CELEBRATING TRUST
Since 1990

SEEWEL®

Your Reliable Source for Quality Cables

STRENGTH.
SAFETY.
PERFORMANCE.



PRODUCT CATALOGUE

DURABILITY | ELECTROLYTIC COPPER | IS : 694 CM/L-0008740787 | IS:7098 (PT-1) CM/L-0003065043 | IS:14255:1995 CM/L-8100176011 | tabu | IAF



THE BACKBONE OF EVERY CONNECTION.

SEEWEL®

Your Reliable Source for Quality Cables

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SEEWEL

Your Reliable Source for Quality Cables

ABOUT US

Seewel Cables, based in North India, is a leading manufacturer of high-quality copper and aluminum wires and cables. With over 35 years of experience, we have built a strong reputation for excellence, innovation, and adherence to international quality standards. Our products are designed for reliability, durability, and superior performance across industrial, commercial, and residential applications.

Quality is at the core of everything we do. Our state-of-the-art ISO:17025:2017 (NABL) Accredited Laboratory ensures rigorous testing, reinforcing our commitment to safety and efficiency. We are also ISO 9001:2015 certified, reflecting our dedication to global best practices and stringent quality control.

At Seewel, we prioritize ethical business practices, technological advancements, and continuous research and development. Our expert team works relentlessly to innovate and enhance our product offerings, ensuring we stay ahead of industry trends. By integrating cutting-edge technology and sustainable practices, we create solutions that meet the evolving needs of modern infrastructure.

Our vision is to become the most trusted and preferred brand in the cable and wire industry, setting new benchmarks in quality and reliability. We are committed to customer satisfaction, timely delivery, and technological excellence, powering industries, homes, and businesses with confidence.

At Seewel Cables, we don't just manufacture wires—we create lifelines for modern infrastructure, ensuring seamless power transmission and connectivity for a brighter, more connected future.

SEEWEL

Your Reliable Source for Quality Cables

21+

APPROVALS

35+

YEARS OF EXCELLENCE

1575+

PROJECTS COMPLETED

2545+

SATISFIED CLIENTS ACROSS **INDIA**

5,11,28,785+

METERS OF **CABLES SUPPLIED**



SEEWEL

Your Reliable Source for Quality Cables



Acharya

DR. MOHAN GUPTA

FOUNDER

PHD (NATUROPATHY), RENOWNED NATUROPATHY GURU

A legacy of excellence and holistic well-being, **Acharya Dr. Mohan Gupta** is a hardworking and learned individual with a **Ph.D. in Naturopathy**. He shifted from Punjab to Delhi in the year 1989, as it was an extremist period and founded a company along with his father **Late Shri Amar Nath Gupta** and his two younger brothers. All of them initiated the company by offering very basic manufacturing of domestic wires and cable; he built **'SEEWEL'** a brand from scratch literally.

He was running a shop under the name "**Gupta Cable House**" from **1995** to the year **2020** at Bhagirath palace, Delhi 110006. Under his unwavering dedication, the company has grown up tremendously.

His legacy is being carried forward currently by his two sons **Jatin Gupta**, his elder son, who expanded into Power Cable Manufacturing in the year 2009, followed by his younger son **Nishant Gupta**, who joined the business and made the company system driven.

Dr. Gupta has also devoted himself in promoting holistic well being through his organization, Natural Lifestyle, a moment that educate people about medicine and surgeries-free healthy life, through free workshops, seminars as well as his books. He continues to inspire millions to adopt a natural and healthy lifestyle.
His contributions have also been recognized by the home ministry, cultural ministry as well as Delhi Police. He is a prestigious member of Delhi state Government advisory board of Naturopathy. Under the visionary leadership, both **SEEWEL** and Natural Life Style stand as pillars of quality, trust and well-being, meaningful impact in both the industrial and well being sectors.



JATIN GUPTA

DIRECTOR

Jatin Gupta, the elder son of **Acharya Dr. Mohan Gupta**, the founder of **Seewel**, has been instrumental in structuring Seewel's growth and innovation. He is equipped with a deep knowledge of the industry and a passion for excellence. With his strategic approach, he has played a key role in modernizing operations and expanding the reach of this brand in the private market across the world, along with the government sector. Under his tremendous leadership, the firm Seewel continues to set new benchmarks in the contexts of quality, reliability, and customer satisfaction. His strong vision and commitment to brilliance drive the company forward, ensuring that Seewel keeps shining as a trusted name in the industry.



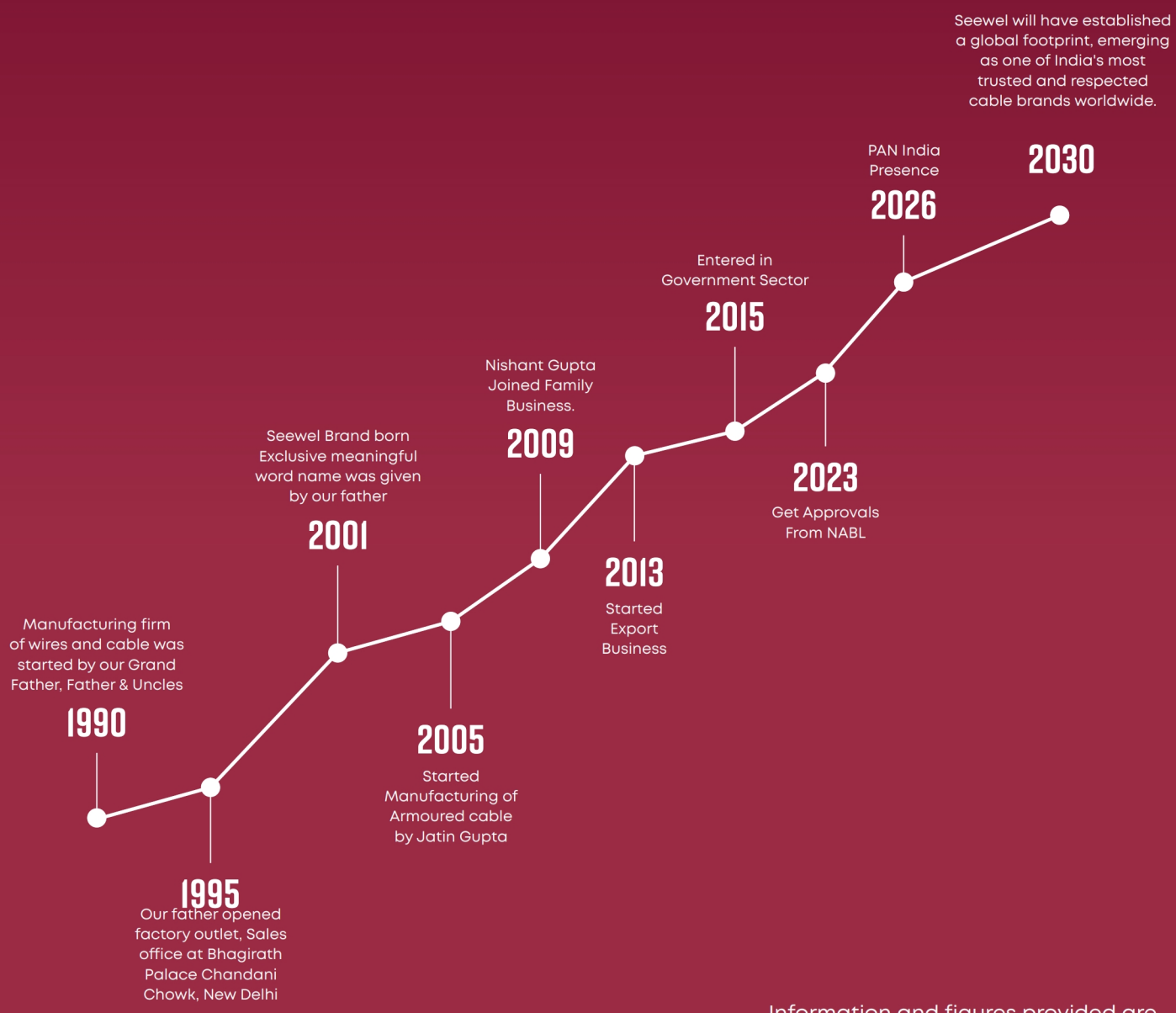
NISHANT GUPTA

DIRECTOR

Carrying an impeccable dedication to uphold Seewel's legacy, **Nishant Gupta**, the younger son of our esteemed founder, **Acharya Dr. Mohan Gupta**, brings fresh perspectives and dynamic leadership to the firm. With his management expertise, he has added export verticals to the company, and he has also been actively focused on streamlining operations, expanding efficiency, and fostering innovation. His forward-thinking approach and commitment to quality ensure that Seewel continues to evolve and is always ready to fulfil the ever-changing requirements of the industry. He is a highly accomplished and devoted professional in accounting and finance. With his enormous efforts, he has made the company system-driven.

OUR **JOURNEY**

SEEWEL Cables' journey spans three decades of growth, innovation and unwavering commitment. We've evolved from humble beginnings into an industry leader, driven by quality, ethics and customer satisfaction. Adapting to market changes and expanding our product range, we've built enduring relationships based on trust. Our journey continues with a focus on setting new industry standards and making a lasting impact in the world of cables and electrical solutions.



Information and figures provided are approximate and for general reference only.



NABL TESTING LABORATORY

Seewel Power Industries has emphasised on product quality by demonstrating quality evaluation for wires & cables at international level by obtaining NABL. National accreditation board for calibration & testing Laborites) for testing & DSIR recognised technology center at cable division, NABL is an autonomous body which is working under the Department of Science & Research Industry (Govt. of India).

National accreditation board for testing and calibration to boast of, it is the first-of-its-kind private facility in India. The lab fully equipped as per international standard to test XLPE cables upto 1.1 kV grade, PVC cables, Flexible cables, aerial bunched cables.

The lab cover Indian standards, British standard, International electrotechnical commission (IEC) standards, American society for testing and material (ASTM) standards and institute of electrical & electronics engineers (IEEE) standards along with eight type of different fire test to demonstrate fire-retardant behaviour in cable.

