6	7 / 1.04	3.12	0.7	16.1	1.1	390	3.08	36
	10	7 / 1.35	4.05	0.7	18.6	1.2	590	1.830	50
	16	C.C *	4.80	0.7	20.5	1.3	850	1.150	67
	25	C.C	6.10	0.9	24.6	1.5	1,280	0.828	89
	35	C.C	7.20	0.9	27.5	1.6	1,700	0.524	110
	50	C.C	8.30	1.0	31.1	1.7	2,260	0.387	137
	70	C.C	10.00	1.1	36.1	1.9	3,160	0.268	169
	95	C.C	11.80	1.1	40.7	2.1	4,240	0.1930	205
5	1.5	7 / 0.53	1.59	0.7	13.1	1.0	200	12.1	12
6		7 / 0.53	1.59	0.7	14.4	1.1	240		12
7		7 / 0.53	1.59	0.7	14.4	1.1	260		11
8		7 / 0.53	1.59	0.7	15.5	1.1	300		11
9		7 / 0.53	1.59	0.7	16.7	1.2	340		10
10		7 / 0.53	1.59	0.7	18.4	1.2	390		10
12		7 / 0.53	1.59	0.7	19.0	1.3	440		9
14		7 / 0.53	1.59	0.7	20.1	1.3	500		9
16		7 / 0.53	1.59	0.7	21.2	1.3	560		8
19		7 / 0.53	1.59	0.7	22.3	1.4	640		8
20		7 / 0.53	1.59	0.7	23.3	1.4	680		8
24		7 / 0.53	1.59	0.7	26.3	1.6	840		7
27		7 / 0.53	1.59	0.7	26.9	1.6	910		7
30		7 / 0.53	1.59	0.7	28.0	1.6	1,000		7
37		7 / 0.53	1.59	0.7	30.2	1.7	1,190		7
5	2.5	7 / 0.67	2.01	0.7	14.4	1.1	270	7.41	17
6		7 / 0.67	2.01	0.7	15.6	1.1	320		17
7		7 / 0.67	2.01	0.7	15.6	1.1	340		15
8		7 / 0.67	2.01	0.7	16.8	1.2	390		15
9		7 / 0.67	2.01	0.7	18.4	1.2	450		14
10		7 / 0.67	2.01	0.7	20.2	1.3	510		13
12		7 / 0.67	2.01	0.7	20.8	1.3	580		12
14		7 / 0.67	2.01	0.7	21.9	1.4	660		12
16		7 / 0.67	2.01	0.7	23.4	1.4	750		11
19		7 / 0.67	2.01	0.7	24.3	1.5	860		11
20		7 / 0.67	2.01	0.7	25.3	1.5	910		10
24		7 / 0.67	2.01	0.7	28.9	1.7	1,120		10
27		7 / 0.67	2.01	0.7	29.5	1.7	1,220		9
30		7 / 0.67	2.01	0.7	30.8	1.7	1,350		9
37		7 / 0.67	2.01	0.7	33.4	1.8	1,620		9

* C.C means circular compacted conductor.



Light Weight

Flame Retardant Telephone & Instrument Cable (Non Screen)

150/250V TFOI

Cable Designation

• 150/250V TFOI

Application

• This cable is designed for control & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Standards applied

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

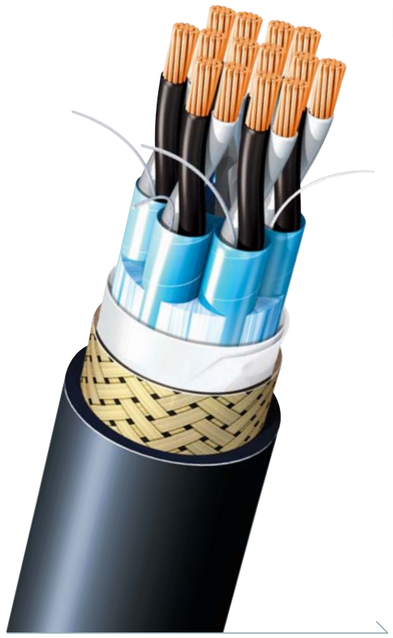
Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Covering	F	Halogen Free Tape (Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TFOI

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	4.9	8.1	0.8	90			
2 P		7 / 0.37	1.11	0.5	5.9	9.3	0.9	130			
3 P		7 / 0.37	1.11	0.5	8.8	12.4	1.0	200			
4 P		7 / 0.37	1.11	0.5	9.5	13.1	1.0	230			
5 P		7 / 0.37	1.11	0.5	10.9	15.2	1.1	320			
6 P		7 / 0.37	1.11	0.5	11.8	16.1	1.1	350			
7 P		7 / 0.37	1.11	0.5	11.8	16.1	1.1	370			
8 P		7 / 0.37	1.11	0.5	12.7	17.2	1.2	420			
10 P	0.75	7 / 0.37	1.11	0.5	14.6	19.1	1.3	500	26.0	100	0.72
12 P		7 / 0.37	1.11	0.5	15.3	20.0	1.3	560			
14 P		7 / 0.37	1.11	0.5	15.9	20.6	1.3	610			
16 P		7 / 0.37	1.11	0.5	17.3	22.2	1.4	690			
19 P		7 / 0.37	1.11	0.5	18.7	23.6	1.4	790			
20 P		7 / 0.37	1.11	0.5	18.7	23.6	1.4	800			
24 P		7 / 0.37	1.11	0.5	21.7	26.8	1.6	980			
30 P		7 / 0.37	1.11	0.5	23.8	29.1	1.7	1,160			
37 P		7 / 0.37	1.11	0.5	25.6	31.1	1.7	1,360			
1 P		7 / 0.43	1.29	0.5	5.3	8.7	0.8	110			
2 P		7 / 0.43	1.29	0.5	6.3	9.7	0.9	150			
3 P		7 / 0.43	1.29	0.5	9.6	13.2	1.0	230			
4 P		7 / 0.43	1.29	0.5	10.3	14.6	1.1	310			
5 P		7 / 0.43	1.29	0.5	11.8	16.1	1.1	360			
6 P		7 / 0.43	1.29	0.5	12.8	17.3	1.2	420			
7 P		7 / 0.43	1.29	0.5	12.8	17.3	1.2	440			
8 P		7 / 0.43	1.29	0.5	13.8	18.3	1.2	490			
10 P	1.0	7 / 0.43	1.29	0.5	15.8	20.5	1.3	590	19.2	110	0.72
12 P		7 / 0.43	1.29	0.5	16.6	21.3	1.4	660			
14 P		7 / 0.43	1.29	0.5	17.3	22.2	1.4	730			
16 P		7 / 0.43	1.29	0.5	18.8	23.7	1.4	820			
19 P		7 / 0.43	1.29	0.5	20.3	25.4	1.5	940			
20 P		7 / 0.43	1.29	0.5	20.3	25.4	1.5	960			
24 P		7 / 0.43	1.29	0.5	23.6	28.9	1.7	1,170			
30 P		7 / 0.43	1.29	0.5	25.8	31.3	1.8	1,400			
37 P		7 / 0.43	1.29	0.5	27.8	33.5	1.8	1,640			
1 P		7 / 0.53	1.59	0.6	6.3	9.7	0.9	140			
2 P		7 / 0.53	1.59	0.6	7.5	10.9	0.9	190			
3 P		7 / 0.53	1.59	0.6	11.4	15.7	1.1	340			
4 P		7 / 0.53	1.59	0.6	12.3	16.8	1.2	400			
5 P		7 / 0.53	1.59	0.6	14.1	18.6	1.2	480			
6 P		7 / 0.53	1.59	0.6	15.3	20.0	1.3	550			
7 P		7 / 0.53	1.59	0.6	15.3	20.0	1.3	590			
8 P		7 / 0.53	1.59	0.6	16.5	21.2	1.3	650			
10 P	1.5	7 / 0.53	1.59	0.6	18.9	23.8	1.5	800	12.8	120	0.66
12 P		7 / 0.53	1.59	0.6	19.8	24.9	1.5	900			
14 P		7 / 0.53	1.59	0.6	20.7	25.8	1.5	990			
16 P		7 / 0.53	1.59	0.6	22.5	27.8	1.6	1,130			
19 P		7 / 0.53	1.59	0.6	24.3	29.6	1.7	1,290			
20 P		7 / 0.53	1.59	0.6	24.3	29.6	1.7	1,320			
24 P		7 / 0.53	1.59	0.6	28.2	33.9	1.9	1,630			
30 P		7 / 0.53	1.59	0.6	30.9	37.3	2.0	2,040			
37 P		7 / 0.53	1.59	0.6	33.3	39.9	2.1	2,390			

Cable Type 250V TFOI

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	5.3	8.7	0.8	110			
2 T		7 / 0.37	1.11	0.5	9.0	12.6	1.0	210			
3 T		7 / 0.37	1.11	0.5	9.7	13.3	1.0	240			
4 T		7 / 0.37	1.11	0.5	10.9	15.2	1.1	330			
5 T		7 / 0.37	1.11	0.5	12.3	16.8	1.2	400			
6 T		7 / 0.37	1.11	0.5	14.1	18.6	1.2	470			
7 T		7 / 0.37	1.11	0.5	14.1	18.6	1.2	490			
8 T		7 / 0.37	1.11	0.5	15.3	20.0	1.3	560			
10 T	0.75	7 / 0.37	1.11	0.5	17.6	22.5	1.4	690	26.0	100	0.72
12 T		7 / 0.37	1.11	0.5	18.7	23.6	1.4	770			
14 T		7 / 0.37	1.11	0.5	19.6	24.5	1.5	850			
16 T		7 / 0.37	1.11	0.5	21.0	26.1	1.5	950			
19 T		7 / 0.37	1.11	0.5	22.9	28.2	1.6	1,100			
20 T		7 / 0.37	1.11	0.5	23.3	28.6	1.6	1,140			
24 T		7 / 0.37	1.11	0.5	25.6	31.1	1.7	1,340			
30 T		7 / 0.37	1.11	0.5	28.6	34.3	1.9	1,620			
32 T		7 / 0.37	1.11	0.5	29.7	35.4	1.9	1,720			
1 T		7 / 0.43	1.29	0.5	5.7	9.1	0.9	130			
2 T		7 / 0.43	1.29	0.5	9.8	13.4	1.0	240			
3 T		7 / 0.43	1.29	0.5	10.6	14.9	1.1	320			
4 T		7 / 0.43	1.29	0.5	11.8	16.1	1.1	380			
5 T		7 / 0.43	1.29	0.5	13.3	17.8	1.2	460			
6 T		7 / 0.43	1.29	0.5	15.3	20.0	1.3	560			
7 T		7 / 0.43	1.29	0.5	15.3	20.0	1.3	590			
8 T		7 / 0.43	1.29	0.5	16.6	21.3	1.4	660			
10 T	1.0	7 / 0.43	1.29	0.5	19.1	24.0	1.5	810	19.2	110	0.72
12 T		7 / 0.43	1.29	0.5	20.3	25.4	1.5	920			
14 T		7 / 0.43	1.29	0.5	21.3	26.4	1.6	1,020			
16 T		7 / 0.43	1.29	0.5	22.8	28.1	1.6	1,150			
19 T		7 / 0.43	1.29	0.5	24.8	30.3	1.7	1,330			
20 T		7 / 0.43	1.29	0.5	25.3	30.8	1.7	1,380			
24 T		7 / 0.43	1.29	0.5	27.8	33.5	1.8	1,620			
30 T		7 / 0.43	1.29	0.5	31.1	37.5	2.0	2,060			
32 T		7 / 0.43	1.29	0.5	32.3	38.9	2.1	2,190			
1 T		7 / 0.53	1.59	0.6	6.8	10.2	0.9	160			
2 T		7 / 0.53	1.59	0.6	11.7	16.0	1.1	350			
3 T		7 / 0.53	1.59	0.6	12.6	17.1	1.2	430			
4 T		7 / 0.53	1.59	0.6	14.1	18.6	1.2	510			
5 T		7 / 0.53	1.59	0.6	15.9	20.6	1.3	620			
6 T		7 / 0.53	1.59	0.6	18.3	23.2	1.4	750			
7 T		7 / 0.53	1.59	0.6	18.3	23.2	1.4	800			
8 T		7 / 0.53	1.59	0.6	19.8	24.9	1.5	900			
10 T	1.5	7 / 0.53	1.59	0.6	22.8	28.1	1.6	1,110	12.8	120	0.66
12 T		7 / 0.53	1.59	0.6	24.3	29.6	1.7	1,260			
14 T		7 / 0.53	1.59	0.6	25.5	31.0	1.7	1,410			
16 T		7 / 0.53	1.59	0.6	27.3	33.0	1.8	1,590			
19 T		7 / 0.53	1.59	0.6	29.7	35.4	1.9	1,830			
20 T		7 / 0.53	1.59	0.6	30.3	36.7	2.0	2,010			
24 T		7 / 0.53	1.59	0.6	33.3	39.9	2.1	2,360			
30 T		7 / 0.53	1.59	0.6	37.2	44.2	2.3	2,880			
32 T		7 / 0.53	1.59	0.6	38.7	45.7	2.3	3,060			



Light Weight

Flame Retardant

Telephone & Instrument Cable (Individual Screen)

150/250V TFOI(i)

Cable Designation

• 150/250V TFOI(i)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(I)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Covering	F	Halogen Free Tape (Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TFOI(i)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.1	8.3	0.8	110			
2 P		7 / 0.37	1.11	0.5	8.6	12.2	1.0	200			
3 P		7 / 0.37	1.11	0.5	9.4	13.0	1.0	240			
4 P		7 / 0.37	1.11	0.5	10.1	14.4	1.1	310			
5 P		7 / 0.37	1.11	0.5	11.6	15.9	1.1	370			
6 P		7 / 0.37	1.11	0.5	12.6	17.1	1.2	430			
7 P		7 / 0.37	1.11	0.5	12.6	17.1	1.2	450			
8 P		7 / 0.37	1.11	0.5	13.5	18.0	1.2	500			
10 P	0.75	7 / 0.37	1.11	0.5	15.5	20.2	1.3	610	26.0	100	0.72
12 P		7 / 0.37	1.11	0.5	16.2	20.9	1.3	680			
14 P		7 / 0.37	1.11	0.5	17.0	21.7	1.4	750			
16 P		7 / 0.37	1.11	0.5	18.4	23.3	1.4	850			
19 P		7 / 0.37	1.11	0.5	19.9	25.0	1.5	980			
20 P		7 / 0.37	1.11	0.5	19.9	25.0	1.5	1,010			
24 P		7 / 0.37	1.11	0.5	23.1	28.4	1.6	1,220			
30 P		7 / 0.37	1.11	0.5	25.3	30.8	1.7	1,460			
37 P		7 / 0.37	1.11	0.5	27.3	33.0	1.8	1,720			
1 P		7 / 0.43	1.29	0.5	5.5	8.9	0.9	120			
2 P		7 / 0.43	1.29	0.5	9.3	12.9	1.0	230			
3 P		7 / 0.43	1.29	0.5	10.1	14.4	1.1	310			
4 P		7 / 0.43	1.29	0.5	10.9	15.2	1.1	360			
5 P		7 / 0.43	1.29	0.5	12.5	17.0	1.2	440			
6 P		7 / 0.43	1.29	0.5	13.6	18.1	1.2	500			
7 P		7 / 0.43	1.29	0.5	13.6	18.1	1.2	530			
8 P		7 / 0.43	1.29	0.5	14.6	19.1	1.3	590			
10 P	1.0	7 / 0.43	1.29	0.5	16.7	21.4	1.4	720	19.2	110	0.69
12 P		7 / 0.43	1.29	0.5	17.5	22.4	1.4	820			
14 P		7 / 0.43	1.29	0.5	18.3	23.2	1.4	900			
16 P		7 / 0.43	1.29	0.5	19.9	25.0	1.5	1,030			
19 P		7 / 0.43	1.29	0.5	21.5	26.6	1.6	1,180			
20 P		7 / 0.43	1.29	0.5	21.5	26.6	1.6	1,210			
24 P		7 / 0.43	1.29	0.5	24.9	30.4	1.7	1,480			
30 P		7 / 0.43	1.29	0.5	27.3	33.0	1.8	1,780			
37 P		7 / 0.43	1.29	0.5	29.5	35.2	1.9	2,090			
1 P		7 / 0.53	1.59	0.6	6.5	9.9	0.9	150			
2 P		7 / 0.53	1.59	0.6	11.0	15.3	1.1	320			
3 P		7 / 0.53	1.59	0.6	12.0	16.3	1.2	390			
4 P		7 / 0.53	1.59	0.6	12.9	17.4	1.2	460			
5 P		7 / 0.53	1.59	0.6	14.8	19.5	1.3	560			
6 P		7 / 0.53	1.59	0.6	16.1	20.8	1.3	640			
7 P		7 / 0.53	1.59	0.6	16.1	20.8	1.3	690			
8 P		7 / 0.53	1.59	0.6	17.3	22.2	1.4	770			
10 P	1.5	7 / 0.53	1.59	0.6	19.8	24.9	1.5	950	12.8	120	0.66
12 P		7 / 0.53	1.59	0.6	20.8	25.9	1.5	1,070			
14 P		7 / 0.53	1.59	0.6	21.7	26.8	1.6	1,180			
16 P		7 / 0.53	1.59	0.6	23.6	28.9	1.7	1,350			
19 P		7 / 0.53	1.59	0.6	25.5	31.0	1.7	1,560			
20 P		7 / 0.53	1.59	0.6	25.5	31.0	1.7	1,600			
24 P		7 / 0.53	1.59	0.6	29.6	35.3	1.9	1,950			
30 P		7 / 0.53	1.59	0.6	32.4	39.0	2.1	2,450			
37 P		7 / 0.53	1.59	0.6	35.0	41.8	2.2	2,900			

