

Siechem

Wires & Cables

Sietherm 155 Flexible Single core EBXL Class F Connecting leads

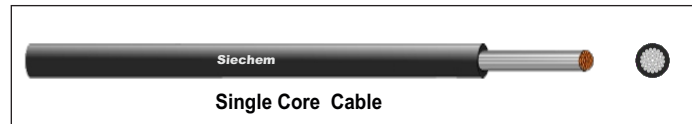
Sietherm 155 Flexible Single core Electron Beam Cross Llinked, Halogen-free very high and low temperature resistant cables are designed for Coil winding, Motors, Transformers, Pumps, Magnets, Relays, Electromagnets, Sensor leads, Solenoid walls, Signal systems, Wind mills, Power stations and other Industrial applications.

Salient Features

Operating temperature -55°C to +155°C
(Briefly -70°C to +180°C)
Compatible with all common insulating varnishes & impregnation of resins
Fire retardant and Halogen free
Weather resistant
High abrasion resistance
Ozone & UV resistant
Oil & grease resistant
High tracking resistance
Easily strippable & very flexible
Hot pressure resistant
Soldering iron resistant
High current carrying capacity
Short Circuit resistance upto +300°C for 60 Sec.



Electron Beam Accelerator



Cable Construction

Conductor : Tinned Flexible Copper Conductor-Class 5 & Class 6 of EN 60228 (Bare Copper Conductor Optional)
Insulation : Sietherm 155 Electron Beam Cross Linked Polyolefin copolymer compound
Colour : As per customer order



Siechem Wires & Cables Meet EU RoHS Directive

Lead Free	Hg Free	Cd Free	Cr ⁶⁺ Free	PBB Free	PBDE Free
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Sietherm 155°C Class F Connecting leads

Sietherm 155 insulation material has very low calorific value of combustion and do not support fire. This material contains low smoke, halogen free, no emission of corrosive gases and least toxic. The specially formulated Polyolefin material is suitable for a continuous operating temperature range of -55°C to +155°C and the high short circuit rating upto 300°C, enables with higher overloading capacity and significantly improved cable life, safety and trouble free services for decades. The cables have withstood at continuous operating temperature of 155°C for 20,000 hours without deterioration of the insulation layer.

SIETHERM 155 SINGLE CORE FLEXIBLE CABLES

Part Number	Size (Sq.mm)	No. of Wires / Max. Stand dia of Conductor (mm)	Conductor Diameter (mm)	Nominal Insulation Thickness (mm)	Nominal Overall Cable Diameter (mm)	Max. DC Resistance at 20° C (Ohm/Km)	Nom. Cable Weight (kg/km)	Current Rating (Amps)
18803XX*	0.25	19 X 0.13	0.6	0.40	1.45 ± 0.15	85.9	4.2	12
18870XX*	0.34	19 X 0.16	0.8	0.40	1.60 ± 0.15	52.1	5.3	19
18806XX*	0.50	19 X 0.19	0.9	0.40	1.70 ± 0.15	40.1	7.6	25
18808XX*	0.75	24 X 0.21	1.1	0.50	2.20 ± 0.15	26.7	11	32
18810XX*	1	32 X 0.21	1.3	0.60	2.60 ± 0.15	20.0	15	39
18813XX*	1.5	30 X 0.26	1.5	0.60	2.70 ± 0.15	13.7	19	48
18816XX*	2.5	50 X 0.26	2.0	0.65	3.35 ± 0.20	8.21	30	65
18819XX*	4	56 X 0.31	2.6	0.70	4.05 ± 0.20	5.09	45	88
18823XX	6	176 X 0.21	3.2	0.90	5.20 ± 0.20	3.39	67	113
18827XX	10	288 X 0.21	4.2	1.00	6.40 ± 0.20	1.95	107	165
18828XX	16	464 X 0.21	5.2	1.10	7.60 ± 0.30	1.24	164	222
18830XX	25	720 X 0.21	6.5	1.25	9.20 ± 0.30	0.795	248	294
18832XX	35	1008 X 0.21	7.7	1.35	10.6 ± 0.30	0.565	343	370
18834XX	50	648 X 0.31	9.2	1.40	12.3 ± 0.30	0.393	480	471
18837XX	70	928 X 0.31	11.0	1.55	14.6 ± 0.50	0.277	668	592
18838XX	95	1256 X 0.31	12.6	1.70	16.3 ± 0.50	0.210	890	719
18841XX	120	1592 X 0.31	14.3	1.80	18.4 ± 0.50	0.164	1110	840
18842XX	150	1984 X 0.31	15.9	2.00	20.8 ± 0.50	0.132	1389	974
18844XX	185	1400 X 0.41	17.6	2.10	22.5 ± 0.50	0.108	1694	1114
18846XX	240	1816 X 0.41	20.2	2.20	25.7 ± 0.50	0.0817	2169	1345
18848XX	300	2379 X 0.41	21.5	2.30	27.0 ± 0.50	0.0654	2692	1553
18849XX	400	3172 X 0.41	26.0	2.40	30.6 ± 0.50	0.0495	3543	1989