SEEWEL

Your Reliable Source for Quality Cables







MANUFACTURING PROCESS

SEEWEL
Your Reliable Source for Quality Cables



WIRE DRAWING
Wire is drawn to the required size.



ANNEALING
Drawn copper wire is annealed



STRANDING
The required conductor size is manufactured with a specified design (Round, Sector Shape, Compacted, etc.).



INSULATION
The conductor is insulated with PVC/XLPE as per the required specification.



CORE REWINDING & CURING
Core is rewound and cured with specified requirements (for PVC cables; curing is not required)



LAYING UP
All rewound cores are arranged together to form a cable with a specific design (final process for aerial bunched cables)



OUTER SHEATH
Done with the required specification



ARMOURING
(For Armoured cable only)

INNER SHEATHING
Not Applicable For Unsheathed & Sheathed Cable Manufacture As Per IS:694:2010



TESTING
All cables are tested as per the required specification



PACKING
All tested and passed cables are packed in required-sized drums prior to dispatch

SEEWEL

Your Reliable Source for Quality Cables

OUR CUSTOMERS

BHARAT PETROLEUM

BHEL

CONCOR

RAIL VIKAS NIGAM LMITED

MUNITION INDIA LIMITED

TCL

FCI

GOVT. OF UTTAR PRADESH

MPPKVVCL

MILITARY ENGINEER SERVICES

APCO INFRATECH PVT. LTD

INDIAN AIR FORCE

NBCC

NHAI

INDIAN RAILWAYS

SMVDSB

OUR PROJECTS

SEEWEL
Your Reliable Source for Quality Cables



MUNGER
MIRZA CHOUKI



RAM MANDIR PROJECT



JALNA NANDED
EXPRESS WAY



SHAMLI AMBALA
NHAI PROJECT



JEWAR INTERNATIONAL AIRPORT



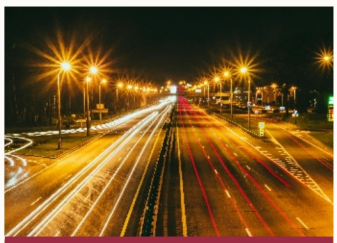
BANGALORE CHENNAI
EXPRESSWAY PROJECT



JAMMU KATRA
MATA VAISHNO DEVI
PROJECT



MATHURA
WATER PROJECT



VADODARA MUMBAI
EXPRESS WAY



JEWAR NHAI PROJECT



NAIDUPETA
TURPU KANUPUR

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GOVERNMENT APPROVALS

MES

IAF

PWD (UP)

PWD (HR)

FCI

MPPKVVCL

NBCC

INDIAN OIL

BHEL

UPRNNL

OUR CERTIFICATIONS

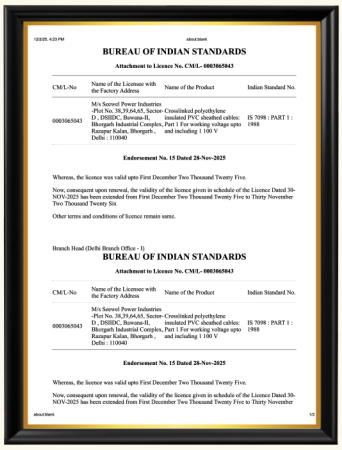
SEEWEL

Your Reliable Source for Quality Cables

ISO : 9001:2015



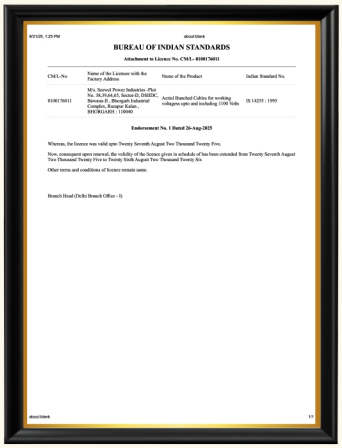
IS : 7098 PT-1



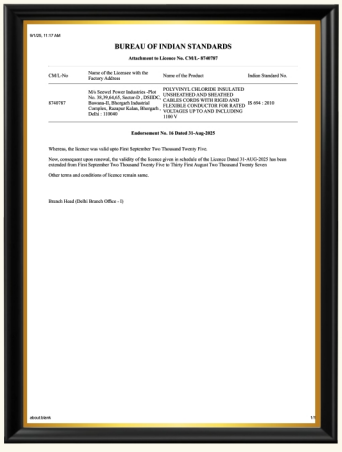
ISO/IEC : 17025: 2017 (NABL)



IS : 14255:1995



IS : 694:2010



INCORPORATION



RANGE OF PRODUCTS

1.



LT XLPE POWER CABLE (UPTO 1.1 KV)

Seewel Make XLPE Insulated Solid/Stranded/Shaped, Aluminium/Copper Conductor, Armoured/Unarmoured, PVC Sheathed cable of Voltage Grade Up to and including 1100 V conforming to IS:7098 PT-1 of Product Range

- 1 Core, 2 Core, 3 Core & 4 Core – 4.0 sq.mm to 400 sq.mm
- 3.5 Core – 25 sq.mm To 400 sq.mm

2.



COPPER CONTROL CABLE

Seewel Make Control Cable, XLPE Insulated Solid/Stranded, Copper Conductor, Armoured/Unarmoured, PVC Sheathed cable of Voltage Grade Up to and including 1100 V conforming to IS:7098 PT-1 of Product Range

- 1.5 sq.mm & 2.5 sq.mm up to 32 core

3.

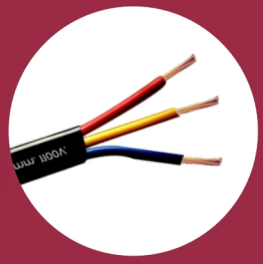


FR/ FR-LSH / HR-FR MULTISTRAND SINGLE CORE & ROUND FLEXIBLE & MULTICORE CABLE

Seewel Make PVC insulated of Grade FR/FR-LSH/HR-FR With Stranded/Flexible Copper Conductor, Unsheathed/Sheathed, Single Core/Multi core Cable of Voltage Grade Up to & including 1100 V conforming to IS: 694:2010 of Product Range

- 0.75 sq.mm to 300 sq.mm for 1 core Cable
- 2 Core, 3 Core, 4 Core – 0.75 sq.mm to 50 sq.mm
- 1.5 sq.mm & 2.5 sq.mm up to 24 cores

4.

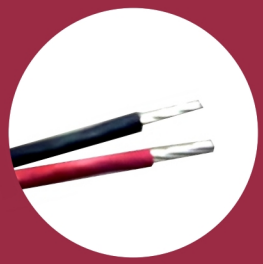


SUBMERSIBLE CABLE

Seewel Make Submersible cable with Plain Solid/Stranded/Flexible Copper Conductor PVC insulated & PVC Sheathed Cable of Voltage Grade Up to and including 1100 V conforming to IS: 694:2010 of Product Range

- 1.0 sq.mm to 16 sq.mm

5.



TWIN FLAT CABLE

Seewel Make Twin Flat Cable with Solid/Stranded Aluminium Conductor PVC Insulated & PVC Sheathed Cable of Voltage Grade Up to and including 1100 V conforming to IS: 694:2010 of Product Range

- 2.5 sq.mm to 16.0 sq.mm

6.



AERIAL BUNCHED CABLE

SEEWEL Make Aerial Bunched Cable with Stranded & Compacted Aluminium Phase Conductor and Stranded messenger Conductor with Aluminium Alloy, Phase Conductor in insulated with XLPE Compound, Messenger is either insulated or Bare with lighting conductor is XLPE insulated cable of Voltage Grade Up to and including 1100 V conforming to IS:14255:1995 of Product Range:

- 1C x 16 sq.mm + 25 sq.mm to 3C x 150 sq.mm + 70 sq.mm (Messenger is either insulated or Bare)
- 3C x 16 sq.mm + 25 sq.mm + 16 sq.mm to 3C x 150 sq.mm + 16 sq.mm (Messenger is either insulated or Bare)

LT POWER & CONTROL

CABLE

IS : 7098 PT-1



ADVANTAGE OF
XLPE CABLES

- Higher Current Rating.
- Higher Short Circuit Rating.
- Longer Service Life.
- For a short time it can withstand maximum 130° C and is favorable to endure short circuit stresses.
- It is Less sensitive to the setting of the network protection.
- Because of the thermosetting process taking place due the effect of cross linking, the crack resistance is increased.
- Due to the chemical cross-linking internal stresses are reduced. Consequently, the material is less sensitive during manufacturing process to the setting of the cooling gradient.
- The thermal resistivity of cross-linked material is favorably low, compared to thermoplastic material.
- The Low dielectric mechanical features of the insulation improves the protection against external effects
- The excellent mechanical features of the insulation improves the protection against external effects.
- The Resistance of the XLPE to acids, alkalis are outstanding and is often compensating the adverse environmental influences.

FEATURES

- Higher Current Rating and emergency overload rating.
- Superior short circuit rating
- Low Dielectric loss
- Much better insulation resistance.
- Resistance to chemical & corrosive gases etc.
- Better Resistance to surge Currents.
- Much Longer life of the cables.



