

FLAME RETARDANT INSTRUMENTATION CABLE



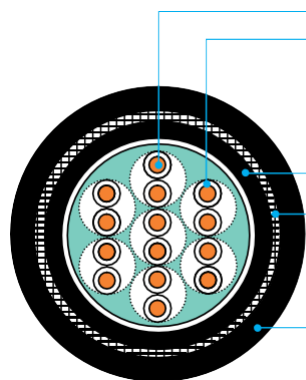
Cable Designation

150/250V TTY, FA-TTY,
150/250V TTYC, FA-TTYC,
150/250V TTYCY, FA-TTYCY

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 : 70°C

Construction



Sectional view	Classification	Code	Construction detail
Conductor	TT		- Stranded plain annealed copper wires as per JIS C 3410(2010)
Insulation			- PVC as per JIS C 3410(2010)
Twisting			- Two insulated cores shall be twisted together to form a pair
Cabling			- Twisted pairs 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		- 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	Y		- PVC as per JIS C 3410(2010) - Protective covering color : Black - Any other color may be applicable when purchaser required.
Core identification			- Printed pair number and Alphabet letter on the white insulation ex) 4P : (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B) - 1T, 1Q cable shall be identified by the black number on the white insulation

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

150/250V (FA-)TTY, 150/250V (FA-)TTYC, 150/250V (FA-)TTYCY

No. of Cores	No. of Cores	Conductor			(FA-)TTY		(FA-)TTYC		(FA-)TTYCY		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-) TTY	(FA-) TTYC	(FA-) TTYCY
		mm ²	No./mm	mm	mm	±mm	mm	±mm	mm	±mm			kg/km	kg/km	kg/km
1P	2				7.9	0.4	9.2	0.4	11.0	0.4			65	130	170
1T	3				8.6	0.4	9.9	0.4	11.7	0.5			85	160	200
1Q	4				9.3	0.4	10.6	0.4	12.6	0.5			105	180	230
4P	8				14.2	0.6	15.5	0.6	17.7	0.7			205	320	400
7P	14				16.9	0.7	18.2	0.7	20.6	0.8			310	445	545
10P	20	0.75	7/0.37	1.11	21.7	0.9	23.0	0.9	25.6	1.0			465	640	775
14P	28	0.75	7/0.37	1.11	23.5	1.0	24.8	1.0	27.4	1.1	26.0	20	585	775	920
19P	38				26.4	1.1	27.7	1.1	30.5	1.2	26.0	20	755	965	1,140
24P	48				31.9	1.3	33.7	1.3	36.7	1.5			1,030	1,380	1,610
30P	60				34.0	1.4	35.8	1.4	39.2	1.6			1,220	1,590	1,870
37P	74				36.9	1.5	38.7	1.5	42.3	1.6			1,450	1,860	2,180
48P	96				42.8	1.7	44.6	1.7	48.4	1.8			1,910	2,380	2,760

FLAME RETARDANT INSTRUMENTATION CABLE



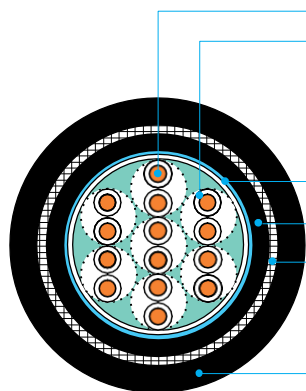
Cable Designation

150/250V TTYSLA, FA-TTYSLA,
150/250V TTYCSLA, FA-TTYCSLA,
150/250V TTYCYSLA, FA-TTYCYSLA

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 : 70°C

Construction



Sectional view	Classification	Code	Construction detail
Conductor	TT		- Stranded plain annealed copper wires as per JIS C 3410(2010)
Insulation			- PVC as per JIS C 3410(2010)
Twisting			- Two insulated cores shall be twisted together to form a pair
Cabling			- Twisted pairs shall be cabled. - Flame retardant & non-hygroscopic fillers may be used. - Suitable tape(s) may be applied on the cabled core.
Common shield	SLA		- Screened by AL/PS tape with tinned copper drain wire. - A suitable tape may be applied on the common shield
Sheath	Y		- PVC as per JIS C 3410(2010)
Armour	C		- 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	Y		- PVC as per JIS C 3410(2010) - Protective covering color : Black - Any other color may be applicable when purchaser required.
Core identification			- Printed pair number and Alphabet letter on the white insulation ex) 4P : (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B) - 1T, 1Q cable shall be identified by the black number on the white insulation