TECHNICAL DETAILS

S.No.	Parameters	Values
1	Temperature Range	-55°C - + 155°C
2	Voltagess For Cross- Section ≥ 0.75 mm² Rated Voltage Cond.Earth U ₀ Rated Voltage Cond.Cond U Maximum Permitted Operating Voltage Cond.Earth Maximum Permitted Operating Voltage Cond.Cond U _m Maximum Permitted Operating Voltage Cond.Earth V ₀ Maximum Permitted Operating Voltage Cond.Cond Test Voltage	600 V AC 1000V AC 720 V AC 1200 V AC 900 V DC 1800 V DC 3500 V AC
3	Voltagess For Cross- Section < 0.75 mm² Rated Voltage Cond.Earth U ₀ Rated Voltage Cond.Cond U Maximum Permitted Operating Voltage Cond.Earth Maximum Permitted Operating Voltage Cond. U _m Maximum Permitted Operating Voltage Cond.Earth V ₀ Maximum Permitted Operating Voltage Cond.Cond Test Voltage	450 V AC 750 V AC 480 V AC 825 V AC 620 V DC 1240 V DC 2500 V AC
4	Minimum Bending Radius: Outer Diameter ≤ 12mm Outer Diameter > 12mm	3 X D 4 X D
5	Nominal Voltage	Minimum ≤ 0.5 mm² = 450/750 V ≥ 0.75 mm² = 600/1000 V
6	Test Voltage	Minimum ≤ 0.5 mm² = 2500 V ≥ 0.75 mm² = 3500 V

Fire Test:-

- Assessment of Halogen : EN 50267-2-2
- Toxicity : EN 50305
- Smoke Emission : EN 61034 P-2
- Flame Propagation : EN 60332 P-1
- Siechem Wires meet EU RoHS norms.

- Conductor : *Class 5 / Class 6 EN 60228
- Thermal Ageing : 180°C for 10 days
- Cold Bend Test : EN 60811 P-1
- Abrasion Resistance : EN 50305
- Fuel / Mineral / Acid & Alkaline Resistance : EN 50305

Note : XX* : Please add last two digits in the part number as per the colour code given hereunder replacing XX while ordering.

Red - 01	Yellow - 02	Blue - 03	Black - 04	Green - 05	Yellow-Green - 06	Grey - 07	Brown - 08	White - 09	Orange - 10	Violet - 11
Chocolate - 12	Tan - 13	Charcoal - 14	LT Blue - 15	DK Grey - 16	LT Green - 17	DK Green - 18	DK Blue - 19	Purple - 20	Pink - 21	

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Approvals & Licenses											
ISO 9001	ISO 14001	IAFT 16949	OHSAS 18001	AS 9100	ISO 45001	UL	CE	UL	UL	UL	UL
ESMA	SGS	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE

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