Cable Type 250V TFOI(i)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	5.5	8.9	0.9	120			
2 T		7 / 0.37	1.11	0.5	9.6	13.2	1.0	230			
3 T		7 / 0.37	1.11	0.5	10.3	14.6	1.1	320			
4 T		7 / 0.37	1.11	0.5	11.5	15.8	1.1	380			
5 T		7 / 0.37	1.11	0.5	13.0	17.5	1.2	460			
6 T		7 / 0.37	1.11	0.5	14.9	19.6	1.3	550			
7 T		7 / 0.37	1.11	0.5	14.9	19.6	1.3	580			
8 T		7 / 0.37	1.11	0.5	16.2	20.9	1.3	650			
10 T	0.75	7 / 0.37	1.11	0.5	18.6	23.5	1.4	800	26.0	100	0.72
12 T		7 / 0.37	1.11	0.5	19.8	24.9	1.5	910			
14 T		7 / 0.37	1.11	0.5	20.8	25.9	1.5	1,010			
16 T		7 / 0.37	1.11	0.5	22.3	27.6	1.6	1,140			
19 T		7 / 0.37	1.11	0.5	24.2	29.5	1.7	1,300			
20 T		7 / 0.37	1.11	0.5	24.7	30.0	1.7	1,350			
24 T		7 / 0.37	1.11	0.5	27.1	32.6	1.8	1,590			
30 T		7 / 0.37	1.11	0.5	30.3	36.7	2.0	2,030			
32 T		7 / 0.37	1.11	0.5	31.5	37.9	2.0	2,150			
1 T		7 / 0.43	1.29	0.5	5.9	9.3	0.9	140			
2 T		7 / 0.43	1.29	0.5	10.3	14.6	1.1	310			
3 T		7 / 0.43	1.29	0.5	11.1	15.4	1.1	370			
4 T		7 / 0.43	1.29	0.5	12.4	16.9	1.2	450			
5 T		7 / 0.43	1.29	0.5	14.0	18.5	1.2	530			
6 T		7 / 0.43	1.29	0.5	16.1	20.8	1.3	640			
7 T		7 / 0.43	1.29	0.5	16.1	20.8	1.3	680			
8 T		7 / 0.43	1.29	0.5	17.5	22.4	1.4	780			
10 T	1.0	7 / 0.43	1.29	0.5	20.1	25.2	1.5	960	19.2	110	0.69
12 T		7 / 0.43	1.29	0.5	21.4	26.5	1.6	1,080			
14 T		7 / 0.43	1.29	0.5	22.5	27.8	1.6	1,220			
16 T		7 / 0.43	1.29	0.5	24.1	29.4	1.7	1,360			
19 T		7 / 0.43	1.29	0.5	26.2	31.7	1.8	1,580			
20 T		7 / 0.43	1.29	0.5	26.7	32.2	1.8	1,640			
24 T		7 / 0.43	1.29	0.5	29.3	35.0	1.9	1,930			
30 T		7 / 0.43	1.29	0.5	32.8	39.4	2.1	2,470			
32 T		7 / 0.43	1.29	0.5	34.1	40.7	2.1	2,620			
1 T		7 / 0.53	1.59	0.6	7.0	10.4	0.9	170			
2 T		7 / 0.53	1.59	0.6	12.2	16.5	1.2	380			
3 T		7 / 0.53	1.59	0.6	13.2	17.7	1.2	480			
4 T		7 / 0.53	1.59	0.6	14.7	19.2	1.3	570			
5 T		7 / 0.53	1.59	0.6	16.6	21.3	1.4	690			
6 T		7 / 0.53	1.59	0.6	19.1	24.0	1.5	840			
7 T		7 / 0.53	1.59	0.6	19.1	24.0	1.5	900			
8 T		7 / 0.53	1.59	0.6	20.7	25.8	1.5	1,020			
10 T	1.5	7 / 0.53	1.59	0.6	23.8	29.1	1.7	1,260	12.8	120	0.66
12 T		7 / 0.53	1.59	0.6	25.4	30.9	1.7	1,450			
14 T		7 / 0.53	1.59	0.6	26.7	32.2	1.8	1,620			
16 T		7 / 0.53	1.59	0.6	28.6	34.3	1.9	1,830			
19 T		7 / 0.53	1.59	0.6	31.1	37.5	2.0	2,210			
20 T		7 / 0.53	1.59	0.6	31.7	38.1	2.0	2,300			
24 T		7 / 0.53	1.59	0.6	34.8	41.6	2.2	2,720			
30 T		7 / 0.53	1.59	0.6	38.9	45.9	2.3	3,310			
32 T		7 / 0.53	1.59	0.6	40.5	47.7	2.4	3,530			

Light Weight

Flame Retardant
Telephone & Instrument Cable (Collective Screen)

150/250V TFOI(c)

Cable Designation

- 150/250V TFOI(c)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

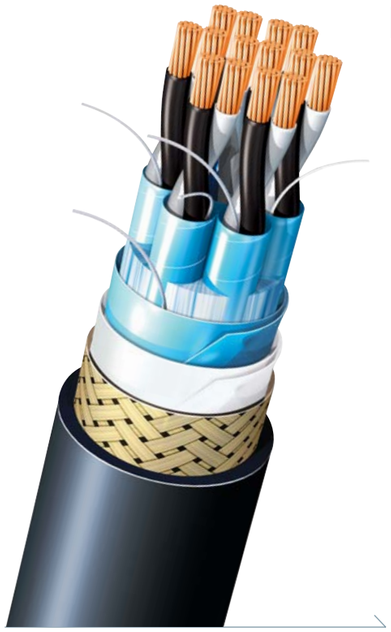
Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	F	Halogen Free Tape (Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TFOI(C)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.1	8.3	0.8	110			
2 P		7 / 0.37	1.11	0.5	6.1	9.5	0.9	140			
3 P		7 / 0.37	1.11	0.5	9.0	12.6	1.0	220			
4 P		7 / 0.37	1.11	0.5	9.7	13.3	1.0	250			
5 P		7 / 0.37	1.11	0.5	11.1	15.4	1.1	330			
6 P		7 / 0.37	1.11	0.5	12.0	16.3	1.2	370			
7 P		7 / 0.37	1.11	0.5	12.0	16.3	1.2	390			
8 P		7 / 0.37	1.11	0.5	12.9	17.4	1.2	440			
10 P	0.75	7 / 0.37	1.11	0.5	14.8	19.5	1.3	530	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	15.5	20.2	1.3	580			
14 P		7 / 0.37	1.11	0.5	16.1	20.8	1.3	630			
16 P		7 / 0.37	1.11	0.5	17.5	22.4	1.4	720			
19 P		7 / 0.37	1.11	0.5	18.9	23.8	1.5	810			
20 P		7 / 0.37	1.11	0.5	18.9	23.8	1.5	830			
24 P		7 / 0.37	1.11	0.5	21.9	27.0	1.6	1,000			
30 P		7 / 0.37	1.11	0.5	24.0	29.3	1.7	1,190			
37 P		7 / 0.37	1.11	0.5	25.8	31.3	1.8	1,390			
1 P		7 / 0.43	1.29	0.5	5.5	8.9	0.9	120			
2 P		7 / 0.43	1.29	0.5	6.5	9.9	0.9	160			
3 P		7 / 0.43	1.29	0.5	9.8	13.4	1.0	250			
4 P		7 / 0.43	1.29	0.5	10.5	14.8	1.1	330			
5 P		7 / 0.43	1.29	0.5	12.0	16.3	1.2	380			
6 P		7 / 0.43	1.29	0.5	13.0	17.5	1.2	440			
7 P		7 / 0.43	1.29	0.5	13.0	17.5	1.2	460			
8 P		7 / 0.43	1.29	0.5	14.0	18.5	1.2	510			
10 P	1.0	7 / 0.43	1.29	0.5	16.0	20.7	1.3	610	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	16.8	21.5	1.4	680			
14 P		7 / 0.43	1.29	0.5	17.5	22.4	1.4	760			
16 P		7 / 0.43	1.29	0.5	19.0	23.9	1.5	840			
19 P		7 / 0.43	1.29	0.5	20.5	25.6	1.5	970			
20 P		7 / 0.43	1.29	0.5	20.5	25.6	1.5	990			
24 P		7 / 0.43	1.29	0.5	23.8	29.1	1.7	1,200			
30 P		7 / 0.43	1.29	0.5	26.0	31.5	1.8	1,430			
37 P		7 / 0.43	1.29	0.5	28.0	33.7	1.8	1,680			
1 P		7 / 0.53	1.59	0.6	6.5	9.9	0.9	150			
2 P		7 / 0.53	1.59	0.6	7.7	11.1	0.9	200			
3 P		7 / 0.53	1.59	0.6	11.6	15.9	1.1	360			
4 P		7 / 0.53	1.59	0.6	12.5	17.0	1.2	420			
5 P		7 / 0.53	1.59	0.6	14.3	18.8	1.3	500			
6 P		7 / 0.53	1.59	0.6	15.5	20.2	1.3	580			
7 P		7 / 0.53	1.59	0.6	15.5	20.2	1.3	610			
8 P		7 / 0.53	1.59	0.6	16.7	21.4	1.4	680			
10 P	1.5	7 / 0.53	1.59	0.6	19.1	24.0	1.5	820	12.8	110	0.66
12 P		7 / 0.53	1.59	0.6	20.0	25.1	1.5	930			
14 P		7 / 0.53	1.59	0.6	20.9	26.0	1.5	1,020			
16 P		7 / 0.53	1.59	0.6	22.7	28.0	1.6	1,160			
19 P		7 / 0.53	1.59	0.6	24.5	29.8	1.7	1,320			
20 P		7 / 0.53	1.59	0.6	24.5	29.8	1.7	1,350			
24 P		7 / 0.53	1.59	0.6	28.4	34.1	1.9	1,660			
30 P		7 / 0.53	1.59	0.6	31.1	37.5	2.0	2,080			
37 P		7 / 0.53	1.59	0.6	33.5	40.1	2.1	2,430			

Cable Type 250V TFOI(i)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	5.5	8.9	0.9	120			
2 T		7 / 0.37	1.11	0.5	9.6	13.2	1.0	230			
3 T		7 / 0.37	1.11	0.5	10.3	14.6	1.1	320			
4 T		7 / 0.37	1.11	0.5	11.5	15.8	1.1	380			
5 T		7 / 0.37	1.11	0.5	13.0	17.5	1.2	460			
6 T		7 / 0.37	1.11	0.5	14.9	19.6	1.3	550			
7 T		7 / 0.37	1.11	0.5	14.9	19.6	1.3	580			
8 T		7 / 0.37	1.11	0.5	16.2	20.9	1.3	650			
10 T	0.75	7 / 0.37	1.11	0.5	18.6	23.5	1.4	800	26.0	100	0.72
12 T		7 / 0.37	1.11	0.5	19.8	24.9	1.5	910			
14 T		7 / 0.37	1.11	0.5	20.8	25.9	1.5	1,010			
16 T		7 / 0.37	1.11	0.5	22.3	27.6	1.6	1,140			
19 T		7 / 0.37	1.11	0.5	24.2	29.5	1.7	1,300			
20 T		7 / 0.37	1.11	0.5	24.7	30.0	1.7	1,350			
24 T		7 / 0.37	1.11	0.5	27.1	32.6	1.8	1,590			
30 T		7 / 0.37	1.11	0.5	30.3	36.7	2.0	2,030			
32 T		7 / 0.37	1.11	0.5	31.5	37.9	2.0	2,150			
1 T		7 / 0.43	1.29	0.5	5.9	9.3	0.9	140			
2 T		7 / 0.43	1.29	0.5	10.3	14.6	1.1	310			
3 T		7 / 0.43	1.29	0.5	11.1	15.4	1.1	370			
4 T		7 / 0.43	1.29	0.5	12.4	16.9	1.2	450			
5 T		7 / 0.43	1.29	0.5	14.0	18.5	1.2	530			
6 T		7 / 0.43	1.29	0.5	16.1	20.8	1.3	640			
7 T		7 / 0.43	1.29	0.5	16.1	20.8	1.3	680			
8 T		7 / 0.43	1.29	0.5	17.5	22.4	1.4	780			
10 T	1.0	7 / 0.43	1.29	0.5	20.1	25.2	1.5	960	19.2	110	0.69
12 T		7 / 0.43	1.29	0.5	21.4	26.5	1.6	1,080			
14 T		7 / 0.43	1.29	0.5	22.5	27.8	1.6	1,220			
16 T		7 / 0.43	1.29	0.5	24.1	29.4	1.7	1,360			
19 T		7 / 0.43	1.29	0.5	26.2	31.7	1.8	1,580			
20 T		7 / 0.43	1.29	0.5	26.7	32.2	1.8	1,640			
24 T		7 / 0.43	1.29	0.5	29.3	35.0	1.9	1,930			
30 T		7 / 0.43	1.29	0.5	32.8	39.4	2.1	2,470			
32 T		7 / 0.43	1.29	0.5	34.1	40.7	2.1	2,620			
1 T		7 / 0.53	1.59	0.6	7.0	10.4	0.9	170			
2 T		7 / 0.53	1.59	0.6	12.2	16.5	1.2	380			
3 T		7 / 0.53	1.59	0.6	13.2	17.7	1.2	480			
4 T		7 / 0.53	1.59	0.6	14.7	19.2	1.3	570			
5 T		7 / 0.53	1.59	0.6	16.6	21.3	1.4	690			
6 T		7 / 0.53	1.59	0.6	19.1	24.0	1.5	840			
7 T		7 / 0.53	1.59	0.6	19.1	24.0	1.5	900			
8 T		7 / 0.53	1.59	0.6	20.7	25.8	1.5	1,020			
10 T	1.5	7 / 0.53	1.59	0.6	23.8	29.1	1.7	1,260	12.8	120	0.66
12 T		7 / 0.53	1.59	0.6	25.4	30.9	1.7	1,450			
14 T		7 / 0.53	1.59	0.6	26.7	32.2	1.8	1,620			
16 T		7 / 0.53	1.59	0.6	28.6	34.3	1.9	1,830			
19 T		7 / 0.53	1.59	0.6	31.1	37.5	2.0	2,210			
20 T		7 / 0.53	1.59	0.6	31.7	38.1	2.0	2,300			
24 T		7 / 0.53	1.59	0.6	34.8	41.6	2.2	2,720			
30 T		7 / 0.53	1.59	0.6	38.9	45.9	2.3	3,310			
32 T		7 / 0.53	1.59	0.6	40.5	47.7	2.4	3,530			



