

LS Marine Cable

(KS-CLF)





Leading Solution

**LG Cable, LG Industrial Systems and LG-Nikko Copper,
Gaon Cable, E1 and Kukdong City Gas are starting with
a new name, Leading Solution, LS.**

New Dream, New Start

To become a leader in the competitive global market, LG has been divided into three groups, electronics and chemicals for LG, energy and distribution for GS, Industrial electric · electronics and material for LS based on their business specialties.

LS' main companies, such as LS cable, LS industrial systems, LS-Nikko copper, Gaon cable, E1 and Yesco, are ranked as No.1 in their respective industry. However, LS won't just sit back, satisfied with being the best in Korea. We will pave the way for becoming the world's best in industrial electric · electronics and material industry with the new CI, LS.

Your good partner LG Cable is making a fresh start as LS Cable

LS Cable is No. 1 cable maker in Korea and its business fields are telecommunication, electric power, components & materials and machinery. Also, LS Cable is creating new businesses particularly in component and materials industry. LS Cable makes its best to accomplish the vision, 'Your No.1 Creative Partner' and be one of the world leaders with high technology and best level of service.



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(KS-CLF)



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LS Cable

Korea's foremost cable maker in both product list and service range, LS Cable has an integrated supply system from basic raw materials to ultrahigh voltage cables, optical fiber cables, system engineering and installation works.

In non-cable sector as well, LS Cable flourishes as a top-rate supplier of information and communication networks, connectors, lead frames, industrial rubber, and aluminum products.

Reputed for its outstanding technology and quality,

LS Cable is at the service of customers within and outside Korea.

Armed with the world's leading technology in electric power and optic fiber, it has been successful with four joint ventures in Malaysia and Vietnam.

It has thus demonstrated leadership in establishing a global network in the domains of electric power, other energy and information.

Merits of KS-CLF Cables

1. More Flexible

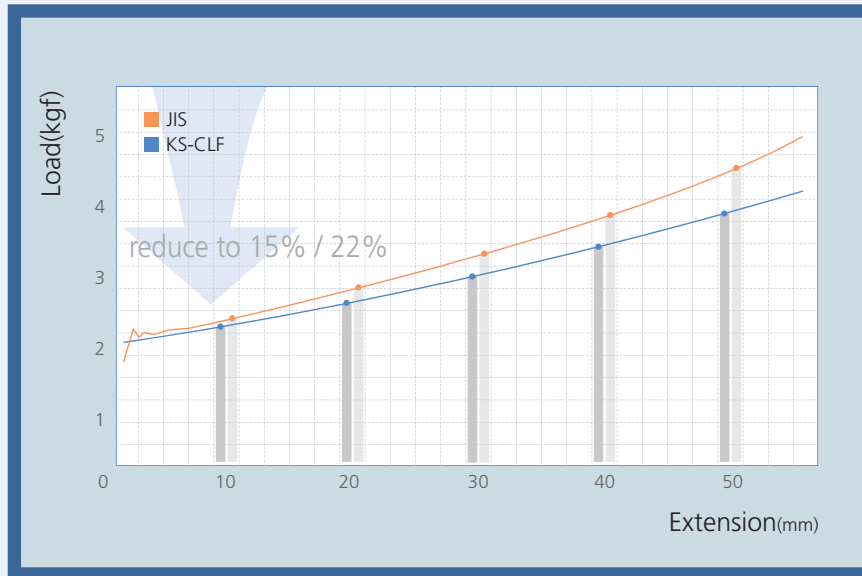
• If you forced same power, KS-CLF is more flexible than JIS type. So, You can install the cables easily.



(JIS type)



(KS-CLF type)

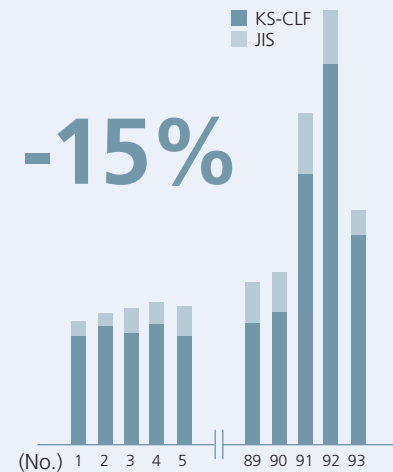


(Compression Test)

2. Compact shaped Type

• Average diameter of KS-CLF shall be reduced to 85% of JIS cables. KS-CLF can be efficiently handled and installed in the limited space with smaller bending radius than JIS cables.

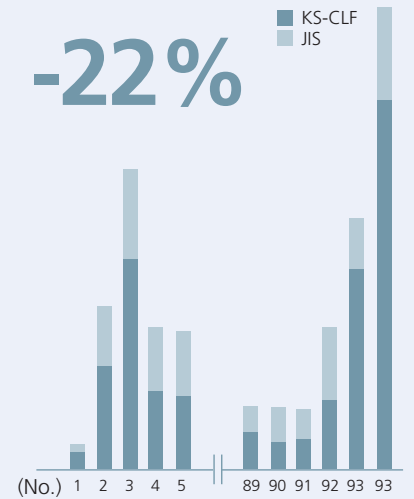
No.	Cable type	JIS	KS-CLF
1	0.6/1KV DPYC 2X1.5SQ	11.7	10.9
2	0.6/1KV DPYC 2X2.5SQ	12.8	11.8
3	0.6/1KV DPYCE 2X2.5SQ+1X2.5SQ	13.5	12.4
4	0.6/1KV DPYCY 2X1.5SQ	13.7	10.9
5	0.6/1KV DPYCY 2X2.5SQ	14.8	11.8
<hr/>			
89	250V TTPYCYS 4PX0.75SQ	18.5	14.1
90	250V TTPYCYS 7PX0.75SQ	21.4	16
91	250V TTPYCY-S 7PX0.75SQ	24.8	18.6
92	0.6/1KV TPYCY 3X70SQ	41.0	35.9
93	0.6/1KV TPYCY 3X95SQ	45.5	40.4
Average of Outer Diameter		20.8	17.8
			85.4%



3. Low-weight Type

• As of one container vessel of 9800TEU, total weight of KS-CLF shall be reduced to 78% of JIS cables. KS-CLF can be efficiently applied for Cruise ship or passenger Ship as well as container vessel.

No.	Cable type	JIS	KS-CLF
1	0.6/1KV DPYC 2X1.5SQ	31	21
2	0.6/1KV DPYC 2X2.5SQ	1,125	765
3	0.6/1KV DPYCE 2X2.5SQ+1X2.5SQ	4,573	3,255
4	0.6/1KV DPYCY 2X1.5SQ	78	42
5	0.6/1KV DPYCY 2X2.5SQ	155	85
<hr/>			
88	250V TTPYCYS 2PX0.75SQ	314	187
89	250V TTPYCYS 4PX0.75SQ	196	92
90	250V TTPYCYS 7PX0.75SQ	195	96
91	250V TTPYCY-S 7PX0.75SQ	330	152
92	0.6/1KV TPYCY 3X70SQ	2,888	2,547
93	0.6/1KV TPYCY 3X95SQ	16,485	14,621
Total Weight		146,580	114,154
			78%

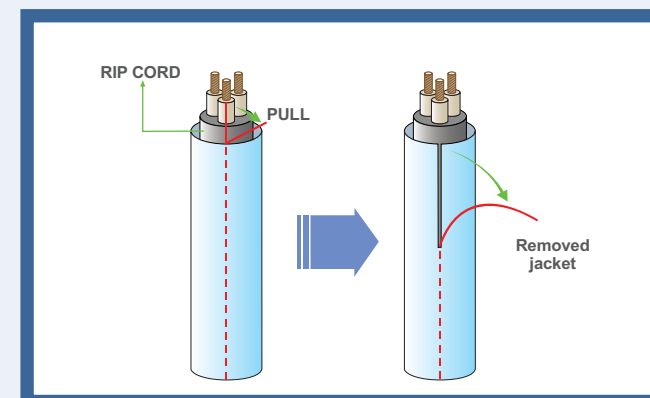


4. Higher Characteristics

Characteristic	KS-CLF	JIS	Remark
Flame Retardant	Highest Flame retardant (IEC 60332-2 Cat.A)	Normal Flame retardant (IEC 60332-1)	Save Cost (No Fire Stopper)
Cold Resistant	-25°C Cold Resistant (-30°C available)	-15°C Cold Resistant	Save Cost
Paint Resistant	Available	N/A	Save Cost

5. Easier & Safer Installation

• KS-CLF adopted rip cord, You can strip of the cables easier and safer.



Cable Designation

Designation	Type of cables	pages
3.6/6KV 6/10KV 8.7/15KV	(HF)SIBS Single core, EPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	p11, p14
	(HF)SIBAS Single core, EPR insulated, high modulus PVC inner covered, bronze wire braided and enhanced PVC sheathed cable	
	(HF)TIBS Three core, EPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)TIBAS Three core, EPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
0.6/1KV	(HF)(F-)DIS Double core, HEPR insulated and enhanced PVC sheathed cable	p17, p34
	(HF)(F-)TIS Three core, HEPR insulated and enhanced PVC sheathed cable	
	(HF)(F-)FIS Four core, HEPR insulated and enhanced PVC sheathed cable	
	(HF)(F-)MIS Multi core, HEPR insulated and enhanced PVC sheathed cable	
	(HF)(F-)MIS(C) Multi core, HEPR insulated and enhanced PVC sheathed cable with common shield	
	(HF)(F-)SIBS Single core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)(F-)DIBS Double core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)(F-)TIBS Three core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)(F-)FIBS Four core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)(F-)SIBS 5 core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
0.6/1KV	(HF)(F-)SIBS 6 core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	p20, p37
	(HF)(F-)MIBS Multi core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)(F-)DIBS(C) Double core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with common shield	
	(HF)(F-)TIBS(C) Three core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with common shield	
	(HF)(F-)FIBS(C) Four core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with common shield	
	(HF)(F-)MIBS(C) Multi core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with common shield	
	(HF)(F-)MIBS(I) Multi core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with individual shield	
	(HF)(F-)SIBAS Single core, HEPR insulated, high modulus PVC inner covered, bronze wire braided and enhanced PVC sheathed cable	
	(HF)(F-)DIBAS Double core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)TIBAS Three core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
0.6/1KV	(HF)(F-)FIBAS Four core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	p25, p42
	(HF)(F-)SIBAS 5 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)SIBAS 6 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)TIBAS Three core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)FIBAS Four core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)SIBAS 5 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
0.6/1KV	(HF)(F-)SIBAS 6 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	p27, p44
	(HF)(F-)SIBAS 5 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)SIBAS 6 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)SIBAS 6 core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	

Designation	Type of cables	pages
0.6/1KV	(HF)(F-)MIBAS Multi core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	p27, p44
	(HF)(F-)DIBAS(C) Double core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with common shield	
	(HF)(F-)TIBAS(C) Three core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with common shield	
	(HF)(F-)FIBAS(C) Four core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with common shield	
	(HF)(F-)MIBAS(I) Multi core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with individual shield	
	(HF)(F-)MIBAS(C) Multi core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with common shield	
	(HF)(F-)MIS Multi core, HEPR insulated and enhanced PVC sheathed cable	
	(HF)(F-)MIS(C) Multi core, HEPR insulated and enhanced PVC sheathed cable with common shield	
	(HF)(F-)MIBS Multi core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable	
	(HF)(F-)MIBS(C) Multi core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with common shield	
250V	(HF)(F-)MIBS(I) Multi core, HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed cable with individual shield	p20, p37
	(HF)(F-)MIBAS Multi core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable	
	(HF)(F-)MIBAS(C) Multi core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with common shield	
	(HF)(F-)MIBAS(I) Multi core, HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed cable with individual shield	
	(HF)(F-)TTIS HEPR insulated, and enhanced PVC sheathed telephone cable	
	(HF)(F-)TTIS(C) HEPR insulated, and enhanced PVC sheathed telephone cable with common shield	
	(HF)(F-)TTIBS HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed telephone cable	
	(HF)(F-)TTIBS(C) HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed telephone cable with common shield	
	(HF)(F-)TTIBAS HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed telephone cable	
	(HF)(F-)TTIBAS(C) HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed telephone cable with common shield	
250V	(HF)(F-)TTIBS(I) HEPR insulated, high modulus PVC inner covered and enhanced PVC sheathed telephone cable with individual shield	p52, p62
	(HF)(F-)TTIBAS(I) HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed telephone cable with individual shield	
	(HF)(F-)TTIBAS(I) HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed telephone cable with individual shield	
	(HF)(F-)TTIBAS(I) HEPR insulated, high modulus PVC inner covered, galvanized steel wire braided and enhanced PVC sheathed telephone cable with individual shield	

NOTOE 1. It means Halogen Free and SHF1 sheathed cable, the symbol begins as "HF"
2. The cable is insulated by mica tape in case of fire resistant type, the symbol begins as "F-"

DESIGNATION OF CABLE CODE

MV POWER CABLES(Flame retardant)

3.6/6KV, 6/10KV, 8.7/15KV SIBS, TIBS

1	2	3	4	5	6
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	Letter	Meaning	Reference Standard
	(HF)	Halogen Free Cables	
1	(blank)	FLAME RETARDANT CABLES (EPR/HEPR INSULATION)	IEC 60332-3, CAT.A
	F-	FIRE RESISTANT & FLAME RETARDANT CABLES (MICA+EPR/HEPR INSULATION)	IEC 60331 IEC 60332-3, CAT.A
	S	Single core	
	D	Double core	
	T	Three core	
2	F	Four core	
	5	Five core	
	6	Six core	
	M	Multi core	
	TT	Telephone (Twisted pair cable)	
3	I	90°C EPR (ethylene propylene rubber) OR HEPR (high modulus ethylene propylene rubber) insulation	IEC 60092-351
4	B	High modulus PVC inner covering If H/F cables, High modulus SHF1 inner covering	
	(blank)	No armour	
5	A	Galvanized Steel wire braid armour or Bronze wire braid armour	Only installed for Hazardous area
	S	Enhanced PVC (Polyvinyl chloride) sheath (-25°C Cold resistant) If H/F cables SHF1 sheath (-25°C Cold resistant)	IEC 60092-359
	E	Earth core	
-	(C)	Common shield	Aluminium/polyester Tape
	(I)	Individual shield	



Voltage rating : 3.6/6KV, 6/10KV, 8.7/15KV
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -354, -359
- IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - 1C : White
 - 3C : Red, White, Blue
- Outer Sheath : Red

Cable Marking

- Ex. [KS-CLF] 8.7/15KV TIBS 3C X 240SQMM LS CABLE
 [YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Conductor screen	Semi-conductive tape plus compound	
Fire proof layer	N/A	
Insulation	EPR to IEC 60092-351	
Insulation screen	Semi-conductive compound plus tape	
Metallic screen	Annealed copper tape	
Filler	If necessary	
Binder tape	If necessary	
Inner covering	High modulus PVC -If necessary, rip-cord under the inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

MV POWER CABLES(Flame retardant)

3.6/6KV, 6/10KV, 8.7/15KV SIBS, TIBS

3.6/6KV SIBS, TIBS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.									METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)																
SIBS	10	7/1.35	4.05	2.5	1.0	15.2	1.4	18.4	0.9	390	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	16	7/1.7	5.1	2.5	1.0	16.2	1.5	19.6	1.0	470	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	25	19/1.29	6.47	2.5	1.0	17.6	1.5	21.1	1.1	590	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	35	19/1.53	7.66	2.5	1.0	18.8	1.6	22.4	1.1	710	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	50	37/1.31	9.18	2.5	1.0	20.3	1.6	24.0	1.2	890	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	70	37/1.55	10.86	2.5	1.0	22.0	1.7	25.8	1.3	1120	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	95	37/1.81	12.66	2.5	1.0	24.2	1.8	28.3	1.4	1420	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	120	61/1.58	14.24	2.5	1.0	25.8	1.8	30.0	1.5	1610	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	150	61/1.77	15.92	2.5	1.2	27.9	1.9	32.2	1.6	2050	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62				
	185	61/1.97	17.69	2.5	1.2	29.6	2.0	34.1	1.7	2330	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	240	91/1.83	20.16	2.6	1.2	32.3	2.1	37.1	1.9	3010	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	300	91/2.05	22.54	2.8	1.2	35.1	2.2	40.1	2.0	3670	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
TIBS	10	7/1.35	4.05	2.5	1.2	30.8	2.0	35.4	1.8	1230	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	16	7/1.7	5.1	2.5	1.2	33.1	2.1	37.8	1.9	1500	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	25	19/1.29	6.47	2.5	1.2	36.0	2.3	41.0	2.1	1890	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
	35	19/1.53	7.66	2.5	1.4	39.0	2.4	44.2	2.2	2340	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
	50	37/1.31	9.18	2.5	1.4	42.2	2.5	47.8	2.4	2930	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
	70	37/1.55	10.86	2.5	1.4	45.8	2.6	51.7	2.6	3670	OSNJ 63c	M63	2"	50.1-454	H73 x 78				
	95	37/1.81	12.66	2.5	1.6	51.1	2.9	57.4	2.9	4710	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90				
	120	61/1.58	14.24	2.5	1.6	54.5	3.0	61.1	3.1	5350	OSNJ 75c	M75	2-1/2"	60.1-62	H85 x 90				
	150	61/1.77	15.92	2.5	1.6	58.1	3.1	65.0	3.3	6650	OSNJ 75d	M75	2-1/2"	62.1-66	H85 x 90				
	185	61/1.97	17.69	2.5	1.6	61.9	3.3	69.2	3.5	7580	OSNJ 90a	M90	3"	66.1-70	H101 x 05				

8.7/15KV SIBS, TIBS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.									METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)																
SIBS	25	19/1.29	6.47	4.5	1.0	21.9	1.7	25.8	1.3	800	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	35	19/1.53	7.66	4.5	1.0	23.1	1.7	27.1	1.4	930	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51				
	50	37/1.31	9.18	4.5	1.0	24.7	1.8	28.7	1.4	1130	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	70	37/1.55	10.86	4.5	1.0	26.3	1.9	30.6	1.5	1370	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	95	37/1.81	12.66	4.5	1.2	29.0	2.0	33.4	1.7	1720	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62				
	120	61/1.58	14.24	4.5	1.2	30.6	2.0	35.1	1.8	1930	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	150	61/1.77	15.92	4.5	1.2	32.2	2.1	37.0	1.8	2350	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	185	61/1.97	17.69	4.5	1.2	34.0	2.2	38.9	1.9	2650	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	240	91/1.83	20.16	4.5	1.2	36.5	2.3	41.5	2.1	3340	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
	300	91/2.05	22.54	4.5	1.4	39.3	2.4	44.6	2.2	4040	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
	25	19/1.29	6.47	4.5	1.4	45.8	2.6	51.6	2.6	2690	OSNJ 63c	M63	2"	50.1-454	H73 x 78				
	35	19/1.53	7.66	4.5	1.6	48.7	2.8	54.8	2.7	3200	OSNJ 75a	M75	2-1/2"	54.1-56	H85 x 90				
50	37/1.31	9.18	4.5	1.6	52.0	2.9	58.4	2.9	3850	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90					
70	37/1.55	10.86	4.5	1.6	55.6	3.0	62.3	3.1	4660	OSNJ 75d	M75	2-1/2"	62.1-66	H85 x 90					
95	37/1.81	12.66	4.5	1.6	60.5	3.2	67.6	3.4	5740	OSNJ 90a	M90	3"	66.1-70	H101 x 105					
120	61/1.58	14.24	4.5	1.8	64.3	3.4	71.7	3.6	6510	OSNJ 90b	M90	3"	70.1-76	H101 x 105					
150	61/1.77	15.92	4.5	1.8	67.9	3.5	75.6	3.8	7880	OSNJ 90b	M90	3"	70.1-76	H101 x 105					
185	61/1.97	17.69	4.5	1.8	71.7	3.7	79.7	4.0	8880										

6/10KV SIBS, TIBS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.									METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)																
SIBS	16	7/1.7	5.1	3.4	1.0	18.2	1.5	21.7	1.1	550	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	25	19/1.29	6.47	3.4	1.0	19.5	1.6	23.2	1.2	680	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	35	19/1.53	7.66	3.4	1.0	20.7	1.6	24.5	1.2	810	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	50	37/1.31	9.18	3.4	1.0	22.3	1.7	26.1	1.3	990	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51				
	70	37/1.55	10.86	3.4	1.0	23.9	1.8	28.0	1.4	1230	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51				
	95	37/1.81	12.66	3.4	1.0	26.2	1.9	30.4	1.5	1540	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	120	61/1.58	14.24	3.4	1.2	28.2	1.9	32.5	1.6	1760	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62				
	150	61/1.77	15.92	3.4	1.2	29.8	2.0	34.4	1.7	2180	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	185	61/1.97	17.69	3.4	1.2	31.6	2.1	36.3	1.8	2470	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	240	91/1.83	20.16	3.4	1.2	34.1	2.2	38.9	1.9	3140	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	300	91/2.05	22.54	3.4	1.2	36.5	2.3	41.5	2.1	3780	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
	16	7/1.7	5.1	3.4	1.2	37.3	2.3	42.4	2.1	1790	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
25	19/1.29	6.47	3.4	1.4	40.6	2.4	46.0	2.3	2250	OSNJ 63b	M63	2"	44.1-50	H73 x 78					
35	19/1.53	7.66	3.4	1.4	43.2	2.5	48.8	2.4	2680	OSNJ 63b	M63	2"	44.1-50	H73 x 78					
50	37/1.31	9.18	3.4	1.4	46.4	2.7	52.4	2.6	3300	OSNJ 63c	M63	2"	50.1-454	H73 x 78					
70	37/1.55	10.86	3.4	1.6	50.5	2.8	56.7	2.8	4130	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90					
95	37/1.81	12.66	3.4	1.6	55.3	3.0	62.0	3.1	5150	OSNJ 75c	M75	2-1/2"	60.1-62	H85 x 90					
120	61/1.58	14.24	3.4	1.6	58.8	3.2	65.7	3.3	5820	OSNJ 75d	M75	2-1/2"	62.1-66	H85 x 90					
150	61/1.77	15.92	3.4	1.6	62.4	3.3	69.6	3.5	7150	OSNJ 90a	M90	3"	66.1-70	H101 x 105					
185	61/1.97	17.69	3.4	1.8	66.6	3.5	74.2	3.7	8180	OSNJ 90b	M90	3"	70.1-76	H101 x 105					

MV POWER CABLES(Flame retardant)

3.6/6KV, 6/10KV, 8.7/15KV SIBAS, TIBAS



Voltage Rating : 3.6/6KV, 6/10KV, 8.7/15KV
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -354, -359 / IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - 1C : White
 - 3C : Red, White, Blue
 - Outer Sheath : Red
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 8.7/15KV TIBAS 3C X 240SQMM LS CABLE
- [YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Conductor screen	Semi-conductive tape plus compound	
Fire proof layer	N/A	
Insulation	EPR to IEC 60092-351	
Insulation screen	Semi-conductive compound plus tape	
Metallic screen	Annealed copper tape	
Filler	If necessary	
Binder tape	If necessary	
Inner covering	High modulus PVC -If necessary, rip-cord under the inner covering	
Armour	Galvanized steel wire braid or Bronze wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

3.6/6KV SIBAS, TIBAS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
SIBAS	10	7/1.35	4.05	2.5	1.0	15.2	0.3	1.5	19.6	1.0	670	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39
	16	7/1.7	5.1	2.5	1.0	16.2	0.3	1.5	20.8	1.0	770	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39
	25	19/1.29	6.47	2.5	1.0	17.6	0.3	1.6	22.3	1.1	920	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
	35	19/1.53	7.66	2.5	1.0	18.8	0.3	1.6	23.6	1.2	1060	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
	50	37/1.31	9.18	2.5	1.0	20.3	0.3	1.7	25.2	1.3	1270	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	70	37/1.55	10.86	2.5	1.0	22.0	0.3	1.7	27.0	1.4	1530	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	95	37/1.81	12.66	2.5	1.0	24.2	0.3	1.8	29.4	1.5	1860	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
	120	61/1.58	14.24	2.5	1.0	25.8	0.3	1.9	31.2	1.6	2080	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
	150	61/1.77	15.92	2.5	1.2	27.9	0.3	2.0	33.4	1.7	2560	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
	185	61/1.97	17.69	2.5	1.2	29.6	0.3	2.0	35.3	1.8	2870	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	240	91/1.83	20.16	2.6	1.2	32.3	0.4	2.2	38.6	1.9	3750	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	300	91/2.05	22.54	2.8	1.2	35.1	0.4	2.3	41.7	2.1	4480	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
TIBAS	10	7/1.35	4.05	2.5	1.2	30.8	0.4	2.1	37.0	1.8	1820	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	16	7/1.7	5.1	2.5	1.2	33.1	0.4	2.2	39.4	2.0	2120	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	25	19/1.29	6.47	2.5	1.2	36.0	0.4	2.3	42.6	2.1	2550	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	35	19/1.53	7.66	2.5	1.4	39.0	0.4	2.4	45.8	2.3	3040	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73
	50	37/1.31	9.18	2.5	1.4	42.2	0.4	2.6	49.4	2.5	3660	OSNJ CW 63a	M63	2"	48-53	H82 x 88
	70	37/1.55	10.86	2.5	1.4	45.8	0.4	2.7	53.3	2.7	4440	OSNJ CW 63b	M63	2"	53.1-56	H82 x 88
	95	37/1.81	12.66	2.5	1.6	51.1	0.4	2.9	59.0	3.0	5530	OSNJ CW 75a	M75	2-1/2"	56-62	H98 x 106
	120	61/1.58	14.24	2.5	1.6	54.5	0.4	3.1	62.7	3.1	6200	OSNJ CW 75b	M75	2-1/2"	62.1-66	H98 x 106
	150	61/1.77	15.92	2.5	1.6	58.1	0.4	3.2	66.6	3.3	7520	OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106
	185	61/1.97	17.69	2.5	1.6	61.9	0.4	3.3	70.7	3.5	8480	OSNJ CW 75d	M78	2-1/2"	70.1-75	H98 x 106

6/10KV SIBAS, TIBAS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
SIBAS	16	7/1.7	5.1	3.4	1.0	18.2	0.3	1.6	22.9	1.1	890	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
	25	19/1.29	6.47	3.4	1.0	19.5	0.3	1.6	24.4	1.2	1040	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	35	19/1.53	7.66	3.4	1.0	20.7	0.3	1.7	25.7	1.3	1190	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	50	37/1.31	9.18	3.4	1.0	22.3	0.3	1.7	27.3	1.4	1400	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	70	37/1.55	10.86	3.4	1.0	23.9	0.3	1.8	29.2	1.5	1670	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
	95	37/1.81	12.66	3.4	1.0	26.2	0.3	1.9	31.6	1.6	2020	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
	120	61/1.58	14.24	3.4	1.2	28.2	0.3	2.0	33.7	1.7	2280	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
	150	61/1.77	15.92	3.4	1.2	29.8	0.3	2.0	35.5	1.8	2730	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	185	61/1.97	17.69	3.4	1.2	31.6	0.4	2.1	37.8	1.9	3200	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	240	91/1.83	20.16	3.4	1.2	34.1	0.4	2.2	40.5	2.0	3920	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	300	91/2.05	22.54	3.4	1.2	36.5	0.4	2.3	43.1	2.2	4620	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	TIBAS	16	7/1.7	5.1	3.4	1.2	37.3	0.4	2.4	44.0	2.2	2470	OSNJ CW 50a	M50	1-1/2"	38-45
25		19/1.29	6.47	3.4	1.4	40.6	0.4	2.5	47.6	2.4	2970	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73
35		19/1.53	7.66	3.4	1.4	43.2	0.4	2.6	50.4	2.5	3430	OSNJ CW 63a	M63	2"	48-53	H82 x 88
50		37/1.31	9.18	3.4	1.4	46.4	0.4	2.7	53.9	2.7	4070	OSNJ CW 63b	M63	2"	53.1-56	H82 x 88
70		37/1.55	10.86	3.4	1.6	50.5	0.4	2.9	58.3	2.9	4940	OSNJ CW 75a	M75	2-1/2"	56-62	H98 x 106
95		37/1.81	12.66	3.4	1.6	55.3	0.4	3.1	63.6	3.2	6010	OSNJ CW 75b	M75	2-1/2"	62.1-66	H98 x 106
120		61/1.58	14.24	3.4	1.6	58.8	0.4	3.2	67.3	3.4	6700	OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106
150		61/1.77	15.92	3.4	1.6	62.4	0.4	3.4	71.2	3.6	8050	OSNJ CW 75d	M78	2-1/2"	70.1-75	H98 x 106
185		61/1.97	17.69	3.4	1.8	66.6	0.4	3.5	75.7	3.8	9110	OSNJ CW 90a	M90	3"	75.1-93	H110 x 120