TECHNICAL DETAILS FOR SEEWEL, SINGLE CORE, ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, UNARMOURED CABLES 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS : 7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XY/ 2XY

SIZE (CROSS SECTIONAL AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	NOMINAL OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	Aluminium	Copper				ALUM. CON. A2XY	CU. CON. 2XY
sq. mm	No's	No's	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	1.80	7	70	90
6	1/3	1/3	0.70	1.80	8	80	110
10	1/7	1/7	0.70	1.80	9	90	160
16	7	7	0.70	1.80	10	130	250
25	7	7	0.90	1.80	11	150	350
35	7	7	0.90	1.80	12	200	400
50	7	7	1.00	1.80	14	250	550
70	19	19	1.10	1.80	16	350	750
95	19	19	1.10	1.80	18	450	1000
120	19	19	1.20	1.80	19	500	1250
150	19	19	1.40	2.00	21	650	1500
185	37	37	1.60	2.00	24	800	1850
240	37	37	1.70	2.00	26	950	2400
300	37	37	1.80	2.00	29	1150	2950
400	61	61	2.00	2.20	33	1500	3750

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM CONDUCTOR			FOR COPPER CONDUCTOR				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	-	-	-	48	47	45	0.376	0.572
6	4.61	3.08	48	45	45	60	59	57	0.564	0.858
10	3.08	1.83	62	62	61	80	78	77	0.940	1.43
16	1.91	1.15	81	80	83	104	102	106	1.50	2.29
25	1.20	0.727	99	90	115	130	115	145	2.35	3.58
35	0.868	0.524	117	110	135	155	140	175	3.29	5.01
50	0.641	0.387	138	125	170	185	165	215	4.70	7.15
70	0.443	0.268	168	155	210	225	200	270	6.58	10.01
95	0.320	0.193	204	185	255	265	235	330	8.93	13.59
120	0.253	0.153	230	210	300	300	265	380	11.28	17.16
150	0.206	0.124	265	230	342	335	300	430	14.10	21.45
185	0.164	0.0991	295	260	385	380	335	495	17.39	26.46
240	0.125	0.0754	340	300	450	435	385	590	22.56	34.32
300	0.100	0.0601	390	335	519	490	430	670	28.20	42.90
400	0.0778	0.0470	450	380	605	550	480	780	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, TWO CORE, ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, UNARMOURED CABLES 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS : 7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XY/ 2XY

SIZE (CROSS SECTIONAL AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	NOMINAL INNER SHEATH THICKNESS	NOMINAL OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALUMINIUM	COPPER					ALUM. COND. A2XY	CU. COND. 2XY
sq.mm	No's	No's	mm	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	0.30	1.80	12	180	240
6	1/3	1/3	0.70	0.30	1.80	13	220	300
10	1/7	1/7	0.70	0.30	1.80	14	250	420
16	7	7	0.70	0.30	1.80	15	280	450
25	7	7	0.90	0.30	2.00	18	400	700
35	7	7	0.90	0.30	2.00	19	450	900
50	7	7	1.00	0.30	2.00	21	600	1150
70	19	19	1.10	0.30	2.00	24	750	1550
95	19	19	1.10	0.40	2.20	27	950	2100
120	19	19	1.20	0.40	2.20	29	1150	2550
150	19	19	1.40	0.40	2.20	31	1350	3100
185	37	37	1.60	0.50	2.40	35	1700	3850
240	37	37	1.70	0.50	2.60	40	2150	5000
300	37	37	1.80	0.60	2.80	43	2650	6200
400	61	61	2.00	0.60	3.0	48	3300	7850

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	34	28	30	44	37	39	0.376	0.572
6	4.61	3.08	43	37	40	55	47	50	0.564	0.858
10	3.08	1.83	57	48	53	74	61	67	0.940	1.43
16	1.91	1.15	78	61	70	94	78	85	1.50	2.29
25	1.20	0.727	95	80	99	120	100	125	2.35	3.58
35	0.868	0.524	116	94	117	145	120	155	3.29	5.01
50	0.641	0.387	140	110	140	170	145	190	4.70	7.15
70	0.443	0.268	170	140	176	210	175	235	6.58	10.01
95	0.320	0.193	200	165	221	250	210	290	8.93	13.59
120	0.253	0.153	225	185	258	285	240	330	11.28	17.16
150	0.206	0.124	255	210	294	315	270	375	14.10	21.45
185	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
240	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
300	0.100	0.0601	370	305	461	460	390	590	28.20	42.90
400	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL , THREE CORE, ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, UNARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS : 7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XY/ 2XY

SIZE (CROSS SECTIONAL AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	NOMINAL INNER SHEATH THICKNESS	NOMINAL OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALUMINIUM	COPPER					ALUM. COND. A2XY	CU. COND. 2XY
sq.mm	No's	No's	mm	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	0.30	1.80	13	200	280
6	1/3	1/3	0.70	0.30	1.80	14	250	360
10	1/7	1/7	0.70	0.30	1.80	16	310	510
16	7	7	0.70	0.30	1.80	17	350	650
25	7	7	0.90	0.30	2.00	20	500	950
35	7	7	0.90	0.30	2.00	22	600	1250
50	7	7	1.00	0.30	2.00	24	800	1600
70	19	19	1.10	0.40	2.20	28	1050	2250
95	19	19	1.10	0.40	2.20	31	1300	3000
120	19	19	1.20	0.40	2.20	34	1600	3700
150	19	19	1.40	0.50	2.40	38	1950	4551
185	37	37	1.60	0.50	2.60	42	2450	5650
240	37	37	1.70	0.60	2.80	47	3100	7350
300	37	37	1.80	0.60	3.0	52	3800	9100
400	61	61	2.00	0.70	3.20	58	4750	11550

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	34	28	30	44	37	39	0.376	0.572
6	4.61	3.08	43	37	40	55	47	50	0.564	0.858
10	3.08	1.83	57	48	53	74	61	67	0.940	1.43
16	1.91	1.15	78	61	70	94	78	85	1.50	2.29
25	1.20	0.727	95	80	99	120	100	125	2.35	3.58
35	0.868	0.524	116	94	117	145	120	155	3.29	5.01
50	0.641	0.387	140	110	140	170	145	190	4.70	7.15
70	0.443	0.268	170	140	176	210	175	235	6.58	10.01
95	0.320	0.193	200	165	221	250	210	290	8.93	13.59
120	0.253	0.153	225	185	258	285	240	330	11.28	17.16
150	0.206	0.124	255	210	294	315	270	375	14.10	21.45
185	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
240	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
300	0.100	0.0601	370	305	460	460	390	590	28.20	42.90
400	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, THREE & HALF CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, UNARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS:7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XY/ 2XY

SIZE (CROSS SECTIONAL AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	NOMINAL INNER SHEATH THICKNESS	NOMINAL OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALUMINIUM	COPPER					ALUM. COND. A2XY	CU. COND. 2XY
sq.mm	No's	No's	mm	mm	mm	mm	Kg/Km	Kg/Km
3×25+16	7/7	7/7	0.90/0.70	0.30	2.0	21	600	1150
3×35+16	7/7	7/7	0.90/0.70	0.30	2.0	24	700	1400
3×50+25	7/7	7/7	1.0/0.90	0.30	2.0	26	900	1850
3×70+35	19/7	19/7	1.10/0.90	0.40	2.20	30	1200	2600
3×95+50	19/7	19/7	1.10/1.0	0.40	2.20	34	1500	3450
3×120+70	19/19	19/19	1.20/1.10	0.40	2.20	37	1800	4350
3×150+70	19/19	19/19	1.40/1.10	0.50	2.40	41	2250	5250
3×185+95	37/19	37/19	1.60/1.10	0.50	2.60	46	2800	6600
3×240+120	37/19	37/19	1.70/1.20	0.60	2.80	50	3550	8500
3×300+150	37/19	37/19	1.80/1.40	0.60	3.0	55	4300	10500
3×400+185	61/37	61/37	2.0/1.60	0.70	3.40	62	5450	13350

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
3×25+16	1.20	0.727	95	80	99	120	100	125	2.35	3.58
3×35+16	0.868	0.524	116	94	117	145	120	155	3.29	5.01
3×50+25	0.641	0.387	140	110	140	170	145	190	4.70	7.15
3×70+35	0.443	0.268	170	140	176	210	175	235	6.58	10.01
3×95+50	0.320	0.193	200	165	221	250	210	290	8.93	13.59
3×120+70	0.253	0.153	225	185	258	285	240	330	11.28	17.16
3×150+70	0.206	0.124	255	210	294	315	270	375	14.10	21.45
3×185+95	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
3×240+120	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
3×300+150	0.100	0.0601	370	305	460	460	390	590	28.20	42.90
3×400+185	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, FOUR CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, UNARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS:7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XY/ 2XY

SIZE (CROSS SECTIONAL AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	NOMINAL INNER SHEATH THICKNESS	NOMINAL OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALUMINIUM	COPPER					ALUM. COND. A2XY	CU. COND. 2XY
sq.mm	No's	No's	mm	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	0.30	1.80	14	230	340
6	1/3	1/3	0.70	0.30	1.80	15	290	430
10	1/7	1/7	0.70	0.30	1.80	17	360	630
16	7	7	0.70	0.30	1.80	19	450	800
25	7	7	0.90	0.30	2.00	22	600	1200
35	7	7	0.90	0.30	2.00	24	750	1600
50	7	7	1.00	0.30	2.00	27	950	2000
70	19	19	1.10	0.40	2.20	31	1300	2900
95	19	19	1.10	0.40	2.20	35	1700	3900
120	19	19	1.20	0.50	2.40	39	2100	4900
150	19	19	1.40	0.50	2.60	43	2550	6000
185	37	37	1.60	0.50	2.80	48	3150	7450
240	37	37	1.70	0.60	3.0	54	4000	9700
300	37	37	1.80	0.70	3.20	61	4950	12050
400	61	61	2.00	0.70	3.60	68	6250	15350

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	34	28	30	44	37	39	0.376	0.572
6	4.61	3.08	43	37	40	55	47	50	0.564	0.858
10	3.08	1.83	57	48	53	74	61	67	0.940	1.43
16	1.91	1.15	78	61	70	94	78	85	1.50	2.29
25	1.20	0.727	95	80	99	120	100	125	2.35	3.58
35	0.868	0.524	116	94	117	145	120	155	3.29	5.01
50	0.641	0.387	140	110	140	170	145	190	4.70	7.15
70	0.443	0.268	170	140	176	210	175	235	6.58	10.01
95	0.320	0.193	200	165	221	250	210	290	8.93	13.59
120	0.253	0.153	225	185	258	285	240	330	11.28	17.16
150	0.206	0.124	255	210	294	315	270	375	14.10	21.45
185	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
240	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
300	0.100	0.0601	370	305	460	460	390	590	28.20	42.90
400	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, SINGLE CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS:7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XFaY/2XFaY,A2XWaY/2XWaY