Light Weight

Flame Retardant

Telephone & Instrument Cable (Individual & Collective Screen)

150/250V TFOI(i&c)

Cable Designation

• 150/250V TFOI(i&c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

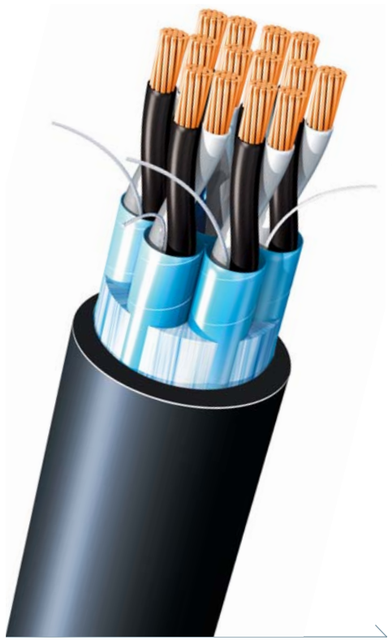
Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	F	Halogen Free Tape (Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TFOI(i&c)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.1	8.3	0.8	110			
2 P		7 / 0.37	1.11	0.5	8.8	12.4	1.0	210			
3 P		7 / 0.37	1.11	0.5	9.6	13.2	1.0	250			
4 P		7 / 0.37	1.11	0.5	10.3	14.6	1.1	330			
5 P		7 / 0.37	1.11	0.5	11.8	16.1	1.1	390			
6 P		7 / 0.37	1.11	0.5	12.8	17.3	1.2	450			
7 P		7 / 0.37	1.11	0.5	12.8	17.3	1.2	470			
8 P		7 / 0.37	1.11	0.5	13.7	18.2	1.2	520			
10 P	0.75	7 / 0.37	1.11	0.5	15.7	20.4	1.3	630	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	16.4	21.1	1.3	700			
14 P		7 / 0.37	1.11	0.5	17.2	21.9	1.4	770			
16 P		7 / 0.37	1.11	0.5	18.6	23.5	1.4	870			
19 P		7 / 0.37	1.11	0.5	20.1	25.2	1.5	1,010			
20 P		7 / 0.37	1.11	0.5	20.1	25.2	1.5	1,030			
24 P		7 / 0.37	1.11	0.5	23.3	28.6	1.6	1,250			
30 P		7 / 0.37	1.11	0.5	25.5	31.0	1.7	1,490			
37 P		7 / 0.37	1.11	0.5	27.5	33.2	1.8	1,750			
1 P		7 / 0.43	1.29	0.5	5.5	8.9	0.9	120			
2 P		7 / 0.43	1.29	0.5	9.5	13.1	1.0	240			
3 P		7 / 0.43	1.29	0.5	10.3	14.6	1.1	330			
4 P		7 / 0.43	1.29	0.5	11.1	15.4	1.1	380			
5 P		7 / 0.43	1.29	0.5	12.7	17.2	1.2	460			
6 P		7 / 0.43	1.29	0.5	13.8	18.3	1.2	520			
7 P		7 / 0.43	1.29	0.5	13.8	18.3	1.2	550			
8 P		7 / 0.43	1.29	0.5	14.8	19.5	1.3	620			
10 P	1.0	7 / 0.43	1.29	0.5	16.9	21.6	1.4	740	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	17.7	22.6	1.4	840			
14 P		7 / 0.43	1.29	0.5	18.5	23.4	1.4	930			
16 P		7 / 0.43	1.29	0.5	20.1	25.2	1.5	1,060			
19 P		7 / 0.43	1.29	0.5	21.7	26.8	1.6	1,210			
20 P		7 / 0.43	1.29	0.5	21.7	26.8	1.6	1,240			
24 P		7 / 0.43	1.29	0.5	25.1	30.6	1.7	1,510			
30 P		7 / 0.43	1.29	0.5	27.5	33.2	1.8	1,810			
37 P		7 / 0.43	1.29	0.5	29.7	35.4	1.9	2,130			
1 P		7 / 0.53	1.59	0.6	6.5	9.9	0.9	150			
2 P		7 / 0.53	1.59	0.6	11.2	15.5	1.1	340			
3 P		7 / 0.53	1.59	0.6	12.2	16.5	1.2	410			
4 P		7 / 0.53	1.59	0.6	13.1	17.6	1.2	480			
5 P		7 / 0.53	1.59	0.6	15.0	19.7	1.3	590			
6 P		7 / 0.53	1.59	0.6	16.3	21.0	1.3	670			
7 P		7 / 0.53	1.59	0.6	16.3	21.0	1.3	710			
8 P		7 / 0.53	1.59	0.6	17.5	22.4	1.4	800			
10 P	1.5	7 / 0.53	1.59	0.6	20.0	25.1	1.5	970	12.8	110	0.66
12 P		7 / 0.53	1.59	0.6	21.0	26.1	1.5	1,090			
14 P		7 / 0.53	1.59	0.6	21.9	27.0	1.6	1,210			
16 P		7 / 0.53	1.59	0.6	23.8	29.1	1.7	1,380			
19 P		7 / 0.53	1.59	0.6	25.7	31.2	1.7	1,590			
20 P		7 / 0.53	1.59	0.6	25.7	31.2	1.7	1,630			
24 P		7 / 0.53	1.59	0.6	29.8	35.7	1.9	2,000			
30 P		7 / 0.53	1.59	0.6	32.6	39.2	2.1	2,490			
37 P		7 / 0.53	1.59	0.6	35.2	42.0	2.2	2,940			

Cable Type 250V TFOI(i&c)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	5.5	8.9	0.9	130			
2 T		7 / 0.37	1.11	0.5	9.8	13.4	1.0	250			
3 T		7 / 0.37	1.11	0.5	10.5	14.8	1.1	330			
4 T		7 / 0.37	1.11	0.5	11.7	16.0	1.1	400			
5 T		7 / 0.37	1.11	0.5	13.2	17.7	1.2	480			
6 T		7 / 0.37	1.11	0.5	15.1	19.8	1.3	570			
7 T		7 / 0.37	1.11	0.5	15.1	19.8	1.3	600			
8 T		7 / 0.37	1.11	0.5	16.4	21.1	1.3	670			
10 T	0.75	7 / 0.37	1.11	0.5	18.8	23.7	1.4	820	26.0	95	0.72
12 T		7 / 0.37	1.11	0.5	20.0	25.1	1.5	940			
14 T		7 / 0.37	1.11	0.5	21.0	26.1	1.5	1,030			
16 T		7 / 0.37	1.11	0.5	22.5	27.8	1.6	1,160			
19 T		7 / 0.37	1.11	0.5	24.4	29.7	1.7	1,330			
20 T		7 / 0.37	1.11	0.5	24.9	30.4	1.7	1,400			
24 T		7 / 0.37	1.11	0.5	27.3	33.0	1.8	1,630			
30 T		7 / 0.37	1.11	0.5	30.5	36.9	2.0	2,070			
32 T		7 / 0.37	1.11	0.5	31.7	38.1	2.0	2,190			
1 T		7 / 0.43	1.29	0.5	5.9	9.3	0.9	140			
2 T		7 / 0.43	1.29	0.5	10.5	14.8	1.1	320			
3 T		7 / 0.43	1.29	0.5	11.3	15.6	1.1	390			
4 T		7 / 0.43	1.29	0.5	12.6	17.1	1.2	470			
5 T		7 / 0.43	1.29	0.5	14.2	18.7	1.2	550			
6 T		7 / 0.43	1.29	0.5	16.3	21.0	1.3	670			
7 T		7 / 0.43	1.29	0.5	16.3	21.0	1.3	710			
8 T		7 / 0.43	1.29	0.5	17.7	22.6	1.4	800			
10 T	1.0	7 / 0.43	1.29	0.5	20.3	25.4	1.5	980	19.2	100	0.69
12 T		7 / 0.43	1.29	0.5	21.6	26.7	1.6	1,110			
14 T		7 / 0.43	1.29	0.5	22.7	28.0	1.6	1,250			
16 T		7 / 0.43	1.29	0.5	24.3	29.6	1.7	1,390			
19 T		7 / 0.43	1.29	0.5	26.4	31.9	1.8	1,610			
20 T		7 / 0.43	1.29	0.5	26.9	32.4	1.8	1,680			
24 T		7 / 0.43	1.29	0.5	29.5	35.2	1.9	1,970			
30 T		7 / 0.43	1.29	0.5	33.0	39.6	2.1	2,510			
32 T		7 / 0.43	1.29	0.5	34.3	41.1	2.1	2,680			
1 T		7 / 0.53	1.59	0.6	7.0	10.4	0.9	180			
2 T		7 / 0.53	1.59	0.6	12.4	16.9	1.2	410			
3 T		7 / 0.53	1.59	0.6	13.4	17.9	1.2	500			
4 T		7 / 0.53	1.59	0.6	14.9	19.6	1.3	610			
5 T		7 / 0.53	1.59	0.6	16.8	21.5	1.4	720			
6 T		7 / 0.53	1.59	0.6	19.3	24.2	1.5	870			
7 T		7 / 0.53	1.59	0.6	19.3	24.2	1.5	930			
8 T		7 / 0.53	1.59	0.6	20.9	26.0	1.5	1,050			
10 T	1.5	7 / 0.53	1.59	0.6	24.0	29.3	1.7	1,290	12.8	110	0.66
12 T		7 / 0.53	1.59	0.6	25.6	31.1	1.7	1,480			
14 T		7 / 0.53	1.59	0.6	26.9	32.4	1.8	1,650			
16 T		7 / 0.53	1.59	0.6	28.8	34.5	1.9	1,860			
19 T		7 / 0.53	1.59	0.6	31.3	37.7	2.0	2,250			
20 T		7 / 0.53	1.59	0.6	31.9	38.5	2.0	2,360			
24 T		7 / 0.53	1.59	0.6	35.0	41.8	2.2	2,760			
30 T		7 / 0.53	1.59	0.6	39.1	46.1	2.3	3,350			
32 T		7 / 0.53	1.59	0.6	40.7	47.9	2.4	3,580			



Light Weight

Flame Retardant
Telephone & Instrument Cable (Individual Screen)

150/250V TXXI(i)

Cable Designation

- 150/250V TXXI(i)

Application

- This cable is designed for telephone & instrument circuits up to 150/250V.
- Suitable for use in commercial marine applications
- Maximum conductor temperature : 90℃

Application Standard

- Design Guide : IEC 60092-350, 376
- Insulation Material : IEC 60092-351
- Sheath Material : IEC 60092-359
- Flammability : IEC 60332-1 & IEC 60332-3 Category A
- Halogen Content : IEC 60754-1,2, 0.5%(Max.)
- Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TXXI(i)

No. of Pairs	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P	0.75	7 / 0.37	1.11	0.5	7.1	0.8	70	26.0	100	0.72
2 P		7 / 0.37	1.11	0.5	10.8	0.9	140			
3 P		7 / 0.37	1.11	0.5	11.8	1.0	180			
4 P		7 / 0.37	1.11	0.5	12.5	1.0	210			
5 P		7 / 0.37	1.11	0.5	14.2	1.1	260			
6 P		7 / 0.37	1.11	0.5	15.2	1.1	300			
7 P		7 / 0.37	1.11	0.5	15.2	1.1	330			
8 P		7 / 0.37	1.11	0.5	16.1	1.1	370			
10 P		7 / 0.37	1.11	0.5	18.3	1.2	460			
12 P		7 / 0.37	1.11	0.5	19.0	1.3	520			
14 P		7 / 0.37	1.11	0.5	20.0	1.3	600			
16 P		7 / 0.37	1.11	0.5	21.4	1.4	670			
19 P		7 / 0.37	1.11	0.5	23.1	1.4	790			
20 P		7 / 0.37	1.11	0.5	23.1	1.4	810			
24 P		7 / 0.37	1.11	0.5	26.5	1.6	1,000			
30 P		7 / 0.37	1.11	0.5	28.9	1.7	1,220			
37 P		7 / 0.37	1.11	0.5	31.1	1.7	1,470			
1 P	1.0	7 / 0.43	1.29	0.5	7.5	0.8	80	19.2	110	0.69
2 P		7 / 0.43	1.29	0.5	11.7	1.0	170			
3 P		7 / 0.43	1.29	0.5	12.5	1.0	210			
4 P		7 / 0.43	1.29	0.5	13.3	1.0	250			
5 P		7 / 0.43	1.29	0.5	15.1	1.1	310			
6 P		7 / 0.43	1.29	0.5	16.2	1.1	360			
7 P		7 / 0.43	1.29	0.5	16.2	1.1	400			
8 P		7 / 0.43	1.29	0.5	17.4	1.2	450			
10 P		7 / 0.43	1.29	0.5	19.7	1.3	570			
12 P		7 / 0.43	1.29	0.5	20.5	1.3	650			
14 P		7 / 0.43	1.29	0.5	21.3	1.4	730			
16 P		7 / 0.43	1.29	0.5	23.1	1.4	840			
19 P		7 / 0.43	1.29	0.5	24.9	1.5	980			
20 P		7 / 0.43	1.29	0.5	24.9	1.5	1,020			
24 P		7 / 0.43	1.29	0.5	28.5	1.6	1,250			
30 P		7 / 0.43	1.29	0.5	31.1	1.7	1,520			
37 P		7 / 0.43	1.29	0.5	33.5	1.8	1,830			

Cable Type 250V TXXI(i)

No. of Triads	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T	0.75	7 / 0.37	1.11	0.5	7.5	0.8	80	26.0	100	0.72
2 T		7 / 0.37	1.11	0.5	12.0	1.0	170			
3 T		7 / 0.37	1.11	0.5	12.7	1.0	210			
4 T		7 / 0.37	1.11	0.5	14.1	1.1	270			
5 T		7 / 0.37	1.11	0.5	15.6	1.1	330			
6 T		7 / 0.37	1.11	0.5	17.7	1.2	400			
7 T		7 / 0.37	1.11	0.5	17.7	1.2	430			
8 T		7 / 0.37	1.11	0.5	19.0	1.3	490			
10 T		7 / 0.37	1.11	0.5	21.6	1.4	620			
12 T		7 / 0.37	1.11	0.5	23.0	1.4	720			
14 T		7 / 0.37	1.11	0.5	24.0	1.5	810			
16 T		7 / 0.37	1.11	0.5	25.7	1.5	920			
19 T		7 / 0.37	1.11	0.5	27.8	1.6	1,090			
20 T		7 / 0.37	1.11	0.5	28.3	1.6	1,130			
24 T		7 / 0.37	1.11	0.5	30.9	1.7	1,350			
30 T		7 / 0.37	1.11	0.5	34.3	1.9	1,660			
32 T		7 / 0.37	1.11	0.5	35.7	1.9	1,790			
1 T	1.0	7 / 0.43	1.29	0.5	7.9	0.8	100	19.2	110	0.69
2 T		7 / 0.43	1.29	0.5	12.7	1.0	200			
3 T		7 / 0.43	1.29	0.5	13.5	1.0	260			
4 T		7 / 0.43	1.29	0.5	15.0	1.1	330			
5 T		7 / 0.43	1.29	0.5	16.8	1.2	400			
6 T		7 / 0.43	1.29	0.5	18.9	1.3	490			
7 T		7 / 0.43	1.29	0.5	18.9	1.3	530			
8 T		7 / 0.43	1.29	0.5	20.5	1.3	610			
10 T		7 / 0.43	1.29	0.5	23.3	1.4	760			
12 T		7 / 0.43	1.29	0.5	24.6	1.5	880			
14 T		7 / 0.43	1.29	0.5	25.9	1.5	1,010			
16 T		7 / 0.43	1.29	0.5	27.7	1.6	1,150			
19 T		7 / 0.43	1.29	0.5	29.8	1.7	1,340			
20 T		7 / 0.43	1.29	0.5	30.5	1.7	1,410			
24 T		7 / 0.43	1.29	0.5	33.3	1.8	1,680			
30 T		7 / 0.43	1.29	0.5	37.0	2.0	2,070			
32 T		7 / 0.43	1.29	0.5	38.5	2.0	2,220			