MV POWER CABLES(Flame retardant)

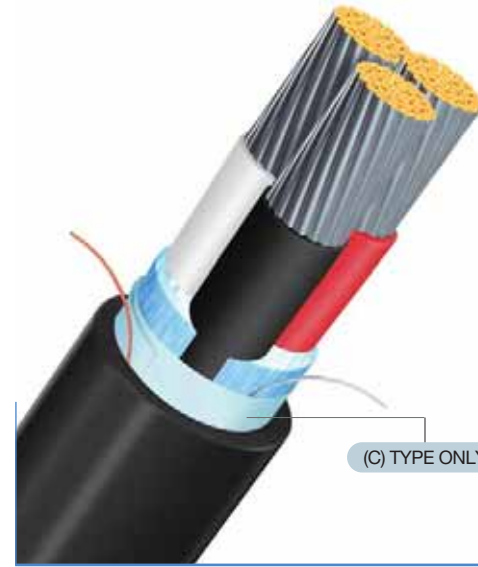
3.6/6KV, 6/10KV, 8.7/15KV SIBAS, TIBAS

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV DIS, TIS, FIS, MIS, MIS(C), 250V MIS, MIS(C)

8.7/15KV SIBAS, TIBAS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
SIBAS	25	19/1.29	6.47	4.5	1.0	21.9	0.3	1.7	27.0	1.3	1200	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	35	19/1.53	7.66	4.5	1.0	23.1	0.3	1.8	28.3	1.4	1360	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
	50	37/1.31	9.18	4.5	1.0	24.7	0.3	1.8	29.9	1.5	1580	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
	70	37/1.55	10.86	4.5	1.0	26.3	0.3	1.9	31.8	1.6	1860	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
	95	37/1.81	12.66	4.5	1.2	29.0	0.3	2.0	34.6	1.7	2250	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
	120	61/1.58	14.24	4.5	1.2	30.6	0.4	2.1	36.7	1.8	2630	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	150	61/1.77	15.92	4.5	1.2	32.2	0.4	2.2	38.5	1.9	3090	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	185	61/1.97	17.69	4.5	1.2	34.0	0.4	2.2	40.4	2.0	3430	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	240	91/1.83	20.16	4.5	1.2	36.5	0.4	2.3	43.1	2.2	4170	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
TIBAS	300	91/2.05	22.54	4.5	1.4	39.3	0.4	2.4	46.1	2.3	4930	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73
	25	19/1.29	6.47	4.5	1.4	45.8	0.4	2.7	53.2	2.7	3460	OSNJ CW 63b	M63	2"	53.1-56	H82 x 88
	35	19/1.53	7.66	4.5	1.6	48.7	0.4	2.8	56.4	2.8	4010	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88
	50	37/1.31	9.18	4.5	1.6	52.0	0.4	3.0	59.9	3.0	4680	OSNJ CW 75a	M75	2-1/2"	56-62	H98 x 106
	70	37/1.55	10.86	4.5	1.6	55.6	0.4	3.1	63.9	3.2	5520	OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106
	95	37/1.81	12.66	4.5	1.6	60.5	0.4	3.3	69.2	3.5	6620	OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106
	120	61/1.58	14.24	4.5	1.8	64.3	0.4	3.4	73.3	3.7	7420	OSNJ CW 75d	M78	2-1/2"	70.1-75	H98 x 106
	150	61/1.77	15.92	4.5	1.8	67.9	0.4	3.6	77.2	3.9	8800	OSNJ CW 90a	M90	3"	75.1-93	H110 x 120
	185	61/1.97	17.69	4.5	1.8	71.7	0.4	3.7	81.3	4.1	9820	OSNJ CW 90a	M90	3"	75.1-93	H110 x 120



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376 /IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - 2C : Black, White
 - 3C : Black, White, Red
 - 4C : Black, White, Red, Green
 - Multi core : White with core number
 - Earth : Green/Yellow
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 0.6/1KV TIS 3C X 120SQMM LS CABLE [YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium/polyester tape with drain wire	(C) TYPE ONLY
Sheath	Enhanced PVC to IEC 60092-359 - If necessary, rip-cord under the Sheath	

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV DIS, TIS, FIS, MIS, MIS(C), 250V MIS, MIS(C)

0.6/1KV DIS, DIS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
DIS	1.5	7/0.53	1.59	0.7	1.0	8.4	0.4	90	OSNU 16b	M16	1/2"	6.1-10	H24 x 26
	2.5	7/0.67	2.01	0.7	1.1	9.3	0.5	120	OSNU 16b	M16	1/2"	6.1-10	H27 x 29
	4	7/0.85	2.5	0.7	1.1	10.5	0.5	160	OSNU 20a	M20	1/2"	10-13	H27 x 29
	6	7/1.04	3.12	0.7	1.2	11.8	0.6	210	OSNU 20a	M20	1/2"	10-13	H27 x 29
	10	7/1.35	4.05	0.7	1.2	13.8	0.7	320	OSNU 20b	M20	1/2"	13.1-15	H32 x 34
	16	7/1.7	5.1	0.7	1.3	16.2	0.8	460	OSNU 25b	M25	3/4"	16-18	H39 x 41.5
	25	19/1.29	6.47	0.9	1.5	20.1	1.0	700	OSNU 32a	M32	1"	18.1-22	H39 x 41.5
	35	19/1.53	7.66	0.9	1.6	22.7	1.1	940	OSNU 32b	M32	1"	22.1-26	H48 x 51
	50	37/1.31	9.18	1.0	1.7	26.7	1.3	1320	OSNU 40a	M40	1-1/4"	26.1-28	H48 x 51
	70	37/1.55	10.86	1.1	1.9	30.8	1.5	1800	OSNU 40b	M40	1-1/4"	28.1-32	H58 x 62
	95	37/1.81	12.66	1.1	2.0	34.9	1.7	2380	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62
	120	61/1.58	14.24	1.2	2.2	38.8	1.9	2800	OSNU 50b	M50	1-1/2"	34.1-40	H73 x 78
	150	61/1.77	15.92	1.4	2.3	43.4	2.2	3710	OSNU 63a	M63	2"	40.1-44	H73 x 78
	185	61/1.97	17.69	1.6	2.5	48.1	2.4	4380	OSNU 63b	M63	2"	44.1-50	H24 x 26
	DIS+E	1.5	7/0.53	1.59	0.7	1.1	8.9	0.4	110	OSNU 16b	M16	1/2"	6.1-10
2.5		7/0.67	2.01	0.7	1.1	9.9	0.5	150	OSNU 16b	M16	1/2"	6.1-10	H27 x 29
4		7/0.85	2.5	0.7	1.1	11.1	0.6	210	OSNU 20a	M20	1/2"	10-13	H27 x 29
6		7/1.04	3.12	0.7	1.2	12.6	0.6	280	OSNU 20a	M20	1/2"	10-13	H27 x 29
10		7/1.35	4.05	0.7	1.3	14.8	0.7	420	OSNU 20b	M20	1/2"	13.1-15	H32 x 34
16		7/1.7	5.1	0.7	1.4	17.3	0.9	620	OSNU 25b	M25	3/4"	16-18	H39 x 41.5
25		19/1.29	6.47	0.9	1.5	21.5	1.1	900	OSNU 32a	M32	1"	18.1-22	H39 x 41.5
35		19/1.53	7.66	0.9	1.6	24.3	1.2	1240	OSNU 32b	M32	1"	22.1-26	H48 x 51
50		37/1.31	9.18	1.0	1.8	28.5	1.4	1630	OSNU 40b	M40	1-1/4"	28.1-32	H58 x 62
70		37/1.55	10.86	1.1	2.0	32.9	1.6	2130	OSNU 50a	M50	1-1/2"	32.1-34	H58 x 62
95		37/1.81	12.66	1.1	2.1	37.4	1.9	2970	OSNU 50b	M50	1-1/2"	34.1-40	H73 x 78
120		61/1.58	14.24	1.2	2.3	41.6	2.1	3610	OSNU 63a	M63	2"	40.1-44	H73 x 78
150		61/1.77	15.92	1.4	2.5	46.5	2.3	4790	OSNU 63b	M63	2"	44.1-50	H73 x 78
185		61/1.97	17.69	1.6	2.6	51.6	2.6	5490	OSNU 63c	M63	2"	50.1-454	H73 x 78

0.6/1KV FIS, FIS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
FIS	1.5	7/0.53	1.59	0.7	1.1	9.8	0.5	140	OSNU 16b	M16	1/2"	6.1-10	H24 x 26
	2.5	7/0.67	2.01	0.7	1.1	10.9	0.5	190	OSNU 20a	M20	1/2"	10-13	H27 x 29
	4	7/0.85	2.5	0.7	1.2	12.3	0.6	260	OSNU 20a	M20	1/2"	10-13	H27 x 29
	6	7/1.04	3.12	0.7	1.2	13.9	0.7	360	OSNU 20b	M20	1/2"	13.1-15	H27 x 29
	10	7/1.35	4.05	0.7	1.3	16.3	0.8	550	OSNU 25b	M25	3/4"	16-18	H32 x 34
	16	7/1.7	5.1	0.7	1.4	19.2	1.0	810	OSNU 32a	M32	1"	18.1-22	H39 x 41.5
	25	19/1.29	6.47	0.9	1.6	23.9	1.2	1250	OSNU 32b	M32	1"	22.1-26	H39 x 41.5
	35	19/1.53	7.66	0.9	1.7	27.0	1.3	1690	OSNU 40a	M40	1-1/4"	26.1-28	H48 x 51
	50	37/1.31	9.18	1.0	1.9	31.8	1.6	2370	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51
	70	37/1.55	10.86	1.1	2.1	36.7	1.8	3260	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62
	95	37/1.81	12.66	1.1	2.3	41.7	2.1	4340	OSNU 63a	M63	2"	40.1-44	H73 x 78
	120	61/1.58	14.24	1.2	2.4	46.4	2.3	5090	OSNU 63b	M63	2"	44.1-50	H73 x 78
	150	61/1.77	15.92	1.4	2.6	51.9	2.6	6790	OSNU 63c	M63	2"	50.1-454	H73 x 78
	185	61/1.97	17.69	1.6	2.9	57.6	2.9	8000	OSNU 75c	M75	2-1/2"	60.1-62	H85 x 90
	FIS+E	1.5	7/0.53	1.59	0.7	1.1	10.7	0.5	170	OSNU 20a	M20	1/2"	10-13
2.5		7/0.67	2.01	0.7	1.2	12.0	0.6	230	OSNU 20a	M20	1/2"	10-13	H27 x 29
4		7/0.85	2.5	0.7	1.2	13.5	0.7	320	OSNU 20b	M20	1/2"	13.1-15	H27 x 29
6		7/1.04	3.12	0.7	1.3	15.4	0.8	440	OSNU 25a	M25	3/4"	15.1-16	H32 x 34
10		7/1.35	4.05	0.7	1.4	18.1	0.9	670	OSNU 32a	M32	1"	18.1-22	H39 x 41.5
16		7/1.7	5.1	0.7	1.5	21.3	1.1	1000	OSNU 32a	M32	1"	18.1-22	H39 x 41.5
25		19/1.29	6.47	0.9	1.7	25.5	1.3	1460	OSNU 32b	M32	1"	22.1-26	H39 x 41.5
35		19/1.53	7.66	0.9	1.8	29.3	1.5	1990	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51
50		37/1.31	9.18	1.0	2.0	33.6	1.7	2720	OSNU 50a	M50	1-1/2"	32.1-34	H58 x 62
70		37/1.55	10.86	1.1	2.1	38.0	1.9	3650	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62
95		37/1.81	12.66	1.1	2.4	44.3	2.2	4990	OSNU 63b	M63	2"	44.1-50	H73 x 78
120		61/1.58	14.24	1.2	2.6	49.6	2.5	5960	OSNU 63b	M63	2"	44.1-50	H73 x 78
150		61/1.77	15.92	1.4	2.8	55.7	2.8	7930	OSNU 75a	M75	2-1/2"	54.1-56	H85 x 90
185		61/1.97	17.69	1.6	3.0	60.8	3.0	9240	OSNU 75c	M75	2-1/2"	60.1-62	H85 x 90

0.6/1KV MIS, MIS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
2	1	7/0.43	1.29	0.7	1.1	8.7	0.4	80	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
3	1	7/0.43	1.29	0.7	1.1	9.2	0.5	100	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
4	1	7/0.43	1.29	0.7	1.1	10.0	0.5	120	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
5	1	7/0.43	1.29	0.7	1.1	10.8	0.5	140	OSNU 20A	M20	1/2"	10-13	H27 x 29
6	1	7/0.43	1.29	0.7	1.2	11.7	0.6	170	OSNU 20A	M20	1/2"	10-13	H27 x 29
7	1	7/0.43	1.29	0.7	1.2	11.7	0.6	180	OSNU 20A	M20	1/2"	10-13	H27 x 29
12	1	7/0.43	1.29	0.7	1.3	15.2	0.8	300	OSNU 20B	M20	1/2"	13.1-15	H27 x 29
19	1	7/0.43	1.29	0.7	1.4	17.7	0.9	430	OSNU 25B	M25	3/4"	16-18	H32 x 34
27	1	7/0.43	1.29	0.7	1.5	20.6	1.0	590	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
37	1	7/0.43	1.29	0.7	1.6	23.2	1.2	780	OSNU 32B	M32	1"	22.1-26	H39 x 41.5
44	1	7/0.43	1.29	0.7	1.7	26.2	1.3	950	OSNU 32B	M32	1"	22.1-26	H39 x 41.5

250V MIS, MIS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
2	1	7/0.43	1.29	0.5	1.0	7.8	0.4	70	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
3	1	7/0.43	1.29	0.5	1.0	8.2	0.4	80	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
4	1	7/0.43	1.29	0.5	1.1	8.9	0.4	100	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
5	1	7/0.43	1.29	0.5	1.1	9.6	0.5	120	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
6	1	7/0.43	1.29	0.5	1.1	10.4	0.5	140	OSNU 20A	M20	1/2"	10-13	H27 x 29
7	1	7/0.43	1.29	0.5	1.1	10.4	0.5	150	OSNU 20A	M20	1/2"	10-13	H27 x 29
12	1	7/0.43	1.29	0.5	1.2	13.3	0.7	250	OSNU 20B	M20	1/2"	13.1-15	H27 x 29
19	1	7/0.43	1.29	0.5	1.3	15.4	0.8	360	OSNU 25A	M25	3/4"	15.1-16	H32 x 34
27	1	7/0.43	1.29	0.5	1.4	17.8	0.9	490	OSNU 25B	M25	3/4"	16-18	H32 x 34
37	1	7/0.43	1.29	0.5	1.5	20.0	1.0	650	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
44	1	7/0.43	1.29	0.5	1.6	22.5	1.1	790	OSNU 32B	M32	1"	22.1-26	H39 x 41.5

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV SIBS, DIBS, TIBS, FIBS, 5IBS, 6IBS, MIBS, 250V MIBS
0.6/1KV DIBS(C), TIBS(C), FIBS(C), MIBS(C), 250V MIBS(C)



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376 / IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - 1C : Black
 - 2C : Black, White
 - 3C : Black, White, Red
 - 4C : Black, White, Red, Green
 - Multi core : White with core number
 - Earth : Green/Yellow
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 0.6/1KV TIBS 3C X 953QMM LS CABLE
[YEAR] IEC 60332-3A -25°C COLD RESISTANT



0.6/1KV SIBS, SIBS(C)

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
SIBS	1.5	7/0.53	1.59	0.7	1.0	5.1	1.0	7.5	0.4	70	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	2.5	7/0.67	2.01	0.7	1.0	5.5	1.0	7.9	0.4	90	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	4	7/0.85	2.5	0.7	1.0	6.0	1.1	8.5	0.4	110	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	6	7/1.04	3.12	0.7	1.0	6.6	1.1	9.2	0.5	140	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	10	7/1.35	4.05	0.7	1.0	7.6	1.1	10.2	0.5	190	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	16	7/1.7	5.1	0.7	1.0	8.7	1.2	11.4	0.6	260	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	25	19/1.29	6.47	0.9	1.0	10.5	1.2	13.3	0.7	370	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	35	19/1.53	7.66	0.9	1.0	11.6	1.3	14.6	0.7	480	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	50	37/1.31	9.18	1.0	1.0	13.5	1.4	16.6	0.8	660	OSNJ 25b	M25	3/4"	16-18	H32 x 34
	70	37/1.55	10.86	1.1	1.0	15.4	1.4	18.7	0.9	880	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	95	37/1.81	12.66	1.1	1.0	17.3	1.5	20.7	1.0	1140	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	120	61/1.58	14.24	1.2	1.0	19.1	1.6	22.7	1.1	1330	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	150	61/1.77	15.92	1.4	1.0	21.2	1.7	24.9	1.2	1740	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	185	61/1.97	17.69	1.6	1.0	23.3	1.7	27.3	1.4	2030	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
	240	91/1.83	20.16	1.7	1.0	26.0	1.9	30.2	1.5	2690	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
300	91/2.05	22.54	1.8	1.2	29.0	2.0	33.5	1.7	3350	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62	

0.6/1KV DIBS, DIBS(C), DIBS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
DIBS / DIBS(C)	1.5	7/0.53	1.59	0.7	1.0	8.2	1.1	10.9	0.5	140	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	2.5	7/0.67	2.01	0.7	1.0	9.0	1.2	11.8	0.6	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	4	7/0.85	2.5	0.7	1.0	10.1	1.2	13.0	0.6	230	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	6	7/1.04	3.12	0.7	1.0	11.4	1.3	14.3	0.7	290	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	10	7/1.35	4.05	0.7	1.0	13.2	1.3	16.4	0.8	400	OSNJ 25b	M25	3/4"	16-18	H32 x 34
	16	7/1.7	5.1	0.7	1.0	15.4	1.4	18.7	0.9	560	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	25	19/1.29	6.47	0.9	1.0	19.0	1.6	22.6	1.1	830	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	35	19/1.53	7.66	0.9	1.0	21.4	1.7	25.2	1.3	1080	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	50	37/1.31	9.18	1.0	1.0	25.0	1.8	29.2	1.5	1480	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
	70	37/1.55	10.86	1.1	1.2	29.2	2.0	33.7	1.7	2020	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62
	95	37/1.81	12.66	1.1	1.2	33.1	2.1	37.9	1.9	2640	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
	120	61/1.58	14.24	1.2	1.2	36.7	2.3	41.8	2.1	3090	OSNJ 63a	M63	2"	40.1-44	H73 x 78
	150	61/1.77	15.92	1.4	1.4	41.3	2.5	46.8	2.3	4080	OSNJ 63b	M63	2"	44.1-50	H73 x 78
	185	61/1.97	17.69	1.6	1.4	45.7	2.6	51.5	2.6	4790	OSNJ 63c	M63	2"	50.1-54	H73 x 78
	DIBS + E	1.5	7/0.53	1.59	0.7	1.0	8.7	1.2	11.4	0.6	170	OSNJ 20a	M20	1/2"	10-13
2.5		7/0.67	2.01	0.7	1.0	9.6	1.2	12.4	0.6	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4		7/0.85	2.5	0.7	1.0	10.7	1.2	13.6	0.7	280	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
6		7/1.04	3.12	0.7	1.0	12.1	1.3	15.1	0.8	360	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
10		7/1.35	4.05	0.7	1.0	14.1	1.4	17.3	0.9	510	OSNJ 25b	M25	3/4"	16-18	H32 x 34
16		7/1.7	5.1	0.7	1.0	16.4	1.5	19.8	1.0	730	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
25		19/1.29	6.47	0.9	1.0	20.3	1.6	24.0	1.2	1000	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
35		19/1.53	7.66	0.9	1.0	22.8	1.7	26.8	1.3	1340	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
50		37/1.31	9.18	1.0	1.0	26.8	1.9	31.0	1.6	1740	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
70		37/1.55	10.86	1.1	1.2	31.2	2.1	35.9	1.8	2280	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
95		37/1.81	12.66	1.1	1.2	35.4	2.2	40.4	2.0	3140	OSNJ 63a	M63	2"	40.1-44	H73 x 78
120		61/1.58	14.24	1.2	1.4	39.6	2.4	45.0	2.2	3830	OSNJ 63b	M63	2"	44.1-50	H73 x 78
150		61/1.77	15.92	1.4	1.4	44.2	2.6	49.9	2.5	5010	OSNJ 63b	M63	2"	44.1-50	H73 x 78
185		61/1.97	17.69	1.6	1.6	49.3	2.8	55.4	2.8	5780	OSNJ 75a	M75	2-1/2"	54.1-56	H85 x 90

CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium/polyester tape with drain wire	(C) TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV SIBS, DIBS, TIBS, FIBS, 5IBS, 6IBS, MIBS, 250V MIBS

0.6/1KV DIBS(C), TIBS(C), FIBS(C), MIBS(C), 250V MIBS(C)

0.6/1KV TIBS, TIBS(C), TIBS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
TIBS / TIBS(C)	1.5	7/0.53	1.59	0.7	1.0	8.7	1.2	11.4	0.6	170	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	2.5	7/0.67	2.01	0.7	1.0	9.6	1.2	12.4	0.6	210	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	4	7/0.85	2.5	0.7	1.0	10.7	1.2	13.6	0.7	280	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	6	7/1.04	3.12	0.7	1.0	12.1	1.3	15.1	0.8	360	OSNU 20b	M20	1/2"	13.1-15	H27 x 29							
	10	7/1.35	4.05	0.7	1.0	14.1	1.4	17.3	0.9	520	OSNU 25b	M25	3/4"	16-18	H32 x 34							
	16	7/1.7	5.1	0.7	1.0	16.4	1.5	19.8	1.0	730	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
	25	19/1.29	6.47	0.9	1.0	20.3	1.6	24.0	1.2	1100	OSNU 32b	M32	1"	22.1-26	H39 x 41.5							
	35	19/1.53	7.66	0.9	1.0	22.8	1.7	26.8	1.3	1450	OSNU 32b	M32	1"	22.1-26	H39 x 41.5							
	50	37/1.31	9.18	1.0	1.2	27.5	1.9	31.8	1.6	2040	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51							
	70	37/1.55	10.86	1.1	1.2	31.2	2.1	35.9	1.8	2730	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62							
	95	37/1.81	12.66	1.1	1.2	35.4	2.2	40.4	2.0	3590	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62							
	120	61/1.58	14.24	1.2	1.4	39.6	2.4	45.0	2.2	4250	OSNU 63a	M63	2"	40.1-44	H73 x 78							
	150	61/1.77	15.92	1.4	1.4	44.2	2.6	49.9	2.5	5580	OSNU 63b	M63	2"	44.1-50	H73 x 78							
	185	61/1.97	17.69	1.6	1.6	49.3	2.8	55.4	2.8	6600	OSNU 75a	M75	2-1/2"	54.1-56	H85 x 90							
	240	91/1.83	20.16	1.7	1.6	55.0	3.0	61.7	3.1	8590	OSNU 75c	M75	2-1/2"	60.1-62	H85 x 90							
TIBS + E	1.5	7/0.53	1.59	0.7	1.0	9.5	1.2	12.3	0.6	200	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	2.5	7/0.67	2.01	0.7	1.0	10.5	1.2	13.4	0.7	250	OSNU 20b	M20	1/2"	13.1-15	H27 x 29							
	4	7/0.85	2.5	0.7	1.0	11.8	1.3	14.8	0.7	340	OSNU 20b	M20	1/2"	13.1-15	H27 x 29							
	6	7/1.04	3.12	0.7	1.0	13.3	1.3	16.4	0.8	440	OSNU 25a	M25	3/4"	15.1-16	H32 x 34							
	10	7/1.35	4.05	0.7	1.0	15.5	1.4	18.8	0.9	640	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
	16	7/1.7	5.1	0.7	1.0	18.2	1.5	21.7	1.1	920	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
	25	19/1.29	6.47	0.9	1.0	21.4	1.7	25.2	1.3	1380	OSNU 32b	M32	1"	22.1-26	H39 x 41.5							
	35	19/1.53	7.66	0.9	1.0	24.6	1.8	28.7	1.4	1760	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51							
	50	37/1.31	9.18	1.0	1.2	28.3	1.9	32.7	1.6	2360	OSNU 50a	M50	1-1/2"	32.1-34	H58 x 62							
	70	37/1.55	10.86	1.1	1.2	31.8	2.1	36.4	1.8	3100	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62							
	95	37/1.81	12.66	1.1	1.2	37.1	2.3	42.2	2.1	4230	OSNU 63a	M63	2"	40.1-44	H73 x 78							
	120	61/1.58	14.24	1.2	1.4	41.9	2.5	47.4	2.4	5110	OSNU 63b	M63	2"	44.1-50	H73 x 78							
	150	61/1.77	15.92	1.4	1.4	46.8	2.7	52.7	2.6	6720	OSNU 63c	M63	2"	50.1-454	H73 x 78							
	185	61/1.97	17.69	1.6	1.6	51.1	2.9	57.5	2.9	7800	OSNU 75b	M75	2-1/2"	56.1-60	H85 x 90							
	240	91/1.83	20.16	1.7	1.6	57.1	3.1	63.9	3.2	10150	OSNU 75d	M75	2-1/2"	62.1-66	H85 x 90							

