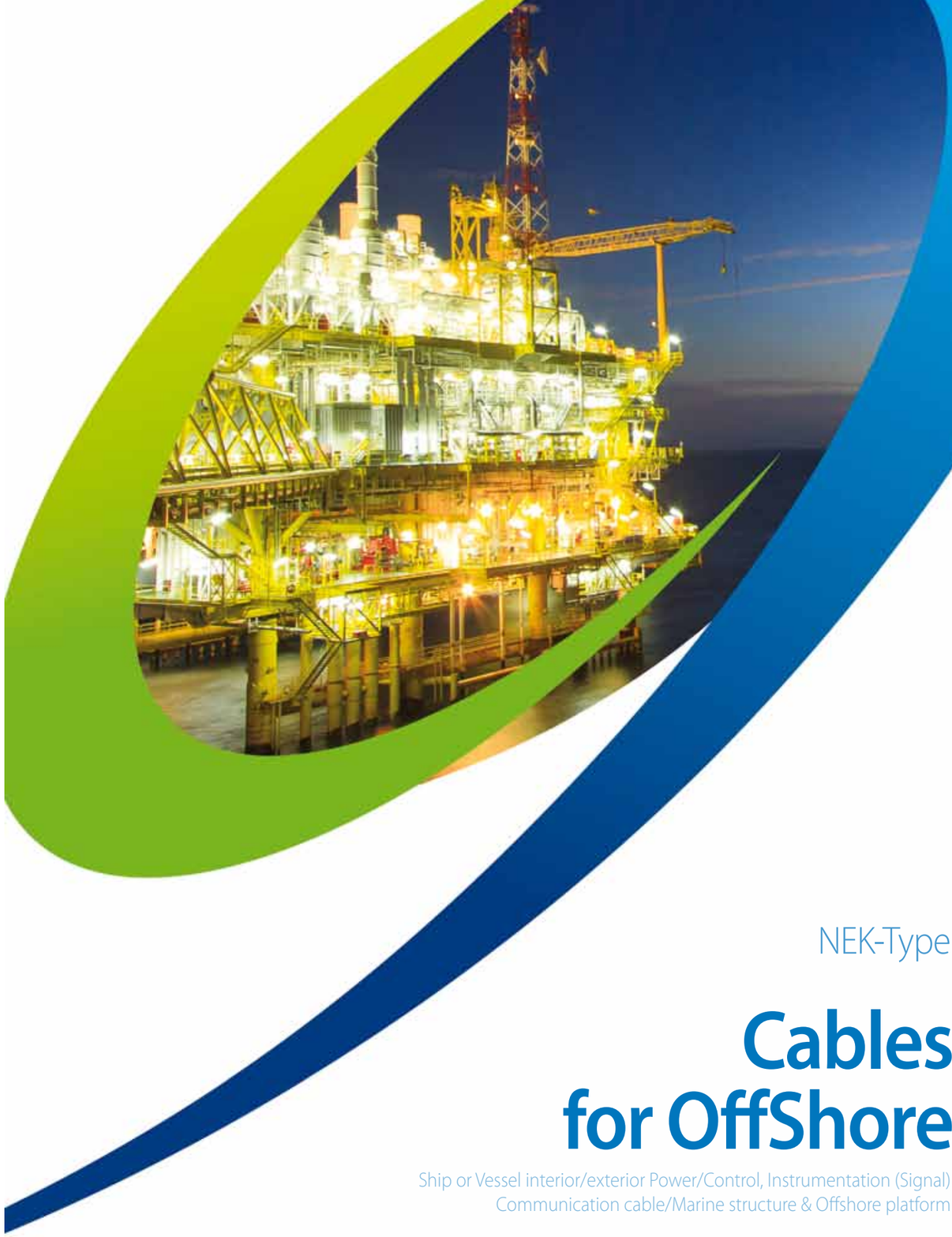


NEK-Type

Cables for OffShore

Ship or Vessel interior/exterior Power/Control, Instrumentation (Signal)
Communication cable/Marine structure & Offshore platform

Seoul Electric Wire Co.,Ltd.

Head Office
(27654) 27-20, Meongsimi-gil, Samseong-myeon, Eumseong-gun, Chungcheongbuk-do, Republic of Korea
Tel : +82-43-879-7200 Fax : +82-43-882-0101
http://www.seoulcable.com

Intelligence and Energy through

The story of 50 years of Seoul Electric Wire Co.,Ltd started from 1968, you can see those history at once

Offshore& Shipboard Cable NEK TYPE

Seoul Electric Wire Co.,Ltd (S.E.C) was established in business for electric wire and cable in 1968. Through continuous development of new products as shipboard cable, special cables for nuclear power plant & aggressive investment based on sustainable management, S.E.C has acquired various type approvals including ABS, BV,DNV/GL,CCS,KR,LR,NK,RINA as well as ISO9001, 14001 and OHSAS 18000.

To produce products of high quality, S.E.C will always make its every effort to grow with customer from cable design to end product.

Buisness Area

- Insulation Standard Cable
- Nuclear Power Plant Cable
- Shipboard Cable
- Wind force, Sunlight Cable
- Special Cable

Brighter future of corporation by developing

Quality Management System Certificate

This is to certify that your company's quality management system has been assessed and found to comply with KETI-QA's Certification Assessment Criteria.
Company Name : SEOUL ELECTRIC WIRE CO., LTD.
Meongsimi-gil, Samseong-myeon, Eumseong-gun, Chungcheongbuk-do, Republic of Korea

Quality Standards : KS A 9001:2001 / ISO 9001:2015
The Design, Development, Production and Servicing of Power Cables for Rated up to 1kV~30kV,
Poly Vinyl Chloride Insulation Cables and Rubber Insulation Cables of Rated up to 450/750V

Further dlarifications regarding the scope of this certificate and the applicability of ISO 9001:2015 requirements may be obtained consulting the organization.

This certification is to be subjected to our surveillance in accordance with KETI-QA's relevant regulations.
KETI Quality Assurance

History

1968. 9	Established SEOUL Electric Wire Co.,Ltd
1996. 12	Certification of ISO/KSA 9001 acquired
2003. 3	22.9Kv-y FR-CN/CO approved by KEPCO
2003. 7	Registered as supplier of non-safety grade nuclear power plant "R" class
2005. 9	Established Joint-venture company (SH Vina) for power cable in Hanoi,Vietnam
2006. 4	Transferred to new factory site in Eumsung-gun, Chungcheongbuk-do
2007. 8	Type approval certification acquired for full range of 9 classes (DNV, ABS, CCS, GL, KR, LR, NK, RINA, BV) of shipboard cables
2007. 9	KEPIC certification of Quality system for Q-class cable acquired
2007. 11	Registered to KHNP as supplier for Q-class cable
2008. 3	Supplied Power cable/Control cable/Instrumentation cable to Nuclear power plant Shingo-ri 1,2.
2008. 12	Type approval certification of DNV, ABS acquired for NEK606 certified for Offshore cable
2009. 3	Certification of ISO 14001 acquired
2009. 4	M&A with Continental Cable Co.,Ltd
2012. 11	Won the prize of 50 million US Dollars for export
2013. 12	Acquired UL certification for PV Wire, XHHW-2, USE-2 cable
	Acquired CSA certification for RPV90, RW90
2014. 8	Supplied Q-Class Cable for UAE nuclear power plant
2015. 1	Supplied Q-Class Cable for Shinhan-wool nuclear power plant
2015. 3	Acquired CSA certification for MV power cable
2017. 6	M&A with Doowon Cable Co.,Ltd
2017. 12	Acquired certification of health & safety management system by OHSAS 18001

NEK606
Shipboard Cables

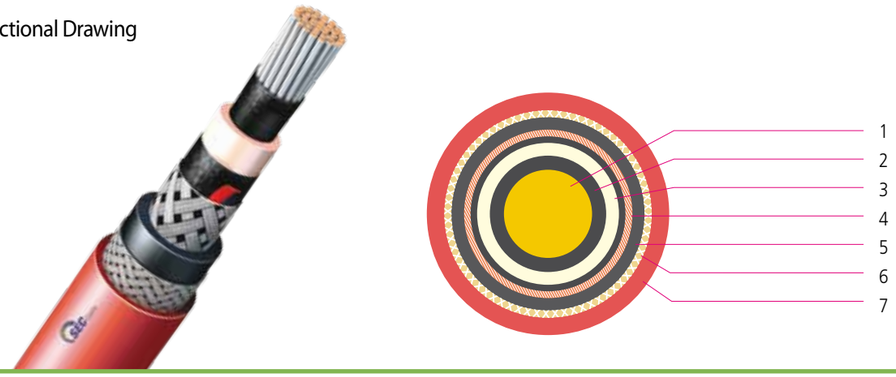
MV Cable

Contents

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU (Sheath code)

: Single core

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60%↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C/ Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	HF EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Conductor screen	Semi-conducting compound and/or Semi-conducting tape
3. Insulation	EPR as per IEC 60092-360
4. Insulation screen	Semi-conducting compound and metallic material (tinned copper -wire braid, -tape, -wire)
5. Inner covering	Halogen free thermoset compound
6. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy braid (M) A Suitable separator tape(s) may be applied under / over the armour
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-MV Cable

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU (Sheath code)

: Single core

Cable type : 3.6/6kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1	10	7	4.05	2.5	1.0	16.4	0.3	1.5	21.4	1.2	750
1	16	7	5.10	2.5	1.0	17.4	0.3	1.5	22.4	1.3	850
1	25	7	6.42	2.5	1.0	18.7	0.3	1.6	24.0	1.3	1,020
1	35	7	7.56	2.5	1.0	19.8	0.3	1.6	25.1	1.4	1,170
1	50	19	8.90	2.5	1.0	21.4	0.3	1.7	26.9	1.5	1,370
1	70	19	10.70	2.5	1.0	23.1	0.3	1.7	28.6	1.6	1,630
1	95	19	12.60	2.5	1.0	25.0	0.3	1.8	30.7	1.7	1,980
1	120	37	14.21	2.5	1.0	26.6	0.3	1.9	32.5	1.8	2,310
1	150	37	15.75	2.5	1.0	28.0	0.3	1.9	33.9	1.8	2,630
1	185	37	17.64	2.5	1.0	29.9	0.3	2.0	36.0	1.9	3,100
1	240	61	20.25	2.6	1.2	33.4	0.3	2.1	39.8	2.1	3,890
1	300	61	22.68	2.8	1.2	36.2	0.4	2.2	43.2	2.3	4,770
1	400	61	25.65	3.0	1.2	40.0	0.4	2.4	47.4	2.5	5,940
1	500	61	28.80	3.2	1.4	44.1	0.4	2.5	51.7	2.7	7,220
1	630	91	32.67	3.2	1.4	48.0	0.4	2.6	55.9	2.9	8,760

Cable type : 6/10kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1	16	7	5.10	3.4	1.0	19.4	0.3	1.6	24.7	1.4	980
1	25	7	6.42	3.4	1.0	20.7	0.3	1.7	26.2	1.5	1,150
1	35	7	7.56	3.4	1.0	21.8	0.3	1.7	27.3	1.5	1,300
1	50	19	8.90	3.4	1.0	23.4	0.3	1.8	29.1	1.6	1,520
1	70	19	10.70	3.4	1.0	25.1	0.3	1.8	30.8	1.7	1,770
1	95	19	12.60	3.4	1.0	27.0	0.3	1.9	32.9	1.8	2,130
1	120	37	14.21	3.4	1.0	28.5	0.3	1.9	34.4	1.9	2,450
1	150	37	15.75	3.4	1.2	30.5	0.3	2.0	36.6	2.0	2,850
1	185	37	17.64	3.4	1.2	32.4	0.3	2.1	38.8	2.1	3,330
1	240	61	20.25	3.4	1.2	35.1	0.4	2.2	42.1	2.3	4,170
1	300	61	22.68	3.4	1.2	37.6	0.4	2.2	44.6	2.4	4,890
1	400	61	25.65	3.4	1.2	40.8	0.4	2.4	48.2	2.6	6,020
1	500	61	28.80	3.4	1.4	44.6	0.4	2.5	52.2	2.8	7,270
1	630	91	32.67	3.4	1.4	48.5	0.4	2.6	56.4	3.0	8,810

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU (Sheath code)

: Single core

Cable type : 8.7/15kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1	25	7	6.42	4.5	1.0	23.1	0.3	1.7	28.6	1.6	1,300
1	35	7	7.56	4.5	1.0	24.2	0.3	1.8	29.9	1.6	1,470
1	50	19	8.90	4.5	1.0	25.8	0.3	1.8	31.5	1.7	1,680
1	70	19	10.70	4.5	1.0	27.5	0.3	1.9	33.4	1.8	1,960
1	95	19	12.60	4.5	1.0	29.4	0.3	2.0	35.5	1.9	2,330
1	120	37	14.21	4.5	1.2	31.5	0.3	2.0	37.6	2.0	2,700
1	150	37	15.75	4.5	1.2	32.9	0.4	2.1	39.3	2.1	3,070
1	185	37	17.64	4.5	1.2	34.8	0.4	2.2	41.8	2.2	3,660
1	240	61	20.25	4.5	1.2	37.6	0.4	2.3	44.8	2.4	4,420
1	300	61	22.68	4.5	1.2	40.4	0.4	2.4	47.8	2.5	5,280
1	400	61	25.65	4.5	1.4	43.7	0.4	2.5	51.3	2.7	6,360
1	500	61	28.80	4.5	1.4	47.0	0.4	2.6	54.9	2.9	7,580
1	630	91	32.67	4.5	1.4	50.9	0.4	2.7	59.0	3.1	9,120

Cable type : 12/20kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1	35	7	7.56	5.5	1.0	26.4	0.3	1.9	32.3	1.8	1,640
1	50	19	8.90	5.5	1.0	28.0	0.3	1.9	33.9	1.8	1,860
1	70	19	10.70	5.5	1.0	29.7	0.3	2.0	35.8	1.9	2,140
1	95	19	12.60	5.5	1.2	32.1	0.3	2.1	38.5	2.1	2,580
1	120	37	14.21	5.5	1.2	33.7	0.4	2.1	40.5	2.2	3,020
1	150	37	15.75	5.5	1.2	35.1	0.4	2.2	42.1	2.3	3,390
1	185	37	17.64	5.5	1.2	37.0	0.4	2.2	44.0	2.3	3,860
1	240	61	20.25	5.5	1.2	40.2	0.4	2.4	47.6	2.5	4,760
1	300	61	22.68	5.5	1.4	43.0	0.4	2.5	50.6	2.7	5,590
1	400	61	25.65	5.5	1.4	45.9	0.4	2.6	53.8	2.8	6,640
1	500	61	28.80	5.5	1.4	49.2	0.4	2.7	57.3	3.0	7,860

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

: Multi core

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60%↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	HF EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	Earth conductor
EMC	Electromagnetic Compatibility

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Conductor screen	Semi-conducting compound and/or Semi-conducting tape
3. Insulation	EPR as per IEC 60092-360
4. Insulation screen	Semi-conducting compound and metallic material (tinned copper -wire braid, -tape, -wire)
5. Cabling	Non-hygroscopic fillers may be used
6. Binder	If necessary
7. Inner covering	Halogen free thermoset compound
8. Screen	Copper/Polyester tape (only EMC type)
9. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy braid (M) A Suitable separator tape(s) may be applied under / over the armour
10. Sheath	SHF2 or SHF MUD as per IEC 60092-360

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

: Multi core

Cable type : 3.6/6kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3	10	7	4.05	2.5	1.2	33.1	0.4	2.1	39.9	2.1	2,350
3	16	7	5.10	2.5	1.2	35.3	0.4	2.2	42.3	2.3	2,710
3	25	7	6.42	2.5	1.2	38.1	0.4	2.3	45.3	2.4	3,230
3	35	7	7.56	2.5	1.2	40.5	0.4	2.4	47.9	2.5	3,730
3	50	19	8.90	2.5	1.4	44.3	0.4	2.5	51.9	2.7	4,480
3	70	19	10.70	2.5	1.4	48.0	0.4	2.7	56.1	3.0	5,370
3	95	19	12.60	2.5	1.4	52.0	0.4	2.8	60.3	3.2	6,490
3	120	37	14.21	2.5	1.6	55.8	0.4	2.9	64.3	3.4	7,630
3	150	37	15.75	2.5	1.6	59.0	0.4	3.1	68.0	3.5	8,780
3	185	37	17.64	2.5	1.6	63.1	0.4	3.2	72.3	3.8	10,260
3	240	61	20.25	2.6	1.6	69.4	0.4	3.4	79.0	4.1	12,670
3+E	25	7	6.42	2.5	1.2	39.1	0.4	2.3	46.5	2.5	3,500
	16	7	5.10	1.0							
3+E	35	7	7.56	2.5	1.2	40.7	0.4	2.4	48.3	2.6	4,080
	25	7	6.42	1.2							
3+E	50	19	8.90	2.5	1.4	45.3	0.4	2.5	53.1	2.8	4,860
	25	7	6.42	1.2							
3+E	70	19	10.70	2.5	1.4	49.0	0.4	2.7	57.3	3.0	5,850
	35	7	7.56	1.2							
3+E	95	19	12.60	2.5	1.4	52.4	0.4	2.8	60.9	3.2	7,090
	50	19	8.90	1.4							
3+E	120	37	14.21	2.5	1.6	56.8	0.4	2.9	65.5	3.4	8,470
	70	19	10.70	1.4							
3+E	150	37	15.75	2.5	1.6	60.7	0.4	3.1	69.9	3.6	9,930
	95	19	12.60	1.6							
3+E	185	37	17.64	2.5	1.6	64.3	0.4	3.2	73.7	3.8	11,390
	95	19	12.60	1.6							
3+E	240	61	20.25	2.6	1.6	70.8	0.4	3.4	80.6	4.2	14,060
	120	37	14.21	1.6							

SEC NEK-MV Cable

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

: Multi core

Cable type : 6/10kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3	16	7	5.10	3.4	1.2	39.6	0.4	2.4	47.0	2.5	3,160
3	25	7	6.42	3.4	1.4	42.8	0.4	2.5	50.4	2.7	3,770
3	35	7	7.56	3.4	1.4	45.2	0.4	2.6	53.1	2.8	4,310
3	50	19	8.90	3.4	1.4	48.5	0.4	2.7	56.6	3.0	5,000
3	70	19	10.70	3.4	1.4	52.3	0.4	2.8	60.6	3.2	5,880
3	95	19	12.60	3.4	1.6	56.7	0.4	3.0	65.4	3.4	7,160
3	120	37	14.21	3.4	1.6	60.1	0.4	3.1	69.1	3.6	8,250
3	150	37	15.75	3.4	1.6	63.3	0.4	3.2	72.5	3.8	9,370
3	185	37	17.64	3.4	1.6	67.3	0.4	3.3	76.7	4.0	10,880
3	240	61	20.25	3.4	1.8	73.6	0.4	3.6	83.7	4.3	13,450
3+E	25	7	6.42	3.4	1.4	43.8	0.4	2.5	51.6	2.7	4,040
	16	7	5.10	1.0							
3+E	35	7	7.56	3.4	1.4	46.2	0.4	2.6	54.3	2.9	4,690
	25	7	6.42	1.2							
3+E	50	19	8.90	3.4	1.4	49.5	0.4	2.7	57.8	3.0	5,390
	25	7	6.42	1.2							
3+E	70	19	10.70	3.4	1.4	53.3	0.4	2.8	61.8	3.2	6,360
	35	7	7.56	1.2							
3+E	95	19	12.60	3.4	1.6	57.7	0.4	3.0	66.6	3.5	7,790
	50	19	8.90	1.4							
3+E	120	37	14.21	3.4	1.6	60.5	0.4	3.1	69.7	3.6	9,060
	70	19	10.70	1.4							
3+E	150	37	15.75	3.4	1.6	64.5	0.4	3.2	73.9	3.8	10,510
	95	19	12.60	1.6							
3+E	185	37	17.64	3.4	1.6	68.1	0.4	3.3	77.7	4.0	12,000
	95	19	12.60	1.6							
3+E	240	61	20.25	3.4	1.8	74.5	0.4	3.6	84.8	4.4	14,830
	120	37	14.21	1.6							

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

: Multi core

Cable type : 8.7/15kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3	25	7	6.42	4.5	1.4	48.0	0.4	2.7	56.1	3.0	4,400
3	35	7	7.56	4.5	1.4	50.4	0.4	2.8	58.7	3.1	4,950
3	50	19	8.90	4.5	1.6	54.2	0.4	2.9	62.7	3.3	5,760
3	70	19	10.70	4.5	1.6	57.9	0.4	3.0	66.6	3.5	6,660
3	95	19	12.60	4.5	1.6	61.9	0.4	3.2	71.1	3.7	7,910
3	120	37	14.21	4.5	1.6	65.3	0.4	3.3	74.7	3.9	9,010
3	150	37	15.75	4.5	1.6	68.5	0.4	3.4	78.1	4.1	10,170
3	185	37	17.64	4.5	1.8	73.0	0.4	3.6	83.1	4.3	11,900
3	240	61	20.25	4.5	1.8	78.8	0.4	3.7	89.1	4.6	14,290
3+E	25	7	6.42	4.5	1.4	49.0	0.4	2.7	57.3	3.0	4,680
	16	7	5.10	1.0							
3+E	35	7	7.56	4.5	1.4	51.4	0.4	2.8	59.9	3.1	5,340
	25	7	6.42	1.2							
3+E	50	19	8.90	4.5	1.6	55.2	0.4	2.9	63.9	3.3	6,160
	25	7	6.42	1.2							
3+E	70	19	10.70	4.5	1.6	58.9	0.4	3.0	67.8	3.5	7,160
	35	7	7.56	1.2							
3+E	95	19	12.60	4.5	1.6	62.9	0.4	3.2	72.3	3.8	8,540
	50	19	8.90	1.4							
3+E	120	37	14.21	4.5	1.6	66.3	0.4	3.3	75.9	3.9	9,860
	70	19	10.70	1.4							
3+E	150	37	15.75	4.5	1.6	69.1	0.4	3.4	78.9	4.1	11,280
	95	19	12.60	1.6							
3+E	185	37	17.64	4.5	1.8	73.1	0.4	3.6	83.4	4.3	12,990
	95	19	12.60	1.6							

SEC NEK-MV Cable

3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

: Multi core

Cable type : 12/20kV RFOU, RFCU, RFMU, RFOU (EMC) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3	35	7	7.56	5.5	1.6	55.5	0.4	3.0	64.2	3.4	5,660
3	50	19	8.90	5.5	1.6	58.9	0.4	3.1	67.9	3.5	6,440
3	70	19	10.70	5.5	1.6	62.7	0.4	3.2	71.9	3.7	7,370
3	95	19	12.60	5.5	1.6	66.7	0.4	3.3	76.1	4.0	8,590
3	120	37	14.21	5.5	1.8	70.5	0.4	3.5	80.3	4.2	9,880
3	150	37	15.75	5.5	1.8	73.6	0.4	3.6	83.7	4.3	11,080
3+E	35	7	7.56	5.5	1.6	56.5	0.4	3.0	65.4	3.4	6,060
	25	7	6.42	1.2							
3+E	50	19	8.90	5.5	1.6	59.9	0.4	3.1	69.1	3.6	6,840
	25	7	6.42	1.2							
3+E	70	19	10.70	5.5	1.6	63.7	0.4	3.2	73.1	3.8	7,870
	35	7	7.56	1.2							
3+E	95	19	12.60	5.5	1.6	67.7	0.4	3.3	77.3	4.0	9,230
	50	19	8.90	1.4							
3+E	120	37	14.21	5.5	1.8	71.5	0.4	3.5	81.5	4.2	10,730
	70	19	10.70	1.4							
3+E	150	37	15.75	5.5	1.8	73.7	0.4	3.6	84.0	4.3	12,180
	95	19	12.60	1.6							

6/10kV, 8.7/15kV, 12/20kV RFOU (VFD) (Sheath code)

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C/ Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	HF EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O	Tinned copper wire braid (O)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	Earth conductor
VFD	Variable frequency drive

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Conductor screen	Semi-conducting compound and/or Semi-conducting tape
3. Insulation	EPR as per IEC 60092-360
4. Insulation screen	Semi-conducting compound and metallic material (tinned copper -wire braid, -tape, -wire)
5. Cabling	Non-hygroscopic fillers may be used
6. Binder	If necessary
7. Inner covering	Halogen free thermoset compound
8. Screen	Copper/Polyester tape
9. Armour	Tinned copper wire braid (O) A Suitable separator tape(s) may be applied under / over the armour
10. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-MV Cable

6/10kV, 8.7/15kV, 12/20kV RFOU (VFD) (Sheath code)

Cable type : 6/10kV RFOU (VFD) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3+3E	16	7	5.10	3.4	1.2	40.6	0.4	2.4	48.2	2.6	3,480
	6	7	3.12	1.0							
3+3E	25	7	6.42	3.4	1.4	43.8	0.4	2.5	51.6	2.7	4,100
	6	7	3.12	1.0							
3+3E	35	7	7.56	3.4	1.4	46.2	0.4	2.6	54.3	2.9	4,640
	6	7	3.12	1.0							
3+3E	50	19	8.90	3.4	1.4	49.5	0.4	2.7	57.8	3.0	5,470
	10	7	4.05	1.0							
3+3E	70	19	10.70	3.4	1.4	53.3	0.4	2.8	61.8	3.2	6,530
	16	7	5.10	1.0							
3+3E	95	19	12.60	3.4	1.6	57.7	0.4	3.0	66.6	3.5	7,820
	16	7	5.10	1.0							
3+3E	120	37	14.21	3.4	1.6	61.1	0.4	3.1	70.3	3.7	9,220
	25	7	6.42	1.2							
3+3E	150	37	15.75	3.4	1.6	64.3	0.4	3.2	73.7	3.8	10,350
	25	7	6.42	1.2							
3+3E	185	37	17.64	3.4	1.6	68.3	0.4	3.3	77.9	4.0	12,160
	35	7	7.56	1.2							
3+3E	240	61	20.25	3.4	1.8	74.6	0.4	3.6	84.9	4.4	15,130
	50	19	8.90	1.4							

6/10kV, 8.7/15kV, 12/20kV RFOU (VFD) (Sheath code)

Cable type : 8.7/15kV RFOU (VFD) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3+3E	25	7	6.42	4.5	1.4	49.0	0.4	2.7	57.3	3.0	4,730
	6	7	3.12	1.0							
3+3E	35	7	7.56	4.5	1.4	51.4	0.4	2.8	59.9	3.1	5,280
	6	7	3.12	1.0							
3+3E	50	19	8.90	4.5	1.6	55.2	0.4	2.9	63.9	3.3	6,240
	10	7	4.05	1.0							
3+3E	70	19	10.70	4.5	1.6	58.9	0.4	3.0	67.8	3.5	7,320
	16	7	5.10	1.0							
3+3E	95	19	12.60	4.5	1.6	62.9	0.4	3.2	72.3	3.8	8,570
	16	7	5.10	1.0							
3+3E	120	37	14.21	4.5	1.6	66.3	0.4	3.3	75.9	3.9	9,990
	25	7	6.42	1.2							
3+3E	150	37	15.75	4.5	1.6	69.5	0.4	3.4	79.3	4.1	11,150
	25	7	6.42	1.2							
3+3E	185	37	17.64	4.5	1.8	74.0	0.4	3.6	84.3	4.4	13,190
	35	7	7.56	1.2							

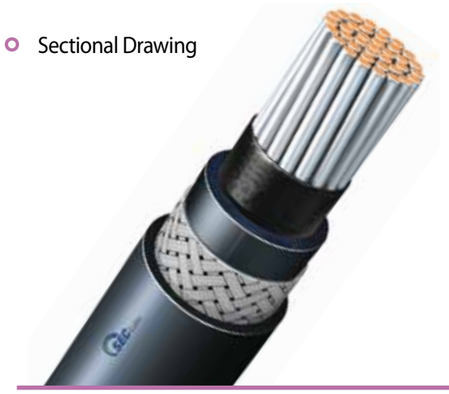
Cable type : 12/20kV RFOU (VFD) (Sheath code)

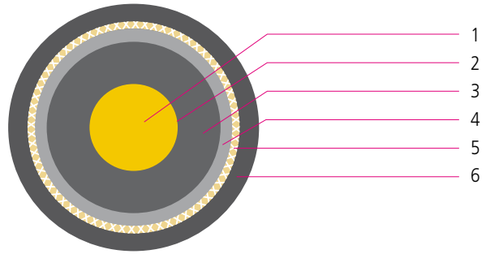
No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3+3E	35	7	7.56	5.5	1.6	56.5	0.4	3.0	65.4	3.4	6,000
	6	7	3.12	1.0							
3+3E	50	19	8.90	5.5	1.6	59.9	0.4	3.1	69.1	3.6	6,920
	10	7	4.05	1.0							
3+3E	70	19	10.70	5.5	1.6	63.7	0.4	3.2	73.1	3.8	8,030
	16	7	5.10	1.0							
3+3E	95	19	12.60	5.5	1.6	67.7	0.4	3.3	77.3	4.0	9,260
	16	7	5.10	1.0							
3+3E	120	37	14.21	5.5	1.8	71.5	0.4	3.5	81.5	4.2	10,860
	25	7	6.42	1.2							
3+3E	150	37	15.75	5.5	1.8	74.6	0.4	3.6	84.9	4.4	12,070
	25	7	6.42	1.2							

0.6/1kV RFOU, RFCU, RFMU (Sheath code)

: Flame retardant power & control cable

Sectional Drawing





Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Inner covering	Halogen free thermoset compound
5. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy braid (M) A Suitable separator tape(s) may be applied under / over the armour
6. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV RFOU, RFCU, RFMU (Sheath code)

: Flame retardant power & control cable

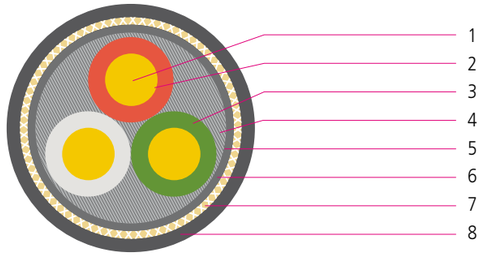
Cable type : 0.6/1kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1	1	7	1.29	1.0	1.0	5.5	0.2	1.1	9.1	0.7	130
1	1.5	7	1.59	1.0	1.0	5.7	0.2	1.1	9.3	0.7	140
1	2.5	7	2.01	1.0	1.0	6.2	0.2	1.1	9.8	0.7	160
1	4	7	2.55	1.0	1.0	6.7	0.2	1.1	10.3	0.8	190
1	6	7	3.12	1.0	1.0	7.2	0.2	1.2	11.0	0.8	230
1	10	7	4.05	1.0	1.0	8.3	0.2	1.2	12.0	0.8	290
1	16	7	5.10	1.0	1.0	9.3	0.2	1.2	13.1	0.9	370
1	25	7	6.42	1.2	1.0	11.0	0.2	1.3	15.0	1.0	520
1	35	7	7.56	1.2	1.0	12.1	0.3	1.3	16.5	1.1	680
1	50	19	8.90	1.4	1.0	13.9	0.3	1.4	18.5	1.2	860
1	70	19	10.70	1.4	1.0	15.6	0.3	1.5	20.4	1.3	1,110
1	95	19	12.60	1.6	1.0	17.9	0.3	1.5	22.7	1.4	1,430
1	120	37	14.21	1.6	1.0	19.5	0.3	1.6	24.5	1.5	1,730
1	150	37	15.75	1.8	1.0	21.4	0.3	1.7	26.6	1.6	2,070
1	185	37	17.64	2.0	1.0	23.9	0.3	1.8	29.3	1.7	2,540
1	240	61	20.25	2.2	1.0	26.8	0.3	1.9	32.5	1.9	3,230
1	300	61	22.68	2.4	1.0	29.7	0.3	2.0	35.5	2.0	3,950
1	400	61	25.65	2.6	1.2	33.4	0.4	2.1	39.9	2.2	5,070
1	500	61	28.80	2.8	1.2	37.1	0.4	2.2	43.8	2.4	6,240
1	630	91	32.67	2.8	1.2	41.0	0.4	2.4	48.2	2.7	7,720

0.6/1kV RFOU, RFCU, RFMU (Sheath code)

: Flame retardant power & control cable - Multi core

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	ONE yellow/green earth conductor

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Inner covering	Halogen free thermoset compound
7. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy braid (M) A Suitable separator tape(s) may be applied under / over the armour
8. Sheath	SHF2 or SHF MUD as per IEC 60092-360

0.6/1kV RFOU, RFCU, RFMU (Sheath code)

: Flame retardant power & control cable - Multi core

Cable type : 0.6/1kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thickness	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	1	7	1.29	1.0	1.0	8.9	0.2	1.2	12.7	0.9	260
2	1.5	7	1.59	1.0	1.0	9.5	0.2	1.2	13.3	0.9	290
2	2.5	7	2.01	1.0	1.0	10.3	0.2	1.3	14.3	1.0	350
2	4	7	2.55	1.0	1.0	11.4	0.3	1.3	15.8	1.0	410
2	6	7	3.12	1.0	1.0	12.5	0.3	1.4	17.1	1.1	490
2	10	7	4.05	1.0	1.0	14.5	0.3	1.4	19.1	1.2	640
2	16	7	5.10	1.0	1.0	16.6	0.3	1.5	21.4	1.3	840
2	25	7	6.42	1.2	1.0	20.0	0.3	1.6	25.0	1.5	1,170
2	35	7	7.56	1.2	1.0	22.2	0.3	1.7	27.5	1.6	1,460
2	50	19	8.90	1.4	1.0	25.7	0.3	1.8	31.2	1.8	1,870
2	70	19	10.70	1.4	1.0	29.2	0.3	2.0	35.1	2.0	2,420
2	95	19	12.60	1.6	1.2	34.2	0.4	2.2	40.9	2.3	3,350
2	120	37	14.21	1.6	1.2	37.4	0.4	2.3	44.3	2.5	4,020
2	150	37	15.75	1.8	1.2	41.2	0.4	2.4	48.3	2.7	4,820
2	185	37	17.64	2.0	1.4	46.6	0.4	2.6	54.1	3.0	5,980
2	240	61	20.25	2.2	1.4	52.4	0.4	2.8	60.4	3.3	7,580
2	300	61	22.68	2.4	1.6	58.6	0.4	3.0	67.0	3.6	9,340
3, 2+E	1	7	1.29	1.0	1.0	9.5	0.2	1.2	13.2	0.9	290
3, 2+E	1.5	7	1.59	1.0	1.0	10.1	0.2	1.3	14.1	1.0	330
3, 2+E	2.5	7	2.01	1.0	1.0	11.0	0.3	1.3	15.4	1.0	430
3, 2+E	4	7	2.55	1.0	1.0	12.1	0.3	1.4	16.7	1.1	530
3, 2+E	6	7	3.12	1.0	1.0	13.3	0.3	1.4	17.9	1.1	640
3, 2+E	10	7	4.05	1.0	1.0	15.5	0.3	1.5	20.3	1.3	790
3, 2+E	16	7	5.10	1.0	1.0	17.7	0.3	1.5	22.5	1.4	1,040
3	25	7	6.42	1.2	1.0	21.4	0.3	1.7	26.6	1.6	1,490
3	35	7	7.56	1.2	1.0	23.8	0.3	1.8	29.2	1.7	1,890
3	50	19	8.90	1.4	1.0	27.6	0.3	1.9	33.2	1.9	2,440
3	70	19	10.70	1.4	1.2	31.7	0.3	2.1	37.8	2.1	3,240
3	95	19	12.60	1.6	1.2	36.6	0.4	2.2	43.3	2.4	4,400
3	120	37	14.21	1.6	1.2	40.1	0.4	2.4	47.2	2.6	5,340
3	150	37	15.75	1.8	1.4	44.6	0.4	2.5	51.9	2.8	6,480
3	185	37	17.64	2.0	1.4	50.0	0.4	2.7	57.7	3.1	7,990
3	240	61	20.25	2.2	1.6	56.7	0.4	2.9	64.9	3.5	10,270
3	300	61	22.68	2.4	1.6	62.8	0.4	3.1	71.5	3.8	12,600
4, 3+E	1	7	1.29	1.0	1.0	10.3	0.2	1.3	14.3	1.0	330
4, 3+E	1.5	7	1.59	1.0	1.0	11.0	0.3	1.3	15.4	1.0	420
4, 3+E	2.5	7	2.01	1.0	1.0	12.0	0.3	1.3	16.4	1.1	490
4, 3+E	4	7	2.55	1.0	1.0	13.3	0.3	1.4	17.9	1.1	610
4, 3+E	6	7	3.12	1.0	1.0	14.6	0.3	1.4	19.2	1.2	740
4, 3+E	10	7	4.05	1.0	1.0	17.1	0.3	1.5	21.9	1.3	950
4, 3+E	16	7	5.10	1.0	1.0	19.5	0.3	1.6	24.6	1.5	1,290
4	25	7	6.42	1.2	1.0	23.7	0.3	1.8	29.1	1.7	1,860
4	35	7	7.56	1.2	1.0	26.4	0.3	1.9	32.0	1.8	2,380
4	50	19	8.90	1.4	1.2	31.0	0.3	2.0	36.9	2.1	3,120
4	70	19	10.70	1.4	1.2	35.2	0.4	2.2	41.9	2.3	4,210
4	95	19	12.60	1.6	1.2	40.7	0.4	2.4	47.9	2.6	5,610
4	120	37	14.21	1.6	1.4	45.0	0.4	2.5	52.4	2.9	6,860
4	150	37	15.75	1.8	1.4	49.6	0.4	2.7	57.4	3.1	8,280
4	185	37	17.64	2.0	1.6	56.0	0.4	2.9	64.2	3.5	10,310
4	240	61	20.25	2.2	1.6	63.1	0.4	3.2	71.9	3.8	13,210

0.6/1kV RFOU, RFCU, RFMU (Sheath code)

