

### FLAME RETARDANT POWER CABLE



#### Cable Designation

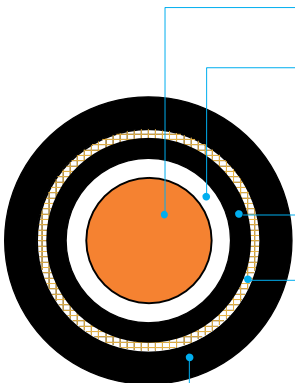
0.6/1kV SPYC, SPYCY, FA-SPYC, FA-SPYCY

0.6/1kV SPYCB, SPYCBY, FA-SPYCB, FA-SPYCBY

#### Application Standard

- Design guide : JIS C 3410(2010)
- Flame retardant : IEC 60332-1  
: IEC 60332-3 Category A (FA-Cables Only)
- Cold bend/impact : CSA 22.2 No. 03 (-40°C/-35°C) (Cold Type Only)
- Max. rated conductor temperature : 90°C

#### Construction

Sectional view	Classification	Code	Construction detail
	Conductor	<b>S</b>	- Stranded tinned annealed copper wires as per JIS C 3410(2010) - A suitable tape may be applied on the conductor
	Insulation	<b>P</b>	- EPR as per JIS C 3410(2010)
	Cabling		- Insulated conductors shall be cabled. - Flame retardant & non-hygroscopic fillers may be used. - Suitable tape(s) may be applied on the cabled core.
	Sheath	<b>Y</b>	- PVC as per JIS C 3410(2010)
	Armour	<b>C</b> <b>(CB)</b>	- Braid of galvanized steel wire(C) or copper alloy wire(CB) - Coverage density : Min. 90% - A suitable separator tape(s) may be applied under/over the armour
	Paint		- The white paint shall be painted uniformly on the steel wire braid - In case of PVC protective covering cable, paint is dispensable.
	Protective Covering	<b>Y</b>	- PVC as per JIS C 3410(2010) - Protective covering color : Black - Any other color may be applicable when purchaser required.

**Note.** Cold type cable ("C") can be supplied.

# JIS CABLE

## JIS C 3410 (2010)

0.6/1KV (FA-)SPYC, 0.6/1KV (FA-)SPYCY, 0.6/1KV (FA-)SPYCB, 0.6/1KV (FA-)SPYCBY

No. of Cores	Conductor			Nominal Dia. Over Sheath	(FA-)SPYC (FA-)SPYCB		(FA-)SPYCY (FA-)SPYCBY		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.		Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-)SPYC SPYCB	(FA-)SPYCY SPYCBY
	mm <sup>2</sup>	No./mm	mm		mm	±mm	mm	±mm			Ω/km	MΩ - km
1	1.5	7/0.52	1.56	5.9	7.2	0.4	9.0	0.4	12.2	1,300	100	135
	2.5	7/0.67	2.01	6.3	7.6	0.4	9.4	0.4	7.56	1,100	120	150
	4	7/0.85	2.55	6.9	8.2	0.4	10.0	0.4	4.70	1,000	140	175
	6	7/1.04	3.12	7.4	8.7	0.4	10.5	0.4	3.11	800	170	205
	10	7/1.35	4.05	8.6	9.9	0.4	11.7	0.5	1.84	700	225	270
	16	7/1.70	5.10	9.6	10.9	0.4	12.9	0.5	1.16	600	300	350
	25	7/2.14	6.42	11.5	12.8	0.5	14.8	0.6	0.734	500	425	485
	35	7/2.52	7.56	12.7	14.0	0.6	16.2	0.6	0.529	450	535	610
	50	19/1.78	8.90	14.6	15.9	0.6	18.1	0.7	0.391	450	700	780
	70	19/2.14	10.70	16.6	17.9	0.7	20.1	0.8	0.270	450	940	1,030
	95	19/2.52	12.60	19.3	20.6	0.8	23.0	0.9	0.195	400	1,260	1,370
	120	37/2.03	14.20	20.9	22.2	0.9	24.8	1.0	0.154	350	1,520	1,650
	150	37/2.25	15.80	23.1	24.4	1.0	27.0	1.1	0.126	350	1,840	1,980
	185	37/2.52	17.60	25.5	26.8	1.1	29.6	1.2	0.100	350	2,260	2,430
	240	61/2.25	20.30	28.8	30.1	1.2	33.1	1.3	0.0762	350	2,920	3,130
	300	61/2.52	22.70	31.8	33.6	1.3	36.6	1.5	0.0607	350	3,700	3,930