0.6/1KV FIBS, FIBS(C), FIBS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
FIBS / FIBS(C)	1.5	7/0.53	1.59	0.7	1.0	9.5	1.2	12.3	0.6	200	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	2.5	7/0.67	2.01	0.7	1.0	10.5	1.2	13.4	0.7	260	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	4	7/0.85	2.5	0.7	1.0	11.8	1.3	14.8	0.7	340	OSNU 20b	M20	1/2"	13.1-15	H27 x 29							
	6	7/1.04	3.12	0.7	1.0	13.3	1.3	16.4	0.8	450	OSNU 25a	M25	3/4"	15.1-16	H32 x 34							
	10	7/1.35	4.05	0.7	1.0	15.5	1.4	18.8	0.9	650	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
	16	7/1.7	5.1	0.7	1.0	18.2	1.5	21.7	1.1	930	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
	25	19/1.29	6.47	0.9	1.0	22.5	1.7	26.4	1.3	1400	OSNU 32b	M32	1"	22.1-26	H39 x 41.5							
	35	19/1.53	7.66	0.9	1.0	25.3	1.8	29.5	1.5	1860	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51							
	50	37/1.31	9.18	1.0	1.2	27.5	1.9	31.8	1.6	2490	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51							
	70	37/1.55	10.86	1.1	1.2	34.7	2.2	39.6	2.0	3530	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62							
	95	37/1.81	12.66	1.1	1.4	39.8	2.4	45.1	2.3	4690	OSNU 63b	M63	2"	44.1-50	H73 x 78							
	120	61/1.58	14.24	1.2	1.4	44.1	2.6	49.8	2.5	5490	OSNU 63b	M63	2"	44.1-50	H73 x 78							
	150	61/1.77	15.92	1.4	1.6	49.5	2.8	55.7	2.8	7290	OSNU 75a	M75	2-1/2"	54.1-56	H85 x 90							
	185	61/1.97	17.69	1.6	1.6	54.8	3.0	61.4	3.1	8560	OSNU 75c	M75	2-1/2"	60.1-62	H85 x 90							
	FIBS + E	1.5	7/0.53	1.59	0.7	1.0	10.3	1.2	13.2	0.7	240	OSNU 20a	M20	1/2"	10-13	H27 x 29						
2.5		7/0.67	2.01	0.7	1.0	11.5	1.3	14.5	0.7	300	OSNU 20b	M20	1/2"	13.1-15	H27 x 29							
4		7/0.85	2.5	0.7	1.0	12.9	1.3	16.0	0.8	400	OSNU 25a	M25	3/4"	15.1-16	H32 x 34							
6		7/1.04	3.12	0.7	1.0	14.6	1.4	17.9	0.9	530	OSNU 25b	M25	3/4"	16-18	H32 x 34							
10		7/1.35	4.05	0.7	1.0	17.1	1.5	20.6	1.0	780	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
16		7/1.7	5.1	0.7	1.0	20.1	1.6	23.8	1.2	1130	OSNU 32b	M32	1"	22.1-26	H39 x 41.5							
25		19/1.29	6.47	0.9	1.0	24.0	1.8	28.0	1.4	1630	OSNU 40a	M40	1-1/4"	26.1-28	H48 x 51							
35		19/1.53	7.66	0.9	1.2	27.9	1.9	32.2	1.6	2230	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51							
50		37/1.31	9.18	1.0	1.2	31.8	2.1	36.5	1.8	2990	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62							
70		37/1.55	10.86	1.1	1.2	35.9	2.2	41.0	2.0	3970	OSNU 63a	M63	2"	40.1-44	H73 x 78							
95		37/1.81	12.66	1.1	1.4	42.1	2.5	47.7	2.4	5420	OSNU 63b	M63	2"	44.1-50	H73 x 78							
120		61/1.58	14.24	1.2	1.4	47.0	2.7	53.0	2.6	6450	OSNU 63c	M63	2"	50.1-454	H73 x 78							
150		61/1.77	15.92	1.4	1.6	53.0	2.9	59.5	3.0	8550	OSNU 75b	M75	2-1/2"	56.1-60	H85 x 90							
185		61/1.97	17.69	1.6	1.6	57.7	3.1	64.6	3.2	9930	OSNU 75d	M75	2-1/2"	62.1-66	H85 x 90							

0.6/1KV 5IBS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
5IBS	1.5	7/0.53	1.59	0.7	1.0	10.3	1.2	13.2	0.7	230	OSNU 20a	M20	1/2"	10-13	H27 x 29							
	2.5	7/0.67	2.01	0.7	1.0	11.5	1.3	14.5	0.7	300	OSNU 20b	M20	1/2"	13.1-15	H27 x 29							
	4	7/0.85	2.5	0.7	1.0	12.9	1.3	16.0	0.8	400	OSNU 25a	M25	3/4"	15.1-16	H32 x 34							
	6	7/1.04	3.12	0.7	1.0	14.6	1.4	17.9	0.9	530	OSNU 25b	M25	3/4"	16-18	H32 x 34							
	10	7/1.35	4.05	0.7	1.0	17.1	1.5	20.6	1.0	770	OSNU 32a	M32	1"	18.1-22	H39 x 41.5							
	16	7/1.7	5.1	0.7	1.0	20.1	1.6	23.8	1.2	1120	OSNU 32b	M32	1"	22.1-26	H39 x 41.5							
	25	19/1.29	6.47	0.9	1.0	24.9	1.8	29.0	1.5	1690	OSNU 40b	M40	1-1/4"	28.1-32	H48 x 51							
	35	19/1.53	7.66	0.9	1.2	28.5	2.0	32.9	1.6	2280	OSNU 50a	M50	1-1/2"	32.1-34	H58 x 62							
	50	37/1.31	9.18	1.0	1.2	33.5	2.2	38.3	1.9	3160	OSNU 50b	M50	1-1/2"	34.1-40	H58 x 62							
	70	37/1.55	10.86	1.1	1.4	39.0	2.4	44.3	2.2	4330	OSNU 63a	M63	2"	40.1-44	H73 x 78							
	95	37/1.81	12.66	1.1	1.4	44.2	2.6	49.9	2.5	5710	OSNU 63b	M63	2"	44.1-50	H73 x 78							
	120	61/1.58	14.24	1.2	1.6	49.4	2.8	55.6	2.8	6740	OSNU 75a	M75	2-1/2"	54.1-56	H85 x 90							
	150	61/1.77	15.92	1.4	1.6	55.1	3.0	61.7	3.1	8890	OSNU 75c	M75	2-1/2"	60.1-62	H85 x 90							
	185	61/1.97	17.69	1.6	1.6	61.0	3.3	68.1	3.4	10430	OSNU 90a	M90	3"	66.1-70	H101 x 105							

0.6/1KV 6IBS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6IBS	1.5	7/0.53	1.59	0.7	1.0	11.3	1.3															

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV SIBS, DIBS, TIBS, FIBS, 5IBS, 6IBS, MIBS, 250V MIBS
0.6/1KV DIBS(C), TIBS(C), FIBS(C), MIBS(C), 250V MIBS(C)

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV MIBS(I), 250V MIBS(I)

0.6/1KV MIBS, MIBS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.									METRIC	NPT		
	(mm ²)	(Nos./mm)	(mm)												
2	1	7/0.43	1.29	0.7	1.0	8.5	1.2	11.2	0.6	130	OSNJ 20a	M20	1/2"	10-13	H27 x 29
3	1	7/0.43	1.29	0.7	1.0	8.9	1.2	11.7	0.6	150	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4	1	7/0.43	1.29	0.7	1.0	9.7	1.2	12.5	0.6	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
5	1	7/0.43	1.29	0.7	1.0	10.5	1.2	13.3	0.7	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29
6	1	7/0.43	1.29	0.7	1.0	11.3	1.3	14.2	0.7	240	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
7	1	7/0.43	1.29	0.7	1.0	11.3	1.3	14.2	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
12	1	7/0.43	1.29	0.7	1.0	14.5	1.4	17.7	0.9	390	OSNJ 25b	M25	3/4"	16-18	H32 x 34
19	1	7/0.43	1.29	0.7	1.0	16.8	1.5	20.2	1.0	540	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
27	1	7/0.43	1.29	0.7	1.0	19.5	1.6	23.1	1.2	710	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
37	1	7/0.43	1.29	0.7	1.0	21.8	1.7	25.7	1.3	920	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
44	1	7/0.43	1.29	0.7	1.0	24.6	1.8	28.7	1.4	1100	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51

250V MIBS, MIBS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.									METRIC	NPT		
	(mm ²)	(Nos./mm)	(mm)												
2	1	7/0.43	1.29	0.5	1.0	7.7	1.1	10.3	0.5	120	OSNJ 20a	M20	1/2"	10-13	H27 x 29
3	1	7/0.43	1.29	0.5	1.0	8.0	1.1	10.7	0.5	130	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4	1	7/0.43	1.29	0.5	1.0	8.6	1.2	11.4	0.6	160	OSNJ 20a	M20	1/2"	10-13	H27 x 29
5	1	7/0.43	1.29	0.5	1.0	9.3	1.2	12.1	0.6	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
6	1	7/0.43	1.29	0.5	1.0	10.0	1.2	12.9	0.6	200	OSNJ 20a	M20	1/2"	10-13	H27 x 29
7	1	7/0.43	1.29	0.5	1.0	10.0	1.2	12.9	0.6	220	OSNJ 20a	M20	1/2"	10-13	H27 x 29
12	1	7/0.43	1.29	0.5	1.0	12.7	1.3	15.8	0.8	330	OSNJ 25b	M25	3/4"	16-18	H32 x 34
19	1	7/0.43	1.29	0.5	1.0	14.7	1.4	17.9	0.9	450	OSNJ 25b	M25	3/4"	16-18	H32 x 34
27	1	7/0.43	1.29	0.5	1.0	16.9	1.5	20.3	1.0	600	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
37	1	7/0.43	1.29	0.5	1.0	18.9	1.6	22.5	1.1	770	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
44	1	7/0.43	1.29	0.5	1.0	21.2	1.7	25.0	1.3	920	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376
- IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
- Multi core : White with core number
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 0.6/1kV MIBS(I) 7C X 1SQMM LS CABLE
- [YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium/polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV MIBS(I), 250V MIBS(I)

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV SIBAS, DIBAS, TIBAS, FIBAS, 5IBAS, 6IBAS, MIBAS, 250V MIBAS
0.6/1KV DIBAS(C), TIBAS(C), FIBAS(C), MIBAS(C), 250V MIBAS(C)

0.6/1KV MIBS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.									METRIC	NPT		
	(mm ²)	(Nos./mm)	(mm)												
2	1	7/0.43	1.29	0.7	1.0	9.6	1.2	12.4	0.6	170	OSNJ 20A	M20	1/2"	10-13	H27 x 29
3	1	7/0.43	1.29	0.7	1.0	10.2	1.2	13.0	0.7	190	OSNJ 20A	M20	1/2"	10-13	H27 x 29
4	1	7/0.43	1.29	0.7	1.0	11.1	1.3	14.1	0.7	230	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29
5	1	7/0.43	1.29	0.7	1.0	12.2	1.3	15.3	0.8	270	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29
6	1	7/0.43	1.29	0.7	1.0	13.4	1.3	16.5	0.8	320	OSNJ 25B	M25	3/4"	16-18	H32 x 34
7	1	7/0.43	1.29	0.7	1.0	13.4	1.3	16.5	0.8	330	OSNJ 25B	M25	3/4"	16-18	H32 x 34
12	1	7/0.43	1.29	0.7	1.0	17.7	1.5	21.2	1.1	540	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5

250V MIBS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.									METRIC	NPT		
	(mm ²)	(Nos./mm)	(mm)												
2	1	7/0.43	1.29	0.5	1.0	8.8	1.2	11.5	0.6	150	OSNJ 20a	M20	1/2"	10-13	H27 x 29
3	1	7/0.43	1.29	0.5	1.0	9.3	1.2	12.1	0.6	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4	1	7/0.43	1.29	0.5	1.0	10.1	1.2	13.0	0.6	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29
5	1	7/0.43	1.29	0.5	1.0	11.1	1.3	14.0	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
6	1	7/0.43	1.29	0.5	1.0	12.1	1.3	15.1	0.8	300	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
7	1	7/0.43	1.29	0.5	1.0	12.1	1.3	15.1	0.8	310	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
12	1	7/0.43	1.29	0.5	1.0	15.9	1.5	19.3	1.0	520	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5

Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376 / IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - 1C : Black
 - 2C : Black, White
 - 3C : Black, White, Red
 - 4C : Black, White, Red, Green
 - Multi core : White with core number
 - Earth : Green/Yellow
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 0.6/1KV TIBAS 3C X 95SQMM LS CABLE
[YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium/polyester with drain wire	
Inner covering	High modulus PVC -If necessary, rip-cord under the inner covering	
Armour	Galvanized steel wire braid or Bronze wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

LV POWER & CONTROL CABLES (Flame retardant)

LS Marine Cable KS-CLF

Cable Construction LV POWER & CONTROL CABLES (Flame retardant)

LS Marine Cable KS-CLF

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV SIBAS, DIBAS, TIBAS, FIBAS, 5IBAS, 6IBAS, MIBAS, 250V MIBAS
0.6/1KV DIBAS(C), TIBAS(C), FIBAS(C), MIBAS(C), 250V MIBAS(C)

0.6/1KV SIBAS

Type of Cable	Conductor										O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)	
	Size	Construction	Dia.	Thick of insulation	Thick of inner covering	Overall inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance		Cable weight (Approx.)	METRIC	NPT			OUTER 'A'
	(mm ²)	(Nos./mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(Kg/Km)					
SIBAS	1.5	7/0.53	1.59	0.7	1.0	5.1	0.3	1.1	8.7	0.4	200	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
	2.5	7/0.67	2.01	0.7	1.0	5.5	0.3	1.1	9.1	0.5	230	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
	4	7/0.85	2.5	0.7	1.0	6.0	0.3	1.1	9.7	0.5	260	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
	6	7/1.04	3.12	0.7	1.0	6.6	0.3	1.1	10.4	0.5	300	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
	10	7/1.35	4.05	0.7	1.0	7.6	0.3	1.2	11.4	0.6	380	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
	16	7/1.7	5.1	0.7	1.0	8.7	0.3	1.2	12.6	0.6	470	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	25	19/1.29	6.47	0.9	1.0	10.5	0.3	1.3	14.5	0.7	640	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	35	19/1.53	7.66	0.9	1.0	11.6	0.3	1.3	15.8	0.8	780	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	50	37/1.31	9.18	1.0	1.0	13.5	0.3	1.4	17.8	0.9	1000	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
	70	37/1.55	10.86	1.1	1.0	15.4	0.3	1.5	19.9	1.0	1270	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
	95	37/1.81	12.66	1.1	1.0	17.3	0.3	1.5	21.9	1.1	1580	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
	120	61/1.58	14.24	1.2	1.0	19.1	0.3	1.6	23.9	1.2	1820	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
	150	61/1.77	15.92	1.4	1.0	21.2	0.3	1.7	26.1	1.3	2300	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
	185	61/1.97	17.69	1.6	1.0	23.3	0.3	1.8	28.5	1.4	2670	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
	240	91/1.83	20.16	1.7	1.0	26.0	0.3	1.9	31.4	1.6	3410	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
300	91/2.05	22.54	1.8	1.2	29.0	0.3	2.0	34.6	1.7	4160	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59		

0.6/1KV DIBAS, DIBAS(C), DIBAS+E

Type of Cable	Conductor										O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)	
	Size	Construction	Dia.	Thick of insulation	Thick of inner covering	Overall inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance		Cable weight (Approx.)	METRIC	NPT			OUTER 'A'
	(mm ²)	(Nos./mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(Kg/Km)					
DIBAS / DIBAS(C)	1.5	7/0.53	1.59	0.7	1.0	8.2	0.3	1.2	12.1	0.6	310	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
	2.5	7/0.67	2.01	0.7	1.0	9.0	0.3	1.2	13.0	0.7	360	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	4	7/0.85	2.5	0.7	1.0	10.1	0.3	1.3	14.2	0.7	420	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	6	7/1.04	3.12	0.7	1.0	11.4	0.3	1.3	15.5	0.8	510	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	10	7/1.35	4.05	0.7	1.0	13.2	0.3	1.4	17.5	0.9	660	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	16	7/1.7	5.1	0.7	1.0	15.4	0.3	1.5	19.9	1.0	850	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
	25	19/1.29	6.47	0.9	1.0	19.0	0.3	1.6	23.8	1.2	1190	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
	35	19/1.53	7.66	0.9	1.0	21.4	0.3	1.7	26.4	1.3	1480	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
	50	37/1.31	9.18	1.0	1.0	25.0	0.3	1.9	30.3	1.5	1940	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
	70	37/1.55	10.86	1.1	1.2	29.2	0.3	2.0	34.9	1.7	2560	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
	95	37/1.81	12.66	1.1	1.2	33.1	0.4	2.2	39.5	2.0	3400	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
	120	61/1.58	14.24	1.2	1.2	36.7	0.4	2.3	43.3	2.2	3930	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
	150	61/1.77	15.92	1.4	1.4	41.3	0.4	2.5	48.3	2.4	5030	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
	185	61/1.97	17.69	1.6	1.4	45.7	0.4	2.7	53.1	2.7	5840	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
	DIBAS+E	1.5	7/0.53	1.59	0.7	1.0	8.7	0.3	1.2	12.6	0.6	340	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
2.5		7/0.67	2.01	0.7	1.0	9.6	0.3	1.2	13.6	0.7	400	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
4		7/0.85	2.5	0.7	1.0	10.7	0.3	1.3	14.8	0.7	480	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
6		7/1.04	3.12	0.7	1.0	12.1	0.3	1.3	16.3	0.8	590	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
10		7/1.35	4.05	0.7	1.0	14.1	0.3	1.4	18.4	0.9	780	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
16		7/1.7	5.1	0.7	1.0	16.4	0.3	1.5	21.0	1.0	1040	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
25		19/1.29	6.47	0.9	1.0	20.3	0.3	1.7	25.2	1.3	1370	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
35		19/1.53	7.66	0.9	1.0	22.8	0.3	1.8	27.9	1.4	1770	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
50		37/1.31	9.18	1.0	1.0	26.8	0.3	1.9	32.2	1.6	2230	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
70		37/1.55	10.86	1.1	1.2	31.2	0.4	2.1	37.4	1.9	3010	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
95		37/1.81	12.66	1.1	1.2	35.4	0.4	2.3	41.9	2.1	3960	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
120		61/1.58	14.24	1.2	1.4	39.6	0.4	2.5	46.6	2.3	4740	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
150		61/1.77	15.92	1.4	1.4	44.2	0.4	2.6	51.4	2.6	6020	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
185		61/1.97	17.69	1.6	1.6	49.3	0.4	2.8	57.0	2.8	6910	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88	

0.6/1KV TIBAS, TIBAS(C), TIBAS+E

Type of Cable	Conductor										O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)	
	Size	Construction	Dia.	Thick of insulation	Thick of inner covering	Overall inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance		Cable weight (Approx.)	METRIC	NPT			OUTER 'A'
	(mm ²)	(Nos./mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(Kg/Km)					
TIBAS / TIBAS(C)	1.5	7/0.53	1.59	0.7	1.0	8.7	0.3	1.2	12.6	0.6	340	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	2.5	7/0.67	2.01	0.7	1.0	9.6	0.3	1.2	13.6	0.7	400	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	4	7/0.85	2.5	0.7	1.0	10.7	0.3	1.3	14.8	0.7	490	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	6	7/1.04	3.12	0.7	1.0	12.1	0.3	1.3	16.3	0.8	590	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	10	7/1.35	4.05	0.7	1.0	14.1	0.3	1.4	18.4	0.9	790	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
	16	7/1.7	5.1	0.7	1.0	16.4	0.3	1.5	21.0	1.0	1040	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
	25	19/1.29	6.47	0.9	1.0	20.3	0.3	1.7	25.2	1.3	1480	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
	35	19/1.53	7.66	0.9	1.0	22.8	0.3	1.8	27.9	1.4	1870	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
	50	37/1.31	9.18	1.0	1.2	27.5	0.3	2.0	33.0	1.7	2550	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
	70	37/1.55	10.86	1.1	1.2	31.2	0.4	2.1	37.4	1.9	3460	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
	95	37/1.81	12.66	1.1	1.2	35.4	0.4	2.3	41.9	2.1	4410	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
	120	61/1.58	14.24	1.2	1.4	39.6	0.4	2.5	46.6	2.3	5160	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
	150	61/1.77	15.92	1.4	1.4	44.2	0.4	2.6	51.4	2.6	6590	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
	185	61/1.97	17.69	1.6	1.6	49.3	0.4	2.8	57.0	2.8	7730	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88	
	240	91/1.83	20.16	1.7	1.6	55.0	0.4	3.1	63.2	3.2	9830	OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106	
TIBAS+E	1.5	7/0.53	1.59	0.7	1.0	9.5	0.3	1.2	13.5	0.7	390	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	2.5	7/0.67	2.01	0.7	1.0	10.5	0.3	1.3	14.6	0.7	460	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	4	7/0.85	2.5	0.7	1.0	11.8	0.3	1.3	16.0	0.8	560	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	6	7/1.04	3.12	0.7	1.0	13.3	0.3	1.4	17.6	0.9	700	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
	10	7/1.35	4.05	0.7	1.0	15.5	0.3	1.5	20.0	1.0	940	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
	16	7/1.7	5.1	0.7	1.0	18.2	0.3	1.6	22.9	1.1	1260	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
	25	19/1.29	6.47	0.9	1.0	21.4	0.3	1.7	26.4	1.3	1780	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
	35	19/1.53	7.66	0.9	1.0	24.6	0.3	1.8	29.9	1.5	2210	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
	50	37/1.31	9.18	1.0	1.2	28.3	0.3	2.0	33.9	1.7	2880	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
	70	37/1.55	10.86	1.1	1.2	31.8	0.4	2.1	38.0	1.9	3830	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
	95	37/1.81	12.66	1.1	1.2	37.1	0.4	2.4	43.8	2.2	5080	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
	120	61/1.58	14.24	1.2	1.4	41.9	0.4	2.5	49.0	2.4	6070	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
	150	61/1.77	15.92	1.4	1.4	46.8	0.4	2.7	54.3	2.7	7790	OSNJ CW 63b	M63	2"	53.1-56	H82 x 88	
	185	61/1.97	17.69	1.6	1.6	51.1	0.4										

LV POWER & CONTROL CABLES(Flame retardant)

0.6/1KV SIBAS, DIBAS, TIBAS, FIBAS, 5IBAS, 6IBAS, MIBAS, 250V MIBAS

0.6/1KV DIBAS(C), TIBAS(C), FIBAS(C), MIBAS(C), 250V MIBAS(C)

0.6/1KV 5IBAS

Type of Cable	Conductor			Thick of insulation	Thick of inner covering	Overall Inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.										METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)										OUTER 'A'							
5IBAS	1.5	7/0.53	1.59	0.7	1.0	10.3	0.3	1.3	14.4	0.7	440	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27				
	2.5	7/0.67	2.01	0.7	1.0	11.5	0.3	1.3	15.6	0.8	520	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33				
	4	7/0.85	2.5	0.7	1.0	12.9	0.3	1.4	17.2	0.9	650	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33				
	6	7/1.04	3.12	0.7	1.0	14.6	0.3	1.4	19.0	1.0	810	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33				
	10	7/1.35	4.05	0.7	1.0	17.1	0.3	1.5	21.8	1.1	1100	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39				
	16	7/1.7	5.1	0.7	1.0	20.1	0.3	1.7	25.0	1.2	1490	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39				
	25	19/1.29	6.47	0.9	1.0	24.9	0.3	1.9	30.2	1.5	2150	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49				
	35	19/1.53	7.66	0.9	1.2	28.5	0.3	2.0	34.1	1.7	2810	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59				
	50	37/1.31	9.18	1.0	1.2	33.5	0.4	2.2	39.9	2.0	3930	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59				
	70	37/1.55	10.86	1.1	1.4	39.0	0.4	2.4	45.8	2.3	5220	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73				
	95	37/1.81	12.66	1.1	1.4	44.2	0.4	2.6	51.5	2.6	6720	OSNJ CW 63a	M63	2"	48-53	H82 x 88				
	120	61/1.58	14.24	1.2	1.6	49.4	0.4	2.8	57.2	2.9	7860	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88				
	150	61/1.77	15.92	1.4	1.6	55.1	0.4	3.1	63.3	3.2	10140	OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106				
	185	61/1.97	17.69	1.6	1.6	61.0	0.4	3.3	69.7	3.5	11810	OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106				

0.6/1KV 6IBAS

Type of Cable	Conductor			Thick of insulation	Thick of inner covering	Overall Inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.										METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)										OUTER 'A'							
6IBAS	1.5	7/0.53	1.59	0.7	1.0	11.3	0.3	1.3	15.4	0.8	490	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27				
	2.5	7/0.67	2.01	0.7	1.0	12.5	0.3	1.4	16.8	0.8	590	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33				
	4	7/0.85	2.5	0.7	1.0	14.2	0.3	1.4	18.5	0.9	740	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33				
	6	7/1.04	3.12	0.7	1.0	16.0	0.3	1.5	20.6	1.0	920	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39				
	10	7/1.35	4.05	0.7	1.0	18.8	0.3	1.6	23.6	1.2	1270	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39				
	16	7/1.7	5.1	0.7	1.0	22.1	0.3	1.7	27.1	1.4	1730	OSNJ CW 32a	M32	1"	22-28	H45 x 49				
	25	19/1.29	6.47	0.9	1.2	27.9	0.3	2.0	33.4	1.7	2560	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59				
	35	19/1.53	7.66	0.9	1.2	31.4	0.4	2.1	37.6	1.9	3450	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59				
	50	37/1.31	9.18	1.0	1.2	36.9	0.4	2.3	43.6	2.2	4620	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73				
	70	37/1.55	10.86	1.1	1.4	43.0	0.4	2.6	50.2	2.5	6160	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73				
	95	37/1.81	12.66	1.1	1.6	49.2	0.4	2.8	56.9	2.8	8010	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88				
	120	61/1.58	14.24	1.2	1.6	54.5	0.4	3.1	62.7	3.1	9300	OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106				
	150	61/1.77	15.92	1.4	1.6	60.8	0.4	3.3	69.5	3.5	12030	OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106				
	185	61/1.97	17.69	1.6	1.8	67.8	0.4	3.6	77.1	3.9	14120	OSNJ CW 90a	M90	3"	75.1-93	H110 x 120				

0.6/1KV MIBAS, MIBAS(C) 1SQ

No. of Cores	Conductor			Thick of insulation	Thick of inner covering	Overall Inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.										METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)										OUTER 'A'							
2	1	7/0.43	1.29	0.7	1.0	8.5	0.3	1.2	12.4	0.6	300	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27				
3	1	7/0.43	1.29	0.7	1.0	8.9	0.3	1.2	12.9	0.6	330	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27				
4	1	7/0.43	1.29	0.7	1.0	9.7	0.3	1.2	13.7	0.7	370	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27				
5	1	7/0.43	1.29	0.7	1.0	10.5	0.3	1.3	14.5	0.7	410	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27				
6	1	7/0.43	1.29	0.7	1.0	11.3	0.3	1.3	15.4	0.8	460	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33				
7	1	7/0.43	1.29	0.7	1.0	11.3	0.3	1.3	15.4	0.8	470	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33				
12	1	7/0.43	1.29	0.7	1.0	14.5	0.3	1.4	18.9	0.9	660	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33				
19	1	7/0.43	1.29	0.7	1.0	16.8	0.3	1.5	21.4	1.1	850	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39				
27	1	7/0.43	1.29	0.7	1.0	19.5	0.3	1.6	24.3	1.2	1080	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39				
37	1	7/0.43	1.29	0.7	1.0	21.8	0.3	1.7	26.9	1.3	1320	OSNJ CW 32A	M32	1"	22-28	H45 x 49				
44	1	7/0.43	1.29	0.7	1.0	24.6	0.3	1.8	29.8	1.5	1550	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49				

250V MIBAS, MIBAS(C) 1SQ

No. of Cores	Conductor			Thick of insulation	Thick of inner covering	Overall Inner covering diameter	Dia. of armour braid	Thick of Sheath	Nominal overall diameter	Tolerance	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.										METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)										OUTER 'A'							
2	1	7/0.43	1.29	0.5	1.0	7.7	0.3	1.2	11.5	0.6	270	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27				
3	1	7/0.43	1.29	0.5	1.0	8.0	0.3	1.2	11.9	0.6	290	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27				
4	1	7/0.43	1.29	0.5	1.0	8.6	0.3	1.2	12.6	0.6	330	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27				
5	1	7/0.43	1.29	0.5	1.0	9.3	0.3	1.2	13.3	0.7	360	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27				
6	1	7/0.43	1.29	0.5	1.0	10.0	0.3	1.3	14.1	0.7	400	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27				
7	1	7/0.43	1.29	0.5	1.0	10.0	0.3	1.3	14.1	0.7	410	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27				
12	1	7/0.43	1.29	0.5	1.0	12.7	0.3	1.4	17.0	0.8	570	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33				
19	1	7/0.43	1.29	0.5	1.0	14.7	0.3	1.4	19.1	1.0	730	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33				
27	1	7/0.43	1.29	0.5	1.0	16.9	0.3	1.5	21.5	1.1	920	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39				
37	1	7/0.43	1.29	0.5	1.0	18.9	0.3	1.6	23.7	1.2	1120	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39				
44	1	7/0.43	1.29	0.5	1.0	21.2	0.3	1.7	26.2	1.3	1310	OSNJ CW 32a	M32	1"	22-28	H45 x 49				

