

**Enhanced Electron Beam Cross Linked Unarmoured Fire Resistant Cables - FRX 100+**

**Application**

- ✓ Metro Rail, Airport, Schools, Shopping malls, Cinemas, High-rise Buildings and fire prone areas.
- ✓ Indoor and Outdoor uses.

**Product Construction**

- ✓ Conductor : Plain annealed Copper solid or stranded circular conductor complying with BS 6360 class 5
- ✓ Tape : Mica
- ✓ Insulation : EBXL-XLPE
- ✓ Outer Sheath : EBXL-ZHLS

**Technical Data**

- ✓ Temperature Range : -15°C to +120°C
- ✓ Rated Voltage (U<sub>0</sub>/U) : 600/1000V
- ✓ Test Voltage : 3.5kV/5 min
- ✓ Bending Radius : Upto 8 of Cable X OD
- ✓ Specification : Gen. BS 7846 & BS 6387

**Features**

- ✓ Flammability : IEC 60332-1 & IEC 60332-3 Categories A, B & C
- ✓ Resistance to Fire : CWZ of BS : 6387, IEC 60331 & F-2 of BS : 7846
- ✓ Smoke Emission : IEC 61034 - 1 & 2
- ✓ Acid Gas Content : IEC 60754 -1 & 2, BS EN 50267 - 1 & 2

**Siechem**  
offers 120°C  
EBXL XLPE as against 90°C  
offered by rest of the  
competition

✓ **Special Features :**

- Maintains Circuit Integrity for 3 hours under fire condition.
- Zero Halogen, Low Smoke and Resistance to flame propagation.
- Siechem FRX 100+ meets BS 7846 Cat F2 and meets Test requirements as per BS 6387 CWZ, at an enhanced voltage of 600/1000V.
- Siechem FRX 100+ also meets 60 minute rating (PH60) to BS EN 50200 and a 30 minute rating to BS 8434-1. These tests demonstrate that FRX 100+ also meets the requirements for use in "Standard" installations in accordance with BS 5839-1 : 2002 for fire detection and alarm systems, and Cables with inherently high resistance to attack by fire in accordance with BS 5266-1 : 2005 for emergency lighting.

Approvals	Accreditations	Certifications

Part Number	Area mm <sup>2</sup>	Approximate Overall Diameter mm	Approximate Cable Weight Kg/km	Maximum Conductor Resistance at 20°C ohms/km	Current Rating for 120°C Operating Temperature (Calculated for 40°C Ambient Air Temperature)			Voltage Drop DC mV/A/m	Voltage Drop Single Phase AC mV/A/m	Short Circuit Rating (1 sec) of Conductor KA
					Direct in Ground Amps	In Duct Amps	In Air Amps			
<b>Single Core</b>										
71813XX	1.5	5.6	50	13.3	35	31	29	31	31	0.21
71816XX	2.5	6.2	66	7.98	47	40	39	19	19	0.36
71819XX	4	6.8	85	4.95	60	53	52	12	12	0.57
71823XX	6	7.4	110	3.30	74	66	66	7.9	7.9	0.86
71827XX	10	8.8	170	1.91	95	88	92	4.7	4.7	1.42
71828XX	16	10.0	237	1.21	126	113	124	2.9	2.9	2.27
71830XX	25	11.8	352	0.78	172	146	169	1.85	1.9	3.37
71832XX	35	13.2	464	0.554	203	173	200	1.35	1.35	5.00
71834XX	50	15.2	644	0.386	242	204	259	0.99	1.05	7.15
71837XX	70	17.1	862	0.272	290	250	320	0.68	0.75	10.00
71838XX	95	19.3	1144	0.206	343	299	386	0.49	0.58	13.57
71841XX	120	19.9	1398	0.161	389	338	437	0.39	0.48	17.15
71842XX	150	23.3	1740	0.129	437	381	501	0.32	0.43	21.45
71844XX	185	25.9	2148	0.106	476	428	582	0.25	0.37	26.45
71846XX	240	29.1	2750	0.0801	539	498	663	0.19	0.33	34.32
71848XX	300	30.9	3367	0.0641	585	560	741	0.155	0.31	42.92
71849XX	400	35.1	4415	0.0486	624	637	858	0.120	0.29	57.22
71850XX	500	38.8	5480	0.0384	672	715	923	0.093	0.28	71.52

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	

\*\* We have obtained various approvals, accreditations, and certifications — some of which may not be relevant to this catalog.



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