: Flame retardant power & control cable - Multi core

- Cable type : 0.6/1kV RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thickness	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
5	1	7	1.29	1.0	1.0	11.3	0.3	1.3	15.7	1.0	410
6	1	7	1.29	1.0	1.0	12.3	0.3	1.4	16.9	1.1	470
7	1	7	1.29	1.0	1.0	12.3	0.3	1.4	16.9	1.1	490
8	1	7	1.29	1.0	1.0	13.4	0.3	1.4	18.0	1.1	540
9	1	7	1.29	1.0	1.0	14.4	0.3	1.5	19.2	1.2	600
10	1	7	1.29	1.0	1.0	15.7	0.3	1.5	20.5	1.3	680
12	1	7	1.29	1.0	1.0	16.2	0.3	1.5	21.1	1.3	720
14	1	7	1.29	1.0	1.0	17.1	0.3	1.5	21.9	1.3	790
15	1	7	1.29	1.0	1.0	17.6	0.3	1.6	22.6	1.4	830
16	1	7	1.29	1.0	1.0	18.1	0.3	1.6	23.1	1.4	870
19	1	7	1.29	1.0	1.0	19.1	0.3	1.6	24.1	1.5	960
21	1	7	1.29	1.0	1.0	20.1	0.3	1.6	25.1	1.5	1030
23	1	7	1.29	1.0	1.0	21.2	0.3	1.7	26.4	1.6	1120
24	1	7	1.29	1.0	1.0	22.5	0.3	1.7	27.7	1.6	1210
27	1	7	1.29	1.0	1.0	23.0	0.3	1.7	28.2	1.7	1270
30	1	7	1.29	1.0	1.0	23.9	0.3	1.8	29.3	1.7	1370
33	1	7	1.29	1.0	1.0	24.8	0.3	1.8	30.3	1.8	1470
37	1	7	1.29	1.0	1.0	25.8	0.3	1.8	31.3	1.8	1580
44	1	7	1.29	1.0	1.0	29.2	0.3	2.0	35.1	2.0	1910
5	1.5	7	1.59	1.0	1.0	12.1	0.3	1.3	16.5	1.1	470
6	1.5	7	1.59	1.0	1.0	13.1	0.3	1.4	17.8	1.1	540
7	1.5	7	1.59	1.0	1.0	13.1	0.3	1.4	17.8	1.1	560
8	1.5	7	1.59	1.0	1.0	14.3	0.3	1.5	19.1	1.2	630
9	1.5	7	1.59	1.0	1.0	15.4	0.3	1.5	20.2	1.3	690
10	1.5	7	1.59	1.0	1.0	16.8	0.3	1.5	21.7	1.3	780
12	1.5	7	1.59	1.0	1.0	17.4	0.3	1.5	22.2	1.4	840
14	1.5	7	1.59	1.0	1.0	18.3	0.3	1.6	23.4	1.4	930
15	1.5	7	1.59	1.0	1.0	18.8	0.3	1.6	23.9	1.4	970
16	1.5	7	1.59	1.0	1.0	19.4	0.3	1.6	24.4	1.5	1,020
19	1.5	7	1.59	1.0	1.0	20.5	0.3	1.7	25.7	1.5	1,140
21	1.5	7	1.59	1.0	1.0	21.6	0.3	1.7	26.9	1.6	1,230
23	1.5	7	1.59	1.0	1.0	22.7	0.3	1.8	28.2	1.7	1,340
24	1.5	7	1.59	1.0	1.0	24.1	0.3	1.8	29.6	1.7	1,440
27	1.5	7	1.59	1.0	1.0	24.7	0.3	1.8	30.2	1.8	1,530
30	1.5	7	1.59	1.0	1.0	25.7	0.3	1.9	31.3	1.8	1,650
33	1.5	7	1.59	1.0	1.0	26.7	0.3	1.9	32.4	1.9	1,770
37	1.5	7	1.59	1.0	1.0	27.8	0.3	1.9	33.5	1.9	1,910
44	1.5	7	1.59	1.0	1.2	31.9	0.3	2.1	38.0	2.1	2,350
5	2.5	7	2.01	1.0	1.0	13.2	0.3	1.4	17.8	1.1	570
6	2.5	7	2.01	1.0	1.0	14.4	0.3	1.4	19.0	1.2	640
7	2.5	7	2.01	1.0	1.0	14.4	0.3	1.4	19.0	1.2	670
8	2.5	7	2.01	1.0	1.0	15.7	0.3	1.5	20.5	1.3	760
9	2.5	7	2.01	1.0	1.0	16.9	0.3	1.6	22.0	1.3	850
10	2.5	7	2.01	1.0	1.0	18.5	0.3	1.6	23.5	1.4	970
12	2.5	7	2.01	1.0	1.0	19.1	0.3	1.6	24.2	1.5	1,050
14	2.5	7	2.01	1.0	1.0	20.2	0.3	1.7	25.4	1.5	1,160
15	2.5	7	2.01	1.0	1.0	20.7	0.3	1.7	26.0	1.5	1,210
16	2.5	7	2.01	1.0	1.0	21.4	0.3	1.7	26.6	1.6	1,280
19	2.5	7	2.01	1.0	1.0	22.6	0.3	1.7	27.8	1.6	1,420
21	2.5	7	2.01	1.0	1.0	23.8	0.3	1.8	29.3	1.7	1,560
23	2.5	7	2.01	1.0	1.0	25.1	0.3	1.8	30.5	1.8	1,680
24	2.5	7	2.01	1.0	1.0	26.7	0.3	1.9	32.3	1.9	1,820
27	2.5	7	2.01	1.0	1.0	27.3	0.3	1.9	33.0	1.9	1,940
30	2.5	7	2.01	1.0	1.0	28.4	0.3	2.0	34.2	2.0	2,100
33	2.5	7	2.01	1.0	1.2	29.9	0.3	2.0	35.8	2.0	2,300
37	2.5	7	2.01	1.0	1.2	31.2	0.3	2.1	37.3	2.1	2,510
44	2.5	7	2.01	1.0	1.2	35.2	0.4	2.2	41.9	2.3	3,120

0.6/1kV RFOU, RFCU, RFMU (Sheath code)

: Flame retardant power & control cable - Multi core

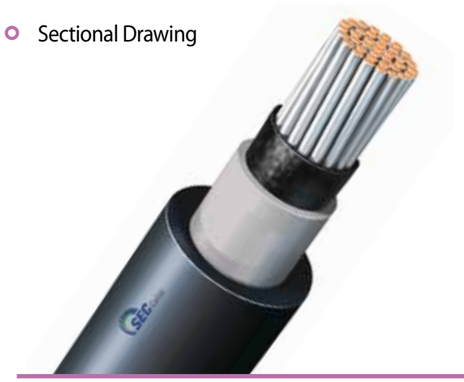
- Cable type : 0.6/1kV RFOU, RFCU, RFMU (Sheath code)

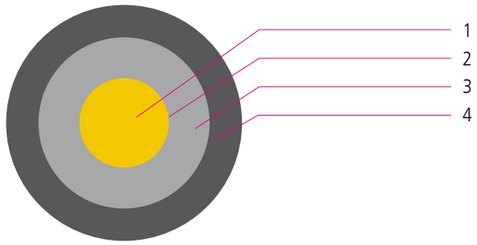
No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2+E	25	7	6.42	1.2	1.0	21.4	0.3	1.6	26.3	1.6	1370
	16	7	5.10	1							
2+E	35	7	7.56	1.2	1.0	24.3	0.3	1.7	29.3	1.7	1790
	25	7	6.42	1.2							
2+E	50	19	8.90	1.4	1.0	27.4	0.3	1.8	32.7	1.9	2180
	25	7	6.42	1.2							
2+E	70	19	10.70	1.4	1.0	31.1	0.3	1.9	36.5	2.1	2810
	35	7	7.56	1.2							
2+E	95	19	12.60	1.6	1.2	36.4	0.4	2.1	42.7	2.4	3880
	50	19	8.90	1.4							
2+E	120	37	14.21	1.6	1.2	40.1	0.4	2.3	46.8	2.6	4810
	70	19	10.70	1.4							
2+E	150	37	15.75	1.8	1.4	45	0.4	2.4	51.9	2.8	5950
	95	19	12.60	1.6							
2+E	185	37	17.64	2	1.4	49.5	0.4	2.6	56.8	3.1	7030
	95	19	12.60	1.6							
2+E	240	61	20.25	2.2	1.4	55.5	0.4	2.7	63	3.4	8840
	120	37	14.21	1.6							
3+E	25	7	6.42	1.2	1.0	22.8	0.3	1.7	27.9	1.6	1700
	16	7	5.10	1							
3+E	35	7	7.56	1.2	1.0	25.8	0.3	1.8	31.1	1.8	2220
	25	7	6.42	1.2							
3+E	50	19	8.90	1.4	1.0	29.2	0.3	2	34.9	2	2760
	25	7	6.42	1.2							
3+E	70	19	10.70	1.4	1.2	33.6	0.4	2.1	39.8	2.2	3750
	35	7	7.56	1.2							
3+E	95	19	12.60	1.6	1.2	38.8	0.4	2.3	45.5	2.5	4970
	50	19	8.90	1.4							
3+E	120	37	14.21	1.6	1.4	43.2	0.4	2.5	50.3	2.8	6200
	70	19	10.70	1.4							
3+E	150	37	15.75	1.8	1.4	48	0.4	2.6	55.3	3	7590
	95	19	12.60	1.6							
3+E	185	37	17.64	2	1.4	52.8	0.4	2.8	60.5	3.3	9070
	95	19	12.60	1.6							
3+E	240	61	20.25	2.2	1.6	59.7	0.4	3.0	67.8	3.6	11590
	120	37	14.21	1.6							
4+E	25	7	6.42	1.2	1	25.1	0.3	1.8	30.3	1.8	2070
	16	7	5.10	1							
4+E	35	7	7.56	1.2	1	28.4	0.3	1.9	33.8	1.9	2700
	25	7	6.42	1.2							
4+E	50	19	8.90	1.4	1.2	32.6	0.4	2.1	38.9	2.2	3550
	25	7	6.42	1.2							
4+E	70	19	10.70	1.4	1.2	37	0.4	2.3	43.7	2.4	4650
	35	7	7.56	1.2							
4+E	95	19	12.60	1.6	1.4	43.3	0.4	2.5	50.4	2.8	6240
	50	19	8.90	1.4							
4+E	120	37	14.21	1.6	1.4	47.7	0.4	2.6	55	3	7670
	70	19	10.70	1.4							
4+E	150	37	15.75	1.8	1.6	53.3	0.4	2.9	61.2	3.3	9500
	95	19	12.60	1.6							
4+E	185	37	17.64	2	1.6	58.8	0.4	3	66.9	3.6	11390
	95	19	12.60	1.6							
4+E	240	61	20.25	2.2	1.6	66	0.4	3.3	74.7	4	14540
	120	37	14.21	1.6							

0.6/1kV RU (Sheath code)

: Flame retardant power & control cable

Sectional Drawing





Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV RU (Sheath code)

: Flame retardant power & control cable

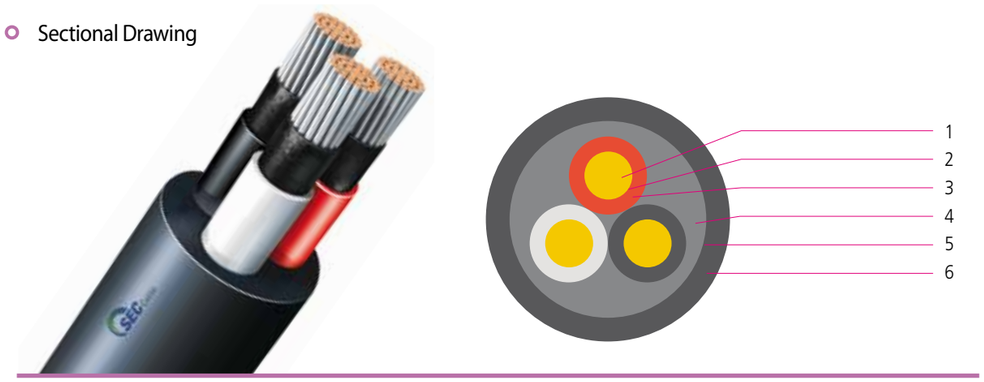
Cable type : 0.6/1kV RU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1	1	7	1.29	1.0	1.0	5.5	0.8	50
1	1.5	7	1.59	1.0	1.0	5.8	0.8	60
1	2.5	7	2.01	1.0	1.0	6.2	0.9	70
1	4	7	2.55	1.0	1.0	6.8	0.9	90
1	6	7	3.12	1.0	1.0	7.3	0.9	120
1	10	7	4.05	1.0	1.1	8.5	1.0	170
1	16	7	5.1	1.0	1.1	9.6	1.0	240
1	25	7	6.42	1.2	1.2	11.5	1.1	360
1	35	7	7.56	1.2	1.2	12.6	1.2	470
1	50	19	8.9	1.4	1.3	14.6	1.3	620
1	70	19	10.7	1.4	1.3	16.3	1.4	840
1	95	19	12.6	1.6	1.4	18.8	1.5	1140
1	120	37	14.21	1.6	1.5	20.6	1.6	1410
1	150	37	15.75	1.8	1.5	22.5	1.7	1710
1	185	37	17.64	2.0	1.6	25.2	1.8	2140
1	240	61	20.25	2.2	1.7	28.3	2.0	2780
1	300	61	22.68	2.4	1.8	31.4	2.1	3450
1	400	61	25.65	2.6	2.0	35.1	2.3	4390
1	500	61	28.8	2.8	2.1	39.1	2.5	5490
1	630	91	32.67	2.8	2.2	43.2	2.7	6860

0.6/1kV RU (Sheath code)

: Flame retardant power & control cable - Multi core

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	ONE yellow/green earth conductor

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV RU (Sheath code)

: Flame retardant power & control cable - Multi core

Cable type : 0.6/1kV RU (Sheath code)

No. of cores	Conductor* Area	Conductor* No.	Conductor* O.D (Approx.)	Insulation Thick.	Sheath Thick.	Outer Dia.	Tolerance	Cable weight (Approx.)
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
2	1	7	1.29	1.0	1.1	9.2	1.0	110
2	1.5	7	1.59	1.0	1.1	9.8	1.0	120
2	2.5	7	2.01	1.0	1.1	10.6	1.1	160
2	4	7	2.55	1.0	1.2	11.9	1.1	210
2	6	7	3.12	1.0	1.2	13	1.2	270
2	10	7	4.05	1.0	1.3	15.2	1.3	390
2	16	7	5.1	1.0	1.4	17.5	1.4	550
2	25	7	6.42	1.2	1.5	21.1	1.6	830
2	35	7	7.56	1.2	1.6	23.5	1.7	1090
2	50	19	8.9	1.4	1.7	27.3	1.9	1440
2	70	19	10.7	1.4	1.8	31	2.1	1930
2	95	19	12.6	1.6	2.0	35.9	2.3	2630
2	120	37	14.21	1.6	2.1	39.4	2.5	3240
2	150	37	15.75	1.8	2.2	43.3	2.7	3950
2	185	37	17.64	2.0	2.4	48.8	3.0	4950
2	240	61	20.25	2.2	2.6	55	3.3	6430
2	300	61	22.68	2.4	2.8	61.2	3.6	8000
3, 2+E	1	7	1.29	1.0	1.1	9.7	1.0	130
3, 2+E	1.5	7	1.59	1.0	1.1	10.3	1.1	150
3, 2+E	2.5	7	2.01	1.0	1.2	11.4	1.1	200
3, 2+E	4	7	2.55	1.0	1.2	12.6	1.2	270
3, 2+E	6	7	3.12	1.0	1.3	14	1.2	350
3, 2+E	10	7	4.05	1.0	1.3	16.2	1.4	510
3, 2+E	16	7	5.1	1.0	1.4	18.6	1.5	740
3	25	7	6.42	1.2	1.5	22.5	1.7	1120
3	35	7	7.56	1.2	1.6	25.1	1.8	1480
3	50	19	8.9	1.4	1.8	29.3	2.0	1980
3	70	19	10.7	1.4	1.9	33.3	2.2	2670
3	95	19	12.6	1.6	2.1	38.6	2.5	3650
3	120	37	14.21	1.6	2.2	42.3	2.7	4500
3	150	37	15.75	1.8	2.3	46.6	2.9	5490
3	185	37	17.64	2.0	2.5	52.4	3.2	6890
3	240	61	20.25	2.2	2.7	59.1	3.5	8960
3	300	61	22.68	2.4	2.9	65.7	3.8	11160
4, 3+E	1	7	1.29	1.0	1.1	10.6	1.1	160
4, 3+E	1.5	7	1.59	1.0	1.2	11.5	1.1	200
4, 3+E	2.5	7	2.01	1.0	1.2	12.5	1.2	250
4, 3+E	4	7	2.55	1.0	1.3	14	1.2	340
4, 3+E	6	7	3.12	1.0	1.3	15.3	1.3	440
4, 3+E	10	7	4.05	1.0	1.4	18	1.4	660
4, 3+E	16	7	5.1	1.0	1.5	20.7	1.6	960
4	25	7	6.42	1.2	1.6	25	1.8	1450
4	35	7	7.56	1.2	1.7	27.9	1.9	1920
4	50	19	8.9	1.4	1.9	32.6	2.2	2570
4	70	19	10.7	1.4	2.0	37	2.4	3470
4	95	19	12.6	1.6	2.2	42.9	2.7	4750
4	120	37	14.21	1.6	2.4	47.2	2.9	5890
4	150	37	15.75	1.8	2.5	52	3.1	7190
4	185	37	17.64	2	2.7	58.4	3.5	9020
4	240	61	20.25	2.2	3.0	66.1	3.9	11760
4	300	61	22.68	2.4	3.2	73.4	4.2	14640

0.6/1kV RU (Sheath code)

: Flame retardant power & control cable - Multi core

- Cable type : 0.6/1kV RU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
5	1	7	1.29	1.0	1.2	11.8	1.1	190
6	1	7	1.29	1.0	1.2	12.8	1.2	230
7	1	7	1.29	1.0	1.2	12.8	1.2	240
8	1	7	1.29	1.0	1.3	14.1	1.3	280
9	1	7	1.29	1.0	1.3	15.1	1.3	320
10	1	7	1.29	1.0	1.3	16.4	1.4	360
12	1	7	1.29	1.0	1.4	17.1	1.4	410
14	1	7	1.29	1.0	1.4	18	1.4	460
15	1	7	1.29	1.0	1.4	18.5	1.5	480
16	1	7	1.29	1.0	1.4	19	1.5	510
19	1	7	1.29	1.0	1.5	20.2	1.6	590
21	1	7	1.29	1.0	1.5	21.2	1.6	650
23	1	7	1.29	1.0	1.5	22.3	1.7	710
24	1	7	1.29	1.0	1.6	23.8	1.7	770
27	1	7	1.29	1.0	1.6	24.3	1.8	840
30	1	7	1.29	1.0	1.6	25.2	1.8	910
33	1	7	1.29	1.0	1.7	26.4	1.9	1000
37	1	7	1.29	1.0	1.7	27.4	1.9	1100
44	1	7	1.29	1.0	1.8	31	2.1	1340
5	1.5	7	1.59	1.0	1.2	12.5	1.2	230
6	1.5	7	1.59	1.0	1.2	13.6	1.2	270
7	1.5	7	1.59	1.0	1.2	13.6	1.2	290
8	1.5	7	1.59	1.0	1.3	15	1.3	340
9	1.5	7	1.59	1.0	1.4	16.3	1.4	390
10	1.5	7	1.59	1.0	1.4	17.7	1.4	450
12	1.5	7	1.59	1.0	1.4	18.3	1.5	500
14	1.5	7	1.59	1.0	1.4	19.2	1.5	570
15	1.5	7	1.59	1.0	1.5	20	1.5	610
16	1.5	7	1.59	1.0	1.5	20.5	1.6	650
19	1.5	7	1.59	1.0	1.5	21.6	1.6	740
21	1.5	7	1.59	1.0	1.6	22.9	1.7	820
23	1.5	7	1.59	1.0	1.6	24.1	1.8	900
24	1.5	7	1.59	1.0	1.7	25.7	1.8	970
27	1.5	7	1.59	1.0	1.7	26.3	1.9	1050
30	1.5	7	1.59	1.0	1.7	27.2	1.9	1150
33	1.5	7	1.59	1.0	1.8	28.5	2.0	1260
37	1.5	7	1.59	1.0	1.8	29.5	2.0	1380
44	1.5	7	1.59	1.0	1.9	33.4	2.2	1690
5	2.5	7	2.01	1.0	1.3	13.9	1.2	310
6	2.5	7	2.01	1.0	1.3	15.1	1.3	360
7	2.5	7	2.01	1.0	1.3	15.1	1.3	390
8	2.5	7	2.01	1.0	1.4	16.6	1.4	450
9	2.5	7	2.01	1.0	1.4	17.8	1.4	510
10	2.5	7	2.01	1.0	1.4	19.4	1.5	580
12	2.5	7	2.01	1.0	1.5	20.3	1.6	670
14	2.5	7	2.01	1.0	1.5	21.3	1.6	760
15	2.5	7	2.01	1.0	1.6	22.1	1.7	810
16	2.5	7	2.01	1.0	1.6	22.7	1.7	860
19	2.5	7	2.01	1.0	1.6	23.9	1.7	990
21	2.5	7	2.01	1.0	1.7	25.4	1.8	1100
23	2.5	7	2.01	1.0	1.7	26.6	1.9	1200
24	2.5	7	2.01	1.0	1.8	28.4	2.0	1300
27	2.5	7	2.01	1.0	1.8	29	2.0	1410
30	2.5	7	2.01	1.0	1.8	30.1	2.1	1540
33	2.5	7	2.01	1.0	1.9	31.5	2.1	1690
37	2.5	7	2.01	1.0	1.9	32.7	2.2	1860
44	2.5	7	2.01	1.0	2.1	37.2	2.4	2280

0.6/1kV RU (Sheath code)

: Flame retardant power & control cable - Multi core

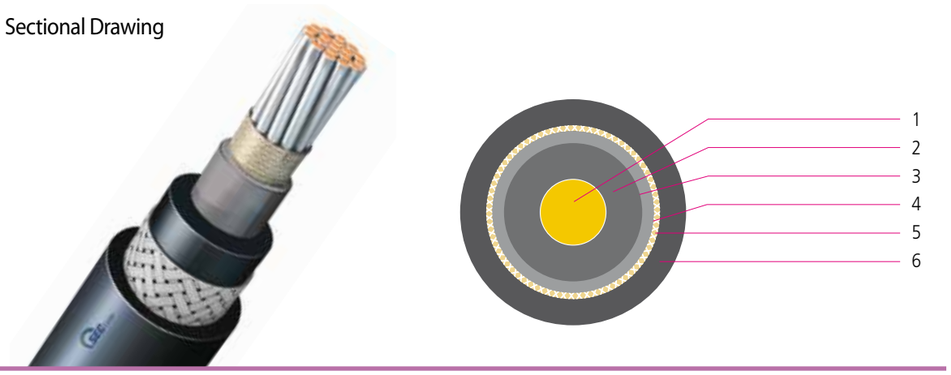
- Cable type : 0.6/1kV RU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
2+E	25	7	6.42	1.2	1.5	22.4	1.7	1020
	16	7	5.1	1.0				
2+E	35	7	7.56	1.2	1.6	25.5	1.8	1390
	25	7	6.42	1.2				
2+E	50	19	8.9	1.4	1.7	28.8	2.0	1730
	25	7	6.42	1.2				
2+E	70	19	10.7	1.4	1.8	32.7	2.2	2320
	35	7	7.56	1.2				
2+E	95	19	12.6	1.6	2	38	2.4	3150
	50	19	8.9	1.4				
2+E	120	37	14.21	1.6	2.1	41.9	2.6	3980
	70	19	10.7	1.4				
2+E	150	37	15.75	1.8	2.3	46.8	2.9	5000
	95	19	12.6	1.6				
2+E	185	37	17.64	2.0	2.4	51.5	3.1	5960
	95	19	12.6	1.6				
2+E	240	61	20.25	2.2	2.6	57.9	3.4	7680
	120	37	14.21	1.6				
3+E	25	7	6.42	1.2	1.6	24	1.7	1320
	16	7	5.1	1.0				
3+E	35	7	7.56	1.2	1.7	27.2	1.9	1790
	25	7	6.42	1.2				
3+E	50	19	8.9	1.4	1.8	30.8	2.1	2270
	25	7	6.42	1.2				
3+E	70	19	10.7	1.4	1.9	35	2.3	3060
	35	7	7.56	1.2				
3+E	95	19	12.6	1.6	2.1	40.6	2.6	4170
	50	19	8.9	1.4				
3+E	120	37	14.21	1.6	2.3	45	2.8	5260
	70	19	10.7	1.4				
3+E	150	37	15.75	1.8	2.4	50	3.0	6550
	95	19	12.6	1.6				
3+E	185	37	17.64	2.0	2.6	55.2	3.3	7920
	95	19	12.6	1.6				
3+E	240	61	20.25	2.2	2.8	62.1	3.7	10240
	120	37	14.21	1.6				
4+E	25	7	6.42	1.2	1.7	26.5	1.9	1650
	16	7	5.1	1.0				
4+E	35	7	7.56	1.2	1.8	30	2.0	2240
	25	7	6.42	1.2				
4+E	50	19	8.9	1.4	1.9	34	2.2	2860
	25	7	6.42	1.2				
4+E	70	19	10.7	1.4	2.1	38.8	2.5	3880
	35	7	7.56	1.2				
4+E	95	19	12.6	1.6	2.3	45.1	2.8	5290
	50	19	8.9	1.4				
4+E	120	37	14.21	1.6	2.5	49.9	3.0	6660
	70	19	10.7	1.4				
4+E	150	37	15.75	1.8	2.7	55.5	3.3	8280
	95	19	12.6	1.6				
4+E	185	37	17.64	2.0	2.8	61.2	3.6	10060
	95	19	12.6	1.6				
4+E	240	61	20.25	2.2	3.1	69	4.0	13050
	120	37	14.21	1.6				

0.6/1kV BFOU, BFCU, BFMU (Sheath code)

: Fire resistant power & control cable

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40°C/ Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Inner covering	Halogen free thermoset compound
5. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy braid (M) A Suitable separator tape(s) may be applied under / over the armour
6. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV BFOU, BFCU, BFMU (Sheath code)

: Fire resistant power & control cable

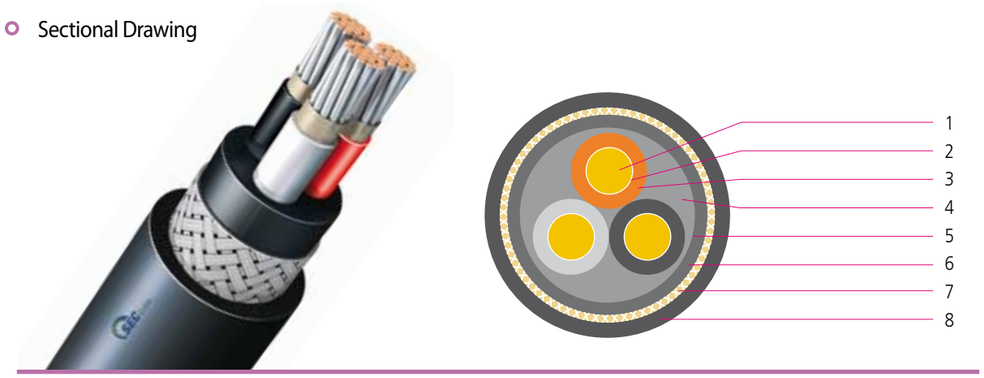
Cable type : 0.6/1kV BFOU, BFCU, BFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1	1	7	1.29	1.0	1.0	6.2	0.2	1.1	9.8	0.7	150
1	1.5	7	1.59	1.0	1.0	6.5	0.2	1.1	10.1	0.8	160
1	2.5	7	2.01	1.0	1.0	6.9	0.2	1.1	10.5	0.8	180
1	4	7	2.55	1.0	1.0	7.5	0.2	1.1	11.1	0.8	210
1	6	7	3.12	1.0	1.0	8.0	0.2	1.2	11.8	0.8	250
1	10	7	4.05	1.0	1.0	9.0	0.2	1.2	12.7	0.9	310
1	16	7	5.1	1.0	1.0	10.0	0.2	1.2	13.8	0.9	390
1	25	7	6.42	1.2	1.0	11.7	0.3	1.3	16.1	1.1	580
1	35	7	7.56	1.2	1.0	12.8	0.3	1.4	17.4	1.1	710
1	50	19	8.9	1.4	1.0	14.6	0.3	1.4	19.2	1.2	890
1	70	19	10.7	1.4	1.0	16.3	0.3	1.5	21.1	1.3	1140
1	95	19	12.6	1.6	1.0	18.6	0.3	1.6	23.6	1.4	1480
1	120	37	14.21	1.6	1.0	20.2	0.3	1.6	25.2	1.5	1760
1	150	37	15.75	1.8	1.0	22.0	0.3	1.7	27.3	1.6	2110
1	185	37	17.64	2.0	1.0	24.4	0.3	1.8	29.8	1.7	2570
1	240	61	20.25	2.2	1.0	27.3	0.3	1.9	33.0	1.9	3260
1	300	61	22.68	2.4	1.0	30.1	0.3	2.0	36.0	2.0	3980
1	400	61	25.65	2.6	1.2	33.9	0.4	2.1	40.3	2.3	5110
1	500	61	28.8	2.8	1.2	37.6	0.4	2.3	44.5	2.5	6300
1	630	91	32.67	2.8	1.2	41.5	0.4	2.4	48.6	2.7	7760

0.6/1kV BFOU, BFCU, BFMU (Sheath code)

: Fire resistant power & control cable - Multi core

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40°C/ Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	ONE yellow/green earth conductor

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Inner covering	Halogen free thermoset compound
7. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy braid (M) A Suitable separator tape(s) may be applied under / over the armour
8. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV BFOU, BFCU, BFMU (Sheath code)

: Fire resistant power & control cable - Multi core

Cable type : 0.6/1kV BFOU, BFCU, BFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	1	7	1.29	1.0	1.0	10.5	0.2	1.2	14.3	1.0	320
2	1.5	7	1.59	1.0	1.0	11.0	0.2	1.3	15.1	1.0	360
2	2.5	7	2.01	1.0	1.0	11.9	0.3	1.3	16.3	1.1	460
2	4	7	2.55	1.0	1.0	12.9	0.3	1.4	17.6	1.1	470
2	6	7	3.12	1.0	1.0	14.0	0.3	1.4	18.7	1.2	540
2	10	7	4.05	1.0	1.0	15.9	0.3	1.5	20.8	1.3	700
2	16	7	5.1	1.0	1.0	18.0	0.3	1.5	22.8	1.4	900
2	25	7	6.42	1.2	1.0	21.4	0.3	1.7	26.6	1.6	1250
2	35	7	7.56	1.2	1.0	23.6	0.3	1.7	28.9	1.7	1530
2	50	19	8.9	1.4	1.0	27.1	0.3	1.9	32.8	1.9	1970
2	70	19	10.7	1.4	1.2	31.0	0.3	2.0	36.9	2.1	2540
2	95	19	12.6	1.6	1.2	35.6	0.4	2.2	42.3	2.4	3450
2	120	37	14.21	1.6	1.2	38.7	0.4	2.3	45.7	2.5	4120
2	150	37	15.75	1.8	1.4	42.9	0.4	2.5	50.3	2.8	5000
2	185	37	17.64	2.0	1.4	47.5	0.4	2.6	55.1	3.0	6060
2	240	61	20.25	2.2	1.4	53.4	0.4	2.8	61.4	3.3	7670
2	300	61	22.68	2.4	1.6	59.5	0.4	3.0	67.9	3.6	9440
3, 2+E	1	7	1.29	1.0	1.0	11.1	0.2	1.3	15.1	1.0	360
3, 2+E	1.5	7	1.59	1.0	1.0	11.7	0.3	1.3	16.1	1.1	440
3, 2+E	2.5	7	2.01	1.0	1.0	12.6	0.3	1.3	17.1	1.1	500
3, 2+E	4	7	2.55	1.0	1.0	13.8	0.3	1.4	18.4	1.2	600
3, 2+E	6	7	3.12	1.0	1.0	15.0	0.3	1.4	19.6	1.2	710
3, 2+E	10	7	4.05	1.0	1.0	17.0	0.3	1.5	21.8	1.3	840
3, 2+E	16	7	5.1	1.0	1.0	19.2	0.3	1.6	24.2	1.5	1120
3	25	7	6.42	1.2	1.0	22.9	0.3	1.7	28.1	1.7	1570
3	35	7	7.56	1.2	1.0	25.3	0.3	1.8	30.7	1.8	1970
3	50	19	8.9	1.4	1.0	29.1	0.3	1.9	34.7	2.0	2530
3	70	19	10.7	1.4	1.2	33.3	0.3	2.1	39.3	2.2	3340
3	95	19	12.6	1.6	1.2	38.1	0.4	2.3	45.1	2.5	4530
3	120	37	14.21	1.6	1.2	41.5	0.4	2.4	48.7	2.7	5460
3	150	37	15.75	1.8	1.4	46.0	0.4	2.6	53.6	2.9	6630
3	185	37	17.64	2.0	1.4	51.0	0.4	2.7	58.8	3.2	8080
3	240	61	20.25	2.2	1.6	57.7	0.4	3.0	66.1	3.6	10410
3	300	61	22.68	2.4	1.6	63.9	0.4	3.2	72.7	3.9	12750
4, 3+E	1	7	1.29	1.0	1.0	12.2	0.3	1.3	16.6	1.1	450
4, 3+E	1.5	7	1.59	1.0	1.0	12.9	0.3	1.3	17.3	1.1	490
4, 3+E	2.5	7	2.01	1.0	1.0	13.9	0.3	1.4	18.5	1.2	580
4, 3+E	4	7	2.55	1.0	1.0	15.2	0.3	1.4	19.8	1.2	700
4, 3+E	6	7	3.12	1.0	1.0	16.5	0.3	1.5	21.3	1.3	850
4, 3+E	10	7	4.05	1.0	1.0	18.8	0.3	1.6	23.8	1.4	1030
4, 3+E	16	7	5.1	1.0	1.0	21.2	0.3	1.6	26.3	1.6	1370
4	25	7	6.42	1.2	1.0	25.4	0.3	1.8	30.8	1.8	1960
4	35	7	7.56	1.2	1.0	28.0	0.3	1.9	33.7	1.9	2470
4	50	19	8.9	1.4	1.2	32.7	0.3	2.1	38.8	2.2	3250
4	70	19	10.7	1.4	1.2	36.9	0.4	2.2	43.6	2.4	4340
4	95	19	12.6	1.6	1.4	42.8	0.4	2.4	50	2.7	5790
4	120	37	14.21	1.6	1.4	46.6	0.4	2.6	54.2	3.0	7030
4	150	37	15.75	1.8	1.4	51.2	0.4	2.8	59.2	3.2	8470
4	185	37	17.64	2.0	1.6	57.2	0.4	3.0	65.6	3.5	10460
4	240	61	20.25	2.2	1.6	64.3	0.4	3.2	73.1	3.9	13350

0.6/1kV BFOU, BFCU, BFMU (Sheath code)

: Fire resistant power & control cable - Multi core

- Cable type : 0.6/1kV BFOU, BFCU, BFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thickness	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
5	1	7	1.29	1.0	1.0	13.4	0.3	1.4	18.0	1.1	510
6	1	7	1.29	1.0	1.0	14.6	0.3	1.4	19.3	1.2	570
7	1	7	1.29	1.0	1.0	14.6	0.3	1.4	19.3	1.2	590
8	1	7	1.29	1.0	1.0	15.9	0.3	1.5	20.8	1.3	670
9	1	7	1.29	1.0	1.0	17.2	0.3	1.5	22	1.3	740
10	1	7	1.29	1.0	1.0	18.8	0.3	1.5	23.7	1.4	840
12	1	7	1.29	1.0	1.0	19.5	0.3	1.6	24.5	1.5	900
14	1	7	1.29	1.0	1.0	20.6	0.3	1.6	25.6	1.5	980
15	1	7	1.29	1.0	1.0	21.1	0.3	1.6	26.1	1.6	1020
16	1	7	1.29	1.0	1.0	21.7	0.3	1.6	26.8	1.6	1070
19	1	7	1.29	1.0	1.0	23	0.3	1.7	28.2	1.7	1190
21	1	7	1.29	1.0	1.0	24.3	0.3	1.7	29.5	1.7	1290
23	1	7	1.29	1.0	1.0	25.5	0.3	1.8	31.0	1.8	1400
24	1	7	1.29	1.0	1.0	27.1	0.3	1.8	32.6	1.9	1520
27	1	7	1.29	1.0	1.0	27.8	0.3	1.8	33.2	1.9	1600
30	1	7	1.29	1.0	1.0	28.9	0.3	1.9	34.5	2.0	1720
33	1	7	1.29	1.0	1.0	30.1	0.3	1.9	35.7	2.0	1840
37	1	7	1.29	1.0	1.0	31.3	0.3	2.0	37.2	2.1	1990
44	1	7	1.29	1.0	1.0	35.9	0.4	2.1	42.4	2.4	2560
5	1.5	7	1.59	1.0	1.0	14.2	0.3	1.4	18.8	1.2	570
6	1.5	7	1.59	1.0	1.0	15.5	0.3	1.4	20.1	1.3	640
7	1.5	7	1.59	1.0	1.0	15.5	0.3	1.4	20.1	1.3	670
8	1.5	7	1.59	1.0	1.0	16.9	0.3	1.5	21.7	1.3	750
9	1.5	7	1.59	1.0	1.0	18.2	0.3	1.6	23.3	1.4	840
10	1.5	7	1.59	1.0	1.0	19.9	0.3	1.6	25.0	1.5	960
12	1.5	7	1.59	1.0	1.0	20.6	0.3	1.6	25.7	1.5	1030
14	1.5	7	1.59	1.0	1.0	21.8	0.3	1.7	27.0	1.6	1140
15	1.5	7	1.59	1.0	1.0	22.4	0.3	1.7	27.6	1.6	1180
16	1.5	7	1.59	1.0	1.0	23.1	0.3	1.7	28.3	1.7	1240
19	1.5	7	1.59	1.0	1.0	24.4	0.3	1.7	29.6	1.7	1370
21	1.5	7	1.59	1.0	1.0	25.7	0.3	1.8	31.2	1.8	1500
23	1.5	7	1.59	1.0	1.0	27.1	0.3	1.8	32.6	1.9	1610
24	1.5	7	1.59	1.0	1.0	28.8	0.3	1.9	34.5	2.0	1760
27	1.5	7	1.59	1.0	1.0	29.5	0.3	1.9	35.2	2.0	1860
30	1.5	7	1.59	1.0	1.0	30.7	0.3	2.0	36.5	2.1	2010
33	1.5	7	1.59	1.0	1.0	32.4	0.3	2.0	38.2	2.2	2190
37	1.5	7	1.59	1.0	1.0	33.7	0.3	2.1	39.8	2.2	2380
44	1.5	7	1.59	1.0	1.2	38.1	0.4	2.2	44.8	2.5	2990
5	2.5	7	2.01	1.0	1.0	15.3	0.3	1.4	19.9	1.2	670
6	2.5	7	2.01	1.0	1.0	16.7	0.3	1.5	21.6	1.3	760
7	2.5	7	2.01	1.0	1.0	16.7	0.3	1.5	21.6	1.3	800
8	2.5	7	2.01	1.0	1.0	18.3	0.3	1.6	23.3	1.4	900
9	2.5	7	2.01	1.0	1.0	19.7	0.3	1.6	24.8	1.5	1000
10	2.5	7	2.01	1.0	1.0	21.6	0.3	1.7	26.9	1.6	1150
12	2.5	7	2.01	1.0	1.0	22.4	0.3	1.7	27.6	1.6	1240
14	2.5	7	2.01	1.0	1.0	23.6	0.3	1.7	28.9	1.7	1360
15	2.5	7	2.01	1.0	1.0	24.3	0.3	1.8	29.7	1.7	1430
16	2.5	7	2.01	1.0	1.0	25.0	0.3	1.8	30.5	1.8	1510
19	2.5	7	2.01	1.0	1.0	26.5	0.3	1.8	31.9	1.8	1680
21	2.5	7	2.01	1.0	1.0	28.0	0.3	1.9	33.6	1.9	1840
23	2.5	7	2.01	1.0	1.0	29.5	0.3	1.9	35.1	2.0	1980
24	2.5	7	2.01	1.0	1.0	31.8	0.3	2.0	37.6	2.1	2200
27	2.5	7	2.01	1.0	1.0	32.5	0.3	2.0	38.4	2.2	2330
30	2.5	7	2.01	1.0	1.0	33.8	0.3	2.1	39.9	2.2	2530
33	2.5	7	2.01	1.0	1.2	35.2	0.4	2.1	41.7	2.3	2820
37	2.5	7	2.01	1.0	1.2	36.6	0.4	2.2	43.3	2.4	3070
44	2.5	7	2.01	1.0	1.2	41.5	0.4	2.4	48.6	2.7	3710