### FLAME RETARDANT POWER CABLE



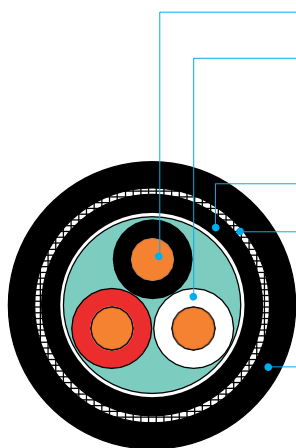
#### Cable Designation

- 0.6/1kV D(T,F,5,6,10)PY, FA-D(T,F,5,6,10)PY
- 0.6/1kV D(T,F,5,6,10)PYC, FA-D(T,F,5,6,10)PYC
- 0.6/1kV D(T,F,5,6,10)PYCY, FA-D(T,F,5,6,10)PYCY
- 0.6/1kV D(T)PYE, D(T)PYCE, D(T)PYCYE

#### Application Standard

- Design guide : JIS C 3410(2010)
- Flame retardant : IEC 60332-1  
: IEC 60332-3 Category A (FA-Cables Only)
- Cold bend/impact : CSA 22.2 No. 03 (-40°C/-35°C) (Cold Type Only)
- Max. rated conductor temperature : 90°C

#### Construction



Sectional view	Classification	Code	Construction detail															
Conductor		<b>D, T, F</b> <b>5, 6, 10</b>	- Stranded tinned annealed copper wires as per JIS C 3410(2010) - A suitable tape may be applied on the conductor															
Insulation		<b>P</b>	- EPR as per JIS C 3410(2010)															
Cabling			- Insulated conductors shall be cabled. - Flame retardant & non-hygroscopic fillers may be used. - Suitable tape(s) may be applied on the cabled core.															
Sheath		<b>Y</b>	- PVC as per JIS C 3410(2010)															
Armour		<b>C</b>	- Braid of galvanized steel wire(C) - Coverage density : Min. 90%															
Paint			- The white paint shall be painted uniformly on the steel wire braid - In case of PVC protective covering cable, paint is dispensable.															
Protective Covering		<b>Y</b>	- PVC as per JIS C 3410(2010) - Protective covering color : Black - Any other color may be applicable when purchaser required.															
Core identification			<table border="1"> <thead> <tr> <th>No. of cores</th> <th>Without Earth core</th> <th>With Earth core</th> </tr> </thead> <tbody> <tr> <td>2C</td> <td>Black, White</td> <td>-</td> </tr> <tr> <td>3C / 2C+E</td> <td>Black, White, Red</td> <td>Black, White, GY</td> </tr> <tr> <td>4C / 3C+E</td> <td>Black, White, Red, Green</td> <td>Black, White, Red, GY</td> </tr> <tr> <td>5C and over</td> <td>Black No. on white insulation</td> <td>Black No. on white insulation, GY</td> </tr> </tbody> </table>	No. of cores	Without Earth core	With Earth core	2C	Black, White	-	3C / 2C+E	Black, White, Red	Black, White, GY	4C / 3C+E	Black, White, Red, Green	Black, White, Red, GY	5C and over	Black No. on white insulation	Black No. on white insulation, GY
No. of cores	Without Earth core	With Earth core																
2C	Black, White	-																
3C / 2C+E	Black, White, Red	Black, White, GY																
4C / 3C+E	Black, White, Red, Green	Black, White, Red, GY																
5C and over	Black No. on white insulation	Black No. on white insulation, GY																