SIZE (CROSS SEC. AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	FLAT STRIP ARMOURED (A2XFaY/2XFaY)					(ROUND WIRE ARMOURED A2XWaY/2XWaY)				
				DIM. ARMOUR STRIP	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WT. OF CABLE		NOMINAL DIA OF ARMOUR WIRE.	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
												ALU. COND.	CU. COND.
	ALU.	COP.					A2XFaY	2XFaY				A2XWaY	2XWaY
sq.mm	No's	No's	mm	mm	mm	mm	Kg/Km	Kg/Km	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	N/A	N/A	N/A	N/A	N/A	1.40	1.24	10	120	150
6	1/3	1/3	0.70	N/A	N/A	N/A	N/A	N/A	1.40	1.24	11	130	170
10	1/7	1/7	0.70	N/A	N/A	N/A	N/A	N/A	1.40	1.24	12	150	220
16	7	7	0.70	N/A	N/A	N/A	N/A	N/A	1.40	1.24	12	200	300
25	7	7	0.90	N/A	N/A	N/A	N/A	N/A	1.40	1.24	14	250	400
35	7	7	0.90	N/A	N/A	N/A	N/A	N/A	1.40	1.24	15	300	500
50	7	7	1.00	N/A	N/A	N/A	N/A	N/A	1.40	1.24	16	360	650
70	19	19	1.10	N/A	N/A	N/A	N/A	N/A	1.40	1.24	18	450	850
95	19	19	1.10	4X0.80	1.40	19	500	1100	1.60	1.40	21	600	1150
120	19	19	1.20	4X0.80	1.40	21	600	1300	1.60	1.40	22	700	1400
150	19	19	1.40	4X0.80	1.40	23	700	1600	1.60	1.40	24	800	1650
185	37	37	1.60	4X0.80	1.40	25	900	1950	1.60	1.40	26	950	2050
240	37	37	1.70	4X0.80	1.40	27	1050	2500	1.60	1.40	29	1150	2600
300	37	37	1.80	4X0.80	1.56	30	1300	3100	1.60	1.56	32	1400	3200
400	61	61	2.00	4X0.80	1.56	34	1650	3900	2.0	1.56	36	1850	4100

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	-	-	-	48	47	45	0.376	0.572
6	4.61	3.08	45	45	40	60	59	57	0.564	0.858
10	3.08	1.83	59	62	53	80	78	77	0.940	1.43
16	1.91	1.15	76	80	73	104	102	106	1.50	2.29
25	1.20	0.727	99	90	115	130	115	145	2.35	3.58
35	0.868	0.524	117	110	140	155	140	175	3.29	5.01
50	0.641	0.387	138	125	170	185	165	215	4.70	7.15
70	0.443	0.268	168	155	210	225	200	270	6.58	10.01
95	0.320	0.193	204	185	255	265	235	330	8.93	13.59
120	0.253	0.153	230	210	300	300	265	380	11.28	17.16
150	0.206	0.124	265	230	342	335	300	430	14.10	21.45
185	0.164	0.0991	295	260	385	380	335	495	17.39	26.46
240	0.125	0.0754	340	300	450	435	385	590	22.56	34.32
300	0.100	0.0601	390	335	519	490	430	670	28.20	42.90
400	0.0778	0.0470	450	380	605	550	480	780	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, TWO CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS:7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XFY/2XFY,A2XWY/2XWY

SIZE (CROSS SEC. AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	MIN. INNER SHEATH THICK	FLAT STRIP ARMOURED (A2XFY/2XFY)					ROUND WIRE ARMOURED (A2XWY/2XWY)				
					DIM. ARMOUR STRIP	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WT. OF CABLE		NOMINAL DIA. OF ARMOUR WIRE	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALU.	COP.						ALU. COND.	CU. COND.				ALU. COND.	CU. COND.
								A2XFY	2XFY				A2XWY	2XWY
sq.mm	No's	No's	mm	mm	mm	mm	mm	Kg/Km	Kg/Km	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	14	370	470
6	1/3	1/3	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	15	460	550
10	1/7	1/7	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	17	530	700
16	7	7	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.40	17	550	750
25	7	7	0.90	0.30	4X0.80	1.40	18	550	850	1.60	1.40	20	750	1050
35	7	7	0.90	0.30	4X0.80	1.40	20	650	1050	1.60	1.40	21	850	1250
50	7	7	1.00	0.30	4X0.80	1.40	22	750	1350	1.60	1.40	23	1000	1550
70	19	19	1.10	0.30	4X0.80	1.56	25	1000	1800	1.60	1.56	26	1250	2050
95	19	19	1.10	0.40	4X0.80	1.56	27	1250	2350	2.0	1.56	30	1700	2800
120	19	19	1.20	0.40	4X0.80	1.56	30	1450	2850	2.0	1.56	32	1950	3350
150	19	19	1.40	0.40	4X0.80	1.72	32	1700	3450	2.0	1.72	35	2250	4000
185	37	37	1.60	0.50	4X0.80	1.72	35	2050	4200	2.0	1.88	38	2700	4850
240	37	37	1.70	0.50	4X0.80	1.88	40	2550	5400	2.50	2.04	44	3550	6350
300	37	37	1.80	0.60	4X0.80	2.04	43	3000	6550	2.50	2.20	47	4100	7650
400	61	61	2.00	0.60	4X0.80	2.36	49	4000	8300	2.50	2.36	52	4950	9500

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	34	28	30	44	37	39	0.376	0.572
6	4.61	3.08	43	37	40	55	47	50	0.564	0.858
10	3.08	1.83	57	48	53	74	61	67	0.940	1.43
16	1.91	1.15	78	61	70	94	78	85	1.50	2.29
25	1.20	0.727	95	80	99	120	100	125	2.35	3.58
35	0.868	0.524	116	94	117	145	120	155	3.29	5.01
50	0.641	0.387	140	110	140	170	145	190	4.70	7.15
70	0.443	0.268	170	140	176	210	175	235	6.58	10.01
95	0.320	0.193	200	165	221	250	210	290	8.93	13.59
120	0.253	0.153	225	185	258	285	240	330	11.28	17.16
150	0.206	0.124	255	210	294	315	270	375	14.10	21.45
185	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
240	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
300	0.100	0.0601	370	305	461	460	390	590	28.20	42.90
400	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, THREE CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS: 7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XFY/2XFY,A2XWY/2XWY

SIZE (CROSS SEC. AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	MIN. INNER SHEATH THICK	FLAT STRIP ARMOURED (A2XFY/2XFY)					ROUND WIRE ARMOURED (A2XWY/2XWY)				
					DIM. ARMOUR STRIP	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WT. OF CABLE		NOMINAL DIA. OF ARMOUR WIRE	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALU.	COP.						ALU. COND.	CU. COND.				ALU. COND.	CU. COND.
								A2XFY	2XFY				A2XWY	2XWY
sq.mm	No's	No's	mm	mm	mm	mm	mm	Kg/Km	Kg/Km	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	15	400	490
6	1/3	1/3	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	16	460	580
10	1/7	1/7	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	17	540	750
16	7	7	0.70	0.30	4X0.80	1.24	18	550	850	1.60	1.40	20	700	1000
25	7	7	0.90	0.30	4X0.80	1.40	20	700	1150	1.60	1.40	22	900	1350
35	7	7	0.90	0.30	4X0.80	1.40	22	850	1450	1.60	1.40	24	1050	1700
50	7	7	1.0	0.30	4X0.80	1.40	25	1000	1850	1.60	1.56	27	1300	2100
70	19	19	1.10	0.40	4X0.80	1.56	29	1350	2550	2.0	1.56	31	1800	3000
95	19	19	1.10	0.40	4X0.80	1.56	31	1600	3300	2.0	1.56	34	2150	3800
120	19	19	1.20	0.40	4X0.80	1.56	34	1900	4000	2.0	1.72	37	2550	4650
150	19	19	1.40	0.50	4X0.80	1.72	38	2350	4950	2.0	1.88	41	3000	5600
185	37	37	1.60	0.50	4X0.80	1.88	42	2850	6050	2.50	2.04	46	3950	7150
240	37	37	1.70	0.60	4X0.80	2.04	47	3500	7750	2.50	2.20	51	4800	9000
300	37	37	1.80	0.70	4X0.80	2.20	52	4250	9550	2.50	2.36	56	5600	10900
400	61	61	2.0	0.70	4X0.80	2.52	59	5350	12250	3.15	2.68	64	7450	14200

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. CON.	CU. CON.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	34	28	30	44	37	39	0.376	0.572
6	4.61	3.08	43	37	40	55	47	50	0.564	0.858
10	3.08	1.83	57	48	53	74	61	67	0.940	1.43
16	1.91	1.15	78	61	70	94	78	85	1.50	2.29
25	1.20	0.727	95	80	99	120	100	125	2.35	3.58
35	0.868	0.524	116	94	117	145	120	155	3.29	5.01
50	0.641	0.387	140	110	140	170	145	190	4.70	7.15
70	0.443	0.268	170	140	176	210	175	235	6.58	10.01
95	0.320	0.193	200	165	221	250	210	290	8.93	13.59
120	0.253	0.153	225	185	258	285	240	330	11.28	17.16
150	0.206	0.124	255	210	294	315	270	375	14.10	21.45
185	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
240	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
300	0.100	0.0601	370	305	460	460	390	590	28.20	42.90
400	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, THREE & HALF CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