Light Weight

Flame Retardant

Telephone & Instrument Cable (Collective Screen)

150/250V TXXI(c)

Cable Designation

• 150/250V TXXI(c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Collective Screen	(c)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TXXI(c)

No. of Pairs	Conductor Nominal Area	Conductor Strand	Conductor Dia.	Thickness of Insulation	Overall Diameter Nominal	Overall Diameter Tolerance	Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	7.1	0.8	70			
2 P		7 / 0.37	1.11	0.5	8.1	0.8	100			
3 P		7 / 0.37	1.11	0.5	11.4	1.0	160			
4 P		7 / 0.37	1.11	0.5	12.1	1.0	180			
5 P		7 / 0.37	1.11	0.5	13.5	1.0	220			
6 P		7 / 0.37	1.11	0.5	14.6	1.1	260			
7 P		7 / 0.37	1.11	0.5	14.6	1.1	280			
8 P		7 / 0.37	1.11	0.5	15.5	1.1	310			
10 P	0.75	7 / 0.37	1.11	0.5	17.6	1.2	380	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	18.3	1.2	430			
14 P		7 / 0.37	1.11	0.5	18.9	1.3	480			
16 P		7 / 0.37	1.11	0.5	20.5	1.3	550			
19 P		7 / 0.37	1.11	0.5	21.9	1.4	630			
20 P		7 / 0.37	1.11	0.5	21.9	1.4	640			
24 P		7 / 0.37	1.11	0.5	25.3	1.5	810			
30 P		7 / 0.37	1.11	0.5	27.6	1.6	980			
37 P		7 / 0.37	1.11	0.5	29.4	1.7	1,140			
1 P		7 / 0.43	1.29	0.5	7.5	0.8	80			
2 P		7 / 0.43	1.29	0.5	8.7	0.8	120			
3 P		7 / 0.43	1.29	0.5	12.2	1.0	190			
4 P		7 / 0.43	1.29	0.5	12.9	1.0	220			
5 P		7 / 0.43	1.29	0.5	14.6	1.1	270			
6 P		7 / 0.43	1.29	0.5	15.6	1.1	310			
7 P		7 / 0.43	1.29	0.5	15.6	1.1	330			
8 P		7 / 0.43	1.29	0.5	16.8	1.2	380			
10 P	1.0	7 / 0.43	1.29	0.5	18.8	1.3	460	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	19.8	1.3	530			
14 P		7 / 0.43	1.29	0.5	20.5	1.3	590			
16 P		7 / 0.43	1.29	0.5	22.2	1.4	670			
19 P		7 / 0.43	1.29	0.5	23.7	1.4	770			
20 P		7 / 0.43	1.29	0.5	23.7	1.4	800			
24 P		7 / 0.43	1.29	0.5	27.2	1.6	980			
30 P		7 / 0.43	1.29	0.5	29.6	1.7	1,190			
37 P		7 / 0.43	1.29	0.5	31.8	1.8	1,410			

Cable Type 250V TXXI(c)

No. of Triads	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	7.5	0.8	80			
2 T		7 / 0.37	1.11	0.5	11.6	1.0	160			
3 T		7 / 0.37	1.11	0.5	12.3	1.0	200			
4 T		7 / 0.37	1.11	0.5	13.5	1.0	240			
5 T		7 / 0.37	1.11	0.5	15.1	1.1	290			
6 T		7 / 0.37	1.11	0.5	17.1	1.2	360			
7 T	0.75	7 / 0.37	1.11	0.5	17.1	1.2	380	26.0	95	0.72
8 T		7 / 0.37	1.11	0.5	18.3	1.2	430			
10 T		7 / 0.37	1.11	0.5	20.8	1.3	540			
12 T		7 / 0.37	1.11	0.5	21.9	1.4	610			
14 T		7 / 0.37	1.11	0.5	23.0	1.4	690			
16 T		7 / 0.37	1.11	0.5	24.4	1.5	780			
19 T		7 / 0.37	1.11	0.5	26.5	1.6	910			
20 T		7 / 0.37	1.11	0.5	26.9	1.6	950			
24 T		7 / 0.37	1.11	0.5	29.4	1.7	1,130			
30 T		7 / 0.37	1.11	0.5	32.6	1.8	1,380			
32 T		7 / 0.37	1.11	0.5	33.9	1.9	1,490			
1 T		7 / 0.43	1.29	0.5	7.9	0.8	100			
2 T		7 / 0.43	1.29	0.5	12.4	1.0	190			
3 T		7 / 0.43	1.29	0.5	13.2	1.0	230			
4 T		7 / 0.43	1.29	0.5	14.6	1.1	290			
5 T		7 / 0.43	1.29	0.5	16.1	1.1	350			
6 T		7 / 0.43	1.29	0.5	18.3	1.2	430			
7 T	1.0	7 / 0.43	1.29	0.5	18.3	1.2	460	19.2	100	0.69
8 T		7 / 0.43	1.29	0.5	19.8	1.3	530			
10 T		7 / 0.43	1.29	0.5	22.5	1.4	660			
12 T		7 / 0.43	1.29	0.5	23.7	1.4	750			
14 T		7 / 0.43	1.29	0.5	24.9	1.5	850			
16 T		7 / 0.43	1.29	0.5	26.4	1.6	960			
19 T		7 / 0.43	1.29	0.5	28.6	1.6	1,120			
20 T		7 / 0.43	1.29	0.5	29.1	1.7	1,170			
24 T		7 / 0.43	1.29	0.5	31.8	1.8	1,390			
30 T		7 / 0.43	1.29	0.5	35.3	1.9	1,710			
32 T		7 / 0.43	1.29	0.5	36.7	2.0	1,840			

Light Weight

Flame Retardant Telephone & Instrument Cable (Individual & Collective Screen)

150/250V TXXI(i & c)

Cable Designation

• 150/250V TXXI(i&c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Insulation	T	Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

Cable Type 250V TXXI(i&c)

No. of Pairs	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	7.3	0.8	70			
2 P		7 / 0.37	1.11	0.5	11.0	0.9	150			
3 P		7 / 0.37	1.11	0.5	12.0	1.0	190			
4 P		7 / 0.37	1.11	0.5	12.7	1.0	220			
5 P		7 / 0.37	1.11	0.5	14.4	1.1	280			
6 P		7 / 0.37	1.11	0.5	15.4	1.1	320			
7 P		7 / 0.37	1.11	0.5	15.4	1.1	340			
8 P		7 / 0.37	1.11	0.5	16.3	1.2	380			
10 P	0.75	7 / 0.37	1.11	0.5	18.5	1.2	480	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	19.2	1.3	540			
14 P		7 / 0.37	1.11	0.5	20.2	1.3	620			
16 P		7 / 0.37	1.11	0.5	21.6	1.4	700			
19 P		7 / 0.37	1.11	0.5	23.3	1.4	810			
20 P		7 / 0.37	1.11	0.5	23.3	1.4	840			
24 P		7 / 0.37	1.11	0.5	26.7	1.6	1,030			
30 P		7 / 0.37	1.11	0.5	29.1	1.7	1,250			
37 P		7 / 0.37	1.11	0.5	31.3	1.8	1,500			
1 P		7 / 0.43	1.29	0.5	7.7	0.8	80			
2 P		7 / 0.43	1.29	0.5	11.9	1.0	180			
3 P		7 / 0.43	1.29	0.5	12.7	1.0	220			
4 P		7 / 0.43	1.29	0.5	13.5	1.0	270			
5 P		7 / 0.43	1.29	0.5	15.3	1.1	330			
6 P		7 / 0.43	1.29	0.5	16.4	1.2	380			
7 P		7 / 0.43	1.29	0.5	16.4	1.2	420			
8 P		7 / 0.43	1.29	0.5	17.6	1.2	480			
10 P	1.0	7 / 0.43	1.29	0.5	19.9	1.3	590	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	20.7	1.3	670			
14 P		7 / 0.43	1.29	0.5	21.5	1.4	750			
16 P		7 / 0.43	1.29	0.5	23.3	1.4	860			
19 P		7 / 0.43	1.29	0.5	25.1	1.5	1,010			
20 P		7 / 0.43	1.29	0.5	25.1	1.5	1,040			
24 P		7 / 0.43	1.29	0.5	28.7	1.6	1,280			
30 P		7 / 0.43	1.29	0.5	31.3	1.8	1,560			
37 P		7 / 0.43	1.29	0.5	33.7	1.8	1,870			

Cable Type 250V TXXI(i&c)

No. of Triads	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	7.7	0.8	80			
2 T		7 / 0.37	1.11	0.5	12.2	1.0	190			
3 T		7 / 0.37	1.11	0.5	12.9	1.0	230			
4 T		7 / 0.37	1.11	0.5	14.3	1.1	290			
5 T		7 / 0.37	1.11	0.5	15.8	1.1	340			
6 T		7 / 0.37	1.11	0.5	17.9	1.2	420			
7 T		7 / 0.37	1.11	0.5	17.9	1.2	450			
8 T	0.75	7 / 0.37	1.11	0.5	19.2	1.3	510			
10 T		7 / 0.37	1.11	0.5	21.8	1.4	640	26.0	95	0.72
12 T		7 / 0.37	1.11	0.5	23.2	1.4	740			
14 T		7 / 0.37	1.11	0.5	24.2	1.5	830			
16 T		7 / 0.37	1.11	0.5	25.9	1.5	950			
19 T		7 / 0.37	1.11	0.5	28.0	1.6	1,110			
20 T		7 / 0.37	1.11	0.5	28.5	1.6	1,160			
24 T		7 / 0.37	1.11	0.5	31.1	1.7	1,380			
30 T		7 / 0.37	1.11	0.5	34.5	1.9	1,700			
32 T		7 / 0.37	1.11	0.5	35.9	1.9	1,820			
1 T		7 / 0.43	1.29	0.5	8.1	0.8	100			
2 T		7 / 0.43	1.29	0.5	12.9	1.0	220			
3 T		7 / 0.43	1.29	0.5	13.7	1.0	270			
4 T		7 / 0.43	1.29	0.5	15.2	1.1	340			
5 T		7 / 0.43	1.29	0.5	17.0	1.2	420			
6 T		7 / 0.43	1.29	0.5	19.1	1.3	510			
7 T	1.0	7 / 0.43	1.29	0.5	19.1	1.3	550			
8 T		7 / 0.43	1.29	0.5	20.7	1.3	630			
10 T		7 / 0.43	1.29	0.5	23.5	1.4	790	19.2	100	0.69
12 T		7 / 0.43	1.29	0.5	25.0	1.5	920			
14 T		7 / 0.43	1.29	0.5	26.1	1.5	1,030			
16 T		7 / 0.43	1.29	0.5	27.9	1.6	1,180			
19 T		7 / 0.43	1.29	0.5	30.0	1.7	1,370			
20 T		7 / 0.43	1.29	0.5	30.7	1.7	1,440			
24 T		7 / 0.43	1.29	0.5	33.5	1.8	1,710			
30 T		7 / 0.43	1.29	0.5	37.2	2.0	2,110			
32 T		7 / 0.43	1.29	0.5	38.7	2.0	2,260			

Light Weight

Fire Resistance

Telephone & Instrument Cable (Non Screen)

150/250V SFOI

Cable Designation

• 150/250V SFOI

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Inner Covering	F	Halogen Free Tape(Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic Compound (IEC 60092-359, SHF 1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SFOI

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.7	9.1	0.9	120			
2 P		7 / 0.37	1.11	0.5	6.8	10.2	0.9	150			
3 P		7 / 0.37	1.11	0.5	10.3	14.6	1.1	280			
4 P		7 / 0.37	1.11	0.5	11.1	15.4	1.1	320			
5 P		7 / 0.37	1.11	0.5	12.7	17.2	1.2	390			
6 P		7 / 0.37	1.11	0.5	13.8	18.3	1.2	440			
7 P		7 / 0.37	1.11	0.5	13.8	18.3	1.2	460			
8 P		7 / 0.37	1.11	0.5	14.9	19.6	1.3	520			
10 P	0.75	7 / 0.37	1.11	0.5	17.0	21.7	1.4	620	26.0	100	0.72
12 P		7 / 0.37	1.11	0.5	17.9	22.8	1.4	700			
14 P		7 / 0.37	1.11	0.5	18.7	23.6	1.4	770			
16 P		7 / 0.37	1.11	0.5	20.3	25.4	1.5	870			
19 P		7 / 0.37	1.11	0.5	21.9	27.0	1.6	990			
20 P		7 / 0.37	1.11	0.5	21.9	27.0	1.6	1,010			
24 P		7 / 0.37	1.11	0.5	25.4	30.9	1.7	1,240			
30 P		7 / 0.37	1.11	0.5	27.8	33.5	1.8	1,480			
37 P		7 / 0.37	1.11	0.5	30.0	35.9	1.9	1,730			
1 P		7 / 0.43	1.29	0.5	6.1	9.5	0.9	130			
2 P		7 / 0.43	1.29	0.5	7.3	10.7	0.9	170			
3 P		7 / 0.43	1.29	0.5	11.0	15.3	1.1	320			
4 P		7 / 0.43	1.29	0.5	11.9	16.2	1.1	360			
5 P		7 / 0.43	1.29	0.5	13.6	18.1	1.2	440			
6 P		7 / 0.43	1.29	0.5	14.8	19.5	1.3	510			
7 P		7 / 0.43	1.29	0.5	14.8	19.5	1.3	530			
8 P		7 / 0.43	1.29	0.5	16.0	20.7	1.3	590			
10 P	1.0	7 / 0.43	1.29	0.5	18.3	23.2	1.4	730	19.2	110	0.72
12 P		7 / 0.43	1.29	0.5	19.2	24.1	1.5	810			
14 P		7 / 0.43	1.29	0.5	20.0	25.1	1.5	900			
16 P		7 / 0.43	1.29	0.5	21.8	26.9	1.6	1,010			
19 P		7 / 0.43	1.29	0.5	23.5	28.8	1.7	1,160			
20 P		7 / 0.43	1.29	0.5	23.5	28.8	1.7	1,190			
24 P		7 / 0.43	1.29	0.5	27.3	33.0	1.8	1,460			
30 P		7 / 0.43	1.29	0.5	29.9	35.8	1.9	1,740			
37 P		7 / 0.43	1.29	0.5	32.2	38.8	2.1	2,140			
1 P		7 / 0.53	1.59	0.6	7.1	10.5	0.9	160			
2 P		7 / 0.53	1.59	0.6	8.5	12.1	1.0	220			
3 P		7 / 0.53	1.59	0.6	12.9	17.4	1.2	400			
4 P		7 / 0.53	1.59	0.6	13.9	18.4	1.2	470			
5 P		7 / 0.53	1.59	0.6	15.9	20.6	1.3	570			
6 P		7 / 0.53	1.59	0.6	17.3	22.2	1.4	660			
7 P		7 / 0.53	1.59	0.6	17.3	22.2	1.4	700			
8 P		7 / 0.53	1.59	0.6	18.7	23.6	1.4	780			
10 P	1.5	7 / 0.53	1.59	0.6	21.4	26.5	1.6	950	12.8	120	0.66
12 P		7 / 0.53	1.59	0.6	22.4	27.7	1.6	1,070			
14 P		7 / 0.53	1.59	0.6	23.4	28.7	1.6	1,180			
16 P		7 / 0.53	1.59	0.6	25.5	31.0	1.7	1,350			
19 P		7 / 0.53	1.59	0.6	27.5	33.2	1.8	1,560			
20 P		7 / 0.53	1.59	0.6	27.5	33.2	1.8	1,590			
24 P		7 / 0.53	1.59	0.6	31.9	38.5	2.0	2,060			
30 P		7 / 0.53	1.59	0.6	35.0	41.8	2.2	2,450			
37 P		7 / 0.53	1.59	0.6	37.7	44.7	2.3	2,880			