**Note.** Cold type cable ("C") can be supplied.

0.6/1kV (FA-)DPY, 0.6/1kV (FA-)DPYC, 0.6/1kV (FA-)DPYCY

No. of Cores	Conductor			(FA-)DPY		(FA-)DPYC		(FA-)DPYCY		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance			(FA-)DPY	(FA-)DPYC	(FA-)DPYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			Ω/km	MΩ - km	kg/km
2	1.5	7/0.52	1.56	10.4	0.5	11.7	0.5	13.7	0.5	12.2	1,300	120	205	260
	2.5	7/0.67	2.01	11.5	0.5	12.8	0.5	14.8	0.6	7.56	1,100	155	250	305
	4	7/0.85	2.55	12.6	0.6	13.9	0.6	15.9	0.6	4.7	1,000	200	300	365
	6	7/1.04	3.12	13.9	0.6	15.2	0.6	17.4	0.7	3.11	800	255	370	445
	10	7/1.35	4.05	15.8	0.7	17.1	0.7	19.3	0.8	1.84	700	360	490	575
	16	7/1.70	5.1	18.1	0.8	19.4	0.8	21.8	0.9	1.16	600	515	660	765
	25	7/2.14	6.42	21.7	0.9	23	0.9	25.6	1	0.734	500	770	945	1,080
	35	7/2.52	7.56	24.2	1	25.5	1	28.1	1.1	0.529	450	1,010	1,200	1,350
	50	19/1.78	8.9	28.1	1.2	29.4	1.2	32.2	1.3	0.391	450	1,360	1,580	1,770
	70	19/2.14	10.7	31.9	1.3	33.7	1.3	36.7	1.5	0.27	450	1,860	2,210	2,440
	95	19/2.52	12.6	37.3	1.6	39.1	1.6	42.7	1.6	0.195	400	2,550	2,960	3,280
	120	7/2.03	14.2	40.9	1.6	42.7	1.6	46.5	1.7	0.154	350	3,150	3,600	3,970
	150	37/2.25	15.8	45.1	1.7	46.9	1.7	50.9	1.8	0.126	350	3,840	4,340	4,760
	185	37/2.52	17.6	49.9	1.9	51.7	1.9	55.9	1.9	0.1	350	4,780	5,320	5,810

0.6/1kV (FA-)DPYE(C), 0.6/1kV (FA-)DPYCE(C), 0.6/1kV (FA-)DPYCYE(C)

No. of Cores	Conductor			(FA-)DPYE		(FA-)DPYCE		(FA-)DPYCYE		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance			(FA-)DPYE	(FA-)DPYCE	(FA-)DPYCYE
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			Ω/km	MΩ - km	kg/km
3	1.5	7/0.52	1.56	11.2	0.5	12.5	0.5	14.5	0.6	12.2	1,300	150	245	300
	2.5	7/0.67	2.01	12.2	0.5	13.5	0.5	15.5	0.6	7.56	1,100	195	295	355
	4	7/0.85	2.55	13.4	0.6	14.7	0.6	16.9	0.7	4.7	1,000	255	365	440
	6	7/1.04	3.12	14.8	0.6	16.1	0.6	18.3	0.7	3.11	800	335	455	535
	10	7/1.35	4.05	17	0.7	18.3	0.7	20.7	0.8	1.84	700	485	625	725
	16	7/1.70	5.1	19.5	0.8	20.8	0.8	23.2	0.9	1.16	600	700	855	970
	25	7/2.14	6.42	23.4	1	24.7	1	27.3	1.1	0.734	500	1,060	1,240	1,390
	35	7/2.52	7.56	26.1	1.1	27.4	1.1	30.2	1.2	0.529	450	1,390	1,600	1,770
	50	19/1.78	8.9	30.2	1.3	32	1.3	35	1.4	0.391	450	1,870	2,200	2,420
	70	19/2.14	10.7	34.3	1.4	36.1	1.4	39.5	1.6	0.27	450	2,570	2,950	3,220
	95	19/2.52	12.6	40.1	1.6	41.9	1.6	45.5	1.7	0.195	400	3,530	3,980	4,310
	120	37/2.03	14.2	44	1.7	45.8	1.7	49.6	1.8	0.154	350	4,370	4,860	5,250
	150	37/2.25	15.8	48.5	1.8	50.3	1.8	54.5	1.9	0.126	350	5,340	5,870	6,350
	185	37/2.52	17.6	53.6	1.9	55.4	1.9	59.8	2	0.1	350	6,640	7,230	7,770