0.6/1kV BFOU, BFCU, BFMU (Sheath code)

: Fire resistant power & control cable - Multi core

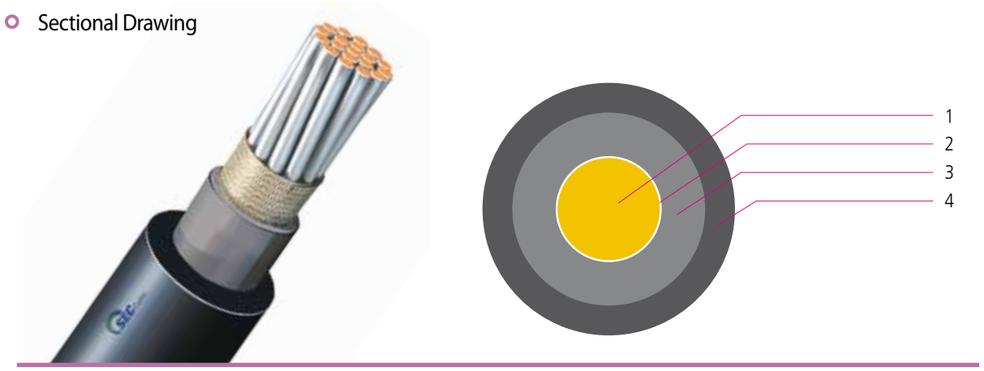
- Cable type: 0.6/1kV BFOU, BFCU, BFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2+E	25	7	6.42	1.2	1.0	23.0	0.3	1.7	28.1	1.7	1460
	16	7	5.1	1.0							
2+E	35	7	7.56	1.2	1.0	25.9	0.3	1.8	31.1	1.8	1880
	25	7	6.42	1.2							
2+E	50	19	8.9	1.4	1.0	29.0	0.3	1.9	34.5	2.0	2290
	25	7	6.42	1.2							
2+E	70	19	10.7	1.4	1.0	32.7	0.3	2.0	38.4	2.2	2930
	35	7	7.56	1.2							
2+E	95	19	12.6	1.6	1.2	38.0	0.4	2.2	44.5	2.5	4020
	50	19	8.9	1.4							
2+E	120	37	14.21	1.6	1.2	41.7	0.4	2.3	48.4	2.7	4930
	70	19	10.7	1.4							
2+E	150	37	15.75	1.8	1.4	46.6	0.4	2.5	53.7	2.9	6110
	95	19	12.6	1.6							
2+E	185	37	17.64	2.0	1.4	50.7	0.4	2.6	58.0	3.1	7140
	95	19	12.6	1.6							
2+E	240	61	20.25	2.2	1.4	56.7	0.4	2.8	64.4	3.5	9000
	120	37	14.21	1.6							
3+E	25	7	6.42	1.2	1.0	24.5	0.3	1.8	29.8	1.7	1800
	16	7	5.1	1.0							
3+E	35	7	7.56	1.2	1.0	27.5	0.3	1.9	33.0	1.9	2330
	25	7	6.42	1.2							
3+E	50	19	8.9	1.4	1.2	31.3	0.3	2.0	37.0	2.1	2910
	25	7	6.42	1.2							
3+E	70	19	10.7	1.4	1.2	35.3	0.4	2.2	41.7	2.3	3890
	35	7	7.56	1.2							
3+E	95	19	12.6	1.6	1.2	40.5	0.4	2.3	47.2	2.6	5100
	50	19	8.9	1.4							
3+E	120	37	14.21	1.6	1.4	44.9	0.4	2.5	52	2.8	6340
	70	19	10.7	1.4							
3+E	150	37	15.75	1.8	1.4	49.6	0.4	2.7	57.1	3.1	7770
	95	19	12.6	1.6							
3+E	185	37	17.64	2.0	1.4	54.1	0.4	2.8	61.8	3.3	9190
	95	19	12.6	1.6							
3+E	240	61	20.25	2.2	1.6	61.0	0.4	3.1	69.3	3.7	11760
	120	37	14.21	1.6							
4+E	25	7	6.42	1.2	1.0	270	0.3	1.9	32.4	1.9	2190
	16	7	5.1	1.0							
4+E	35	7	7.56	1.2	1.2	30.7	0.3	2.0	36.3	2.1	2870
	25	7	6.42	1.2							
4+E	50	19	8.9	1.4	1.2	34.5	0.4	2.2	41.0	2.3	3710
	25	7	6.42	1.2							
4+E	70	19	10.7	1.4	1.2	38.9	0.4	2.3	45.6	2.5	4790
	35	7	7.56	1.2							
4+E	95	19	12.6	1.6	1.4	45.1	0.4	2.5	52.2	2.9	6390
	50	19	8.9	1.4							
4+E	120	37	14.21	1.6	1.4	49.5	0.4	2.7	57.0	3.1	7870
	70	19	10.7	1.4							
4+E	150	37	15.75	1.8	1.6	55.2	0.4	2.9	63.1	3.4	9680
	95	19	12.6	1.6							
4+E	185	37	17.64	2.0	1.6	60.2	0.4	3.1	68.5	3.7	11570
	95	19	12.6	1.6							
4+E	240	61	20.25	2.2	1.6	67.4	0.4	3.3	76.1	4.1	14710
	120	37	14.21	1.6							

0.6/1kV BU (Sheath code)

: Fire resistant power & control cable

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Sheath	SHF2 or SHF MUD as per IEC 60092-360

0.6/1kV BU (Sheath code)

: Fire resistant power & control cable - Multi core

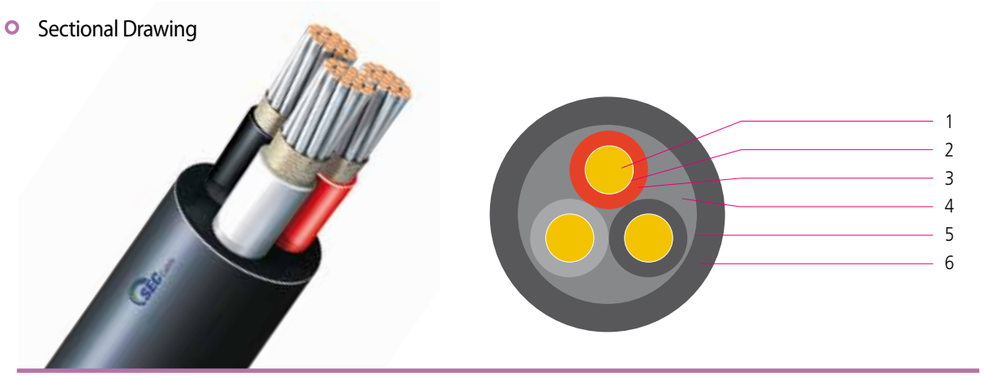
Cable type : 0.6/1kV BU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1	1	7	1.29	1.0	1.0	6.3	0.9	60
1	1.5	7	1.59	1.0	1.0	6.6	0.9	70
1	2.5	7	2.01	1.0	1.0	7.0	0.9	80
1	4	7	2.55	1.0	1.0	7.5	0.9	100
1	6	7	3.12	1.0	1.0	8.1	1.0	120
1	10	7	4.05	1.0	1.1	9.2	1.0	180
1	16	7	5.1	1.0	1.1	10.3	1.1	250
1	25	7	6.42	1.2	1.2	12.2	1.2	380
1	35	7	7.56	1.2	1.2	13.3	1.2	480
1	50	19	8.9	1.4	1.3	15.3	1.3	640
1	70	19	10.7	1.4	1.3	17.0	1.4	850
1	95	19	12.6	1.6	1.4	19.5	1.5	1160
1	120	37	14.21	1.6	1.5	21.3	1.6	1430
1	150	37	15.75	1.8	1.6	23.4	1.7	1740
1	185	37	17.64	2.0	1.6	25.7	1.8	2150
1	240	61	20.25	2.2	1.7	28.8	2.0	2800
1	300	61	22.68	2.4	1.8	31.9	2.1	3480
1	400	61	25.65	2.6	2.0	35.6	2.3	4410
1	500	61	28.8	2.8	2.1	39.6	2.5	5510
1	630	91	32.67	2.8	2.2	43.7	2.7	6880

0.6/1kV BU (Sheath code)

: Fire resistant power & control cable - Multi core

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	ONE yellow/green earth conductor

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Sheath	SHF2 or SHF MUD as per IEC 60092-360

0.6/1kV BU (Sheath code)

: Fire resistant power & control cable - Multi core

Cable type : 0.6/1kV BU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
2	1	7	1.29	1.0	1.1	10.8	1.1	130
2	1.5	7	1.59	1.0	1.1	11.3	1.1	150
2	2.5	7	2.01	1.0	1.2	12.4	1.2	190
2	4	7	2.55	1.0	1.2	13.4	1.2	240
2	6	7	3.12	1.0	1.3	14.7	1.3	300
2	10	7	4.05	1.0	1.3	16.6	1.4	420
2	16	7	5.1	1.0	1.4	18.9	1.5	590
2	25	7	6.42	1.2	1.5	22.5	1.7	880
2	35	7	7.56	1.2	1.6	24.9	1.8	1130
2	50	19	8.9	1.4	1.7	28.7	2.0	1500
2	70	19	10.7	1.4	1.8	32.4	2.2	1990
2	95	19	12.6	1.6	2.0	37.3	2.4	2700
2	120	37	14.21	1.6	2.1	40.7	2.6	3310
2	150	37	15.75	1.8	2.3	44.9	2.8	4050
2	185	37	17.64	2.0	2.4	49.7	3.0	5020
2	240	61	20.25	2.2	2.6	56.0	3.3	6500
2	300	61	22.68	2.4	2.8	62.1	3.7	8070
3, 2+E	1	7	1.29	1.0	1.1	11.4	1.1	160
3, 2+E	1.5	7	1.59	1.0	1.2	12.2	1.2	190
3, 2+E	2.5	7	2.01	1.0	1.2	13.1	1.2	230
3, 2+E	4	7	2.55	1.0	1.2	14.3	1.3	300
3, 2+E	6	7	3.12	1.0	1.3	15.7	1.3	390
3, 2+E	10	7	4.05	1.0	1.4	17.9	1.4	550
3, 2+E	16	7	5.1	1.0	1.4	20.1	1.6	790
3	25	7	6.42	1.2	1.6	24.2	1.8	1190
3	35	7	7.56	1.2	1.7	26.8	1.9	1550
3	50	19	8.9	1.4	1.8	30.8	2.1	2050
3	70	19	10.7	1.4	1.9	34.8	2.3	2740
3	95	19	12.6	1.6	2.1	40.1	2.6	3730
3	120	37	14.21	1.6	2.2	43.7	2.7	4590
3	150	37	15.75	1.8	2.4	48.2	3.0	5610
3	185	37	17.64	2.0	2.5	53.4	3.2	6960
3	240	61	20.25	2.2	2.8	60.3	3.6	9080
3	300	61	22.68	2.4	3.0	66.9	3.9	11280
4, 3+E	1	7	1.29	1.0	1.2	12.7	1.2	200
4, 3+E	1.5	7	1.59	1.0	1.2	13.4	1.2	230
4, 3+E	2.5	7	2.01	1.0	1.2	14.4	1.3	290
4, 3+E	4	7	2.55	1.0	1.3	15.9	1.3	380
4, 3+E	6	7	3.12	1.0	1.3	17.2	1.4	490
4, 3+E	10	7	4.05	1.0	1.4	19.7	1.5	700
4, 3+E	16	7	5.1	1.0	1.5	22.4	1.7	1020
4	25	7	6.42	1.2	1.7	26.9	1.9	1540
4	35	7	7.56	1.2	1.8	29.8	2.0	2010
4	50	19	8.9	1.4	1.9	34.3	2.3	2660
4	70	19	10.7	1.4	2.1	38.9	2.5	3590
4	95	19	12.6	1.6	2.3	44.8	2.8	4880
4	120	37	14.21	1.6	2.4	48.8	3.0	6000
4	150	37	15.75	1.8	2.6	53.8	3.2	7340
4	185	37	17.64	2.0	2.7	59.6	3.5	9110
4	240	61	20.25	2.2	3.0	67.3	3.9	11870
4	300	61	22.68	2.4	3.2	74.6	4.3	14760

0.6/1kV BU (Sheath code)

: Fire resistant power & control cable - Multi core

- Cable type : 0.6/1kV BU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
5	1	7	1.29	1.0	1.2	13.9	1.2	240
6	1	7	1.29	1.0	1.3	15.3	1.3	290
7	1	7	1.29	1.0	1.3	15.3	1.3	300
8	1	7	1.29	1.0	1.3	16.6	1.4	350
9	1	7	1.29	1.0	1.4	18.1	1.5	400
10	1	7	1.29	1.0	1.4	19.7	1.5	460
12	1	7	1.29	1.0	1.4	20.4	1.6	510
14	1	7	1.29	1.0	1.5	21.7	1.6	580
15	1	7	1.29	1.0	1.5	22.2	1.7	620
16	1	7	1.29	1.0	1.5	22.9	1.7	650
19	1	7	1.29	1.0	1.5	24.1	1.8	740
21	1	7	1.29	1.0	1.6	25.6	1.8	820
23	1	7	1.29	1.0	1.6	26.9	1.9	900
24	1	7	1.29	1.0	1.7	28.7	2.0	980
27	1	7	1.29	1.0	1.7	29.3	2.0	1060
30	1	7	1.29	1.0	1.7	30.4	2.1	1150
33	1	7	1.29	1.0	1.8	31.8	2.1	1260
37	1	7	1.29	1.0	1.8	33.0	2.2	1380
44	1	7	1.29	1.0	2.0	37.6	2.4	1710
5	1.5	7	1.59	1.0	1.3	14.9	1.3	290
6	1.5	7	1.59	1.0	1.3	16.2	1.4	340
7	1.5	7	1.59	1.0	1.3	16.2	1.4	360
8	1.5	7	1.59	1.0	1.4	17.8	1.4	420
9	1.5	7	1.59	1.0	1.4	19.1	1.5	470
10	1.5	7	1.59	1.0	1.4	20.8	1.6	540
12	1.5	7	1.59	1.0	1.5	21.8	1.6	620
14	1.5	7	1.59	1.0	1.5	22.9	1.7	690
15	1.5	7	1.59	1.0	1.6	23.7	1.7	740
16	1.5	7	1.59	1.0	1.6	24.4	1.8	790
19	1.5	7	1.59	1.0	1.6	25.7	1.8	900
21	1.5	7	1.59	1.0	1.7	27.3	1.9	1000
23	1.5	7	1.59	1.0	1.7	28.7	2.0	1090
24	1.5	7	1.59	1.0	1.8	30.6	2.1	1190
27	1.5	7	1.59	1.0	1.8	31.3	2.1	1290
30	1.5	7	1.59	1.0	1.8	32.4	2.2	1400
33	1.5	7	1.59	1.0	1.9	33.9	2.2	1540
37	1.5	7	1.59	1.0	1.9	35.2	2.3	1680
44	1.5	7	1.59	1.0	2.1	40.1	2.6	2080
5	2.5	7	2.01	1.0	1.3	16.0	1.3	360
6	2.5	7	2.01	1.0	1.3	17.4	1.4	420
7	2.5	7	2.01	1.0	1.3	17.4	1.4	450
8	2.5	7	2.01	1.0	1.4	19.2	1.5	530
9	2.5	7	2.01	1.0	1.5	20.9	1.6	610
10	2.5	7	2.01	1.0	1.5	22.7	1.7	690
12	2.5	7	2.01	1.0	1.5	23.5	1.7	780
14	2.5	7	2.01	1.0	1.6	25.0	1.8	890
15	2.5	7	2.01	1.0	1.6	25.6	1.8	940
16	2.5	7	2.01	1.0	1.6	26.4	1.9	1000
19	2.5	7	2.01	1.0	1.7	28.0	1.9	1160
21	2.5	7	2.01	1.0	1.7	29.5	2.0	1270
23	2.5	7	2.01	1.0	1.8	31.2	2.1	1410
24	2.5	7	2.01	1.0	1.8	33.1	2.2	1510
27	2.5	7	2.01	1.0	1.9	34.1	2.3	1660
30	2.5	7	2.01	1.0	1.9	35.3	2.3	1810
33	2.5	7	2.01	1.0	2.0	36.9	2.4	1980
37	2.5	7	2.01	1.0	2.0	38.4	2.5	2170
44	2.5	7	2.01	1.0	2.2	43.6	2.7	2680

0.6/1kV BU (Sheath code)

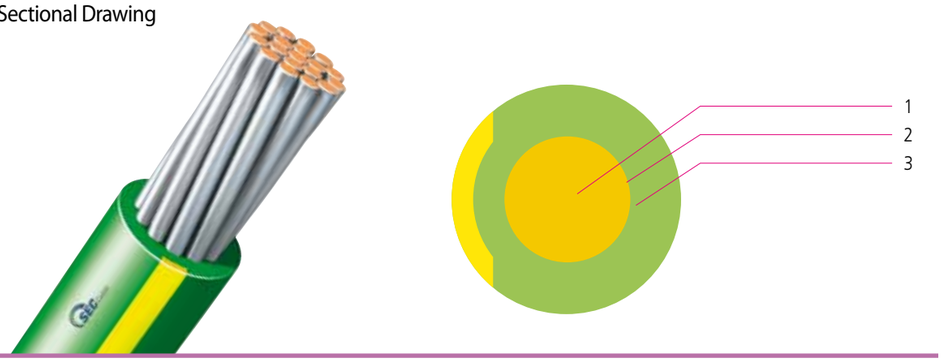
: Fire resistant power & control cable - Multi core

- Cable type : 0.6/1kV BU (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
2+E	25	7	6.42	1.2	1.5	24.0	1.7	1070
	16	7	5.1	1.0				
2+E	35	7	7.56	1.2	1.6	27.1	1.9	1450
	25	7	6.42	1.2				
2+E	50	19	8.9	1.4	1.7	30.4	2.1	1800
	25	7	6.42	1.2				
2+E	70	19	10.7	1.4	1.8	34.3	2.3	2390
	35	7	7.56	1.2				
2+E	95	19	12.6	1.6	2.0	39.6	2.5	3240
	50	19	8.9	1.4				
2+E	120	37	14.21	1.6	2.1	43.5	2.7	4070
	70	19	10.7	1.4				
2+E	150	37	15.75	1.8	2.3	48.4	3.0	5100
	95	19	12.6	1.6				
2+E	185	37	17.64	2.0	2.4	52.7	3.2	6040
	95	19	12.6	1.6				
2+E	240	61	20.25	2.2	2.6	59.1	3.5	7770
	120	37	14.21	1.6				
3+E	25	7	6.42	1.2	1.6	25.7	1.8	1380
	16	7	5.1	1.0				
3+E	35	7	7.56	1.2	1.7	28.9	2.0	1860
	25	7	6.42	1.2				
3+E	50	19	8.9	1.4	1.9	32.7	2.2	2370
	25	7	6.42	1.2				
3+E	70	19	10.7	1.4	2.0	36.9	2.4	3160
	35	7	7.56	1.2				
3+E	95	19	12.6	1.6	2.2	42.5	2.7	4290
	50	19	8.9	1.4				
3+E	120	37	14.21	1.6	2.3	46.7	2.9	5370
	70	19	10.7	1.4				
3+E	150	37	15.75	1.8	2.5	51.8	3.1	6690
	95	19	12.6	1.6				
3+E	185	37	17.64	2.0	2.6	56.5	3.4	8020
	95	19	12.6	1.6				
3+E	240	61	20.25	2.2	2.8	63.4	3.7	10350
	120	37	14.21	1.6				
4+E	25	7	6.42	1.2	1.7	28.4	2.0	1730
	16	7	5.1	1.0				
4+E	35	7	7.56	1.2	1.8	31.9	2.1	2320
	25	7	6.42	1.2				
4+E	50	19	8.9	1.4	2.0	36.1	2.4	2980
	25	7	6.42	1.2				
4+E	70	19	10.7	1.4	2.1	40.7	2.6	3990
	35	7	7.56	1.2				
4+E	95	19	12.6	1.6	2.3	46.9	2.9	5410
	50	19	8.9	1.4				
4+E	120	37	14.21	1.6	2.5	51.7	3.1	6790
	70	19	10.7	1.4				
4+E	150	37	15.75	1.8	2.7	57.4	3.4	8430
	95	19	12.6	1.6				
4+E	185	37	17.64	2.0	2.9	62.8	3.7	10200
	95	19	12.6	1.6				
4+E	240	61	20.25	2.2	3.1	70.4	4.1	13180
	120	37	14.21	1.6				

0.6/1kV RX
: Flame retardant earthing & bonding wires

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
Flame retardant	IEC 60332-1
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓

Designation

Letter	Explain
R	EPR insulation (Halogen free)
X	No armour

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360

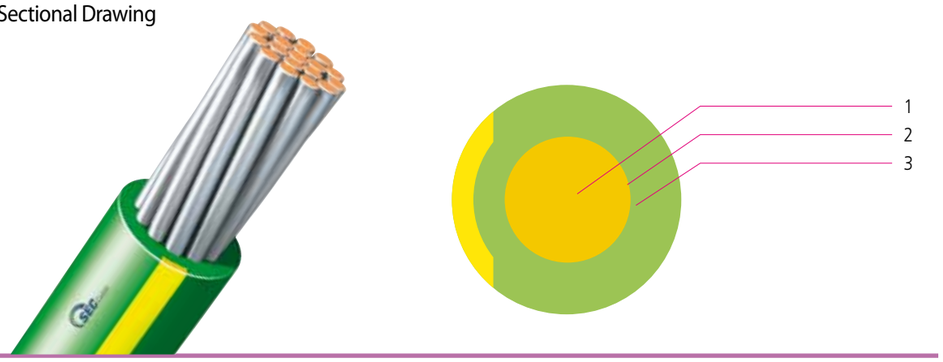
0.6/1kV RX
: Flame retardant earthing & bonding wires

Cable type : 0.6/1kV RX

No. of cores	Conductor*			Insulation	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.			
	mm²	EA	mm	mm	mm	±mm	kg/km
1	1	7	1.29	1.0	5.6	0.8	50
1	1.5	7	1.59	1.0	5.9	0.8	60
1	2.5	7	2.01	1.0	6.3	0.9	70
1	4	7	2.55	1.0	6.8	0.9	90
1	6	7	3.12	1.0	7.4	0.9	110
1	10	7	4.05	1.0	8.5	1.0	170
1	16	7	5.1	1.0	9.6	1.0	230
1	25	7	6.42	1.2	11.5	1.1	350
1	35	7	7.56	1.2	12.6	1.2	460
1	50	19	8.9	1.4	14.6	1.3	610
1	70	19	10.7	1.4	16.3	1.4	820
1	95	19	12.6	1.6	18.8	1.5	1120
1	120	37	14.21	1.6	20.6	1.6	1390
1	150	37	15.75	1.8	22.5	1.7	1690
1	185	37	17.64	2.0	25.2	1.8	2110
1	240	61	20.25	2.2	28.3	2.0	2750
1	300	61	22.68	2.4	31.4	2.1	3420

0.6/1kV UX
: Flame retardant earthing & bonding wires

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 SHF2 (Insulation)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No.0.3 - Bend : -40℃/ Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
U	SHF2 insulation
X	No armour
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	SHF2 or SHF MUD as per IEC 60092-360

0.6/1kV UX
: Flame retardant earthing & bonding wires

Cable type : 0.6/1kV UX

No. of cores	Conductor*			Insulation	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.			
	mm²	EA	mm	mm	mm	±mm	kg/km
1	1	7	1.29	1.0	5.6	0.8	50
1	1.5	7	1.59	1.0	5.9	0.8	60
1	2.5	7	2.01	1.0	6.3	0.9	80
1	4	7	2.55	1.0	6.8	0.9	100
1	6	7	3.12	1.0	7.4	0.9	130
1	10	7	4.05	1.0	8.5	1.0	190
1	16	7	5.1	1.0	9.6	1.0	270
1	25	7	6.42	1.2	11.5	1.1	410
1	35	7	7.56	1.2	12.6	1.2	540
1	50	19	8.9	1.4	14.6	1.3	720
1	70	19	10.7	1.4	16.3	1.4	970
1	95	19	12.6	1.6	18.8	1.5	1330
1	120	37	14.21	1.6	20.6	1.6	1650
1	150	37	15.75	1.8	22.5	1.7	2010
1	185	37	17.64	2.0	25.2	1.8	2520
1	240	61	20.25	2.2	28.3	2.0	3290
1	300	61	22.68	2.4	31.4	2.1	4090

0.6/1kV (1.8/3kV) RFOU (EMC) (Sheath code)

: Flame retardant power & control cable

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃/ Impact : -35℃
Mud resistant	NEK 606 (Mud type only) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O	Tinned copper wire braid (O)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
EMC	Electromagnetic Compatibility

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Inner covering	Halogen free thermoset compound
7. Screen	Copper/Polyester tape
8. Armour	Tinned copper wire braid (O) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV (1.8/3kV) RFOU (EMC) (Sheath code)

: Flame retardant power & control cable

Cable type : 0.6/1kV (1.8/3kV) RFOU (EMC) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3	10	7	4.05	2.2	1.0	20.9	0.3	1.7	26.3	1.6	1130
3	16	7	5.1	2.2	1.0	23.1	0.3	1.8	28.7	1.7	1420
3	25	7	6.42	2.2	1.0	25.9	0.3	1.8	31.5	1.8	1830
3	35	7	7.56	2.2	1.0	28.3	0.3	1.9	34.1	2.0	2250
3	50	19	8.9	2.2	1.2	31.6	0.3	2.1	37.8	2.1	2830
3	70	19	10.7	2.2	1.2	35.4	0.4	2.2	42.2	2.4	3710
3	95	19	12.6	2.4	1.2	40.3	0.4	2.4	47.5	2.6	4850
3	120	37	14.21	2.4	1.4	44.1	0.4	2.5	51.6	2.8	5850
3	150	37	15.75	2.4	1.4	47.3	0.4	2.6	55.0	3.0	6860
3	185	37	17.64	2.4	1.4	51.8	0.4	2.8	59.9	3.2	8300
3	240	61	20.25	2.4	1.6	57.6	0.4	3.0	66.2	3.6	10490
3	300	61	22.68	2.4	1.6	62.8	0.4	3.1	71.6	3.8	12680

0.6/1kV (1.8/3kV) RFOU (VFD) (Sheath code)

: Flame retardant power & control cable

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C/ Impact : -35°C
Mud resistant	NEK 606 (Mud type only) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O	Tinned copper wire braid (O)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	Earth conductor
VFD	Variable frequency drive

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Inner covering	Halogen free thermoset compound
7. Screen	Copper/Polyester tape
8. Armour	Tinned copper wire braid (O) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV (1.8/3kV) RFOU (VFD) (Sheath code)

: Flame retardant power & control cable

Cable type : 0.6/1kV (1.8/3kV) RFOU (VFD) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3+3E	10	7	4.05	2.2	1.0	21.7	0.3	1.7	26.9	1.8	1310
	4	7	2.55	1.0							
3+3E	16	7	5.1	2.2	1.0	24.0	0.3	1.7	29.2	1.9	1650
	6	7	3.12	1.0							
3+3E	25	7	6.42	2.2	1.0	25.9	0.3	1.8	31.3	2.0	2030
	6	7	3.12	1.0							
3+3E	35	7	7.56	2.2	1.0	28.2	0.3	1.9	33.9	2.1	2450
	6	7	3.12	1.0							
3+3E	50	19	8.9	2.2	1.2	35.9	0.3	2.1	41.9	2.5	3530
	10	7	4.05	2.2							
3+3E	70	19	10.7	2.2	1.2	40.0	0.4	2.2	46.7	2.8	4650
	16	7	5.1	2.2							
3+3E	95	19	12.6	2.4	1.2	42.7	0.4	2.4	49.8	2.9	5630
	16	7	5.1	2.2							
3+3E	120	37	14.21	2.4	1.4	47.6	0.4	2.5	54.9	3.2	7020
	25	7	6.42	2.2							
3+3E	150	37	15.75	2.4	1.4	49.4	0.4	2.6	56.8	3.3	7930
	25	7	6.42	2.2							
3+3E	185	37	17.64	2.4	1.4	54.1	0.4	2.8	61.9	3.5	9700
	35	7	7.56	2.2							
3+3E	240	61	20.25	2.4	1.6	60.1	0.4	3.0	68.4	3.9	12280
	50	19	8.9	2.2							

0.6/1kV (1.8/3kV) BFOU (EMC) (Sheath code)

: Flame retardant power & control cable

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	EC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃/ Impact : -35℃
Mud resistant	NEK 606 (Mud type only) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O	Tinned copper wire braid (O)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
EMC	Electromagnetic Compatibility

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Inner covering	Halogen free thermoset compound
7. Screen	Copper/Polyester tape
8. Armour	Tinned copper wire braid (O) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-LV Cable

0.6/1kV (1.8/3kV) BFOU (EMC) (Sheath code)

: Flame retardant power & control cable

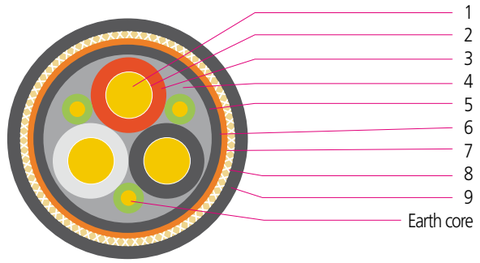
Cable type : 0.6/1kV (1.8/3kV) BFOU (EMC) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3	10	7	4.05	2.2	1.0	21.6	0.3	1.7	27.0	1.6	1160
3	16	7	5.1	2.2	1.0	24.6	0.3	1.8	30.2	1.8	1510
3	25	7	6.42	2.2	1.0	27.4	0.3	1.9	33.2	1.9	1940
3	35	7	7.56	2.2	1.0	29.8	0.3	2.0	35.8	2.0	2370
3	50	19	8.9	2.2	1.2	33.1	0.4	2.1	39.7	2.2	3050
3	70	19	10.7	2.2	1.2	36.9	0.4	2.2	43.7	2.4	3830
3	95	19	12.6	2.4	1.2	41.8	0.4	2.4	49.1	2.7	4970
3	120	37	14.21	2.4	1.4	45.6	0.4	2.6	53.3	2.9	6010
3	150	37	15.75	2.4	1.4	48.7	0.4	2.7	56.7	3.1	7030
3	185	37	17.64	2.4	1.4	52.8	0.4	2.8	60.9	3.3	8400
3	240	61	20.25	2.4	1.6	58.6	0.4	3.0	67.2	3.6	10600
3	300	61	22.68	2.4	1.6	63.9	0.4	3.2	72.8	3.9	12830

0.6/1kV (1.8/3kV) BFOU (VFD) (Sheath code)

: Fire resistant power & control cable

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C/ Impact : -35°C
Mud resistant	NEK 606 (Mud type only) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O	Tinned copper wire braid (O)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
E	Earth conductor
VFD	Variable frequency drive

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used
5. Binder	If necessary
6. Inner covering	Halogen free thermoset compound
7. Screen	Copper/Polyester tape
8. Armour	Tinned copper wire braid (O) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

0.6/1kV (1.8/3kV) BFOU (VFD) (Sheath code)

: Fire resistant power & control cable

Cable type : 0.6/1kV (1.8/3kV) BFOU (VFD) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
3+3E	10	7	4.05	2.2	1.0	22.8	0.3	1.7	28.1	1.9	1370
	4	7	2.55	1.0							
3+3E	16	7	5.1	2.2	1.0	25.6	0.3	1.8	31	2.0	1770
	6	7	3.12	1.0							
3+3E	25	7	6.42	2.2	1.0	27.4	0.3	1.9	33	2.1	2150
	6	7	3.12	1.0							
3+3E	35	7	7.56	2.2	1.0	29.8	0.3	1.9	35.4	2.2	2560
	6	7	3.12	1.0							
3+3E	50	19	8.9	2.2	1.2	37.4	0.4	2.2	44	2.6	3790
	10	7	4.05	2.2							
3+3E	70	19	10.7	2.2	1.2	42.3	0.4	2.3	49.1	2.9	4870
	16	7	5.1	2.2							
3+3E	95	19	12.6	2.4	1.4	45.4	0.4	2.4	52.4	3.1	5900
	16	7	5.1	2.2							
3+3E	120	37	14.21	2.4	1.4	49.8	0.4	2.6	57.3	3.3	7280
	25	7	6.42	2.2							
3+3E	150	37	15.75	2.4	1.4	51.6	0.4	2.7	59.2	3.4	8190
	25	7	6.42	2.2							
3+3E	185	37	17.64	2.4	1.4	56.1	0.4	2.8	63.9	3.6	9910
	35	7	7.56	2.2							
3+3E	240	61	20.25	2.4	1.6	62.1	0.4	3.0	70.4	4.0	12520
	50	19	8.9	2.2							

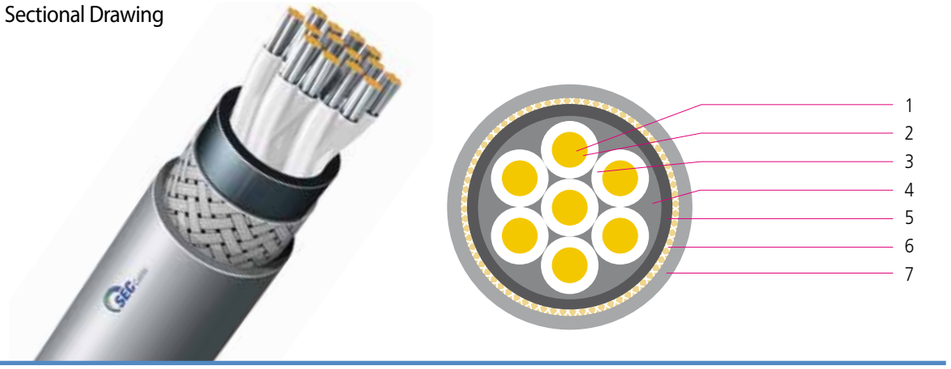
NEK606
Shipboard Cables

INSTRUMENT Cable

150/250V RFOU, RFCU, RFMU (Sheath code)

: Flame retardant instrumentation cable

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	EC 60092-350, IEC 60092-376
Material	EC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C, Impact : -35°C
Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
5. Inner covering	Halogen free thermoset compound
6. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V RFOU, RFCU, RFMU (Sheath code)
: Flame retardant instrumentation cable

- Cable type : 150/250V RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	2	7	1.11	0.6	1.0	7.1	0.2	1.1	10.7	1.1	190
3	3	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	210
4	4	7	1.11	0.6	1.0	8.1	0.2	1.1	11.7	1.1	230
5	5	7	1.11	0.6	1.0	8.8	0.2	1.1	12.4	1.5	260
6	6	7	1.11	0.6	1.0	9.5	0.2	1.1	13.1	1.5	280
7	7	7	1.11	0.6	1.0	9.5	0.2	1.1	13.1	1.5	300
8	8	7	1.11	0.6	1.0	10.3	0.2	1.2	14.1	1.6	330
9	9	7	1.11	0.6	1.0	11.0	0.2	1.2	14.8	1.6	360
10	10	7	1.11	0.6	1.0	11.9	0.3	1.2	16.1	1.8	450
12	12	7	1.11	0.6	1.0	12.3	0.3	1.2	16.5	1.8	480
14	14	7	1.11	0.6	1.0	12.9	0.3	1.2	17.1	1.8	520
15	15	7	1.11	0.6	1.0	13.3	0.3	1.2	17.5	1.9	530
16	16	7	1.11	0.6	1.0	13.6	0.3	1.2	17.8	1.9	560
19	19	7	1.11	0.6	1.0	14.3	0.3	1.3	18.8	2.0	620
20	20	7	1.11	0.6	1.0	14.8	0.3	1.3	19.2	2.0	650
21	21	7	1.11	0.6	1.0	15.1	0.3	1.3	19.5	2.0	670
23	23	7	1.11	0.6	1.0	15.8	0.3	1.3	20.2	2.1	720
27	27	7	1.11	0.6	1.0	17.1	0.3	1.3	21.5	2.1	810
30	30	7	1.11	0.6	1.0	17.7	0.3	1.3	22.2	2.2	860
33	33	7	1.11	0.6	1.0	18.4	0.3	1.3	22.8	2.2	920
37	37	7	1.11	0.6	1.0	19.1	0.3	1.4	23.8	2.2	1000
44	44	7	1.11	0.6	1.0	21.5	0.3	1.4	26.2	2.4	1170
2	2	7	1.29	0.6	1.0	7.5	0.2	1.1	11.1	1.1	210
3	3	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	220
4	4	7	1.29	0.6	1.0	8.6	0.2	1.1	12.1	1.2	250
5	5	7	1.29	0.6	1.0	9.3	0.2	1.1	12.9	1.5	280
6	6	7	1.29	0.6	1.0	10.1	0.2	1.1	13.7	1.5	320
7	7	7	1.29	0.6	1.0	10.1	0.2	1.1	13.7	1.5	330
8	8	7	1.29	0.6	1.0	10.9	0.2	1.2	14.7	1.6	370
9	9	7	1.29	0.6	1.0	11.7	0.3	1.2	15.9	1.6	450
10	10	7	1.29	0.6	1.0	12.7	0.3	1.2	16.9	1.8	500
12	12	7	1.29	0.6	1.0	13.1	0.3	1.2	17.3	1.8	540
14	14	7	1.29	0.6	1.0	13.7	0.3	1.2	17.9	1.8	580
15	15	7	1.29	0.6	1.0	14.1	0.3	1.2	18.3	2.0	600
16	16	7	1.29	0.6	1.0	14.5	0.3	1.3	18.9	2.0	640
19	19	7	1.29	0.6	1.0	15.2	0.3	1.3	19.7	2.0	710
20	20	7	1.29	0.6	1.0	15.7	0.3	1.3	20.1	2.1	740
21	21	7	1.29	0.6	1.0	16.0	0.3	1.3	20.4	2.1	760
23	23	7	1.29	0.6	1.0	16.8	0.3	1.3	21.2	2.1	820
27	27	7	1.29	0.6	1.0	18.2	0.3	1.3	22.6	2.2	930
30	30	7	1.29	0.6	1.0	18.9	0.3	1.4	23.5	2.2	1000
33	33	7	1.29	0.6	1.0	19.6	0.3	1.4	24.2	2.3	1070
37	37	7	1.29	0.6	1.0	20.4	0.3	1.4	25.0	2.3	1150
44	44	7	1.29	0.6	1.0	23.0	0.3	1.4	27.6	2.4	1360