Cable Type 250V SFOI (MGT+XLPE/LIC/CWB/SHF1)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	6.1	9.5	0.9	130			
2 T		7 / 0.37	1.11	0.5	10.6	14.9	1.1	290			
3 T		7 / 0.37	1.11	0.5	11.4	15.7	1.1	340			
4 T		7 / 0.37	1.11	0.5	12.7	17.2	1.2	410			
5 T		7 / 0.37	1.11	0.5	14.3	18.8	1.3	480			
6 T		7 / 0.37	1.11	0.5	16.5	21.2	1.3	590			
7 T		7 / 0.37	1.11	0.5	16.5	21.2	1.3	620			
8 T		7 / 0.37	1.11	0.5	17.9	22.8	1.4	700			
10 T	0.75	7 / 0.37	1.11	0.5	20.6	25.7	1.5	860	26.0	100	0.72
12 T		7 / 0.37	1.11	0.5	21.9	27.0	1.6	970			
14 T		7 / 0.37	1.11	0.5	23.0	28.3	1.6	1,080			
16 T		7 / 0.37	1.11	0.5	24.6	29.9	1.7	1,200			
19 T		7 / 0.37	1.11	0.5	26.8	32.3	1.8	1,390			
20 T		7 / 0.37	1.11	0.5	27.3	33.0	1.8	1,460			
24 T		7 / 0.37	1.11	0.5	30.0	35.9	1.9	1,710			
30 T		7 / 0.37	1.11	0.5	33.5	40.1	2.1	2,170			
32 T		7 / 0.37	1.11	0.5	34.9	41.7	2.2	2,320			
1 T		7 / 0.43	1.29	0.5	6.5	9.9	0.9	150			
2 T		7 / 0.43	1.29	0.5	11.3	15.6	1.1	320			
3 T		7 / 0.43	1.29	0.5	12.2	16.5	1.2	380			
4 T		7 / 0.43	1.29	0.5	13.6	18.1	1.2	470			
5 T		7 / 0.43	1.29	0.5	15.4	20.1	1.3	560			
6 T		7 / 0.43	1.29	0.5	17.7	22.6	1.4	680			
7 T		7 / 0.43	1.29	0.5	17.7	22.6	1.4	720			
8 T		7 / 0.43	1.29	0.5	19.2	24.1	1.5	810			
10 T	1.0	7 / 0.43	1.29	0.5	22.1	27.2	1.6	990	19.2	110	0.72
12 T		7 / 0.43	1.29	0.5	23.5	28.8	1.7	1,130			
14 T		7 / 0.43	1.29	0.5	24.7	30.0	1.7	1,260			
16 T		7 / 0.43	1.29	0.5	26.4	31.9	1.8	1,410			
19 T		7 / 0.43	1.29	0.5	28.7	34.4	1.9	1,640			
20 T		7 / 0.43	1.29	0.5	29.3	35.0	1.9	1,700			
24 T		7 / 0.43	1.29	0.5	32.2	38.8	2.1	2,110			
30 T		7 / 0.43	1.29	0.5	36.0	42.8	2.2	2,560			
32 T		7 / 0.43	1.29	0.5	37.4	44.4	2.3	2,730			
1 T		7 / 0.53	1.59	0.6	7.6	11.0	0.9	180			
2 T		7 / 0.53	1.59	0.6	13.2	17.7	1.2	410			
3 T		7 / 0.53	1.59	0.6	14.2	18.7	1.2	490			
4 T		7 / 0.53	1.59	0.6	15.9	20.6	1.3	610			
5 T		7 / 0.53	1.59	0.6	18.0	22.9	1.4	740			
6 T		7 / 0.53	1.59	0.6	20.7	25.8	1.5	890			
7 T		7 / 0.53	1.59	0.6	20.7	25.8	1.5	950			
8 T		7 / 0.53	1.59	0.6	22.4	27.7	1.6	1,070			
10 T	1.5	7 / 0.53	1.59	0.6	25.8	31.3	1.8	1,320	12.8	120	0.66
12 T		7 / 0.53	1.59	0.6	27.5	33.2	1.8	1,520			
14 T		7 / 0.53	1.59	0.6	28.9	34.6	1.9	1,690			
16 T		7 / 0.53	1.59	0.6	30.9	37.3	2.0	1,990			
19 T		7 / 0.53	1.59	0.6	33.7	40.3	2.1	2,310			
20 T		7 / 0.53	1.59	0.6	34.3	41.1	2.1	2,420			
24 T		7 / 0.53	1.59	0.6	37.7	44.7	2.3	2,840			
30 T		7 / 0.53	1.59	0.6	42.1	49.5	2.5	3,460			
32 T		7 / 0.53	1.59	0.6	43.8	51.2	2.5	3,670			

Light Weight

Fire Resistance Telephone & Instrument Cable (Indiviidual Screen)

150/250V SFOI(i)

Cable Designation

• 150/250V SFOI(i)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Covering	F	Halogen Free Tape(Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SFOI(i)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.9	9.3	0.9	130			
2 P		7 / 0.37	1.11	0.5	10.0	13.6	1.0	230			
3 P		7 / 0.37	1.11	0.5	10.8	15.1	1.1	320			
4 P		7 / 0.37	1.11	0.5	11.7	16.0	1.1	370			
5 P		7 / 0.37	1.11	0.5	13.4	17.9	1.2	450			
6 P		7 / 0.37	1.11	0.5	14.6	19.1	1.3	510			
7 P		7 / 0.37	1.11	0.5	14.6	19.1	1.3	540			
8 P		7 / 0.37	1.11	0.5	15.7	20.4	1.3	610			
10 P	0.75	7 / 0.37	1.11	0.5	18.0	22.9	1.4	740	26.0	100	0.72
12 P		7 / 0.37	1.11	0.5	18.8	23.7	1.4	830			
14 P		7 / 0.37	1.11	0.5	19.7	24.6	1.5	910			
16 P		7 / 0.37	1.11	0.5	21.4	26.5	1.6	1,040			
19 P		7 / 0.37	1.11	0.5	23.1	28.4	1.6	1,200			
20 P		7 / 0.37	1.11	0.5	23.1	28.4	1.6	1,230			
24 P		7 / 0.37	1.11	0.5	26.8	32.3	1.8	1,490			
30 P		7 / 0.37	1.11	0.5	29.4	35.1	1.9	1,790			
37 P		7 / 0.37	1.11	0.5	31.7	38.1	2.0	2,200			
1 P		7 / 0.43	1.29	0.5	6.3	9.7	0.9	140			
2 P		7 / 0.43	1.29	0.5	10.7	15.0	1.1	300			
3 P		7 / 0.43	1.29	0.5	11.6	15.9	1.1	360			
4 P		7 / 0.43	1.29	0.5	12.5	17.0	1.2	430			
5 P		7 / 0.43	1.29	0.5	14.3	18.8	1.3	510			
6 P		7 / 0.43	1.29	0.5	15.6	20.3	1.3	600			
7 P		7 / 0.43	1.29	0.5	15.6	20.3	1.3	630			
8 P		7 / 0.43	1.29	0.5	16.8	21.5	1.4	700			
10 P	1.0	7 / 0.43	1.29	0.5	19.2	24.1	1.5	860	19.2	110	0.69
12 P		7 / 0.43	1.29	0.5	20.1	25.2	1.5	980			
14 P		7 / 0.43	1.29	0.5	21.0	26.1	1.5	1,080			
16 P		7 / 0.43	1.29	0.5	22.9	28.2	1.6	1,230			
19 P		7 / 0.43	1.29	0.5	24.7	30.0	1.7	1,410			
20 P		7 / 0.43	1.29	0.5	24.7	30.0	1.7	1,450			
24 P		7 / 0.43	1.29	0.5	28.7	34.4	1.9	1,780			
30 P		7 / 0.43	1.29	0.5	31.4	37.8	2.0	2,220			
37 P		7 / 0.43	1.29	0.5	33.9	40.5	2.1	2,620			
1 P		7 / 0.53	1.59	0.6	7.3	10.7	0.9	170			
2 P		7 / 0.53	1.59	0.6	12.4	16.9	1.2	380			
3 P		7 / 0.53	1.59	0.6	13.4	17.9	1.2	450			
4 P		7 / 0.53	1.59	0.6	14.5	19.0	1.3	530			
5 P		7 / 0.53	1.59	0.6	16.6	21.3	1.4	650			
6 P		7 / 0.53	1.59	0.6	18.1	23.0	1.4	750			
7 P		7 / 0.53	1.59	0.6	18.1	23.0	1.4	800			
8 P		7 / 0.53	1.59	0.6	19.5	24.4	1.5	890			
10 P	1.5	7 / 0.53	1.59	0.6	22.3	27.6	1.6	1,110	12.8	120	0.66
12 P		7 / 0.53	1.59	0.6	23.4	28.7	1.6	1,250			
14 P		7 / 0.53	1.59	0.6	24.4	29.7	1.7	1,380			
16 P		7 / 0.53	1.59	0.6	26.6	32.1	1.8	1,580			
19 P		7 / 0.53	1.59	0.6	28.7	34.4	1.9	1,820			
20 P		7 / 0.53	1.59	0.6	28.7	34.4	1.9	1,870			
24 P		7 / 0.53	1.59	0.6	33.3	39.9	2.1	2,400			
30 P		7 / 0.53	1.59	0.6	36.5	43.3	2.2	2,870			
37 P		7 / 0.53	1.59	0.6	39.4	46.6	2.4	3,410			

Cable Type 250V SFOI(i)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	6.3	9.7	0.9	140			
2 T		7 / 0.37	1.11	0.5	11.1	15.4	1.1	320			
3 T		7 / 0.37	1.11	0.5	11.9	16.2	1.1	380			
4 T		7 / 0.37	1.11	0.5	13.4	17.9	1.2	460			
5 T		7 / 0.37	1.11	0.5	15.1	19.8	1.3	560			
6 T		7 / 0.37	1.11	0.5	17.3	22.2	1.4	670			
7 T		7 / 0.37	1.11	0.5	17.3	22.2	1.4	710			
8 T		7 / 0.37	1.11	0.5	18.8	23.7	1.4	800			
10 T	0.75	7 / 0.37	1.11	0.5	21.6	26.7	1.6	980	26.0	100	0.72
12 T		7 / 0.37	1.11	0.5	23.0	28.3	1.6	1,120			
14 T		7 / 0.37	1.11	0.5	24.1	29.4	1.7	1,240			
16 T		7 / 0.37	1.11	0.5	25.9	31.4	1.8	1,400			
19 T		7 / 0.37	1.11	0.5	28.2	33.9	1.9	1,620			
20 T		7 / 0.37	1.11	0.5	28.7	34.4	1.9	1,680			
24 T		7 / 0.37	1.11	0.5	31.5	37.9	2.0	2,070			
30 T		7 / 0.37	1.11	0.5	35.2	42.0	2.2	2,520			
32 T		7 / 0.37	1.11	0.5	36.6	43.4	2.2	2,670			
1 T		7 / 0.43	1.29	0.5	6.7	10.1	0.9	160			
2 T		7 / 0.43	1.29	0.5	11.8	16.1	1.1	360			
3 T		7 / 0.43	1.29	0.5	12.8	17.3	1.2	440			
4 T		7 / 0.43	1.29	0.5	14.3	18.8	1.3	530			
5 T		7 / 0.43	1.29	0.5	16.1	20.8	1.3	640			
6 T		7 / 0.43	1.29	0.5	18.5	23.4	1.4	770			
7 T		7 / 0.43	1.29	0.5	18.5	23.4	1.4	820			
8 T		7 / 0.43	1.29	0.5	20.1	25.2	1.5	930			
10 T	1.0	7 / 0.43	1.29	0.5	23.1	28.4	1.6	1,150	19.2	110	0.69
12 T		7 / 0.43	1.29	0.5	24.6	29.9	1.7	1,310			
14 T		7 / 0.43	1.29	0.5	25.8	31.3	1.8	1,470			
16 T		7 / 0.43	1.29	0.5	27.7	33.4	1.8	1,660			
19 T		7 / 0.43	1.29	0.5	30.1	36.5	2.0	2,010			
20 T		7 / 0.43	1.29	0.5	30.7	37.1	2.0	2,090			
24 T		7 / 0.43	1.29	0.5	33.7	40.3	2.1	2,450			
30 T		7 / 0.43	1.29	0.5	37.7	44.7	2.3	3,000			
32 T		7 / 0.43	1.29	0.5	39.2	46.2	2.3	3,180			
1 T		7 / 0.53	1.59	0.6	7.8	11.4	1.0	200			
2 T		7 / 0.53	1.59	0.6	13.7	18.2	1.2	450			
3 T		7 / 0.53	1.59	0.6	14.8	19.5	1.3	560			
4 T		7 / 0.53	1.59	0.6	16.6	21.3	1.4	670			
5 T		7 / 0.53	1.59	0.6	18.7	23.6	1.4	820			
6 T		7 / 0.53	1.59	0.6	21.5	26.6	1.6	990			
7 T		7 / 0.53	1.59	0.6	21.5	26.6	1.6	1,060			
8 T		7 / 0.53	1.59	0.6	23.3	28.6	1.6	1,200			
10 T	1.5	7 / 0.53	1.59	0.6	26.8	32.3	1.8	1,480	12.8	120	0.66
12 T		7 / 0.53	1.59	0.6	28.6	34.3	1.9	1,700			
14 T		7 / 0.53	1.59	0.6	30.0	35.9	1.9	1,920			
16 T		7 / 0.53	1.59	0.6	32.2	38.8	2.1	2,260			
19 T		7 / 0.53	1.59	0.6	35.0	41.8	2.2	2,620			
20 T		7 / 0.53	1.59	0.6	35.7	42.5	2.2	2,720			
24 T		7 / 0.53	1.59	0.6	39.2	46.2	2.3	3,200			
30 T		7 / 0.53	1.59	0.6	43.8	51.2	2.5	3,910			
32 T		7 / 0.53	1.59	0.6	45.6	53.2	2.6	4,180			

Light Weight

Fire Resistance

Telephone & Instrument Cable (Collective Screen)

150/250V SFOI(c)