0.6/1kV (FA-)TPY, 0.6/1kV (FA-)TPYC, 0.6/1kV (FA-)TPYCY

No. of Cores	Conductor			(FA-)TPY		(FA-)TPYC		(FA-)TPYCY		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance			(FA-)TPY	(FA-)TPYC	(FA-)TPYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			Ω/km	MΩ - km	kg/km
3	1.5	7/0.52	1.56	11.2	0.5	12.5	0.5	14.5	0.6	12.2	1,300	150	245	300
	2.5	7/0.67	2.01	12.2	0.5	13.5	0.5	15.5	0.6	7.56	1,100	195	295	355
	4	7/0.85	2.55	13.4	0.6	14.7	0.6	16.9	0.7	4.7	1,000	255	365	440
	6	7/1.04	3.12	14.8	0.6	16.1	0.6	18.3	0.7	3.11	800	335	455	535
	10	7/1.35	4.05	17	0.7	18.3	0.7	20.7	0.8	1.84	700	485	625	725
	16	7/1.70	5.1	19.5	0.8	20.8	0.8	23.2	0.9	1.16	600	700	855	970
	25	7/2.14	6.42	23.4	1	24.7	1	27.3	1.1	0.734	500	1,060	1,240	1,390
	35	7/2.52	7.56	26.1	1.1	27.4	1.1	30.2	1.2	0.529	450	1,390	1,600	1,770
	50	19/1.78	8.9	30.2	1.3	32	1.3	35	1.4	0.391	450	1,870	2,200	2,420
	70	19/2.14	10.7	34.3	1.4	36.1	1.4	39.5	1.6	0.27	450	2,570	2,950	3,220
	95	19/2.52	12.6	40.1	1.6	41.9	1.6	45.5	1.7	0.195	400	3,530	3,980	4,310
	120	37/2.03	14.2	44	1.7	45.8	1.7	49.6	1.8	0.154	350	4,370	4,860	5,250
	150	37/2.25	15.8	48.5	1.8	50.3	1.8	54.5	1.9	0.126	350	5,340	5,870	6,350
	185	37/2.52	17.6	53.6	1.9	55.4	1.9	59.8	2	0.1	350	6,640	7,230	7,770

# JIS CABLE

## JIS C 3410 (2010)

### 0.6/1kV (FA-)TPYE, 0.6/1kV (FA-)TPYCE, 0.6/1kV (FA-)TPYCYE

No. of Cores	Conductor			(FA-)TPYE		(FA-)TPYCE		(FA-)TPYCYE		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-)TPYE	(FA-)TPYCE	(FA-)TPYCYE
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
4	1.5	7/0.52	1.56	12.0	0.5	13.5	0.5	15.5	0.6	12.2	1,300	210	310	370
	2.5	7/0.67	2.01	12.9	0.6	14.4	0.6	16.6	0.7	7.56	1,100	260	370	440
	4	7/0.85	2.55	14.5	0.6	16.0	0.6	18.2	0.7	4.70	900	350	470	550
	6	7/1.04	3.12	15.9	0.7	17.4	0.7	19.6	0.8	3.11	800	450	590	670
	10	7/1.35	4.05	18.3	0.8	19.8	0.8	22.2	0.9	1.84	700	660	810	920
	16	7/1.70	5.10	21.0	0.9	22.5	0.9	25.1	1.0	1.16	600	940	1,120	1,250
	25	7/2.14	6.42	25.8	1.1	27.3	1.1	30.1	1.2	0.734	500	1,450	1,660	1,840
	35	7/2.52	7.56	28.6	1.2	30.1	1.2	33.1	1.3	0.529	450	1,900	2,140	2,340
	50	19/1.78	8.90	33.4	1.4	35.4	1.4	38.6	1.5	0.391	450	2,580	2,940	3,200
	70	19/2.14	10.70	39.1	1.6	41.1	1.6	44.5	1.6	0.270	450	3,630	4,050	4,370
	95	19/2.52	12.60	44.1	1.6	46.1	1.6	49.9	1.7	0.195	400	4,840	5,310	5,720
	120	37/2.03	14.20	48.1	1.8	50.1	1.8	54.1	1.9	0.154	350	5,950	6,460	6,930
	150	37/2.25	15.80	53.4	1.9	55.4	1.9	59.6	2.1	0.126	350	7,310	7,870	8,420
	185	37/2.52	17.60	59.1	2.1	61.1	2.1	65.5	2.3	0.100	350	9,080	9,700	10,340