IS:7098 PT-1

PHYSICAL PARAMETERS

CABLE CODE : A2XFY/2XFY,A2XWY/2XWY

SIZE (CROSS SEC. AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	MIN. INNER SHEATH THICK	FLAT STRIP ARMOURED (A2XFY/2XFY)					ROUND WIRE ARMOURED (A2XWY/2XWY)				
					DIM. ARMOUR STRIP	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WT. OF CABLE		NOMINAL DIA. OF ARMOUR WIRE	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALU.	COP.						A2XFY	2XFY				ALU. COND. A2XWY	CU. COND. 2XWY
sq.mm	No's	No's	mm	mm	mm	mm	mm	Kg/Km	Kg/Km	mm	mm	mm	Kg/Km	Kg/Km
3X25+16	7/7	7/7	0.90/0.70	0.30	4X0.80	1.40	22	800	1350	1.60	1.40	23	1000	1550
3X35+16	7/7	7/7	0.90/0.70	0.30	4X0.80	1.40	24	950	1650	1.60	1.40	26	1200	1900
3X50+25	7/7	7/7	1.0/0.90	0.30	4X0.80	1.40	27	1150	2150	1.60	1.56	28	1450	2400
3X70+35	19/7	19/7	1.10/0.90	0.40	4X0.80	1.56	31	1500	2850	2.0	1.56	33	2000	3400
3X95+50	19/7	19/7	1.10/1.0	0.40	4X0.80	1.56	34	1850	3800	2.0	1.56	36	2400	4350
3X120+70	19/19	19/19	1.20/1.10	0.40	4X0.80	1.72	38	2250	4700	2.0	1.72	40	2900	5400
3X150+70	19/19	19/19	1.40/1.10	0.50	4X0.80	1.72	41	2650	5600	2.0	1.88	44	3400	6400
3X185+95	37/19	37/19	1.60/1.10	0.50	4X0.80	1.88	46	3200	7000	2.50	2.04	50	4450	8200
3X240+120	37/19	37/19	1.70/1.20	0.60	4X0.80	2.04	50	4000	8900	2.50	2.2	54	5250	10200
3X300+150	37/19	37/19	1.80/1.40	0.60	4X0.80	2.20	55	4800	11000	2.50	2.36	59	6200	12400
3X400+185	61/37	61/37	2.0/1.60	0.70	4X0.80	2.52	62	5950	13850	3.15	2.68	66	8200	16050

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. CON.	CU. CON.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
3X25+16	1.20	0.727	95	80	99	120	100	125	2.35	3.58
3X35+16	0.868	0.524	116	94	117	145	120	155	3.29	5.01
3X50+25	0.641	0.387	140	110	140	170	145	190	4.70	7.15
3X70+35	0.443	0.268	170	140	176	210	175	235	6.58	10.01
3X95+50	0.320	0.193	200	165	221	250	210	290	8.93	13.59
3X120+70	0.253	0.153	225	185	258	285	240	330	11.28	17.16
3X150+70	0.206	0.124	255	210	294	315	270	375	14.10	21.45
3X185+95	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
3X240+120	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
3X300+150	0.100	0.0601	370	305	460	460	390	590	28.20	42.90
3X400+185	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



TECHNICAL DETAILS FOR SEEWEL, FOUR CORE ALUMINIUM/COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CABLES. 1.1 KV

SEEWEL
Your Reliable Source for Quality Cables

PHYSICAL PARAMETERS

CABLE CODE : A2XFY/2XFY, A2XWY/2XWY

SIZE (CROSS SEC. AREA)	MINIMUM NO. OF STRAND IN CONDUCTOR		NOMINAL INSULATION THICKNESS	MIN. INNER SHEATH THICK	FLAT STRIP ARMOUND (A2XFY/2XFY)					ROUND WIRE ARMOUND (A2XWY/2XWY)				
					DIM. ARMOUR STRIP	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WT. OF CABLE		NOMINAL DIA. OF ARMOUR WIRE	MINIMUM OUTER SHEATH THICKNESS	APPROX. OVERALL DIA. OF CABLE	APPROX. WEIGHT OF CABLE	
	ALU.	COP.						ALU.	COP.				ALU. COND.	CU. COND.
								A2XFY	2XFY				A2XWY	2XWY
sq.mm	No's	No's	mm	mm	mm	mm	mm	Kg/Km	Kg/Km	mm	mm	mm	Kg/Km	Kg/Km
4	1/3	1/3	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	16	440	560
6	1/3	1/3	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.24	17	520	670
10	1/7	1/7	0.70	0.30	N/A	N/A	N/A	N/A	N/A	1.40	1.40	19	620	900
16	7	7	0.70	0.30	4X0.80	1.40	20	650	1000	1.60	1.40	21	850	1200
25	7	7	0.90	0.30	4X0.80	1.40	22	850	1450	1.60	1.40	24	1100	1700
35	7	7	0.90	0.30	4X0.80	1.40	25	1000	1850	1.60	1.40	26	1300	2100
50	7	7	1.0	0.30	4X0.80	1.56	28	1300	2400	1.60	1.56	29	1550	2700
70	19	19	1.10	0.40	4X0.80	1.56	32	1650	3250	2.0	1.56	34	2200	3800
95	19	19	1.10	0.40	4X0.80	1.56	35	2000	4250	2.0	1.72	38	2700	4900
120	19	19	1.20	0.50	4X0.80	1.72	39	2500	5300	2.0	1.88	42	3200	6000
150	19	19	1.40	0.50	4X0.80	1.88	43	2950	6400	2.50	2.04	47	4100	7550
185	37	37	1.60	0.50	4X0.80	2.04	48	3600	7950	2.50	2.20	52	4850	9150
240	37	37	1.70	0.60	4X0.80	2.20	54	4500	10200	2.50	2.36	58	5950	11600
300	37	37	1.80	0.70	4X0.80	2.36	61	5500	12600	3.15	2.52	66	7750	14850
400	61	61	2.0	0.70	4X0.80	2.68	68	6850	15900	3.15	2.84	73	9350	18400

ELECTRICAL PARAMETERS

SIZE (CROSS SECTIONAL AREA)	MAXIMUM CONDUCTOR D.C RESISTANCE AT 20° C		NORMAL CURRENT RATING						SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURA.	
			FOR ALUMINIUM COND.			FOR COPPER COND.				
	ALUMINIUM	COPPER	Ground	Duct	Air	Ground	Duct	Air	ALU. COND.	CU. COND.
sq.mm	Ohm/Km	Ohm/Km	Amps	Amps	Amps	Amps	Amps	Amps	K. Amps	K. Amps
4	7.41	4.61	34	28	30	44	37	39	0.376	0.572
6	4.61	3.08	43	37	40	55	47	50	0.564	0.858
10	3.08	1.83	57	48	53	74	61	67	0.940	1.43
16	1.91	1.15	78	61	70	94	78	85	1.50	2.29
25	1.20	0.727	95	80	99	120	100	125	2.35	3.58
35	0.868	0.524	116	94	117	145	120	155	3.29	5.01
50	0.641	0.387	140	110	140	170	145	190	4.70	7.15
70	0.443	0.268	170	140	176	210	175	235	6.58	10.01
95	0.320	0.193	200	165	221	250	210	290	8.93	13.59
120	0.253	0.153	225	185	258	285	240	330	11.28	17.16
150	0.206	0.124	255	210	294	315	270	375	14.10	21.45
185	0.164	0.0991	285	235	339	355	300	435	17.39	26.46
240	0.125	0.0754	325	270	402	410	350	510	22.56	34.32
300	0.100	0.0601	370	305	460	460	390	590	28.20	42.90
400	0.0778	0.0470	435	350	542	520	440	670	37.60	57.20



SEEWEL
Your Reliable Source for Quality Cables

TECHNICAL DETAILS FOR
SEEWEL, 1.5 SQ.MM. COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CONTROL CABLES, 1.1 KV

PHYSICAL & ELECTRICAL PARAMETERS — CABLE CODE : 2XFY/2XWY

NO. OF CORE	MAX. CONDUCTUR D.C RESISTANCE AT 20°	MIN. INNER SHEATH THICK.	FLAT STRIP ARMOURED (2XFY)						ROUND WIRE CABLE ARMOURED (2XWY)						NORMAL CURRENT RATING XLPE INSULATION		SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURATION
			DIMENSION OF ARMOUR STRIP	MIN. OUTER SHEATH THICKNESS	APPROX OVERALL DIA. OF CABLE		APPROX WEIGHT OF CABLE		NOMINAL DIA OF ARMOUR WIRE	MIN OUTER SHEATH THICKNESS	APPROX OVERALL DIA. OF CABLE		APPROX WEIGHT OF CABLE				
					Solid. Cond.	Std. Cond.	Solid. Cond.	Std. Cond.			Solid. Cond.	Std. Cond.	Solid. Cond.	Std. Cond.	Ground	Duct/Air	
No.	0hm/km	mm	mm	mm	mm	mm	kg/km	kg/km	mm	mm	mm	mm	mm	mm	Amp	Amp	K.Amp
2	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	12	13	320	350	33	29	0.215
3	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	13	13	330	350	25	22	0.215
4	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	14	14	370	400	25	22	0.215
5	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	14	15	420	450	24	21	0.215
7	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	15	16	470	500	21	18	0.215
10	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	18	19	640	650	18	16	0.215
12	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.40	19	20	750	800	17	15	0.215
14	12.10	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.40	20	21	800	850	16	14	0.215
19	12.10	0.30	4 X 0.8	1.40	20	21	750	750	1.60	1.40	21	22	940	1000	15	13	0.215
24	12.10	0.30	4 X 0.8	1.40	23	24	920	950	1.60	1.40	24	25	1140	1250	13	12	0.215

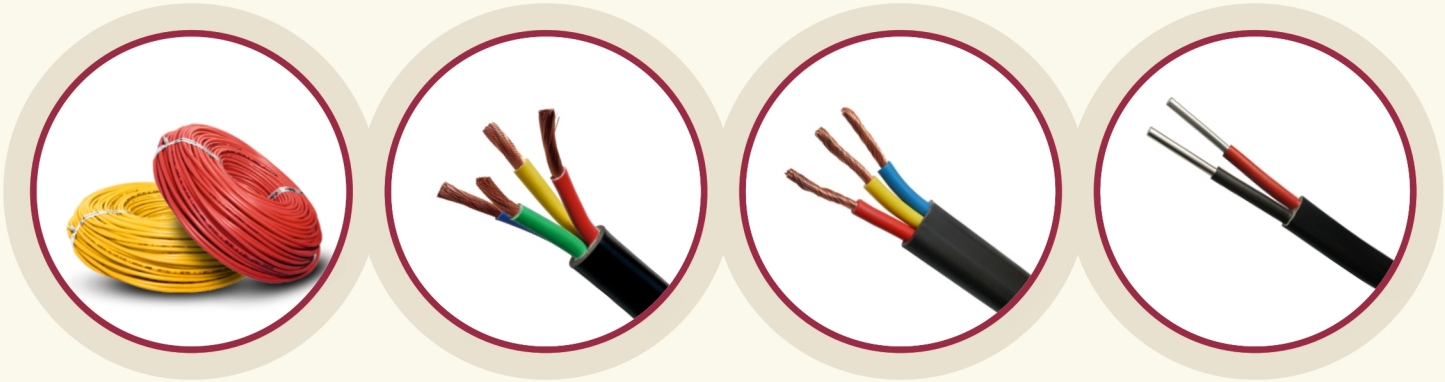
TECHNICAL DETAILS FOR
SEEWEL, 2.5 SQ.MM, COPPER CONDUCTOR, XLPE INSULATED, ARMOURED CONTROL CABLES 1.1 KV