SEC NEK-INSTRUMENT Cable

150/250V RFOU, RFCU, RFMU (Sheath code)
: Flame retardant instrumentation cable

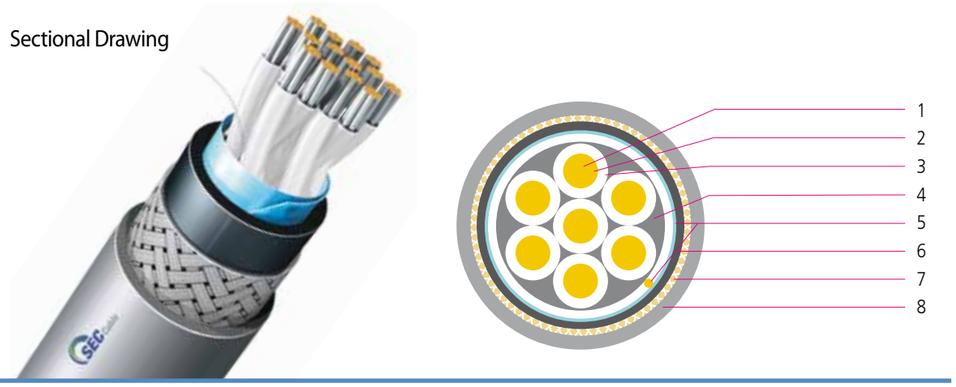
- Cable type : 150/250V RFOU, RFCU, RFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	2	7	1.59	0.7	1.0	8.4	0.2	1.1	12.0	1.1	250
3	3	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	270
4	4	7	1.59	0.7	1.0	9.7	0.2	1.1	13.3	1.2	310
5	5	7	1.59	0.7	1.0	10.6	0.2	1.2	14.4	1.6	360
6	6	7	1.59	0.7	1.0	11.5	0.3	1.2	15.7	1.6	450
7	7	7	1.59	0.7	1.0	11.5	0.3	1.2	15.7	1.6	470
8	8	7	1.59	0.7	1.0	12.5	0.3	1.2	16.7	1.7	520
9	9	7	1.59	0.7	1.0	13.4	0.3	1.2	17.6	1.7	560
10	10	7	1.59	0.7	1.0	14.6	0.3	1.3	19.0	1.9	650
12	12	7	1.59	0.7	1.0	15.1	0.3	1.3	19.5	1.9	690
14	14	7	1.59	0.7	1.0	15.9	0.3	1.3	20.3	2.0	760
15	15	7	1.59	0.7	1.0	16.3	0.3	1.3	20.7	2.1	790
16	16	7	1.59	0.7	1.0	16.7	0.3	1.3	21.1	2.1	830
19	19	7	1.59	0.7	1.0	17.6	0.3	1.3	22.1	2.2	920
20	20	7	1.59	0.7	1.0	18.2	0.3	1.4	22.8	2.2	970
21	21	7	1.59	0.7	1.0	18.6	0.3	1.4	23.2	2.2	1010
23	23	7	1.59	0.7	1.0	19.5	0.3	1.4	24.1	2.3	1080
27	27	7	1.59	0.7	1.0	21.2	0.3	1.4	25.8	2.3	1230
30	30	7	1.59	0.7	1.0	22.0	0.3	1.4	26.6	2.4	1320
33	33	7	1.59	0.7	1.0	22.9	0.3	1.5	27.7	2.4	1430
37	37	7	1.59	0.7	1.0	23.8	0.3	1.5	28.6	2.5	1550
44	44	7	1.59	0.7	1.0	26.8	0.3	1.5	31.7	2.6	1830
2	2	7	2.01	0.7	1.0	9.3	0.2	1.1	12.9	1.2	290
3	3	7	2.01	0.7	1.0	9.8	0.2	1.1	13.4	1.2	330
4	4	7	2.01	0.7	1.0	10.7	0.2	1.2	14.5	1.3	390
5	5	7	2.01	0.7	1.0	11.7	0.3	1.2	15.9	1.6	490
6	6	7	2.01	0.7	1.0	12.8	0.3	1.2	17.0	1.7	550
7	7	7	2.01	0.7	1.0	12.8	0.3	1.2	17.0	1.7	580
8	8	7	2.01	0.7	1.0	13.9	0.3	1.3	18.3	1.8	650
9	9	7	2.01	0.7	1.0	14.9	0.3	1.3	19.3	1.8	720
10	10	7	2.01	0.7	1.0	16.3	0.3	1.3	20.7	2.0	810
12	12	7	2.01	0.7	1.0	16.8	0.3	1.3	21.2	2.0	880
14	14	7	2.01	0.7	1.0	17.7	0.3	1.3	22.1	2.1	970
15	15	7	2.01	0.7	1.0	18.2	0.3	1.4	22.8	2.2	1020
16	16	7	2.01	0.7	1.0	18.7	0.3	1.4	23.3	2.2	1070
19	19	7	2.01	0.7	1.0	19.7	0.3	1.4	24.4	2.3	1200
20	20	7	2.01	0.7	1.0	20.4	0.3	1.4	25.0	2.3	1250
21	21	7	2.01	0.7	1.0	20.8	0.3	1.4	25.4	2.3	1300
23	23	7	2.01	0.7	1.0	21.9	0.3	1.4	26.5	2.4	1400
27	27	7	2.01	0.7	1.0	23.8	0.3	1.5	28.6	2.5	1620
30	30	7	2.01	0.7	1.0	24.7	0.3	1.5	29.5	2.5	1740
33	33	7	2.01	0.7	1.0	25.7	0.3	1.5	30.5	2.6	1880
37	37	7	2.01	0.7	1.0	26.7	0.3	1.5	31.5	2.6	2040
44	44	7	2.01	0.7	1.2	30.4	0.3	1.6	35.4	2.8	2460

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Multi core

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(c)	Collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necssary
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
5. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
6. Inner covering	Halogen free thermoset compound
7. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
8. Sheath	SHF2 or SHF MUD as per IEC 60092-360

NEK-INSTRUMENT Cable

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Multi core

Cable type : 150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	0.75	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	210
3	0.75	7	1.11	0.6	1.0	7.9	0.2	1.1	11.5	1.1	220
4	0.75	7	1.11	0.6	1.0	8.5	0.2	1.1	12.1	1.2	250
5	0.75	7	1.11	0.6	1.0	9.2	0.2	1.1	12.8	1.5	280
6	0.75	7	1.11	0.6	1.0	9.9	0.2	1.1	13.5	1.5	310
7	0.75	7	1.11	0.6	1.0	9.9	0.2	1.1	13.5	1.5	320
8	0.75	7	1.11	0.6	1.0	10.7	0.2	1.2	14.5	1.6	350
9	0.75	7	1.11	0.6	1.0	11.5	0.2	1.2	15.2	1.6	390
10	0.75	7	1.11	0.6	1.0	12.4	0.3	1.2	16.6	1.8	470
12	0.75	7	1.11	0.6	1.0	12.8	0.3	1.2	16.9	1.8	500
14	0.75	7	1.11	0.6	1.0	13.4	0.3	1.2	17.6	1.8	540
15	0.75	7	1.11	0.6	1.0	13.7	0.3	1.2	17.9	1.9	560
16	0.75	7	1.11	0.6	1.0	14.1	0.3	1.2	18.3	2.0	590
19	0.75	7	1.11	0.6	1.0	14.8	0.3	1.3	19.2	2.0	650
20	0.75	7	1.11	0.6	1.0	15.2	0.3	1.3	19.6	2.0	680
21	0.75	7	1.11	0.6	1.0	15.5	0.3	1.3	19.9	2.0	700
23	0.75	7	1.11	0.6	1.0	16.3	0.3	1.3	20.7	2.1	750
27	0.75	7	1.11	0.6	1.0	17.6	0.3	1.3	22.0	2.1	840
30	0.75	7	1.11	0.6	1.0	18.2	0.3	1.3	22.6	2.2	890
33	0.75	7	1.11	0.6	1.0	18.9	0.3	1.3	23.3	2.2	950
37	0.75	7	1.11	0.6	1.0	19.6	0.3	1.4	24.2	2.3	1030
44	0.75	7	1.11	0.6	1.0	22.0	0.3	1.4	26.6	2.4	1210
2	1	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	230
3	1	7	1.29	0.6	1.0	8.3	0.2	1.1	11.9	1.1	250
4	1	7	1.29	0.6	1.0	9.0	0.2	1.1	12.6	1.2	280
5	1	7	1.29	0.6	1.0	9.7	0.2	1.1	13.3	1.5	310
6	1	7	1.29	0.6	1.0	10.5	0.2	1.1	14.1	1.6	340
7	1	7	1.29	0.6	1.0	10.5	0.2	1.1	14.1	1.6	350
8	1	7	1.29	0.6	1.0	11.3	0.2	1.2	15.1	1.6	400
9	1	7	1.29	0.6	1.0	12.1	0.3	1.2	16.3	1.7	480
10	1	7	1.29	0.6	1.0	13.1	0.3	1.2	17.3	1.8	530
12	1	7	1.29	0.6	1.0	13.5	0.3	1.2	17.7	1.8	570
14	1	7	1.29	0.6	1.0	14.2	0.3	1.2	18.4	1.9	610
15	1	7	1.29	0.6	1.0	14.5	0.3	1.2	18.7	2.0	640
16	1	7	1.29	0.6	1.0	14.9	0.3	1.3	19.3	2.0	680
19	1	7	1.29	0.6	1.0	15.7	0.3	1.3	20.1	2.1	740
20	1	7	1.29	0.6	1.0	16.2	0.3	1.3	20.6	2.1	770
21	1	7	1.29	0.6	1.0	16.5	0.3	1.3	20.9	2.1	800
23	1	7	1.29	0.6	1.0	17.3	0.3	1.3	21.7	2.1	850
27	1	7	1.29	0.6	1.0	18.7	0.3	1.3	23.1	2.2	960
30	1	7	1.29	0.6	1.0	19.4	0.3	1.4	24.0	2.2	1040
33	1	7	1.29	0.6	1.0	20.1	0.3	1.4	24.7	2.3	1110
37	1	7	1.29	0.6	1.0	20.9	0.3	1.4	25.5	2.3	1190
44	1	7	1.29	0.6	1.0	23.4	0.3	1.4	28.1	2.5	1400

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Multi core

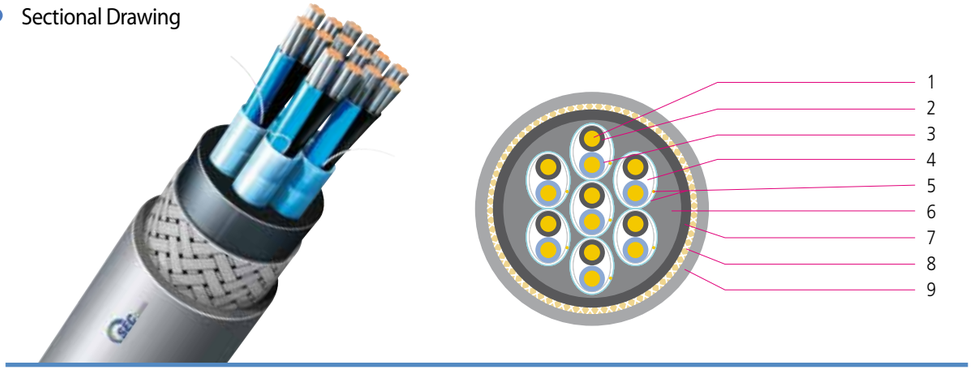
Cable type: 150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	270
3	1.5	7	1.59	0.7	1.0	9.4	0.2	1.1	13.0	1.2	300
4	1.5	7	1.59	0.7	1.0	10.2	0.2	1.1	13.7	1.2	330
5	1.5	7	1.59	0.7	1.0	11.0	0.2	1.2	14.8	1.6	390
6	1.5	7	1.59	0.7	1.0	11.9	0.3	1.2	16.1	1.7	470
7	1.5	7	1.59	0.7	1.0	11.9	0.3	1.2	16.1	1.7	490
8	1.5	7	1.59	0.7	1.0	12.9	0.3	1.2	17.1	1.7	540
9	1.5	7	1.59	0.7	1.0	13.9	0.3	1.2	18.1	1.8	590
10	1.5	7	1.59	0.7	1.0	15.0	0.3	1.3	19.5	1.9	680
12	1.5	7	1.59	0.7	1.0	15.5	0.3	1.3	19.9	1.9	730
14	1.5	7	1.59	0.7	1.0	16.3	0.3	1.3	20.7	2.0	790
15	1.5	7	1.59	0.7	1.0	16.7	0.3	1.3	21.1	2.1	820
16	1.5	7	1.59	0.7	1.0	17.2	0.3	1.3	21.6	2.1	860
19	1.5	7	1.59	0.7	1.0	18.1	0.3	1.3	22.5	2.2	960
20	1.5	7	1.59	0.7	1.0	18.7	0.3	1.4	23.3	2.2	1010
21	1.5	7	1.59	0.7	1.0	19.0	0.3	1.4	23.7	2.2	1040
23	1.5	7	1.59	0.7	1.0	20.0	0.3	1.4	24.6	2.3	1120
27	1.5	7	1.59	0.7	1.0	21.6	0.3	1.4	26.3	2.4	1270
30	1.5	7	1.59	0.7	1.0	22.4	0.3	1.4	27.0	2.4	1360
33	1.5	7	1.59	0.7	1.0	23.3	0.3	1.5	28.1	2.5	1470
37	1.5	7	1.59	0.7	1.0	24.2	0.3	1.5	29.1	2.5	1590
44	1.5	7	1.59	0.7	1.0	27.3	0.3	1.5	32.1	2.7	1880
2	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	320
3	2.5	7	2.01	0.7	1.0	10.3	0.2	1.1	13.9	1.2	360
4	2.5	7	2.01	0.7	1.0	11.2	0.2	1.2	15.0	1.3	420
5	2.5	7	2.01	0.7	1.0	12.2	0.3	1.2	16.4	1.7	520
6	2.5	7	2.01	0.7	1.0	13.2	0.3	1.2	17.4	1.7	580
7	2.5	7	2.01	0.7	1.0	13.2	0.3	1.2	17.4	1.7	610
8	2.5	7	2.01	0.7	1.0	14.3	0.3	1.3	18.8	1.8	680
9	2.5	7	2.01	0.7	1.0	15.4	0.3	1.3	19.8	1.8	750
10	2.5	7	2.01	0.7	1.0	16.8	0.3	1.3	21.2	2.0	840
12	2.5	7	2.01	0.7	1.0	17.3	0.3	1.3	21.7	2.0	910
14	2.5	7	2.01	0.7	1.0	18.2	0.3	1.3	22.6	2.1	1000
15	2.5	7	2.01	0.7	1.0	18.7	0.3	1.4	23.3	2.2	1060
16	2.5	7	2.01	0.7	1.0	19.2	0.3	1.4	23.8	2.2	1110
19	2.5	7	2.01	0.7	1.0	20.2	0.3	1.4	24.8	2.3	1240
20	2.5	7	2.01	0.7	1.0	20.9	0.3	1.4	25.5	2.3	1290
21	2.5	7	2.01	0.7	1.0	21.3	0.3	1.4	25.9	2.3	1340
23	2.5	7	2.01	0.7	1.0	22.4	0.3	1.4	27.0	2.4	1440
27	2.5	7	2.01	0.7	1.0	24.3	0.3	1.5	29.1	2.5	1670
30	2.5	7	2.01	0.7	1.0	25.2	0.3	1.5	30.0	2.5	1790
33	2.5	7	2.01	0.7	1.0	26.2	0.3	1.5	31.0	2.6	1920
37	2.5	7	2.01	0.7	1.0	27.2	0.3	1.5	32.0	2.6	2090
44	2.5	7	2.01	0.7	1.2	30.9	0.3	1.6	35.9	2.8	2510

150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-353
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M(o)	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i)	Individual screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Inner covering	Halogen free thermoset compound
8. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	200
2P	0.75	7	1.11	0.6	1.0	10.9	0.2	1.2	14.7	1.3	320
3P	0.75	7	1.11	0.6	1.0	11.5	0.3	1.2	15.7	1.3	410
4P	0.75	7	1.11	0.6	1.0	12.6	0.3	1.2	16.8	1.4	470
5P	0.75	7	1.11	0.6	1.0	13.9	0.3	1.2	18.1	1.8	540
7P	0.75	7	1.11	0.6	1.0	15.1	0.3	1.3	19.6	1.8	650
8P	0.75	7	1.11	0.6	1.0	16.5	0.3	1.3	20.9	1.9	720
10P	0.75	7	1.11	0.6	1.0	19.4	0.3	1.4	24.0	2.1	910
12P	0.75	7	1.11	0.6	1.0	20.1	0.3	1.4	24.7	2.2	990
14P	0.75	7	1.11	0.6	1.0	21.2	0.3	1.4	25.8	2.2	1,090
16P	0.75	7	1.11	0.6	1.0	22.4	0.3	1.4	27.0	2.4	1,190
19P	0.75	7	1.11	0.6	1.0	23.7	0.3	1.5	28.5	2.5	1,350
20P	0.75	7	1.11	0.6	1.0	24.5	0.3	1.5	29.3	2.5	1,410
24P	0.75	7	1.11	0.6	1.0	28.0	0.3	1.6	33.0	2.7	1,710
32P	0.75	7	1.11	0.6	1.2	30.5	0.3	1.6	35.6	2.8	2,060
37P	0.75	7	1.11	0.6	1.2	32.5	0.3	1.7	37.7	2.9	2,330
1P	1.0	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	210
2P	1.0	7	1.29	0.6	1.0	11.5	0.3	1.2	15.7	1.3	400
3P	1.0	7	1.29	0.6	1.0	12.2	0.3	1.2	16.4	1.4	450
4P	1.0	7	1.29	0.6	1.0	13.4	0.3	1.2	17.6	1.4	530
5P	1.0	7	1.29	0.6	1.0	14.7	0.3	1.3	19.1	1.8	620
7P	1.0	7	1.29	0.6	1.0	16.1	0.3	1.3	20.5	1.9	730
8P	1.0	7	1.29	0.6	1.0	17.5	0.3	1.3	21.9	1.9	820
10P	1.0	7	1.29	0.6	1.0	20.7	0.3	1.4	25.3	2.2	1,040
12P	1.0	7	1.29	0.6	1.0	21.4	0.3	1.4	26.0	2.2	1,130
14P	1.0	7	1.29	0.6	1.0	22.6	0.3	1.4	27.2	2.3	1,250
16P	1.0	7	1.29	0.6	1.0	23.9	0.3	1.5	28.8	2.5	1,390
19P	1.0	7	1.29	0.6	1.0	25.3	0.3	1.5	30.1	2.6	1,560
20P	1.0	7	1.29	0.6	1.0	26.1	0.3	1.5	31.0	2.6	1,630
24P	1.0	7	1.29	0.6	1.0	29.9	0.3	1.6	34.9	2.8	1,980
32P	1.0	7	1.29	0.6	1.2	32.6	0.3	1.7	37.9	2.9	2,430
37P	1.0	7	1.29	0.6	1.2	34.7	0.4	1.7	40.3	3.1	2,830

SEC NEK-INSTRUMENT Cable

150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	250
2P	1.5	7	1.59	0.7	1.0	13.2	0.3	1.2	17.4	1.4	490
3P	1.5	7	1.59	0.7	1.0	14.1	0.3	1.3	18.5	1.5	560
4P	1.5	7	1.59	0.7	1.0	15.5	0.3	1.3	19.9	1.5	660
5P	1.5	7	1.59	0.7	1.0	17.0	0.3	1.3	21.5	1.9	760
7P	1.5	7	1.59	0.7	1.0	18.7	0.3	1.4	23.3	2.0	930
8P	1.5	7	1.59	0.7	1.0	20.4	0.3	1.4	25.0	2.1	1,040
10P	1.5	7	1.59	0.7	1.0	24.1	0.3	1.5	29.0	2.4	1,330
12P	1.5	7	1.59	0.7	1.0	25.0	0.3	1.5	29.8	2.4	1,460
14P	1.5	7	1.59	0.7	1.0	26.4	0.3	1.5	31.2	2.5	1,610
16P	1.5	7	1.59	0.7	1.0	28.0	0.3	1.6	33.0	2.7	1,800
19P	1.5	7	1.59	0.7	1.0	29.6	0.3	1.6	34.6	2.8	2,020
20P	1.5	7	1.59	0.7	1.2	30.8	0.3	1.6	35.8	2.8	2,140
24P	1.5	7	1.59	0.7	1.2	35.2	0.4	1.8	41.1	3.1	2,740
32P	1.5	7	1.59	0.7	1.2	38.2	0.4	1.8	44.1	3.3	3,290
37P	1.5	7	1.59	0.7	1.2	40.7	0.4	1.9	46.8	3.4	3,720
1P	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	290
2P	2.5	7	2.01	0.7	1.0	14.7	0.3	1.3	19.1	1.5	590
3P	2.5	7	2.01	0.7	1.0	15.7	0.3	1.3	20.1	1.6	690
4P	2.5	7	2.01	0.7	1.0	17.3	0.3	1.3	21.7	1.6	810
5P	2.5	7	2.01	0.7	1.0	19.1	0.3	1.4	23.7	2.0	960
7P	2.5	7	2.01	0.7	1.0	20.9	0.3	1.4	25.5	2.1	1,160
8P	2.5	7	2.01	0.7	1.0	22.8	0.3	1.5	27.7	2.2	1,330
10P	2.5	7	2.01	0.7	1.0	27.1	0.3	1.6	32.2	2.6	1,690
12P	2.5	7	2.01	0.7	1.0	28.1	0.3	1.6	33.1	2.6	1,860
14P	2.5	7	2.01	0.7	1.2	29.9	0.3	1.6	34.9	2.7	2,100
16P	2.5	7	2.01	0.7	1.2	31.7	0.3	1.7	36.9	2.9	2,340
19P	2.5	7	2.01	0.7	1.2	33.5	0.4	1.7	39.2	3.0	2,750
20P	2.5	7	2.01	0.7	1.2	34.6	0.4	1.7	40.3	3.1	2,880
24P	2.5	7	2.01	0.7	1.2	39.7	0.4	1.9	45.8	3.3	3,540
32P	2.5	7	2.01	0.7	1.4	43.5	0.4	2.0	49.8	3.5	4,370
37P	2.5	7	2.01	0.7	1.4	46.3	0.4	2.0	52.6	3.7	4,910

150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

- Cable type : 150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	1.11	1.0	7.5	0.2	1.1	11.1	1.1	210
2T	0.75	7	1.11	1.11	1.0	11.3	0.3	1.2	15.5	1.3	400
3T	0.75	7	1.11	1.11	1.0	12.0	0.3	1.2	16.2	1.4	460
4T	0.75	7	1.11	1.11	1.0	13.2	0.3	1.2	17.4	1.4	540
5T	0.75	7	1.11	1.11	1.0	14.5	0.3	1.3	18.9	1.8	630
7T	0.75	7	1.11	1.11	1.0	15.9	0.3	1.3	20.3	1.9	760
8T	0.75	7	1.11	1.11	1.0	17.3	0.3	1.3	21.7	1.9	850
10T	0.75	7	1.11	1.11	1.0	20.4	0.3	1.4	25.0	2.2	1,070
12T	0.75	7	1.11	1.11	1.0	21.1	0.3	1.4	25.7	2.2	1,170
14T	0.75	7	1.11	1.11	1.0	22.3	0.3	1.4	26.9	2.3	1,300
16T	0.75	7	1.11	1.11	1.0	23.6	0.3	1.5	28.4	2.5	1,450
19T	0.75	7	1.11	1.11	1.0	24.9	0.3	1.5	29.7	2.5	1,630
20T	0.75	7	1.11	1.11	1.0	25.7	0.3	1.5	30.5	2.6	1,710
24T	0.75	7	1.11	1.11	1.0	29.4	0.3	1.6	34.4	2.8	2,070
32T	0.75	7	1.11	1.11	1.2	32.1	0.3	1.7	37.3	2.9	2,550
1T	1.0	7	1.29	1.29	1.0	7.9	0.2	1.1	11.5	1.1	230
2T	1.0	7	1.29	1.29	1.0	12.0	0.3	1.2	16.2	1.4	450
3T	1.0	7	1.29	1.29	1.0	12.8	0.3	1.2	17.0	1.4	520
4T	1.0	7	1.29	1.29	1.0	14.0	0.3	1.2	18.2	1.5	610
5T	1.0	7	1.29	1.29	1.0	15.4	0.3	1.3	19.8	1.8	720
7T	1.0	7	1.29	1.29	1.0	16.9	0.3	1.3	21.3	1.9	870
8T	1.0	7	1.29	1.29	1.0	18.4	0.3	1.3	22.8	2.0	970
10T	1.0	7	1.29	1.29	1.0	21.7	0.3	1.4	26.4	2.3	1,230
12T	1.0	7	1.29	1.29	1.0	22.5	0.3	1.4	27.1	2.3	1,360
14T	1.0	7	1.29	1.29	1.0	23.7	0.3	1.5	28.6	2.4	1,530
16T	1.0	7	1.29	1.29	1.0	25.1	0.3	1.5	30.0	2.5	1,690
19T	1.0	7	1.29	1.29	1.0	26.6	0.3	1.5	31.4	2.6	1,910
20T	1.0	7	1.29	1.29	1.0	27.5	0.3	1.5	32.3	2.7	2,000
24T	1.0	7	1.29	1.29	1.2	31.6	0.3	1.6	36.7	2.9	2,450
32T	1.0	7	1.29	1.29	1.2	34.3	0.4	1.7	40.0	3.0	3,120

SEC NEK-INSTRUMENT Cable

150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

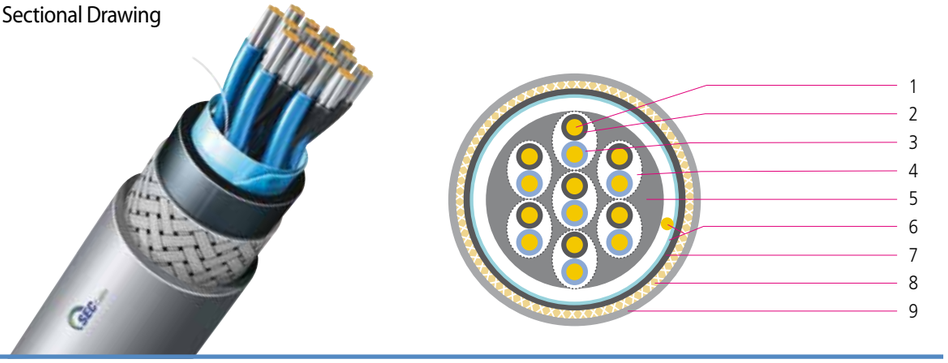
- Cable type : 150/250V RFOU(i), RFCU(i), RFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	270
2T	1.5	7	1.59	0.7	1.0	13.8	0.3	1.3	18.2	1.5	560
3T	1.5	7	1.59	0.7	1.0	14.7	0.3	1.3	19.1	1.5	650
4T	1.5	7	1.59	0.7	1.0	16.2	0.3	1.3	20.6	1.6	780
5T	1.5	7	1.59	0.7	1.0	17.9	0.3	1.3	22.3	2.0	910
7T	1.5	7	1.59	0.7	1.0	19.6	0.3	1.4	24.2	2.1	1,120
8T	1.5	7	1.59	0.7	1.0	21.4	0.3	1.4	26.0	2.1	1,260
10T	1.5	7	1.59	0.7	1.0	25.4	0.3	1.5	30.2	2.5	1,610
12T	1.5	7	1.59	0.7	1.0	26.2	0.3	1.5	31.1	2.5	1,780
14T	1.5	7	1.59	0.7	1.0	27.7	0.3	1.6	32.8	2.6	2,010
16T	1.5	7	1.59	0.7	1.0	29.4	0.3	1.6	34.4	2.8	2,230
19T	1.5	7	1.59	0.7	1.2	31.3	0.3	1.7	36.6	2.9	2,560
20T	1.5	7	1.59	0.7	1.2	32.3	0.3	1.7	37.6	2.9	2,680
24T	1.5	7	1.59	0.7	1.2	37.1	0.4	1.8	42.9	3.2	3,390
32T	1.5	7	1.59	0.7	1.2	40.2	0.4	1.9	46.3	3.4	4,160
1T	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	330
2T	2.5	7	2.01	0.7	1.0	15.4	0.3	1.3	19.8	1.5	680
3T	2.5	7	2.01	0.7	1.0	16.4	0.3	1.3	20.8	1.6	810
4T	2.5	7	2.01	0.7	1.0	18.1	0.3	1.4	22.7	1.7	980
5T	2.5	7	2.01	0.7	1.0	20.0	0.3	1.4	24.6	2.1	1,160
7T	2.5	7	2.01	0.7	1.0	21.9	0.3	1.4	26.6	2.2	1,440
8T	2.5	7	2.01	0.7	1.0	24.0	0.3	1.5	28.8	2.3	1,640
10T	2.5	7	2.01	0.7	1.0	28.5	0.3	1.6	33.5	2.6	2,090
12T	2.5	7	2.01	0.7	1.0	29.5	0.3	1.6	34.6	2.7	2,330
14T	2.5	7	2.01	0.7	1.2	31.4	0.3	1.7	36.7	2.8	2,660
16T	2.5	7	2.01	0.7	1.2	33.3	0.4	1.7	38.9	3.0	3,070
19T	2.5	7	2.01	0.7	1.2	35.2	0.4	1.8	41.1	3.1	3,500
20T	2.5	7	2.01	0.7	1.2	36.4	0.4	1.8	42.3	3.2	3,670
24T	2.5	7	2.01	0.7	1.4	42.2	0.4	1.9	48.3	3.5	4,520
32T	2.5	7	2.01	0.7	1.4	45.8	0.4	2.0	52.1	3.7	5,580

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(c)	Collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necssary
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
6. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
7. Inner covering	Halogen free thermoset compound
8. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

NEK-INSTRUMENT Cable

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	200
2P	0.75	7	1.11	0.6	1.0	10.6	0.2	1.2	14.4	1.3	310
3P	0.75	7	1.11	0.6	1.0	11.2	0.2	1.2	15.0	1.3	350
4P	0.75	7	1.11	0.6	1.0	12.2	0.3	1.2	16.4	1.4	440
5P	0.75	7	1.11	0.6	1.0	13.4	0.3	1.2	17.6	1.7	490
7P	0.75	7	1.11	0.6	1.0	14.5	0.3	1.3	19.0	1.8	580
8P	0.75	7	1.11	0.6	1.0	15.8	0.3	1.3	20.2	1.9	640
10P	0.75	7	1.11	0.6	1.0	18.5	0.3	1.3	22.9	2.1	790
12P	0.75	7	1.11	0.6	1.0	19.1	0.3	1.4	23.7	2.1	870
14P	0.75	7	1.11	0.6	1.0	20.2	0.3	1.4	24.8	2.2	940
16P	0.75	7	1.11	0.6	1.0	21.3	0.3	1.4	25.9	2.3	1,030
19P	0.75	7	1.11	0.6	1.0	22.5	0.3	1.4	27.1	2.4	1,140
20P	0.75	7	1.11	0.6	1.0	23.2	0.3	1.4	27.8	2.4	1,180
24P	0.75	7	1.11	0.6	1.0	26.4	0.3	1.5	31.2	2.6	1,430
32P	0.75	7	1.11	0.6	1.0	28.6	0.3	1.6	33.6	2.7	1,700
37P	0.75	7	1.11	0.6	1.0	30.3	0.3	1.6	35.4	2.8	1,890
1P	1.0	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	210
2P	1.0	7	1.29	0.6	1.0	11.2	0.2	1.2	15.0	1.3	340
3P	1.0	7	1.29	0.6	1.0	11.9	0.3	1.2	16.1	1.4	420
4P	1.0	7	1.29	0.6	1.0	13.0	0.3	1.2	17.2	1.4	480
5P	1.0	7	1.29	0.6	1.0	14.2	0.3	1.2	18.4	1.8	550
7P	1.0	7	1.29	0.6	1.0	15.5	0.3	1.3	19.9	1.8	650
8P	1.0	7	1.29	0.6	1.0	16.8	0.3	1.3	21.2	1.9	720
10P	1.0	7	1.29	0.6	1.0	19.7	0.3	1.4	24.3	2.2	910
12P	1.0	7	1.29	0.6	1.0	20.4	0.3	1.4	25.0	2.2	980
14P	1.0	7	1.29	0.6	1.0	21.5	0.3	1.4	26.1	2.3	1,080
16P	1.0	7	1.29	0.6	1.0	22.7	0.3	1.4	27.3	2.4	1,180
19P	1.0	7	1.29	0.6	1.0	24.0	0.3	1.5	28.8	2.5	1,320
20P	1.0	7	1.29	0.6	1.0	24.7	0.3	1.5	29.6	2.5	1,380
24P	1.0	7	1.29	0.6	1.0	28.2	0.3	1.6	33.2	2.7	1,670
32P	1.0	7	1.29	0.6	1.0	30.5	0.3	1.6	35.5	2.8	1,970
37P	1.0	7	1.29	0.6	1.2	32.6	0.3	1.7	37.9	2.9	2,240

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	250
2P	1.5	7	1.59	0.7	1.0	12.8	0.3	1.2	17.0	1.4	460
3P	1.5	7	1.59	0.7	1.0	13.6	0.3	1.2	17.8	1.4	520
4P	1.5	7	1.59	0.7	1.0	14.9	0.3	1.3	19.3	1.5	610
5P	1.5	7	1.59	0.7	1.0	16.3	0.3	1.3	20.7	1.9	700
7P	1.5	7	1.59	0.7	1.0	17.8	0.3	1.3	22.2	2.0	830
8P	1.5	7	1.59	0.7	1.0	19.4	0.3	1.4	24.0	2.0	940
10P	1.5	7	1.59	0.7	1.0	22.9	0.3	1.4	27.5	2.3	1,170
12P	1.5	7	1.59	0.7	1.0	23.7	0.3	1.5	28.5	2.4	1,290
14P	1.5	7	1.59	0.7	1.0	25.0	0.3	1.5	29.8	2.4	1,420
16P	1.5	7	1.59	0.7	1.0	26.4	0.3	1.5	31.2	2.6	1,550
19P	1.5	7	1.59	0.7	1.0	27.9	0.3	1.6	32.9	2.7	1,750
20P	1.5	7	1.59	0.7	1.0	28.8	0.3	1.6	33.8	2.7	1,830
24P	1.5	7	1.59	0.7	1.2	33.1	0.3	1.7	38.4	3.0	2,250
32P	1.5	7	1.59	0.7	1.2	35.9	0.4	1.8	41.7	3.1	2,820
37P	1.5	7	1.59	0.7	1.2	38.1	0.4	1.8	44.0	3.2	3,150
1P	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	290
2P	2.5	7	2.01	0.7	1.0	14.2	0.3	1.3	18.6	1.5	560
3P	2.5	7	2.01	0.7	1.0	15.1	0.3	1.3	19.5	1.5	640
4P	2.5	7	2.01	0.7	1.0	16.6	0.3	1.3	21.0	1.6	750
5P	2.5	7	2.01	0.7	1.0	18.2	0.3	1.3	22.6	2.0	860
7P	2.5	7	2.01	0.7	1.0	19.9	0.3	1.4	24.5	2.1	1,050
8P	2.5	7	2.01	0.7	1.0	21.7	0.3	1.4	26.3	2.2	1,180
10P	2.5	7	2.01	0.7	1.0	25.7	0.3	1.5	30.5	2.5	1,500
12P	2.5	7	2.01	0.7	1.0	26.6	0.3	1.5	31.4	2.5	1,640
14P	2.5	7	2.01	0.7	1.0	28.0	0.3	1.6	33.1	2.6	1,840
16P	2.5	7	2.01	0.7	1.0	29.7	0.3	1.6	34.7	2.8	2,030
19P	2.5	7	2.01	0.7	1.2	31.6	0.3	1.7	36.8	2.9	2,320
20P	2.5	7	2.01	0.7	1.2	32.6	0.3	1.7	37.8	2.9	2,420
24P	2.5	7	2.01	0.7	1.2	37.3	0.4	1.8	43.1	3.2	3,070
32P	2.5	7	2.01	0.7	1.2	40.4	0.4	1.9	46.5	3.4	3,720
37P	2.5	7	2.01	0.7	1.4	43.4	0.4	1.9	49.5	3.5	4,220

SEC NEK-INSTRUMENT Cable

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	210
2T	0.75	7	1.11	0.6	1.0	11.8	0.3	1.2	15.9	1.3	410
3T	0.75	7	1.11	0.6	1.0	12.5	0.3	1.2	16.6	1.4	450
4T	0.75	7	1.11	0.6	1.0	13.6	0.3	1.2	17.8	1.4	520
5T	0.75	7	1.11	0.6	1.0	14.9	0.3	1.3	19.3	1.8	610
7T	0.75	7	1.11	0.6	1.0	16.3	0.3	1.3	20.7	1.9	720
8T	0.75	7	1.11	0.6	1.0	17.7	0.3	1.3	22.1	2.0	800
10T	0.75	7	1.11	0.6	1.0	20.8	0.3	1.4	25.4	2.2	1,000
12T	0.75	7	1.11	0.6	1.0	21.5	0.3	1.4	26.1	2.3	1,090
14T	0.75	7	1.11	0.6	1.0	22.7	0.3	1.4	27.3	2.3	1,200
16T	0.75	7	1.11	0.6	1.0	24.0	0.3	1.5	28.8	2.5	1,330
19T	0.75	7	1.11	0.6	1.0	25.3	0.3	1.5	30.2	2.6	1,480
20T	0.75	7	1.11	0.6	1.0	26.1	0.3	1.5	31.0	2.6	1,550
24T	0.75	7	1.11	0.6	1.0	29.8	0.3	1.6	34.9	2.8	1,870
32T	0.75	7	1.11	0.6	1.2	32.5	0.3	1.7	37.8	2.9	2,280
1T	1.0	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	230
2T	1.0	7	1.29	0.6	1.0	12.5	0.3	1.2	16.7	1.4	450
3T	1.0	7	1.29	0.6	1.0	13.2	0.3	1.2	17.4	1.4	510
4T	1.0	7	1.29	0.6	1.0	14.5	0.3	1.2	18.7	1.5	590
5T	1.0	7	1.29	0.6	1.0	15.9	0.3	1.3	20.3	1.9	680
7T	1.0	7	1.29	0.6	1.0	17.3	0.3	1.3	21.7	1.9	810
8T	1.0	7	1.29	0.6	1.0	18.8	0.3	1.3	23.2	2.0	910
10T	1.0	7	1.29	0.6	1.0	22.2	0.3	1.4	26.8	2.3	1,140
12T	1.0	7	1.29	0.6	1.0	23.0	0.3	1.4	27.6	2.3	1,250
14T	1.0	7	1.29	0.6	1.0	24.2	0.3	1.5	29.0	2.4	1,390
16T	1.0	7	1.29	0.6	1.0	25.6	0.3	1.5	30.4	2.6	1,540
19T	1.0	7	1.29	0.6	1.0	27.1	0.3	1.5	31.9	2.6	1,720
20T	1.0	7	1.29	0.6	1.0	27.9	0.3	1.5	32.7	2.7	1,790
24T	1.0	7	1.29	0.6	1.2	32.1	0.3	1.6	37.1	2.9	2,200
32T	1.0	7	1.29	0.6	1.2	34.8	0.4	1.7	40.4	3.1	2,770