LV POWER & CONTROL CABLES(Flame retardant)
0.6/1KV MIBAS(I), 250V MIBAS(I)



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376
- IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - Multi core : White with core number
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 250V MIBAS(I) LS CABLE
- [YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium/polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Armour	Galvanized steel wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

0.6/1KV MIBAS(I) 1SQ

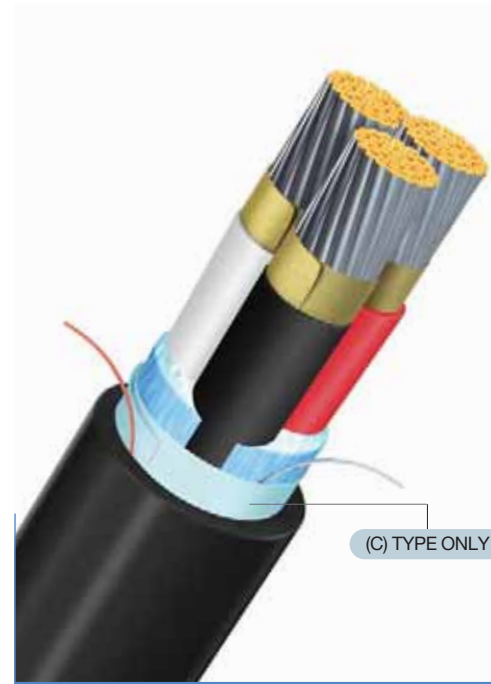
No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT	OUTER 'A'		
2	1	7/0.43	1.29	0.7	1.0	9.6	0.3	1.2	13.6	0.7	350	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27	
3	1	7/0.43	1.29	0.7	1.0	10.2	0.3	1.3	14.2	0.7	390	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27	
4	1	7/0.43	1.29	0.7	1.0	11.1	0.3	1.3	15.3	0.8	450	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27	
5	1	7/0.43	1.29	0.7	1.0	12.2	0.3	1.3	16.5	0.8	510	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33	
6	1	7/0.43	1.29	0.7	1.0	13.4	0.3	1.4	17.7	0.9	570	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33	
7	1	7/0.43	1.29	0.7	1.0	13.4	0.3	1.4	17.7	0.9	590	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33	
12	1	7/0.43	1.29	0.7	1.0	17.7	0.3	1.6	22.4	1.1	870	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39	

250V MIBAS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT	OUTER 'A'		
2	1	7/0.43	1.29	0.5	1.0	8.8	0.3	1.2	12.7	0.6	320	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
3	1	7/0.43	1.29	0.5	1.0	9.3	0.3	1.2	13.2	0.7	360	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
4	1	7/0.43	1.29	0.5	1.0	10.1	0.3	1.3	14.2	0.7	410	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
5	1	7/0.43	1.29	0.5	1.0	11.1	0.3	1.3	15.2	0.8	470	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
6	1	7/0.43	1.29	0.5	1.0	12.1	0.3	1.3	16.3	0.8	530	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
7	1	7/0.43	1.29	0.5	1.0	12.1	0.3	1.3	16.3	0.8	550	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
12	1	7/0.43	1.29	0.5	1.0	15.9	0.3	1.5	20.5	1.0	820	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-DIS, F-TIS, F-FIS, F-MIS, F-MIS(C),
250V F-MIS, F-MIS(C)



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376
IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - 2C : Black, White
 - 3C : Black, White, Red
 - 4C : Black, White, Red, Green
 - Multi core : Numbers on the white insulations
 - Earth : Green/Yellow
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 0.6/1KV F-TIS 3C X 120SQMM LS CABLE
[YEAR] IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C) TYPE ONLY
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

0.6/1KV F-DIS, F-DIS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
F-DIS	1.5	7/0.53	1.59	0.7	1.1	9.4	0.5	110	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	2.5	7/0.67	2.01	0.7	1.1	10.3	0.5	140	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	4	7/0.85	2.5	0.7	1.2	11.4	0.6	190	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	6	7/1.04	3.12	0.7	1.2	12.7	0.6	240	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	10	7/1.35	4.05	0.7	1.3	14.8	0.7	350	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	16	7/1.7	5.1	0.7	1.4	17.6	0.9	510	OSNJ 25b	M25	3/4"	16-18	H32 x 34
	25	19/1.29	6.47	0.9	1.5	21.5	1.1	770	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	35	19/1.53	7.66	0.9	1.6	24.0	1.2	1020	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	50	37/1.31	9.18	1.0	1.8	27.8	1.4	1400	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
	70	37/1.55	10.86	1.1	1.9	31.9	1.6	1890	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
	95	37/1.81	12.66	1.1	2.1	35.9	1.8	2480	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
	120	61/1.58	14.24	1.2	2.2	39.7	2.0	2910	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
	150	61/1.77	15.92	1.4	2.4	44.3	2.2	3830	OSNJ 63a	M63	2"	40.1-44	H73 x 78
	185	61/1.97	17.69	1.6	2.5	49.0	2.5	4510	OSNJ 63b	M63	2"	44.1-50	H73 x 78
	F-DIS+E	1.5	7/0.53	1.59	0.7	1.1	10.0	0.5	140	OSNJ 16b	M16	1/2"	6.1-10
2.5		7/0.67	2.01	0.7	1.1	11.0	0.5	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4		7/0.85	2.5	0.7	1.2	12.1	0.6	240	OSNJ 20a	M20	1/2"	10-13	H27 x 29
6		7/1.04	3.12	0.7	1.2	13.6	0.7	320	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
10		7/1.35	4.05	0.7	1.3	15.7	0.8	480	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
16		7/1.7	5.1	0.7	1.4	18.8	0.9	690	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
25		19/1.29	6.47	0.9	1.6	22.9	1.1	990	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
35		19/1.53	7.66	0.9	1.7	25.7	1.3	1340	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
50		37/1.31	9.18	1.0	1.8	29.7	1.5	1740	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
70		37/1.55	10.86	1.1	2.0	34.2	1.7	2260	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
95		37/1.81	12.66	1.1	2.2	38.4	1.9	3110	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
120		61/1.58	14.24	1.2	2.3	42.6	2.1	3770	OSNJ 63a	M63	2"	40.1-44	H73 x 78
150		61/1.77	15.92	1.4	2.5	47.5	2.4	4960	OSNJ 63b	M63	2"	44.1-50	H73 x 78
185		61/1.97	17.69	1.6	2.7	52.6	2.6	5680	OSNJ 63c	M63	2"	50.1-454	H73 x 78

0.6/1KV F-TIS, F-TIS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
F-TIS	1.5	7/0.53	1.59	0.7	1.1	10.0	0.5	140	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
	2.5	7/0.67	2.01	0.7	1.1	11.0	0.5	170	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	4	7/0.85	2.5	0.7	1.2	12.1	0.6	230	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	6	7/1.04	3.12	0.7	1.2	13.6	0.7	300	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	10	7/1.35	4.05	0.7	1.3	15.7	0.8	450	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
	16	7/1.7	5.1	0.7	1.4	18.8	0.9	660	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	25	19/1.29	6.47	0.9	1.6	22.9	1.1	1010	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	35	19/1.53	7.66	0.9	1.7	25.7	1.3	1340	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	50	37/1.31	9.18	1.0	1.8	29.7	1.5	1860	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
	70	37/1.55	10.86	1.1	2.0	34.1	1.7	2540	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62
	95	37/1.81	12.66	1.1	2.1	38.4	1.9	3360	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
	120	61/1.58	14.24	1.2	2.3	42.6	2.1	3940	OSNJ 63a	M63	2"	40.1-44	H73 x 78
	150	61/1.77	15.92	1.4	2.5	47.5	2.4	5230	OSNJ 63b	M63	2"	44.1-50	H73 x 78
	185	61/1.97	17.69	1.6	2.7	52.6	2.6	6160	OSNJ 63c	M63	2"	50.1-454	H73 x 78
	240	91/1.83	20.16	1.7	2.9	58.8	2.9	8220	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90
F-TIS+E	1.5	7/0.53	1.59	0.7	1.1	11.0	0.6	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	2.5	7/0.67	2.01	0.7	1.2	12.1	0.6	230	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	4	7/0.85	2.5	0.7	1.2	13.4	0.7	290	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	6	7/1.04	3.12	0.7	1.3	15.0	0.7	390	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	10	7/1.35	4.05	0.7	1.4	17.4	0.9	580	OSNJ 25b	M25	3/4"	16-18	H32 x 34
	16	7/1.7	5.1	0.7	1.5	20.8	1.0	860	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	25	19/1.29	6.47	0.9	1.6	24.3	1.2	1310	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	35	19/1.53	7.66	0.9	1.8	27.8	1.4	1660	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
	50	37/1.31	9.18	1.0	1.9	31.2	1.6	2220	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
	70	37/1.55	10.86	1.1	2.0	34.9	1.7	2930	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
	95	37/1.81	12.66	1.1	2.2	40.4	2.0	4020	OSNJ 63a	M63	2"	40.1-44	H73 x 78
	120	61/1.58	14.24	1.2	2.4	45.2	2.3	4830	OSNJ 63b	M63	2"	44.1-50	H73 x 78
	150	61/1.77	15.92	1.4	2.6	50.5	2.5	6400	OSNJ 63c	M63	2"	50.1-454	H73 x 78
	185	61/1.97	17.69	1.6	2.8	54.8	2.7	7410	OSNJ 75a	M75	2-1/2"	54.1-56	H85 x 90
	240	91/1.83	20.16	1.7	3.0	61.2	3.1	9700	OSNJ 75c	M75	2-1/2"	60.1-62	H85 x 90

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-DIS, F-TIS, F-FIS, F-MIS, F-MIS(C),
250V F-MIS, F-MIS(C)

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-SIBS, F-DIBS, F-TIBS, F-FIBS, F-MIBS, 250V F-MIBS
0.6/1KV F-DIBS(C), F-TIBS(C), F-FIBS(C), F-MIBS(C), 250V F-MIBS(C)

0.6/1KV F-FIS, F-FIS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
F-FIS	1.5	7/0.53	1.59	0.7	1.1	11.0	0.5	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	2.5	7/0.67	2.01	0.7	1.2	12.1	0.6	230	OSNJ 20a	M20	1/2"	10-13	H27 x 29
	4	7/0.85	2.5	0.7	1.2	13.4	0.7	310	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	6	7/1.04	3.12	0.7	1.3	15.0	0.7	410	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
	10	7/1.35	4.05	0.7	1.4	17.4	0.9	610	OSNJ 25b	M25	3/4"	16-18	H32 x 34
	16	7/1.7	5.1	0.7	1.5	20.8	1.0	900	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
	25	19/1.29	6.47	0.9	1.7	25.5	1.3	1360	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
	35	19/1.53	7.66	0.9	1.8	28.6	1.4	1820	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
	50	37/1.31	9.18	1.0	2.0	33.1	1.7	2510	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62
	70	37/1.55	10.86	1.1	2.1	38.1	1.9	3420	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
	95	37/1.81	12.66	1.1	2.3	42.8	2.1	4510	OSNJ 63a	M63	2"	40.1-44	H73 x 78
	120	61/1.58	14.24	1.2	2.5	47.5	2.4	5290	OSNJ 63b	M63	2"	44.1-50	H73 x 78
	150	61/1.77	15.92	1.4	2.7	53.0	2.7	7010	OSNJ 63c	M63	2"	50.1-454	H73 x 78
	185	61/1.97	17.69	1.6	2.9	58.7	2.9	8240	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90
	F-DIS+E	1.5	7/0.53	1.59	0.7	1.2	12.1	0.6	210	OSNJ 20a	M20	1/2"	10-13
2.5		7/0.67	2.01	0.7	1.2	13.3	0.7	270	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4		7/0.85	2.5	0.7	1.3	14.8	0.7	370	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
6		7/1.04	3.12	0.7	1.4	16.6	0.8	500	OSNJ 25b	M25	3/4"	16-18	H32 x 34
10		7/1.35	4.05	0.7	1.5	19.3	1.0	740	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
16		7/1.7	5.1	0.7	1.6	23.1	1.2	1090	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
25		19/1.29	6.47	0.9	1.7	27.3	1.4	1580	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
35		19/1.53	7.66	0.9	1.9	31.1	1.6	2130	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
50		37/1.31	9.18	1.0	2.0	35.2	1.8	2870	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
70		37/1.55	10.86	1.1	2.2	39.6	2.0	3830	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
95		37/1.81	12.66	1.1	2.4	45.6	2.3	5170	OSNJ 63b	M63	2"	44.1-50	H73 x 78
120		61/1.58	14.24	1.2	2.6	50.9	2.5	6170	OSNJ 63c	M63	2"	50.1-454	H73 x 78
150		61/1.77	15.92	1.4	2.8	56.9	2.8	8160	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90
185		61/1.97	17.69	1.6	3.0	62.0	3.1	9500	OSNJ 75c	M75	2-1/2"	60.1-62	H85 x 90

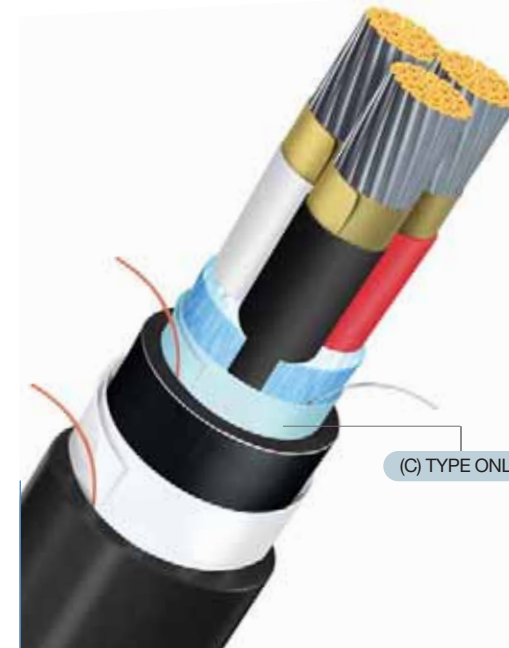
0.6/1KV F-MIS, F-MIS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
2	1	7/0.43	1.29	0.7	1.1	9.8	0.5	110	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
3	1	7/0.43	1.29	0.7	1.1	10.3	0.5	130	OSNJ 20a	M20	1/2"	10-13	H27 x 29
4	1	7/0.43	1.29	0.7	1.2	11.2	0.6	160	OSNJ 20a	M20	1/2"	10-13	H27 x 29
5	1	7/0.43	1.29	0.7	1.2	12.2	0.6	190	OSNJ 20a	M20	1/2"	10-13	H27 x 29
6	1	7/0.43	1.29	0.7	1.2	13.3	0.7	230	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
7	1	7/0.43	1.29	0.7	1.2	13.3	0.7	240	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
12	1	7/0.43	1.29	0.7	1.4	17.3	0.9	400	OSNJ 25b	M25	3/4"	16-18	H32 x 34
19	1	7/0.43	1.29	0.7	1.5	20.3	1.0	590	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
27	1	7/0.43	1.29	0.7	1.6	23.8	1.2	820	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
37	1	7/0.43	1.29	0.7	1.7	26.7	1.3	1080	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
44	1	7/0.43	1.29	0.7	1.9	30.2	1.5	1310	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51

250V F-MIS, F-MIS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
2	1	7/0.43	1.29	0.5	1.1	8.9	0.4	90	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
3	1	7/0.43	1.29	0.5	1.1	9.3	0.5	110	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
4	1	7/0.43	1.29	0.5	1.1	10.1	0.5	140	OSNJ 20a	M20	1/2"	10-13	H27 x 29
5	1	7/0.43	1.29	0.5	1.1	11.0	0.5	170	OSNJ 20a	M20	1/2"	10-13	H27 x 29
6	1	7/0.43	1.29	0.5	1.2	11.9	0.6	190	OSNJ 20a	M20	1/2"	10-13	H27 x 29
7	1	7/0.43	1.29	0.5	1.2	11.9	0.6	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29
12	1	7/0.43	1.29	0.5	1.3	15.4	0.8	350	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
19	1	7/0.43	1.29	0.5	1.4	18.0	0.9	510	OSNJ 25b	M25	3/4"	16-18	H32 x 34
27	1	7/0.43	1.29	0.5	1.5	21.0	1.0	700	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
37	1	7/0.43	1.29	0.5	1.6	23.6	1.2	930	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
44	1	7/0.43	1.29	0.5	1.7	26.6	1.3	1120	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51

Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C



Applied Standard

- IEC 60092-350, -351, -353, -359, -376
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - 1C : Black
 - 2C : Black, White
 - 3C : Black, White, Red
 - 4C : Black, White, Red, Green
 - Multi core : White with core number
 - Earth : Green/Yellow
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 0.6/1KV F-TIBS 3C X 95SQMM LS CABLE
- [YEAR] IEC 60332-3A, IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

Detail	Remark
Conductor	Tinned annealed copper
Fire proof layer	Mica tape
Separator	If necessary
Insulation	HEPR to IEC 60092-351
Individual screen	N/A
Filler	If necessary
Binder tape	If necessary
Overall screen	Aluminium / polyester tape with drain wire (C) TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering
Separator tape	If necessary
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-SIBS, F-DIBS, F-TIBS, F-FIBS, F-MIBS, 250V F-MIBS
0.6/1KV F-DIBS(C), F-TIBS(C), F-FIBS(C), F-MIBS(C), 250V F-MIBS(C)

0.6/1KV F-SIBS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.									METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)																
F-SIBS	1.5	7/0.53	1.59	0.7	1.0	5.5	1.0	8.0	0.4	90	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26				
	2.5	7/0.67	2.01	0.7	1.0	6.0	1.1	8.5	0.4	100	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26				
	4	7/0.85	2.5	0.7	1.0	6.4	1.1	9.0	0.4	120	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26				
	6	7/1.04	3.12	0.7	1.0	7.1	1.1	9.7	0.5	150	OSNJ 16b	M16	1/2"	6.1-10	H24 x 26				
	10	7/1.35	4.05	0.7	1.0	8.0	1.1	10.7	0.5	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29				
	16	7/1.7	5.1	0.7	1.0	9.3	1.2	12.1	0.6	280	OSNJ 20a	M20	1/2"	10-13	H27 x 29				
	25	19/1.29	6.47	0.9	1.0	11.1	1.3	14.0	0.7	400	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
	35	19/1.53	7.66	0.9	1.0	12.3	1.3	15.3	0.8	520	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34				
	50	37/1.31	9.18	1.0	1.0	14.0	1.4	17.2	0.9	690	OSNJ 25b	M25	3/4"	16-18	H32 x 34				
	70	37/1.55	10.86	1.1	1.0	15.9	1.4	19.2	1.0	920	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	95	37/1.81	12.66	1.1	1.0	17.7	1.5	21.2	1.1	1190	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	120	61/1.58	14.24	1.2	1.0	19.5	1.6	23.1	1.2	1370	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	150	61/1.77	15.92	1.4	1.0	21.6	1.7	25.4	1.3	1790	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	185	61/1.97	17.69	1.6	1.0	23.8	1.8	27.8	1.4	2090	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51				
	240	91/1.83	20.16	1.7	1.0	26.4	1.9	30.7	1.5	2750	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
300	91/2.05	22.54	1.8	1.2	29.4	2.0	33.9	1.7	3420	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62					

0.6/1KV F-DIBS, F-DIBS(C), F-DIBS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.									METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)																
F-DIBS/ F-DIBS (C)	1.5	7/0.53	1.59	0.7	1.0	9.2	1.2	11.9	0.6	170	OSNJ 20a	M20	1/2"	10-13	H27 x 29				
	2.5	7/0.67	2.01	0.7	1.0	10.0	1.2	12.8	0.6	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29				
	4	7/0.85	2.5	0.7	1.0	11.0	1.3	13.9	0.7	260	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
	6	7/1.04	3.12	0.7	1.0	12.2	1.3	15.2	0.8	320	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34				
	10	7/1.35	4.05	0.7	1.0	14.1	1.4	17.3	0.9	450	OSNJ 25b	M25	3/4"	16-18	H32 x 34				
	16	7/1.7	5.1	0.7	1.0	16.7	1.5	20.1	1.0	620	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	25	19/1.29	6.47	0.9	1.0	20.2	1.6	24.0	1.2	900	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	35	19/1.53	7.66	0.9	1.0	22.6	1.7	26.5	1.3	1160	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51				
	50	37/1.31	9.18	1.0	1.0	26.1	1.9	30.3	1.5	1570	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	70	37/1.55	10.86	1.1	1.2	30.3	2.0	34.8	1.7	2120	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	95	37/1.81	12.66	1.1	1.2	33.9	2.2	38.8	1.9	2740	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	120	61/1.58	14.24	1.2	1.4	37.9	2.3	43.1	2.2	3250	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
	150	61/1.77	15.92	1.4	1.4	42.1	2.5	47.7	2.4	4210	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
	185	61/1.97	17.69	1.6	1.4	46.5	2.7	52.4	2.6	4930	OSNJ 63c	M63	2"	50.1-454	H73 x 78				
	F-DIBS+E	1.5	7/0.53	1.59	0.7	1.0	9.7	1.2	12.5	0.6	200	OSNJ 20a	M20	1/2"	10-13	H27 x 29			
2.5		7/0.67	2.01	0.7	1.0	10.6	1.2	13.5	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
4		7/0.85	2.5	0.7	1.0	11.6	1.3	14.6	0.7	320	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
6		7/1.04	3.12	0.7	1.0	13.0	1.3	16.1	0.8	410	OSNJ 25b	M25	3/4"	16-18	H32 x 34				
10		7/1.35	4.05	0.7	1.0	15.0	1.4	18.2	0.9	570	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
16		7/1.7	5.1	0.7	1.0	17.8	1.5	21.3	1.1	810	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
25		19/1.29	6.47	0.9	1.0	21.6	1.7	25.4	1.3	1090	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
35		19/1.53	7.66	0.9	1.0	24.2	1.8	28.2	1.4	1450	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
50		37/1.31	9.18	1.0	1.2	28.3	1.9	32.7	1.6	1890	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62				
70		37/1.55	10.86	1.1	1.2	32.4	2.1	37.1	1.9	2420	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
95		37/1.81	12.66	1.1	1.2	36.3	2.3	41.4	2.1	3280	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
120		61/1.58	14.24	1.2	1.4	40.6	2.4	46.0	2.3	3990	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
150		61/1.77	15.92	1.4	1.4	45.1	2.6	50.9	2.5	5190	OSNJ 63c	M63	2"	50.1-454	H73 x 78				
185		61/1.97	17.69	1.6	1.6	50.2	2.8	56.4	2.8	5970	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90				

0.6/1KV F-TIBS, F-TIBS(C), F-TIBS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)			
	Size	Construction	Dia.									METRIC					NPT		
	(mm ²)	(Nos./mm)	(mm)																
F-TIBS/ F-TIBS(C)	1.5	7/0.53	1.59	0.7	1.0	9.7	1.2	12.5	0.6	210	OSNJ 20a	M20	1/2"	10-13	H27 x 29				
	2.5	7/0.67	2.01	0.7	1.0	10.6	1.2	13.5	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
	4	7/0.85	2.5	0.7	1.0	11.6	1.3	14.6	0.7	320	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
	6	7/1.04	3.12	0.7	1.0	13.0	1.3	16.1	0.8	410	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34				
	10	7/1.35	4.05	0.7	1.0	15.0	1.4	18.2	0.9	570	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	16	7/1.7	5.1	0.7	1.0	17.8	1.5	21.3	1.1	810	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
	25	19/1.29	6.47	0.9	1.0	21.6	1.7	25.4	1.3	1190	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
	35	19/1.53	7.66	0.9	1.0	24.2	1.8	28.2	1.4	1550	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	50	37/1.31	9.18	1.0	1.2	27.5	1.9	31.8	1.6	2110	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
	70	37/1.55	10.86	1.1	1.2	32.4	2.1	37.1	1.9	2870	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
	95	37/1.81	12.66	1.1	1.2	36.3	2.3	41.4	2.1	3730	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
	120	61/1.58	14.24	1.2	1.4	40.6	2.4	46.0	2.3	4410	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
	150	61/1.77	15.92	1.4	1.4	45.1	2.6	50.9	2.5	5750	OSNJ 63c	M63	2"	50.1-454	H73 x 78				
	185	61/1.97	17.69	1.6	1.6	50.2	2.8	56.4	2.8	6800	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90				
	F-TIBS+E	1.5	7/0.53	1.59	0.7	1.0	10.6	1.2	13.5	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29			
2.5		7/0.67	2.01	0.7	1.0	11.6	1.3	14.6	0.7	310	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29				
4		7/0.85	2.5	0.7	1.0	12.8	1.3	15.9	0.8	390	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34				
6		7/1.04	3.12	0.7	1.0	14.3	1.4	17.5	0.9	510	OSNJ 25b	M25	3/4"	16-18	H32 x 34				
10		7/1.35	4.05	0.7	1.0	16.5	1.5	19.9	1.0	720	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5				
16		7/1.7	5.1	0.7	1.0	19.7	1.6	23.3	1.2	1020	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5				
25		19/1.29	6.47	0.9	1.0	22.9	1.7	26.8	1.3	1500	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51				
35		19/1.53	7.66	0.9	1.0	26.1	1.9	30.3	1.5	1890	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51				
50		37/1.31	9.18	1.0	1.2	29.7	2.0	34.2	1.7	2510	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
70		37/1.55	10.86	1.1	1.2	33.1	2.1	37.9	1.9	3270	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62				
95		37/1.81	12.66	1.1	1.4	38.6	2.4	43.8	2.2	4460	OSNJ 63a	M63	2"	40.1-44	H73 x 78				
120		61/1.58	14.24	1.2	1.4	42.9	2.5	48.6	2.4	5310	OSNJ 63b	M63	2"	44.1-50	H73 x 78				
150		61/1.77	15.92	1.4	1.6	48.2	2.7	54.3	2.7	7000	OSNJ 75a	M75	2-1/2"	54.1-56	H85 x 90				
185		61/1.97	17.69	1.6	1.6	52.2	2.9	58.6	2.9	8060	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90				

LV POWER & CONTROL CABLES (Fire resistant & Flame retardant)

LS Marine Cable KS-CLF

Cable Construction LV POWER & CONTROL CABLES (Fire resistant & Flame retardant)

LS Marine Cable KS-CLF

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-SIBS, F-DIBS, F-TIBS, F-FIBS, F-MIBS, 250V F-MIBS
0.6/1KV F-DIBS(C), F-TIBS(C), F-FIBS(C), F-MIBS(C), 250V F-MIBS(C)