### 0.6/1kV (FA-)FPY, 0.6/1kV (FA-)FPYC, 0.6/1kV (FA-)FPYCY

No. of Cores	Conductor			(FA-)FPY		(FA-)FPYC		(FA-)FPYCY		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-)FPY	(FA-)FPYC	(FA-)FPYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
4	1.5	7/0.52	1.56	12.0	0.5	13.5	0.5	15.5	0.6	12.2	1,300	210	310	370
	2.5	7/0.67	2.01	12.9	0.6	14.4	0.6	16.6	0.7	7.56	1,100	260	370	440
	4	7/0.85	2.55	14.5	0.6	16.0	0.6	18.2	0.7	4.70	900	350	470	550
	6	7/1.04	3.12	15.9	0.7	17.4	0.7	19.6	0.8	3.11	800	450	590	670
	10	7/1.35	4.05	18.3	0.8	19.8	0.8	22.2	0.9	1.84	700	660	810	920
	16	7/1.70	5.10	21.0	0.9	22.5	0.9	25.1	1.0	1.16	600	940	1,120	1,250
	25	7/2.14	6.42	25.8	1.1	27.3	1.1	30.1	1.2	0.734	500	1,450	1,660	1,840
	35	7/2.52	7.56	28.6	1.2	30.1	1.2	33.1	1.3	0.529	450	1,900	2,140	2,340
	50	19/1.78	8.90	33.4	1.4	35.4	1.4	38.6	1.5	0.391	450	2,580	2,940	3,200
	70	19/2.14	10.70	39.1	1.6	41.1	1.6	44.5	1.6	0.270	450	3,630	4,050	4,370
	95	19/2.52	12.60	44.1	1.6	46.1	1.6	49.9	1.7	0.195	400	4,840	5,310	5,720
	120	37/2.03	14.20	48.1	1.8	50.1	1.8	54.1	1.9	0.154	350	5,950	6,460	6,930
	150	37/2.25	15.80	53.4	1.9	55.4	1.9	59.6	2.1	0.126	350	7,310	7,870	8,420
	185	37/2.52	17.60	59.1	2.1	61.1	2.1	65.5	2.3	0.100	350	9,080	9,700	10,340

### 0.6/1kV (FA-)5PY, 0.6/1kV (FA-)5PYC, 0.6/1kV (FA-)5PYCY

No. of Cores	Conductor			(FA-)5PY		(FA-)5PYC		(FA-)5PYCY		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-) 5PY	(FA-) 5PYC	(FA-) 5PYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
5	1.5	7 / 0.52	1.56	13.0	0.5	14.5	0.6	16.7	0.7	12.2	1,300	230	340	410
	2.5	7 / 0.67	2.01	14.3	0.6	15.8	0.6	18.0	0.7	7.56	1,100	290	400	470
	4	7 / 0.85	2.55	15.8	0.6	17.3	0.7	19.5	0.8	4.70	900	390	510	580
	6	7 / 1.04	3.12	17.6	0.7	19.1	0.8	21.5	0.9	3.11	800	520	650	730
	10	7 / 1.35	4.05	20.3	0.8	21.8	0.9	24.2	1.0	1.84	700	760	910	1,000
	16	7 / 1.70	5.10	23.3	0.9	24.8	1.0	27.4	1.1	1.16	600	1,100	1,270	1,370

### 0.6/1kV (FA-)6PY, 0.6/1kV (FA-)6PYC, 0.6/1kV (FA-) 6PYCY

No. of Cores	Conductor			(FA-)6PY		(FA-)6PYC		(FA-)6PYCY		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-) 6PY	(FA-) 6PYC	(FA-) 6PYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
6	1.5	7 / 0.52	1.56	14.3	0.7	15.8	0.8	18.0	0.8	12.2	1,300	280	390	480
	2.5	7 / 0.67	2.01	15.5	0.8	17.0	0.8	19.2	0.9	7.56	1,100	360	470	570
	4	7 / 0.85	2.55	17.4	0.8	18.9	0.9	21.3	0.9	4.70	900	490	610	730
	6	7 / 1.04	3.12	19.0	0.9	20.5	0.9	22.9	1.0	3.11	800	630	770	900

### 0.6/1kV (FA-)10PY, 0.6/1kV (FA-)10PYC, 0.6/1kV (FA-)10PYCY

No. of Cores	Conductor			(FA-)10PY		(FA-)10PYC		(FA-)10PYCY		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-) 10PY	(FA-) 10PYC	(FA-) 10PYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
10	1.5	7 / 0.52	1.56	18.3	0.8	19.8	0.9	22.2	1.0	12.2	1,300	450	600	710
	2.5	7 / 0.67	2.01	20.1	0.9	21.6	0.9	24.0	1.0	7.56	1,100	590	750	870
	4	7 / 0.85	2.55	22.5	1.0	24.0	1.0	26.6	1.1	4.70	900	800	980	1,120

### FLAME RETARDANT POWER CABLE



#### Cable Designation

0.6/1kV DPYSLA, TPYSLA, FA-DPYSLA, FA-TPYSLA

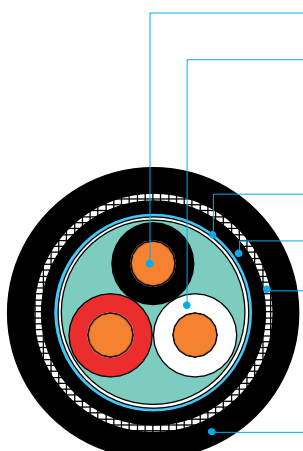
0.6/1kV DPYCSLA, TPYCSLA, FA-DPYCSLA, FA-TPYCSLA