150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

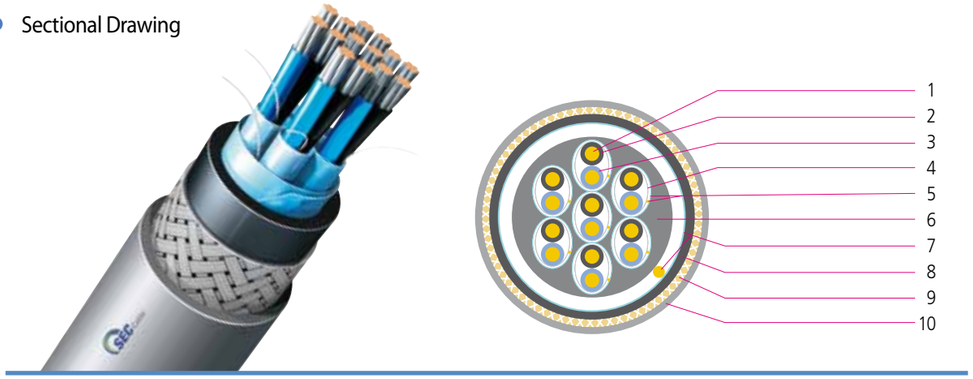
Cable type : 150/250V RFOU(c), RFCU(c), RFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	270
2T	1.5	7	1.59	0.7	1.0	14.3	0.3	1.3	18.7	1.5	560
3T	1.5	7	1.59	0.7	1.0	15.2	0.3	1.3	19.6	1.5	640
4T	1.5	7	1.59	0.7	1.0	16.7	0.3	1.3	21.1	1.6	750
5T	1.5	7	1.59	0.7	1.0	18.3	0.3	1.3	22.7	2.0	870
7T	1.5	7	1.59	0.7	1.0	20.0	0.3	1.4	24.6	2.1	1,060
8T	1.5	7	1.59	0.7	1.0	21.8	0.3	1.4	26.4	2.2	1,190
10T	1.5	7	1.59	0.7	1.0	25.8	0.3	1.5	30.6	2.5	1,510
12T	1.5	7	1.59	0.7	1.0	26.7	0.3	1.5	31.5	2.5	1,660
14T	1.5	7	1.59	0.7	1.0	28.2	0.3	1.6	33.2	2.6	1,860
16T	1.5	7	1.59	0.7	1.0	29.8	0.3	1.6	34.9	2.8	2,060
19T	1.5	7	1.59	0.7	1.2	31.8	0.3	1.7	37.0	2.9	2,350
20T	1.5	7	1.59	0.7	1.2	32.8	0.3	1.7	38.0	2.9	2,460
24T	1.5	7	1.59	0.7	1.2	37.5	0.4	1.8	43.4	3.2	3,120
32T	1.5	7	1.59	0.7	1.2	40.7	0.4	1.9	46.8	3.4	3,790
1T	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	330
2T	2.5	7	2.01	0.7	1.0	15.9	0.3	1.3	20.3	1.6	680
3T	2.5	7	2.01	0.7	1.0	16.9	0.3	1.3	21.3	1.6	800
4T	2.5	7	2.01	0.7	1.0	18.6	0.3	1.4	23.2	1.7	950
5T	2.5	7	2.01	0.7	1.0	20.5	0.3	1.4	25.1	2.1	1,110
7T	2.5	7	2.01	0.7	1.0	22.4	0.3	1.4	27.0	2.2	1,360
8T	2.5	7	2.01	0.7	1.0	24.5	0.3	1.5	29.3	2.3	1,550
10T	2.5	7	2.01	0.7	1.0	29.0	0.3	1.6	34.0	2.6	1,970
12T	2.5	7	2.01	0.7	1.0	30.0	0.3	1.6	35.0	2.7	2,180
14T	2.5	7	2.01	0.7	1.2	31.9	0.3	1.7	37.2	2.8	2,480
16T	2.5	7	2.01	0.7	1.2	33.8	0.4	1.7	39.4	3.0	2,860
19T	2.5	7	2.01	0.7	1.2	35.7	0.4	1.8	41.6	3.1	3,240
20T	2.5	7	2.01	0.7	1.2	36.9	0.4	1.8	42.8	3.2	3,400
24T	2.5	7	2.01	0.7	1.4	42.7	0.4	1.9	48.8	3.5	4,190
32T	2.5	7	2.01	0.7	1.4	46.3	0.4	2.0	52.6	3.7	5,120

150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i/c)	Individual and collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. Individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
8. Inner sheath	Halogen free thermoset compound
9. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
10. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	200
2P	0.75	7	1.11	0.6	1.0	11.3	0.2	1.2	15.1	1.3	350
3P	0.75	7	1.11	0.6	1.0	11.9	0.3	1.2	16.1	1.4	430
4P	0.75	7	1.11	0.6	1.0	13.1	0.3	1.2	17.2	1.4	500
5P	0.75	7	1.11	0.6	1.0	14.3	0.3	1.2	18.5	1.8	570
7P	0.75	7	1.11	0.6	1.0	15.6	0.3	1.3	20.0	1.8	680
8P	0.75	7	1.11	0.6	1.0	16.9	0.3	1.3	21.3	1.9	750
10P	0.75	7	1.11	0.6	1.0	19.9	0.3	1.4	24.5	2.2	940
12P	0.75	7	1.11	0.6	1.0	20.5	0.3	1.4	25.1	2.2	1,020
14P	0.75	7	1.11	0.6	1.0	21.6	0.3	1.4	26.2	2.3	1,120
16P	0.75	7	1.11	0.6	1.0	22.9	0.3	1.4	27.5	2.4	1,230
19P	0.75	7	1.11	0.6	1.0	24.1	0.3	1.5	29.0	2.5	1,390
20P	0.75	7	1.11	0.6	1.0	24.9	0.3	1.5	29.7	2.5	1,450
24P	0.75	7	1.11	0.6	1.0	28.4	0.3	1.6	33.4	2.7	1,760
32P	0.75	7	1.11	0.6	1.2	31.0	0.3	1.6	36.0	2.8	2,110
37P	0.75	7	1.11	0.6	1.2	32.9	0.3	1.7	38.1	3.0	2,380
1P	1.0	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	210
2P	1.0	7	1.29	0.6	1.0	12.0	0.3	1.2	16.1	1.4	430
3P	1.0	7	1.29	0.6	1.0	12.7	0.3	1.2	16.9	1.4	480
4P	1.0	7	1.29	0.6	1.0	13.9	0.3	1.2	18.0	1.4	560
5P	1.0	7	1.29	0.6	1.0	15.2	0.3	1.3	19.6	1.8	650
7P	1.0	7	1.29	0.6	1.0	16.5	0.3	1.3	21.0	1.9	770
8P	1.0	7	1.29	0.6	1.0	18.0	0.3	1.3	22.4	2.0	860
10P	1.0	7	1.29	0.6	1.0	21.2	0.3	1.4	25.8	2.2	1,080
12P	1.0	7	1.29	0.6	1.0	21.9	0.3	1.4	26.5	2.3	1,170
14P	1.0	7	1.29	0.6	1.0	23.1	0.3	1.4	27.7	2.3	1,290
16P	1.0	7	1.29	0.6	1.0	24.4	0.3	1.5	29.2	2.5	1,440
19P	1.0	7	1.29	0.6	1.0	25.8	0.3	1.5	30.6	2.6	1,610
20P	1.0	7	1.29	0.6	1.0	26.6	0.3	1.5	31.4	2.6	1,680
24P	1.0	7	1.29	0.6	1.0	30.4	0.3	1.6	35.4	2.8	2,040
32P	1.0	7	1.29	0.6	1.2	33.1	0.3	1.7	38.3	3.0	2,480
37P	1.0	7	1.29	0.6	1.2	35.2	0.4	1.7	40.8	3.1	2,890

SEC NEK-INSTRUMENT Cable

150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	250
2P	1.5	7	1.59	0.7	1.0	13.7	0.3	1.2	17.9	1.4	520
3P	1.5	7	1.59	0.7	1.0	14.5	0.3	1.3	18.9	1.5	600
4P	1.5	7	1.59	0.7	1.0	15.9	0.3	1.3	20.3	1.6	690
5P	1.5	7	1.59	0.7	1.0	17.5	0.3	1.3	21.9	1.9	800
7P	1.5	7	1.59	0.7	1.0	19.1	0.3	1.4	23.7	2.0	970
8P	1.5	7	1.59	0.7	1.0	20.8	0.3	1.4	25.4	2.1	1,080
10P	1.5	7	1.59	0.7	1.0	24.6	0.3	1.5	29.4	2.4	1,370
12P	1.5	7	1.59	0.7	1.0	25.4	0.3	1.5	30.3	2.5	1,500
14P	1.5	7	1.59	0.7	1.0	26.9	0.3	1.5	31.7	2.5	1,660
16P	1.5	7	1.59	0.7	1.0	28.4	0.3	1.6	33.4	2.7	1,850
19P	1.5	7	1.59	0.7	1.0	30.0	0.3	1.6	35.1	2.8	2,070
20P	1.5	7	1.59	0.7	1.2	31.2	0.3	1.6	36.2	2.9	2,190
24P	1.5	7	1.59	0.7	1.2	35.7	0.4	1.8	41.5	3.1	2,800
32P	1.5	7	1.59	0.7	1.2	38.7	0.4	1.8	44.5	3.3	3,350
37P	1.5	7	1.59	0.7	1.2	41.1	0.4	1.9	47.2	3.4	3,790
1P	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	290
2P	2.5	7	2.01	0.7	1.0	15.2	0.3	1.3	19.6	1.5	630
3P	2.5	7	2.01	0.7	1.0	16.1	0.3	1.3	20.6	1.6	720
4P	2.5	7	2.01	0.7	1.0	17.8	0.3	1.3	22.2	1.7	850
5P	2.5	7	2.01	0.7	1.0	19.5	0.3	1.4	24.1	2.1	1,000
7P	2.5	7	2.01	0.7	1.0	21.4	0.3	1.4	26.0	2.1	1,210
8P	2.5	7	2.01	0.7	1.0	23.3	0.3	1.5	28.1	2.3	1,370
10P	2.5	7	2.01	0.7	1.0	27.6	0.3	1.6	32.6	2.6	1,740
12P	2.5	7	2.01	0.7	1.0	28.6	0.3	1.6	33.6	2.6	1,920
14P	2.5	7	2.01	0.7	1.2	30.4	0.3	1.6	35.4	2.7	2,150
16P	2.5	7	2.01	0.7	1.2	32.2	0.3	1.7	37.4	2.9	2,400
19P	2.5	7	2.01	0.7	1.2	34.0	0.4	1.7	39.7	3.0	2,810
20P	2.5	7	2.01	0.7	1.2	35.1	0.4	1.7	40.8	3.1	2,940
24P	2.5	7	2.01	0.7	1.2	40.2	0.4	1.9	46.3	3.4	3,610
32P	2.5	7	2.01	0.7	1.4	44.0	0.4	2.0	50.3	3.6	4,440
37P	2.5	7	2.01	0.7	1.4	46.8	0.4	2.0	53.1	3.7	4,990

150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.0	7.5	0.2	1.1	11.1	1.1	210
2T	0.75	7	1.11	0.6	1.0	11.8	0.3	1.2	15.9	1.3	430
3T	0.75	7	1.11	0.6	1.0	12.5	0.3	1.2	16.6	1.4	490
4T	0.75	7	1.11	0.6	1.0	13.6	0.3	1.2	17.8	1.4	560
5T	0.75	7	1.11	0.6	1.0	14.9	0.3	1.3	19.3	1.8	660
7T	0.75	7	1.11	0.6	1.0	16.3	0.3	1.3	20.7	1.9	790
8T	0.75	7	1.11	0.6	1.0	17.7	0.3	1.3	22.1	2.0	880
10T	0.75	7	1.11	0.6	1.0	20.8	0.3	1.4	25.4	2.2	1,100
12T	0.75	7	1.11	0.6	1.0	21.5	0.3	1.4	26.1	2.3	1,210
14T	0.75	7	1.11	0.6	1.0	22.7	0.3	1.4	27.3	2.3	1,340
16T	0.75	7	1.11	0.6	1.0	24.0	0.3	1.5	28.8	2.5	1,490
19T	0.75	7	1.11	0.6	1.0	25.3	0.3	1.5	30.2	2.6	1,670
20T	0.75	7	1.11	0.6	1.0	26.1	0.3	1.5	31.0	2.6	1,750
24T	0.75	7	1.11	0.6	1.0	29.8	0.3	1.6	34.9	2.8	2,120
32T	0.75	7	1.11	0.6	1.2	32.5	0.3	1.7	37.8	2.9	2,610
1T	1.0	7	1.29	0.6	1.0	7.9	0.2	1.1	11.5	1.1	230
2T	1.0	7	1.29	0.6	1.0	12.5	0.3	1.2	16.7	1.4	470
3T	1.0	7	1.29	0.6	1.0	13.2	0.3	1.2	17.4	1.4	550
4T	1.0	7	1.29	0.6	1.0	14.5	0.3	1.2	18.7	1.5	640
5T	1.0	7	1.29	0.6	1.0	15.9	0.3	1.3	20.3	1.9	750
7T	1.0	7	1.29	0.6	1.0	17.3	0.3	1.3	21.7	1.9	900
8T	1.0	7	1.29	0.6	1.0	18.8	0.3	1.3	23.2	2.0	1,010
10T	1.0	7	1.29	0.6	1.0	22.2	0.3	1.4	26.8	2.3	1,270
12T	1.0	7	1.29	0.6	1.0	23.0	0.3	1.4	27.6	2.3	1,400
14T	1.0	7	1.29	0.6	1.0	24.2	0.3	1.5	29.0	2.4	1,570
16T	1.0	7	1.29	0.6	1.0	25.6	0.3	1.5	30.4	2.6	1,740
19T	1.0	7	1.29	0.6	1.0	27.1	0.3	1.5	31.9	2.6	1,960
20T	1.0	7	1.29	0.6	1.0	27.9	0.3	1.5	32.7	2.7	2,050
24T	1.0	7	1.29	0.6	1.2	32.1	0.3	1.6	37.1	2.9	2,500
32T	1.0	7	1.29	0.6	1.2	34.8	0.4	1.7	40.4	3.1	3,180

SEC NEK-INSTRUMENT Cable

150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RFOU(i/c), RFCU(i/c), RFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.0	8.9	0.2	1.1	12.5	1.2	270
2T	1.5	7	1.59	0.7	1.0	14.3	0.3	1.3	18.7	1.5	590
3T	1.5	7	1.59	0.7	1.0	15.2	0.3	1.3	19.6	1.5	690
4T	1.5	7	1.59	0.7	1.0	16.7	0.3	1.3	21.1	1.6	810
5T	1.5	7	1.59	0.7	1.0	18.3	0.3	1.3	22.7	2.0	940
7T	1.5	7	1.59	0.7	1.0	20.0	0.3	1.4	24.6	2.1	1,160
8T	1.5	7	1.59	0.7	1.0	21.8	0.3	1.4	26.4	2.2	1,300
10T	1.5	7	1.59	0.7	1.0	25.8	0.3	1.5	30.6	2.5	1,650
12T	1.5	7	1.59	0.7	1.0	26.7	0.3	1.5	31.5	2.5	1,830
14T	1.5	7	1.59	0.7	1.0	28.2	0.3	1.6	33.2	2.6	2,050
16T	1.5	7	1.59	0.7	1.0	29.8	0.3	1.6	34.9	2.8	2,280
19T	1.5	7	1.59	0.7	1.2	31.8	0.3	1.7	37.0	2.9	2,610
20T	1.5	7	1.59	0.7	1.2	32.8	0.3	1.7	38.0	2.9	2,740
24T	1.5	7	1.59	0.7	1.2	37.5	0.4	1.8	43.4	3.2	3,450
32T	1.5	7	1.59	0.7	1.2	40.7	0.4	1.9	46.8	3.4	4,230
1T	2.5	7	2.01	0.7	1.0	9.8	0.2	1.1	13.3	1.2	330
2T	2.5	7	2.01	0.7	1.0	15.9	0.3	1.3	20.3	1.6	720
3T	2.5	7	2.01	0.7	1.0	16.9	0.3	1.3	21.3	1.6	850
4T	2.5	7	2.01	0.7	1.0	18.6	0.3	1.4	23.2	1.7	1,020
5T	2.5	7	2.01	0.7	1.0	20.5	0.3	1.4	25.1	2.1	1,200
7T	2.5	7	2.01	0.7	1.0	22.4	0.3	1.4	27.0	2.2	1,480
8T	2.5	7	2.01	0.7	1.0	24.5	0.3	1.5	29.3	2.3	1,690
10T	2.5	7	2.01	0.7	1.0	29.0	0.3	1.6	34.0	2.6	2,140
12T	2.5	7	2.01	0.7	1.0	30.0	0.3	1.6	35.0	2.7	2,380
14T	2.5	7	2.01	0.7	1.2	31.9	0.3	1.7	37.2	2.8	2,710
16T	2.5	7	2.01	0.7	1.2	33.8	0.4	1.7	39.4	3.0	3,130
19T	2.5	7	2.01	0.7	1.2	35.7	0.4	1.8	41.6	3.1	3,560
20T	2.5	7	2.01	0.7	1.2	36.9	0.4	1.8	42.8	3.2	3,730
24T	2.5	7	2.01	0.7	1.4	42.7	0.4	1.9	48.8	3.5	4,590
32T	2.5	7	2.01	0.7	1.4	46.3	0.4	2.0	52.6	3.7	5,660

150/250V BFOU, BFCU, BFMU (Sheath code)

: Fire resistant instrumentation cable - Multi core

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
5. Inner covering	Halogen free thermoset compound
6. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-INSTRUMENT Cable

150/250V BFOU, BFCU, BFMU (Sheath code)

: Fire resistant instrumentation cable - Multi core

Cable type : 150/250V BFOU, BFCU, BFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	0.75	7	1.11	0.6	1.0	8.7	0.2	1.1	12.3	1.2	240
3	0.75	7	1.11	0.6	1.0	9.2	0.2	1.1	12.8	1.2	260
4	0.75	7	1.11	0.6	1.0	10.0	0.2	1.1	13.6	1.2	290
5	0.75	7	1.11	0.6	1.0	10.9	0.2	1.1	14.5	1.6	330
6	0.75	7	1.11	0.6	1.0	11.9	0.2	1.1	15.5	1.6	360
7	0.75	7	1.11	0.6	1.0	11.9	0.2	1.1	15.5	1.6	370
8	0.75	7	1.11	0.6	1.0	12.9	0.2	1.2	16.6	1.7	420
9	0.75	7	1.11	0.6	1.0	13.8	0.2	1.2	17.6	1.7	470
10	0.75	7	1.11	0.6	1.0	15.1	0.3	1.2	19.3	1.9	580
12	0.75	7	1.11	0.6	1.0	15.6	0.3	1.2	19.8	1.9	610
14	0.75	7	1.11	0.6	1.0	16.4	0.3	1.2	20.6	2.0	660
15	0.75	7	1.11	0.6	1.0	16.8	0.3	1.2	21.0	2.1	690
16	0.75	7	1.11	0.6	1.0	17.3	0.3	1.2	21.5	2.1	720
19	0.75	7	1.11	0.6	1.0	18.2	0.3	1.3	22.7	2.2	800
20	0.75	7	1.11	0.6	1.0	18.8	0.3	1.3	23.2	2.4	830
21	0.75	7	1.11	0.6	1.0	19.2	0.3	1.3	23.6	2.4	860
23	0.75	7	1.11	0.6	1.0	20.2	0.3	1.3	24.6	2.5	930
27	0.75	7	1.11	0.6	1.0	21.9	0.3	1.3	26.3	2.6	1,050
30	0.75	7	1.11	0.6	1.0	22.7	0.3	1.3	27.2	2.6	1,120
33	0.75	7	1.11	0.6	1.0	23.7	0.3	1.3	28.1	2.7	1,190
37	0.75	7	1.11	0.6	1.0	24.6	0.3	1.4	29.2	2.7	1,290
44	0.75	7	1.11	0.6	1.0	27.8	0.3	1.4	32.4	2.9	1,530
2	1.0	7	1.29	0.6	1.0	9.0	0.2	1.1	12.6	1.2	260
3	1.0	7	1.29	0.6	1.0	9.6	0.2	1.1	13.2	1.2	280
4	1.0	7	1.29	0.6	1.0	10.4	0.2	1.1	14.0	1.2	310
5	1.0	7	1.29	0.6	1.0	11.4	0.2	1.1	15.0	1.6	350
6	1.0	7	1.29	0.6	1.0	12.4	0.2	1.1	16.0	1.6	400
7	1.0	7	1.29	0.6	1.0	12.4	0.2	1.1	16.0	1.6	410
8	1.0	7	1.29	0.6	1.0	13.5	0.2	1.2	17.2	1.7	460
9	1.0	7	1.29	0.6	1.0	14.5	0.3	1.2	18.7	1.8	560
10	1.0	7	1.29	0.6	1.0	15.8	0.3	1.2	20.0	1.9	630
12	1.0	7	1.29	0.6	1.0	16.3	0.3	1.2	20.5	2.0	680
14	1.0	7	1.29	0.6	1.0	17.2	0.3	1.2	21.4	2.0	730
15	1.0	7	1.29	0.6	1.0	17.6	0.3	1.2	21.8	2.1	760
16	1.0	7	1.29	0.6	1.0	18.1	0.3	1.3	22.6	2.2	810
19	1.0	7	1.29	0.6	1.0	19.1	0.3	1.3	23.6	2.2	890
20	1.0	7	1.29	0.6	1.0	19.8	0.3	1.3	24.2	2.5	930
21	1.0	7	1.29	0.6	1.0	20.2	0.3	1.3	24.6	2.5	960
23	1.0	7	1.29	0.6	1.0	21.2	0.3	1.3	25.6	2.5	1,030
27	1.0	7	1.29	0.6	1.0	23.0	0.3	1.3	27.4	2.6	1,170
30	1.0	7	1.29	0.6	1.0	23.9	0.3	1.4	28.5	2.7	1,270
33	1.0	7	1.29	0.6	1.0	24.9	0.3	1.4	29.5	2.7	1,350
37	1.0	7	1.29	0.6	1.0	25.9	0.3	1.4	30.5	2.8	1,450
44	1.0	7	1.29	0.6	1.0	29.2	0.3	1.4	33.8	2.9	1,730

150/250V BFOU, BFCU, BFMU (Sheath code)

: Fire resistant instrumentation cable - Multi core

Cable type : 150/250V BFOU, BFCU, BFMU (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	1.5	7	1.59	0.7	1.0	10.0	0.2	1.1	13.6	1.2	300
3	1.5	7	1.59	0.7	1.0	10.6	0.2	1.1	14.2	1.3	330
4	1.5	7	1.59	0.7	1.0	11.6	0.2	1.1	15.2	1.3	380
5	1.5	7	1.59	0.7	1.0	12.7	0.2	1.2	16.5	1.7	440
6	1.5	7	1.59	0.7	1.0	13.8	0.3	1.2	18.0	1.7	540
7	1.5	7	1.59	0.7	1.0	13.8	0.3	1.2	18.0	1.7	560
8	1.5	7	1.59	0.7	1.0	15.0	0.3	1.2	19.2	1.8	620
9	1.5	7	1.59	0.7	1.0	16.2	0.3	1.2	20.4	1.9	690
10	1.5	7	1.59	0.7	1.0	17.7	0.3	1.3	22.1	2.1	790
12	1.5	7	1.59	0.7	1.0	18.3	0.3	1.3	22.7	2.1	850
14	1.5	7	1.59	0.7	1.0	19.3	0.3	1.3	23.7	2.1	930
15	1.5	7	1.59	0.7	1.0	19.8	0.3	1.3	24.2	2.3	960
16	1.5	7	1.59	0.7	1.0	20.4	0.3	1.3	24.8	2.3	1,010
19	1.5	7	1.59	0.7	1.0	21.5	0.3	1.3	26.0	2.3	1,120
20	1.5	7	1.59	0.7	1.0	22.2	0.3	1.4	26.8	2.6	1,180
21	1.5	7	1.59	0.7	1.0	22.7	0.3	1.4	27.3	2.6	1,220
23	1.5	7	1.59	0.7	1.0	23.9	0.3	1.4	28.5	2.7	1,320
27	1.5	7	1.59	0.7	1.0	26.0	0.3	1.4	30.6	2.8	1,500
30	1.5	7	1.59	0.7	1.0	27.0	0.3	1.4	31.6	2.8	1,610
33	1.5	7	1.59	0.7	1.0	28.1	0.3	1.5	32.9	2.9	1,740
37	1.5	7	1.59	0.7	1.0	29.2	0.3	1.5	34.1	3.0	1,880
44	1.5	7	1.59	0.7	1.0	33.1	0.3	1.5	37.9	3.1	2,240
2	2.5	7	2.01	0.7	1.0	10.8	0.2	1.1	14.4	1.3	350
3	2.5	7	2.01	0.7	1.0	11.5	0.2	1.1	15.1	1.3	390
4	2.5	7	2.01	0.7	1.0	12.6	0.2	1.2	16.4	1.4	460
5	2.5	7	2.01	0.7	1.0	13.8	0.3	1.2	18.0	1.7	570
6	2.5	7	2.01	0.7	1.0	15.1	0.3	1.2	19.3	1.8	650
7	2.5	7	2.01	0.7	1.0	15.1	0.3	1.2	19.3	1.8	670
8	2.5	7	2.01	0.7	1.0	16.4	0.3	1.3	20.8	1.9	760
9	2.5	7	2.01	0.7	1.0	17.7	0.3	1.3	22.2	2.0	840
10	2.5	7	2.01	0.7	1.0	19.4	0.3	1.3	23.8	2.1	960
12	2.5	7	2.01	0.7	1.0	20.0	0.3	1.3	24.5	2.2	1,040
14	2.5	7	2.01	0.7	1.0	21.2	0.3	1.3	25.6	2.2	1,140
15	2.5	7	2.01	0.7	1.0	21.7	0.3	1.4	26.3	2.4	1,200
16	2.5	7	2.01	0.7	1.0	22.4	0.3	1.4	27.0	2.4	1,260
19	2.5	7	2.01	0.7	1.0	23.6	0.3	1.4	28.3	2.5	1,410
20	2.5	7	2.01	0.7	1.0	24.4	0.3	1.4	29.0	2.7	1,460
21	2.5	7	2.01	0.7	1.0	24.9	0.3	1.4	29.6	2.7	1,530
23	2.5	7	2.01	0.7	1.0	26.3	0.3	1.4	30.9	2.8	1,650
27	2.5	7	2.01	0.7	1.0	28.6	0.3	1.5	33.4	2.9	1,910
30	2.5	7	2.01	0.7	1.0	29.7	0.3	1.5	34.5	3.0	2,050
33	2.5	7	2.01	0.7	1.0	30.9	0.3	1.5	35.7	3.0	2,200
37	2.5	7	2.01	0.7	1.0	32.2	0.3	1.5	37.0	3.1	2,390
44	2.5	7	2.01	0.7	1.2	36.6	0.3	1.6	41.7	3.3	2,890

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Multi core

Sectional Drawing

Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(c)	Collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
5. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
6. Inner covering	Halogen free thermoset compound
7. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
8. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Multi core

Cable type : 150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	0.75	7	1.11	0.6	0.6	9.1	0.2	1.1	12.7	1.2	260
3	0.75	7	1.11	0.6	0.6	9.6	0.2	1.1	13.2	1.2	280
4	0.75	7	1.11	0.6	0.6	10.4	0.2	1.1	14.0	1.2	310
5	0.75	7	1.11	0.6	0.6	11.3	0.2	1.1	14.9	1.6	350
6	0.75	7	1.11	0.6	0.6	12.3	0.2	1.1	15.9	1.6	390
7	0.75	7	1.11	0.6	0.6	12.3	0.2	1.1	15.9	1.6	400
8	0.75	7	1.11	0.6	0.6	13.3	0.2	1.2	17.1	1.7	450
9	0.75	7	1.11	0.6	0.6	14.3	0.2	1.2	18.1	1.8	490
10	0.75	7	1.11	0.6	0.6	15.5	0.3	1.2	19.7	1.9	610
12	0.75	7	1.11	0.6	0.6	16.0	0.3	1.2	20.2	2.0	640
14	0.75	7	1.11	0.6	0.6	16.8	0.3	1.2	21.0	2.0	690
15	0.75	7	1.11	0.6	0.6	17.2	0.3	1.2	21.4	2.1	720
16	0.75	7	1.11	0.6	0.6	17.7	0.3	1.2	21.9	2.1	750
19	0.75	7	1.11	0.6	0.6	18.7	0.3	1.3	23.1	2.2	840
20	0.75	7	1.11	0.6	0.6	19.2	0.3	1.3	23.7	2.4	870
21	0.75	7	1.11	0.6	0.6	19.6	0.3	1.3	24.1	2.5	900
23	0.75	7	1.11	0.6	0.6	20.6	0.3	1.3	25.0	2.5	960
27	0.75	7	1.11	0.6	0.6	22.4	0.3	1.3	26.8	2.6	1,090
30	0.75	7	1.11	0.6	0.6	23.2	0.3	1.3	27.6	2.6	1,160
33	0.75	7	1.11	0.6	0.6	24.1	0.3	1.3	28.5	2.7	1,230
37	0.75	7	1.11	0.6	0.6	25.0	0.3	1.4	29.6	2.7	1,330
44	0.75	7	1.11	0.6	0.6	28.2	0.3	1.4	32.8	2.9	1,580
2	1.0	7	1.29	0.6	0.6	9.5	0.2	1.1	13.1	1.2	280
3	1.0	7	1.29	0.6	0.6	10.0	0.2	1.1	13.6	1.2	300
4	1.0	7	1.29	0.6	0.6	10.9	0.2	1.1	14.5	1.3	340
5	1.0	7	1.29	0.6	0.6	11.8	0.2	1.1	15.4	1.6	380
6	1.0	7	1.29	0.6	0.6	12.8	0.2	1.1	16.4	1.7	430
7	1.0	7	1.29	0.6	0.6	12.8	0.2	1.1	16.4	1.7	440
8	1.0	7	1.29	0.6	0.6	13.9	0.2	1.2	17.7	1.7	490
9	1.0	7	1.29	0.6	0.6	14.9	0.3	1.2	19.1	1.8	590
10	1.0	7	1.29	0.6	0.6	16.2	0.3	1.2	20.4	2.0	670
12	1.0	7	1.29	0.6	0.6	16.8	0.3	1.2	21.0	2.0	710
14	1.0	7	1.29	0.6	0.6	17.6	0.3	1.2	21.8	2.0	770
15	1.0	7	1.29	0.6	0.6	18.1	0.3	1.2	22.3	2.2	800
16	1.0	7	1.29	0.6	0.6	18.6	0.3	1.3	23.0	2.2	850
19	1.0	7	1.29	0.6	0.6	19.6	0.3	1.3	24.0	2.2	930
20	1.0	7	1.29	0.6	0.6	20.2	0.3	1.3	24.6	2.5	960
21	1.0	7	1.29	0.6	0.6	20.6	0.3	1.3	25.0	2.5	1,000
23	1.0	7	1.29	0.6	0.6	21.7	0.3	1.3	26.1	2.6	1,070
27	1.0	7	1.29	0.6	0.6	23.5	0.3	1.3	27.9	2.6	1,220
30	1.0	7	1.29	0.6	0.6	24.4	0.3	1.4	29.0	2.7	1,310
33	1.0	7	1.29	0.6	0.6	25.3	0.3	1.4	29.9	2.7	1,400
37	1.0	7	1.29	0.6	0.6	26.3	0.3	1.4	30.9	2.8	1,500
44	1.0	7	1.29	0.6	0.6	29.7	0.3	1.4	34.3	3.0	1,780

SEC NEK-INSTRUMENT Cable

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Multi core

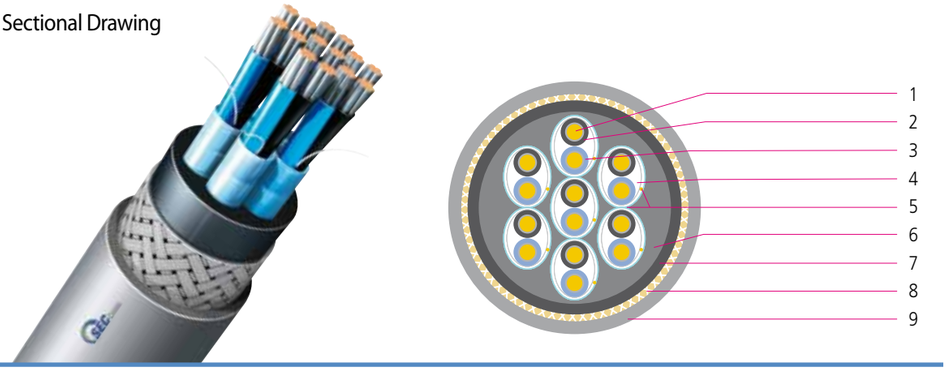
Cable type : 150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
2	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	330
3	1.5	7	1.59	0.7	1.0	11.0	0.2	1.1	14.6	1.3	360
4	1.5	7	1.59	0.7	1.0	12.0	0.2	1.1	15.6	1.3	400
5	1.5	7	1.59	0.7	1.0	13.1	0.2	1.2	16.9	1.7	470
6	1.5	7	1.59	0.7	1.0	14.3	0.3	1.2	18.5	1.8	570
7	1.5	7	1.59	0.7	1.0	14.3	0.3	1.2	18.5	1.8	590
8	1.5	7	1.59	0.7	1.0	15.5	0.3	1.2	19.7	1.8	660
9	1.5	7	1.59	0.7	1.0	16.7	0.3	1.2	20.9	1.9	720
10	1.5	7	1.59	0.7	1.0	18.2	0.3	1.3	22.6	2.1	830
12	1.5	7	1.59	0.7	1.0	18.8	0.3	1.3	23.2	2.1	880
14	1.5	7	1.59	0.7	1.0	19.8	0.3	1.3	24.2	2.2	960
15	1.5	7	1.59	0.7	1.0	20.3	0.3	1.3	24.7	2.3	1,000
16	1.5	7	1.59	0.7	1.0	20.9	0.3	1.3	25.3	2.3	1,050
19	1.5	7	1.59	0.7	1.0	22.0	0.3	1.3	26.4	2.4	1,160
20	1.5	7	1.59	0.7	1.0	22.7	0.3	1.4	27.3	2.6	1,220
21	1.5	7	1.59	0.7	1.0	23.2	0.3	1.4	27.8	2.6	1,270
23	1.5	7	1.59	0.7	1.0	24.4	0.3	1.4	29.0	2.7	1,360
27	1.5	7	1.59	0.7	1.0	26.4	0.3	1.4	31.1	2.8	1,550
30	1.5	7	1.59	0.7	1.0	27.4	0.3	1.4	32.0	2.8	1,660
33	1.5	7	1.59	0.7	1.0	28.5	0.3	1.5	33.4	2.9	1,790
37	1.5	7	1.59	0.7	1.0	29.7	0.3	1.5	34.5	3.0	1,930
44	1.5	7	1.59	0.7	1.0	33.5	0.3	1.5	38.4	3.2	2,300
2	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.9	1.3	380
3	2.5	7	2.01	0.7	1.0	12.0	0.2	1.1	15.6	1.3	420
4	2.5	7	2.01	0.7	1.0	13.1	0.2	1.2	16.9	1.4	490
5	2.5	7	2.01	0.7	1.0	14.3	0.3	1.2	18.5	1.8	600
6	2.5	7	2.01	0.7	1.0	15.6	0.3	1.2	19.8	1.8	680
7	2.5	7	2.01	0.7	1.0	15.6	0.3	1.2	19.8	1.8	710
8	2.5	7	2.01	0.7	1.0	16.9	0.3	1.3	21.3	1.9	800
9	2.5	7	2.01	0.7	1.0	18.2	0.3	1.3	22.6	2.0	880
10	2.5	7	2.01	0.7	1.0	19.9	0.3	1.3	24.3	2.2	1,000
12	2.5	7	2.01	0.7	1.0	20.5	0.3	1.3	24.9	2.2	1,080
14	2.5	7	2.01	0.7	1.0	21.6	0.3	1.3	26.1	2.3	1,180
15	2.5	7	2.01	0.7	1.0	22.2	0.3	1.4	26.8	2.4	1,240
16	2.5	7	2.01	0.7	1.0	22.9	0.3	1.4	27.5	2.4	1,310
19	2.5	7	2.01	0.7	1.0	24.1	0.3	1.4	28.7	2.5	1,450
20	2.5	7	2.01	0.7	1.0	24.9	0.3	1.4	29.5	2.7	1,510
21	2.5	7	2.01	0.7	1.0	25.4	0.3	1.4	30.0	2.7	1,570
23	2.5	7	2.01	0.7	1.0	26.8	0.3	1.4	31.4	2.8	1,700
27	2.5	7	2.01	0.7	1.0	29.1	0.3	1.5	33.9	2.9	1,960
30	2.5	7	2.01	0.7	1.0	30.2	0.3	1.5	35.0	3.0	2,100
33	2.5	7	2.01	0.7	1.0	31.4	0.3	1.5	36.2	3.1	2,260
37	2.5	7	2.01	0.7	1.0	32.7	0.3	1.5	37.5	3.1	2,440
44	2.5	7	2.01	0.7	1.2	37.1	0.3	1.6	42.1	3.4	2,960

150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i)	Individual screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Inner covering	Halogen free thermoset compound
8. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-INSTRUMENT Cable