0.6/1KV F-FIBS, F-FIBS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
F-FIBS	1.5	7/0.53	1.59	0.7	1.0	10.6	1.2	13.5	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
	2.5	7/0.67	2.01	0.7	1.0	11.6	1.3	14.6	0.7	310	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
	4	7/0.85	2.5	0.7	1.0	12.8	1.3	15.9	0.8	400	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
	6	7/1.04	3.12	0.7	1.0	14.3	1.4	17.5	0.9	510	OSNJ 25b	M25	3/4"	16-18	H32 x 34							
	10	7/1.35	4.05	0.7	1.0	16.5	1.5	19.9	1.0	720	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
	16	7/1.7	5.1	0.7	1.0	19.7	1.6	23.3	1.2	1030	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5							
	25	19/1.29	6.47	0.9	1.0	24.0	1.8	28.0	1.4	1520	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51							
	35	19/1.53	7.66	0.9	1.0	26.8	1.9	31.1	1.6	1990	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51							
	50	37/1.31	9.18	1.0	1.2	27.5	1.9	31.8	1.6	2580	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51							
	70	37/1.55	10.86	1.1	1.2	36.0	2.3	41.0	2.1	3700	OSNJ 63a	M63	2"	40.1-44	H73 x 78							
	95	37/1.81	12.66	1.1	1.4	40.8	2.4	46.2	2.3	4880	OSNJ 63b	M63	2"	44.1-50	H73 x 78							
	120	61/1.58	14.24	1.2	1.4	45.1	2.6	50.9	2.5	5690	OSNJ 63c	M63	2"	50.1-454	H73 x 78							
	150	61/1.77	15.92	1.4	1.6	50.6	2.8	56.8	2.8	7520	OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90							
	185	61/1.97	17.69	1.6	1.6	55.8	3.0	62.5	3.1	8810	OSNJ 75d	M75	2-1/2"	62.1-66	H85 x 90							
	F-FIBS+E	1.5	7/0.53	1.59	0.7	1.0	11.6	1.3	14.6	0.7	300	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29						
2.5		7/0.67	2.01	0.7	1.0	12.8	1.3	15.8	0.8	370	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
4		7/0.85	2.5	0.7	1.0	14.1	1.4	17.3	0.9	470	OSNJ 25b	M25	3/4"	16-18	H32 x 34							
6		7/1.04	3.12	0.7	1.0	15.8	1.4	19.1	1.0	610	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
10		7/1.35	4.05	0.7	1.0	18.3	1.5	21.8	1.1	870	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
16		7/1.7	5.1	0.7	1.0	21.8	1.7	25.6	1.3	1250	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5							
25		19/1.29	6.47	0.9	1.0	25.6	1.8	29.8	1.5	1780	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51							
35		19/1.53	7.66	0.9	1.2	29.6	2.0	34.1	1.7	2400	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62							
50		37/1.31	9.18	1.0	1.2	33.3	2.1	38.1	1.9	3180	OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62							
70		37/1.55	10.86	1.1	1.4	37.8	2.3	43.0	2.1	4230	OSNJ 63a	M63	2"	40.1-44	H73 x 78							
95		37/1.81	12.66	1.1	1.4	43.3	2.5	49.0	2.4	5650	OSNJ 63b	M63	2"	44.1-50	H73 x 78							
120		61/1.58	14.24	1.2	1.6	48.6	2.8	54.7	2.7	6760	OSNJ 75a	M75	2-1/2"	54.1-56	H85 x 90							
150		61/1.77	15.92	1.4	1.6	54.1	3.0	60.7	3.0	8840	OSNJ 75c	M75	2-1/2"	60.1-62	H85 x 90							
185		61/1.97	17.69	1.6	1.6	58.9	3.2	65.8	3.3	10250	OSNJ 75d	M75	2-1/2"	62.1-66	H85 x 90							

0.6/1KV F-MIBS, F-MIBS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
2	1	7/0.43	1.29	0.7	1.0	9.5	1.2	12.3	0.6	160	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
3	1	7/0.43	1.29	0.7	1.0	9.9	1.2	12.8	0.6	190	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
4	1	7/0.43	1.29	0.7	1.0	10.8	1.2	13.7	0.7	220	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
5	1	7/0.43	1.29	0.7	1.0	11.7	1.3	14.7	0.7	260	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
6	1	7/0.43	1.29	0.7	1.0	12.7	1.3	15.8	0.8	300	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
7	1	7/0.43	1.29	0.7	1.0	12.7	1.3	15.8	0.8	320	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
12	1	7/0.43	1.29	0.7	1.0	16.4	1.5	19.8	1.0	500	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
19	1	7/0.43	1.29	0.7	1.0	19.2	1.6	22.8	1.1	700	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5							
27	1	7/0.43	1.29	0.7	1.0	22.4	1.7	26.3	1.3	950	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51							
37	1	7/0.43	1.29	0.7	1.0	25.1	1.8	29.2	1.5	1220	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51							
44	1	7/0.43	1.29	0.7	1.2	28.8	2.0	33.2	1.7	1510	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62							

0.6/1KV F-MIBS+E, F-MIBS(C)+E 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
2	1	7/0.43	1.29	0.7	1.0	9.9	1.2	12.8	0.6	170	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
3	1	7/0.43	1.29	0.7	1.0	10.8	1.2	13.7	0.7	200	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
4	1	7/0.43	1.29	0.7	1.0	11.7	1.3	14.7	0.7	230	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
5	1	7/0.43	1.29	0.7	1.0	12.7	1.3	15.8	0.8	270	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
6	1	7/0.43	1.29	0.7	1.0	12.7	1.3	15.8	0.8	280	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
7	1	7/0.43	1.29	0.7	1.0	13.7	1.4	16.9	0.8	320	OSNJ 25b	M25	3/4"	16-18	H32 x 34							
12	1	7/0.43	1.29	0.7	1.0	17.3	1.5	20.7	1.0	480	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
19	1	7/0.43	1.29	0.7	1.0	20.2	1.6	23.9	1.2	650	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5							
27	1	7/0.43	1.29	0.7	1.0	23.2	1.7	27.2	1.4	860	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51							
37	1	7/0.43	1.29	0.7	1.0	26.1	1.9	30.3	1.5	1100	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51							
44	1	7/0.43	1.29	0.7	1.2	28.8	2.0	33.2	1.7	1310	OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62							

250V F-MIBS, F-MIBS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	Dia.									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
2	1	7/0.43	1.29	0.5	1.0	8.6	1.2	11.4	0.6	140	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
3	1	7/0.43	1.29	0.5	1.0	9.0	1.2	11.8	0.6	170	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
4	1	7/0.43	1.29	0.5	1.0	9.8	1.2	12.6	0.6	200	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
5	1	7/0.43	1.29	0.5	1.0	10.6	1.2	13.5	0.7	230	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
6	1	7/0.43	1.29	0.5	1.0	11.4	1.3	14.4	0.7	260	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
7	1	7/0.43	1.29	0.5	1.0	11.4	1.3	14.4	0.7	280	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
12	1	7/0.43	1.29	0.5	1.0	14.7	1.4	17.9	0.9	430	OSNJ 25b	M25	3/4"	16-18	H32 x 34							
19	1	7/0.43	1.29	0.5	1.0	17.1	1.5	20.5	1.0	610	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
27	1	7/0.43	1.29	0.5	1.0	19.8	1.6	23.5	1.2	820	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5							
37	1	7/0.43	1.29	0.5	1.0	22.2	1.7	26.1	1.3	1050	OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51							
44	1	7/0.43	1.29	0.5	1.0	25.0	1.8	29.1	1.5	1270	OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51							

250V F-MIBS+E, F-MIBS(C)+E 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)						
	Size	Construction	O.D									METRIC					NPT			OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)									(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
2	1	7/0.43	1.29	0.5	1.0	9.0	1.2	11.8	0.6	150	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
3	1	7/0.43	1.29	0.5	1.0	9.8	1.2	12.6	0.6	180	OSNJ 20a	M20	1/2"	10-13	H27 x 29							
4	1	7/0.43	1.29	0.5	1.0	10.6	1.2	13.5	0.7	200	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29							
5	1	7/0.43	1.29	0.5	1.0	11.4	1.3	14.4	0.7	230	OSNJ 20b	M20	1/2"	13.1-15	H32 x 34							
6	1	7/0.43	1.29	0.5	1.0	11.4	1.3	14.4	0.7	240	OSNJ 20b	M20	1/2"	13.1-15	H32 x 34							
7	1	7/0.43	1.29	0.5	1.0	12.3	1.3	15.4	0.8	270	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34							
12	1	7/0.43	1.29	0.5	1.0	15.4	1.4	18.7	0.9	400	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5							
19	1	7/0.43	1.29	0.5	1.0	1																

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)
0.6/1KV F-MIBS(I), 250V F-MIBS(I)



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376
 IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 -Multi core : White with core number
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 250V F-MIBS(I) 7C X 1SQMM LS CABLE
 [YEAR] IEC 60332-3A, IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium / polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

0.6/1KV F-MIBS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
													OUTER 'A'		
2	1	7/0.43	1.29	0.7	1.0	10.6	1.2	13.4	0.7	200	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
3	1	7/0.43	1.29	0.7	1.0	11.2	1.3	14.1	0.7	240	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
4	1	7/0.43	1.29	0.7	1.0	12.3	1.3	15.3	0.8	290	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
5	1	7/0.43	1.29	0.7	1.0	13.5	1.4	16.7	0.8	340	OSNJ 25b	M25	3/4"	16-18	H32 x 34
6	1	7/0.43	1.29	0.7	1.0	14.8	1.4	18.0	0.9	400	OSNJ 25b	M25	3/4"	16-18	H32 x 34
7	1	7/0.43	1.29	0.7	1.0	14.8	1.4	18.0	0.9	430	OSNJ 25b	M25	3/4"	16-18	H32 x 34
12	1	7/0.43	1.29	0.7	1.0	19.6	1.6	23.3	1.2	710	OSNJ 32b	M32	1"	22.1-26	H39 x 41.5

250V F-MIBS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	O.D (mm)									METRIC	NPT		
													OUTER 'A'		
2	1	7/0.43	1.29	0.5	1.0	9.7	1.2	12.5	0.6	170	OSNJ 20a	M20	1/2"	10-13	H27 x 29
3	1	7/0.43	1.29	0.5	1.0	10.3	1.2	13.2	0.7	210	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
4	1	7/0.43	1.29	0.5	1.0	11.3	1.3	14.2	0.7	250	OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
5	1	7/0.43	1.29	0.5	1.0	12.4	1.3	15.4	0.8	290	OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
6	1	7/0.43	1.29	0.5	1.0	13.5	1.4	16.7	0.8	340	OSNJ 25b	M25	3/4"	16-18	H32 x 34
7	1	7/0.43	1.29	0.5	1.0	13.5	1.4	16.7	0.8	360	OSNJ 25b	M25	3/4"	16-18	H32 x 34
12	1	7/0.43	1.29	0.5	1.0	17.9	1.5	21.4	1.1	580	OSNJ 32a	M32	1"	18.1-22	H39 x 41.5

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-SIBAS, F-DIBAS, F-TIBAS, F-FIBAS, F-MIBAS, 250V F-MIBAS
0.6/1KV F-DIBAS(C), F-TIBAS(C), F-FIBAS(C), F-MIBAS(C), 250V F-MIBAS(C)



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - 1C : Black
 - 2C : Black, White
 - 3C : Black, White, Red
 - 4C : Black, White, Red, Green
 - Multi core : White with core number
 - Earth : Green/Yellow
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 0.6/1KV F-TIBAS 3C X 120SQMM LS CABLE
- [YEAR] IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C) TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the inner covering	
Armour	Galvanized steel wire braid or Bronze wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

0.6/1KV F-SIBAS

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
F-SIBAS	1.5	7/0.53	1.59	0.7	1.0	5.5	0.3	1.1	9.2	0.5	210	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27
	2.5	7/0.67	2.01	0.7	1.0	6.0	0.3	1.1	9.6	0.5	240	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27
	4	7/0.85	2.5	0.7	1.0	6.4	0.3	1.1	10.2	0.5	270	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27
	6	7/1.04	3.12	0.7	1.0	7.1	0.3	1.1	10.9	0.5	320	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27
	10	7/1.35	4.05	0.7	1.0	8.0	0.3	1.2	11.9	0.6	390	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27
	16	7/1.7	5.1	0.7	1.0	9.3	0.3	1.2	13.3	0.7	500	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
	25	19/1.29	6.47	0.9	1.0	11.1	0.3	1.3	15.2	0.8	660	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
	35	19/1.53	7.66	0.9	1.0	12.3	0.3	1.3	16.5	0.8	800	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
	50	37/1.31	9.18	1.0	1.0	14.0	0.3	1.4	18.4	0.9	1010	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
	70	37/1.55	10.86	1.1	1.0	15.9	0.3	1.5	20.4	1.0	1280	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39
	95	37/1.81	12.66	1.1	1.0	17.7	0.3	1.6	22.4	1.1	1590	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
	120	61/1.58	14.24	1.2	1.0	19.5	0.3	1.6	24.3	1.2	1820	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
	150	61/1.77	15.92	1.4	1.0	21.6	0.3	1.7	26.6	1.3	2280	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	185	61/1.97	17.69	1.6	1.0	23.8	0.3	1.8	29.0	1.4	2630	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49

0.6/1KV F-DIBAS, F-DIBAS(C), F-DIBAS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
F-DIBAS/ F-DIBAS (C)	1.5	7/0.53	1.59	0.7	1.0	9.2	0.3	1.2	13.1	0.7	350	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
	2.5	7/0.67	2.01	0.7	1.0	10.0	0.3	1.3	14.0	0.7	400	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
	4	7/0.85	2.5	0.7	1.0	11.0	0.3	1.3	15.1	0.8	470	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
	6	7/1.04	3.12	0.7	1.0	12.2	0.3	1.3	16.4	0.8	560	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
	10	7/1.35	4.05	0.7	1.0	14.1	0.3	1.4	18.4	0.9	710	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
	16	7/1.7	5.1	0.7	1.0	16.7	0.3	1.5	21.3	1.1	940	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39
	25	19/1.29	6.47	0.9	1.0	20.2	0.3	1.7	25.1	1.3	1280	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
	35	19/1.53	7.66	0.9	1.0	22.6	0.3	1.8	27.7	1.4	1580	OSNJ CW 32a	M32	1"	22-28	H45 x 49
	50	37/1.31	9.18	1.0	1.0	26.1	0.3	1.9	31.5	1.6	2050	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
	70	37/1.55	10.86	1.1	1.2	30.3	0.4	2.1	36.4	1.8	2820	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
	95	37/1.81	12.66	1.1	1.2	33.9	0.4	2.2	40.4	2.0	3520	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	120	61/1.58	14.24	1.2	1.4	37.9	0.4	2.4	44.7	2.2	4120	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
	150	61/1.77	15.92	1.4	1.4	42.1	0.4	2.6	49.2	2.5	5170	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73
	185	61/1.97	17.69	1.6	1.4	46.5	0.4	2.7	54.0	2.7	5990	OSNJ CW 63b	M63	2"	53.1-56	H82 x 88
	F-DIBAS +E	1.5	7/0.53	1.59	0.7	1.0	9.7	0.3	1.2	13.7	0.7	390	OSNJ CW 16b	M16	1/2"	12.6-15.1
2.5		7/0.67	2.01	0.7	1.0	10.6	0.3	1.3	14.7	0.7	460	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
4		7/0.85	2.5	0.7	1.0	11.6	0.3	1.3	15.8	0.8	540	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
6		7/1.04	3.12	0.7	1.0	13.0	0.3	1.4	17.3	0.9	650	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
10		7/1.35	4.05	0.7	1.0	15.0	0.3	1.5	19.4	1.0	850	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
16		7/1.7	5.1	0.7	1.0	17.8	0.3	1.6	22.4	1.1	1140	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
25		19/1.29	6.47	0.9	1.0	21.6	0.3	1.7	26.6	1.3	1490	OSNJ CW 32a	M32	1"	22-28	H45 x 49
35		19/1.53	7.66	0.9	1.0	24.2	0.3	1.8	29.4	1.5	1890	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
50		37/1.31	9.18	1.0	1.2	28.3	0.3	2.0	33.9	1.7	2410	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
70		37/1.55	10.86	1.1	1.2	32.4	0.4	2.2	38.7	1.9	3160	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
95		37/1.81	12.66	1.1	1.2	36.3	0.4	2.3	42.9	2.1	4110	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
120		61/1.58	14.24	1.2	1.4	40.6	0.4	2.5	47.5	2.4	4910	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73
150		61/1.77	15.92	1.4	1.4	45.1	0.4	2.7	52.4	2.6	6210	OSNJ CW 63a	M63	2"	48-53	H82 x 88
185		61/1.97	17.69	1.6	1.6	50.2	0.4	2.9	58.0	2.9	7110	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)

0.6/1KV F-SIBAS, F-DIBAS, F-TIBAS, F-FIBAS, F-MIBAS, 250V F-MIBAS
0.6/1KV F-DIBAS(C), F-TIBAS(C), F-FIBAS(C), F-MIBAS(C), 250V F-MIBAS(C)

0.6/1KV F-TIBAS, F-TIBAS(C), F-TIBAS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.										METRIC	NPT	OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)														
F-TIBAS / F-TIBAS (C)	1.5	7/0.53	1.59	0.7	1.0	9.7	0.3	1.2	13.7	0.7	400	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	2.5	7/0.67	2.01	0.7	1.0	10.6	0.3	1.3	14.7	0.7	460	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	4	7/0.85	2.5	0.7	1.0	11.6	0.3	1.3	15.8	0.8	550	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	6	7/1.04	3.12	0.7	1.0	13.0	0.3	1.4	17.3	0.9	660	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	10	7/1.35	4.05	0.7	1.0	15.0	0.3	1.5	19.4	1.0	860	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
	16	7/1.7	5.1	0.7	1.0	17.8	0.3	1.6	22.4	1.1	1140	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
	25	19/1.29	6.47	0.9	1.0	21.6	0.3	1.7	26.6	1.3	1590	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
	35	19/1.53	7.66	0.9	1.0	24.2	0.3	1.8	29.4	1.5	2000	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
	50	37/1.31	9.18	1.0	1.2	27.5	0.3	2.0	33.0	1.7	2620	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
	70	37/1.55	10.86	1.1	1.2	32.4	0.4	2.2	38.7	1.9	3610	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
	95	37/1.81	12.66	1.1	1.2	36.3	0.4	2.3	42.9	2.1	4570	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
	120	61/1.58	14.24	1.2	1.4	40.6	0.4	2.5	47.5	2.4	5330	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
	150	61/1.77	15.92	1.4	1.4	45.1	0.4	2.7	52.4	2.6	6780	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
	185	61/1.97	17.69	1.6	1.6	50.2	0.4	2.9	58.0	2.9	7940	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88	
	F-TIBAS +E	1.5	7/0.53	1.59	0.7	1.0	10.6	0.3	1.3	14.7	0.7	450	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
2.5		7/0.67	2.01	0.7	1.0	11.6	0.3	1.3	15.8	0.8	530	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
4		7/0.85	2.5	0.7	1.0	12.8	0.3	1.4	17.1	0.9	640	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
6		7/1.04	3.12	0.7	1.0	14.3	0.3	1.4	18.7	0.9	780	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
10		7/1.35	4.05	0.7	1.0	16.5	0.3	1.5	21.1	1.1	1030	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
16		7/1.7	5.1	0.7	1.0	19.7	0.3	1.6	24.5	1.2	1390	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
25		19/1.29	6.47	0.9	1.0	22.9	0.3	1.8	28.0	1.4	1930	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
35		19/1.53	7.66	0.9	1.0	26.1	0.3	1.9	31.5	1.6	2370	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
50		37/1.31	9.18	1.0	1.2	29.7	0.3	2.0	35.3	1.8	3060	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
70		37/1.55	10.86	1.1	1.2	33.1	0.4	2.2	39.4	2.0	4030	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
95		37/1.81	12.66	1.1	1.4	38.6	0.4	2.4	45.4	2.3	5340	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
120		61/1.58	14.24	1.2	1.4	42.9	0.4	2.6	50.1	2.5	6290	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
150		61/1.77	15.92	1.4	1.6	48.2	0.4	2.8	55.8	2.8	8100	OSNJ CW 63b	M63	2"	53.1-56	H82 x 88	
185		61/1.97	17.69	1.6	1.6	52.2	0.4	3.0	60.1	3.0	9240	OSNJ CW 75a	M75	2-1/2"	56-62	H98 x 106	

0.6/1KV F-FIBAS, F-FIBAS+E

Type of Cable	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.										METRIC	NPT	OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)														
F-FIBAS	1.5	7/0.53	1.59	0.7	1.0	10.6	0.3	1.3	14.7	0.7	460	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
	2.5	7/0.67	2.01	0.7	1.0	11.6	0.3	1.3	15.8	0.8	530	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	4	7/0.85	2.5	0.7	1.0	12.8	0.3	1.4	17.1	0.9	640	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
	6	7/1.04	3.12	0.7	1.0	14.3	0.3	1.4	18.7	0.9	780	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
	10	7/1.35	4.05	0.7	1.0	16.5	0.3	1.5	21.1	1.1	1030	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
	16	7/1.7	5.1	0.7	1.0	19.7	0.3	1.6	24.5	1.2	1400	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
	25	19/1.29	6.47	0.9	1.0	24.0	0.3	1.8	29.2	1.5	1960	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
	35	19/1.53	7.66	0.9	1.0	26.8	0.3	1.9	32.3	1.6	2490	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
	50	37/1.31	9.18	1.0	1.2	27.5	0.3	2.0	33.0	1.7	3080	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
	70	37/1.55	10.86	1.1	1.2	36.0	0.4	2.3	42.6	2.1	4520	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
	95	37/1.81	12.66	1.1	1.4	40.8	0.4	2.5	47.8	2.4	5810	OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73	
	120	61/1.58	14.24	1.2	1.4	45.1	0.4	2.7	52.5	2.6	6720	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
	150	61/1.77	15.92	1.4	1.6	50.6	0.4	2.9	58.4	2.9	8670	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88	
	185	61/1.97	17.69	1.6	1.6	55.8	0.4	3.1	64.1	3.2	10080	OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106	
	F-FIBAS +E	1.5	7/0.53	1.59	0.7	1.0	11.6	0.3	1.3	15.8	0.8	520	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
2.5		7/0.67	2.01	0.7	1.0	12.8	0.3	1.4	17.0	0.9	620	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
4		7/0.85	2.5	0.7	1.0	14.1	0.3	1.4	18.5	0.9	740	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33	
6		7/1.04	3.12	0.7	1.0	15.8	0.3	1.5	20.3	1.0	910	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
10		7/1.35	4.05	0.7	1.0	18.3	0.3	1.6	23.0	1.1	1210	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
16		7/1.7	5.1	0.7	1.0	21.8	0.3	1.7	26.8	1.3	1650	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
25		19/1.29	6.47	0.9	1.0	25.6	0.3	1.9	31.0	1.5	2250	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
35		19/1.53	7.66	0.9	1.2	29.6	0.3	2.0	35.3	1.8	2940	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	
50		37/1.31	9.18	1.0	1.2	33.3	0.4	2.2	39.7	2.0	3940	OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59	
70		37/1.55	10.86	1.1	1.4	37.8	0.4	2.4	44.6	2.2	5090	OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73	
95		37/1.81	12.66	1.1	1.4	43.3	0.4	2.6	50.6	2.5	6630	OSNJ CW 63a	M63	2"	48-53	H82 x 88	
120		61/1.58	14.24	1.2	1.6	48.6	0.4	2.8	56.3	2.8	7870	OSNJ CW 63c	M63	2"	56.1-60	H82 x 88	
150		61/1.77	15.92	1.4	1.6	54.1	0.4	3.0	62.3	3.1	10070	OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106	
185		61/1.97	17.69	1.6	1.6	58.9	0.4	3.2	67.4	3.4	11580	OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106	

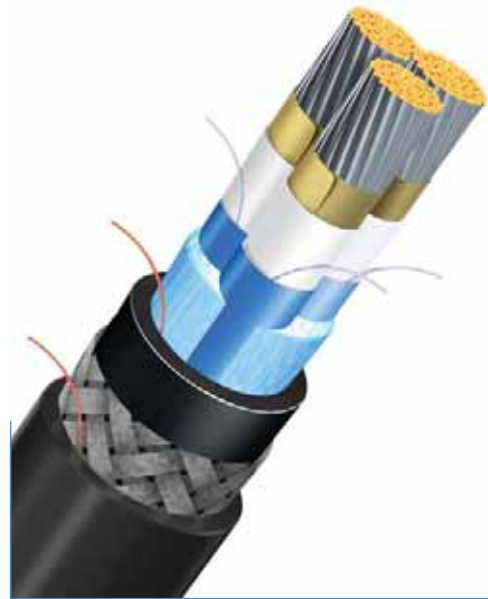
0.6/1KV F-MIBAS, F-MIBAS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.										METRIC	NPT	OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)														
2	1	7/0.43	1.29	0.7	1.0	9.5	0.3	1.2	13.5	0.7	350	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
3	1	7/0.43	1.29	0.7	1.0	9.9	0.3	1.3	14.0	0.7	380	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
4	1	7/0.43	1.29	0.7	1.0	10.8	0.3	1.3	14.9	0.7	430	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
5	1	7/0.43	1.29	0.7	1.0	11.7	0.3	1.3	15.9	0.8	490	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
6	1	7/0.43	1.29	0.7	1.0	12.7	0.3	1.4	17.0	0.8	540	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
7	1	7/0.43	1.29	0.7	1.0	12.7	0.3	1.4	17.0	0.8	560	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33	
12	1	7/0.43	1.29	0.7	1.0	16.4	0.3	1.5	21.0	1.0	810	OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39	
19	1	7/0.43	1.29	0.7	1.0	19.2	0.3	1.6	24.0	1.2	1060	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39	
27	1	7/0.43	1.29	0.7	1.0	22.4	0.3	1.8	27.5	1.4	1360	OSNJ CW 32a	M32	1"	22-28	H45 x 49	
37	1	7/0.43	1.29	0.7	1.0	25.1	0.3	1.9	30.4	1.5	1690	OSNJ CW 32b	M32	1"	28.1-32	H45 x 49	
44	1	7/0.43	1.29	0.7	1.2	28.8	0.3	2.0	34.4	1.7	2040	OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59	

250V F-MIBAS, F-MIBAS(C) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size	Construction	Dia.										METRIC	NPT	OUTER 'A'		
	(mm ²)	(Nos./mm)	(mm)														
2	1	7/0.43	1.29	0.5	1.0	8.6	0.3	1.2	12.5	0.6	310	OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27	
3	1	7/0.43	1.29	0.5	1.0	9.0	0.3	1.2	13.0	0.7	340	OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27	
4	1	7/0.43	1.29	0.5	1.0	9.8	0.3</										

LV POWER & CONTROL CABLES(Fire resistant & Flame retardant)
0.6/1KV F-MIBAS(I), 250V F-MIBAS(I)



Voltage Rating : 0.6/1KV, 250V
Max. Conductor Temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -353, -359, -376
 IEC 60332-1, -3 (Cat.A) , IEC 60331

Cable Identification

- Insulation
 -Multi core : White with core number
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 250V F-MIBAS(I) 7C X 1SQMM LS CABLE
 [YEAR] IEC 60332-3A, IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium / polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Armour	Galvanized steel wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

0.6/1KV F-MIBAS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
2	1	7/0.43	1.29	0.7	1.0	10.6	0.3	1.3	14.6	0.7	400	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
3	1	7/0.43	1.29	0.7	1.0	11.2	0.3	1.3	15.3	0.8	450	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
4	1	7/0.43	1.29	0.7	1.0	12.3	0.3	1.3	16.5	0.8	520	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
5	1	7/0.43	1.29	0.7	1.0	13.5	0.3	1.4	17.8	0.9	600	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
6	1	7/0.43	1.29	0.7	1.0	14.8	0.3	1.4	19.2	1.0	680	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
7	1	7/0.43	1.29	0.7	1.0	14.8	0.3	1.4	19.2	1.0	710	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
12	1	7/0.43	1.29	0.7	1.0	19.6	0.3	1.6	24.5	1.2	1080	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39

250V F-MIBAS(I) 1SQ

No. of Cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall Inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
2	1	7/0.43	1.29	0.5	1.0	9.7	0.3	1.2	13.7	0.7	360	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
3	1	7/0.43	1.29	0.5	1.0	10.3	0.3	1.3	14.3	0.7	410	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
4	1	7/0.43	1.29	0.5	1.0	11.3	0.3	1.3	15.4	0.8	460	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
5	1	7/0.43	1.29	0.5	1.0	12.4	0.3	1.4	16.6	0.8	530	OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
6	1	7/0.43	1.29	0.5	1.0	13.5	0.3	1.4	17.9	0.9	600	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
7	1	7/0.43	1.29	0.5	1.0	13.5	0.3	1.4	17.9	0.9	620	OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
12	1	7/0.43	1.29	0.5	1.0	17.9	0.3	1.6	22.6	1.1	920	OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Flame retardant)
250V TTIS, TTIS(C)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375/IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer rerequirement