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

150/250V (FA-)TTYSLA, 150/250V (FA-)TTYCSLA, 150/250V (FA-)TTYCYSLA

No. of Cores	No. of Cores	Conductor			(FA-)TTYSLA		(FA-)TTYCSLA		(FA-)TTYCYSLA		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-) TTYSLA	(FA-) TTYCSLA	(FA-) TTYCYSLA
		mm ²	No./mm	mm	mm	±mm	mm	±mm	mm	±mm	Ω/km	MΩ - km	kg/km	kg/km	kg/km
1P	2				8.1	0.5	9.4	0.4	11.2	0.4			80	140	180
1T	3				8.8	0.5	10.1	0.4	12.1	0.5			100	170	215
1Q	4				9.5	0.5	10.8	0.4	12.8	0.5			110	190	240
4P	8				14.4	0.7	15.7	0.6	17.9	0.7			220	335	410
7P	14				17.1	0.8	18.4	0.7	20.8	0.8			330	460	560
10P	20	0.75	7/0.37	1.11	22.1	0.9	23.4	0.9	26.0	1.0	26.0	20	500	665	805
14P	28	0.75	7/0.37	1.11	23.7	1.0	25.0	1.0	27.6	1.1	26.0	20	610	790	935
19P	38				26.6	1.0	27.9	1.1	30.7	1.2			790	985	1,160
24P	48				32.1	1.2	33.9	1.4	36.9	1.5			1,190	1,400	1,630
30P	60				34.2	1.3	36.0	1.4	39.4	1.6			1,280	1,610	1,890
37P	74				37.1	1.4	38.9	1.6	42.5	1.6			1,520	1,880	2,200
48P	96				43.0	1.5	44.8	1.7	48.6	1.7			1,990	2,410	2,790

FLAME RETARDANT INSTRUMENTATION CABLE



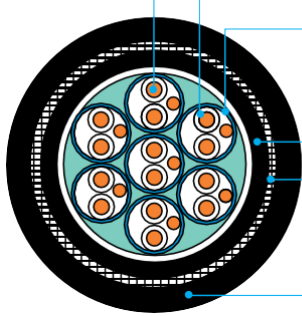
Cable Designation

150/250V TTY-SLA, FA-TTY-SLA,
150/250V TTYC-SLA, FA-TTYC-SLA,
150/250V TTYCY-SLA, FA-TTYCY-SLA

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 : 70°C

Construction

Sectional view	Classification	Code	Construction detail
	Conductor	TT	- Stranded plain annealed copper wires as per JIS C 3410(2010)
	Insulation		- PVC as per JIS C 3410(2010)
	Twisting		- Two insulated cores shall be twisted together to form a pair
	Individual shield	-SLA	- Screened by AL/PS tape with tinned copper drain wire. - A suitable tape may be applied on the individual shield
	Cabling		- Twisted pairs 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	- 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	Y	- PVC as per JIS C 3410(2010) - Protective covering color: Black - Any other color may be applicable when purchaser required.
	Core identification		- Printed pair number and Alphabet letter on the white insulation ex) 4P: (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B)

Note. Fire resistance type FR(A) & Cold type cable ("C") can be supplied.

