

MEDIUM VOLTAGE (3.6/6kV, 6/10kV) FLAME RETARDANT CABLE



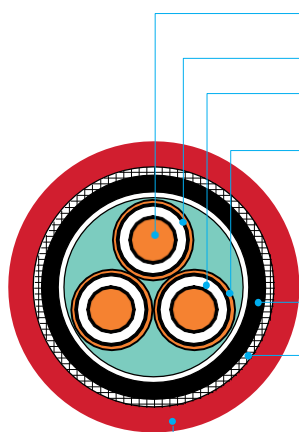
Cable Designation

3.6/6kV SPYCB(Y), TPYCY(Y), FA-SPYCB(Y), FA-TPYCY(Y)
6/10kV SPYCB(Y), TPYCY(Y), FA-SPYCB(Y), FA-TPYCY(Y)

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		S, T	- Stranded tinned annealed copper wires as per JIS C 3410(2010) - A suitable tape may be applied on the conductor
Conductor screen			- Semi-conducting layer (tape / compound)
Insulation		P	- EPR as per JIS C 3410(2010)
Insulation screen			- Non-metallic part : Semi-conducting layer (tape / compound) - Metallic part : Copper tape with about 0.1mm thickness - A suitable separator tape(s) may be applied over the metallic part
Cabling			- Three insulation screened conductors shall be cabled. - Flame retardant & non-hygroscopic fillers may be used . - Suitable tape(s) may be applied on the cabled core.
Sheath		Y	- PVC as per JIS C 3410(2010)
Armour		C (CB)	- 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 red paint shall be painted uniformly on the steel wire braid. - In case of PVC outer sheath cable, paint is dispensable.
Protective covering		Y	- PVC as per JIS C 3410(2010) - Outer sheath color : Red - Any other color may be applicable when purchaser required.
Core identification			- 3C : Red, Yellow, Blue

Note. Cold type cable can be supplied. (Cold type abbreviation "C" is added at the end of designation.)

3.6/6KV (FA-)SPYCB, 3.6/6KV (FA-)SPYCBY

No. of Cores	Conductor			(FA-)SPYCB		(FA-)SPYCBY		Conductor Resistance (at 20°C) (Max)	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance		SPYCB FA-SPYCB	SPYCBY FA-SPYCBY
No.	mm ²	No./mm	mm	mm	±mm	mm	±mm	Ω/km	kg/km	kg/km
1	10	7/1.35	4.05	17.6	0.7	19.8	0.8	1.840	560	640
	16	7/1.70	5.10	18.8	0.8	21.2	0.8	1.160	660	755
	25	7/2.14	6.42	20.1	0.8	22.5	0.9	0.734	795	895
	35	7/2.52	7.56	21.5	0.9	23.9	1.0	0.529	940	1,050
	50	19/1.78	8.90	22.8	0.9	25.4	1.0	0.391	1,110	1,230
	70	19/2.14	10.70	24.8	1.0	27.4	1.1	0.270	1,380	1,520
	95	19/2.52	12.60	26.9	1.1	29.7	1.2	0.195	1,710	1,870
	120	37/2.03	14.21	28.7	1.1	31.5	1.3	0.154	2,010	2,180
	150	37/2.25	15.75	30.3	1.2	33.3	1.3	0.126	2,330	2,520
	185	37/2.52	17.64	32.8	1.3	35.8	1.4	0.100	2,890	3,090
	240	61/2.25	20.25	35.9	1.4	39.3	1.6	0.0762	3,590	3,830
	300	61/2.52	22.68	38.9	1.6	42.5	1.6	0.0607	4,330	4,610