Cable Marking

- Ex. [KS-CLF] 250V TTIS(C) 19P X 1.5SQMM LS CABLE
[YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Insulation screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C)TYPE ONLY
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V TTIS, TTIS(C) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	7.4	0.4	60	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
2	0.75	7/0.37	1.11	0.5	1.1	11.0	0.5	120	OSNU 20A	M20	1/2"	10-13	H27 x 29
4	0.75	7/0.37	1.11	0.5	1.2	12.6	0.6	180	OSNU 20A	M20	1/2"	10-13	H27 x 29
7	0.75	7/0.37	1.11	0.5	1.3	14.5	0.7	260	OSNU 20B	M20	1/2"	13.1-15	H27 x 29
10	0.75	7/0.37	1.11	0.5	1.4	18.0	0.9	380	OSNU 25B	M25	3/4"	16-18	H32 x 34
14	0.75	7/0.37	1.11	0.5	1.5	19.6	1.0	480	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
19	0.75	7/0.37	1.11	0.5	1.5	21.5	1.1	610	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
24	0.75	7/0.37	1.11	0.5	1.6	24.5	1.2	770	OSNU 32B	M32	1"	22.1-26	H39 x 41.5
30	0.75	7/0.37	1.11	0.5	1.7	26.1	1.3	920	OSNU 40A	M40	1-1/4"	26.1-28	H48 x 51
37	0.75	7/0.37	1.11	0.5	1.8	28.0	1.4	1100	OSNU 40A	M40	1-1/4"	26.1-28	H48 x 51
48	0.75	7/0.37	1.11	0.5	1.9	32.2	1.6	1430	OSNU 50A	M50	1-1/2"	32.1-34	H58 x 62
1T	0.75	7/0.37	1.11	0.5	1.0	7.8	0.4	70	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
1Q	0.75	7/0.37	1.11	0.5	1.0	8.4	0.4	90	OSNU 16B	M16	1/2"	6.1-10	H24 x 26

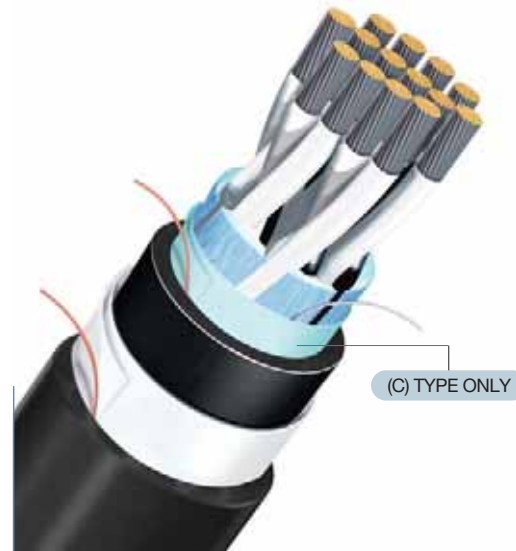
250V TTIS, TTIS(C) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	7.8	0.4	70	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
2	1	7/0.43	1.29	0.5	1.2	11.6	0.6	140	OSNU 20A	M20	1/2"	10-13	H27 x 29
4	1	7/0.43	1.29	0.5	1.2	13.4	0.7	210	OSNU 20B	M20	1/2"	13.1-15	H27 x 29
7	1	7/0.43	1.29	0.5	1.3	15.4	0.8	310	OSNU 25A	M25	3/4"	15.1-16	H32 x 34
10	1	7/0.43	1.29	0.5	1.4	19.3	1.0	450	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
14	1	7/0.43	1.29	0.5	1.5	21.0	1.1	580	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
19	1	7/0.43	1.29	0.5	1.6	23.1	1.2	740	OSNU 32B	M32	1"	22.1-26	H39 x 41.5
24	1	7/0.43	1.29	0.5	1.7	26.3	1.3	940	OSNU 40A	M40	1-1/4"	26.1-28	H48 x 51
30	1	7/0.43	1.29	0.5	1.8	28.1	1.4	1130	OSNU 40A	M40	1-1/4"	26.1-28	H48 x 51
37	1	7/0.43	1.29	0.5	1.8	30.1	1.5	1350	OSNU 40B	M40	1-1/4"	28.1-32	H48 x 51
48	1	7/0.43	1.29	0.5	2.0	34.7	1.7	1750	OSNU 50B	M50	1-1/2"	34.1-40	H58 x 62
1T	1	7/0.43	1.29	0.5	1.0	8.2	0.4	90	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
1Q	1	7/0.43	1.29	0.5	1.1	8.9	0.4	100	OSNU 16B	M16	1/2"	6.1-10	H24 x 26

250V TTIS, TTIS(C) 1.5SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.1	8.9	0.4	90	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
2	1.5	7/0.53	1.59	0.6	1.2	13.6	0.7	190	OSNU 20B	M20	1/2"	13.1-15	H27 x 29
4	1.5	7/0.53	1.59	0.6	1.3	15.7	0.8	300	OSNU 25A	M25	3/4"	15.1-16	H32 x 34
7	1.5	7/0.53	1.59	0.6	1.4	18.2	0.9	440	OSNU 32A	M32	1"	18.1-22	H39 x 41.5
10	1.5	7/0.53	1.59	0.6	1.6	22.8	1.1	650	OSNU 32B	M32	1"	22.1-26	H39 x 41.5
14	1.5	7/0.53	1.59	0.6	1.7	25.0	1.3	840	OSNU 32B	M32	1"	22.1-26	H39 x 41.5
19	1.5	7/0.53	1.59	0.6	1.8	27.5	1.4	1080	OSNU 40A	M40	1-1/4"	26.1-28	H48 x 51
24	1.5	7/0.53	1.59	0.6	1.9	31.6	1.6	1380	OSNU 40B	M40	1-1/4"	28.1-32	H48 x 51
30	1.5	7/0.53	1.59	0.6	2.0	33.7	1.7	1660	OSNU 50A	M50	1-1/2"	32.1-34	H58 x 62
37	1.5	7/0.53	1.59	0.6	2.1	36.2	1.8	1980	OSNU 50B	M50	1-1/2"	34.1-40	H58 x 62
48	1.5	7/0.53	1.59	0.6	2.3	41.8	2.1	2590	OSNU 63A	M63	2"	40.1-44	H73 x 78
1T	1.5	7/0.53	1.59	0.6	1.1	9.4	0.5	120	OSNU 16B	M16	1/2"	6.1-10	H24 x 26
1Q	1.5	7/0.53	1.59	0.6	1.1	10.2	0.5	140	OSNU 20A	M20	1/2"	10-13	H27 x 29

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Flame retardant)
250V TTIBS, TTIBS(C)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375 / IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 250V TTIBS(C) 19P X 1.5SQMM LS CABLE
[YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C)TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V TTIBS, TTIBS(C) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT	OUTER 'A'		
1	0.75	7/0.37	1.11	0.5	1.0	7.3	1.1	9.9	0.5	110	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26	
2	0.75	7/0.37	1.11	0.5	1.0	10.6	1.2	13.5	0.7	180	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29	
4	0.75	7/0.37	1.11	0.5	1.0	12.1	1.3	15.1	0.8	250	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29	
7	0.75	7/0.37	1.11	0.5	1.0	13.8	1.4	17.0	0.8	340	OSNJ 25B	M25	3/4"	16-18	H32 x 34	
10	0.75	7/0.37	1.11	0.5	1.0	17.0	1.5	20.5	1.0	480	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
14	0.75	7/0.37	1.11	0.5	1.0	18.6	1.6	22.1	1.1	590	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
19	0.75	7/0.37	1.11	0.5	1.0	20.3	1.6	24.0	1.2	730	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
24	0.75	7/0.37	1.11	0.5	1.0	23.0	1.7	27.0	1.3	910	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51	
30	0.75	7/0.37	1.11	0.5	1.0	24.5	1.8	28.6	1.4	1060	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
37	0.75	7/0.37	1.11	0.5	1.0	26.3	1.9	30.5	1.5	1250	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
48	0.75	7/0.37	1.11	0.5	1.2	30.5	2.0	35.1	1.8	1640	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
1T	0.75	7/0.37	1.11	0.5	1.0	7.6	1.1	10.3	0.5	120	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
1Q	0.75	7/0.37	1.11	0.5	1.0	8.2	1.1	10.9	0.5	140	OSNJ 20A	M20	1/2"	10-13	H27 x 29	

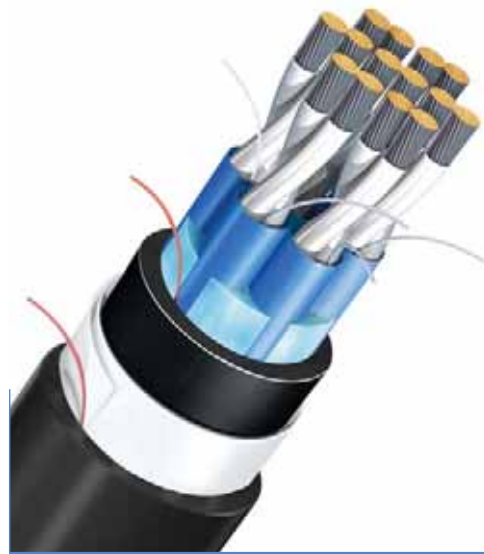
250V TTIBS, TTIBS(C) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT	OUTER 'A'		
1	1	7/0.43	1.29	0.5	1.0	7.7	1.1	10.3	0.5	120	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
2	1	7/0.43	1.29	0.5	1.0	11.2	1.3	14.1	0.7	210	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29	
4	1	7/0.43	1.29	0.5	1.0	12.8	1.3	15.9	0.8	290	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34	
7	1	7/0.43	1.29	0.5	1.0	14.7	1.4	17.9	0.9	400	OSNJ 25B	M25	3/4"	16-18	H32 x 34	
10	1	7/0.43	1.29	0.5	1.0	18.2	1.5	21.7	1.1	560	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
14	1	7/0.43	1.29	0.5	1.0	19.8	1.6	23.5	1.2	700	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
19	1	7/0.43	1.29	0.5	1.0	21.7	1.7	25.6	1.3	870	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
24	1	7/0.43	1.29	0.5	1.0	24.7	1.8	28.8	1.4	1090	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
30	1	7/0.43	1.29	0.5	1.0	26.4	1.9	30.6	1.5	1280	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
37	1	7/0.43	1.29	0.5	1.2	28.6	2.0	33.1	1.7	1540	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62	
48	1	7/0.43	1.29	0.5	1.2	32.9	2.1	37.6	1.9	1980	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
1T	1	7/0.43	1.29	0.5	1.0	8.0	1.1	10.7	0.5	130	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
1Q	1	7/0.43	1.29	0.5	1.0	8.6	1.2	11.4	0.6	160	OSNJ 20A	M20	1/2"	10-13	H27 x 29	

250V TTIBS, TTIBS(C) 1.5SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE			Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT	OUTER 'A'		
1	1.5	7/0.53	1.59	0.6	1.0	8.7	1.2	11.4	0.6	150	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
2	1.5	7/0.53	1.59	0.6	1.0	13.0	1.3	16.1	0.8	270	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34	
4	1.5	7/0.53	1.59	0.6	1.0	15.0	1.4	18.2	0.9	380	OSNJ 25B	M25	3/4"	16-18	H32 x 34	
7	1.5	7/0.53	1.59	0.6	1.0	17.3	1.5	20.7	1.0	540	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
10	1.5	7/0.53	1.59	0.6	1.0	21.5	1.7	25.3	1.3	780	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
14	1.5	7/0.53	1.59	0.6	1.0	23.5	1.8	27.5	1.4	980	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51	
19	1.5	7/0.53	1.59	0.6	1.0	25.8	1.8	30.0	1.5	1230	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
24	1.5	7/0.53	1.59	0.6	1.0	30.0	2.0	34.5	1.7	1580	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
30	1.5	7/0.53	1.59	0.6	1.0	32.0	2.1	36.7	1.8	1870	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
37	1.5	7/0.53	1.59	0.6	1.2	34.3	2.2	39.1	2.0	2220	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
48	1.5	7/0.53	1.59	0.6	1.2	39.8	2.4	45.1	2.3	2890	OSNJ 63B	M63	2"	44.1-50	H73 x 78	
1T	1.5	7/0.53	1.59	0.6	1.0	9.1	1.2	11.9	0.6	170	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
1Q	1.5	7/0.53	1.59	0.6	1.0	9.9	1.2	12.7	0.6	200	OSNJ 20A	M20	1/2"	10-13	H27 x 29	

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Flame retardant)
250V TTIBS(I)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375
- IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)

Cable Marking

- Ex. [KS-CLF] 250V TTIBS(C) 19P X 1.5SQMM LS CABLE
- [YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium / polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V TTIBS(I) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	7.4	1.1	10.0	0.5	110	OSNJ 16B	M16	1/2"	6.1-10	H2 x 26
2	0.75	7/0.37	1.11	0.5	1.0	12.2	1.3	15.2	0.8	220	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34
4	0.75	7/0.37	1.11	0.5	1.0	14.3	1.4	17.5	0.9	300	OSNJ 25B	M25	3/4"	16-18	H32 x 34
7	0.75	7/0.37	1.11	0.5	1.0	16.7	1.5	20.1	1.0	420	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
10	0.75	7/0.37	1.11	0.5	1.0	21.5	1.7	25.4	1.3	620	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
14	0.75	7/0.37	1.11	0.5	1.0	23.5	1.8	27.5	1.4	750	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51
19	0.75	7/0.37	1.11	0.5	1.0	26.4	1.9	30.6	1.5	950	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
24	0.75	7/0.37	1.11	0.5	1.2	30.5	2.0	35.1	1.8	1220	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
30	0.75	7/0.37	1.11	0.5	1.2	32.5	2.1	37.2	1.9	1420	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
37	0.75	7/0.37	1.11	0.5	1.2	35.2	2.2	40.2	2.0	1670	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
48	0.75	7/0.37	1.11	0.5	1.4	41.0	2.5	46.4	2.3	2190	OSNJ 63B	M63	2"	44.1-50	H73 x 78
1T	0.75	7/0.37	1.11	0.5	1.0	7.7	1.1	10.3	0.5	120	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	0.75	7/0.37	1.11	0.5	1.0	8.3	1.1	11.0	0.5	140	OSNJ 20A	M20	1/2"	10-13	H27 x 29

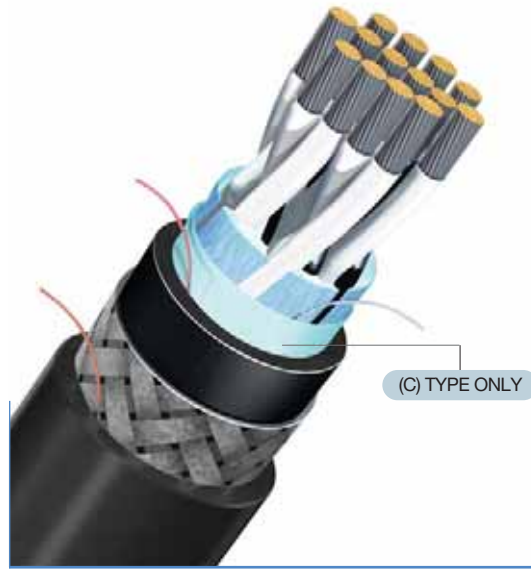
250V TTIBS(I) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	7.8	1.1	10.4	0.5	120	OSNJ 20A	M20	1/2"	10-13	H27 x 29
2	1	7/0.43	1.29	0.5	1.0	12.9	1.3	16.0	0.8	240	OSNJ 25B	M25	3/4"	16-18	H32 x 34
4	1	7/0.43	1.29	0.5	1.0	15.1	1.4	18.4	0.9	340	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
7	1	7/0.43	1.29	0.5	1.0	17.7	1.5	21.2	1.1	480	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
10	1	7/0.43	1.29	0.5	1.0	22.9	1.7	26.8	1.3	710	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51
14	1	7/0.43	1.29	0.5	1.0	25.0	1.8	29.2	1.5	880	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
19	1	7/0.43	1.29	0.5	1.2	28.5	2.0	32.9	1.6	1140	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62
24	1	7/0.43	1.29	0.5	1.2	32.6	2.1	37.3	1.9	1440	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
30	1	7/0.43	1.29	0.5	1.2	34.7	2.2	39.6	2.0	1670	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
37	1	7/0.43	1.29	0.5	1.4	38.0	2.3	43.2	2.2	2020	OSNJ 63A	M63	2"	40.1-44	H73 x 78
48	1	7/0.43	1.29	0.5	1.4	43.8	2.6	49.5	2.5	2600	OSNJ 63B	M63	2"	44.1-50	H73 x 78
1T	1	7/0.43	1.29	0.5	1.0	8.1	1.1	10.8	0.5	140	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	1	7/0.43	1.29	0.5	1.0	8.7	1.2	11.4	0.6	160	OSNJ 20A	M20	1/2"	10-13	H27 x 29

250V TTIBS(I) 1.5SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.0	8.8	1.2	11.5	0.6	150	OSNJ 20A	M20	1/2"	10-13	H27 x 29
2	1.5	7/0.53	1.59	0.6	1.0	14.8	1.4	18.1	0.9	310	OSNJ 25B	M25	3/4"	16-18	H32 x 34
4	1.5	7/0.53	1.59	0.6	1.0	17.4	1.5	20.9	1.0	450	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
7	1.5	7/0.53	1.59	0.6	1.0	20.6	1.6	24.4	1.2	650	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
10	1.5	7/0.53	1.59	0.6	1.0	26.8	1.9	31.0	1.6	970	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
14	1.5	7/0.53	1.59	0.6	1.2	29.7	2.0	34.2	1.7	1240	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
19	1.5	7/0.53	1.59	0.6	1.2	33.4	2.1	38.2	1.9	1580	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
24	1.5	7/0.53	1.59	0.6	1.4	38.8	2.4	44.1	2.2	2040	OSNJ 63A	M63	2"	40.1-44	H73 x 78
30	1.5	7/0.53	1.59	0.6	1.4	41.3	2.5	46.8	2.3	2390	OSNJ 63B	M63	2"	44.1-50	H73 x 78
37	1.5	7/0.53	1.59	0.6	1.4	44.8	2.6	50.6	2.5	2830	OSNJ 63C	M63	2"	50.1-454	H73 x 78
48	1.5	7/0.53	1.59	0.6	1.6	52.1	2.9	58.4	2.9	3710	OSNJ 75B	M75	2-1/2"	56.1-60	H85 x 90
1T	1.5	7/0.53	1.59	0.6	1.0	9.2	1.2	12.0	0.6	170	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	1.5	7/0.53	1.59	0.6	1.0	10.0	1.2	12.8	0.6	200	OSNJ 20A	M20	1/2"	10-13	H27 x 29

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Flame retardant)
250V TTIBAS, TTIBAS(C)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375/IEC 60332-1, -3 (Cat.A)

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 250V TTIBAS(C) 19P X 1.5SQMM LS CABLE
[YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C) TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Armour	Galvanized steel wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V TTIBAS, TTIBAS(C) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	7.3	0.3	1.1	11.1	0.6	250	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	0.75	7/0.37	1.11	0.5	1.0	10.6	0.3	1.3	14.6	0.7	390	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
4	0.75	7/0.37	1.11	0.5	1.0	12.1	0.3	1.3	16.3	0.8	480	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
7	0.75	7/0.37	1.11	0.5	1.0	13.8	0.3	1.4	18.2	0.9	600	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33
10	0.75	7/0.37	1.11	0.5	1.0	17.0	0.3	1.5	21.7	1.1	800	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
14	0.75	7/0.37	1.11	0.5	1.0	18.6	0.3	1.6	23.3	1.2	940	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
19	0.75	7/0.37	1.11	0.5	1.0	20.3	0.3	1.7	25.2	1.3	1110	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
24	0.75	7/0.37	1.11	0.5	1.0	23.0	0.3	1.8	28.2	1.4	1330	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
30	0.75	7/0.37	1.11	0.5	1.0	24.5	0.3	1.8	29.8	1.5	1520	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
37	0.75	7/0.37	1.11	0.5	1.0	26.3	0.3	1.9	31.7	1.6	1730	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
48	0.75	7/0.37	1.11	0.5	1.2	30.5	0.4	2.1	36.7	1.8	2340	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
1T	0.75	7/0.37	1.11	0.5	1.0	7.6	0.3	1.2	11.5	0.6	270	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
1Q	0.75	7/0.37	1.11	0.5	1.0	8.2	0.3	1.2	12.1	0.6	300	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27

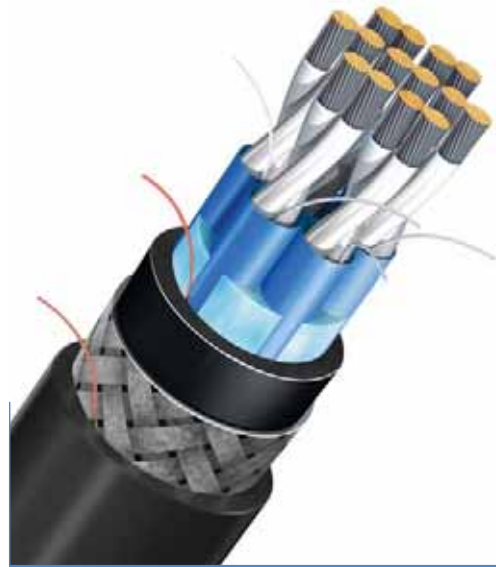
250V TTIBAS, TTIBAS(C) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	7.7	0.3	1.2	11.5	0.6	270	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	1	7/0.43	1.29	0.5	1.0	11.2	0.3	1.3	15.3	0.8	420	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
4	1	7/0.43	1.29	0.5	1.0	12.8	0.3	1.4	17.1	0.9	530	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
7	1	7/0.43	1.29	0.5	1.0	14.7	0.3	1.4	19.1	1.0	680	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
10	1	7/0.43	1.29	0.5	1.0	18.2	0.3	1.6	22.9	1.1	900	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
14	1	7/0.43	1.29	0.5	1.0	19.8	0.3	1.6	24.7	1.2	1070	OSNJ CW 32A	M32	1"	22-28	H45 x 49
19	1	7/0.43	1.29	0.5	1.0	21.7	0.3	1.7	26.7	1.3	1270	OSNJ CW 32A	M32	1"	22-28	H45 x 49
24	1	7/0.43	1.29	0.5	1.0	24.7	0.3	1.8	30.0	1.5	1540	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
30	1	7/0.43	1.29	0.5	1.0	26.4	0.3	1.9	31.8	1.6	1770	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
37	1	7/0.43	1.29	0.5	1.2	28.6	0.3	2.0	34.2	1.7	2070	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
48	1	7/0.43	1.29	0.5	1.2	32.9	0.4	2.2	39.2	2.0	2730	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
1T	1	7/0.43	1.29	0.5	1.0	8.0	0.3	1.2	11.9	0.6	290	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
1Q	1	7/0.43	1.29	0.5	1.0	8.6	0.3	1.2	12.6	0.6	330	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

250V TTIBAS, TTIBAS(C) 1.5SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.0	8.7	0.3	1.2	12.6	0.6	320	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	1.5	7/0.53	1.59	0.6	1.0	13.0	0.3	1.4	17.3	0.9	520	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
4	1.5	7/0.53	1.59	0.6	1.0	15.0	0.3	1.5	19.4	1.0	670	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	1.5	7/0.53	1.59	0.6	1.0	17.3	0.3	1.5	21.9	1.1	870	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
10	1.5	7/0.53	1.59	0.6	1.0	21.5	0.3	1.7	26.5	1.3	1170	OSNJ CW 32A	M32	1"	22-28	H45 x 49
14	1.5	7/0.53	1.59	0.6	1.0	23.5	0.3	1.8	28.7	1.4	1410	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
19	1.5	7/0.53	1.59	0.6	1.0	25.8	0.3	1.9	31.2	1.6	1700	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
24	1.5	7/0.53	1.59	0.6	1.2	30.0	0.3	2.1	35.7	1.8	2130	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
30	1.5	7/0.53	1.59	0.6	1.2	32.0	0.4	2.1	38.2	1.9	2610	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
37	1.5	7/0.53	1.59	0.6	1.2	34.3	0.4	2.2	40.7	2.0	3000	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
48	1.5	7/0.53	1.59	0.6	1.4	39.8	0.4	2.5	46.7	2.3	3800	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
1T	1.5	7/0.53	1.59	0.6	1.0	9.1	0.3	1.2	13.1	0.7	350	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
1Q	1.5	7/0.53	1.59	0.6	1.0	9.9	0.3	1.3	13.9	0.7	390	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Flame retardant)
250V TTIBAS(I)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard
• IEC 60092-350, -351, -359, -375/IEC 60332-1, -3 (Cat.A)

Cable Identification
• Insulation
-Multi Pair : White with pair number (1A, 1B), (2A, 2B)
-Triad : White with triad number (1A, 1B, 1C)
-Quad : White with quad number (1A, 1B, 1C, 1D)
• Outer Sheath : Customer requirement
• Only installed for hazardous area

Cable Marking
• Ex. [KS-CLF] 250V TTIBAS(I) 19P X 1.5SQMM LS CABLE
[YEAR] IEC 60332-3A -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	N/A	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium / polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Armour	Galvanized steel wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V TTIBAS(I) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	7.4	0.3	1.2	11.2	0.6	270	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	0.75	7/0.37	1.11	0.5	1.0	12.2	0.3	1.3	16.4	0.8	480	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
4	0.75	7/0.37	1.11	0.5	1.0	14.3	0.3	1.4	18.7	0.9	640	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	0.75	7/0.37	1.11	0.5	1.0	16.7	0.3	1.5	21.3	1.1	840	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
10	0.75	7/0.37	1.11	0.5	1.0	21.5	0.3	1.7	26.5	1.3	1180	OSNJ CW 32A	M32	1"	22-28	H45 x 49
14	0.75	7/0.37	1.11	0.5	1.0	23.5	0.3	1.8	28.7	1.4	1420	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
19	0.75	7/0.37	1.11	0.5	1.0	26.4	0.3	1.9	31.8	1.6	1750	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
24	0.75	7/0.37	1.11	0.5	1.2	30.5	0.4	2.1	36.7	1.8	2330	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
30	0.75	7/0.37	1.11	0.5	1.2	32.5	0.4	2.2	38.8	1.9	2660	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
37	0.75	7/0.37	1.11	0.5	1.2	35.2	0.4	2.3	41.7	2.1	3090	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
48	0.75	7/0.37	1.11	0.5	1.4	41.0	0.4	2.5	48.0	2.4	3930	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
1T	0.75	7/0.37	1.11	0.5	1.0	7.7	0.3	1.2	11.5	0.6	300	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
1Q	0.75	7/0.37	1.11	0.5	1.0	8.3	0.3	1.2	12.2	0.6	340	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27