150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)
: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.0	9.1	0.2	1.1	12.7	1.2	240
2P	0.75	7	1.11	0.6	1.0	13.6	0.2	1.2	17.4	1.4	420
3P	0.75	7	1.11	0.6	1.0	14.5	0.3	1.2	18.7	1.5	520
4P	0.75	7	1.11	0.6	1.0	16.0	0.3	1.2	20.2	1.6	590
5P	0.75	7	1.11	0.6	1.0	17.6	0.3	1.2	21.8	1.9	680
7P	0.75	7	1.11	0.6	1.0	19.3	0.3	1.3	23.7	2.0	820
8P	0.75	7	1.11	0.6	1.0	21.1	0.3	1.3	25.5	2.1	910
10P	0.75	7	1.11	0.6	1.0	25.0	0.3	1.4	29.6	2.4	1,170
12P	0.75	7	1.11	0.6	1.0	25.9	0.3	1.4	30.5	2.5	1,260
14P	0.75	7	1.11	0.6	1.0	27.3	0.3	1.4	31.9	2.5	1,390
16P	0.75	7	1.11	0.6	1.0	29.0	0.3	1.4	33.6	2.7	1,520
19P	0.75	7	1.11	0.6	1.0	30.7	0.3	1.5	35.5	2.8	1,710
20P	0.75	7	1.11	0.6	1.0	31.7	0.3	1.5	36.5	3.1	1,790
24P	0.75	7	1.11	0.6	1.0	36.3	0.3	1.6	41.3	3.3	2,200
32P	0.75	7	1.11	0.6	1.2	39.6	0.3	1.6	44.7	3.5	2,630
37P	0.75	7	1.11	0.6	1.2	42.2	0.3	1.7	47.5	3.6	2,960
1P	1.0	7	1.29	0.6	1.0	9.5	0.2	1.1	13.1	1.2	260
2P	1.0	7	1.29	0.6	1.0	14.3	0.3	1.2	18.5	1.5	500
3P	1.0	7	1.29	0.6	1.0	15.2	0.3	1.2	19.4	1.5	560
4P	1.0	7	1.29	0.6	1.0	16.8	0.3	1.2	21.0	1.6	650
5P	1.0	7	1.29	0.6	1.0	18.5	0.3	1.3	22.9	2.0	760
7P	1.0	7	1.29	0.6	1.0	20.3	0.3	1.3	24.7	2.1	900
8P	1.0	7	1.29	0.6	1.0	22.1	0.3	1.3	26.5	2.2	1,020
10P	1.0	7	1.29	0.6	1.0	26.3	0.3	1.4	30.9	2.5	1,300
12P	1.0	7	1.29	0.6	1.0	27.2	0.3	1.4	31.8	2.5	1,410
14P	1.0	7	1.29	0.6	1.0	28.7	0.3	1.4	33.4	2.6	1,550
16P	1.0	7	1.29	0.6	1.0	30.5	0.3	1.5	35.3	2.8	1,730
19P	1.0	7	1.29	0.6	1.0	32.3	0.3	1.5	37.1	2.9	1,930
20P	1.0	7	1.29	0.6	1.0	33.3	0.3	1.5	38.2	3.2	2,020
24P	1.0	7	1.29	0.6	1.0	38.2	0.3	1.6	43.3	3.4	2,480
32P	1.0	7	1.29	0.6	1.2	41.7	0.3	1.7	47.0	3.6	3,010
37P	1.0	7	1.29	0.6	1.2	44.4	0.4	1.7	50.1	3.8	3,510

150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	300
2P	1.5	7	1.59	0.7	1.0	16.0	0.3	1.2	20.2	1.6	590
3P	1.5	7	1.59	0.7	1.0	17.1	0.3	1.3	21.5	1.6	680
4P	1.5	7	1.59	0.7	1.0	18.8	0.3	1.3	23.2	1.7	790
5P	1.5	7	1.59	0.7	1.0	20.8	0.3	1.3	25.2	2.1	920
7P	1.5	7	1.59	0.7	1.0	22.8	0.3	1.4	27.4	2.2	1,110
8P	1.5	7	1.59	0.7	1.0	24.9	0.3	1.4	29.5	2.3	1,250
10P	1.5	7	1.59	0.7	1.0	29.7	0.3	1.5	34.5	2.7	1,610
12P	1.5	7	1.59	0.7	1.0	30.7	0.3	1.5	35.6	2.7	1,750
14P	1.5	7	1.59	0.7	1.0	32.5	0.3	1.5	37.3	2.8	1,940
16P	1.5	7	1.59	0.7	1.0	34.5	0.3	1.6	39.5	3.0	2,160
19P	1.5	7	1.59	0.7	1.0	36.5	0.3	1.6	41.6	3.1	2,420
20P	1.5	7	1.59	0.7	1.2	37.9	0.3	1.6	43.0	3.4	2,560
24P	1.5	7	1.59	0.7	1.2	43.6	0.4	1.8	49.4	3.7	3,310
32P	1.5	7	1.59	0.7	1.2	47.3	0.4	1.8	53.2	3.9	3,940
37P	1.5	7	1.59	0.7	1.2	50.4	0.4	1.9	56.5	4.1	4,450
1P	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.9	1.3	340
2P	2.5	7	2.01	0.7	1.0	17.5	0.3	1.3	21.9	1.6	710
3P	2.5	7	2.01	0.7	1.0	18.7	0.3	1.3	23.1	1.7	810
4P	2.5	7	2.01	0.7	1.0	20.6	0.3	1.3	25.0	1.8	950
5P	2.5	7	2.01	0.7	1.0	22.8	0.3	1.4	27.4	2.2	1,120
7P	2.5	7	2.01	0.7	1.0	25.1	0.3	1.4	29.7	2.3	1,350
8P	2.5	7	2.01	0.7	1.0	27.4	0.3	1.5	32.2	2.5	1,550
10P	2.5	7	2.01	0.7	1.0	32.7	0.3	1.6	37.7	2.8	1,990
12P	2.5	7	2.01	0.7	1.0	33.9	0.3	1.6	38.9	2.9	2,180
14P	2.5	7	2.01	0.7	1.2	36.0	0.3	1.6	41.0	3.0	2,440
16P	2.5	7	2.01	0.7	1.2	38.2	0.3	1.7	43.4	3.2	2,730
19P	2.5	7	2.01	0.7	1.2	40.5	0.4	1.7	46.1	3.4	3,200
20P	2.5	7	2.01	0.7	1.2	41.8	0.4	1.7	47.5	3.6	3,350
24P	2.5	7	2.01	0.7	1.2	48.0	0.4	1.9	54.1	4.0	4,140
32P	2.5	7	2.01	0.7	1.4	52.6	0.4	2.0	58.9	4.2	5,070
37P	2.5	7	2.01	0.7	1.4	56.0	0.4	2.0	62.3	4.4	5,680

SEC NEK-INSTRUMENT Cable

150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.0	9.1	0.2	1.1	12.7	1.2	250
2T	0.75	7	1.11	0.6	1.0	14.3	0.3	1.2	18.5	1.5	510
3T	0.75	7	1.11	0.6	1.0	15.2	0.3	1.2	19.4	1.5	580
4T	0.75	7	1.11	0.6	1.0	16.8	0.3	1.2	20.9	1.6	680
5T	0.75	7	1.11	0.6	1.0	18.5	0.3	1.3	22.9	2.0	800
7T	0.75	7	1.11	0.6	1.0	20.3	0.3	1.3	24.7	2.1	950
8T	0.75	7	1.11	0.6	1.0	22.1	0.3	1.3	26.5	2.2	1,070
10T	0.75	7	1.11	0.6	1.0	26.3	0.3	1.4	30.9	2.5	1,360
12T	0.75	7	1.11	0.6	1.0	27.2	0.3	1.4	31.8	2.5	1,490
14T	0.75	7	1.11	0.6	1.0	28.7	0.3	1.4	33.3	2.6	1,650
16T	0.75	7	1.11	0.6	1.0	30.4	0.3	1.5	35.3	2.8	1,840
19T	0.75	7	1.11	0.6	1.0	32.2	0.3	1.5	37.1	2.9	2,050
20T	0.75	7	1.11	0.6	1.0	33.3	0.3	1.5	38.1	3.2	2,150
24T	0.75	7	1.11	0.6	1.0	38.2	0.3	1.6	43.2	3.4	2,640
32T	0.75	7	1.11	0.6	1.2	41.7	0.3	1.7	47.0	3.6	3,220
1T	1.0	7	1.29	0.6	1.0	9.5	0.2	1.1	13.1	1.2	270
2T	1.0	7	1.29	0.6	1.0	15.0	0.3	1.2	19.1	1.5	560
3T	1.0	7	1.29	0.6	1.0	15.9	0.3	1.2	20.1	1.6	640
4T	1.0	7	1.29	0.6	1.0	17.6	0.3	1.2	21.8	1.6	750
5T	1.0	7	1.29	0.6	1.0	19.4	0.3	1.3	23.8	2.0	880
7T	1.0	7	1.29	0.6	1.0	21.3	0.3	1.3	25.7	2.1	1,060
8T	1.0	7	1.29	0.6	1.0	23.2	0.3	1.3	27.6	2.2	1,200
10T	1.0	7	1.29	0.6	1.0	27.6	0.3	1.4	32.2	2.6	1,530
12T	1.0	7	1.29	0.6	1.0	28.6	0.3	1.4	33.2	2.6	1,680
14T	1.0	7	1.29	0.6	1.0	30.2	0.3	1.5	35.0	2.7	1,890
16T	1.0	7	1.29	0.6	1.0	32.0	0.3	1.5	36.9	2.9	2,080
19T	1.0	7	1.29	0.6	1.0	33.9	0.3	1.5	38.8	3.0	2,340
20T	1.0	7	1.29	0.6	1.0	35.1	0.3	1.5	39.9	3.2	2,460
24T	1.0	7	1.29	0.6	1.2	40.4	0.3	1.6	45.5	3.5	3,040
32T	1.0	7	1.29	0.6	1.2	43.9	0.4	1.7	49.6	3.7	3,840

150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

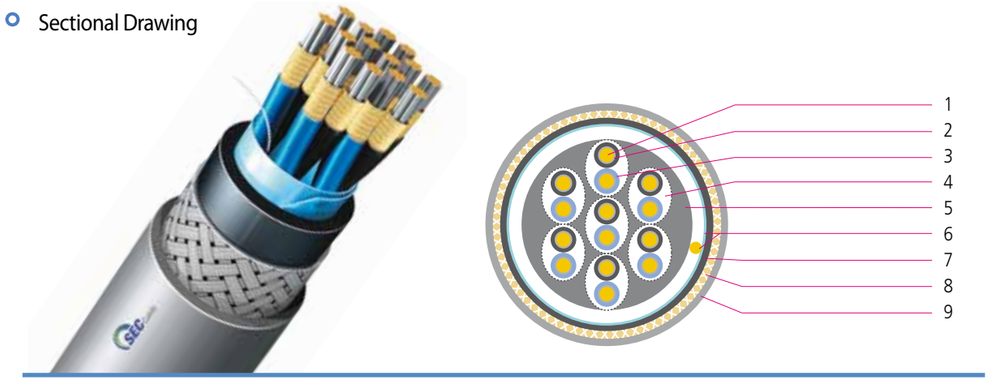
Cable type : 150/250V BFOU(i), BFCU(i), BFMU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	320
2T	1.5	7	1.59	0.7	1.0	16.8	0.3	1.3	21.2	1.6	680
3T	1.5	7	1.59	0.7	1.0	17.9	0.3	1.3	22.3	1.7	780
4T	1.5	7	1.59	0.7	1.0	19.7	0.3	1.3	24.2	1.8	930
5T	1.5	7	1.59	0.7	1.0	21.8	0.3	1.3	26.2	2.2	1,080
7T	1.5	7	1.59	0.7	1.0	24.0	0.3	1.4	28.6	2.3	1,330
8T	1.5	7	1.59	0.7	1.0	26.2	0.3	1.4	30.8	2.4	1,500
10T	1.5	7	1.59	0.7	1.0	31.2	0.3	1.5	36.0	2.7	1,930
12T	1.5	7	1.59	0.7	1.0	32.3	0.3	1.5	37.2	2.8	2,120
14T	1.5	7	1.59	0.7	1.0	34.2	0.3	1.6	39.2	2.9	2,390
16T	1.5	7	1.59	0.7	1.0	36.3	0.3	1.6	41.3	3.1	2,640
19T	1.5	7	1.59	0.7	1.2	38.6	0.3	1.7	43.9	3.2	3,030
20T	1.5	7	1.59	0.7	1.2	39.9	0.3	1.7	45.2	3.5	3,180
24T	1.5	7	1.59	0.7	1.2	45.8	0.4	1.8	51.7	3.8	4,050
32T	1.5	7	1.59	0.7	1.2	49.8	0.4	1.9	55.9	4.0	4,920
1T	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.9	1.3	380
2T	2.5	7	2.01	0.7	1.0	18.3	0.3	1.3	22.7	1.7	810
3T	2.5	7	2.01	0.7	1.0	19.6	0.3	1.3	24.0	1.7	940
4T	2.5	7	2.01	0.7	1.0	21.7	0.3	1.4	26.3	1.9	1,140
5T	2.5	7	2.01	0.7	1.0	24.0	0.3	1.4	28.6	2.3	1,340
7T	2.5	7	2.01	0.7	1.0	26.3	0.3	1.4	31.0	2.4	1,650
8T	2.5	7	2.01	0.7	1.0	28.8	0.3	1.5	33.6	2.5	1,890
10T	2.5	7	2.01	0.7	1.0	34.4	0.3	1.6	39.4	2.9	2,420
12T	2.5	7	2.01	0.7	1.0	35.6	0.3	1.6	40.6	3.0	2,680
14T	2.5	7	2.01	0.7	1.2	37.9	0.3	1.7	43.1	3.1	3,050
16T	2.5	7	2.01	0.7	1.2	40.2	0.4	1.7	45.9	3.3	3,530
19T	2.5	7	2.01	0.7	1.2	42.6	0.4	1.8	48.5	3.5	4,010
20T	2.5	7	2.01	0.7	1.2	44.0	0.4	1.8	49.9	3.7	4,200
24T	2.5	7	2.01	0.7	1.4	51.0	0.4	1.9	57.1	4.1	5,210
32T	2.5	7	2.01	0.7	1.4	55.4	0.4	2.0	61.7	4.3	6,370

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(c)	Collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
6. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
7. Inner covering	Halogen free thermoset compound
8. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
9. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.0	9.1	0.2	1.1	12.7	1.2	240
2P	0.75	7	1.11	0.6	1.0	13.2	0.2	1.2	17.0	1.4	400
3P	0.75	7	1.11	0.6	1.0	14.0	0.2	1.2	17.8	1.4	440
4P	0.75	7	1.11	0.6	1.0	15.3	0.3	1.2	19.5	1.5	550
5P	0.75	7	1.11	0.6	1.0	16.8	0.3	1.2	21.0	1.9	620
7P	0.75	7	1.11	0.6	1.0	18.4	0.3	1.3	22.8	2.0	730
8P	0.75	7	1.11	0.6	1.0	20.0	0.3	1.3	24.4	2.1	820
10P	0.75	7	1.11	0.6	1.0	23.6	0.3	1.3	28.0	2.3	1,020
12P	0.75	7	1.11	0.6	1.0	24.4	0.3	1.4	29.1	2.4	1,110
14P	0.75	7	1.11	0.6	1.0	25.8	0.3	1.4	30.4	2.5	1,210
16P	0.75	7	1.11	0.6	1.0	27.3	0.3	1.4	31.9	2.6	1,320
19P	0.75	7	1.11	0.6	1.0	28.9	0.3	1.4	33.5	2.7	1,450
20P	0.75	7	1.11	0.6	1.0	29.8	0.3	1.4	34.4	3.0	1,510
24P	0.75	7	1.11	0.6	1.0	34.1	0.3	1.5	38.9	3.2	1,860
32P	0.75	7	1.11	0.6	1.0	36.9	0.3	1.6	42.0	3.3	2,180
37P	0.75	7	1.11	0.6	1.0	39.3	0.3	1.6	44.3	3.5	2,430
1P	1.0	7	1.29	0.6	1.0	9.5	0.2	1.1	13.1	1.2	260
2P	1.0	7	1.29	0.6	1.0	13.8	0.2	1.2	17.6	1.4	430
3P	1.0	7	1.29	0.6	1.0	14.6	0.3	1.2	18.8	1.5	530
4P	1.0	7	1.29	0.6	1.0	16.1	0.3	1.2	20.3	1.6	600
5P	1.0	7	1.29	0.6	1.0	17.7	0.3	1.2	21.8	1.9	680
7P	1.0	7	1.29	0.6	1.0	19.3	0.3	1.3	23.7	2.0	810
8P	1.0	7	1.29	0.6	1.0	21.0	0.3	1.3	25.4	2.1	900
10P	1.0	7	1.29	0.6	1.0	24.9	0.3	1.4	29.5	2.4	1,150
12P	1.0	7	1.29	0.6	1.0	25.7	0.3	1.4	30.3	2.5	1,230
14P	1.0	7	1.29	0.6	1.0	27.1	0.3	1.4	31.7	2.5	1,340
16P	1.0	7	1.29	0.6	1.0	28.7	0.3	1.4	33.3	2.7	1,470
19P	1.0	7	1.29	0.6	1.0	30.4	0.3	1.5	35.2	2.8	1,640
20P	1.0	7	1.29	0.6	1.0	31.3	0.3	1.5	36.2	3.1	1,720
24P	1.0	7	1.29	0.6	1.0	35.9	0.3	1.6	40.9	3.3	2,100
32P	1.0	7	1.29	0.6	1.0	38.9	0.3	1.6	43.9	3.4	2,460
37P	1.0	7	1.29	0.6	1.2	41.6	0.3	1.7	46.9	3.6	2,800

SEC NEK-INSTRUMENT Cable

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	300
2P	1.5	7	1.59	0.7	1.0	15.4	0.3	1.2	19.6	1.5	560
3P	1.5	7	1.59	0.7	1.0	16.3	0.3	1.2	20.5	1.6	630
4P	1.5	7	1.59	0.7	1.0	18.0	0.3	1.3	22.4	1.7	730
5P	1.5	7	1.59	0.7	1.0	19.8	0.3	1.3	24.2	2.1	840
7P	1.5	7	1.59	0.7	1.0	21.7	0.3	1.3	26.1	2.2	990
8P	1.5	7	1.59	0.7	1.0	23.6	0.3	1.4	28.2	2.3	1,120
10P	1.5	7	1.59	0.7	1.0	28.0	0.3	1.4	32.6	2.6	1,420
12P	1.5	7	1.59	0.7	1.0	29.0	0.3	1.5	33.8	2.6	1,550
14P	1.5	7	1.59	0.7	1.0	30.6	0.3	1.5	35.4	2.7	1,700
16P	1.5	7	1.59	0.7	1.0	32.4	0.3	1.5	37.2	2.9	1,870
19P	1.5	7	1.59	0.7	1.0	34.3	0.3	1.6	39.3	3.0	2,100
20P	1.5	7	1.59	0.7	1.0	35.4	0.3	1.6	40.5	3.3	2,200
24P	1.5	7	1.59	0.7	1.2	40.8	0.3	1.7	46.1	3.6	2,730
32P	1.5	7	1.59	0.7	1.2	44.3	0.4	1.8	50.1	3.8	3,390
37P	1.5	7	1.59	0.7	1.2	47.1	0.4	1.8	53.0	3.9	3,780
1P	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.9	1.3	340
2P	2.5	7	2.01	0.7	1.0	16.8	0.3	1.3	21.2	1.6	670
3P	2.5	7	2.01	0.7	1.0	17.9	0.3	1.3	22.3	1.7	750
4P	2.5	7	2.01	0.7	1.0	19.7	0.3	1.3	24.1	1.8	880
5P	2.5	7	2.01	0.7	1.0	21.7	0.3	1.3	26.1	2.2	1,010
7P	2.5	7	2.01	0.7	1.0	23.8	0.3	1.4	28.4	2.3	1,220
8P	2.5	7	2.01	0.7	1.0	25.9	0.3	1.4	30.5	2.4	1,380
10P	2.5	7	2.01	0.7	1.0	30.8	0.3	1.5	35.6	2.7	1,760
12P	2.5	7	2.01	0.7	1.0	31.9	0.3	1.5	36.7	2.8	1,920
14P	2.5	7	2.01	0.7	1.0	33.7	0.3	1.6	38.7	2.9	2,140
16P	2.5	7	2.01	0.7	1.0	35.7	0.3	1.6	40.7	3.1	2,360
19P	2.5	7	2.01	0.7	1.2	38.0	0.3	1.7	43.2	3.2	2,690
20P	2.5	7	2.01	0.7	1.2	39.2	0.3	1.7	44.5	3.5	2,820
24P	2.5	7	2.01	0.7	1.2	45.0	0.4	1.8	50.8	3.8	3,600
32P	2.5	7	2.01	0.7	1.2	48.8	0.4	1.9	54.9	4.0	4,310
37P	2.5	7	2.01	0.7	1.4	52.3	0.4	1.9	58.4	4.2	4,890

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

- Cable type : 150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.0	9.1	0.2	1.1	12.7	1.2	250
2T	0.75	7	1.11	0.6	1.0	14.7	0.3	1.2	18.9	1.5	520
3T	0.75	7	1.11	0.6	1.0	15.6	0.3	1.2	19.8	1.5	570
4T	0.75	7	1.11	0.6	1.0	17.2	0.3	1.2	21.4	1.6	660
5T	0.75	7	1.11	0.6	1.0	18.9	0.3	1.3	23.3	2.0	770
7T	0.75	7	1.11	0.6	1.0	20.7	0.3	1.3	25.1	2.1	900
8T	0.75	7	1.11	0.6	1.0	22.5	0.3	1.3	26.9	2.2	1,010
10T	0.75	7	1.11	0.6	1.0	26.7	0.3	1.4	31.3	2.5	1,290
12T	0.75	7	1.11	0.6	1.0	27.6	0.3	1.4	32.2	2.6	1,390
14T	0.75	7	1.11	0.6	1.0	29.2	0.3	1.4	33.8	2.6	1,520
16T	0.75	7	1.11	0.6	1.0	30.9	0.3	1.5	35.7	2.8	1,690
19T	0.75	7	1.11	0.6	1.0	32.7	0.3	1.5	37.5	2.9	1,870
20T	0.75	7	1.11	0.6	1.0	33.7	0.3	1.5	38.6	3.2	1,960
24T	0.75	7	1.11	0.6	1.0	38.6	0.3	1.6	43.7	3.4	2,400
32T	0.75	7	1.11	0.6	1.2	42.1	0.3	1.7	47.4	3.6	2,900
1T	1.0	7	1.29	0.6	1.0	9.5	0.2	1.1	13.1	1.2	270
2T	1.0	7	1.29	0.6	1.0	15.4	0.3	1.2	19.6	1.5	560
3T	1.0	7	1.29	0.6	1.0	16.4	0.3	1.2	20.6	1.6	630
4T	1.0	7	1.29	0.6	1.0	18.0	0.3	1.2	22.2	1.7	730
5T	1.0	7	1.29	0.6	1.0	19.8	0.3	1.3	24.2	2.1	850
7T	1.0	7	1.29	0.6	1.0	21.7	0.3	1.3	26.1	2.2	1,000
8T	1.0	7	1.29	0.6	1.0	23.7	0.3	1.3	28.1	2.3	1,120
10T	1.0	7	1.29	0.6	1.0	28.1	0.3	1.4	32.7	2.6	1,430
12T	1.0	7	1.29	0.6	1.0	29.0	0.3	1.4	33.7	2.6	1,550
14T	1.0	7	1.29	0.6	1.0	30.7	0.3	1.5	35.5	2.7	1,730
16T	1.0	7	1.29	0.6	1.0	32.5	0.3	1.5	37.3	2.9	1,900
19T	1.0	7	1.29	0.6	1.0	34.4	0.3	1.5	39.2	3.0	2,120
20T	1.0	7	1.29	0.6	1.0	35.5	0.3	1.5	40.3	3.3	2,220
24T	1.0	7	1.29	0.6	1.2	40.9	0.3	1.6	46.0	3.5	2,750
32T	1.0	7	1.29	0.6	1.2	44.4	0.4	1.7	50.0	3.7	3,440

SEC NEK-INSTRUMENT Cable

150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

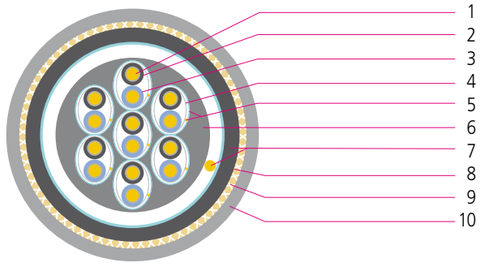
- Cable type : 150/250V BFOU(c), BFCU(c), BFMU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	320
2T	1.5	7	1.59	0.7	1.0	17.2	0.3	1.3	21.6	1.6	680
3T	1.5	7	1.59	0.7	1.0	18.3	0.3	1.3	22.7	1.7	770
4T	1.5	7	1.59	0.7	1.0	20.2	0.3	1.3	24.6	1.8	900
5T	1.5	7	1.59	0.7	1.0	22.3	0.3	1.3	26.7	2.2	1,040
7T	1.5	7	1.59	0.7	1.0	24.4	0.3	1.4	29.0	2.3	1,260
8T	1.5	7	1.59	0.7	1.0	26.7	0.3	1.4	31.3	2.4	1,420
10T	1.5	7	1.59	0.7	1.0	31.7	0.3	1.5	36.5	2.8	1,830
12T	1.5	7	1.59	0.7	1.0	32.8	0.3	1.5	37.6	2.8	1,990
14T	1.5	7	1.59	0.7	1.0	34.7	0.3	1.6	39.7	2.9	2,220
16T	1.5	7	1.59	0.7	1.0	36.7	0.3	1.6	41.8	3.1	2,450
19T	1.5	7	1.59	0.7	1.2	39.1	0.3	1.7	44.4	3.3	2,800
20T	1.5	7	1.59	0.7	1.2	40.4	0.3	1.7	45.7	3.5	2,930
24T	1.5	7	1.59	0.7	1.2	46.3	0.4	1.8	52.2	3.9	3,740
32T	1.5	7	1.59	0.7	1.2	50.3	0.4	1.9	56.4	4.1	4,500
1T	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.9	1.3	380
2T	2.5	7	2.01	0.7	1.0	18.8	0.3	1.3	23.2	1.7	810
3T	2.5	7	2.01	0.7	1.0	20.1	0.3	1.3	24.5	1.8	930
4T	2.5	7	2.01	0.7	1.0	22.1	0.3	1.4	26.7	1.9	1,110
5T	2.5	7	2.01	0.7	1.0	24.4	0.3	1.4	29.0	2.3	1,290
7T	2.5	7	2.01	0.7	1.0	26.8	0.3	1.4	31.4	2.4	1,570
8T	2.5	7	2.01	0.7	1.0	29.3	0.3	1.5	34.1	2.6	1,790
10T	2.5	7	2.01	0.7	1.0	34.9	0.3	1.6	39.9	2.9	2,290
12T	2.5	7	2.01	0.7	1.0	36.1	0.3	1.6	41.1	3.0	2,520
14T	2.5	7	2.01	0.7	1.2	38.4	0.3	1.7	43.6	3.1	2,850
16T	2.5	7	2.01	0.7	1.2	40.7	0.4	1.7	46.4	3.4	3,290
19T	2.5	7	2.01	0.7	1.2	43.1	0.4	1.8	48.9	3.5	3,730
20T	2.5	7	2.01	0.7	1.2	44.5	0.4	1.8	50.4	3.8	3,900
24T	2.5	7	2.01	0.7	1.4	51.5	0.4	1.9	57.6	4.1	4,840
32T	2.5	7	2.01	0.7	1.4	55.9	0.4	2.0	62.2	4.4	5,860

150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C, Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
F	Halogen free thermoset compound inner covering
O, C, M	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i/c)	Individual and collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. Individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
8. Inner covering	Halogen free thermoset compound
9. Armour	Tinned copper wire braid (O), Galvanized steel wire braid (C), Copper alloy wire braid (M) A Suitable separator tape(s) may be applied under / over the armour
10. Sheath	SHF2 or SHF MUD as per IEC 60092-360

SEC NEK-INSTRUMENT Cable

150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)
: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm²	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.0	9.0	0.2	1.1	12.6	1.2	240
2P	0.75	7	1.11	0.6	1.0	13.9	0.2	1.2	17.7	1.4	440
3P	0.75	7	1.11	0.6	1.0	14.8	0.3	1.2	19.0	1.5	540
4P	0.75	7	1.11	0.6	1.0	16.2	0.3	1.2	20.4	1.6	620
5P	0.75	7	1.11	0.6	1.0	17.8	0.3	1.2	22.0	1.9	700
7P	0.75	7	1.11	0.6	1.0	18.8	0.3	1.3	23.2	2.0	820
8P	0.75	7	1.11	0.6	1.0	20.4	0.3	1.3	24.8	2.1	920
10P	0.75	7	1.11	0.6	1.0	23.6	0.3	1.4	28.2	2.4	1,150
12P	0.75	7	1.11	0.6	1.0	24.4	0.3	1.4	29.0	2.4	1,240
14P	0.75	7	1.11	0.6	1.0	25.8	0.3	1.4	30.4	2.5	1,360
16P	0.75	7	1.11	0.6	1.0	27.3	0.3	1.4	31.9	2.6	1,490
19P	0.75	7	1.11	0.6	1.0	28.2	0.3	1.5	33.0	2.7	1,660
20P	0.75	7	1.11	0.6	1.0	29.1	0.3	1.5	34.0	2.9	1,730
24P	0.75	7	1.11	0.6	1.0	33.3	0.3	1.6	38.3	3.2	2,110
32P	0.75	7	1.11	0.6	1.2	36.3	0.3	1.6	41.3	3.3	2,530
37P	0.75	7	1.11	0.6	1.2	38.6	0.3	1.7	43.8	3.4	2,850
1P	1.0	7	1.29	0.6	1.0	9.4	0.2	1.1	13.0	1.2	250
2P	1.0	7	1.29	0.6	1.0	14.6	0.3	1.2	18.8	1.5	530
3P	1.0	7	1.29	0.6	1.0	15.5	0.3	1.2	19.7	1.5	590
4P	1.0	7	1.29	0.6	1.0	17.0	0.3	1.2	21.2	1.6	680
5P	1.0	7	1.29	0.6	1.0	18.7	0.3	1.3	23.1	2.0	790
7P	1.0	7	1.29	0.6	1.0	19.7	0.3	1.3	24.1	2.1	910
8P	1.0	7	1.29	0.6	1.0	21.5	0.3	1.3	25.9	2.1	1,020
10P	1.0	7	1.29	0.6	1.0	24.9	0.3	1.4	29.5	2.4	1,280
12P	1.0	7	1.29	0.6	1.0	25.7	0.3	1.4	30.3	2.5	1,390
14P	1.0	7	1.29	0.6	1.0	27.1	0.3	1.4	31.7	2.5	1,530
16P	1.0	7	1.29	0.6	1.0	28.7	0.3	1.5	33.5	2.7	1,700
19P	1.0	7	1.29	0.6	1.0	29.7	0.3	1.5	34.5	2.8	1,880
20P	1.0	7	1.29	0.6	1.0	30.7	0.3	1.5	35.5	3.0	1,960
24P	1.0	7	1.29	0.6	1.0	35.1	0.3	1.6	40.1	3.3	2,390
32P	1.0	7	1.29	0.6	1.2	38.2	0.3	1.7	43.5	3.4	2,900
37P	1.0	7	1.29	0.6	1.2	40.7	0.4	1.7	46.3	3.6	3,390

150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	290
2P	1.5	7	1.59	0.7	1.0	16.3	0.3	1.2	20.5	1.6	620
3P	1.5	7	1.59	0.7	1.0	17.4	0.3	1.3	21.8	1.6	710
4P	1.5	7	1.59	0.7	1.0	19.1	0.3	1.3	23.6	1.7	820
5P	1.5	7	1.59	0.7	1.0	21.1	0.3	1.3	25.5	2.1	950
7P	1.5	7	1.59	0.7	1.0	22.2	0.3	1.4	26.8	2.2	1,120
8P	1.5	7	1.59	0.7	1.0	24.2	0.3	1.4	28.8	2.3	1,260
10P	1.5	7	1.59	0.7	1.0	28.1	0.3	1.5	32.9	2.6	1,590
12P	1.5	7	1.59	0.7	1.0	29.1	0.3	1.5	33.9	2.6	1,730
14P	1.5	7	1.59	0.7	1.0	30.7	0.3	1.5	35.6	2.7	1,910
16P	1.5	7	1.59	0.7	1.0	32.5	0.3	1.6	37.6	2.9	2,130
19P	1.5	7	1.59	0.7	1.0	33.7	0.3	1.6	38.7	3.0	2,360
20P	1.5	7	1.59	0.7	1.2	35.0	0.3	1.6	40.0	3.2	2,490
24P	1.5	7	1.59	0.7	1.2	40.0	0.4	1.8	45.9	3.5	3,200
32P	1.5	7	1.59	0.7	1.2	43.4	0.4	1.8	49.3	3.7	3,820
37P	1.5	7	1.59	0.7	1.2	46.2	0.4	1.9	52.3	3.9	4,310
1P	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.8	1.3	340
2P	2.5	7	2.01	0.7	1.0	17.9	0.3	1.3	22.3	1.7	740
3P	2.5	7	2.01	0.7	1.0	19.0	0.3	1.3	23.4	1.7	840
4P	2.5	7	2.01	0.7	1.0	21.0	0.3	1.3	25.4	1.8	980
5P	2.5	7	2.01	0.7	1.0	23.1	0.3	1.4	27.7	2.2	1,160
7P	2.5	7	2.01	0.7	1.0	24.4	0.3	1.4	29.0	2.3	1,360
8P	2.5	7	2.01	0.7	1.0	26.6	0.3	1.5	31.4	2.4	1,550
10P	2.5	7	2.01	0.7	1.0	30.9	0.3	1.6	36.0	2.7	1,960
12P	2.5	7	2.01	0.7	1.0	32.0	0.3	1.6	37.0	2.8	2,150
14P	2.5	7	2.01	0.7	1.2	34.0	0.3	1.6	39.1	2.9	2,410
16P	2.5	7	2.01	0.7	1.2	36.0	0.3	1.7	41.3	3.1	2,690
19P	2.5	7	2.01	0.7	1.2	37.3	0.4	1.7	43.0	3.2	3,110
20P	2.5	7	2.01	0.7	1.2	38.5	0.4	1.7	44.2	3.5	3,260
24P	2.5	7	2.01	0.7	1.2	44.2	0.4	1.9	50.3	3.8	4,010
32P	2.5	7	2.01	0.7	1.4	48.3	0.4	2.0	54.6	4.0	4,920
37P	2.5	7	2.01	0.7	1.4	51.4	0.4	2.0	57.7	4.1	5,520

SEC NEK-INSTRUMENT Cable

150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.0	9.1	0.2	1.1	12.7	1.2	250
2T	0.75	7	1.11	0.6	1.0	14.7	0.3	1.2	18.9	1.5	540
3T	0.75	7	1.11	0.6	1.0	15.6	0.3	1.2	19.8	1.5	610
4T	0.75	7	1.11	0.6	1.0	17.2	0.3	1.2	21.4	1.6	710
5T	0.75	7	1.11	0.6	1.0	18.9	0.3	1.3	23.3	2.0	830
7T	0.75	7	1.11	0.6	1.0	20.7	0.3	1.3	25.1	2.1	990
8T	0.75	7	1.11	0.6	1.0	22.5	0.3	1.3	26.9	2.2	1,110
10T	0.75	7	1.11	0.6	1.0	26.7	0.3	1.4	31.3	2.5	1,410
12T	0.75	7	1.11	0.6	1.0	27.6	0.3	1.4	32.2	2.6	1,530
14T	0.75	7	1.11	0.6	1.0	29.2	0.3	1.4	33.8	2.6	1,690
16T	0.75	7	1.11	0.6	1.0	30.9	0.3	1.5	35.7	2.8	1,880
19T	0.75	7	1.11	0.6	1.0	32.7	0.3	1.5	37.5	2.9	2,110
20T	0.75	7	1.11	0.6	1.0	33.7	0.3	1.5	38.6	3.2	2,200
24T	0.75	7	1.11	0.6	1.0	38.6	0.3	1.6	43.7	3.4	2,690
32T	0.75	7	1.11	0.6	1.2	42.1	0.3	1.7	47.4	3.6	3,290
1T	1.0	7	1.29	0.6	1.0	9.5	0.2	1.1	13.1	1.2	270
2T	1.0	7	1.29	0.6	1.0	15.4	0.3	1.2	19.6	1.5	590
3T	1.0	7	1.29	0.6	1.0	16.4	0.3	1.2	20.6	1.6	670
4T	1.0	7	1.29	0.6	1.0	18.0	0.3	1.2	22.2	1.7	780
5T	1.0	7	1.29	0.6	1.0	19.8	0.3	1.3	24.2	2.1	920
7T	1.0	7	1.29	0.6	1.0	21.7	0.3	1.3	26.1	2.2	1,100
8T	1.0	7	1.29	0.6	1.0	23.7	0.3	1.3	28.1	2.3	1,240
10T	1.0	7	1.29	0.6	1.0	28.1	0.3	1.4	32.7	2.6	1,580
12T	1.0	7	1.29	0.6	1.0	29.0	0.3	1.4	33.7	2.6	1,730
14T	1.0	7	1.29	0.6	1.0	30.7	0.3	1.5	35.5	2.7	1,940
16T	1.0	7	1.29	0.6	1.0	32.5	0.3	1.5	37.3	2.9	2,140
19T	1.0	7	1.29	0.6	1.0	34.4	0.3	1.5	39.2	3.0	2,400
20T	1.0	7	1.29	0.6	1.0	35.5	0.3	1.5	40.3	3.3	2,510
24T	1.0	7	1.29	0.6	1.2	40.9	0.3	1.6	46.0	3.5	3,100
32T	1.0	7	1.29	0.6	1.2	44.4	0.4	1.7	50.0	3.7	3,910