Cable Designation

• 150/250V SFOI(c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	F	Halogen Free Tape(Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SFOI(c)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.9	9.3	0.9	130			
2 P		7 / 0.37	1.11	0.5	7.0	10.4	0.9	170			
3 P		7 / 0.37	1.11	0.5	10.5	14.8	1.1	300			
4 P		7 / 0.37	1.11	0.5	11.3	15.6	1.1	340			
5 P		7 / 0.37	1.11	0.5	12.9	17.4	1.2	410			
6 P		7 / 0.37	1.11	0.5	14.0	18.5	1.2	460			
7 P		7 / 0.37	1.11	0.5	14.0	18.5	1.2	480			
8 P		7 / 0.37	1.11	0.5	15.1	19.8	1.3	540			
10 P	0.75	7 / 0.37	1.11	0.5	17.2	21.9	1.4	640	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	18.1	23.0	1.4	720			
14 P		7 / 0.37	1.11	0.5	18.9	23.8	1.5	790			
16 P		7 / 0.37	1.11	0.5	20.5	25.6	1.5	900			
19 P		7 / 0.37	1.11	0.5	22.1	27.2	1.6	1,010			
20 P		7 / 0.37	1.11	0.5	22.1	27.2	1.6	1,030			
24 P		7 / 0.37	1.11	0.5	25.6	31.1	1.7	1,270			
30 P		7 / 0.37	1.11	0.5	28.0	33.7	1.8	1,510			
37 P		7 / 0.37	1.11	0.5	30.2	36.6	2.0	1,850			
1 P		7 / 0.43	1.29	0.5	6.3	9.7	0.9	140			
2 P		7 / 0.43	1.29	0.5	7.5	10.9	0.9	190			
3 P		7 / 0.43	1.29	0.5	11.2	15.5	1.1	340			
4 P		7 / 0.43	1.29	0.5	12.1	16.4	1.2	380			
5 P		7 / 0.43	1.29	0.5	13.8	18.3	1.2	460			
6 P		7 / 0.43	1.29	0.5	15.0	19.7	1.3	530			
7 P		7 / 0.43	1.29	0.5	15.0	19.7	1.3	560			
8 P		7 / 0.43	1.29	0.5	16.2	20.9	1.3	620			
10 P	1.0	7 / 0.43	1.29	0.5	18.5	23.4	1.4	750	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	19.4	24.3	1.5	830			
14 P		7 / 0.43	1.29	0.5	20.2	25.3	1.5	920			
16 P		7 / 0.43	1.29	0.5	22.0	27.1	1.6	1,040			
19 P		7 / 0.43	1.29	0.5	23.7	29.0	1.7	1,190			
20 P		7 / 0.43	1.29	0.5	23.7	29.0	1.7	1,220			
24 P		7 / 0.43	1.29	0.5	27.5	33.2	1.8	1,500			
30 P		7 / 0.43	1.29	0.5	30.1	36.5	2.0	1,870			
37 P		7 / 0.43	1.29	0.5	32.4	39.0	2.1	2,180			
1 P		7 / 0.53	1.59	0.6	7.3	10.7	0.9	170			
2 P		7 / 0.53	1.59	0.6	8.7	12.3	1.0	240			
3 P		7 / 0.53	1.59	0.6	13.1	17.6	1.2	430			
4 P		7 / 0.53	1.59	0.6	14.1	18.6	1.2	490			
5 P		7 / 0.53	1.59	0.6	16.1	20.8	1.3	590			
6 P		7 / 0.53	1.59	0.6	17.5	22.4	1.4	680			
7 P		7 / 0.53	1.59	0.6	17.5	22.4	1.4	720			
8 P		7 / 0.53	1.59	0.6	18.9	23.8	1.5	800			
10 P	1.5	7 / 0.53	1.59	0.6	21.6	26.7	1.6	980	12.8	110	0.66
12 P		7 / 0.53	1.59	0.6	22.6	27.9	1.6	1,100			
14 P		7 / 0.53	1.59	0.6	23.6	28.9	1.7	1,210			
16 P		7 / 0.53	1.59	0.6	25.7	31.2	1.7	1,380			
19 P		7 / 0.53	1.59	0.6	27.7	33.4	1.8	1,590			
20 P		7 / 0.53	1.59	0.6	27.7	33.4	1.8	1,630			
24 P		7 / 0.53	1.59	0.6	32.1	38.7	2.0	2,100			
30 P		7 / 0.53	1.59	0.6	35.2	42.0	2.2	2,490			
37 P		7 / 0.53	1.59	0.6	37.9	44.9	2.3	2,920			

Cable Type 250V SFOI(c)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	6.3	9.7	0.9	140			
2 T		7 / 0.37	1.11	0.5	10.8	15.1	1.1	310			
3 T		7 / 0.37	1.11	0.5	11.6	15.9	1.1	360			
4 T		7 / 0.37	1.11	0.5	12.9	17.4	1.2	430			
5 T		7 / 0.37	1.11	0.5	14.5	19.0	1.3	500			
6 T		7 / 0.37	1.11	0.5	16.7	21.4	1.4	610			
7 T		7 / 0.37	1.11	0.5	16.7	21.4	1.4	640			
8 T		7 / 0.37	1.11	0.5	18.1	23.0	1.4	720			
10 T	0.75	7 / 0.37	1.11	0.5	20.8	25.9	1.5	890	26.0	95	0.72
12 T		7 / 0.37	1.11	0.5	22.1	27.2	1.6	990			
14 T		7 / 0.37	1.11	0.5	23.2	28.5	1.6	1,110			
16 T		7 / 0.37	1.11	0.5	24.8	30.3	1.7	1,240			
19 T		7 / 0.37	1.11	0.5	27.0	32.5	1.8	1,420			
20 T		7 / 0.37	1.11	0.5	27.5	33.2	1.8	1,490			
24 T		7 / 0.37	1.11	0.5	30.2	36.6	2.0	1,830			
30 T		7 / 0.37	1.11	0.5	33.7	40.3	2.1	2,200			
32 T		7 / 0.37	1.11	0.5	35.1	41.9	2.2	2,360			
1 T		7 / 0.43	1.29	0.5	6.7	10.1	0.9	160			
2 T		7 / 0.43	1.29	0.5	11.5	15.8	1.1	340			
3 T		7 / 0.43	1.29	0.5	12.4	16.9	1.2	410			
4 T		7 / 0.43	1.29	0.5	13.8	18.3	1.2	490			
5 T		7 / 0.43	1.29	0.5	15.6	20.3	1.3	590			
6 T		7 / 0.43	1.29	0.5	17.9	22.8	1.4	710			
7 T		7 / 0.43	1.29	0.5	17.9	22.8	1.4	750			
8 T		7 / 0.43	1.29	0.5	19.4	24.3	1.5	830			
10 T	1.0	7 / 0.43	1.29	0.5	22.3	27.6	1.6	1,030	19.2	100	0.69
12 T		7 / 0.43	1.29	0.5	23.7	29.0	1.7	1,160			
14 T		7 / 0.43	1.29	0.5	24.9	30.4	1.7	1,300			
16 T		7 / 0.43	1.29	0.5	26.6	32.1	1.8	1,450			
19 T		7 / 0.43	1.29	0.5	28.9	34.6	1.9	1,670			
20 T		7 / 0.43	1.29	0.5	29.5	35.2	1.9	1,740			
24 T		7 / 0.43	1.29	0.5	32.4	39.0	2.1	2,150			
30 T		7 / 0.43	1.29	0.5	36.2	43.0	2.2	2,600			
32 T		7 / 0.43	1.29	0.5	37.6	44.6	2.3	2,770			
1 T		7 / 0.53	1.59	0.6	7.8	11.4	1.0	200			
2 T		7 / 0.53	1.59	0.6	13.4	17.9	1.2	430			
3 T		7 / 0.53	1.59	0.6	14.4	18.9	1.3	520			
4 T		7 / 0.53	1.59	0.6	16.1	20.8	1.3	630			
5 T		7 / 0.53	1.59	0.6	18.2	23.1	1.4	760			
6 T		7 / 0.53	1.59	0.6	20.9	26.0	1.5	920			
7 T		7 / 0.53	1.59	0.6	20.9	26.0	1.5	970			
8 T		7 / 0.53	1.59	0.6	22.6	27.9	1.6	1,100			
10 T	1.5	7 / 0.53	1.59	0.6	26.0	31.5	1.8	1,360	12.8	110	0.66
12 T		7 / 0.53	1.59	0.6	27.7	33.4	1.8	1,550			
14 T		7 / 0.53	1.59	0.6	29.1	34.8	1.9	1,720			
16 T		7 / 0.53	1.59	0.6	31.1	37.5	2.0	2,030			
19 T		7 / 0.53	1.59	0.6	33.9	40.5	2.1	2,350			
20 T		7 / 0.53	1.59	0.6	34.5	41.3	2.2	2,460			
24 T		7 / 0.53	1.59	0.6	37.9	44.9	2.3	2,880			
30 T		7 / 0.53	1.59	0.6	42.3	49.7	2.5	3,510			
32 T		7 / 0.53	1.59	0.6	44.0	51.4	2.6	3,720			

Light Weight

Fire Resistance Telephone & Instrument Cable (Individual & Collective Screen)

150/250V SFOI(i&c)

Cable Designation

• 150/250V SFOI(i&c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	F	Halogen Free Tape(Lapped inner covering)
Armor	O	Copper Wire Braid (O)
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SFOI(i&c)

No. of Pairs	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	5.9	9.3	0.9	130			
2 P		7 / 0.37	1.11	0.5	10.2	14.5	1.1	290			
3 P		7 / 0.37	1.11	0.5	11.0	15.3	1.1	340			
4 P		7 / 0.37	1.11	0.5	11.9	16.2	1.1	390			
5 P		7 / 0.37	1.11	0.5	13.6	18.1	1.2	470			
6 P		7 / 0.37	1.11	0.5	14.8	19.5	1.3	540			
7 P		7 / 0.37	1.11	0.5	14.8	19.5	1.3	570			
8 P		7 / 0.37	1.11	0.5	15.9	20.6	1.3	630			
10 P	0.75	7 / 0.37	1.11	0.5	18.2	23.1	1.4	770	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	19.0	23.9	1.5	850			
14 P		7 / 0.37	1.11	0.5	19.9	25.0	1.5	950			
16 P		7 / 0.37	1.11	0.5	21.6	26.7	1.6	1,070			
19 P		7 / 0.37	1.11	0.5	23.3	28.6	1.6	1,230			
20 P		7 / 0.37	1.11	0.5	23.3	28.6	1.6	1,250			
24 P		7 / 0.37	1.11	0.5	27.0	32.5	1.8	1,530			
30 P		7 / 0.37	1.11	0.5	29.6	35.3	1.9	1,820			
37 P		7 / 0.37	1.11	0.5	31.9	38.5	2.0	2,250			
1 P		7 / 0.43	1.29	0.5	6.3	9.7	0.9	140			
2 P		7 / 0.43	1.29	0.5	10.9	15.2	1.1	320			
3 P		7 / 0.43	1.29	0.5	11.8	16.1	1.1	380			
4 P		7 / 0.43	1.29	0.5	12.7	17.2	1.2	450			
5 P		7 / 0.43	1.29	0.5	14.5	19.0	1.3	540			
6 P		7 / 0.43	1.29	0.5	15.8	20.5	1.3	620			
7 P		7 / 0.43	1.29	0.5	15.8	20.5	1.3	660			
8 P		7 / 0.43	1.29	0.5	17.0	21.7	1.4	730			
10 P	1.0	7 / 0.43	1.29	0.5	19.4	24.3	1.5	890	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	20.3	25.4	1.5	1,000			
14 P		7 / 0.43	1.29	0.5	21.2	26.3	1.6	1,110			
16 P		7 / 0.43	1.29	0.5	23.1	28.4	1.6	1,260			
19 P		7 / 0.43	1.29	0.5	24.9	30.4	1.7	1,450			
20 P		7 / 0.43	1.29	0.5	24.9	30.4	1.7	1,490			
24 P		7 / 0.43	1.29	0.5	28.9	34.6	1.9	1,810			
30 P		7 / 0.43	1.29	0.5	31.6	38.0	2.0	2,260			
37 P		7 / 0.43	1.29	0.5	34.1	40.7	2.1	2,660			
1 P		7 / 0.53	1.59	0.6	7.3	10.7	0.9	170			
2 P		7 / 0.53	1.59	0.6	12.6	17.1	1.2	400			
3 P		7 / 0.53	1.59	0.6	13.6	18.1	1.2	470			
4 P		7 / 0.53	1.59	0.6	14.7	19.2	1.3	550			
5 P		7 / 0.53	1.59	0.6	16.8	21.5	1.4	670			
6 P		7 / 0.53	1.59	0.6	18.3	23.2	1.4	780			
7 P		7 / 0.53	1.59	0.6	18.3	23.2	1.4	830			
8 P		7 / 0.53	1.59	0.6	19.7	24.6	1.5	920			
10 P	1.5	7 / 0.53	1.59	0.6	22.5	27.8	1.6	1,140	12.8	110	0.66
12 P		7 / 0.53	1.59	0.6	23.6	28.9	1.7	1,280			
14 P		7 / 0.53	1.59	0.6	24.6	29.9	1.7	1,410			
16 P		7 / 0.53	1.59	0.6	26.8	32.3	1.8	1,610			
19 P		7 / 0.53	1.59	0.6	28.9	34.6	1.9	1,860			
20 P		7 / 0.53	1.59	0.6	28.9	34.6	1.9	1,910			
24 P		7 / 0.53	1.59	0.6	33.5	40.1	2.1	2,440			
30 P		7 / 0.53	1.59	0.6	36.7	43.5	2.2	2,910			
37 P		7 / 0.53	1.59	0.6	39.6	46.8	2.4	3,460			

Cable Type 250V SFOI(i&c)

No. of Triads	Conductor			Thickness of Insulation	Nominal Dia. Inner Covering	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.			Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	6.3	9.7	0.9	150			
2 T		7 / 0.37	1.11	0.5	11.3	15.6	1.1	340			
3 T		7 / 0.37	1.11	0.5	12.1	16.4	1.2	400			
4 T		7 / 0.37	1.11	0.5	13.6	18.1	1.2	480			
5 T		7 / 0.37	1.11	0.5	15.3	20.0	1.3	580			
6 T		7 / 0.37	1.11	0.5	17.5	22.4	1.4	690			
7 T		7 / 0.37	1.11	0.5	17.5	22.4	1.4	730			
8 T		7 / 0.37	1.11	0.5	19.0	23.9	1.5	820			
10 T	0.75	7 / 0.37	1.11	0.5	21.8	26.9	1.6	1,000	26.0	95	0.72
12 T		7 / 0.37	1.11	0.5	23.2	28.5	1.6	1,150			
14 T		7 / 0.37	1.11	0.5	24.3	29.6	1.7	1,270			
16 T		7 / 0.37	1.11	0.5	26.1	31.6	1.8	1,430			
19 T		7 / 0.37	1.11	0.5	28.4	34.1	1.9	1,660			
20 T		7 / 0.37	1.11	0.5	28.9	34.6	1.9	1,720			
24 T		7 / 0.37	1.11	0.5	31.7	38.1	2.0	2,110			
30 T		7 / 0.37	1.11	0.5	35.4	42.2	2.2	2,560			
32 T		7 / 0.37	1.11	0.5	36.8	43.8	2.3	2,740			
1 T		7 / 0.43	1.29	0.5	6.7	10.1	0.9	160			
2 T		7 / 0.43	1.29	0.5	12.0	16.3	1.2	380			
3 T		7 / 0.43	1.29	0.5	13.0	17.5	1.2	460			
4 T		7 / 0.43	1.29	0.5	14.5	19.0	1.3	550			
5 T		7 / 0.43	1.29	0.5	16.3	21.0	1.3	660			
6 T		7 / 0.43	1.29	0.5	18.7	23.6	1.4	800			
7 T		7 / 0.43	1.29	0.5	18.7	23.6	1.4	850			
8 T		7 / 0.43	1.29	0.5	20.3	25.4	1.5	960			
10 T	1.0	7 / 0.43	1.29	0.5	23.3	28.6	1.6	1,180	19.2	100	0.69
12 T		7 / 0.43	1.29	0.5	24.8	30.3	1.7	1,350			
14 T		7 / 0.43	1.29	0.5	26.0	31.5	1.8	1,500			
16 T		7 / 0.43	1.29	0.5	27.9	33.6	1.8	1,690			
19 T		7 / 0.43	1.29	0.5	30.3	36.7	2.0	2,050			
20 T		7 / 0.43	1.29	0.5	30.9	37.3	2.0	2,130			
24 T		7 / 0.43	1.29	0.5	33.9	40.5	2.1	2,490			
30 T		7 / 0.43	1.29	0.5	37.9	44.9	2.3	3,040			
32 T		7 / 0.43	1.29	0.5	39.4	46.6	2.4	3,240			
1 T		7 / 0.53	1.59	0.6	7.8	11.4	1.0	200			
2 T		7 / 0.53	1.59	0.6	13.9	18.4	1.2	470			
3 T		7 / 0.53	1.59	0.6	15.0	19.7	1.3	580			
4 T		7 / 0.53	1.59	0.6	16.8	21.5	1.4	700			
5 T		7 / 0.53	1.59	0.6	18.9	23.8	1.5	840			
6 T		7 / 0.53	1.59	0.6	21.7	26.8	1.6	1,020			
7 T		7 / 0.53	1.59	0.6	21.7	26.8	1.6	1,080			
8 T		7 / 0.53	1.59	0.6	23.5	28.8	1.7	1,230			
10 T	1.5	7 / 0.53	1.59	0.6	27.0	32.5	1.8	1,510	12.8	110	0.66
12 T		7 / 0.53	1.59	0.6	28.8	34.5	1.9	1,740			
14 T		7 / 0.53	1.59	0.6	30.2	36.6	2.0	2,040			
16 T		7 / 0.53	1.59	0.6	32.4	39.0	2.1	2,300			
19 T		7 / 0.53	1.59	0.6	35.2	42.0	2.2	2,660			
20 T		7 / 0.53	1.59	0.6	35.9	42.7	2.2	2,760			
24 T		7 / 0.53	1.59	0.6	39.4	46.6	2.4	3,270			
30 T		7 / 0.53	1.59	0.6	44.0	51.4	2.6	3,960			
32 T		7 / 0.53	1.59	0.6	45.8	53.4	2.6	4,230			