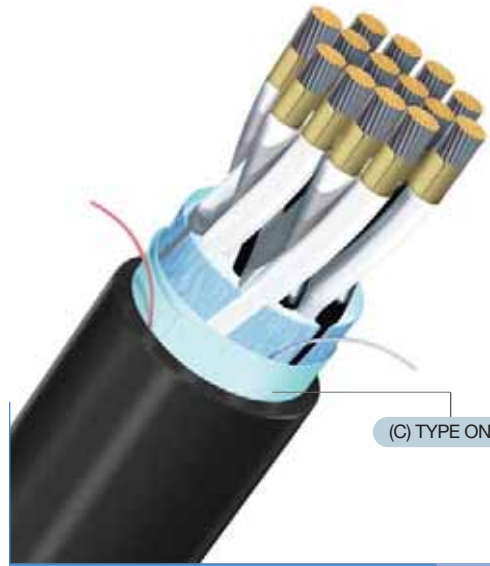
250V TTIBAS(I) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	7.8	0.3	1.2	11.6	0.6	290	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	1	7/0.43	1.29	0.5	1.0	12.9	0.3	1.4	17.2	0.9	520	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
4	1	7/0.43	1.29	0.5	1.0	15.1	0.3	1.5	19.6	1.0	690	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	1	7/0.43	1.29	0.5	1.0	17.7	0.3	1.6	22.4	1.1	930	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
10	1	7/0.43	1.29	0.5	1.0	22.9	0.3	1.8	28.0	1.4	1300	OSNJ CW 32A	M32	1"	22-28	H45 x 49
14	1	7/0.43	1.29	0.5	1.0	25.0	0.3	1.9	30.3	1.5	1570	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
19	1	7/0.43	1.29	0.5	1.2	28.5	0.3	2.0	34.1	1.7	1980	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
24	1	7/0.43	1.29	0.5	1.2	32.6	0.4	2.2	38.9	1.9	2590	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
30	1	7/0.43	1.29	0.5	1.2	34.7	0.4	2.3	41.2	2.1	2970	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
37	1	7/0.43	1.29	0.5	1.4	38.0	0.4	2.4	44.8	2.2	3510	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
48	1	7/0.43	1.29	0.5	1.4	43.8	0.4	2.6	51.0	2.6	4400	OSNJ CW 63A	M63	2"	48-53	H82 x 88
1T	1	7/0.43	1.29	0.5	1.0	8.1	0.3	1.2	12.0	0.6	320	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
1Q	1	7/0.43	1.29	0.5	1.0	8.7	0.3	1.2	12.6	0.6	360	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27

250V TTIBAS(I) 1.5SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.0	8.8	0.3	1.2	12.7	0.6	340	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	1.5	7/0.53	1.59	0.6	1.0	14.8	0.3	1.4	19.3	1.0	630	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
4	1.5	7/0.53	1.59	0.6	1.0	17.4	0.3	1.6	22.1	1.1	850	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	1.5	7/0.53	1.59	0.6	1.0	20.6	0.3	1.7	25.5	1.3	1150	OSNJ CW 32A	M32	1"	22-28	H45 x 49
10	1.5	7/0.53	1.59	0.6	1.0	26.8	0.3	1.9	32.2	1.6	1640	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
14	1.5	7/0.53	1.59	0.6	1.2	29.7	0.3	2.0	35.4	1.8	2030	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
19	1.5	7/0.53	1.59	0.6	1.2	33.4	0.4	2.2	39.7	2.0	2670	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
24	1.5	7/0.53	1.59	0.6	1.4	38.8	0.4	2.4	45.6	2.3	3350	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
30	1.5	7/0.53	1.59	0.6	1.4	41.3	0.4	2.5	48.4	2.4	3850	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
37	1.5	7/0.53	1.59	0.6	1.4	44.8	0.4	2.7	52.1	2.6	4500	OSNJ CW 63A	M63	2"	48-53	H82 x 88
48	1.5	7/0.53	1.59	0.6	1.6	52.1	0.4	3.0	60.0	3.0	5740	OSNJ CW 75A	M75	2-1/2"	56-62	H98 x 106
1T	1.5	7/0.53	1.59	0.6	1.0	9.2	0.3	1.2	13.2	0.7	380	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
1Q	1.5	7/0.53	1.59	0.6	1.0	10.0	0.3	1.3	14.0	0.7	430	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Fire resistant & Flame retardant)
250V F-TTIS, F-TTIS(C)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 250V F-TTIS(C) 19P X 1.5SQMM LS CABLE [YEAR] IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C) TYPE ONLY
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V F-TTIS, F-TTIS(C) 0.75SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.1	8.5	0.4	80	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26
2	0.75	7/0.37	1.11	0.5	1.2	12.7	0.6	170	OSNJ 20A	M20	1/2"	10-13	H27 x 29
4	0.75	7/0.37	1.11	0.5	1.3	14.7	0.7	270	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29
7	0.75	7/0.37	1.11	0.5	1.4	17.0	0.9	400	OSNJ 25B	M25	3/4"	16-18	H32 x 34
10	0.75	7/0.37	1.11	0.5	1.5	21.3	1.1	590	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
14	0.75	7/0.37	1.11	0.5	1.6	23.3	1.2	770	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
19	0.75	7/0.37	1.11	0.5	1.7	25.6	1.3	990	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
24	0.75	7/0.37	1.11	0.5	1.8	29.3	1.5	1260	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
30	0.75	7/0.37	1.11	0.5	1.9	31.3	1.6	1520	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
37	0.75	7/0.37	1.11	0.5	2.0	33.6	1.7	1820	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62
48	0.75	7/0.37	1.11	0.5	2.2	38.7	1.9	2370	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
1T	0.75	7/0.37	1.11	0.5	1.1	8.9	0.4	100	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26
1Q	0.75	7/0.37	1.11	0.5	1.1	9.6	0.5	120	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26

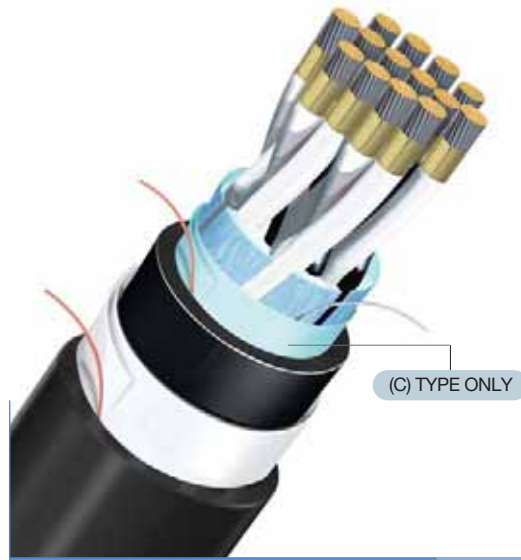
250V F-TTIS, F-TTIS(C) 1SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.1	8.9	0.4	90	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26
2	1	7/0.43	1.29	0.5	1.2	13.4	0.7	190	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29
4	1	7/0.43	1.29	0.5	1.3	15.6	0.8	300	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34
7	1	7/0.43	1.29	0.5	1.4	18.0	0.9	470	OSNJ 25B	M25	3/4"	16-18	H32 x 34
10	1	7/0.43	1.29	0.5	1.6	22.6	1.1	690	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
14	1	7/0.43	1.29	0.5	1.6	24.7	1.2	890	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
19	1	7/0.43	1.29	0.5	1.7	27.1	1.4	1160	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51
24	1	7/0.43	1.29	0.5	1.9	31.2	1.6	1480	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
30	1	7/0.43	1.29	0.5	2.0	33.3	1.7	1780	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62
37	1	7/0.43	1.29	0.5	2.1	35.8	1.8	2140	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
48	1	7/0.43	1.29	0.5	2.3	41.2	2.1	2780	OSNJ 63A	M63	2"	40.1-44	H73 x 78
1T	1	7/0.43	1.29	0.5	1.1	9.3	0.5	110	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26
1Q	1	7/0.43	1.29	0.5	1.1	10.1	0.5	140	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26

250V F-TTIS, F-TTIS(C) 1.5SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight [Approx.] (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)							METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.1	10.0	0.5	110	OSNJ 16B	M16	1/2"	6.1-10	H24 x 26
2	1.5	7/0.53	1.59	0.6	1.3	15.4	0.8	250	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34
4	1.5	7/0.53	1.59	0.6	1.4	17.9	0.9	400	OSNJ 25B	M25	3/4"	16-18	H32 x 34
7	1.5	7/0.53	1.59	0.6	1.5	20.8	1.0	630	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
10	1.5	7/0.53	1.59	0.6	1.7	26.2	1.3	930	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51
14	1.5	7/0.53	1.59	0.6	1.8	28.7	1.4	1220	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
19	1.5	7/0.53	1.59	0.6	1.9	31.6	1.6	1580	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
24	1.5	7/0.53	1.59	0.6	2.1	36.4	1.8	2030	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
30	1.5	7/0.53	1.59	0.6	2.2	39.0	1.9	2450	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
37	1.5	7/0.53	1.59	0.6	2.3	41.8	2.1	2950	OSNJ 63A	M63	2"	40.1-44	H73 x 78
48	1.5	7/0.53	1.59	0.6	2.5	48.3	2.4	3850	OSNJ 63B	M63	2"	44.1-50	H73 x 78
1T	1.5	7/0.53	1.59	0.6	1.1	10.5	0.5	150	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	1.5	7/0.53	1.59	0.6	1.2	11.4	0.6	180	OSNJ 20A	M20	1/2"	10-13	H27 x 29

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Fire resistant & Flame retardant)
250V F-TTIBS, F-TTIBS(C)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 250V F-TTIBS(C) 19P X 1.5SQMM LS CABLE [YEAR]
- IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium / polyester tape with drain wire	(C) TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V F-TTIBS, F-TTIBS(C) 0.75SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	8.3	1.1	11.0	0.5	130	OSNJ 20A	M20	1/2"	10-13	H27 x 29
2	0.75	7/0.37	1.11	0.5	1.0	12.2	1.3	15.2	0.8	240	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34
4	0.75	7/0.37	1.11	0.5	1.0	14.1	1.4	17.2	0.9	330	OSNJ 25B	M25	3/4"	16-18	H32 x 34
7	0.75	7/0.37	1.11	0.5	1.0	16.2	1.5	19.5	1.0	460	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
10	0.75	7/0.37	1.11	0.5	1.0	20.1	1.6	23.8	1.2	660	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
14	0.75	7/0.37	1.11	0.5	1.0	22.0	1.7	25.8	1.3	820	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
19	0.75	7/0.37	1.11	0.5	1.0	24.1	1.8	28.1	1.4	1030	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51
24	0.75	7/0.37	1.11	0.5	1.2	27.9	1.9	32.3	1.6	1320	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62
30	0.75	7/0.37	1.11	0.5	1.2	29.7	2.0	34.3	1.7	1560	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62
37	0.75	7/0.37	1.11	0.5	1.2	31.9	2.1	36.5	1.8	1840	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
48	0.75	7/0.37	1.11	0.5	1.2	36.6	2.3	41.7	2.1	2360	OSNJ 63A	M63	2"	40.1-44	H73 x 78
1T	0.75	7/0.37	1.11	0.5	1.0	8.7	1.2	11.4	0.6	150	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	0.75	7/0.37	1.11	0.5	1.0	9.3	1.2	12.1	0.6	180	OSNJ 20A	M20	1/2"	10-13	H27 x 29

250V F-TTIBS, F-TTIBS(C) 1SQ

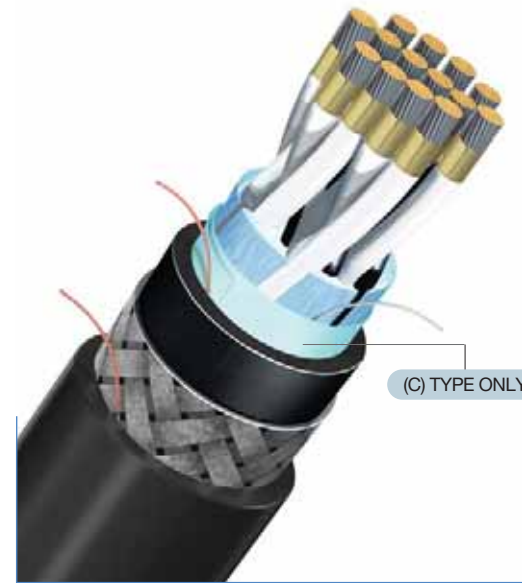
No. of cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	8.6	1.2	11.4	0.6	140	OSNJ 20A	M20	1/2"	10-13	H27 x 29
2	1	7/0.43	1.29	0.5	1.0	12.8	1.3	15.9	0.8	260	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34
4	1	7/0.43	1.29	0.5	1.0	14.8	1.4	18.1	0.9	370	OSNJ 25B	M25	3/4"	16-18	H32 x 34
7	1	7/0.43	1.29	0.5	1.0	17.1	1.5	20.5	1.0	530	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
10	1	7/0.43	1.29	0.5	1.0	21.3	1.7	25.1	1.3	750	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
14	1	7/0.43	1.29	0.5	1.0	23.2	1.7	27.2	1.4	950	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51
19	1	7/0.43	1.29	0.5	1.0	25.5	1.8	29.6	1.5	1190	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
24	1	7/0.43	1.29	0.5	1.2	29.6	2.0	34.1	1.7	1530	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62
30	1	7/0.43	1.29	0.5	1.2	31.6	2.1	36.2	1.8	1810	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
37	1	7/0.43	1.29	0.5	1.2	33.8	2.2	38.7	1.9	2140	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
48	1	7/0.43	1.29	0.5	1.4	39.3	2.4	44.6	2.2	2800	OSNJ 63B	M63	2"	44.1-50	H73 x 78
1T	1	7/0.43	1.29	0.5	1.0	9.0	1.2	11.8	0.6	170	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	1	7/0.43	1.29	0.5	1.0	9.8	1.2	12.6	0.6	200	OSNJ 20A	M20	1/2"	10-13	H27 x 29

250V F-TTIBS, F-TTIBS(C) 1.5SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.0	9.6	1.2	12.5	0.6	180	OSNJ 20A	M20	1/2"	10-13	H27 x 29
2	1.5	7/0.53	1.59	0.6	1.0	14.6	1.4	17.9	0.9	330	OSNJ 25B	M25	3/4"	16-18	H32 x 34
4	1.5	7/0.53	1.59	0.6	1.0	17.0	1.5	20.4	1.0	480	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5
7	1.5	7/0.53	1.59	0.6	1.0	19.6	1.6	23.3	1.2	690	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5
10	1.5	7/0.53	1.59	0.6	1.0	24.6	1.8	28.7	1.4	1000	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
14	1.5	7/0.53	1.59	0.6	1.0	26.9	1.9	31.2	1.6	1270	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51
19	1.5	7/0.53	1.59	0.6	1.2	30.0	2.0	34.5	1.7	1630	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
24	1.5	7/0.53	1.59	0.6	1.2	34.5	2.2	39.4	2.0	2070	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62
30	1.5	7/0.53	1.59	0.6	1.2	36.8	2.3	41.9	2.1	2450	OSNJ 63A	M63	2"	40.1-44	H73 x 78
37	1.5	7/0.53	1.59	0.6	1.4	39.8	2.4	45.2	2.3	2950	OSNJ 63B	M63	2"	44.1-50	H73 x 78
48	1.5	7/0.53	1.59	0.6	1.4	45.8	2.6	51.7	2.6	3800	OSNJ 63C	M63	2"	50.1-454	H73 x 78
1T	1.5	7/0.53	1.59	0.6	1.0	10.1	1.2	13.0	0.7	210	OSNJ 20A	M20	1/2"	10-13	H27 x 29
1Q	1.5	7/0.53	1.59	0.6	1.0	11.0	1.3	13.9	0.7	250	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Fire resistant & Flame retardant)

250V F-TTIBAS, F-TTIBAS(C)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- Ex. [KS-CLF] 250V F-TTIBAS(C) 19P X 1.5SQMM LS CABLE
- [YEAR] IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	N/A	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	Aluminium/polyester tape with drain wire	(C) TYPE ONLY
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Armour	Galvanized steel wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V F-TTIBAS, F-TTIBAS(C) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	8.3	0.3	1.2	12.2	0.6	300	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	0.75	7/0.37	1.11	0.5	1.0	12.2	0.3	1.3	16.4	0.8	470	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
4	0.75	7/0.37	1.11	0.5	1.0	14.1	0.3	1.4	18.4	0.9	600	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33
7	0.75	7/0.37	1.11	0.5	1.0	16.2	0.3	1.5	20.7	1.0	770	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
10	0.75	7/0.37	1.11	0.5	1.0	20.1	0.3	1.7	25.0	1.2	1030	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
14	0.75	7/0.37	1.11	0.5	1.0	22.0	0.3	1.7	27.0	1.3	1230	OSNJ CW 32A	M32	1"	22-28	H45 x 49
19	0.75	7/0.37	1.11	0.5	1.0	24.1	0.3	1.8	29.3	1.5	1470	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
24	0.75	7/0.37	1.11	0.5	1.2	27.9	0.3	2.0	33.4	1.7	1830	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
30	0.75	7/0.37	1.11	0.5	1.2	29.7	0.3	2.0	35.4	1.8	2100	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
37	0.75	7/0.37	1.11	0.5	1.2	31.9	0.4	2.1	38.1	1.9	2570	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
48	0.75	7/0.37	1.11	0.5	1.2	36.6	0.4	2.3	43.2	2.2	3190	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
1T	0.75	7/0.37	1.11	0.5	1.0	8.7	0.3	1.2	12.6	0.6	320	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
1Q	0.75	7/0.37	1.11	0.5	1.0	9.3	0.3	1.2	13.3	0.7	360	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

250V F-TTIBAS, F-TTIBAS(C) 1SQ

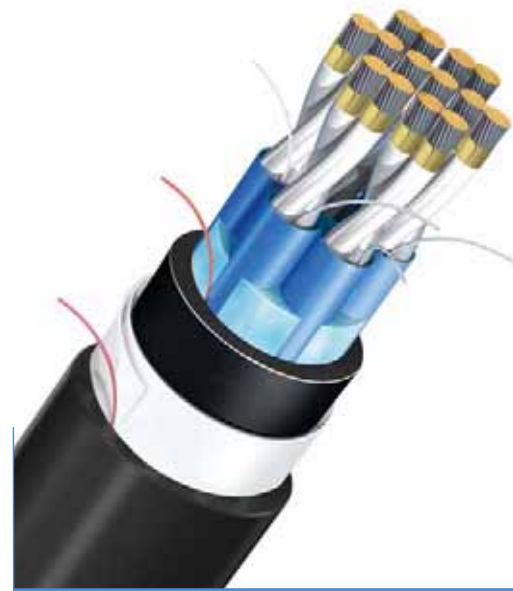
No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	8.6	0.3	1.2	12.5	0.6	310	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	1	7/0.43	1.29	0.5	1.0	12.8	0.3	1.4	17.1	0.9	510	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33
4	1	7/0.43	1.29	0.5	1.0	14.8	0.3	1.4	19.3	1.0	650	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33
7	1	7/0.43	1.29	0.5	1.0	17.1	0.3	1.5	21.7	1.1	850	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
10	1	7/0.43	1.29	0.5	1.0	21.3	0.3	1.7	26.3	1.3	1150	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
14	1	7/0.43	1.29	0.5	1.0	23.2	0.3	1.8	28.4	1.4	1380	OSNJ CW 32A	M32	1"	22-28	H45 x 49
19	1	7/0.43	1.29	0.5	1.0	25.5	0.3	1.9	30.8	1.5	1660	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
24	1	7/0.43	1.29	0.5	1.2	29.6	0.3	2.0	35.3	1.8	2070	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
30	1	7/0.43	1.29	0.5	1.2	31.6	0.4	2.1	37.8	1.9	2540	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
37	1	7/0.43	1.29	0.5	1.2	33.8	0.4	2.2	40.3	2.0	2920	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
48	1	7/0.43	1.29	0.5	1.4	39.3	0.4	2.4	46.2	2.3	3690	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
1T	1	7/0.43	1.29	0.5	1.0	9.0	0.3	1.2	13.0	0.7	340	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
1Q	1	7/0.43	1.29	0.5	1.0	9.8	0.3	1.2	13.8	0.7	390	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

250V F-TTIBAS, F-TTIBAS(C) 1.5SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1.5	7/0.53	1.59	0.6	1.0	9.6	0.3	1.2	13.7	0.7	360	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
2	1.5	7/0.53	1.59	0.6	1.0	14.6	0.3	1.4	19.1	1.0	610	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33
4	1.5	7/0.53	1.59	0.6	1.0	17.0	0.3	1.5	21.6	1.1	800	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	1.5	7/0.53	1.59	0.6	1.0	19.6	0.3	1.6	24.5	1.2	1060	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
10	1.5	7/0.53	1.59	0.6	1.0	24.6	0.3	1.8	29.9	1.5	1450	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
14	1.5	7/0.53	1.59	0.6	1.0	26.9	0.3	1.9	32.4	1.6	1760	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
19	1.5	7/0.53	1.59	0.6	1.2	30.0	0.3	2.1	35.7	1.8	2180	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
24	1.5	7/0.53	1.59	0.6	1.2	34.5	0.4	2.2	40.9	2.0	2860	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
30	1.5	7/0.53	1.59	0.6	1.2	36.8	0.4	2.3	43.5	2.2	3290	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
37	1.5	7/0.53	1.59	0.6	1.4	39.8	0.4	2.5	46.8	2.3	3860	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
48	1.5	7/0.53	1.59	0.6	1.4	45.8	0.4	2.7	53.2	2.7	4850	OSNJ CW 63A	M63	2"	48-53	H82 x 88
1T	1.5	7/0.53	1.59	0.6	1.0	10.1	0.3	1.3	14.2	0.7	400	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
1Q	1.5	7/0.53	1.59	0.6	1.0	11.0	0.3	1.3	15.1	0.8	460	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Fire resistant & Flame retardant)

250V F-TTIBS(I)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement

Cable Marking

- Ex. [KS-CLF] 250V F-TTIBS(I) 19P X 1.5SQMM LS CABLE
- [YEAR] IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium / polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Separator tape	If necessary	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V F-TTIBS(I) 0.75SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)	
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT			OUTER 'A'
1	0.75	7/0.37	1.11	0.5	1.0	8.4	1.1	11.1	0.6	150	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
2	0.75	7/0.37	1.11	0.5	1.0	14.0	1.4	17.2	0.9	310	OSNJ 25B	M25	3/4"	16-18	H32 x 34	
4	0.75	7/0.37	1.11	0.5	1.0	16.4	1.5	19.8	1.0	460	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
7	0.75	7/0.37	1.11	0.5	1.0	19.4	1.6	23.0	1.2	680	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
10	0.75	7/0.37	1.11	0.5	1.0	25.1	1.8	29.2	1.5	1010	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
14	0.75	7/0.37	1.11	0.5	1.2	27.9	1.9	32.2	1.6	1300	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62	
19	0.75	7/0.37	1.11	0.5	1.2	31.3	2.1	35.9	1.8	1670	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
24	0.75	7/0.37	1.11	0.5	1.2	35.9	2.2	40.9	2.0	2110	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
30	0.75	7/0.37	1.11	0.5	1.4	38.7	2.4	43.9	2.2	2540	OSNJ 63A	M63	2"	40.1-44	H73 x 78	
37	0.75	7/0.37	1.11	0.5	1.4	41.9	2.5	47.4	2.4	3030	OSNJ 63B	M63	2"	44.1-50	H73 x 78	
48	0.75	7/0.37	1.11	0.5	1.6	48.7	2.8	54.8	2.7	3960	OSNJ 75A	M75	2-1/2"	54.1-56	H85 x 90	
1T	0.75	7/0.37	1.11	0.5	1.0	8.8	1.2	11.5	0.6	180	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
1Q	0.75	7/0.37	1.11	0.5	1.0	9.4	1.2	12.2	0.6	210	OSNJ 20A	M20	1/2"	10-13	H27 x 29	

250V F-TTIBS(I) 1SQ

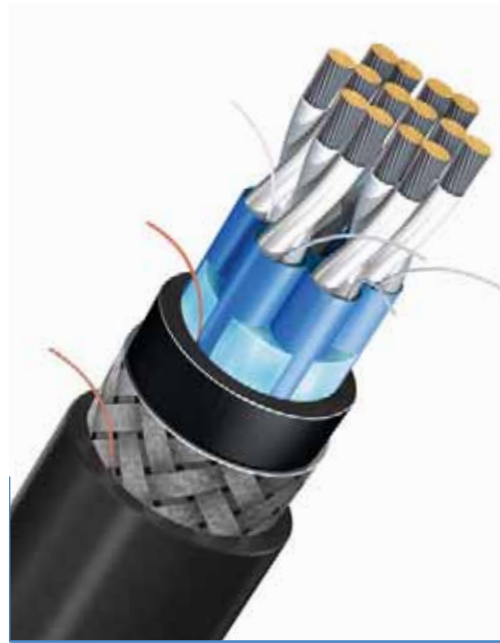
No. of cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)	
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT			OUTER 'A'
1	1	7/0.43	1.29	0.5	1.0	8.7	1.2	11.4	0.6	160	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
2	1	7/0.43	1.29	0.5	1.0	14.7	1.4	17.9	0.9	340	OSNJ 25A	M25	3/4"	15.1-16	H32 x 34	
4	1	7/0.43	1.29	0.5	1.0	17.3	1.5	20.7	1.0	510	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
7	1	7/0.43	1.29	0.5	1.0	20.4	1.6	24.1	1.2	750	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
10	1	7/0.43	1.29	0.5	1.0	26.5	1.9	30.7	1.5	1120	OSNJ 40B	M40	1-1/4"	28.1-32	H48 x 51	
14	1	7/0.43	1.29	0.5	1.2	29.4	2.0	33.9	1.7	1450	OSNJ 50A	M50	1-1/2"	32.1-34	H58 x 62	
19	1	7/0.43	1.29	0.5	1.2	33.0	2.1	37.8	1.9	1860	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
24	1	7/0.43	1.29	0.5	1.4	38.4	2.3	43.6	2.2	2400	OSNJ 63A	M63	2"	40.1-44	H73 x 78	
30	1	7/0.43	1.29	0.5	1.4	40.8	2.4	46.3	2.3	2840	OSNJ 63B	M63	2"	44.1-50	H73 x 78	
37	1	7/0.43	1.29	0.5	1.4	44.3	2.6	50.0	2.5	3390	OSNJ 63B	M63	2"	44.1-50	H73 x 78	
48	1	7/0.43	1.29	0.5	1.6	51.5	2.9	57.8	2.9	4440	OSNJ 75B	M75	2-1/2"	56.1-60	H85 x 90	
1T	1	7/0.43	1.29	0.5	1.0	9.1	1.2	11.9	0.6	190	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
1Q	1	7/0.43	1.29	0.5	1.0	9.9	1.2	12.7	0.6	240	OSNJ 20A	M20	1/2"	10-13	H27 x 29	

250V F-TTIBS(I) 1.5SQ

No. of cores	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)	
	Size (mm ²)	Construction (Nos./mm)	Dia. (mm)									METRIC	NPT			OUTER 'A'
1	1.5	7/0.53	1.59	0.6	1.0	9.7	1.2	12.5	0.6	190	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
2	1.5	7/0.53	1.59	0.6	1.0	16.6	1.5	20.0	1.0	420	OSNJ 32A	M32	1"	18.1-22	H39 x 41.5	
4	1.5	7/0.53	1.59	0.6	1.0	19.6	1.6	23.2	1.2	630	OSNJ 32B	M32	1"	22.1-26	H39 x 41.5	
7	1.5	7/0.53	1.59	0.6	1.0	23.3	1.7	27.3	1.4	940	OSNJ 40A	M40	1-1/4"	26.1-28	H48 x 51	
10	1.5	7/0.53	1.59	0.6	1.2	30.8	2.0	35.4	1.8	1450	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
14	1.5	7/0.53	1.59	0.6	1.2	33.7	2.2	38.5	1.9	1840	OSNJ 50B	M50	1-1/2"	34.1-40	H58 x 62	
19	1.5	7/0.53	1.59	0.6	1.4	38.2	2.3	43.5	2.2	2410	OSNJ 63A	M63	2"	40.1-44	H73 x 78	
24	1.5	7/0.53	1.59	0.6	1.4	44.2	2.6	49.9	2.5	3070	OSNJ 63B	M63	2"	44.1-50	H73 x 78	
30	1.5	7/0.53	1.59	0.6	1.4	47.1	2.7	53.0	2.7	3630	OSNJ 63C	M63	2"	50.1-454	H73 x 78	
37	1.5	7/0.53	1.59	0.6	1.6	51.5	2.9	57.8	2.9	4400	OSNJ 75B	M75	2-1/2"	56.1-60	H85 x 90	
48	1.5	7/0.53	1.59	0.6	1.6	59.4	3.2	66.4	3.3	5690	OSNJ 90A	M90	3"	66.1-70	H101 x 105	
1T	1.5	7/0.53	1.59	0.6	1.0	10.2	1.2	13.1	0.7	240	OSNJ 20A	M20	1/2"	10-13	H27 x 29	
1Q	1.5	7/0.53	1.59	0.6	1.0	11.1	1.3	14.0	0.7	290	OSNJ 20B	M20	1/2"	13.1-15	H27 x 29	