150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

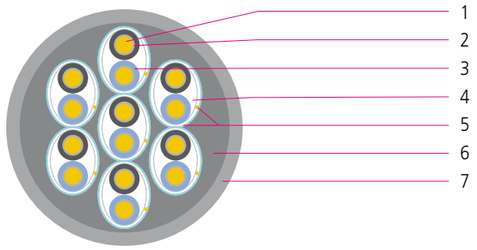
Cable type : 150/250V BFOU(i/c), BFCU(i/c), BFMU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Inner Covering		Armour	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.	O.D (Approx.)		Thick.			
	mm^2	EA	mm	mm	mm	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.0	10.4	0.2	1.1	14.0	1.2	320
2T	1.5	7	1.59	0.7	1.0	17.2	0.3	1.3	21.6	1.6	710
3T	1.5	7	1.59	0.7	1.0	18.3	0.3	1.3	22.7	1.7	820
4T	1.5	7	1.59	0.7	1.0	20.2	0.3	1.3	24.6	1.8	960
5T	1.5	7	1.59	0.7	1.0	22.3	0.3	1.3	26.7	2.2	1,120
7T	1.5	7	1.59	0.7	1.0	24.4	0.3	1.4	29.0	2.3	1,370
8T	1.5	7	1.59	0.7	1.0	26.7	0.3	1.4	31.3	2.4	1,550
10T	1.5	7	1.59	0.7	1.0	31.7	0.3	1.5	36.5	2.8	1,980
12T	1.5	7	1.59	0.7	1.0	32.8	0.3	1.5	37.6	2.8	2,180
14T	1.5	7	1.59	0.7	1.0	34.7	0.3	1.6	39.7	2.9	2,440
16T	1.5	7	1.59	0.7	1.0	36.7	0.3	1.6	41.8	3.1	2,700
19T	1.5	7	1.59	0.7	1.2	39.1	0.3	1.7	44.4	3.3	3,100
20T	1.5	7	1.59	0.7	1.2	40.4	0.3	1.7	45.7	3.5	3,250
24T	1.5	7	1.59	0.7	1.2	46.3	0.4	1.8	52.2	3.9	4,120
32T	1.5	7	1.59	0.7	1.2	50.3	0.4	1.9	56.4	4.1	5,000
1T	2.5	7	2.01	0.7	1.0	11.3	0.2	1.1	14.9	1.3	380
2T	2.5	7	2.01	0.7	1.0	18.8	0.3	1.3	23.2	1.7	840
3T	2.5	7	2.01	0.7	1.0	20.1	0.3	1.3	24.5	1.8	980
4T	2.5	7	2.01	0.7	1.0	22.1	0.3	1.4	26.7	1.9	1,180
5T	2.5	7	2.01	0.7	1.0	24.4	0.3	1.4	29.0	2.3	1,380
7T	2.5	7	2.01	0.7	1.0	26.8	0.3	1.4	31.4	2.4	1,700
8T	2.5	7	2.01	0.7	1.0	29.3	0.3	1.5	34.1	2.6	1,940
10T	2.5	7	2.01	0.7	1.0	34.9	0.3	1.6	39.9	2.9	2,480
12T	2.5	7	2.01	0.7	1.0	36.1	0.3	1.6	41.1	3.0	2,740
14T	2.5	7	2.01	0.7	1.2	38.4	0.3	1.7	43.6	3.1	3,110
16T	2.5	7	2.01	0.7	1.2	40.7	0.4	1.7	46.4	3.4	3,590
19T	2.5	7	2.01	0.7	1.2	43.1	0.4	1.8	48.9	3.5	4,080
20T	2.5	7	2.01	0.7	1.2	44.5	0.4	1.8	50.4	3.8	4,280
24T	2.5	7	2.01	0.7	1.4	51.5	0.4	1.9	57.6	4.1	5,290
32T	2.5	7	2.01	0.7	1.4	55.9	0.4	2.0	62.2	4.4	6,460

150/250V RU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i)	Individual screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V RU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

- Cable type : 150/250V RU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.3	8.1	1.0	100
2P	0.75	7	1.11	0.6	1.1	11.0	1.1	150
3P	0.75	7	1.11	0.6	1.1	11.7	1.1	190
4P	0.75	7	1.11	0.6	1.2	13.0	1.2	240
5P	0.75	7	1.11	0.6	1.2	14.2	1.6	290
7P	0.75	7	1.11	0.6	1.3	15.7	1.6	380
8P	0.75	7	1.11	0.6	1.3	17.0	1.7	430
10P	0.75	7	1.11	0.6	1.4	20.2	2.0	570
12P	0.75	7	1.11	0.6	1.4	20.8	2.0	640
14P	0.75	7	1.11	0.6	1.5	22.2	2.1	730
16P	0.75	7	1.11	0.6	1.5	23.4	2.2	820
19P	0.75	7	1.11	0.6	1.6	24.9	2.3	950
20P	0.75	7	1.11	0.6	1.6	25.6	2.3	1,000
24P	0.75	7	1.11	0.6	1.7	29.4	2.5	1,250
32P	0.75	7	1.11	0.6	1.8	31.9	2.6	1,560
37P	0.75	7	1.11	0.6	1.9	34.1	2.8	1,800
1P	1.0	7	1.29	0.6	1.3	8.5	1.0	110
2P	1.0	7	1.29	0.6	1.1	11.6	1.1	180
3P	1.0	7	1.29	0.6	1.2	12.5	1.2	230
4P	1.0	7	1.29	0.6	1.2	13.7	1.2	290
5P	1.0	7	1.29	0.6	1.2	15.1	1.6	340
7P	1.0	7	1.29	0.6	1.3	16.6	1.7	450
8P	1.0	7	1.29	0.6	1.3	18.1	1.8	510
10P	1.0	7	1.29	0.6	1.5	21.7	2.0	680
12P	1.0	7	1.29	0.6	1.5	22.4	2.1	770
14P	1.0	7	1.29	0.6	1.5	23.6	2.1	870
16P	1.0	7	1.29	0.6	1.6	25.1	2.3	990
19P	1.0	7	1.29	0.6	1.6	26.5	2.4	1,140
20P	1.0	7	1.29	0.6	1.6	27.3	2.4	1,200
24P	1.0	7	1.29	0.6	1.8	31.5	2.6	1,500
32P	1.0	7	1.29	0.6	1.9	34.2	2.8	1,900
37P	1.0	7	1.29	0.6	1.9	36.3	2.9	2,150

SEC NEK-INSTRUMENT Cable

150/250V RU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

- Cable type : 150/250V RU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.3	9.4	1.0	140
2P	1.5	7	1.59	0.7	1.2	13.5	1.2	240
3P	1.5	7	1.59	0.7	1.2	14.4	1.3	300
4P	1.5	7	1.59	0.7	1.3	16.0	1.3	380
5P	1.5	7	1.59	0.7	1.3	17.6	1.7	460
7P	1.5	7	1.59	0.7	1.4	19.4	1.8	600
8P	1.5	7	1.59	0.7	1.5	21.3	1.9	700
10P	1.5	7	1.59	0.7	1.6	25.3	2.2	910
12P	1.5	7	1.59	0.7	1.6	26.1	2.3	1,030
14P	1.5	7	1.59	0.7	1.7	27.8	2.3	1,190
16P	1.5	7	1.59	0.7	1.7	29.3	2.5	1,330
19P	1.5	7	1.59	0.7	1.8	31.2	2.6	1,550
20P	1.5	7	1.59	0.7	1.8	32.1	2.7	1,630
24P	1.5	7	1.59	0.7	2.0	37.0	2.9	2,030
32P	1.5	7	1.59	0.7	2.1	40.2	3.1	2,560
37P	1.5	7	1.59	0.7	2.2	42.9	3.2	2,940
1P	2.5	7	2.01	0.7	1.4	10.5	1.1	180
2P	2.5	7	2.01	0.7	1.3	15.3	1.3	310
3P	2.5	7	2.01	0.7	1.3	16.2	1.4	400
4P	2.5	7	2.01	0.7	1.4	18.0	1.4	510
5P	2.5	7	2.01	0.7	1.4	19.8	1.8	620
7P	2.5	7	2.01	0.7	1.5	21.9	1.9	810
8P	2.5	7	2.01	0.7	1.6	24.0	2.0	940
10P	2.5	7	2.01	0.7	1.7	28.5	2.4	1,220
12P	2.5	7	2.01	0.7	1.7	29.5	2.4	1,390
14P	2.5	7	2.01	0.7	1.8	31.3	2.5	1,590
16P	2.5	7	2.01	0.7	1.9	33.3	2.7	1,810
19P	2.5	7	2.01	0.7	1.9	35.1	2.8	2,090
20P	2.5	7	2.01	0.7	2.0	36.4	2.9	2,220
24P	2.5	7	2.01	0.7	2.2	41.9	3.1	2,760
32P	2.5	7	2.01	0.7	2.3	45.6	3.3	3,490
37P	2.5	7	2.01	0.7	2.4	48.5	3.5	4,000

150/250V RU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.3	8.1	1.0	110
2T	0.75	7	1.11	0.6	1.1	11.5	1.1	190
3T	0.75	7	1.11	0.6	1.1	12.2	1.2	240
4T	0.75	7	1.11	0.6	1.2	13.5	1.2	300
5T	0.75	7	1.11	0.6	1.2	14.8	1.6	370
7T	0.75	7	1.11	0.6	1.3	16.4	1.7	480
8T	0.75	7	1.11	0.6	1.3	17.8	1.7	550
10T	0.75	7	1.11	0.6	1.4	21.1	2.0	710
12T	0.75	7	1.11	0.6	1.5	22.0	2.0	820
14T	0.75	7	1.11	0.6	1.5	23.2	2.1	930
16T	0.75	7	1.11	0.6	1.6	24.7	2.3	1,060
19T	0.75	7	1.11	0.6	1.6	26.1	2.4	1,220
20T	0.75	7	1.11	0.6	1.6	26.9	2.4	1,290
24T	0.75	7	1.11	0.6	1.8	31.0	2.6	1,600
32T	0.75	7	1.11	0.6	1.9	33.7	2.7	2,030
1T	1.0	7	1.29	0.6	1.3	8.5	1.0	120
2T	1.0	7	1.29	0.6	1.1	12.1	1.2	220
3T	1.0	7	1.29	0.6	1.2	13.1	1.2	290
4T	1.0	7	1.29	0.6	1.2	14.4	1.3	360
5T	1.0	7	1.29	0.6	1.3	16.0	1.6	440
7T	1.0	7	1.29	0.6	1.3	17.4	1.7	570
8T	1.0	7	1.29	0.6	1.4	19.1	1.8	670
10T	1.0	7	1.29	0.6	1.5	22.7	2.1	860
12T	1.0	7	1.29	0.6	1.5	23.5	2.1	980
14T	1.0	7	1.29	0.6	1.6	24.9	2.2	1,130
16T	1.0	7	1.29	0.6	1.6	26.3	2.4	1,270
19T	1.0	7	1.29	0.6	1.7	28.0	2.4	1,490
20T	1.0	7	1.29	0.6	1.7	28.8	2.5	1,560
24T	1.0	7	1.29	0.6	1.8	33.0	2.7	1,930
32T	1.0	7	1.29	0.6	1.9	35.9	2.8	2,450

SEC NEK-INSTRUMENT Cable

150/250V RU(i) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

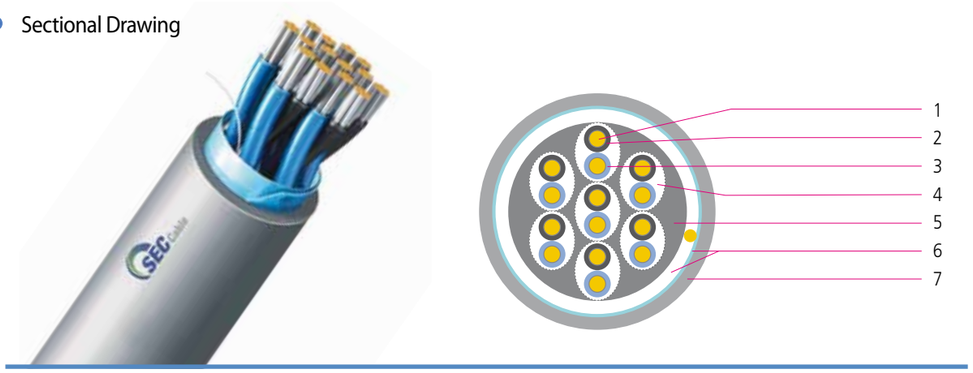
Cable type : 150/250V RU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.3	9.4	1.0	160
2T	1.5	7	1.59	0.7	1.2	14.1	1.3	290
3T	1.5	7	1.59	0.7	1.3	15.3	1.3	390
4T	1.5	7	1.59	0.7	1.3	16.8	1.4	490
5T	1.5	7	1.59	0.7	1.4	18.6	1.8	600
7T	1.5	7	1.59	0.7	1.4	20.3	1.9	780
8T	1.5	7	1.59	0.7	1.5	22.3	2.0	900
10T	1.5	7	1.59	0.7	1.6	26.5	2.3	1,170
12T	1.5	7	1.59	0.7	1.7	27.6	2.3	1,360
14T	1.5	7	1.59	0.7	1.7	29.1	2.4	1,540
16T	1.5	7	1.59	0.7	1.8	31.0	2.6	1,750
19T	1.5	7	1.59	0.7	1.9	32.9	2.7	2,040
20T	1.5	7	1.59	0.7	1.9	33.9	2.7	2,150
24T	1.5	7	1.59	0.7	2.1	39.1	3.0	2,670
32T	1.5	7	1.59	0.7	2.2	42.4	3.2	3,390
1T	2.5	7	2.01	0.7	1.4	10.5	1.1	210
2T	2.5	7	2.01	0.7	1.3	15.9	1.3	390
3T	2.5	7	2.01	0.7	1.3	17.0	1.4	510
4T	2.5	7	2.01	0.7	1.4	18.9	1.5	660
5T	2.5	7	2.01	0.7	1.5	21.0	1.9	820
7T	2.5	7	2.01	0.7	1.5	22.9	2.0	1,070
8T	2.5	7	2.01	0.7	1.6	25.1	2.1	1,230
10T	2.5	7	2.01	0.7	1.8	30.1	2.5	1,610
12T	2.5	7	2.01	0.7	1.8	31.1	2.5	1,850
14T	2.5	7	2.01	0.7	1.9	33.0	2.6	2,130
16T	2.5	7	2.01	0.7	1.9	34.9	2.8	2,400
19T	2.5	7	2.01	0.7	2.0	37.0	2.9	2,800
20T	2.5	7	2.01	0.7	2.0	38.2	3.0	2,950
24T	2.5	7	2.01	0.7	2.2	44.0	3.2	3,650
32T	2.5	7	2.01	0.7	2.4	48.0	3.4	4,680

150/250V RU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(c)	Collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
6. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

NEK-INSTRUMENT Cable

150/250V RU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.3	8.1	1.0	100
2P	0.75	7	1.11	0.6	1.1	10.7	1.2	150
3P	0.75	7	1.11	0.6	1.1	11.3	1.3	170
4P	0.75	7	1.11	0.6	1.1	12.4	1.3	210
5P	0.75	7	1.11	0.6	1.2	13.7	1.7	250
7P	0.75	7	1.11	0.6	1.2	14.9	1.8	310
8P	0.75	7	1.11	0.6	1.3	16.3	1.9	370
10P	0.75	7	1.11	0.6	1.4	19.3	2.2	480
12P	0.75	7	1.11	0.6	1.4	19.9	2.3	530
14P	0.75	7	1.11	0.6	1.4	20.9	2.3	590
16P	0.75	7	1.11	0.6	1.5	22.2	2.5	670
19P	0.75	7	1.11	0.6	1.5	23.4	2.6	760
20P	0.75	7	1.11	0.6	1.5	24.1	2.7	800
24P	0.75	7	1.11	0.6	1.6	27.6	2.9	990
32P	0.75	7	1.11	0.6	1.7	29.9	3.1	1,240
37P	0.75	7	1.11	0.6	1.8	31.9	3.2	1,410
1P	1.0	7	1.29	0.6	1.3	8.5	1.1	110
2P	1.0	7	1.29	0.6	1.1	11.4	1.3	170
3P	1.0	7	1.29	0.6	1.1	12.0	1.4	200
4P	1.0	7	1.29	0.6	1.2	13.3	1.4	250
5P	1.0	7	1.29	0.6	1.2	14.5	1.8	300
7P	1.0	7	1.29	0.6	1.3	16.0	1.9	380
8P	1.0	7	1.29	0.6	1.3	17.3	2.0	430
10P	1.0	7	1.29	0.6	1.4	20.5	2.4	560
12P	1.0	7	1.29	0.6	1.4	21.1	2.4	620
14P	1.0	7	1.29	0.6	1.5	22.4	2.5	710
16P	1.0	7	1.29	0.6	1.5	23.7	2.7	800
19P	1.0	7	1.29	0.6	1.6	25.1	2.8	920
20P	1.0	7	1.29	0.6	1.6	25.9	2.9	970
24P	1.0	7	1.29	0.6	1.7	29.6	3.1	1,200
32P	1.0	7	1.29	0.6	1.8	32.1	3.3	1,490
37P	1.0	7	1.29	0.6	1.9	34.2	3.5	1,700

150/250V RU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.3	9.4	1.0	140
2P	1.5	7	1.59	0.7	1.2	13.1	1.2	220
3P	1.5	7	1.59	0.7	1.2	13.9	1.2	270
4P	1.5	7	1.59	0.7	1.2	15.2	1.3	330
5P	1.5	7	1.59	0.7	1.3	16.9	1.7	410
7P	1.5	7	1.59	0.7	1.4	18.6	1.8	520
8P	1.5	7	1.59	0.7	1.4	20.1	1.9	590
10P	1.5	7	1.59	0.7	1.5	23.8	2.1	770
12P	1.5	7	1.59	0.7	1.6	24.8	2.2	880
14P	1.5	7	1.59	0.7	1.6	26.1	2.3	990
16P	1.5	7	1.59	0.7	1.7	27.8	2.4	1,130
19P	1.5	7	1.59	0.7	1.7	29.3	2.5	1,290
20P	1.5	7	1.59	0.7	1.8	30.4	2.6	1,370
24P	1.5	7	1.59	0.7	1.9	34.7	2.8	1,690
32P	1.5	7	1.59	0.7	2.0	37.7	2.9	2,110
37P	1.5	7	1.59	0.7	2.1	40.2	3.1	2,410
1P	2.5	7	2.01	0.7	1.4	10.5	1.1	180
2P	2.5	7	2.01	0.7	1.2	14.5	1.3	280
3P	2.5	7	2.01	0.7	1.3	15.6	1.3	360
4P	2.5	7	2.01	0.7	1.3	17.1	1.4	450
5P	2.5	7	2.01	0.7	1.4	19.0	1.8	550
7P	2.5	7	2.01	0.7	1.4	20.7	1.9	700
8P	2.5	7	2.01	0.7	1.5	22.7	2.0	810
10P	2.5	7	2.01	0.7	1.6	26.8	2.3	1,050
12P	2.5	7	2.01	0.7	1.7	27.9	2.3	1,200
14P	2.5	7	2.01	0.7	1.7	29.4	2.4	1,360
16P	2.5	7	2.01	0.7	1.8	31.2	2.6	1,540
19P	2.5	7	2.01	0.7	1.8	33.0	2.7	1,770
20P	2.5	7	2.01	0.7	1.9	34.2	2.8	1,880
24P	2.5	7	2.01	0.7	2.1	39.3	3.0	2,340
32P	2.5	7	2.01	0.7	2.2	42.6	3.2	2,930
37P	2.5	7	2.01	0.7	2.3	45.4	3.3	3,360

SEC NEK-INSTRUMENT Cable

150/250V RU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Cable type : 150/250V RU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.3	8.1	1.0	110
2T	0.75	7	1.11	0.6	1.1	11.9	1.1	180
3T	0.75	7	1.11	0.6	1.1	12.6	1.2	220
4T	0.75	7	1.11	0.6	1.2	13.9	1.2	280
5T	0.75	7	1.11	0.6	1.2	15.2	1.6	340
7T	0.75	7	1.11	0.6	1.3	16.8	1.7	430
8T	0.75	7	1.11	0.6	1.3	18.2	1.8	490
10T	0.75	7	1.11	0.6	1.4	21.6	2.0	640
12T	0.75	7	1.11	0.6	1.5	22.5	2.1	730
14T	0.75	7	1.11	0.6	1.5	23.6	2.1	820
16T	0.75	7	1.11	0.6	1.6	25.1	2.3	930
19T	0.75	7	1.11	0.6	1.6	26.5	2.4	1,060
20T	0.75	7	1.11	0.6	1.6	27.3	2.4	1,120
24T	0.75	7	1.11	0.6	1.8	31.4	2.6	1,400
32T	0.75	7	1.11	0.6	1.9	34.1	2.8	1,750
1T	1.0	7	1.29	0.6	1.3	8.5	1.0	120
2T	1.0	7	1.29	0.6	1.1	12.6	1.2	210
3T	1.0	7	1.29	0.6	1.2	13.5	1.2	270
4T	1.0	7	1.29	0.6	1.2	14.8	1.3	330
5T	1.0	7	1.29	0.6	1.3	16.4	1.7	410
7T	1.0	7	1.29	0.6	1.3	17.9	1.7	510
8T	1.0	7	1.29	0.6	1.4	19.6	1.8	590
10T	1.0	7	1.29	0.6	1.5	23.2	2.1	770
12T	1.0	7	1.29	0.6	1.5	23.9	2.1	870
14T	1.0	7	1.29	0.6	1.6	25.4	2.2	990
16T	1.0	7	1.29	0.6	1.6	26.8	2.4	1,110
19T	1.0	7	1.29	0.6	1.7	28.4	2.5	1,290
20T	1.0	7	1.29	0.6	1.7	29.3	2.5	1,350
24T	1.0	7	1.29	0.6	1.8	33.5	2.7	1,670
32T	1.0	7	1.29	0.6	1.9	36.4	2.9	2,100

150/250V RU(c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

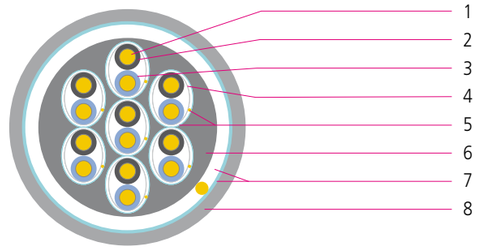
Cable type : 150/250V RU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.3	9.4	1.0	160
2T	1.5	7	1.59	0.7	1.2	14.6	1.3	290
3T	1.5	7	1.59	0.7	1.3	15.7	1.3	370
4T	1.5	7	1.59	0.7	1.3	17.2	1.4	460
5T	1.5	7	1.59	0.7	1.4	19.0	1.8	560
7T	1.5	7	1.59	0.7	1.4	20.8	1.9	710
8T	1.5	7	1.59	0.7	1.5	22.8	2.0	830
10T	1.5	7	1.59	0.7	1.6	27.0	2.3	1,070
12T	1.5	7	1.59	0.7	1.7	28.1	2.4	1,230
14T	1.5	7	1.59	0.7	1.7	29.6	2.4	1,390
16T	1.5	7	1.59	0.7	1.8	31.4	2.6	1,580
19T	1.5	7	1.59	0.7	1.9	33.4	2.7	1,830
20T	1.5	7	1.59	0.7	1.9	34.4	2.8	1,920
24T	1.5	7	1.59	0.7	2.1	39.5	3.0	2,390
32T	1.5	7	1.59	0.7	2.2	42.9	3.2	3,010
1T	2.5	7	2.01	0.7	1.4	10.5	1.1	210
2T	2.5	7	2.01	0.7	1.3	16.4	1.4	390
3T	2.5	7	2.01	0.7	1.3	17.4	1.4	490
4T	2.5	7	2.01	0.7	1.4	19.3	1.5	620
5T	2.5	7	2.01	0.7	1.5	21.4	1.9	770
7T	2.5	7	2.01	0.7	1.5	23.4	2.0	980
8T	2.5	7	2.01	0.7	1.6	25.6	2.1	1,140
10T	2.5	7	2.01	0.7	1.8	30.6	2.5	1,490
12T	2.5	7	2.01	0.7	1.8	31.6	2.5	1,690
14T	2.5	7	2.01	0.7	1.9	33.5	2.6	1,940
16T	2.5	7	2.01	0.7	1.9	35.4	2.8	2,180
19T	2.5	7	2.01	0.7	2.0	37.5	2.9	2,540
20T	2.5	7	2.01	0.7	2.0	38.7	3.0	2,670
24T	2.5	7	2.01	0.7	2.2	44.5	3.3	3,310
32T	2.5	7	2.01	0.7	2.4	48.5	3.5	4,210

150/250V RU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
R	EPR insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i/c)	Individual and collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	If necessary
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
8. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V RU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

- Cable type : 150/250V RU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.3	8.1	1.0	100
2P	0.75	7	1.11	0.6	1.1	11.4	1.1	170
3P	0.75	7	1.11	0.6	1.1	12.1	1.2	210
4P	0.75	7	1.11	0.6	1.2	13.4	1.2	260
5P	0.75	7	1.11	0.6	1.2	14.6	1.6	310
7P	0.75	7	1.11	0.6	1.3	16.1	1.7	400
8P	0.75	7	1.11	0.6	1.3	17.4	1.7	460
10P	0.75	7	1.11	0.6	1.4	20.6	2.0	590
12P	0.75	7	1.11	0.6	1.4	21.3	2.0	670
14P	0.75	7	1.11	0.6	1.5	22.6	2.1	760
16P	0.75	7	1.11	0.6	1.5	23.8	2.2	860
19P	0.75	7	1.11	0.6	1.6	25.3	2.3	990
20P	0.75	7	1.11	0.6	1.6	26.1	2.4	1,040
24P	0.75	7	1.11	0.6	1.7	29.8	2.5	1,290
32P	0.75	7	1.11	0.6	1.8	32.3	2.7	1,610
37P	0.75	7	1.11	0.6	1.9	34.5	2.8	1,840
1P	1.0	7	1.29	0.6	1.3	8.5	1.0	110
2P	1.0	7	1.29	0.6	1.1	12.1	1.2	200
3P	1.0	7	1.29	0.6	1.2	13.0	1.2	250
4P	1.0	7	1.29	0.6	1.2	14.2	1.3	310
5P	1.0	7	1.29	0.6	1.2	15.5	1.6	370
7P	1.0	7	1.29	0.6	1.3	17.1	1.7	480
8P	1.0	7	1.29	0.6	1.3	18.5	1.8	540
10P	1.0	7	1.29	0.6	1.5	22.1	2.1	720
12P	1.0	7	1.29	0.6	1.5	22.9	2.1	810
14P	1.0	7	1.29	0.6	1.5	24.0	2.1	910
16P	1.0	7	1.29	0.6	1.6	25.6	2.3	1,030
19P	1.0	7	1.29	0.6	1.6	26.9	2.4	1,180
20P	1.0	7	1.29	0.6	1.6	27.8	2.4	1,240
24P	1.0	7	1.29	0.6	1.8	31.9	2.6	1,550
32P	1.0	7	1.29	0.6	1.9	34.7	2.8	1,940
37P	1.0	7	1.29	0.6	1.9	36.8	2.9	2,200

SEC NEK-INSTRUMENT Cable

150/250V RU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

- Cable type : 150/250V RU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.3	9.4	1.0	140
2P	1.5	7	1.59	0.7	1.2	14.0	1.2	260
3P	1.5	7	1.59	0.7	1.2	14.8	1.3	320
4P	1.5	7	1.59	0.7	1.3	16.5	1.4	410
5P	1.5	7	1.59	0.7	1.3	18.0	1.7	490
7P	1.5	7	1.59	0.7	1.4	19.8	1.8	630
8P	1.5	7	1.59	0.7	1.5	21.8	1.9	730
10P	1.5	7	1.59	0.7	1.6	25.8	2.2	950
12P	1.5	7	1.59	0.7	1.6	26.6	2.3	1,070
14P	1.5	7	1.59	0.7	1.7	28.2	2.4	1,230
16P	1.5	7	1.59	0.7	1.7	29.8	2.5	1,370
19P	1.5	7	1.59	0.7	1.8	31.6	2.6	1,590
20P	1.5	7	1.59	0.7	1.8	32.6	2.7	1,670
24P	1.5	7	1.59	0.7	2.0	37.5	2.9	2,090
32P	1.5	7	1.59	0.7	2.1	40.7	3.1	2,620
37P	1.5	7	1.59	0.7	2.2	43.4	3.2	3,000
1P	2.5	7	2.01	0.7	1.4	10.5	1.1	180
2P	2.5	7	2.01	0.7	1.3	15.7	1.3	340
3P	2.5	7	2.01	0.7	1.3	16.7	1.4	430
4P	2.5	7	2.01	0.7	1.4	18.5	1.5	540
5P	2.5	7	2.01	0.7	1.4	20.3	1.9	650
7P	2.5	7	2.01	0.7	1.5	22.3	2.0	840
8P	2.5	7	2.01	0.7	1.6	24.5	2.1	980
10P	2.5	7	2.01	0.7	1.7	29.0	2.4	1,260
12P	2.5	7	2.01	0.7	1.7	30.0	2.4	1,430
14P	2.5	7	2.01	0.7	1.8	31.8	2.5	1,640
16P	2.5	7	2.01	0.7	1.9	33.8	2.7	1,860
19P	2.5	7	2.01	0.7	1.9	35.6	2.8	2,140
20P	2.5	7	2.01	0.7	2.0	36.9	2.9	2,270
24P	2.5	7	2.01	0.7	2.2	42.4	3.2	2,820
32P	2.5	7	2.01	0.7	2.3	46.0	3.3	3,550
37P	2.5	7	2.01	0.7	2.4	49.0	3.5	4,060

150/250V RU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

- Cable type : 150/250V RU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.3	8.1	1.0	110
2T	0.75	7	1.11	0.6	1.1	11.9	1.1	200
3T	0.75	7	1.11	0.6	1.1	12.6	1.2	260
4T	0.75	7	1.11	0.6	1.2	13.9	1.2	320
5T	0.75	7	1.11	0.6	1.2	15.2	1.6	390
7T	0.75	7	1.11	0.6	1.3	16.8	1.7	500
8T	0.75	7	1.11	0.6	1.3	18.2	1.8	570
10T	0.75	7	1.11	0.6	1.4	21.6	2.0	740
12T	0.75	7	1.11	0.6	1.5	22.5	2.1	850
14T	0.75	7	1.11	0.6	1.5	23.6	2.1	970
16T	0.75	7	1.11	0.6	1.6	25.1	2.3	1,100
19T	0.75	7	1.11	0.6	1.6	26.5	2.4	1,260
20T	0.75	7	1.11	0.6	1.6	27.3	2.4	1,320
24T	0.75	7	1.11	0.6	1.8	31.4	2.6	1,650
32T	0.75	7	1.11	0.6	1.9	34.1	2.8	2,080
1T	1.0	7	1.29	0.6	1.3	8.5	1.0	120
2T	1.0	7	1.29	0.6	1.1	12.6	1.2	240
3T	1.0	7	1.29	0.6	1.2	13.5	1.2	310
4T	1.0	7	1.29	0.6	1.2	14.8	1.3	380
5T	1.0	7	1.29	0.6	1.3	16.4	1.7	470
7T	1.0	7	1.29	0.6	1.3	17.9	1.7	600
8T	1.0	7	1.29	0.6	1.4	19.6	1.8	700
10T	1.0	7	1.29	0.6	1.5	23.2	2.1	900
12T	1.0	7	1.29	0.6	1.5	23.9	2.1	1,020
14T	1.0	7	1.29	0.6	1.6	25.4	2.2	1,170
16T	1.0	7	1.29	0.6	1.6	26.8	2.4	1,310
19T	1.0	7	1.29	0.6	1.7	28.4	2.5	1,530
20T	1.0	7	1.29	0.6	1.7	29.3	2.5	1,610
24T	1.0	7	1.29	0.6	1.8	33.5	2.7	1,970
32T	1.0	7	1.29	0.6	1.9	36.4	2.9	2,500

SEC NEK-INSTRUMENT Cable

150/250V RU(i/c) (Sheath code)

: Flame retardant instrumentation cable - Pairs, Triads

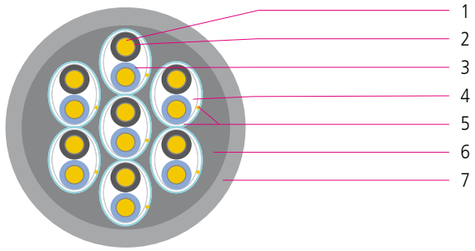
- Cable type : 150/250V RU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.3	9.4	1.0	160
2T	1.5	7	1.59	0.7	1.2	14.6	1.3	320
3T	1.5	7	1.59	0.7	1.3	15.7	1.3	410
4T	1.5	7	1.59	0.7	1.3	17.2	1.4	510
5T	1.5	7	1.59	0.7	1.4	19.0	1.8	630
7T	1.5	7	1.59	0.7	1.4	20.8	1.9	810
8T	1.5	7	1.59	0.7	1.5	22.8	2.0	940
10T	1.5	7	1.59	0.7	1.6	27.0	2.3	1,210
12T	1.5	7	1.59	0.7	1.7	28.1	2.4	1,390
14T	1.5	7	1.59	0.7	1.7	29.6	2.4	1,580
16T	1.5	7	1.59	0.7	1.8	31.4	2.6	1,800
19T	1.5	7	1.59	0.7	1.9	33.4	2.7	2,090
20T	1.5	7	1.59	0.7	1.9	34.4	2.8	2,200
24T	1.5	7	1.59	0.7	2.1	39.5	3.0	2,720
32T	1.5	7	1.59	0.7	2.2	42.9	3.2	3,450
1T	2.5	7	2.01	0.7	1.4	10.5	1.1	210
2T	2.5	7	2.01	0.7	1.3	16.4	1.4	420
3T	2.5	7	2.01	0.7	1.3	17.4	1.4	540
4T	2.5	7	2.01	0.7	1.4	19.3	1.5	690
5T	2.5	7	2.01	0.7	1.5	21.4	1.9	850
7T	2.5	7	2.01	0.7	1.5	23.4	2.0	1,100
8T	2.5	7	2.01	0.7	1.6	25.6	2.1	1,270
10T	2.5	7	2.01	0.7	1.8	30.6	2.5	1,660
12T	2.5	7	2.01	0.7	1.8	31.6	2.5	1,900
14T	2.5	7	2.01	0.7	1.9	33.5	2.6	2,180
16T	2.5	7	2.01	0.7	1.9	35.4	2.8	2,450
19T	2.5	7	2.01	0.7	2.0	37.5	2.9	2,860
20T	2.5	7	2.01	0.7	2.0	38.7	3.0	3,010
24T	2.5	7	2.01	0.7	2.2	44.5	3.3	3,710
32T	2.5	7	2.01	0.7	2.4	48.5	3.5	4,750

150/250V BU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C, Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i)	Individual screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

NEK-INSTRUMENT Cable

150/250V BU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Cable type : 150/250V BU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.3	9.6	1.0	120
2P	0.75	7	1.11	0.6	1.1	13.8	1.2	200
3P	0.75	7	1.11	0.6	1.1	14.6	1.3	240
4P	0.75	7	1.11	0.6	1.2	16.3	1.4	310
5P	0.75	7	1.11	0.6	1.2	17.9	1.7	370
7P	0.75	7	1.11	0.6	1.3	19.9	1.8	480
8P	0.75	7	1.11	0.6	1.3	21.6	1.9	550
10P	0.75	7	1.11	0.6	1.4	25.7	2.2	730
12P	0.75	7	1.11	0.6	1.4	26.6	2.3	810
14P	0.75	7	1.11	0.6	1.5	28.3	2.4	930
16P	0.75	7	1.11	0.6	1.5	29.9	2.5	1,040
19P	0.75	7	1.11	0.6	1.6	31.8	2.6	1,200
20P	0.75	7	1.11	0.6	1.6	32.8	2.9	1,270
24P	0.75	7	1.11	0.6	1.7	37.7	3.1	1,590
32P	0.75	7	1.11	0.6	1.8	41.0	3.3	1,980
37P	0.75	7	1.11	0.6	1.9	43.8	3.4	2,260
1P	1.0	7	1.29	0.6	1.3	10.0	1.0	140
2P	1.0	7	1.29	0.6	1.1	14.4	1.3	230
3P	1.0	7	1.29	0.6	1.2	15.5	1.3	290
4P	1.0	7	1.29	0.6	1.2	17.1	1.4	350
5P	1.0	7	1.29	0.6	1.2	18.8	1.8	430
7P	1.0	7	1.29	0.6	1.3	20.8	1.9	550
8P	1.0	7	1.29	0.6	1.3	22.7	2.0	630
10P	1.0	7	1.29	0.6	1.5	27.2	2.3	850
12P	1.0	7	1.29	0.6	1.5	28.2	2.4	950
14P	1.0	7	1.29	0.6	1.5	29.7	2.4	1,070
16P	1.0	7	1.29	0.6	1.6	31.6	2.6	1,220
19P	1.0	7	1.29	0.6	1.6	33.4	2.7	1,390
20P	1.0	7	1.29	0.6	1.6	34.5	3.0	1,470
24P	1.0	7	1.29	0.6	1.8	39.8	3.2	1,860
32P	1.0	7	1.29	0.6	1.9	43.3	3.4	2,320
37P	1.0	7	1.29	0.6	1.9	46.0	3.5	2,630

150/250V BU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

- Cable type : 150/250V BU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.3	11.0	1.1	160
2P	1.5	7	1.59	0.7	1.2	16.3	1.4	290
3P	1.5	7	1.59	0.7	1.2	17.4	1.4	360
4P	1.5	7	1.59	0.7	1.3	19.4	1.5	460
5P	1.5	7	1.59	0.7	1.3	21.3	1.9	550
7P	1.5	7	1.59	0.7	1.4	23.6	2.0	710
8P	1.5	7	1.59	0.7	1.5	25.9	2.1	830
10P	1.5	7	1.59	0.7	1.6	30.8	2.5	1,100
12P	1.5	7	1.59	0.7	1.6	31.9	2.5	1,230
14P	1.5	7	1.59	0.7	1.7	33.9	2.6	1,410
16P	1.5	7	1.59	0.7	1.7	35.9	2.8	1,580
19P	1.5	7	1.59	0.7	1.8	38.1	3.0	1,830
20P	1.5	7	1.59	0.7	1.8	39.3	3.2	1,930
24P	1.5	7	1.59	0.7	2.0	45.4	3.5	2,430
32P	1.5	7	1.59	0.7	2.1	49.3	3.7	3,030
37P	1.5	7	1.59	0.7	2.2	52.6	3.9	3,470
1P	2.5	7	2.01	0.7	1.4	12.1	1.2	210
2P	2.5	7	2.01	0.7	1.3	18.0	1.4	370
3P	2.5	7	2.01	0.7	1.3	19.2	1.5	460
4P	2.5	7	2.01	0.7	1.4	21.4	1.6	590
5P	2.5	7	2.01	0.7	1.4	23.6	2.0	710
7P	2.5	7	2.01	0.7	1.5	26.0	2.1	920
8P	2.5	7	2.01	0.7	1.6	28.6	2.3	1,080
10P	2.5	7	2.01	0.7	1.7	34.1	2.7	1,420
12P	2.5	7	2.01	0.7	1.7	35.2	2.7	1,600
14P	2.5	7	2.01	0.7	1.8	37.4	2.8	1,830
16P	2.5	7	2.01	0.7	1.9	39.8	3.0	2,080
19P	2.5	7	2.01	0.7	1.9	42.1	3.2	2,380
20P	2.5	7	2.01	0.7	2.0	43.6	3.4	2,540
24P	2.5	7	2.01	0.7	2.2	50.3	3.8	3,190
32P	2.5	7	2.01	0.7	2.3	54.6	4.0	3,990
37P	2.5	7	2.01	0.7	2.4	58.3	4.2	4,570