0.6/1kV DPYCYSLA, TPYCYSLA, FA-DPYCYSLA, FA-TPYCYSLA

#### Application Standard

- Design guide : JIS C 3410(2010)
- Flame retardant : IEC 60332-1  
: IEC 60332-3 Category A (FA-Cables Only)
- Cold bend/impact : CSA 22.2 No. 03 (-40°C/-35°C) (Cold Type Only)
- Max. rated conductor temperature : 90°C

#### Construction

Sectional view	Classification	Code	Construction detail						
	Conductor	<b>D, T</b>	- Stranded tinned annealed copper wires as per JIS C 3410(2010) - A suitable tape may be applied on the conductor						
	Insulation	<b>P</b>	- EPR as per JIS C 3410(2010)						
	Cabling		- Insulated conductors shall be cabled. - Flame retardant & non-hygroscopic fillers may be used. - Suitable tape(s) may be applied on the cabled core.						
	Commonshield	<b>SLA</b>	- Screened by AL/PS tape with tinned copper drain wire. - A suitable tape may be applied on the common shield						
	Sheath	<b>Y</b>	- PVC as per JIS C 3410(2010)						
	Armour	<b>C</b>	- Braid of galvanized steel wire(C) - Coverage density : Min. 90%						
	Paint		- The white paint shall be painted uniformly on the steel wire braid - In case of PVC protective covering cable, paint is dispensable.						
	Protective Covering	<b>Y</b>	- PVC as per JIS C 3410(2010) - Protective covering color : Black - Any other color may be applicable when purchaser required.						
	Core identification		<table border="1"> <thead> <tr> <th>No. of cores</th> <th>Insulation Color</th> </tr> </thead> <tbody> <tr> <td>2C</td> <td>Black, White</td> </tr> <tr> <td>3C</td> <td>Black, White, Red</td> </tr> </tbody> </table>	No. of cores	Insulation Color	2C	Black, White	3C	Black, White, Red
	No. of cores	Insulation Color							
2C	Black, White								
3C	Black, White, Red								

**Note.** Cold type cable ("C") can be supplied.

### 0.6/1kV (FA-)DPYCSLA, 0.6/1kV (FA-)DPYCYSLA

No. of Cores	Conductor			Nominal Dia. Over Sheath	(FA-)DPYCSLA		(FA-)DPYCYSLA		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.		Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-)DPYCSLA	(FA-)DPYCYSLA
	mm <sup>2</sup>	No./mm	mm		mm	±mm	mm	±mm			kg/km	kg/km
2	1.5	7 / 0.52	1.56	10.6	11.9	0.5	13.9	0.6	12.2	1,300	215	270
	2.5	7 / 0.67	2.01	11.7	13.0	0.5	15.0	0.6	7.56	1,100	260	320
	4	7 / 0.85	2.55	12.8	14.1	0.6	16.3	0.7	4.70	1,000	310	385
	6	7 / 1.04	3.12	14.1	15.4	0.6	17.6	0.7	3.11	800	450	530
	10	7 / 1.35	4.05	16.0	17.3	0.7	19.5	0.8	1.84	700	580	680
	16	7 / 1.70	5.10	18.3	19.6	0.8	22.0	0.9	1.16	600	760	860
	25	7 / 2.14	6.42	21.9	23.2	0.9	25.8	1.0	0.734	500	1,080	1,210
	35	7 / 2.52	7.56	24.4	25.7	1.0	28.3	1.1	0.529	450	1,350	1,510
	50	19 / 1.78	8.90	28.3	29.6	1.2	32.4	1.3	0.391	450	1,730	1,940
	70	19 / 2.14	10.70	32.1	33.9	1.4	36.9	1.5	0.270	450	2,440	2,700
	95	19 / 2.52	12.60	37.5	39.3	1.6	42.9	1.7	0.195	400	3,170	3,470
	120	37 / 2.03	14.21	41.1	42.9	1.7	46.7	1.9	0.154	350	3,820	4,170

