



HIGH TEMPERATURE CABLES

Application:

Used for very high temperature applications in steel, chemical & metallurgical industry, nuclear power plants, oil exploration & oil rigs, military & defence equipments, aircraft & aerospace vehicle wiring, auto wiring, electrical appliances, etc.

Types & Sizes:

Starting from Single-core 0.50 sq.mm and up to higher sizes depending on customer requirements

Conductor:

Bare/ Tinned copper (up to 150°C),
Silver plated copper (up to 200°C),
Nickel plated conductor (up to 260°C) or
Thermocouples (KX, JX, TX, EX, SX/RX)

Insulation:

ETFE, FEP, PFA, Silicon

Screening:

Individual & Overall or Overall screening –
Aluminium Mylar Tape with copper drain
wire

Armour:

Braiding with Bare/ Tinned/ Nickel plated/
Silver plated copper wire or fibre glass

Outer Sheath:

PVC, HDPE, FEP, PFA, Silicon, LSZH

Specifications:

JSS 51034, JSS 51037, JSS 51038, IS:8130

ETFE – Ethylene tetrafluoroethylene

Features and benefits of ETFE-Cables:

- ⊙ Excellent mechanical properties and hardness with high tensile strength
- ⊙ High resistance to chemicals & solvents
- ⊙ Good electric and insulation properties with low dielectric values
- ⊙ Good resistance to hot and cold temperatures with operating temperature from approx. -90°C up to +150 °C

FEP – Fluorinated ethylene propylene

Features and benefits of FEP Cables:

- ⊙ Very high resistance to chemicals and oils
- ⊙ High tolerance to cold working environment
- ⊙ Good electric and insulation properties with low dielectric values
- ⊙ Excellent temperature resistance with operating temperature from approx. -90°C up to +180°C

PFA – Perfluoroalkoxy alkanes

Features and benefits of PFA Cables:

- ⊙ Very high resistance to chemicals and oils
- ⊙ Low friction resistance
- ⊙ Good electric and insulation properties with low dielectric values
- ⊙ Excellent temperature resistance with operating temperature from approx. -90°C up to +250°C (and up to +260°C short term)

Technical Data for FEP/ PFA Insulated Single-core cables

No. of Cores & Cross Sectional Area	Conductor	Thickness of Insulation	Thickness of Outer sheath	Cable Weight	Max D.C Conductor Resistance at 20° C
No. X sq.mm	No. X Strand dia. (mm)	Nom. mm	Nom. mm	Approx. kg/km	Ω/km
1C X 0.25	19 X 0.13	0.20	1.1	4	79.0
1C X 0.5	19 X 0.18	0.20	1.4	6	40.1
1C X 0.75	19 X 0.23	0.20	1.6	9	26.7
1C X 1.0	19 X 0.26	0.25	1.8	12	20.0
1C X 1.5	19 X 0.32	0.25	2.1	17	13.7
1C X 2.5	19 X 0.41	0.25	2.6	27	8.21
1C X 0.22	7 X 0.20	0.20	1.1	3.5	90.0
1C X 0.5	16 X 0.20	0.20	1.4	6	40.1
1C X 0.75	24 X 0.20	0.25	1.6	9	26.7
1C X 1.0	32 X 0.20	0.25	1.9	12	20.0
1C X 1.5	30 X 0.25	0.25	2.1	16	13.7
1C X 2.5	50 X 0.25	0.25	2.6	26	8.21
1C X 4.0	56 X 0.30	0.35	3.3	41	5.09
1C X 6.0	84 X 0.30	0.35	3.9	61	3.39
1C X 10.0	80 X 0.40	0.40	5.0	95	1.95

Note

- ⊙ Details given are for reference only and maybe revised without notice
- ⊙ Colour coding to be selected by customer

1 Red ●	4 Black ●	7 Grey ●	10 Orange ●	13 Tan ●	16 Dark Grey ●	19 Dark Blue ●
2 Yellow ●	5 Green ●	8 Brown ●	11 Violet ●	14 Charcoal ●	17 Light Green ●	20 Purple ●
3 Blue ●	6 Yellow/ Green ●	9 White ○	12 Chocolate ●	15 Light Blue ●	18 Dark Green ●	21 Pink ●

**Cables that are built for every task,
for every environment, anywhere in the world.**

Power Cables



Control Cables



Instrumentation & Signal Cables



Thermocouple Extension/Compensating Cables



Rubber & Silicon Cables



Mining Cables



Solar Cables



Marine & Offshore Cables



Multi-layer Cables (AL-HDPE-PA) *Eco-friendly substitute for lead sheath*



Fire Survival/ Fire Resistant Cables



Fire Alarm Cables *FireFence®: FA-SD (Standard) and FA-EH (Enhanced)*



High Temperature Cables



VFD/ VSD Cables



Foundation Fieldbus/ Profibus Cables



Railway Power & Signalling Cables



House/ Building Wires



Flexible Multicore Cables



Flat Cables



Special Cables Pvt. Ltd.

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