SEC NEK-INSTRUMENT Cable

150/250V BU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

- Cable type : 150/250V BU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.3	9.6	1.0	140
2T	0.75	7	1.11	0.6	1.1	14.4	1.3	240
3T	0.75	7	1.11	0.6	1.1	15.3	1.3	300
4T	0.75	7	1.11	0.6	1.2	17.1	1.4	380
5T	0.75	7	1.11	0.6	1.2	18.8	1.8	460
7T	0.75	7	1.11	0.6	1.3	20.8	1.9	600
8T	0.75	7	1.11	0.6	1.3	22.6	2.0	690
10T	0.75	7	1.11	0.6	1.4	27.0	2.3	900
12T	0.75	7	1.11	0.6	1.5	28.1	2.4	1,030
14T	0.75	7	1.11	0.6	1.5	29.7	2.4	1,170
16T	0.75	7	1.11	0.6	1.6	31.6	2.6	1,330
19T	0.75	7	1.11	0.6	1.6	33.4	2.7	1,520
20T	0.75	7	1.11	0.6	1.6	34.5	3.0	1,610
24T	0.75	7	1.11	0.6	1.8	39.8	3.2	2,020
32T	0.75	7	1.11	0.6	1.9	43.3	3.4	2,540
1T	1.0	7	1.29	0.6	1.3	10.0	1.0	150
2T	1.0	7	1.29	0.6	1.1	15.1	1.3	270
3T	1.0	7	1.29	0.6	1.2	16.3	1.4	350
4T	1.0	7	1.29	0.6	1.2	17.9	1.4	440
5T	1.0	7	1.29	0.6	1.3	19.9	1.8	540
7T	1.0	7	1.29	0.6	1.3	21.8	1.9	690
8T	1.0	7	1.29	0.6	1.4	24.0	2.0	810
10T	1.0	7	1.29	0.6	1.5	28.6	2.4	1,060
12T	1.0	7	1.29	0.6	1.5	29.5	2.4	1,200
14T	1.0	7	1.29	0.6	1.6	31.4	2.5	1,380
16T	1.0	7	1.29	0.6	1.6	33.2	2.7	1,550
19T	1.0	7	1.29	0.6	1.7	35.3	2.8	1,800
20T	1.0	7	1.29	0.6	1.7	36.4	3.1	1,900
24T	1.0	7	1.29	0.6	1.8	41.8	3.3	2,360
32T	1.0	7	1.29	0.6	1.9	45.5	3.5	2,970

150/250V BU(i) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

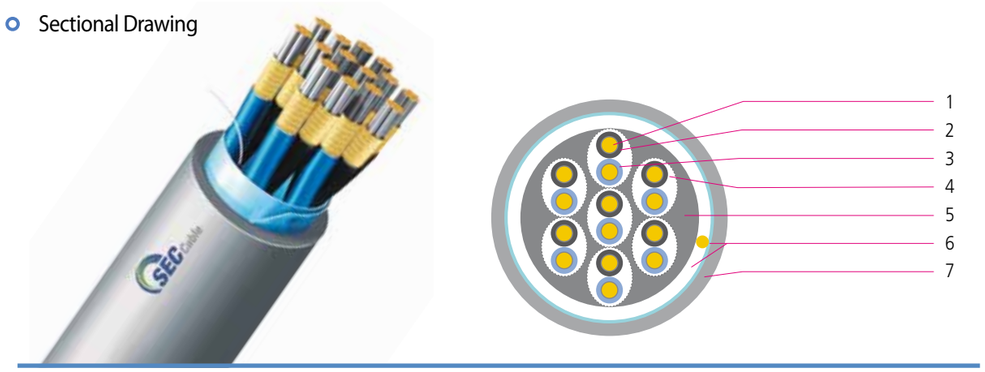
Cable type : 150/250V BU(i) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm^2	EA	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.3	11.0	1.1	190
2T	1.5	7	1.59	0.7	1.2	17.1	1.4	350
3T	1.5	7	1.59	0.7	1.3	18.4	1.5	460
4T	1.5	7	1.59	0.7	1.3	20.3	1.6	570
5T	1.5	7	1.59	0.7	1.4	22.6	2.0	710
7T	1.5	7	1.59	0.7	1.4	24.7	2.1	910
8T	1.5	7	1.59	0.7	1.5	27.2	2.2	1,060
10T	1.5	7	1.59	0.7	1.6	32.4	2.6	1,390
12T	1.5	7	1.59	0.7	1.7	33.7	2.6	1,590
14T	1.5	7	1.59	0.7	1.7	35.6	2.7	1,810
16T	1.5	7	1.59	0.7	1.8	37.9	2.9	2,060
19T	1.5	7	1.59	0.7	1.9	40.2	3.1	2,390
20T	1.5	7	1.59	0.7	1.9	41.5	3.3	2,520
24T	1.5	7	1.59	0.7	2.1	47.9	3.6	3,150
32T	1.5	7	1.59	0.7	2.2	52.0	3.8	3,970
1T	2.5	7	2.01	0.7	1.4	12.1	1.2	240
2T	2.5	7	2.01	0.7	1.3	18.9	1.5	460
3T	2.5	7	2.01	0.7	1.3	20.1	1.6	590
4T	2.5	7	2.01	0.7	1.4	22.4	1.7	750
5T	2.5	7	2.01	0.7	1.5	24.9	2.1	930
7T	2.5	7	2.01	0.7	1.5	27.3	2.2	1,200
8T	2.5	7	2.01	0.7	1.6	30.0	2.3	1,400
10T	2.5	7	2.01	0.7	1.8	36.0	2.7	1,850
12T	2.5	7	2.01	0.7	1.8	37.2	2.8	2,100
14T	2.5	7	2.01	0.7	1.9	39.5	2.9	2,410
16T	2.5	7	2.01	0.7	1.9	41.8	3.1	2,720
19T	2.5	7	2.01	0.7	2.0	44.4	3.3	3,150
20T	2.5	7	2.01	0.7	2.0	45.8	3.5	3,330
24T	2.5	7	2.01	0.7	2.2	52.8	3.9	4,150
32T	2.5	7	2.01	0.7	2.4	57.6	4.1	5,280

150/250V BU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90℃

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↓
Smoke emission	IEC 61034, 60% ↑
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40℃, Impact : -35℃
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(c)	Collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Separator	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
6. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
7. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V BU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

- Cable type : 150/250V BU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.3	9.6	1.0	120
2P	0.75	7	1.11	0.6	1.1	13.3	1.2	190
3P	0.75	7	1.11	0.6	1.1	14.1	1.3	220
4P	0.75	7	1.11	0.6	1.1	15.4	1.3	270
5P	0.75	7	1.11	0.6	1.2	17.1	1.7	330
7P	0.75	7	1.11	0.6	1.2	18.7	1.8	400
8P	0.75	7	1.11	0.6	1.3	20.6	1.9	470
10P	0.75	7	1.11	0.6	1.4	24.4	2.2	620
12P	0.75	7	1.11	0.6	1.4	25.2	2.2	680
14P	0.75	7	1.11	0.6	1.4	26.5	2.3	760
16P	0.75	7	1.11	0.6	1.5	28.3	2.5	860
19P	0.75	7	1.11	0.6	1.5	29.8	2.5	970
20P	0.75	7	1.11	0.6	1.5	30.7	2.8	1,020
24P	0.75	7	1.11	0.6	1.6	35.2	3.0	1,280
32P	0.75	7	1.11	0.6	1.7	38.3	3.2	1,580
37P	0.75	7	1.11	0.6	1.8	40.9	3.3	1,800
1P	1.0	7	1.29	0.6	1.3	10.0	1.0	140
2P	1.0	7	1.29	0.6	1.1	13.9	1.2	210
3P	1.0	7	1.29	0.6	1.1	14.8	1.3	250
4P	1.0	7	1.29	0.6	1.2	16.4	1.4	310
5P	1.0	7	1.29	0.6	1.2	18.0	1.7	370
7P	1.0	7	1.29	0.6	1.3	19.8	1.8	470
8P	1.0	7	1.29	0.6	1.3	21.6	1.9	530
10P	1.0	7	1.29	0.6	1.4	25.6	2.2	700
12P	1.0	7	1.29	0.6	1.4	26.4	2.3	780
14P	1.0	7	1.29	0.6	1.5	28.1	2.4	890
16P	1.0	7	1.29	0.6	1.5	29.7	2.5	990
19P	1.0	7	1.29	0.6	1.6	31.5	2.6	1,130
20P	1.0	7	1.29	0.6	1.6	32.5	2.9	1,200
24P	1.0	7	1.29	0.6	1.7	37.3	3.1	1,500
32P	1.0	7	1.29	0.6	1.8	40.5	3.3	1,840
37P	1.0	7	1.29	0.6	1.9	43.2	3.4	2,110

SEC NEK-INSTRUMENT Cable

150/250V BU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

- Cable type : 150/250V BU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.3	11.0	1.1	160
2P	1.5	7	1.59	0.7	1.2	15.7	1.3	270
3P	1.5	7	1.59	0.7	1.2	16.7	1.4	330
4P	1.5	7	1.59	0.7	1.2	18.3	1.5	400
5P	1.5	7	1.59	0.7	1.3	20.3	1.9	490
7P	1.5	7	1.59	0.7	1.4	22.4	2.0	620
8P	1.5	7	1.59	0.7	1.4	24.4	2.1	710
10P	1.5	7	1.59	0.7	1.5	29.0	2.4	930
12P	1.5	7	1.59	0.7	1.6	30.1	2.5	1,050
14P	1.5	7	1.59	0.7	1.6	31.8	2.5	1,180
16P	1.5	7	1.59	0.7	1.7	33.8	2.7	1,340
19P	1.5	7	1.59	0.7	1.7	35.7	2.8	1,520
20P	1.5	7	1.59	0.7	1.8	37.0	3.1	1,630
24P	1.5	7	1.59	0.7	1.9	42.4	3.4	2,030
32P	1.5	7	1.59	0.7	2.0	46.1	3.6	2,510
37P	1.5	7	1.59	0.7	2.1	49.1	3.7	2,870
1P	2.5	7	2.01	0.7	1.4	12.1	1.2	210
2P	2.5	7	2.01	0.7	1.2	17.1	1.4	340
3P	2.5	7	2.01	0.7	1.3	18.4	1.5	420
4P	2.5	7	2.01	0.7	1.3	20.2	1.6	520
5P	2.5	7	2.01	0.7	1.4	22.4	2.0	630
7P	2.5	7	2.01	0.7	1.4	24.5	2.1	800
8P	2.5	7	2.01	0.7	1.5	26.9	2.2	930
10P	2.5	7	2.01	0.7	1.6	31.9	2.5	1,220
12P	2.5	7	2.01	0.7	1.7	33.2	2.6	1,390
14P	2.5	7	2.01	0.7	1.7	35.1	2.7	1,560
16P	2.5	7	2.01	0.7	1.8	37.3	2.9	1,770
19P	2.5	7	2.01	0.7	1.8	39.4	3.0	2,020
20P	2.5	7	2.01	0.7	1.9	40.8	3.3	2,150
24P	2.5	7	2.01	0.7	2.1	47.0	3.6	2,700
32P	2.5	7	2.01	0.7	2.2	51.0	3.8	3,360
37P	2.5	7	2.01	0.7	2.3	54.4	4.0	3,840

150/250V BU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

- Cable type : 150/250V BU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.3	9.6	1.0	140
2T	0.75	7	1.11	0.6	1.1	14.8	1.3	240
3T	0.75	7	1.11	0.6	1.1	15.7	1.3	280
4T	0.75	7	1.11	0.6	1.2	17.5	1.4	360
5T	0.75	7	1.11	0.6	1.2	19.2	1.8	430
7T	0.75	7	1.11	0.6	1.3	21.2	1.9	540
8T	0.75	7	1.11	0.6	1.3	23.1	2.0	620
10T	0.75	7	1.11	0.6	1.4	27.4	2.3	820
12T	0.75	7	1.11	0.6	1.5	28.6	2.4	930
14T	0.75	7	1.11	0.6	1.5	30.1	2.5	1,040
16T	0.75	7	1.11	0.6	1.6	32.0	2.6	1,180
19T	0.75	7	1.11	0.6	1.6	33.8	2.7	1,340
20T	0.75	7	1.11	0.6	1.6	34.9	3.0	1,410
24T	0.75	7	1.11	0.6	1.8	40.2	3.3	1,780
32T	0.75	7	1.11	0.6	1.9	43.7	3.4	2,200
1T	1.0	7	1.29	0.6	1.3	10.0	1.0	150
2T	1.0	7	1.29	0.6	1.1	15.5	1.3	270
3T	1.0	7	1.29	0.6	1.2	16.7	1.4	330
4T	1.0	7	1.29	0.6	1.2	18.3	1.5	410
5T	1.0	7	1.29	0.6	1.3	20.4	1.9	500
7T	1.0	7	1.29	0.6	1.3	22.3	2.0	620
8T	1.0	7	1.29	0.6	1.4	24.4	2.1	730
10T	1.0	7	1.29	0.6	1.5	29.0	2.4	960
12T	1.0	7	1.29	0.6	1.5	30.0	2.4	1,070
14T	1.0	7	1.29	0.6	1.6	31.8	2.5	1,220
16T	1.0	7	1.29	0.6	1.6	33.7	2.7	1,360
19T	1.0	7	1.29	0.6	1.7	35.8	2.8	1,570
20T	1.0	7	1.29	0.6	1.7	36.9	3.1	1,660
24T	1.0	7	1.29	0.6	1.8	42.3	3.4	2,070
32T	1.0	7	1.29	0.6	1.9	46.0	3.5	2,570

SEC NEK-INSTRUMENT Cable

150/250V BU(c) (Sheath code)

: Fire resistant instrumentation cable - Pairs, Triads

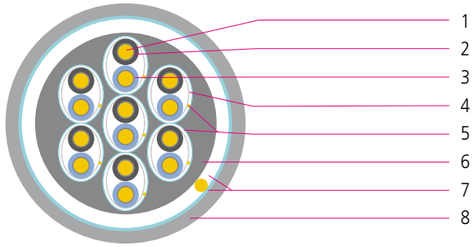
- Cable type : 150/250V BU(c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.3	11.0	1.1	190
2T	1.5	7	1.59	0.7	1.2	17.5	1.4	350
3T	1.5	7	1.59	0.7	1.3	18.9	1.5	440
4T	1.5	7	1.59	0.7	1.3	20.7	1.6	540
5T	1.5	7	1.59	0.7	1.4	23.0	2.0	660
7T	1.5	7	1.59	0.7	1.4	25.2	2.1	840
8T	1.5	7	1.59	0.7	1.5	27.6	2.2	980
10T	1.5	7	1.59	0.7	1.6	32.8	2.6	1,280
12T	1.5	7	1.59	0.7	1.7	34.2	2.7	1,450
14T	1.5	7	1.59	0.7	1.7	36.0	2.7	1,640
16T	1.5	7	1.59	0.7	1.8	38.3	3.0	1,860
19T	1.5	7	1.59	0.7	1.9	40.7	3.1	2,150
20T	1.5	7	1.59	0.7	1.9	42.0	3.3	2,260
24T	1.5	7	1.59	0.7	2.1	48.3	3.7	2,840
32T	1.5	7	1.59	0.7	2.2	52.5	3.9	3,530
1T	2.5	7	2.01	0.7	1.4	12.1	1.2	240
2T	2.5	7	2.01	0.7	1.3	19.3	1.5	450
3T	2.5	7	2.01	0.7	1.3	20.6	1.6	560
4T	2.5	7	2.01	0.7	1.4	22.9	1.7	710
5T	2.5	7	2.01	0.7	1.5	25.4	2.1	870
7T	2.5	7	2.01	0.7	1.5	27.8	2.2	1,110
8T	2.5	7	2.01	0.7	1.6	30.5	2.4	1,290
10T	2.5	7	2.01	0.7	1.8	36.4	2.8	1,710
12T	2.5	7	2.01	0.7	1.8	37.7	2.8	1,930
14T	2.5	7	2.01	0.7	1.9	40.0	2.9	2,200
16T	2.5	7	2.01	0.7	1.9	42.3	3.2	2,480
19T	2.5	7	2.01	0.7	2.0	44.9	3.3	2,860
20T	2.5	7	2.01	0.7	2.0	46.3	3.6	3,020
24T	2.5	7	2.01	0.7	2.2	53.3	3.9	3,770
32T	2.5	7	2.01	0.7	2.4	58.1	4.2	4,760

150/250V BU(i/c) (Sheath code)

: Fire resistant instrumentation cable : Pairs, Triads

Sectional Drawing



Application Standard

▷ Max. rated conductor temperature : 90°C

Design	IEC 60092-350, IEC 60092-376
Material	IEC 60092-360 EPR (Insulation)
	IEC 60092-360 SHF2 (Sheath)
Flame retardant	IEC 60332-1, IEC 60332-3 CAT. A
Fire resistant	IEC 60331-1, IEC 60331-2
Halogen content	IEC 60754-1, 0.5% ↑
Smoke emission	IEC 61034, 60% ↓
Fluorine content	IEC 60684-2, 0.1% ↓
Cold properties	IEC 60092-350, 8.10 & CSA C 22.2 No. 0.3 - Bend : -40°C, Impact : -35°C
Oil & Mud resistant	NEK 606 (Sheath code) : Option

Designation

Letter	Explain
B	Fire resistant layer + EPR Insulation (Halogen free)
U	Halogen free thermoset compound SHF2 sheath
-E or -M	Oil & Mud resistant halogen free thermoset compound SHF MUD
(i/c)	Individual and collective screen

Construction

Classification	Construction
1. Conductor	Stranded tinned annealed copper as per IEC 60228, Class 2 or Class 5.
2. Fire proof layer	Mica / Glass tape
3. Insulation	EPR as per IEC 60092-360
4. Twisting	Two/Three insulated cores shall be twisted together to form a pair/Triad
5. individual screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads
6. Cabling	Non-hygroscopic fillers may be used, Suitable tape(s) may be applied on the cabled core
7. Collective screen	Screened by copper or aluminium backed polyester tape with tinned copper drain wire A Suitable separator tape(s) may be applied on the collective screen
8. Sheath	SHF2 or SHF MUD as per IEC 60092-360

150/250V BU(i/c) (Sheath code)

: Fire resistant instrumentation cable : Pairs, Triads

Cable type : 150/250V BU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm²	EA	mm	mm	mm	mm	±mm	kg/km
1P	0.75	7	1.11	0.6	1.3	9.6	1.0	120
2P	0.75	7	1.11	0.6	1.1	14.2	1.3	220
3P	0.75	7	1.11	0.6	1.1	15.1	1.3	270
4P	0.75	7	1.11	0.6	1.2	16.7	1.4	330
5P	0.75	7	1.11	0.6	1.2	18.3	1.8	400
7P	0.75	7	1.11	0.6	1.3	20.3	1.9	510
8P	0.75	7	1.11	0.6	1.3	22.0	1.9	580
10P	0.75	7	1.11	0.6	1.4	26.2	2.3	760
12P	0.75	7	1.11	0.6	1.4	27.0	2.3	850
14P	0.75	7	1.11	0.6	1.5	28.7	2.4	970
16P	0.75	7	1.11	0.6	1.5	30.3	2.6	1,080
19P	0.75	7	1.11	0.6	1.6	32.2	2.7	1,240
20P	0.75	7	1.11	0.6	1.6	33.3	2.9	1,310
24P	0.75	7	1.11	0.6	1.7	38.1	3.2	1,640
32P	0.75	7	1.11	0.6	1.8	41.4	3.3	2,030
37P	0.75	7	1.11	0.6	1.9	44.2	3.5	2,320
1P	1.0	7	1.29	0.6	1.3	10.0	1.0	140
2P	1.0	7	1.29	0.6	1.1	14.9	1.3	250
3P	1.0	7	1.29	0.6	1.2	16.0	1.3	310
4P	1.0	7	1.29	0.6	1.2	17.5	1.4	380
5P	1.0	7	1.29	0.6	1.2	19.2	1.8	450
7P	1.0	7	1.29	0.6	1.3	21.3	1.9	580
8P	1.0	7	1.29	0.6	1.3	23.1	2.0	670
10P	1.0	7	1.29	0.6	1.5	27.7	2.3	890
12P	1.0	7	1.29	0.6	1.5	28.6	2.4	990
14P	1.0	7	1.29	0.6	1.5	30.2	2.5	1,120
16P	1.0	7	1.29	0.6	1.6	32.1	2.7	1,270
19P	1.0	7	1.29	0.6	1.6	33.9	2.7	1,440
20P	1.0	7	1.29	0.6	1.6	34.9	3.0	1,520
24P	1.0	7	1.29	0.6	1.8	40.3	3.3	1,910
32P	1.0	7	1.29	0.6	1.9	43.8	3.4	2,380
37P	1.0	7	1.29	0.6	1.9	46.5	3.6	2,690

150/250V BU(i/c) (Sheath code)

: Fire resistant instrumentation cable : Pairs, Triads

- Cable type : 150/250V BU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm^2	EA	mm	mm	mm	mm	±mm	kg/km
1P	1.5	7	1.59	0.7	1.3	11.0	1.1	160
2P	1.5	7	1.59	0.7	1.2	16.8	1.4	320
3P	1.5	7	1.59	0.7	1.2	17.8	1.4	390
4P	1.5	7	1.59	0.7	1.3	19.8	1.5	490
5P	1.5	7	1.59	0.7	1.3	21.8	1.9	580
7P	1.5	7	1.59	0.7	1.4	24.0	2.0	740
8P	1.5	7	1.59	0.7	1.5	26.4	2.2	870
10P	1.5	7	1.59	0.7	1.6	31.3	2.5	1,140
12P	1.5	7	1.59	0.7	1.6	32.4	2.6	1,270
14P	1.5	7	1.59	0.7	1.7	34.4	2.7	1,460
16P	1.5	7	1.59	0.7	1.7	36.3	2.9	1,630
19P	1.5	7	1.59	0.7	1.8	38.6	3.0	1,880
20P	1.5	7	1.59	0.7	1.8	39.8	3.2	1,980
24P	1.5	7	1.59	0.7	2.0	45.8	3.5	2,490
32P	1.5	7	1.59	0.7	2.1	49.8	3.7	3,100
37P	1.5	7	1.59	0.7	2.2	53.1	3.9	3,540
1P	2.5	7	2.01	0.7	1.4	12.1	1.2	210
2P	2.5	7	2.01	0.7	1.3	18.5	1.5	400
3P	2.5	7	2.01	0.7	1.3	19.7	1.5	490
4P	2.5	7	2.01	0.7	1.4	21.8	1.6	620
5P	2.5	7	2.01	0.7	1.4	24.0	2.0	750
7P	2.5	7	2.01	0.7	1.5	26.5	2.2	960
8P	2.5	7	2.01	0.7	1.6	29.1	2.3	1,120
10P	2.5	7	2.01	0.7	1.7	34.6	2.7	1,470
12P	2.5	7	2.01	0.7	1.7	35.7	2.7	1,650
14P	2.5	7	2.01	0.7	1.8	37.9	2.8	1,890
16P	2.5	7	2.01	0.7	1.9	40.3	3.1	2,140
19P	2.5	7	2.01	0.7	1.9	42.6	3.2	2,440
20P	2.5	7	2.01	0.7	2.0	44.1	3.5	2,600
24P	2.5	7	2.01	0.7	2.2	50.8	3.8	3,260
32P	2.5	7	2.01	0.7	2.3	55.1	4.0	4,070
37P	2.5	7	2.01	0.7	2.4	58.8	4.2	4,650

SEC NEK-INSTRUMENT Cable

150/250V BU(i/c) (Sheath code)

: Fire resistant instrumentation cable : Pairs, Triads

- Cable type : 150/250V BU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm^2	EA	mm	mm	mm	mm	±mm	kg/km
1T	0.75	7	1.11	0.6	1.3	9.6	1.0	140
2T	0.75	7	1.11	0.6	1.1	14.8	1.3	260
3T	0.75	7	1.11	0.6	1.1	15.7	1.3	320
4T	0.75	7	1.11	0.6	1.2	17.5	1.4	400
5T	0.75	7	1.11	0.6	1.2	19.2	1.8	490
7T	0.75	7	1.11	0.6	1.3	21.2	1.9	630
8T	0.75	7	1.11	0.6	1.3	23.1	2.0	720
10T	0.75	7	1.11	0.6	1.4	27.4	2.3	940
12T	0.75	7	1.11	0.6	1.5	28.6	2.4	1,070
14T	0.75	7	1.11	0.6	1.5	30.1	2.5	1,210
16T	0.75	7	1.11	0.6	1.6	32.0	2.6	1,370
19T	0.75	7	1.11	0.6	1.6	33.8	2.7	1,570
20T	0.75	7	1.11	0.6	1.6	34.9	3.0	1,650
24T	0.75	7	1.11	0.6	1.8	40.2	3.3	2,080
32T	0.75	7	1.11	0.6	1.9	43.7	3.4	2,590
1T	1.0	7	1.29	0.6	1.3	10.0	1.0	150
2T	1.0	7	1.29	0.6	1.1	15.5	1.3	300
3T	1.0	7	1.29	0.6	1.2	16.7	1.4	380
4T	1.0	7	1.29	0.6	1.2	18.3	1.5	470
5T	1.0	7	1.29	0.6	1.3	20.4	1.9	570
7T	1.0	7	1.29	0.6	1.3	22.3	2.0	730
8T	1.0	7	1.29	0.6	1.4	24.4	2.1	850
10T	1.0	7	1.29	0.6	1.5	29.0	2.4	1,110
12T	1.0	7	1.29	0.6	1.5	30.0	2.4	1,240
14T	1.0	7	1.29	0.6	1.6	31.8	2.5	1,420
16T	1.0	7	1.29	0.6	1.6	33.7	2.7	1,600
19T	1.0	7	1.29	0.6	1.7	35.8	2.8	1,850
20T	1.0	7	1.29	0.6	1.7	36.9	3.1	1,950
24T	1.0	7	1.29	0.6	1.8	42.3	3.4	2,420
32T	1.0	7	1.29	0.6	1.9	46.0	3.5	3,040

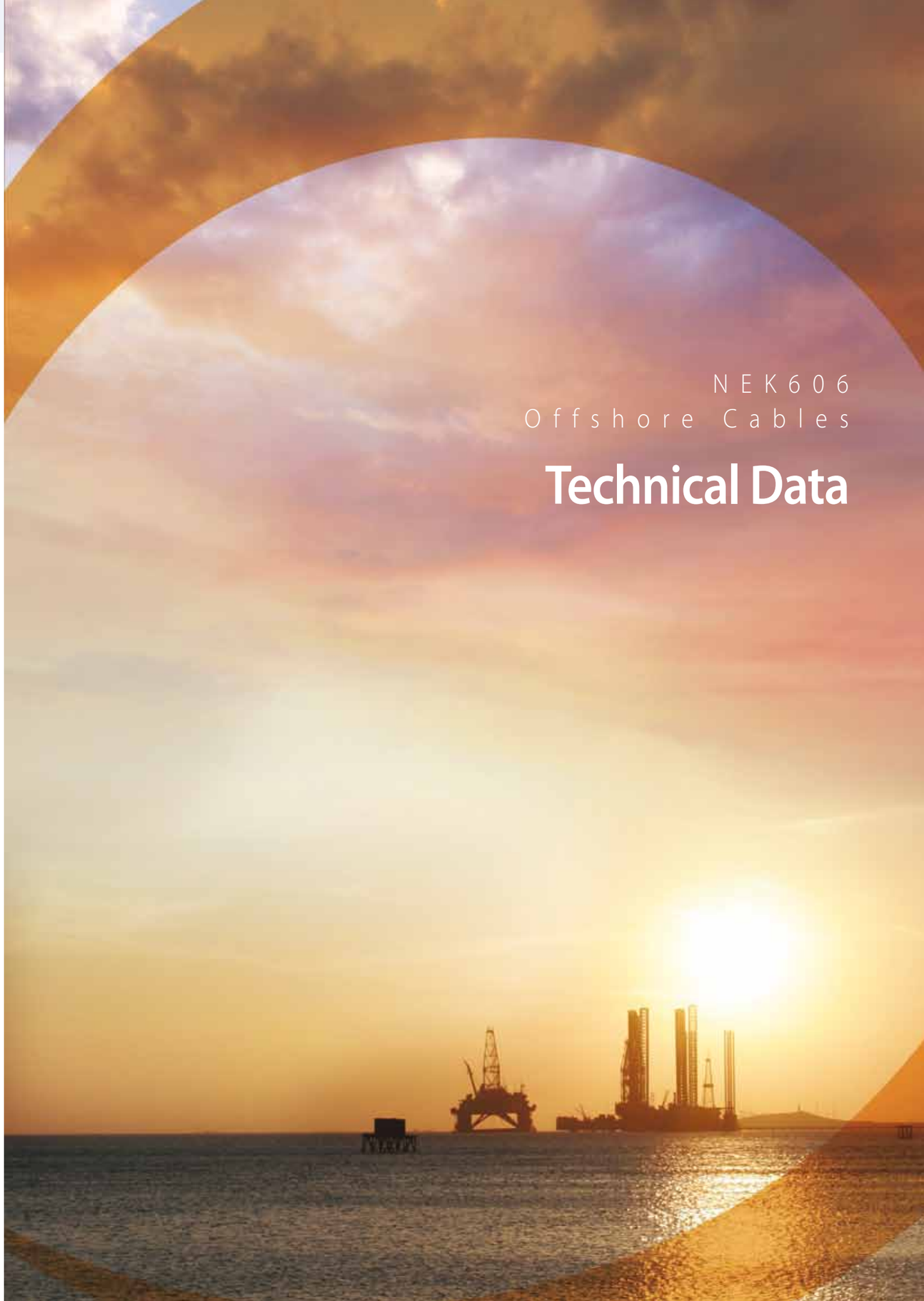
150/250V BU(i/c) (Sheath code)

: Fire resistant instrumentation cable : Pairs, Triads

- Cable type : 150/250V BU(i/c) (Sheath code)

No. of cores	Conductor*			Insulation	Sheath	Outer Dia.	Tolerance	Cable weight (Approx.)
	Area	No.	O.D (Approx.)	Thick.	Thick.			
	mm^2	EA	mm	mm	mm	mm	±mm	kg/km
1T	1.5	7	1.59	0.7	1.3	11.0	1.1	190
2T	1.5	7	1.59	0.7	1.2	17.5	1.4	380
3T	1.5	7	1.59	0.7	1.3	18.9	1.5	490
4T	1.5	7	1.59	0.7	1.3	20.7	1.6	600
5T	1.5	7	1.59	0.7	1.4	23.0	2.0	740
7T	1.5	7	1.59	0.7	1.4	25.2	2.1	950
8T	1.5	7	1.59	0.7	1.5	27.6	2.2	1,100
10T	1.5	7	1.59	0.7	1.6	32.8	2.6	1,440
12T	1.5	7	1.59	0.7	1.7	34.2	2.7	1,640
14T	1.5	7	1.59	0.7	1.7	36.0	2.7	1,860
16T	1.5	7	1.59	0.7	1.8	38.3	3.0	2,110
19T	1.5	7	1.59	0.7	1.9	40.7	3.1	2,440
20T	1.5	7	1.59	0.7	1.9	42.0	3.3	2,580
24T	1.5	7	1.59	0.7	2.1	48.3	3.7	3,220
32T	1.5	7	1.59	0.7	2.2	52.5	3.9	4,040
1T	2.5	7	2.01	0.7	1.4	12.1	1.2	240
2T	2.5	7	2.01	0.7	1.3	19.3	1.5	490
3T	2.5	7	2.01	0.7	1.3	20.6	1.6	620
4T	2.5	7	2.01	0.7	1.4	22.9	1.7	790
5T	2.5	7	2.01	0.7	1.5	25.4	2.1	970
7T	2.5	7	2.01	0.7	1.5	27.8	2.2	1,240
8T	2.5	7	2.01	0.7	1.6	30.5	2.4	1,440
10T	2.5	7	2.01	0.7	1.8	36.4	2.8	1,900
12T	2.5	7	2.01	0.7	1.8	37.7	2.8	2,150
14T	2.5	7	2.01	0.7	1.9	40.0	2.9	2,460
16T	2.5	7	2.01	0.7	1.9	42.3	3.2	2,780
19T	2.5	7	2.01	0.7	2.0	44.9	3.3	3,220
20T	2.5	7	2.01	0.7	2.0	46.3	3.6	3,390
24T	2.5	7	2.01	0.7	2.2	53.3	3.9	4,220
32T	2.5	7	2.01	0.7	2.4	58.1	4.2	5,350

* The construction of the conductor in class 5 was given in APPENDIX C.



Technical Data & Installation Information

1. Conductor resistance as per IEC 60228 or IEC 60092-376.

Nominal Area	IEC 60228				IEC 60092-376			
	Class 2		Class 5		Class 2		Class 5	
	Electrical power & control cables Conductor D.C. resistance at 20°C (Max.)		Electrical power & control cables Conductor D.C. resistance at 20°C (Max.)		Instrumentation & telecommunication cables Conductor D.C. resistance at 20°C (Max.)		Instrumentation & telecommunication cables Conductor D.C. resistance at 20°C (Max.)	
	Plain	Tin-coated	Plain	Tin-coated	Plain	Tin-coated	Plain	Tin-coated
mm^2	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km
0.75	-	-	-	-	26	26.3	27.6	28.3
1	18.1	18.2	19.5	20	19.2	19.3	20.7	21.2
1.5	12.1	12.2	13.3	13.7	12.8	12.9	14.1	14.5
2.5	7.41	7.56	7.98	8.21	7.86	8.02	8.47	8.71
4	4.6	4.7	4.95	5.09				
6	3.08	3.11	3.3	3.39				
10	1.83	1.84	1.91	1.95				
16	1.15	1.16	1.21	1.24				
25	0.727	0.734	0.78	0.795				
35	0.524	0.529	0.554	0.565				
50	0.387	0.391	0.386	0.393				
70	0.268	0.27	0.272	0.277				
95	0.193	0.195	0.206	0.21				
120	0.153	0.154	0.161	0.164				
150	0.124	0.126	0.129	0.132				
185	0.099	0.1	0.106	0.108				
240	0.0754	0.0762	0.0801	0.0817				
300	0.0601	0.0607	0.0641	0.0654				

Technical Data & Installation Information

2. 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 norminal range of temperatures in accordance with IEC Pub. 60228.
The values are based on the following formula :

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

Temperature (°C)	Correction factor (Kc)	Reciprocal of factor (Kr)	Temperature (°C)	Correction factor (Kc)	Reciprocal of factor (Kr)
0	1.087	0.920	21	0.996	1.004
1	1.082	0.924	22	0.992	1.008
2	1.078	0.928	23	0.988	1.012
3	1.073	0.932	24	0.984	1.016
4	1.068	0.936	25	0.980	1.020
5	1.064	0.940	26	0.977	1.024
6	1.059	0.944	27	0.973	1.028
7	1.055	0.948	28	0.969	1.032
8	1.050	0.952	29	0.965	1.036
9	1.046	0.956	30	0.962	1.040
10	1.042	0.960	31	0.958	1.044
11	1.037	0.964	32	0.954	1.048
12	1.033	0.968	33	0.951	1.052
13	1.029	0.972	34	0.947	1.056
14	1.025	0.976	35	0.943	1.060
15	1.020	0.980	36	0.940	1.064
16	1.016	0.984	37	0.936	1.068
17	1.012	0.988	38	0.933	1.072
18	1.008	0.992	39	0.929	1.076
19	1.004	0.996	40	0.926	1.080
20	1.000	1.000			

Technical Data & Installation Information

3. Current ratings for continuous service (IEC 60092-352)

3.1 Current rating for continuous service at 90°C

Nominal cross section area	EPR or XLPE Insulation (Max. rated conductor temperature 90°C)		
	1C	2C	3C
	A	A	A
0.5	11	8.5	7
0.75	14	11	9
1	17	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
400	670	-	-

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3.2 Current rating for continuous service at 90°C (3.6/6~12/20kV)

Nominal cross section area	EPR or XLPE Insulation (Max. rated conductor temperature 90°C)	
	1C	3C
	A	A
10	68	48
16	91	64
25	121	85
35	149	105
50	186	130
70	230	161
95	278	195
120	322	225
150	370	258
185	422	295
240	496	347
300	571	400
400	637	-

Note) 1.Maximum permissible service temperature of the conductor is 90°C

2. The current rating given above are based on an ambient air temperature of 45°C
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 : $Kc = \frac{I^1}{\sqrt[3]{N}}$ Where, I^1 = Current for single core cable, N = Number of cores

5. The current ratings above table are based on the norminal dimensions of 0.6/1kV cables. Currents ratings for higher voltage cables, up to 15kV, may be up to about 5% lower than the tabulated values for LV cables.
6. Correction factors for various ambient air temperature

Maximum conductor temperature	EPR or XLPE Insulation (Max. rated conductor temperature 90°C)									
℃	35	35	45	50	55	60	65	70	75	80
85	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61	0.50	-
90	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Technical Data & Installation Information

4. Minimum bending radius

4.1 Bending radii for cables rated up to 1.8/3kV

Cable type		Overall diameter of cable (D)	Minimum internal radius of bend
Insulation	Covering		
Thermoplastic or thermosetting with circular copper conductors	Unarmoured or unbraided	≤ 25mm	4D [a]
		> 25mm	6D
	Metal braid screened or armoured	Any	6D
	Metal wire armoured Metal tape armoured or metal - sheathed	Any	6D
	Composite polyester/metal laminate tape screened units or collective tape screening	Any	8D
Thermoplastic or thermosetting with sector shaped copper conductors	Any	Any	8D
Mineral	Hard metal sheathed	Any	6D

[a] 6D for defined circuit integrity

4.2 Bending radii for cables rated at 3.6/6(7.2)kV and above

Cable type	Overall diameter of cable (D)	Minimum internal radius of bend
Single core cable	Any	12D
3 core cables	Any	9D

* D : overall diameter of cable

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5. Short circuit current ratings

The short circuit currents quoted here are for cables operating normally at maximum conductor temperature of 90°C.
EPR insulation is actually capable of withstanding short-term temperature up to 250°C.
The values of the below table are applicable to low voltage three-phase a.c. systems and high voltage three-phase a.c. systems. (0.6/1kV to 8.7/15kV)
The operating at a nominal frequency of 50Hz or 60Hz.

Conductor		Short circuit current (kA)												
Nominal area	Dia.	Duration of short circuit in second												
mm²	mm	0.03	0.05	0.07	0.1	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	0.49	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	0.78	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	1.26	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	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	3.17	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	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	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	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	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	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	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	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	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	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	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	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	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	155.3	126.8	109.8	98.2	89.7	83.0	77.7	73.2	69.5

Technical Data & Installation Information

6. Calculation of electical 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 = Cunductor length (m)

3) D.C. voltage drop (2wire D.C. circuit)

$$Vdrop = 2 \times I \times L \times R$$

Where, I = Load current (Amp)

L = Length of cable (km)

R = D.C. conductor resistance at max. rated conductor temperature (Ω/km)

4) A.C. voltage drop

* Single-phase voltage drop

$$Vdrop = 2 \times I \times L \times (R \cdot \cos\Phi + X \cdot \cos\Phi)$$

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)

Φ = Power factor angle by which the current lags (leads) the voltage

* Three-phase voltage drop

$$Vdrop = \sqrt{3} \times I \times L \times (R \cdot \cos\Phi + X \cdot \cos\Phi)$$

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)

Φ = Power factor angle by which the current lags (leads) the voltage