### 0.6/1kV (FA-)TPYCSLA, 0.6/1kV (FA-)TPYCYSLA

No. of Cores	Conductor			Nominal Dia. Over Sheath	(FA-)TPYCSLA		(FA-)TPYCYSLA		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.		Nominal Dia.	Tolerance	Nominal Dia.	Tolerance			(FA-)TPYCSLA	(FA-)TPYCYSLA
	mm <sup>2</sup>	No./mm	mm		mm	±mm	mm	±mm			kg/km	kg/km
3	1.5	7 / 0.52	1.56	11.4	12.7	0.5	14.7	0.6	12.2	1,300	255	315
	2.5	7 / 0.67	2.01	12.4	13.7	0.5	15.7	0.6	7.56	1,100	305	365
	4	7 / 0.85	2.55	13.6	14.9	0.6	17.1	0.7	4.70	1,000	375	450
	6	7 / 1.04	3.12	15.0	16.3	0.7	18.5	0.7	3.11	800	540	620
	10	7 / 1.35	4.05	17.2	18.5	0.7	20.9	0.8	1.84	700	730	830
	16	7 / 1.70	5.10	19.7	21.0	0.8	23.4	0.9	1.16	600	970	1,080
	25	7 / 2.14	6.42	23.6	24.9	1.0	27.5	1.1	0.734	500	1,380	1,520
	35	7 / 2.52	7.56	26.3	27.6	1.1	30.4	1.2	0.529	450	1,750	1,920
	50	19 / 1.78	8.90	30.4	32.2	1.3	35.2	1.4	0.391	450	2,390	2,610
	70	19 / 2.14	10.70	34.5	36.3	1.5	39.7	1.6	0.270	450	3,290	3,580
	95	19 / 2.52	12.60	40.3	42.1	1.7	45.9	1.8	0.195	400	4,220	4,570
	120	37 / 2.03	14.21	44.2	46.0	1.8	50.0	2.0	0.154	350	5,120	5,520



### FIRE RESISTANT POWER CABLE



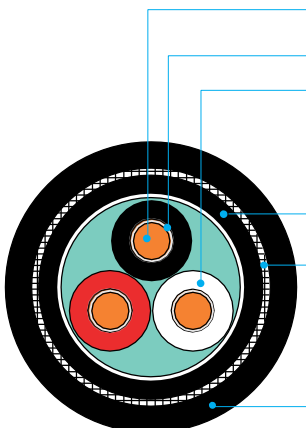
#### Cable Designation

0.6/1kV FR-D(T)PY, FR-FA-D(T)PY  
 0.6/1kV FR-D(T)PYC, FR-FA-D(T)PYC  
 0.6/1kV FR-D(T)PYCY, FR-FA-D(T)PYCY

#### Application Standard

- Design guide : JIS C 3410(2010)
- Flame retardant : IEC 60332-1
- Fire resistant : IEC 60332-3 Category A (FR-FA-Cables Only)  
: IEC 60331-21 & IEC60331-1, -2 (120minute)
- Cold bend/impact : CSA 22.2 No. 03 (-40°C/-35°C) (Cold Type Only)
- Max. rated conductor temperature : 90°C

#### Construction

Sectional view	Classification	Code	Construction detail						
	Conductor	<b>D, T</b>	- Stranded tinned annealed copper wires as per JIS C 3410(2010) - A suitable tape may be applied on the conductor						
	Fire resisting layer	<b>FR-(FA-)</b>	- Mica/glass tape						
	Insulation	<b>P</b>	- EPR as per JIS C 3410(2010)						
	Cabling		- Insulated conductors shall be cabled. - Flame retardant & non-hygroscopic fillers may be used. - Suitable tape(s) may be applied on the cabled core.						
	Sheath	<b>Y</b>	- PVC as per JIS C 3410(2010)						
	Armour	<b>C</b>	- Braid of galvanized steel wire(C) - Coverage density : Min. 90%						
	Paint		- The white paint shall be painted uniformly on the steel wire braid - In case of PVC protective covering cable, paint is dispensable.						
	Protective Covering	<b>Y</b>	- PVC as per JIS C 3410(2010) - Protective covering color : Black - Any other color may be applicable when purchaser required.						
Core identification			<table border="1"> <thead> <tr> <th>No. of cores</th> <th>Insulation Color</th> </tr> </thead> <tbody> <tr> <td>2C</td> <td>Black, White</td> </tr> <tr> <td>3C</td> <td>Black, White, Red</td> </tr> </tbody> </table>	No. of cores	Insulation Color	2C	Black, White	3C	Black, White, Red
No. of cores	Insulation Color								
2C	Black, White								
3C	Black, White, Red								