INSTRUMENTATION & TELECOMMUNICATION CABLES
(Fire resistant & Flame retardant)

250V F-TTIBAS(I)



Voltage rating : 250V
Max. Conductor temperature : 90°C

Applied Standard

- IEC 60092-350, -351, -359, -375
- IEC 60332-1, -3 (Cat.A), IEC 60331

Cable Identification

- Insulation
 - Multi Pair : White with pair number (1A, 1B), (2A, 2B)
 - Triad : White with triad number (1A, 1B, 1C)
 - Quad : White with quad number (1A, 1B, 1C, 1D)
- Outer Sheath : Customer requirement
- Only installed for hazardous area

Cable Marking

- EEx. [KS-CLF] 250V F-TTIBAS(I) 19P X 1.5SQMM LS CABLE
- [YEAR] IEC 60332-3A IEC 60331 -25°C COLD RESISTANT



CONSTRUCTION DETAIL

	Detail	Remark
Conductor	Tinned annealed copper	
Fire proof layer	Mica tape	
Separator	If necessary	
Insulation	HEPR to IEC 60092-351	
Individual screen	Aluminium/polyester tape with drain wire	
Filler	If necessary	
Binder tape	If necessary	
Overall screen	N/A	
Inner covering	High modulus PVC -If necessary, rip-cord under the Inner covering	
Armour	Galvanized steel wire braid -If necessary, separator tape under and/or over the armour	
Sheath	Enhanced PVC to IEC 60092-359 -If necessary, rip-cord under the Sheath	

250V F-TTIBAS(I) 0.75SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	0.75	7/0.37	1.11	0.5	1.0	8.4	0.3	1.2	12.3	0.6	320	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	0.75	7/0.37	1.11	0.5	1.0	14.0	0.3	1.4	18.4	0.9	580	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33
4	0.75	7/0.37	1.11	0.5	1.0	16.4	0.3	1.5	21.0	1.1	770	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	0.75	7/0.37	1.11	0.5	1.0	19.4	0.3	1.6	24.2	1.2	1040	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
10	0.75	7/0.37	1.11	0.5	1.0	25.1	0.3	1.9	30.4	1.5	1470	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
14	0.75	7/0.37	1.11	0.5	1.2	27.9	0.3	2.0	33.4	1.7	1820	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
19	0.75	7/0.37	1.11	0.5	1.2	31.3	0.4	2.1	37.5	1.9	2390	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
24	0.75	7/0.37	1.11	0.5	1.2	35.9	0.4	2.3	42.5	2.1	2930	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
30	0.75	7/0.37	1.11	0.5	1.4	38.7	0.4	2.4	45.5	2.3	3420	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
37	0.75	7/0.37	1.11	0.5	1.4	41.9	0.4	2.5	49.0	2.4	3980	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
48	0.75	7/0.37	1.11	0.5	1.6	48.7	0.4	2.8	56.4	2.8	5070	OSNJ CW 63B	M63	2"	53.1-56	H82 x 88
1T	0.75	7/0.37	1.11	0.5	1.0	8.8	0.3	1.2	12.7	0.6	350	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
1Q	0.75	7/0.37	1.11	0.5	1.0	9.4	0.3	1.2	13.4	0.7	400	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

250V F-TTIBAS(I) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1	7/0.43	1.29	0.5	1.0	8.7	0.3	1.2	12.6	0.6	330	OSNJ CW 16A	M16	1/2"	8-12.5	H25 x 27
2	1	7/0.43	1.29	0.5	1.0	14.7	0.3	1.4	19.1	1.0	620	OSNJ CW 20B	M20	1/2"	17.6-19.5	H31 x 33
4	1	7/0.43	1.29	0.5	1.0	17.3	0.3	1.5	21.9	1.1	830	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
7	1	7/0.43	1.29	0.5	1.0	20.4	0.3	1.7	25.3	1.3	1130	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
10	1	7/0.43	1.29	0.5	1.0	26.5	0.3	1.9	31.9	1.6	1610	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
14	1	7/0.43	1.29	0.5	1.2	29.4	0.3	2.0	35.1	1.8	1990	OSNJ CW 40A	M40	1-1/4"	30-35	H55 x 59
19	1	7/0.43	1.29	0.5	1.2	33.0	0.4	2.2	39.3	2.0	2620	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
24	1	7/0.43	1.29	0.5	1.4	38.4	0.4	2.4	45.2	2.3	3280	OSNJ CW 50A	M50	1-1/2"	38-45	H68 x 73
30	1	7/0.43	1.29	0.5	1.4	40.8	0.4	2.5	47.9	2.4	3770	OSNJ CW 50B	M50	1-1/2"	45.1-50	H68 x 73
37	1	7/0.43	1.29	0.5	1.4	44.3	0.4	2.6	51.6	2.6	4400	OSNJ CW 63A	M63	2"	48-53	H82 x 88
48	1	7/0.43	1.29	0.5	1.6	51.5	0.4	2.9	59.4	3.0	5610	OSNJ CW 63C	M63	2"	56.1-60	H82 x 88
1T	1	7/0.43	1.29	0.5	1.0	9.1	0.3	1.2	13.0	0.7	370	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
1Q	1	7/0.43	1.29	0.5	1.0	9.9	0.3	1.3	13.9	0.7	430	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27

250V F-TTIBAS(I) 1SQ

No. of Pairs	Conductor			Thick of insulation (mm)	Thick of inner covering (mm)	Overall inner covering diameter (mm)	Dia. of armour braid (mm)	Thick of Sheath (mm)	Nominal overall diameter (mm)	Tolerance (mm)	Cable weight (Approx.) (Kg/Km)	O.S.C.G Cable gland	ENTRY THREAD SIZE		Cable DIA (mm)	HEXAGON DIMENSIONS (H)
	Size (mm²)	Construction (Nos./mm)	Dia. (mm)										METRIC	NPT		
1	1	7/0.43	1.59	0.6	1.0	9.7	0.3	1.2	12.6	0.7	380	OSNJ CW 16A	M16	1/2"	12.6-15.1	H25 x 27
2	1	7/0.43	1.59	0.6	1.0	16.6	0.3	1.5	19.1	1.1	730	OSNJ CW 25A	M25	3/4"	17.5-22	H36 x 39
4	1	7/0.43	1.59	0.6	1.0	19.6	0.3	1.6	21.9	1.2	1000	OSNJ CW 25B	M25	3/4"	22.1-26	H36 x 39
7	1	7/0.43	1.59	0.6	1.0	23.3	0.3	1.8	25.3	1.4	1370	OSNJ CW 32B	M32	1"	28.1-32	H45 x 49
10	1	7/0.43	1.59	0.6	1.2	30.8	0.3	2.1	31.9	1.8	2160	OSNJ CW 32B	M40	1-1/4"	35.1-40	H55 x 59
14	1	7/0.43	1.59	0.6	1.2	33.7	0.3	2.2	35.1	2.0	2610	OSNJ CW 40B	M40	1-1/4"	35.1-40	H55 x 59
19	1	7/0.43	1.59	0.6	1.4	38.2	0.4	2.4	39.3	2.3	3280	OSNJ CW 40B	M50	1-1/2"	38-45	H68 x 73
24	1	7/0.43	1.59	0.6	1.4	44.2	0.4	2.6	45.2	2.6	4070	OSNJ CW 50A	M63	1-1/2"	48-53	H82 x 88
30	1	7/0.43	1.59	0.6	1.4	47.1	0.4	2.8	47.9	2.7	4700	OSNJ CW 63A	M63	2"	53.1-56	H82 x 88
37	1	7/0.43	1.59	0.6	1.6	51.5	0.4	2.9	51.6	3.0	5560	OSNJ CW 63B	M63	2"	56.1-60	H82 x 88
48	1	7/0.43	1.59	0.6	1.6	59.4	0.4	3.2	59.4	3.4	7030	OSNJ CW 75C	M77	2"	66.1-70	H98 x 106
1T	1	7/0.43	1.59	0.6	1.0	10.2	0.3	1.3	13.0	0.7	430	OSNJ CW 16B	M16	1/2"	12.6-15.1	H25 x 27
1Q	1	7/0.43	1.59	0.6	1.0	11.1	0.3	1.3	13.9	0.8	500	OSNJ CW 20A	M20	1/2"	13-17.5	H31 x 33

1. Conductor resistance

Resistance Formula

$$R = \rho \frac{L}{A}$$

- R : Resistance in ohm per phase
- ρ : Specific resistance, $\frac{\text{ohm}\cdot\text{mm}^2}{\text{m}}$
- A : Conductor area, mm^2
- L : Conductor length, m

Resistance as a function of temperature

$$R = R_0 [1 + \alpha(t - 20)]$$

- R_0 : Resistance at $t = 20^\circ\text{C}$
- $\alpha = 0.00393$ for copper
- t : Conductor temperature, $^\circ\text{C}$
- $\alpha = 0.00403$ for aluminium

Conductor resistance and insulation resistance

Norminal Conductor area (mm^2)	No. of wires and diameter of wires (Nos./mm)	Approx. diameter (mm)	Conductor resistance at 20°C (ohm/Km)	Insulation resistance at 20°C (Mohm-Km)
0.75	7/0.37	1.11	24.8	[1060]
1	7/0.43	1.29	18.2	2110[950]
1.5	7/0.53	1.59	12.2	1040[930]
2.5	7/0.67	2.01	7.56	870
4	7/0.85	2.5	4.7	750
6	7/1.04	3.12	3.11	630
10	7/1.35	4.05	1.84	510
16	7/1.7	5.1	1.16	430
25	19/1.29	6.47	0.734	430
35	19/1.53	7.66	0.529	370
50	37/1.31	9.18	0.391	370
70	37/1.55	10.86	0.27	340
95	37/1.81	12.66	0.195	300
120	61/1.58	14.24	0.154	290
150	61/1.77	15.92	0.126	300
185	61/1.97	17.69	0.1	300
240	91/1.83	20.16	0.0762	280
300	91/2.05	22.54	0.0607	260

Note. the value of [] are given for 250V HEPR insulated cables

2. Current ratings

For power cables, the current ratings are given in the following table :

Conductor area (mm^2)	Single core (Nos./mm)	Two core (mm)	Three or Four core (ohm/Km)
1.5	23	20	16
2.5	30	26	21
4	40	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

The current ratings in Tables A.1 to A.5 are based on the nominal dimensions of 600/1000V cables. Current ratings for higher voltage cable, up to 15kV, may be upto about 5% lower then the tabulated values for LV cables.

For control cables, the current ratings are given by the following formula :

$$I = \frac{I_1}{\sqrt[3]{N}}$$

- I_1 = Current for single core cable
- N = Number of cores

No. of cores (Nos./mm)	1mm ² A mp (ohm/Km)
2	13
4	10
7	8
12	7
19	6
27	6
37	5
44	4

The tabled current ratings must be adjusted for ambient air temperature other than 45°C , Appropriate rating factors are :

Ambient air temperature $^\circ\text{C}$	35 $^\circ\text{C}$	40 $^\circ\text{C}$	45 $^\circ\text{C}$	50 $^\circ\text{C}$	55 $^\circ\text{C}$	60 $^\circ\text{C}$	65 $^\circ\text{C}$	70 $^\circ\text{C}$	75 $^\circ\text{C}$	80 $^\circ\text{C}$	85 $^\circ\text{C}$
Rating factors	1,10	1,05	1,00	0,94	0,88	0,82	0,74	0,67	0,58	0,47	-

Short circuit rating

The following short circuit current are for cables operating normally at a maximum conductor temperature of 90°C . The theoretical temperature that arises in the conductor during a short circuit, which is used as a basis of the calculation, is 250°C . EPR and XLPE-insulation are capable of withstanding short temperatures up to 250°C . The short circuit currents for copper conductors given in the table are values for one second, for other durations the current may be calculated from the following formula:

$$I_t = \frac{I}{\sqrt{t}}$$

- I_t = short circuit for t sec.[A]
- N = short circuit for one sec.[A]
- t = short circuit duration[sec.]

Conductor area (mm^2)	Current One second amperes	Conductor area (mm^2)	Current One second amperes
1.5	250	50	8450
2.5	420	70	11830
4	680	95	16060
6	1010	120	20280
10	1690	150	25350
16	2700	185	31270
25	4230	240	40560
35	5920	300	50700

The duration of the short circuit based on these assumptions should be between 0.2 sec. and 10 sec.

3. Reactance / Impedance

Reactance

Conductor area (mm ²)	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
Rating factors (Ω/km)	0.135	0.125	0.117	0.111	0.103	0.098	0.097	0.094	0.094	0.091	0.090	0.088	0.088	0.088	0.088	0.087

The reactance of a cable operating in AC system depends on many factors, including, in particular, the axial spacing between conductors and proximity and magnetic properties of adjacent steelwork. The former is known for multicore cable, but may vary for single core cables depending upon the spacing between them and their disposition when installed.

Reactances of cables in certain dispositions remote from steelwork are calculable and are shown. The tabulated values are for cables with circular conductors. The value for a sector-shaped conductor should be taken as 90% of the tabulated value. The value of reactance so calculated is for a supply frequency of 60Hz. For any other frequency, a correction should be made in direct proportion to the frequency. For example at 50Hz, the reactance is 0.83 times that at 60Hz. Induction for 2-and 3- conductor cables is given by the formula :

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

- L = Inductance in H/m and phase
- a = Axial space between conductor
- d = Conductor diameter in mm

Reactance for 2-and 3-conductor cables is given by the formula :

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

- X = Reactance in ohm per phase
- L = Inductance in H/m and phase
- f = Frequency in Hz
- I = Conductor length in meter

Impedance

Conductor area (mm ²)	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
Rating factors (Ω/km)	15.557	9.641	5.994	3.967	2.348	1.482	0.941	0.681	0.507	0.356	0.265	0.215	0.183	0.155	0.131	0.116

Impedance for 2, 3 & 4 conductor cables is given by the formula:

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

- Z = Impedance in ohm per phase
- R = Resistance at operating temp. in ohm per phase
- X = Reactance in ohm per phase

Installations temperature

Minimum recommended temperature of installations :

- 10°C Ship wiring cable with PVC sheath
- 20°C Elastomeric on/off shore cables

Installations pulling force

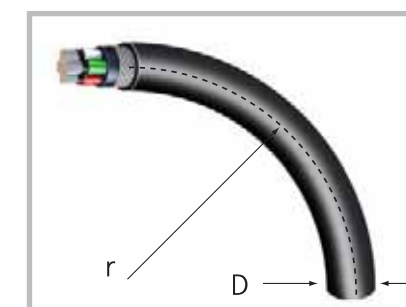
The cable pulling force can be estimated, as a maximum limit :

5Kp per mm² conductor area in the cable.

Additional tension will be supplied from the braid and the insulation and sheathing compound.

4. Bending radius

Installations recommendations minimum cable bending radius



r : radius
D : external diameter

Bending radius for cables rated up to 1, 8/3 kV

Insulation	Conductor area		Overall of cable (D)	Minimum internal radius of band
		Covering		
Thermoplastic or thermosetting with copper conductors	Unarmoured or unbraided		>25Min	4D
	Metal braided screen or armoured		>25Min	6D
	Metal wire armoured		Any	6D
	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
6D for defined circuit integrity				

Bending radius for cables rated at 3, 6/6.0(7.2)kV and above

Conductor area	Overall of cable (D)	Minimum internal radius of band
sector shaped copper	Any	12D
3-Core cables	Any	9D

5. Voltage drop coefficient

The voltage drop coefficients in each circuit are given in the following table :

Voltage	Conductor size (SQ)	Resistance (20°C) (Ohm/km)	Voltage drop coefficient						
			100	95	90	85	80	75	70
250V	0.75	26	1.00	0.95	0.90	0.85	0.80	0.75	0.70
	1	18.2	1.00	0.95	0.90	0.85	0.80	0.75	0.70
	1.5	12.2	1.00	0.95	0.90	0.85	0.80	0.75	0.71
	2.5	7.56	1.00	0.95	0.90	0.86	0.81	0.76	0.71
	4	4.7	1.00	0.96	0.91	0.86	0.81	0.76	0.71
	6	3.11	1.00	0.96	0.91	0.86	0.81	0.77	0.72
0.6/1kV	10	1.84	1.00	0.96	0.92	0.87	0.82	0.77	0.73
	16	1.16	1.00	0.97	0.92	0.88	0.83	0.76	0.74
	25	0.734	1.00	0.98	0.94	0.90	0.85	0.81	0.76
	35	0.529	1.00	0.99	0.95	0.91	0.87	0.83	0.78
	50	0.391	1.00	1.00	0.97	0.93	0.89	0.85	0.81
	70	0.27	1.00	1.02	1.00	0.97	0.93	0.90	0.86
	95	0.195	1.00	1.04	1.03	1.01	0.98	0.95	0.92
	120	0.154	1.00	1.07	1.06	1.05	1.03	1.00	0.97
	150	0.126	1.00	1.09	1.10	1.09	1.08	1.05	1.03
	185	0.1	1.00	1.13	1.15	1.15	1.15	1.13	1.11
	240	0.0762	1.00	1.19	1.23	1.25	1.25	1.25	1.24
	300	0.0607	1.00	1.24	1.31	1.35	1.36	1.37	1.37

6. Gland information

OSCG cable gland size(Non armoured type)

Gland type/size	Entry thread size		Cable dia (mm) Outer"A"	Hexagon dimension (H)
	Metric	Npt		
OSNJ 16a	M16	1/2"	3-6	H24 x 26
OSNJ 16b	M16	1/2"	6.1-10	H24 x 26
OSNJ 20a	M20	1/2"	10-13	H27 x 29
OSNJ 20b	M20	1/2"	13.1-15	H27 x 29
OSNJ 25a	M25	3/4"	15.1-16	H32 x 34
OSNJ 25b	M25	3/4"	16-18	H32 x 34
OSNJ 32a	M32	1"	18.1-22	H39 x 41.5
OSNJ 32b	M32	1"	22.1-26	H39 x 41.5
OSNJ 40a	M40	1-1/4"	26.1-28	H48 x 51
OSNJ 40b	M40	1-1/4"	28.1-32	H48 x 51
OSNJ 50a	M50	1-1/2"	32.1-34	H58 x 62
OSNJ 50b	M50	1-1/2"	34.1-40	H58 x 62
OSNJ 63a	M63	2"	40.1-44	H73 x 78
OSNJ 63b	M63	2"	44.1-50	H73 x 78
OSNJ 63c	M63	2"	50.1-454	H73 x 78
OSNJ 75a	M75	2-1/2"	54.1-56	H85 x 90
OSNJ 75b	M75	2-1/2"	56.1-60	H85 x 90
OSNJ 75c	M75	2-1/2"	60.1-62	H85 x 90
OSNJ 75d	M75	2-1/2"	62.1-66	H85 x 90
OSNJ 90a	M90	3"	66.1-70	H101 x 105
OSNJ 90b	M90	3"	70.1-76	H101 x 05

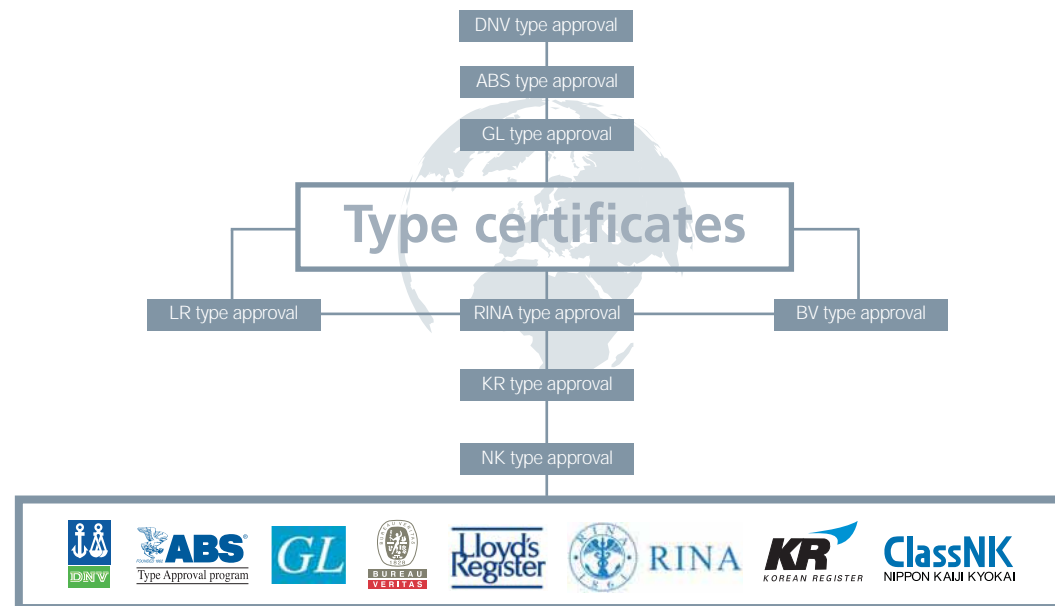
OSCG cable gland size(Non armoured type)

Gland type/size	Entry thread size		Cable dia (mm) Outer"A"	Hexagon dimension (H)
	Metric	Npt		
OSNJ CW 16a	M16	1/2"	8-12.5	H25 x 27
OSNJ CW 16b	M16	1/2"	12.6-15.1	H25 x 27
OSNJ CW 20a	M20	1/2"	13-17.5	H31 x 33
OSNJ CW 20b	M20	1/2"	17.6-19.5	H31 x 33
OSNJ CW 25a	M25	3/4"	17.5-22	H36 x 39
OSNJ CW 25b	M25	3/4"	22.1-26	H36 x 39
OSNJ CW 32a	M32	1"	22-28	H45 x 49
OSNJ CW 32b	M32	1"	28.1-32	H45 x 49
OSNJ CW 40a	M40	1-1/4"	30-35	H55 x 59
OSNJ CW 40b	M40	1-1/4"	35.1-40	H55 x 59
OSNJ CW 50a	M50	1-1/2"	38-45	H68 x 73
OSNJ CW 50b	M50	1-1/2"	45.1-50	H68 x 73
OSNJ CW 63a	M63	2"	48-53	H82 x 88
OSNJ CW 63b	M63	2"	53.1-56	H82 x 88
OSNJ CW 63c	M63	2"	56.1-60	H82 x 88
OSNJ CW 75a	M75	2-1/2"	56-62	H98 x 106
OSNJ CW 75b	M76	2-1/2"	62.1-66	H98 x 106
OSNJ CW 75c	M77	2-1/2"	66.1-70	H98 x 106
OSNJ CW 75d	M78	2-1/2"	70.1-75	H98 x 106

Type certificates / ISO certificates

Safety-related instruction

Type certificates



ISO certificates



The following safety-related instructions are to help you use products safely and precisely, and to prevent unexpected danger or damage. According to the extent of risk, damage and emergency of risk occurrence anticipated when products are incorrectly used, the safety-related instructions are classified as follows:

	Warning	In case of using products incorrectly by ignoring this indication, it is possible to anticipate mortality risks or severe wounds.
	Caution	In case of using products incorrectly by ignoring this indication, it is possible to anticipate slight wounds or property damage.

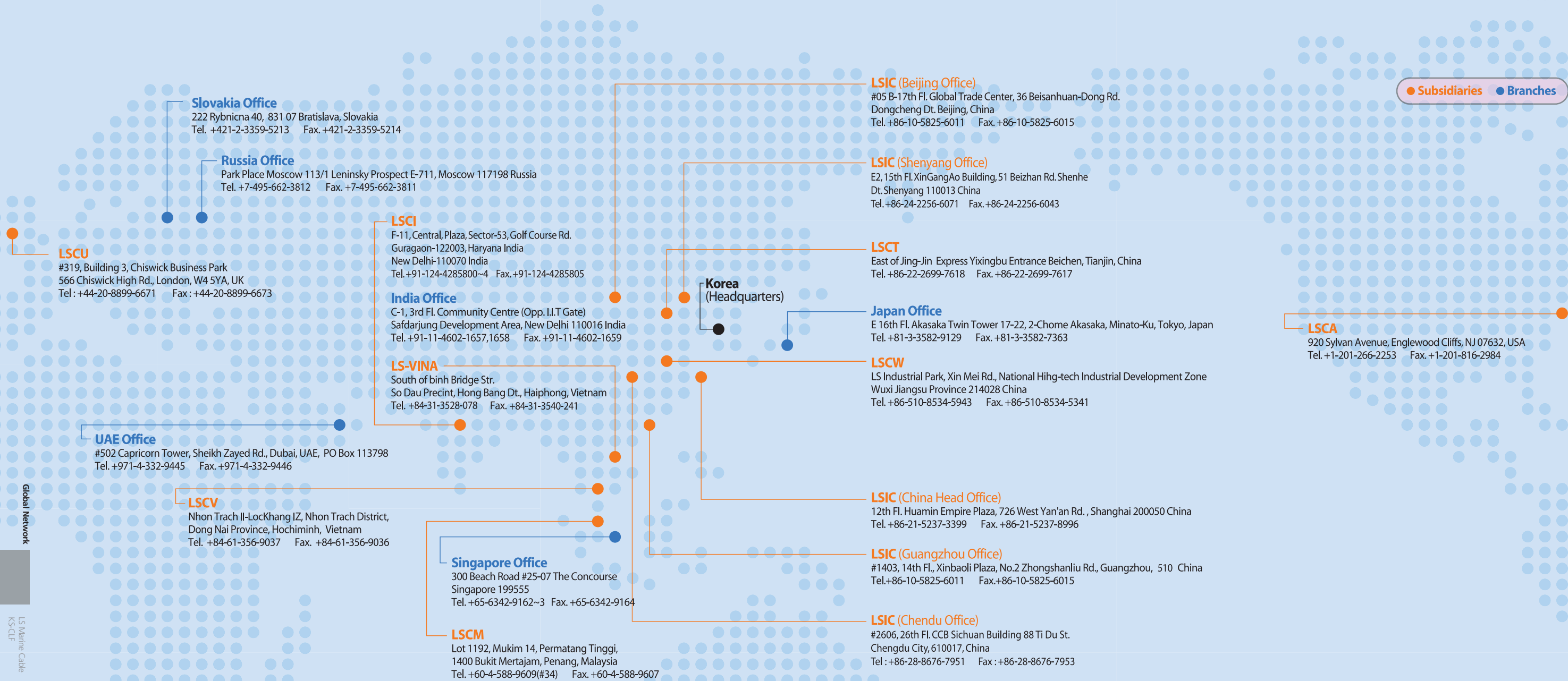
Warning	
	It may be the cause of a fire or damage by a fire. Do not use in excess of a rated voltage and an allowable current.
	It may be the cause of an electric shock. Do not conduct connection operations when power is on.
	It may be the cause of a fire or an electric shock. Do not disassemble or convert products.
	It may be the cause of a fire or damage by a fire. Keep heat-resisting temperature of cable, considering the environment of using.
	Be sure to earth an screened products.

Caution	
	Cable is not untied. Pile up drums after making them stand.
	It may be the cause of damage to a cable. When you hand a drum on the crane, keep sufficient length to the extent that an angle of the wire can be under 60 degrees.
	It may be the cause of disconnection or breakdown of a cable. Keep the permissible pulling tension and radius of bend.
	It may be the cause of damage to a cable. Do not drop a drum. Use an A-frame carrier or a crane.
	It may be the cause of damage to a cable. In case of processing the terminal of cable, keep water from percolating.
	It may be the cause of damage to a cable. Do not use except its fixed purpose according to each kind of cable.

- Before using products, read these instructions.
- Use products after verifying indefinite details besides the above descriptions from company.
- keep this safety-related instructions in the place it can always be seen by users after reading it.

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