150/250V (FA-)TTY-SLA, 150/250V (FA-)TTYC-SLA, 150/250V (FA-)TTYCY-SLA

No. of Cores	No. of Cores	Conductor			(FA-)TTY-SLA		(FA-)TTYC-SLA		(FA-)TTYCY-SLA		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-) TTY-SLA	(FA-) TTYC-SLA	(FA-) TTYCY-SLA
		mm ²	No./mm	mm	mm	±mm	mm	±mm	mm	±mm	Ω/km	MΩ - km	kg/km	kg/km	kg/km
4P	8				16.0	0.7	17.3	0.7	19.5	0.8			270	380	465
7P	14				19.5	0.9	20.8	0.8	23.2	0.9			410	545	660
10P	20				25.2	1.1	26.5	1.1	29.3	1.2			630	805	970
14P	28				27.6	1.2	28.9	1.2	31.7	1.3			790	980	1,160
19P	38	0.75	7/0.37	1.11	30.9	1.4	32.7	1.3	35.7	1.4	26.0	300	1,030	1,320	1,540
24P	48				36.6	1.6	38.4	1.5	42.0	1.6			1,370	1,710	2,020
30P	60				39.1	1.7	40.9	1.6	44.5	1.7			1,600	1,970	2,300
37P	74				42.3	1.8	44.1	1.7	47.9	1.8			1,900	2,300	2,670
48P	96				49.1	1.9	50.9	1.9	55.1	1.9			2,500	2,960	3,440

FLAME RETARDANT INSTRUMENTATION CABLE



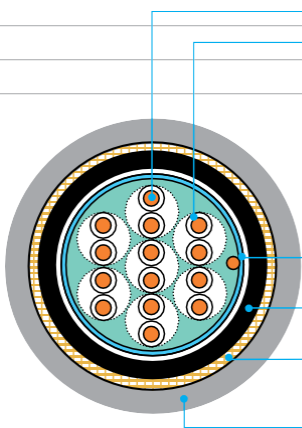
Cable Designation

250V RCOP(OS)

Application Standard

- Design guide : IEC 60092-350 & IEC 60092-376
- 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		- Stranded tinned annealed copper wires as per IEC 60228, Class 2
	Insulation	R	- EPR as per IEC 60092-351
	Twisting		- Two/Three Insulated cores shall be twisted together to form a pair/triad
	Cabling		- Twisted pairs/triads shall be cabled - Flame retardant & non-hygroscopic fillers may be used - Suitable tape(s) may be applied on the cabled core - A Filler may be applied to obtain a circular Cable
	Collective screen	(OS)	- AL/PS tape + Tinned copper drain wire (0.75mm ²) - A suitable tape may be applied on the collective screen
	Inner sheath	C	- SE1 as per IEC 60092-359
	Armour	O	- Braid of plain annealed copper wires - Coverage density is minimum 90%
	Outer sheath	P	- ST2(PVC) as per IEC 60092-359 - Outer sheath color : Grey (for Non-IS Type) or Blue (for IS Type)
	Core identification		- Printed pair/triad number and Alphabet letter on the white insulation ex) 4P : (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B) 2T : (1A, 1B, 1C), (2A, 2B, 2C)

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

JIS CABLE

JIS C 3410 (2010)

(PAIR TYPE)

250VRCOP(OS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
1Q				9.0	12.8	0.8			290
2P				11.7	15.5	0.9			360
4P				13.5	17.3	1.0			470
5P				15.1	19.1	1.1			550
6P				16.3	20.3	1.1			620
7P				16.3	20.3	1.1			650
8P				17.3	21.3	1.2			710
10P	1.0	7/0.43	1.29	19.6	23.8	1.3	19.3	1,050	850
12P	1.0	7/0.43	1.29	20.4	24.6	1.3	19.3	1,050	940
14P				21.4	25.6	1.3			1,040
16P				22.9	27.3	1.4			1,160
19P				24.2	28.6	1.4			1,300
20P				24.7	29.1	1.5			1,350
24P				27.5	32.1	1.6			1,590
30P				30.8	36.0	1.7			2,000
37P				33.1	38.3	1.8			2,310

*.1 Quad cable shall be twisted quad formation

(TRIAD TYPE)

250VRCOP(OS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
2T				13.0	16.8	1.0			430
4T				15.1	19.1	1.1			580
5T				16.8	20.8	1.1			680
6T				19.1	23.3	1.2			810
7T				19.1	23.3	1.2			860
8T				20.4	24.6	1.3			940
10T				23.2	27.6	1.4			1,130
12T	1.0	7/0.43	1.29	24.7	29.1	1.5	19.3	1,050	1,280
14T				25.7	30.1	1.5			1,410
16T				27.5	32.1	1.6			1,590
19T				29.8	34.4	1.7			1,810
20T				30.3	35.5	1.7			1,980
24T				33.1	38.3	1.8			2,280
30T				36.7	42.1	2.0			2,730
37T				40.2	45.8	2.1			3,260