**Note.** Cold type cable ("C") can be supplied.

0.6/1kVFR-(FA-)DPY, 0.6/1kVFR-(FA-)DPYC, 0.6/1kVFR-(FA-)DPYCY

No. of Cores	Conductor			FR-(FA-)DPY		FR-(FA-)DPYC		FR-(FA-)DPYCY		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Overall Dia.	Tolerance			FR-(FA-)DPY	FR-(FA-)DPYC	FR-(FA-)DPYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
2	1.5	7/0.52	1.56	12.8	0.6	14.1	0.6	16.3	0.7	12.2	1,000	165	270	340
	2.5	7/0.67	2.01	13.9	0.6	15.2	0.6	17.4	0.7	7.56	900	205	320	395
	4	7/0.85	2.55	15.0	0.7	16.3	0.7	18.5	0.7	4.70	800	255	375	455
	6	7/1.04	3.12	16.1	0.7	17.4	0.7	19.6	0.8	3.11	700	310	440	530
	10	7/1.35	4.05	18.2	0.8	19.5	0.8	21.9	0.9	1.84	600	430	575	685
	16	7/1.70	5.10	20.5	0.9	21.8	0.9	24.4	1.0	1.16	500	590	755	875
	25	7/2.14	6.42	24.1	1.0	25.4	1.0	28.0	1.1	0.734	450	860	1,060	1,210
	35	7/2.52	7.56	26.6	1.1	27.9	1.1	30.7	1.2	0.529	400	1,110	1,320	1,500
	50	19/1.78	8.90	30.5	1.3	32.3	1.3	35.3	1.4	0.391	400	1,480	1,820	2,030
	70	19/2.14	10.70	34.3	1.4	36.1	1.4	39.5	1.6	0.270	350	1,990	2,370	2,640
	95	19/2.52	12.60	39.7	1.6	41.5	1.6	45.1	1.7	0.195	350	2,700	3,140	3,480
	120	37/2.03	14.20	43.1	1.7	44.9	1.7	48.7	1.8	0.154	350	3,300	3,770	4,160
	150	37/2.25	15.80	47.5	1.8	49.3	1.8	53.3	1.9	0.126	350	4,030	4,550	4,990
	185	37/2.52	17.60	52.3	1.9	54.1	1.9	58.5	2.0	0.100	350	4,980	5,550	6,080

0.6/1kVFR-(FA-)TPY, 0.6/1kVFR-(FA-)TPYC, 0.6/1kVFR-(FA-)TPYCY

No. of Cores	Conductor			FR-(FA-)TPY		FR-(FA-)TPYC		FR-(FA-)TPYCY		Conductor Resistance (at 20°C) (Max) Ω/km	Insulation Resistance (at 20°C) (Min) MΩ - km	Cable Weight (Approx.)		
	Nominal Area	Strand	Dia.	Nominal Dia.	Tolerance	Nominal Dia.	Tolerance	Nominal Overall Dia.	Tolerance			FR-(FA-)TPY	FR-(FA-)TPYC	FR-(FA-)TPYCY
	mm <sup>2</sup>	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
3	1.5	7/0.52	1.56	13.6	0.6	14.9	0.6	17.1	0.7	12.2	1,000	205	315	390
	2.5	7/0.67	2.01	14.8	0.6	16.1	0.6	18.3	0.7	7.56	900	255	375	460
	4	7/0.85	2.55	16.0	0.7	17.3	0.7	19.5	0.8	4.70	800	320	450	540
	6	7/1.04	3.12	17.4	0.7	18.7	0.7	21.1	0.8	3.11	700	410	550	650
	10	7/1.35	4.05	19.6	0.8	20.9	0.8	23.3	0.9	1.84	600	570	730	845
	16	7/1.70	5.10	22.1	0.9	23.4	0.9	26.0	1.0	1.16	500	795	975	1,110
	25	7/2.14	6.42	26.0	1.1	27.3	1.1	30.1	1.2	0.734	450	1,170	1,380	1,550
	35	7/2.52	7.56	28.6	1.2	29.9	1.2	32.7	1.3	0.529	400	1,520	1,740	1,930
	50	19/1.78	8.90	32.8	1.4	34.6	1.4	38.0	1.5	0.391	400	2,010	2,380	2,640
	70	19/2.14	10.70	36.9	1.5	38.7	1.5	42.3	1.6	0.270	350	2,730	3,140	3,450
	95	19/2.52	12.60	42.7	1.7	44.5	1.7	48.3	1.8	0.195	350	3,730	4,200	4,580
	120	37/2.03	14.20	46.5	1.8	48.3	1.8	52.3	1.9	0.154	350	4,580	5,090	5,520
	150	37/2.25	15.80	51.1	1.9	52.9	1.9	57.1	2.0	0.126	350	5,570	6,130	6,630
	185	37/2.52	17.60	56.2	2.0	58.0	2.0	62.6	2.1	0.100	350	6,890	7,510	8,110