PHYSICAL & ELECTRICAL PARAMETERS — CABLE CODE : A2FY/ 2XWY

NO. OF CORE	MAX. CONDUCTUR D.C RESISTANCE AT 20°	MIN. INNER SHEATH THICK.	FLAT STRIP ARMOURED (2XFY)						ROUND CABLE ARMOURED (2XWY)						NORMAL CURRENT RATING XLPE INSULATION		SHORT CIRCUIT CURRENT RATING FOR 1 SEC. DURATION
			DIMENSION OF ARMOUR STRIP	MIN. OUTER SHEAT THICKNESS	APPROX OVERALL DIA. OF CABLE		APPROX WEIGHT OF CABLE		NOMINAL DIA OF ARMOUR WIRE	MIN OUTER SHEATH THICKNESS	APPROX OVERALL DIA. OF CABLE		APPROX WEIGHT OF CABLE				
					Solid. Cond.	Std. Cond.	Solid. Cond.	Std. Cond.			Solid. Cond.	Std. Cond.	Solid. Cond.	Std. Cond.	Ground	Duct/Air	
No.	0hm/km	mm	mm	mm	mm	mm	kg/km	kg/km	mm	mm	mm	mm	mm	mm	Amp	Amp	K.Amp
2	7.41	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	13	13	370	400	39	32	0.358
3	7.41	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	14	14	390	410	34	30	0.358
4	7.41	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	15	15	440	460	34	30	0.358
5	7.41	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	15	16	500	520	31	28	0.358
7	7.41	0.30	N/A	N/A	N/A	N/A	N/A	N/A	1.40	1.24	16	17	590	610	27	25	0.358
10	7.41	0.30	4X0.8	1.24	19	20	650	690	1.60	1.40	20	21	850	880	24	21	0.358
12	7.41	0.30	4X0.8	1.40	19	20	700	750	1.60	1.40	21	22	920	950	22	20	0.358
14	7.41	0.30	4X0.8	1.40	20	21	790	830	1.60	1.40	22	23	1000	1030	21	19	0.358
19	7.41	0.30	4X0.8	1.40	22	23	970	1010	1.60	1.40	24	25	1200	1260	19	17	0.358
24	7.41	0.30	4X0.8	1.40	25	27	1190	1240	1.60	1.40	27	29	1480	1540	17	16	0.358

PVC CABLE RANGE

IS:694:2010



ADVANTAGE OF PVC CABLES

- A Non-hygroscopic Insulation almost unaffected by moisture.
- Complete Protection against most forms of electrolytic and chemical corrosion.
- Non-Migration of Compound permitting vertical Installation
- A tough and resilient sheath with excellent fire-resisting qualities.
- Good Ageing Characteristics.

FEATURES

- High Dielectric Strength & Resistance To Dc Voltage Effects
- High Mechanical Strength & Resistance To Abrasion, Vibration & Ageing
- Resistance To Most Acids Alkalis, To Temporary Contact With Solvents, Oils & Liquid Fluds
- Flame Retardant Does Not Support Combustion And Self-extinguishing
- Much Longer Life Of The Cables.



FR/FR-LSH/HR-FR MULTI STRAND SINGLE CORE WIRES

NOMINAL AREA OF CONDUCTOR	NORMAL THICKNESS OF INSULATION	APPROX OVERALL DIAMETER	MAX CONDUCTOR D.C RESISTANCE AT 20° C	CURRENT CARRYING CAPACITY 2 CABLE, SINGLE PHASE AC	
				ENCLOSED IN CONDUIT/ TRUNKING	UNENCLOSED CLIPPED TO A SURFACE OR ON CABLE TRAY
Sq.mm.	mm	mm	Ohms/ km	Amps	Amps
**1.0	0.60	2.8	18.10	11	12
**1.5	0.70	3.1	12.10	13	16
**2.5	0.80	3.8	7.41	18	22
*4.0	0.80	4.6	4.95	24	19
*6.0	0.80	5.3	3.30	31	37

** CONDUCTOR AS PER CLASS-2 OF IS:8130
* CONDUCTOR AS PER CLASS-5 OF IS:8130



FR/FR-LSH/HR-FR MULTI STRAND SINGLE CORE WIRES

NOMINAL AREA OF CONDUCTOR	NOMINAL THICKNESS OF INSULATION	APPROX OVERALL DIAMETER	MAX D.C CONDUCTOR RESISTANCE AT 20° C	CURRENT CARRYING CAPACITY BUNCHED & ENCLOSED IN CONDUIT OR TRUCKING		CURRENT CARRYING CAPACITY CLIPPED DIRECT TO A SURFACE OR ON CABLE TRAY BUNCHED & UNENCLOSED	
				2 CABLES SINGLE PHASE AC OR DC	3 OR 4 CABLES 3 PHASE AC	2 CABLES SINGLE PHASE AC OR DC	3 OR 4 CABLES 3 PHASE AC
Sq.mm.	mm	mm	Ohms/ km	Amps	Amps	Amps	Amps
10	1.0	6.5	1.91	42	35	51	45
16	1.0	7.5	1.21	57	48	68	61
25	1.2	9.5	0.780	71	60	86	75
35	1.2	10.5	0.554	91	77	110	99
50	1.4	12.0	0.386	120	100	145	135

** CONDUCTOR AS PER CLASS-5 OF IS:8130



FR/FR-LSH/HR-FR MULTI STRAND SINGLE CORE WIRES

NOMINAL AREA OF CONDUCTOR	NOMINAL THICKNESS OF INSULATION	APPROX OVERALL DIAMETER	MAX D.C CONDUCTOR RESISTANCE AT 20° C	CURRENT CARRYING CAPACITY CLIPPED DIRECT TO A SURFACE OR ON CABLE TRAY BUNCHED & UNENCLOSED		CURRENT CARRYING CAPACITY	
				2 CABLES SINGLE PHASE AC OR DC	3 OR 4 CABLES 3 PHASE AC	FLAT OR VERTICAL 2 CABLES SINGLE PHASE AC OR DC OR 3 OR 4 CABLES 3 PHASE AC	TREFOIL (3 CABLES 3 PHASE AC)
Sq.mm.	mm	mm	Ohms/ kn	Amps	Amps	Amps	Amps
70	1.4	14.5	0.272	200	180	215	185
95	1.6	16.0	0.206	235	215	260	230
120	1.6	18.5	0.161	270	240	305	267
150	1.8	21.0	0.129	310	280	355	305
185	2.0	23.0	0.106	360	320	415	350
240	2.2	27.0	0.080	425	385	500	420
300	2.4	30.0	0.064	490	440	585	490

*CONDUCTOR AS PER CLASS-5 OF IS:8130



FR/FR-LSH/HR-FR ROUND FLEXIBLE CABLE

NOMINAL AREA OF CONDUCTOR	MAX CONDUCTOR RESISTANCE AT 20°C	NOM THICKNESS OF INSULATION	APPX. DIA OVER INSULATION	NOM SHEATH THICKNESS			APPX. OVERALL DIAMETER			2 CORE SINGLE PHASE AC	CURRENT RATING	
				2 CORE	3 CORE	4 CORE	2 CORE	3 CORE	4 CORE		2 CORE SINGLE PHASE AC	3/4 CORE THREE PHASE AC
Sq.mm.	Ohms/Km	mm	mm	mm	mm	mm	mm	mm	mm	Amps	Amps	Amps
0.75	*26.0	0.6	2.5	0.9	0.9	0.9	6.8	7.2	7.8	7	-	-
1.00	**18.1	0.6	2.6	1.2	1.2	1.2	7.5	8.0	8.7	11	-	-
1.50	**12.1	0.7	3.0	1.2	1.2	1.3	8.6	8.9	10.0	14	-	-
2.50	**7.41	0.8	3.7	1.3	1.3	1.3	10.0	10.6	11.6	19	-	-
4.00	*4.95	0.8	4.3	1.0	1.0	1.0	11.0	11.5	13.0	26	-	-
6	*3.30	0.8	5.1	1.10	1.20	1.20	12.5	13.3	14.8	-	34	30
10	*1.91	1.0	6.6	1.30	1.40	1.40	15.6	16.6	18.6	-	44	39
16	*1.21	1.0	8.0	1.40	140	1.40	18.6	19.9	22.2	-	61	55
25	*780	1.2	10.0	1.40	1.50	1.60	23.0	24.6	27.4	-	69	60
35	*.554	1.2	11.0	1.60	1.60	1.70	25.3	26.0	28.0	-	88	77
50	*.386	1.4	13.4	2.0	2.0	2.0	30.1	32.0	33.0	-	116	102