FLAME RETARDANT INSTRUMENTATION CABLE



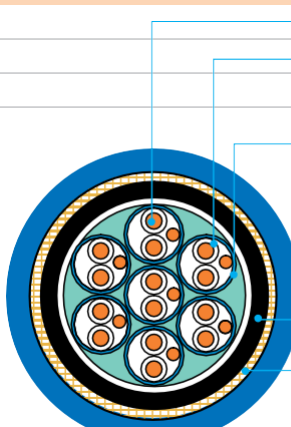
Cable Designation

250V RCOP(IS)

Application Standard

- Design guide : IEC 60092-350 & IEC 60092-376
- 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		- Stranded tinned annealed copper wires as per IEC 60228, Class 2
	Insulation	R	- EPR as per IEC 60092-351
	Twisting		- Two/Three Insulated cores shall be twisted together to form a pair/triad
	Individual screen	(IS)	- AL/PS tape + Tinned copper drain wire (0.75mm ²) - A suitable tape may be applied on the individual screen
	Cabling		- Twisted pairs/triads shall be cabled - Flame retardant & non-hygroscopic fillers may be used - Suitable tape(s) may be applied on the cabled core - A Filler may be applied to obtain a circular Cable
	Inner sheath	C	- SE1 as per IEC 60092-359
	Armour	O	- Braid of plain annealed copper wires - Coverage density is minimum 90%
	Outer sheath	P	- ST2 (PVC) as per IEC 60092-359 - Outer sheath color : Grey (for Non-IS Type) or Blue (for IS Type)
	Core identification		- Printed pair/triad number and Alphabet letter on the white insulation ex) 4P : (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B) 2T : (1A, 1B, 1C), (2A, 2B, 2C)

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

JIS CABLE

JIS C 3410 (2010)

(PAIR TYPE)

250VRCOP(IS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
1P				8.0	11.8	0.8			230
2P				12.3	16.1	0.9			380
4P				14.5	18.3	1.0			520
5P				16.3	20.3	1.1			620
6P				16.9	20.9	1.1			680
7P				16.9	20.9	1.1			720
8P				18.7	22.9	1.2			830
10P	1.0	7 / 0.43	1.29	21.4	25.6	1.3	19.3	1,050	990
12P	1.0	7 / 0.43	1.29	22.2	26.4	1.4	19.3	1,050	1,100
14P				23.3	27.7	1.4			1,220
16P				25.2	29.6	1.5			1,370
19P				25.7	30.1	1.5			1,510
20P				26.5	30.9	1.5			1,590
24P				30.2	35.2	1.7			1,980
30P				32.9	38.1	1.8			2,350
37P				34.8	40.2	1.9			2,750

(TRIAD TYPE)

250VRCOP(IS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
1T				8.4	12.2	0.8			260
2T				13.3	17.1	1.0			440
4T				15.7	19.7	1.1			640
5T				17.3	21.3	1.2			740
6T				19.7	23.9	1.3			880
7T				19.7	23.9	1.3			940
8T				21.3	25.5	1.3			1,050
10T	1.0	7 / 0.43	1.29	24.2	28.6	1.4	19.3	1,050	1,270
12T	1.0	7 / 0.43	1.29	25.6	30.0	1.5	19.3	1,050	1,430
14T				26.9	31.5	1.6			1,610
16T				28.5	33.1	1.6			1,780
19T				31.0	36.2	1.7			2,150
20T				31.5	3.7	1.8			2,230
24T				34.6	40.0	1.9			2,630
30T				38.4	44.0	2.1			3,160
37T				41.9	47.5	2.2			3,720

