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# Flat Twin & Flat Three Core LSF 6242B & 6243B

3 Insulated &amp; sheathed with uninsulated circuit protective conductor as option

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## Application

9 LSF insulated and sheathed cable for installation clipped to flat surfaces, or embedded in plaster, etc. For domestic and industrial wiring.

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## Specifications

- 12 • In accordance with BS7211.
- 13 • **Conductors:** Solid Class 1 (up to 2.5mm<sup>2</sup>) and stranded Class 2 (above 2.5mm<sup>2</sup>) copper conductors to BS EN 60228.
- 14 • **Insulation:** XLPE insulation Type GP 8 to BS7655.
- 15 • **Core Identification:**  
2 core - brown, blue  
3 core - brown, black, grey
- 16 • **Position of protective conductor:**  
Twin - centrally placed between brown and blue cores.  
Three core - centrally placed between black and grey cores.
- 17 • **Outer Sheath:** LSF Sheath Type LTS2 to BS7655.
- 18 • Flame retardant to BS EN 60332-1-2.
- 19 • **Temperature Rating:** 70°C maximum conductor operating temperature.
- **Voltage Rating:** 300/500V.

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# Flat Twin & Flat Three Core LSF 6242B & 6243B

Insulated & sheathed with uninsulated circuit protective conductor as option

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Minimum O/D mm	Maximum O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>6192B - Flat Twin</b>							
6192B-0010	1.0	1	0.7	4.0 x 6.2	4.7 x 7.4	54	23
6192B-0015	1.5	1	0.7	4.4 x 7.0	5.4 x 8.4	70	26
6192B-0025	2.5	1	0.7	5.2 x 8.4	6.2 x 9.8	105	30
6192B-0040	4	2	0.7	5.6 x 9.6	7.2 x 11.5	150	50
6192B-0060	6	2	0.7	6.4 x 10.5	8.0 x 13.0	205	60
6192B-0100	10	2	0.7	7.8 x 13.0	9.6 x 16.0	325	70
6192B-0160	16	2	0.7	9.0 x 15.5	11.0 x 18.5	465	80
<b>6193 - Flat Three Core</b>							
6193B-0010	1.0	1	0.7	4.0 x 8.4	4.7 x 9.8	77	30
6193B-0015	1.5	1	0.7	4.4 x 9.8	5.4 x 11.5	100	50
6193B-0025	2.5	1	0.7	5.2 x 11.5	6.2 x 13.5	150	60
6193B-0040	4	2	0.7	5.8 x 13.5	7.4 x 16.5	230	70
6193B-0060	6	2	0.7	6.4 x 15.0	8.0 x 18.0	300	80
6193B-0100	10	2	0.7	7.8 x 19.0	9.6 x 22.5	480	90
6193B-0160	16	2	0.7	9.0 x 22.0	11.0 x 26.5	700	160

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Minimum O/D mm	Maximum O/D mm	Nom Earth Conductor Area mm <sup>2</sup>	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>6242B - Flat Twin + Earth</b>								
6242B-0010	1.0	1	0.7	4.1 x 7.6	5.0 x 9.1	1.0	69	26
6242B-0015	1.5	1	0.7	4.4 x 8.1	5.3 x 9.7	1.0	85	29
6242B-0025	2.5	1	0.7	4.9 x 9.3	6.0 x 11.2	1.5	120	50
6242B-0040	4	2	0.7	5.5 x 10.4	6.7 x 12.6	1.5	175	60
6242B-0060	6	2	0.7	6.2 x 12.0	7.5 x 14.6	2.5	240	60
6242B-0100	10	2	0.7	7.3 x 14.5	8.8 x 17.6	4	390	80
6242B-0160	16	2	0.7	8.4 x 17.0	10.1 x 20.5	6	560	90
<b>6243B - Flat Three Core + Earth</b>								
6243B-0010	1.0	1	0.7	4.1 x 10.0	5.1 x 12.1	1.0	92	50
6243B-0015	1.5	1	0.7	4.4 x 10.7	5.3 x 12.9	1.0	115	50
6243B-0025	2.5	1	0.7	4.9 x 12.0	6.0 x 14.6	1.0	170	60
6243B-0040	4	2	0.7	5.5 x 14.0	6.7 x 16.9	1.5	255	80
6243B-0060	6	2	0.7	6.2 x 16.2	7.5 x 19.5	2.5	340	80
6243B-0100	10	2	0.7	7.3 x 19.5	8.8 x 23.6	4	550	160
6243B-0160	16	2	0.7	8.4 x 22.8	10.1 x 27.6	6	790	180

For further technical information see page 1.90.

For conductor short-circuit ratings see page 19.28.

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# Technical Information

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- 600/1000V XLPE/LSF 90°C, 6242B/6243B

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## CURRENT RATING & VOLTAGE DROP

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Ambient air temperature: 30°C

Conductor operating temperature: 90°C

For ambient temperatures other than 30°C, the following factors should be applied:

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Ambient air temp °C	20	25	30	35	40	45	50	55
Rating factor	1.08	1.04	1.0	0.96	0.91	0.87	0.82	0.76

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Conductor Size	Reference Method B (enclosed in conduit/ trunking etc)		Reference Method C (clipped direct)		Reference Method E (in cable tray/free air)		Voltage Drop	
	Single Phase a.c./d.c.	Three Phase a.c.	Single Phase a.c./d.c.	Three Phase a.c.	Single Phase a.c./d.c.	Three Phase a.c.	Single Phase a.c./d.c.	Three Phase a.c./d.c.
mm <sup>2</sup>	A	A	A	A	A	A	mV/A/m	mV/A/m
1.5	22	19.5	24	22	26	23	31	27
2.5	30	26	33	30	36	32	19	16
4.0	40	35	45	40	49	42	12	10
6.0	51	44	58	52	63	54	7.9	6.8
10	69	60	80	71	86	75	4.7	4.0
16	91	80	107	96	115	100	2.9	2.5
25	119	105	138	119	149	127	1.9	1.65

# Technical Information

## ELECTRICAL CHARACTERISTICS

Conductor Size mm <sup>2</sup>	Electrical Characteristics			
	Maximum d.c. Conductor Resistance @ 20°C ohms/km	Maximum a.c. Conductor Resistance @ 90°C ohms/km	Reactance @ 50Hz ohms/km	Impedance @ 90°C, 50Hz ohms/km
1.5	12.1	15.4	0.104	15.4
2.5	7.41	9.45	0.101	9.45
4.0	4.61	5.88	0.094	5.88
6.0	3.08	3.93	0.0952	3.93
10	1.83	2.33	0.0856	2.33
16	1.15	1.47	0.0818	1.47