

## YY LSOH MULTICORE

A 300/500v low smoke zero halogen (LSOH) insulated and sheathed flexible cable. For installations where public safety is a consideration, where standard PVC cables were previously used for energy transmission or control applications.

A wide range of core configurations and conductor sizes make LSOH multicore flexible products desirable for installations where smoke emission in fire conditions is a consideration. LSOH compounds protect people and equipment in the event of fire conditions.

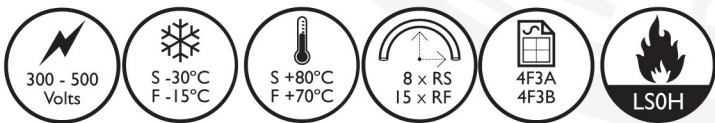
### CONSTRUCTION

Plain copper class 5 conductor with LSOH insulation number coded, or colour coded, with green yellow CPC. Cores twisted together with grey LSOH sheath overall.

### TECHNICAL DATA

Generally to VDE 0250 BS EN 50525-1 BS EN 50525-2-51  
BS EN 50525-3-11

Nominal Voltage	300/500v
Test Voltage	2000v
Operating Temperature Static	-30°C to +80°C
Operating Temperature Flexing	-15°C to +70°C
Bending Radius	8 times overall diameter (Static) 15 times overall diameter (Flexing)
Current Rating Table	4F3A & 4F3B
Flame Test	BS EN 60332-3-24 CAT C
Halogen Emission	BS EN 50267-2
Smoke Density	BS EN 61034-2



### YY LSOH DIMENSIONS

Cores x mm <sup>2</sup>	Nom OD mm	Weight kg / km	Cores x mm <sup>2</sup>	Nom OD mm	Weight kg / km
2 x 0.5	4.9	37	2 x 4.0	9.1	154
3 x 0.5	5.2	44	3 x 4.0	9.7	188
4 x 0.5	5.6	52	4 x 4.0	10.8	239
5 x 0.5	6.2	65	5 x 4.0	11.9	298
6 x 0.5	6.5	68	7 x 4.0	12.9	346
7 x 0.5	6.8	72	3 x 6.0	11.5	268
8 x 0.5	7.9	96	4 x 6.0	11.9	325
12 x 0.5	9.5	129	5 x 6.0	13.2	410
18 x 0.5	11.6	179	7 x 6.0	15.2	525
25 x 0.5	13.6	235	3 x 10.0	13.2	435
2 x 0.75	5.4	45	4 x 10.0	15.8	560
3 x 0.75	5.6	54	5 x 10.0	17.3	678
4 x 0.75	6.2	66	7 x 10.0	18.9	865
5 x 0.75	6.8	80	3 x 16.0	18.3	684
6 x 0.75	7.1	88	4 x 16.0	19.5	866
7 x 0.75	7.7	92	5 x 16.0	22.5	1150
8 x 0.75	8.1	115	7 x 16.0	24.6	1390
12 x 0.75	9.8	156	4 x 25.0	24.4	1370
18 x 0.75	11.7	219	5 x 25.0	27.1	1698
25 x 0.75	13.4	286	4 x 35.0	26.2	1860
2 x 1.0	5.9	55	5 x 35.0	32.2	2340
3 x 1.0	6.2	66			
4 x 1.0	6.8	82			
5 x 1.0	7.4	99			
7 x 1.0	8.1	115			
8 x 1.0	8.5	128			
12 x 1.0	10.8	188			
18 x 1.0	12.5	278			
25 x 1.0	14.5	355			
2 x 1.5	6.4	69			
3 x 1.5	6.8	86			
4 x 1.5	7.4	105			
5 x 1.5	8.4	135			
7 x 1.5	8.9	149			
8 x 1.5	9.6	168			
12 x 1.5	11.8	249			
18 x 1.5	13.9	356			
25 x 1.5	16.4	472			
34 x 1.5	19.2	632			
2 x 2.5	7.2	99			
3 x 2.5	7.9	123			
4 x 2.5	8.9	154			
5 x 2.5	10.1	199			
7 x 2.5	10.9	219			
12 x 2.5	13.8	372			
18 x 2.5	17.2	622			

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**Table 4F3A**  
**Flexible cords, non-armoured (Copper Conductors)**

CURRENT-CARRYING CAPACITY (amperes): and MASS SUPPORTABLE (kg):

Conductor Cross sectional area	Current carrying capacity		Maximum mass supportable by twin flexible cord (see regulations 522.7.2 & 559.6.1.5)
	Single-phase a.c.	Three-phase a.c.	
1	2	3	4
(mm <sup>2</sup> )	(A)	(A)	(kg)
0.5	3	3	2
0.75	6	6	3
1	10	10	5
1.25	13	-	5
1.5	16	16	5
2.5	25	20	5
4	32	25	5

**NOTES:**

Where cable is on a reel see the notes to Table 4F1A

RATING FACTOR FOR AMBIENT TEMPERATURE					
60°C thermoplastic or thermosetting insulated cords:					
Ambient Temp (°C)	35	40	45	50	55
Rating Factor	0.91	0.82	0.71	0.58	0.41

RATING FACTOR FOR AMBIENT TEMPERATURE						
180°C thermosetting insulated cords:						
Ambient Temp (°C)	35 to 120	125	130	135	140	145
Rating Factor	1.0	0.96	0.85	0.74	0.60	0.42

RATING FACTOR FOR AMBIENT TEMPERATURE						
90°C thermoplastic or thermosetting insulated cords:						
Ambient Temp (°C)	35 to 50	55	60	65	70	-
Rating Factor	1.0	0.96	0.83	0.67	0.47	-

RATING FACTOR FOR AMBIENT TEMPERATURE						
Glass fibre cords:						
Ambient Temp (°C)	35 to 150	155	160	165	170	175
Rating Factor	1.0	0.92	0.82	0.71	0.57	0.40

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## YY LSOH MULTICORE

**TABLE 4F3B**

**Flexible cords, non-armoured (Copper Conductors)**

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature: 60°C\*

Conductor Cross sectional area	d.c or Single-phase a.c.	Three-phase a.c.
1	2	3
(mm <sup>2</sup> )	(mV/A/m)	(mV/A/m)
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

**NOTES:**

\* The tabulated values above are for 60°C thermoplastic or thermosetting insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:

90°C thermoplastic or thermosetting insulated	1.09
180°C thermosetting insulated	1.31
185°C glass fibre	1.43

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