FIRE RESISTANT INSTRUMENTATION CABLE



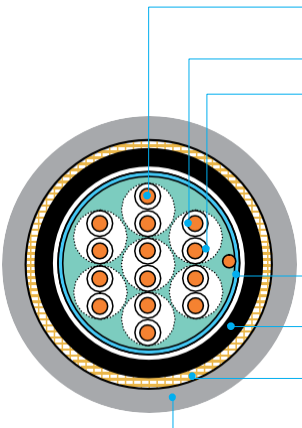
Cable Designation

250V FR-RCOP(OS)

Application Standard

- Design guide : IEC 60092-350 & IEC 60092-376
- Insulation material : IEC 60092-351, EPR
- Sheath material : IEC 60092-359, SE1 & ST2
- Flame retardant : IEC 60332-1 & IEC 60332-3 Category A
- Fire resistant : IEC 60331-21 & IEC 60331-1 or -2 (120minute)
- Max. rated conductor temperature : 90°C

Construction

Sectional view	Classification	Code	Construction detail
	Conductor		- Stranded tinned annealed copper wires as per IEC 60228, Class 2 - A suitable tape may be applied on the conductor
	Fire resisting layer	FR-	- Mica/glass tape
	Insulation	R	- EPR as per IEC 60092-351
	Twisting		- Two/Three Insulated cores shall be twisted together to form a pair/triad
	Cabling		- Twisted pairs/triads shall be cabled. - Flame retardant & non-hygroscopic fillers may be used . - Suitable tape(s) may be applied on the cabled core.
	Collective screen	(OS)	- AL/PS tape + tinned copper drain wire - A suitable tape may be applied on the collective screen
	Inner sheath	C	- SE1 as per IEC 60092-359
	Armour	O	- Braid of plain annealed copper wires - A suitable separator tape(s) may be applied under/over the armour
	Outer sheath	P	- ST2 (PVC) as per IEC 60092-359
	Core identification		- Printed pair/triad number and Alphabet letter on the white insulation ex) 4P : (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B) 2T : (1A, 1B, 1C), (2A, 2B, 2C)

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

JIS CABLE

JIS C 3410 (2010)

(PAIR TYPE)

250V FR-RCOP(OS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
1Q				10.4	14.2	0.9			330
2P				13.6	17.4	1.0			420
4P				15.7	19.7	1.1			560
5P				17.6	21.6	1.2			640
6P				19.0	23.2	1.2			730
7P				19.0	23.2	1.2			770
8P				20.2	24.4	1.3			830
10P	1.0	7 / 0.43	1.29	22.9	27.3	1.4	19.3	20	1,000
12P	1.0	7 / 0.43	1.29	24.1	28.5	1.4	19.3	20	1,120
14P				25.0	29.4	1.5			1,210
16P				27.0	31.6	1.6			1,370
19P				28.3	32.9	1.6			1,510
20P				29.1	33.7	1.6			1,590
24P				32.4	37.6	1.8			1,960
30P				36.3	41.7	2.0			2,350
37P				39.0	44.6	2.1			2,730

*. 1 Quad cable shall be twisted quad formation

(TRIAD TYPE)

250V FR-RCOP(OS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
2T				14.9	18.9	1.1			490
4T				17.6	21.6	1.2			670
5T				19.7	23.9	1.3			800
6T				22.4	26.6	1.4			940
7T				22.4	26.6	1.4			990
8T				24.1	28.5	1.4			1,120
10T				27.4	32.0	1.6			1,350
12T	1.0	7 / 0.43	1.29	29.2	33.8	1.7	19.3	20	1,520
14T				30.4	35.6	1.7			1,770
16T				32.5	37.7	1.8			1,960
19T				35.2	40.6	1.9			2,250
20T				35.8	41.2	1.9			2,330
24T				39.1	44.7	2.1			2,700
30T				43.5	49.3	2.3			3,250
37T				47.5	53.5	2.4			3,830

FIRE RESISTANT INSTRUMENTATION CABLE



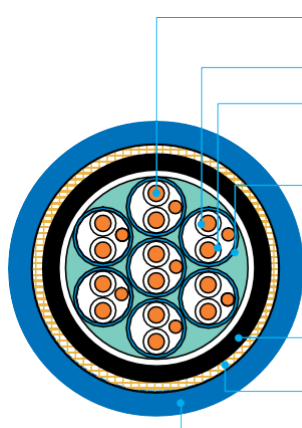
Cable Designation

250V FR-RCOP (IS)