3.6/6KV (FA-)TPYC, 3.6/6KV (FA-)TPYCY

No. of Cores	Conductor			(FA-)TPYC		(FA-)TPYCY		Conductor Resistance (at 20°C) (Max)	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance		TPYC FA-TPYC	TPYCY FA-TPYCY
No.	mm ²	No./mm	mm	mm	±mm	mm	±mm	Ω/km	kg/km	kg/km
3	10	7/1.35	4.05	34.1	1.4	37.5	1.5	1.840	1,620	1,850
	16	7/1.70	5.10	36.5	1.5	39.9	1.6	1.160	1,920	2,170
	25	7/2.14	6.42	39.6	1.6	43.2	1.7	0.734	2,370	2,650
	35	7/2.52	7.56	42.2	1.6	46.0	1.7	0.529	2,800	3,120
	50	19/1.78	8.90	45.5	1.7	49.3	1.8	0.391	3,360	3,710
	70	19/2.14	10.70	49.6	1.8	53.6	1.9	0.270	4,210	4,610
	95	19/2.52	12.60	54.1	1.9	58.5	2.0	0.195	5,260	5,740
	120	37/2.03	14.21	57.8	2.0	62.2	2.1	0.154	6,210	6,720
	150	37/2.52	15.75	61.6	2.1	66.2	2.2	0.126	7,250	7,820

6/10KV (FA-)SPYCB, 6/10KV (FA-)SPYCBY

No. of Cores	Conductor			(FA-)SPYCB		(FA-)SPYCBY		Conductor Resistance (at 20°C) (Max)	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance		SPYCB FA-SPYCB	SPYCBY FA-SPYCBY
No.	mm ²	No./mm	mm	mm	±mm	mm	±mm	Ω/km	kg/km	kg/km
1	16	7/1.70	5.10	20.8	0.8	23.2	0.9	1.160	765	870
	25	7/2.14	6.42	22.1	0.9	24.7	1.0	0.734	910	1,030
	35	7/2.52	7.56	23.5	0.9	26.1	1.0	0.529	1,060	1,190
	50	19/1.78	8.90	24.8	1.0	27.4	1.1	0.391	1,230	1,360
	70	19/2.14	10.70	26.8	1.1	29.6	1.2	0.270	1,510	1,670
	95	19/2.52	12.60	28.9	1.2	31.7	1.3	0.195	1,850	2,020
	120	37/2.03	14.21	30.5	1.2	33.5	1.3	0.154	2,150	2,340
	150	37/2.25	15.75	32.8	1.3	35.8	1.4	0.126	2,610	2,820
	185	37/2.52	17.64	34.8	1.4	38.2	1.5	0.100	3,060	3,290
	240	61/2.25	20.25	37.7	1.5	41.1	1.6	0.0762	3,760	4,010
300	61/2.52	22.68	40.3	1.6	43.9	1.7	0.0607	4,470	4,760	

6/10KV (FA-)TPYC, 6/10KV (FA-)TPYCY

No. of Cores	Conductor			(FA-)TPYC		(FA-)TPYCY		Conductor Resistance (at 20°C) (Max)	Cable Weight (Approx.)	
	Nominal Area	Strand	Dia.	Nominal Overall Dia.	Tolerance	Nominal Overall Dia.	Tolerance		TPYC FA-TPYC	TPYCY FA-TPYCY
No.	mm ²	No./mm	mm	mm	±mm	mm	±mm	Ω/km	kg/km	kg/km
3	16	7/1.70	5.10	41.0	1.6	44.6	1.7	1.160	2,290	2,590
	25	7/2.14	6.42	44.1	1.7	47.9	1.8	0.734	2,760	3,100
	35	7/2.52	7.56	46.7	1.7	50.7	1.8	0.529	3,220	3,590
	50	19/1.78	8.90	49.8	1.8	53.8	1.9	0.391	3,780	4,180
	70	19/2.14	10.70	54.1	1.9	58.5	2.0	0.270	4,690	5,170
	95	19/2.52	12.60	58.4	2.0	63.0	2.1	0.195	5,740	6,290
	120	37/2.03	14.21	62.3	2.1	67.1	2.2	0.154	6,750	7,360
	150	37/2.25	15.75	65.9	2.2	70.7	2.3	0.126	7,790	8,440