Light Weight

Fire Resistance Telephone & Instrument Cable (Individual Screen)

150/250V SXXI(i)

Cable Designation

• 150/250V SXXI(i)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor	S	Plain, Annealed, Stranded copper wire
Fire Resisting Layer		Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SXXI(i)

No. of Pairs	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	7.9	0.8	80			
2 P		7 / 0.37	1.11	0.5	12.4	1.0	170			
3 P		7 / 0.37	1.11	0.5	13.2	1.0	210			
4 P		7 / 0.37	1.11	0.5	14.3	1.1	260			
5 P		7 / 0.37	1.11	0.5	16.0	1.1	320			
6 P		7 / 0.37	1.11	0.5	17.4	1.2	380			
7 P		7 / 0.37	1.11	0.5	17.4	1.2	410			
8 P		7 / 0.37	1.11	0.5	18.5	1.2	460			
10 P	0.75	7 / 0.37	1.11	0.5	21.0	1.3	570	26.0	100	0.72
12 P		7 / 0.37	1.11	0.5	21.8	1.4	650			
14 P		7 / 0.37	1.11	0.5	22.9	1.4	740			
16 P		7 / 0.37	1.11	0.5	24.6	1.5	840			
19 P		7 / 0.37	1.11	0.5	26.5	1.6	980			
20 P		7 / 0.37	1.11	0.5	26.5	1.6	1,010			
24 P		7 / 0.37	1.11	0.5	30.6	1.7	1,260			
30 P		7 / 0.37	1.11	0.5	33.4	1.8	1,530			
37 P		7 / 0.37	1.11	0.5	35.9	1.9	1,830			
1 P		7 / 0.43	1.29	0.5	8.3	0.8	90			
2 P		7 / 0.43	1.29	0.5	13.1	1.0	200			
3 P		7 / 0.43	1.29	0.5	14.2	1.1	250			
4 P		7 / 0.43	1.29	0.5	15.1	1.1	310			
5 P		7 / 0.43	1.29	0.5	17.1	1.2	380			
6 P		7 / 0.43	1.29	0.5	18.4	1.2	440			
7 P		7 / 0.43	1.29	0.5	18.4	1.2	480			
8 P		7 / 0.43	1.29	0.5	19.8	1.3	550			
10 P	1.0	7 / 0.43	1.29	0.5	22.4	1.4	690	19.2	110	0.69
12 P		7 / 0.43	1.29	0.5	23.3	1.4	780			
14 P		7 / 0.43	1.29	0.5	24.2	1.5	880			
16 P		7 / 0.43	1.29	0.5	26.3	1.6	1,020			
19 P		7 / 0.43	1.29	0.5	28.3	1.6	1,190			
20 P		7 / 0.43	1.29	0.5	28.3	1.6	1,230			
24 P		7 / 0.43	1.29	0.5	32.5	1.8	1,510			
30 P		7 / 0.43	1.29	0.5	35.4	1.9	1,840			
37 P		7 / 0.43	1.29	0.5	38.1	2.0	2,210			

Cable Type 250V SXXI(i)

No. of Triads	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	8.3	0.8	100			
2 T		7 / 0.37	1.11	0.5	13.5	1.0	210			
3 T		7 / 0.37	1.11	0.5	14.5	1.1	270			
4 T		7 / 0.37	1.11	0.5	16.0	1.1	330			
5 T		7 / 0.37	1.11	0.5	17.9	1.2	410			
6 T		7 / 0.37	1.11	0.5	20.3	1.3	500			
7 T		7 / 0.37	1.11	0.5	20.3	1.3	540			
8 T		7 / 0.37	1.11	0.5	21.8	1.4	620			
10 T	0.75	7 / 0.37	1.11	0.5	25.0	1.5	780	26.0	100	0.72
12 T		7 / 0.37	1.11	0.5	26.4	1.6	900			
14 T		7 / 0.37	1.11	0.5	27.7	1.6	1,020			
16 T		7 / 0.37	1.11	0.5	29.5	1.7	1,160			
19 T		7 / 0.37	1.11	0.5	32.0	1.8	1,360			
20 T		7 / 0.37	1.11	0.5	32.5	1.8	1,420			
24 T		7 / 0.37	1.11	0.5	35.7	1.9	1,700			
30 T		7 / 0.37	1.11	0.5	39.6	2.1	2,100			
32 T		7 / 0.37	1.11	0.5	41.2	2.1	2,250			
1 T		7 / 0.43	1.29	0.5	8.9	0.9	120			
2 T		7 / 0.43	1.29	0.5	14.4	1.1	250			
3 T		7 / 0.43	1.29	0.5	15.4	1.1	310			
4 T		7 / 0.43	1.29	0.5	17.1	1.2	400			
5 T		7 / 0.43	1.29	0.5	18.9	1.3	480			
6 T		7 / 0.43	1.29	0.5	21.5	1.4	590			
7 T		7 / 0.43	1.29	0.5	21.5	1.4	640			
8 T		7 / 0.43	1.29	0.5	23.3	1.4	740			
10 T	1.0	7 / 0.43	1.29	0.5	26.5	1.6	930	19.2	110	0.69
12 T		7 / 0.43	1.29	0.5	28.2	1.6	1,090			
14 T		7 / 0.43	1.29	0.5	29.4	1.7	1,220			
16 T		7 / 0.43	1.29	0.5	31.5	1.8	1,400			
19 T		7 / 0.43	1.29	0.5	34.1	1.9	1,640			
20 T		7 / 0.43	1.29	0.5	34.7	1.9	1,710			
24 T		7 / 0.43	1.29	0.5	37.9	2.0	2,040			
30 T		7 / 0.43	1.29	0.5	42.3	2.2	2,540			
32 T		7 / 0.43	1.29	0.5	44.0	2.3	2,720			

Light Weight

Fire Resistance Telephone & Instrument Cable (Collective Screen)

150/250V SXXI(c)

Cable Designation

• 150/250V SXXI(c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor		Plain, Annealed, Stranded copper wire
Fire Resisting Layer	S	Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SXXI(c)

No. of Pairs	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	7.9	0.8	80			
2 P		7 / 0.37	1.11	0.5	9.2	0.9	120			
3 P		7 / 0.37	1.11	0.5	12.9	1.0	190			
4 P		7 / 0.37	1.11	0.5	13.7	1.0	230			
5 P		7 / 0.37	1.11	0.5	15.5	1.1	280			
6 P		7 / 0.37	1.11	0.5	16.8	1.2	330			
7 P		7 / 0.37	1.11	0.5	16.8	1.2	350			
8 P		7 / 0.37	1.11	0.5	17.9	1.2	390			
10 P	0.75	7 / 0.37	1.11	0.5	20.2	1.3	490	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	21.1	1.3	550			
14 P		7 / 0.37	1.11	0.5	21.9	1.4	610			
16 P		7 / 0.37	1.11	0.5	23.7	1.4	700			
19 P		7 / 0.37	1.11	0.5	25.5	1.5	820			
20 P		7 / 0.37	1.11	0.5	25.5	1.5	840			
24 P		7 / 0.37	1.11	0.5	29.2	1.7	1,030			
30 P		7 / 0.37	1.11	0.5	31.8	1.8	1,250			
37 P		7 / 0.37	1.11	0.5	34.2	1.9	1,480			
1 P		7 / 0.43	1.29	0.5	8.3	0.8	90			
2 P		7 / 0.43	1.29	0.5	9.7	0.9	140			
3 P		7 / 0.43	1.29	0.5	13.6	1.0	220			
4 P		7 / 0.43	1.29	0.5	14.7	1.1	270			
5 P		7 / 0.43	1.29	0.5	16.4	1.2	330			
6 P		7 / 0.43	1.29	0.5	17.8	1.2	380			
7 P		7 / 0.43	1.29	0.5	17.8	1.2	410			
8 P		7 / 0.43	1.29	0.5	19.0	1.3	460			
10 P	1.0	7 / 0.43	1.29	0.5	21.5	1.4	570	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	22.6	1.4	660			
14 P		7 / 0.43	1.29	0.5	23.4	1.4	730			
16 P		7 / 0.43	1.29	0.5	25.4	1.5	840			
19 P		7 / 0.43	1.29	0.5	27.1	1.6	970			
20 P		7 / 0.43	1.29	0.5	27.1	1.6	990			
24 P		7 / 0.43	1.29	0.5	31.3	1.8	1,240			
30 P		7 / 0.43	1.29	0.5	34.1	1.9	1,500			
37 P		7 / 0.43	1.29	0.5	36.6	2.0	1,780			

Cable Type 250V SXXI(c)

No. of Triads	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	8.3	0.8	100			
2 T		7 / 0.37	1.11	0.5	13.2	1.0	200			
3 T		7 / 0.37	1.11	0.5	14.2	1.1	250			
4 T		7 / 0.37	1.11	0.5	15.5	1.1	300			
5 T		7 / 0.37	1.11	0.5	17.3	1.2	370			
6 T		7 / 0.37	1.11	0.5	19.7	1.3	460			
7 T		7 / 0.37	1.11	0.5	19.7	1.3	490			
8 T		7 / 0.37	1.11	0.5	21.1	1.3	550			
10 T	0.75	7 / 0.37	1.11	0.5	24.0	1.5	690	26.0	95	0.72
12 T		7 / 0.37	1.11	0.5	25.5	1.5	800			
14 T		7 / 0.37	1.11	0.5	26.6	1.6	890			
16 T		7 / 0.37	1.11	0.5	28.4	1.6	1,010			
19 T		7 / 0.37	1.11	0.5	30.8	1.7	1,180			
20 T		7 / 0.37	1.11	0.5	31.3	1.8	1,230			
24 T		7 / 0.37	1.11	0.5	34.2	1.9	1,460			
30 T		7 / 0.37	1.11	0.5	37.9	2.0	1,790			
32 T		7 / 0.37	1.11	0.5	39.5	2.1	1,930			
1 T		7 / 0.43	1.29	0.5	8.9	0.9	120			
2 T		7 / 0.43	1.29	0.5	14.1	1.1	230			
3 T		7 / 0.43	1.29	0.5	15.0	1.1	290			
4 T		7 / 0.43	1.29	0.5	16.4	1.2	350			
5 T		7 / 0.43	1.29	0.5	18.4	1.2	440			
6 T		7 / 0.43	1.29	0.5	20.9	1.3	530			
7 T		7 / 0.43	1.29	0.5	20.9	1.3	570			
8 T		7 / 0.43	1.29	0.5	22.6	1.4	660			
10 T	1.0	7 / 0.43	1.29	0.5	25.7	1.5	820	19.2	100	0.69
12 T		7 / 0.43	1.29	0.5	27.1	1.6	940			
14 T		7 / 0.43	1.29	0.5	28.5	1.6	1,070			
16 T		7 / 0.43	1.29	0.5	30.4	1.7	1,210			
19 T		7 / 0.43	1.29	0.5	32.7	1.8	1,400			
20 T		7 / 0.43	1.29	0.5	33.5	1.8	1,480			
24 T		7 / 0.43	1.29	0.5	36.6	2.0	1,760			
30 T		7 / 0.43	1.29	0.5	40.6	2.1	2,160			
32 T		7 / 0.43	1.29	0.5	42.2	2.2	2,320			

Light Weight

Fire Resistance Telephone & Instrument Cable (Individual & Collective Screen)

150/250V SXXI(i&c)

Cable Designation

• 150/250V SXXI(i&c)

Application

• This cable is designed for telephone & instrument circuits up to 150/250V.
• Suitable for use in commercial marine applications
• Maximum conductor temperature : 90℃

Application Standard

• Design Guide : IEC 60092-350, 376
• Insulation Material : IEC 60092-351
• Sheath Material : IEC 60092-359
• Flammability : IEC 60332-1 & IEC 60332-3 Category A
• Fire Resistance : IEC 60331 (750℃ or 1000℃)
• Halogen Content : IEC 60754-1,2, 0.5%(Max.)
• Smoke Emission : IEC 61034-1,2, 60%(Min.)

Construction

Classification	Code Letter	Construction Detail
Conductor	S	Plain, Annealed, Stranded copper wire
Fire Resisting Layer		Mica/Glass Tape (MGT)
Insulation		Cross-linked Polyethylene (XLPE) as per IEC 60092-351
Individual Screen	(i)	Each pair/triad are individually screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the individual screen.
Collective Screen	(c)	Pair/triad laid up and collective screened by aluminium backed polyester tape (AL/PS tape) with tinned copper drain wire. Suitable binder tape may be wrapped on/below the collective screen.
Inner Covering	X	Non
Armor	X	Non
Sheath	I	Halogen Free Thermoplastic compound (IEC 60092-359, SHF1) Sheath color - Non-intrinsically safe cable : Black - Intrinsically safe cable : Blue
Core Identification		1) Each pair/triad - Pairs : Black, White - Triads : Black, White, Red 2) Multi pair/triad cables Multi pair/triads are identified by lapping of the pair/triad numbered tape or by the pair/triad number print directly on the each cores. 3) The other color scheme may be applicable when purchaser required.

* Fire resistance cable to IEC 60331 (at 1000℃) can be supplied if required.