*CONDUCTOR AS PER CLASS-5 OF IS:8130
**CONDUCTOR AS PER CLASS-2 OF IS:8130



FR/FR-LSH/HR-FR MULTICORE CABLES

NO. OF CORES	NOMINAL AREA OF CONDUCTOR	NOM. THICKNESS OF INSULATION	NOM. THICKNESS OF SHEATH	APPROX. OVERALL DIAMETER	MAX. CONDUCTOR D.C RESISTANCE AT 20° C	CURRENT RATING
No.	Sq.mm.	mm	mm	mm	Ohms/ km	Amps
5	1.5	0.6	1.0	10.0	12.1	14
6	1.5	0.6	1.0	10.8	12.1	14
7	1.5	0.6	1.0	11.52	12.1	13
8	1.5	0.6	1.10	12.2	12.1	12
10	1.5	0.6	1.10	13.6	12.1	11
12	1.5	0.6	1.10	14.70	12.1	10
14	1.5	0.6	1.20	15.90	12.1	9
16	1.5	0.6	1.20	16.80	12.1	9
19	1.5	0.6	1.30	18.30	12.1	8
24	1.5	0.6	1.40	20.50	12.1	7
5	2.5	0.7	1.0	11.6	7.41	19
6	2.5	0.7	1.10	12.80	7.41	18
7	2.5	0.7	1.10	13.65	7.41	17
8	2.5	0.7	1.20	14.60	7.41	16
10	2.5	0.7	1.30	16.30	7.41	15
12	2.5	0.7	1.30	17.60	7.41	14
14	2.5	0.7	1.30	18.80	7.41	13
16	2.5	0.7	1.40	20.10	7.41	12
19	2.5	0.7	1.40	21.70	7.41	10
24	2.5	0.7	1.50	24.20	7.41	9

** CONDUCTOR AS PER CLASS-2 OF IS:8130



SUBMERSIBLE CABLE

NOMINAL AREA OF CONDUCTOR	MAX. CONDUCTOR D.C RESISTANCE AT 20° C	NOM. INSULATION THICKNESS	NOM. OUTER SHEATH THICKNESS	APPROX. OVERALL DIMENSIONS (W X T)	CURRENT RATING
Sq.mm.	Ohms/ km	mm	mm	mm	Amps
1.0	**18.1	0.6	0.9	7.50 X 4.60	11
1.5	**12.1	0.6	0.9	8.0 X 4.95	14
2.5	**7.41	0.7	1.0	9.50 X 5.90	19
4.0	*4.95	0.8	1.0	11 X 6.60	26
6.0	*3.30	0.8	1.1	12.50 X 7.30	30
10	*1.91	1.0	1.4	15.80 X 9.25	39
16	*1.21	1.0	1.4	18 X 10.40	55

** CONDUCTOR AS PER CLASS-2 OF IS:8130
* CONDUCTOR AS PER CLASS-5 OF IS:8130



ALUMINIUM TWIN FLAT CABLE

NOMINAL AREA OF CONDUCTOR	MAX. CONDUCTOR D.C RESISTANCE AT 20° C	NOM. INSULATION THICKNESS	NOM. OUTER SHEATH THICKNESS	APPROX. OVERALL DIMENSIONS (W X T)	CURRENT RATING
Sq.mm.	Ohms/ km	mm	mm	mm	Amps
2.5	12.1	0.7	1.0	9.2 X 5.6	19
6.0	4.61	0.8	1.1	11.2 X 6.8	32
10.0	3.08	1.0	1.40	13.8 x 8.0	42
16.0	1.91	1.0	1.40	16.8 x 9.7	58

*2.5 MM² TO 10MM² CONDUCTOR SHALL BE EITHER SOLID OR STRANDED
*ALL SIZES ABOVE 10MM² SHALL BE STRANDED



AERIAL BUNCHED CABLE

IS : 14255 : 1995

SEEWEL Aerial Bunched Cable with Aluminium Conductor, XLPE insulated Suitably laid up as per IS:14255:1995 of Product Range up to 3c x 150 sq.mm + 70 + 16

SEEWEL Aerial Bunched Cable 1.1 KV Grade Stranded & Compacted Aluminium Phase Conductor and Stranded messenger Conductor with Aluminium Alloy, Phase Conductor in insulated with XLPE Compound, Messenger is either insulated or Bare Referred Specification IS:14255:1995 up to the latest amendment

SR. NO	DESCRIPTION & TYPE OF CABLE	NUMBER OF WIRE		THICKNESS OF XLPE INSULATION		APPROX. OVERALL DIAMETER	APPROX. WEIGHT OF CABLE	BREAKING LOAD OF MSG.	MAX. D.C. RESISTANCE OHM/KM		AC CURRENT RATING AMPS.
		Phase	MSG.	Phase	MSG.						
		Nos.	Nos.	mm	mm	mm	kg/km	KN(Min.)	Phase	MSG.	In air 40° C
	WITH INSULATED MESSENGER CONDUCTOR										
1	1 c x 16 mm² + 25 mm² (insulated)	7	7	1.20	1.20	20.0	165	7.0	1.91	1.380	72
2	3 c x 16 mm² + 25 mm² (insulated)	7	7	1.20	1.20	22.0	301	7.0	1.91	1.380	64
3	1 c x 25 mm² + 25 mm² (insulated)	7	7	1.20	1.20	22.40	195	7	1.20	1.380	99
4	3 c x 25 mm² + 25 mm² (insulated)	7	7	1.20	1.20	25.0	390	7	1.20	1.380	84
5	1 c x 35 mm² + 25 mm² (insulated)	7	7	1.20	1.20	27.30	227	7	0.868	1.380	120
6	3 c x 35 mm² + 25 mm² (insulated)	7	7	1.20	1.20	27.40	486	7	0.868	1.380	110
7	1 c x 35 mm² + 35 mm² (insulated)	7	7	1.20	1.20	28.0	259	10.1	0.868	0.986	120
8	3 c x 35 mm² + 35 mm² (insulated)	7	7	1.20	1.20	28.40	518	10.1	0.868	0.986	105
9	1 c x 50 mm² + 35 mm² (insulated)	7	7	1.50	1.20	29.0	317	10.1	0.641	0.986	150
10	3 c x 50 mm² + 35 mm² (insulated)	7	7	1.50	1.20	32.30	692	10.1	0.641	0.986	130
11	3 c x 70 mm² + 50 mm² (insulated)	19	7	1.50	1.50	37.50	939	14.0	0.443	0.689	155
12	3 c x 70 mm² + 70 mm² (insulated)	19	19	1.50	1.50	39.0	1002	19.7	0.443	0.492	155
13	3 c x 95 mm² + 70 mm² (insulated)	19	19	1.50	1.50	42.7	1237	19.7	0.32	0.492	190
14	3 c x 120 mm² + 70 mm² (insulated)	19	19	1.60	1.50	46.0	1482	19.7	0.253	0.492	220
15	3 c x 150 mm² + 70 mm² (insulated)	19	19	1.80	1.50	50.0	1791	19.7	0.206	0.492	250

SR. NO	DESCRIPTION & TYPE OF CABLE	NUMBER OF WIRE		THICKNESS OF XLPE INSULATION		APPROX. OVERALL DIAMETER	APPROX. WEIGHT OF CABLE	BREAKING LOAD OF MSG.	MAX. D.C. RESISTANCE OHM/KM		AC CURRENT RATING AMPS.
		Phase	MSG.	Phase	MSG.						
		Nos.	Nos.	mm	mm	mm	kg/km	KN(Min.)	Phase	MSG.	In air 40° C
	WITH BARE MESSENGER CONDUCTOR										
1	1 c x 16 mm² + 25 mm² (Bare)	7	7	1.20	N.A.	18.5	137	7.0	1.91	1.380	72
2	3 c x 16 mm² + 25 mm² (Bare)	7	7	1.20	N.A.	19.3	272	7.0	1.91	1.380	64
3	1 c x 25 mm² + 25 mm² (Bare)	7	7	1.20	N.A.	19.5	167	7	1.20	1.380	99
4	3 c x 25 mm² + 25 mm² (Bare)	7	7	1.20	N.A.	20.5	362	7	1.20	1.380	84
5	1 c x 35 mm² + 25 mm² (Bare)	7	7	1.20	N.A.	22.0	199	7	0.868	1.380	120
6	3 c x 35 mm² + 25 mm² (Bare)	7	7	1.20	N.A.	23.50	458	7	0.868	1.380	110
7	1 c x 35 mm² + 35 mm² (Bare)	7	7	1.20	N.A.	24.60	226	10.1	0.868	0.986	120
8	3 c x 35 mm² + 35 mm² (Bare)	7	7	1.20	N.A.	25.0	485	10.1	0.868	0.986	105
9	1 c x 50 mm² + 35 mm² (Bare)	7	7	1.50	N.A.	26.6	284	10.1	0.641	0.986	150
10	3 c x 50 mm² + 35 mm² (Bare)	7	7	1.50	N.A.	26.8	659	10.1	0.641	0.986	130
11	3 c x 70 mm² + 50 mm² (Bare)	19	7	1.50	N.A.	31.20	890	14.0	0.443	0.689	155
12	3 c x 70 mm² + 70 mm² (Bare)	19	19	1.50	N.A.	34.4	946	19.7	0.443	0.492	155
13	3 c x 95 mm² + 70 mm² (Bare)	19	19	1.50	N.A.	36.0	1179	19.7	0.32	0.492	190
14	3 c x 120 mm² + 70 mm² (Bare)	19	19	1.60	N.A.	38.0	1425	19.7	0.253	0.492	220
15	3 c x 150 mm² + 70 mm² (Bare)	19	19	1.80	N.A.	40.0	1735	19.7	0.206	0.492	250

IS : 14255 : 1995

SEEWEL Aerial Bunched Cable 1.1 KV Grade Stranded & Compacted Aluminium Phase Conductor and Stranded messenger Conductor with Aluminium Alloy, Phase Conductor in insulated with XLPE Compound, Messenger is either insulated or Bare with lighting conductor of 16 mm Referred Specification IS:14255:1995 up to the latest amendment"