Application Standard

- Design guide : IEC 60092-350 & IEC 60092-376
- Insulation material : IEC 60092-351, EPR
- Sheath material : IEC 60092-359, SE1 & ST2
- Flame retardant : IEC 60332-1 & IEC 60332-3 Category A
- Fire resistant : IEC 60331-21 & IEC 60331-1 or -2 (120minute)
- Max. rated conductor temperature : 90°C

Construction

Sectional view	Classification	Code	Construction detail
	Conductor		- Stranded tinned annealed copper wires as per IEC 60228, Class 2 - A suitable tape may be applied on the conductor
	Fire resisting layer	FR-	- Mica/glass tape
	Insulation	R	- EPR as per IEC 60092-351
	Twisting		- Two/Three Insulated cores shall be twisted together to form a pair/triad
	Collective screen	(IS)	- AL/PS tape + tinned copper drain wire - A suitable tape may be applied on the collective screen
	Cabling		- Twisted pairs/triads shall be cabled. - Flame retardant & non-hygroscopic fillers may be used. - Suitable tape(s) may be applied on the cabled core.
	Inner sheath	C	- SE1 as per IEC 60092-359
	Armour	O	- Braid of plain annealed copper wires - A suitable separator tape(s) may be applied under/over the armour
	Outer sheath	P	- ST2 as per IEC 60092-359
	Core identification		- Printed pair/triad number and Alphabet letter on the white insulation ex) 4P : (1A, 1B), (2A, 2B), (3A, 3B), (4A, 4B) 2T : (1A, 1B, 1C), (2A, 2B, 2C)

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

JIS CABLE

JIS C 3410 (2010)

(PAIR TYPE)

250VFR-RCOP(IS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
1P				9.0	12.8	0.8			260
2P				14.3	18.1	1.0			440
4P				16.8	20.8	1.1			620
5P				18.9	23.1	1.2			740
6P				19.6	23.8	1.3			800
7P				19.6	23.8	1.3			850
8P				21.7	25.9	1.3			960
10P	1.0	7 / 0.43	1.29	24.8	29.2	1.5	19.3	20	1,170
12P	1.0	7 / 0.43	1.29	25.8	30.2	1.5	19.3	20	1,290
14P				27.3	31.9	1.6			1,460
16P				29.5	34.1	1.7			1,640
19P				30.1	35.1	1.7			1,880
20P				30.8	36.0	1.7			1,970
24P				35.4	40.8	1.9			2,370
30P				38.5	44.1	2.1			2,800
37P				40.7	46.3	2.2			3,230

(TRIAD TYPE)

250VFR-RCOP(IS)

No. of Units	Conductor			Nominal Dia. Inner Sheath	Overall Diameter		Conductor Resistance (at 20°C) (Max)	Insulation Resistance (at 20°C) (Min)	Cable Weight (Approx.)
	Nominal Area	Strand	Dia.		Nominal	Tolerance			
No.	mm ²	No./mm	mm	mm	mm	±mm	Ω/km	MΩ - km	kg/km
1T				9.5	13.3	0.8			290
2T				15.2	19.2	1.1			510
4T				18.0	22.0	1.2			720
5T				20.2	24.4	1.3			860
6T				23.0	27.4	1.4			1,030
7T				23.0	27.4	1.4			1,090
8T				24.8	29.2	1.5			1,220
10T	1.0	7 / 0.43	1.29	28.3	32.9	1.6	19.3	20	1,480
12T	1.0	7 / 0.43	1.29	30.1	35.1	1.7	19.3	20	1,770
14T				31.4	36.6	1.8			1,950
16T				33.5	38.7	1.8			2,170
19T				36.4	41.8	2.0			2,510
20T				37.2	42.6	2.0			2,620
24T				40.6	46.2	2.1			3,050
30T				45.3	51.1	2.3			3,690
37T				49.4	55.4	2.5			4,360