Cable Type 250V SXXI(i&c)

No. of Pairs	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 P		7 / 0.37	1.11	0.5	8.1	0.8	80			
2 P		7 / 0.37	1.11	0.5	12.6	1.0	180			
3 P		7 / 0.37	1.11	0.5	13.4	1.0	230			
4 P		7 / 0.37	1.11	0.5	14.5	1.1	280			
5 P		7 / 0.37	1.11	0.5	16.2	1.1	330			
6 P		7 / 0.37	1.11	0.5	17.6	1.2	390			
7 P		7 / 0.37	1.11	0.5	17.6	1.2	420			
8 P		7 / 0.37	1.11	0.5	18.7	1.2	470			
10 P	0.75	7 / 0.37	1.11	0.5	21.2	1.3	590	26.0	95	0.72
12 P		7 / 0.37	1.11	0.5	22.2	1.4	680			
14 P		7 / 0.37	1.11	0.5	23.1	1.4	760			
16 P		7 / 0.37	1.11	0.5	25.0	1.5	870			
19 P		7 / 0.37	1.11	0.5	26.7	1.6	1,010			
20 P		7 / 0.37	1.11	0.5	26.7	1.6	1,030			
24 P		7 / 0.37	1.11	0.5	30.8	1.7	1,290			
30 P		7 / 0.37	1.11	0.5	33.6	1.8	1,560			
37 P		7 / 0.37	1.11	0.5	36.1	1.9	1,860			
1 P		7 / 0.43	1.29	0.5	8.7	0.8	100			
2 P		7 / 0.43	1.29	0.5	13.3	1.0	210			
3 P		7 / 0.43	1.29	0.5	14.4	1.1	270			
4 P		7 / 0.43	1.29	0.5	15.3	1.1	320			
5 P		7 / 0.43	1.29	0.5	17.3	1.2	400			
6 P		7 / 0.43	1.29	0.5	18.6	1.2	460			
7 P		7 / 0.43	1.29	0.5	18.6	1.2	500			
8 P		7 / 0.43	1.29	0.5	20.0	1.3	570			
10 P	1.0	7 / 0.43	1.29	0.5	22.6	1.4	710	19.2	100	0.69
12 P		7 / 0.43	1.29	0.5	23.5	1.4	810			
14 P		7 / 0.43	1.29	0.5	24.4	1.5	910			
16 P		7 / 0.43	1.29	0.5	26.5	1.6	1,040			
19 P		7 / 0.43	1.29	0.5	28.5	1.6	1,220			
20 P		7 / 0.43	1.29	0.5	28.5	1.6	1,260			
24 P		7 / 0.43	1.29	0.5	32.7	1.8	1,540			
30 P		7 / 0.43	1.29	0.5	35.8	1.9	1,890			
37 P		7 / 0.43	1.29	0.5	38.5	2.0	2,260			

Cable Type 250V SXXI(i&c)

No. of Triads	Conductor			Thickness of Insulation	Overall Diameter		Cable Weight	Conductor Resistance (at 20℃)(max.)	Capacitance	Inductance
	Nominal Area	Strand	Dia.		Nominal	Tolerance				
No.	mm²	No./mm	mm	mm	mm	±mm	kg/km	Ω/km	nF/km	mH/km
1 T		7 / 0.37	1.11	0.5	8.7	0.8	100			
2 T		7 / 0.37	1.11	0.5	13.7	1.0	220			
3 T		7 / 0.37	1.11	0.5	14.7	1.1	280			
4 T		7 / 0.37	1.11	0.5	16.2	1.1	350			
5 T		7 / 0.37	1.11	0.5	18.1	1.2	430			
6 T		7 / 0.37	1.11	0.5	20.5	1.3	520			
7 T		7 / 0.37	1.11	0.5	20.5	1.3	560			
8 T	0.75	7 / 0.37	1.11	0.5	22.2	1.4	650			
10 T		7 / 0.37	1.11	0.5	25.2	1.5	810	26.0	95	0.72
12 T		7 / 0.37	1.11	0.5	26.6	1.6	930			
14 T		7 / 0.37	1.11	0.5	27.9	1.6	1,050			
16 T		7 / 0.37	1.11	0.5	29.7	1.7	1,180			
19 T		7 / 0.37	1.11	0.5	32.2	1.8	1,390			
20 T		7 / 0.37	1.11	0.5	32.7	1.8	1,450			
24 T		7 / 0.37	1.11	0.5	35.9	1.9	1,740			
30 T		7 / 0.37	1.11	0.5	39.8	2.1	2,130			
32 T		7 / 0.37	1.11	0.5	41.4	2.2	2,290			
1 T		7 / 0.43	1.29	0.5	9.1	0.9	120			
2 T		7 / 0.43	1.29	0.5	14.6	1.1	260			
3 T		7 / 0.43	1.29	0.5	15.6	1.1	330			
4 T		7 / 0.43	1.29	0.5	17.3	1.2	420			
5 T	1.0	7 / 0.43	1.29	0.5	19.1	1.3	510			
6 T		7 / 0.43	1.29	0.5	21.7	1.4	620			
7 T		7 / 0.43	1.29	0.5	21.7	1.4	670			
8 T		7 / 0.43	1.29	0.5	23.5	1.4	770			
10 T		7 / 0.43	1.29	0.5	26.7	1.6	960	19.2	100	0.69
12 T		7 / 0.43	1.29	0.5	28.4	1.6	1,120			
14 T		7 / 0.43	1.29	0.5	29.6	1.7	1,260			
16 T		7 / 0.43	1.29	0.5	31.7	1.8	1,430			
19 T		7 / 0.43	1.29	0.5	34.3	1.9	1,680			
20 T		7 / 0.43	1.29	0.5	34.9	1.9	1,750			
24 T		7 / 0.43	1.29	0.5	38.1	2.0	2,080			
30 T		7 / 0.43	1.29	0.5	42.5	2.2	2,580			
32 T		7 / 0.43	1.29	0.5	44.2	2.3	2,770			

Halogen Free Shipboard Cables
(XLPE Insulation / SHF1 Sheath Cables)

Technical Data & Installation Information

- Temperature Correction Factors for Conductor Resistance
- Current Ratings for Continuous Service (IEC 60092-352)
- Short Circuit Current Ratings
- Minimum Bending Radius (In Accordance with IEC 60092-352)
- Calculation of Electrical Data
- Certificates Approved

JS Cable

1. Temperature Correction Factors for Conductor Resistance

The values of the correction factor (Kc) and reciprocal of factor (Kr) are given in following table for a normal range of temperatures in accordance with IEC Pub. 60228.

• The values are based on the following formula :

$$Kc = \frac{1}{1 + 0.00393(t-20)} = \frac{254.5}{234.5 + t} \qquad Kr = 1/Kc$$

Temperature (℃)	Correction Factor (Kc)	Reciprocal of Factor (Kr)	Temperature (℃)	Correction Factor (Kc)	Reciprocal of Factor (Kr)
5	1.063	0.941	36	0.940	1.063
6	1.058	0.945	37	0.936	1.067
7	1.054	0.949	38	0.933	1.071
8	1.050	0.953	39	0.930	1.075
9	1.045	0.957	40	0.927	1.079
10	1.041	0.961	41	0.923	1.082
11	1.037	0.965	42	0.920	1.086
12	1.033	0.969	43	0.917	1.090
13	1.028	0.972	44	0.914	1.094
14	1.024	0.976	45	0.910	1.098
15	1.020	0.980	46	0.907	1.102
16	1.016	0.984	47	0.904	1.106
17	1.012	0.988	48	0.901	1.110
18	1.008	0.992	49	0.898	1.114
19	1.004	0.996	50	0.894	1.118
20	1.000	1.000	51	0.891	1.122
21	0.996	1.004	52	0.888	1.126
22	0.992	1.008	53	0.885	1.130
23	0.988	1.012	54	0.882	1.134
24	0.985	1.016	55	0.879	1.138
25	0.981	1.020	56	0.876	1.142
26	0.977	1.024	57	0.873	1.146
27	0.973	1.028	58	0.870	1.149
28	0.970	1.031	59	0.867	1.153
29	0.966	1.035	60	0.864	1.157
30	0.962	1.039	65	0.850	1.177
31	0.958	1.043	70	0.836	1.197
32	0.955	1.047	75	0.822	1.216
33	0.951	1.051	80	0.809	1.235
34	0.947	1.055	85	0.797	1.256
35	0.944	1.059	90	0.784	1.275

2. Current Ratings for Continuous Service (IEC 60092-352)

Nominal Cross Section Area	XLPE Insulation (90℃)					
	1C		2C		3C / 4C	
mm²	A		A		A	
0.5	10		8.5		7	
0.75	13		11		9	
1.0 (0.9)	16		14		11	
1.5	23		20		16	
2.5	40		26		21	
4	51		34		28	
6	52		44		36	
10	72		61		50	
16	96		82		67	
25	127		108		89	
35	157		133		110	
50	196		167		137	
70	242		206		169	
95	293		249		205	
120	339		288		237	
150	389		331		272	
185	444		377		311	
240	522		444		365	
300	601		511		421	
	d.c	a.c	d.c	a.c	d.c	a.c
400	690	670	587	570	483	469
500	780	720	663	612	546	504
630	890	780	757	663	623	546

Note

1. Maximum permissible service temperature of the conductor is 90℃
2. The current ratings given above are based on an ambient air temperature of 45℃
3. The current ratings given above are for 6 cables of less bunched or laid together in flat formation.
   When more than 6 cables are bunched or laid close together, the current ratings given above should be multiplied by correction factor 0.85.
4. For cables with more than four core cables, the current ratings are calculated by the following formula.

formula : $I = \frac{I\,1}{\sqrt[3]{N}}$ Where, $I\,1$ = Current for single core cable, N = Number of cores

5. Correction factors for various ambient air temperature

Maximum conductor temperature	Correction factors for ambient air temperature									
℃	35	40	45	50	55	60	65	70	75	80
90	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

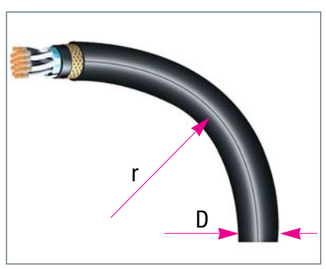
3. Short Circuit Current Ratings

The short circuit currents quoted here are for cables operating normally at maximum conductor temperature of 90℃.
XLPE insulation is actually capable of withstanding short-term temperature up to 250℃.

Conductor		Short Circuit Current(kA)													
Nominal Area	Dia.	Duration of Short Circuit in Second													
(mm^2)	(mm)	0.03	0.05	0.07	0.1	0.14	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
1.5	1.59	1.26	0.98	0.83	0.69	0.58	0.49	0.40	0.35	0.31	0.28	0.26	0.24	0.23	0.22
2.5	2.01	2.02	1.56	1.32	1.10	0.93	0.78	0.64	0.55	0.49	0.45	0.42	0.39	0.37	0.35
4	2.55	3.25	2.52	2.13	1.78	1.50	1.26	1.03	0.89	0.80	0.73	0.67	0.63	0.59	0.56
6	3.12	4.86	3.77	3.18	2.66	2.25	1.88	1.54	1.33	1.19	1.09	1.01	0.94	0.89	0.84
10	4.05	8.19	6.34	5.36	4.49	3.79	3.17	2.59	2.24	2.01	1.83	1.70	1.59	1.50	1.42
16	5.10	12.99	10.06	8.50	7.11	6.01	5.03	4.11	3.56	3.18	2.90	2.69	2.52	2.37	2.25
25	6.42	20.6	15.9	13.5	11.3	9.5	8.0	6.5	5.6	5.0	4.6	4.3	4.0	3.8	3.6
35	7.56	28.5	22.1	18.7	15.6	13.2	11.1	9.0	7.8	7.0	6.4	5.9	5.5	5.2	4.9
50	8.90	38.6	29.9	25.3	21.2	17.9	15.0	12.2	10.6	9.5	8.6	8.0	7.5	7.1	6.7
70	10.70	55.9	43.3	36.6	30.6	25.9	21.6	17.7	15.3	13.7	12.5	11.6	10.8	10.2	9.7
95	12.60	77.5	60.0	50.7	42.4	35.9	30.0	24.5	21.2	19.0	17.3	16.0	15.0	14.1	13.4
120	14.21	97.9	75.8	64.1	53.6	45.3	37.9	31.0	26.8	24.0	21.9	20.3	19.0	17.9	17.0
150	15.75	120.3	93.1	78.7	65.9	55.7	46.6	38.0	32.9	29.5	26.9	24.9	23.3	22.0	20.8
185	17.64	150.8	116.8	98.8	82.6	69.8	58.4	47.7	41.3	36.9	33.7	31.2	29.2	27.5	26.1
240	20.25	198.3	153.6	129.8	108.6	91.8	76.8	62.7	54.3	48.6	44.3	41.0	38.4	36.2	34.3
300	22.68	248.7	192.6	162.8	136.2	115.1	96.3	78.6	68.1	60.9	55.6	51.5	48.2	45.4	43.1
400	26.10	329.3	255.1	215.6	180.4	152.5	127.6	104.1	90.2	80.7	73.6	68.2	63.8	60.1	57.0
500	28.80	401.0	310.6	262.5	219.6	185.6	155.3	126.8	109.8	98.2	89.7	83.0	77.7	73.2	69.5

4. Minimum Bending Radius (In accordance with IEC 60092-352)

Cable Type			Minimum Bending Radius
0.6/1kV Power & Control Cable	Un armored	D ≤ 25 mm	4D
		D > 25 mm	6D
	Armored	All Type	6D
150/250V Telephone & Instrument Cable		All Type	8D



Note D : overall diameter of cable

5. Calculation of Electrical Data

1) Inductance (for 2, 3 & 4 conductor cables)

$$L = 0.2 \times [\ln(\frac{2a}{d}) + 0.25] \times 10^{-6}$$

L = Inductance (H/m)
a = Axial space between conductor (mm)
d = Conductor diameter (mm)

2) Reactance (for 2, 3 & 4 conductor cables)

$$X = 2 \times \pi \times f \times L \times l$$

X = Reactance (Ω) f = Frequency (Hz)
L = Inductance (H/m) l = Conductor length (m)

3) Impedance (for 2, 3 & 4 conductor cables)

$$Z = \sqrt{(R^2 + X^2)}$$

Z = Impedance (Ω)
R = Resistance at operating temp (Ω)
X = Reactance (Ω)

4) Voltage drop

① D.C Voltage drop (2 wire D.C circuits)

$$V\ drop = 2 \times I \times L \times R\ [volts]$$

Where, I = Load current [Amp]
L = Length of cable [km]
R = D.C conductor resistance at Max. rated conductor temperature [Ω/km]

② A.C. voltage drop

• Single-phase voltage drop

$$V\ drop = 2 \times I \times L \times (R \cdot COS\ Ø + X \cdot SIN\ Ø)\ [volts]$$

Where, I = Load current [Amp]
L = Length of cable [km]
R = A.C. conductor resistance at Max. rated conductor temperature [Ω/km]
X = Reactance of the cable [Ω/km]
Ø = Power factor angle by which the current lags (or leads) the voltage

• Three-phase voltage drop

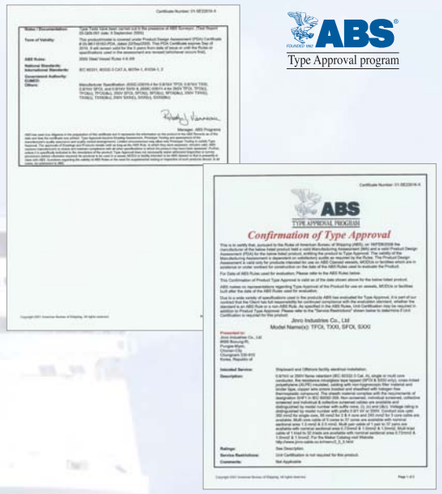
$$V\ drop = \sqrt{3} \times I \times L \times (R \cdot COS\ Ø + X \cdot SIN\ Ø)\ [volts]$$

Where, I = Load current [Amp]
L = Length of cable [km]
R = A.C conductor resistance at Max. rated conductor temperature [Ω/km]
X = Reactance of the cable [Ω/km]
Ø = Power factor angle by which the current lags (or leads) the voltage

Certificates Approved

BV Type Approval

ABS Type Approval



DNV Type Approval

LR Type Approval