SR. NO	DESCRIPTION & TYPE OF CABLE	NUMBER OF WIRE		THICKNESS OF XLPE INSULATION		APPROX. OVERALL DIAMETER	APPROX. WEIGHT OF CABLE	BREAKING LOAD OF MSG.	Max. D.C. Resistance Ohm/km		AC Current Rating amps.
		Phase	MSG.	Phase	MSG.						
		Nos.	Nos.	mm	mm	mm	kg/km	KN(Min.)	Phase	MSG.	In air 40° C
	WITH INSULATED MESSENGER CONDUCTOR										
1	3 c x 16 mm^2 + 25 mm^2 (insulated) + 16 mm^2	7	7	1.20	1.20	23.50	369	7.0	1.91	1.380	62
2	3 c x 25 mm^2 + 25 mm^2 (insulated) + 16 mm^2	7	7	1.20	1.20	25.0	457	7.0	1.20	1.380	84
3	3 c x 35 mm^2 + 25 mm^2 (insulated) + 16 mm^2	7	7	1.20	1.20	27.50	554	7.0	0.868	1.380	103
4	3 c x 35 mm^2 + 35 mm^2 (insulated) + 16 mm^2	7	7	1.20	1.20	28.40	586	10.1	0.868	0.986	103
5	3 c x 50 mm^2 + 35 mm^2 (insulated) + 16 mm^2	7	7	1.50	1.20	32.50	760	10.1	0.641	0.986	127
6	3 c x 70 mm^2 + 50 mm^2 (insulated) + 16 mm^2	19	7	1.50	1.50	37.50	1007	14.0	0.443	0.689	154
7	3 c x 70 mm^2 + 70 mm^2 (insulated) + 16 mm^2	19	19	1.50	1.50	39.50	1070	19.7	0.443	0.492	154
8	3 c x 95 mm^2 + 70 mm^2 (insulated) + 16 mm^2	19	19	1.50	1.50	42.5	1304	19.7	0.32	0.492	188
9	3 c x 120 mm^2 + 70 mm^2 (insulated) + 16 mm^2	19	19	1.60	1.50	46.80	1550	19.7	0.253	0.492	218
	3 c x 150 mm^2 + 70 mm^2 (insulated) + 16 mm^2	19	19	1.80	1.50	50.80	1860	19.7	0.206	0.492	248

SR. NO	DESCRIPTION & TYPE OF CABLE	NUMBER OF WIRE		THICKNESS OF XLPE INSULATION		APPROX. OVERALL DIAMETER	APPROX. WEIGHT OF CABLE	BREAKING LOAD OF MSG.	MAX. D.C. RESISTANCE OHM/KM		AC CURRENT RATING AMPS.
		Phase	MSG.	Phase	MSG.						
		Nos.	Nos.	mm	mm	mm	kg/km	KN(Min.)	Phase	MSG.	In air 40° C
	WITH BARE MESSENGER CONDUCTOR										
1	3 c x 16 mm^2 + 25 mm^2 (Bare) + 16 mm^2	7	7	1.20	N.A.	19.5	340	7.0	1.91	1.380	62
2	3 c x 25 mm^2 + 25 mm^2 (Bare) + 16 mm^2	7	7	1.20	N.A.	20.5	429	7	1.20	1.380	84
3	3 c x 35 mm^2 + 25 mm^2 (Bare) + 16 mm^2	7	7	1.20	N.A.	23.50	526	7	0.868	1.380	103
4	3 c x 35 mm^2 + 35 mm^2 (Bare) + 16 mm^2	7	7	1.20	N.A.	25.0	553	10.1	0.868	0.986	103
5	3 c x 50 mm^2 + 35 mm^2 (Bare) + 16 mm^2	7	7	1.50	N.A.	26.8	727	10.1	0.641	0.986	127
6	3 c x 70 mm^2 + 50 mm^2 (Bare) + 16 mm^2	19	7	1.50	N.A.	31.50	958	14.0	0.443	0.689	154
7	3 c x 70 mm^2 + 70 mm^2 (Bare) + 16 mm^2	19	19	1.50	N.A.	34.5	1013	19.7	0.443	0.492	154
8	3 c x 95 mm^2 + 70 mm^2 (Bare) + 16 mm^2	19	19	1.50	N.A.	37.0	1248	19.7	0.32	0.492	188
9	3 c x 120 mm^2 + 70 mm^2 (Bare) + 16 mm^2	19	19	1.60	N.A.	39.0	1493	19.7	0.253	0.492	218
10	3 c x 150 mm^2 + 70 mm^2 (Bare) + 16 mm^2	19	19	1.80	N.A.	40.0	1803	19.7	0.206	0.492	248

NOTE

- Insulation Thickness of 16 mm for lighting conductor–1.20 mm, Ambient Air Temperature is 40° C
- Current Rating of 16 mm lighting conductor - 60 Amps
- Conductor Operating Temperature - 90° C
- Short circuit temperature for one sec. - 250° C

RATING & DE- RATING FACTOR TABLE

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Rating factor for variation in air temperature:

AIR TEMPERATURE	20	25	30	35	40	45	50
RATING FACTOR	1.32	1.25	1.16	1.09	1	0.9	0.81

DE- RATING FACTOR TABLE

Rating Factor for variation in ambient air temperature for cable in free air.

Ambient air temperature	25°c	30°c	35°c	40°c	45°c	50°c	55°c	60°c
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90° C

Rating Factor for variation in ground temperature for direct buried cable

Ground Temprature	15°c	20°c	25°c	30°c	35°c	40°c	45°c	50°c
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90° C

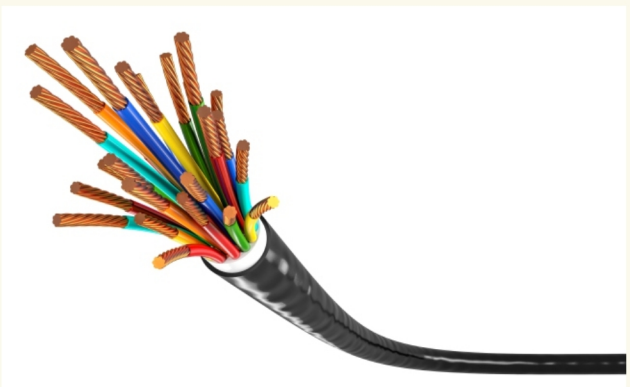
Rating Factor for variation in ground temperature for cable in duct.

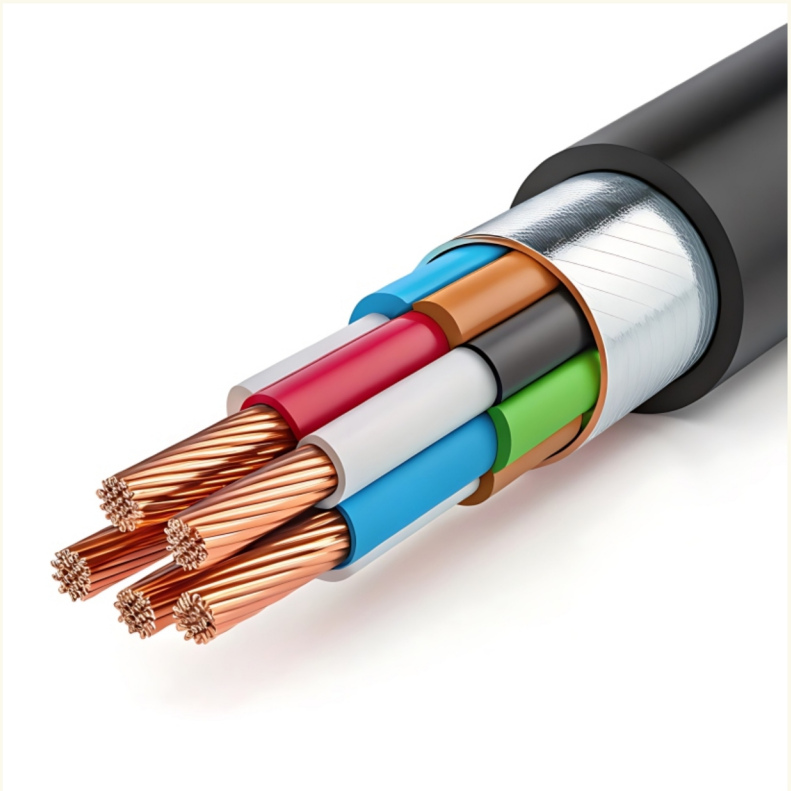
Ground Temprature	15°c	20°c	25°c	30°c	35°c	40°c	45°c	50°c
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90° C

* For glands and lugs - Please consult with Seewel







RECOMMENDATION FOR
HANDLING, STORAGE & INSTALLATION OF POWER CABLES

Proper care and precautions should be taken while handling, storage and installation of Power cables. The general recommendations are as follows :

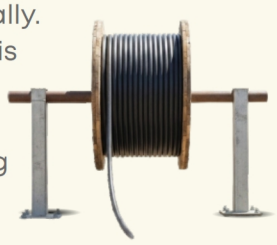


HANDLING: The cable drums should be unloaded from trucks or railway wagons with the help of crane, fork lift or using a proper ramp with 1:3 or 1:4 incline so as to avoid damage to the outer layer of cables, The cable with drum or without with drum should never be thrown or dropped on the ground from the truck or wagon. The cable drum should always be stored with flanges vertical and lying flat on the ground. The drum should be rolled in the direction of arrow to avoid loosening and entanglement of cable winding. The drum should not be rolled on rocky uneven surface with sharp projections.

STORAGE: The cable drum should be stored in dry covered area having concrete/firm surface. The drum should be stored in such a way that the bottom end of cable is not damaged, Cable drums should not be stored one above the other



INSTALLATION: Cable should be unwound from the drum after lifting the drum on the centre shaft supported on both the ends with suitable jacks/ stand. if the cable is in coil form then it should be unwound by putting the coil on a rotating pat off or by rolling the coil held vertically. if unwinding the coil by rolling then it should be ensured that the ground surface is even and smooth so that the cable is not damaged.
The cable drum should always be stored with flanges vertical and lying flat on the ground. The drum should be rolled in the direction of arrow to avoid loosening and entanglement of cable winding. The drum should not be rolled on rocky uneven surface with sharp projections.



Recommended safe pulling force in Newtons when cable is pulled with pulling eys is:

a) For Aluminium Conductor Cable	30 x total conductor area in sq.mm
b) For Copper Conductor Cable	50 x total conductor area in sq.mm

Recommended safe pulling force in Newtons when cable is pulled with stockings is:

a) For Armoured Cable	9 x D Square
b) For Unarmoured Cable	5 x D Square

Recommended minimum bending radius of power cable is :

POWER CABLE	1.1 Kv Cables
SINGLE CORE CABLES	15 x D
MULTICORE CABLES	12 x D

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