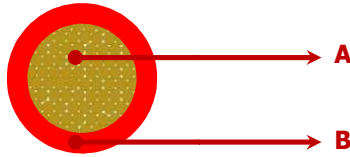


## ÖLFLEX® UNIPLUS FR-LSH

DS 4610011U

Valid from: 2018-03-01



A – Annealed Bare Copper Conductor

B – Flame Retardant PVC Insulation

### Application

OLFLEX® UNIPLUS FR-LSH are ISI marked single-conductor cables with Flame Retardant low smoke thermoplastic PVC-insulation for fixed installation in panel wiring. They are suitable for protected, stationary use in or control units/ switchgear in conjunction with voltages up to 1100 V AC. These products are used in applications where safety of human and property are of utmost importance.

### Design

Conductor : Annealed Bare copper, Class V in acc. to IS 8130/IEC 60228  
 Approval : IS 694:2010  
 Insulation : PVC compound Type D in acc. to IS 5831:1984  
 Current Rating : in acc. to IS 3961  
 CE approval : Certified to use CE marking on the product.

### Electrical properties

Nominal voltage 1100 V  
 Test voltage 3000 V AC

### Mechanical properties

Min. bending radius occasional flexing: 8 x cable OD  
 Fixed installation: 6 x cable OD  
 Temperature range occasional flexing: -15 °C up to +70 °C max. Conductor temperature  
 Fixed installation: -40 °C up to +80 °C max. Conductor temperature

### Flame retardant properties and other tests

Oxygen Index: > 29 in accordance to ASTM-D 2863  
 Temperature Index: minimum 250°C in accordance to ASTM-D 2863  
 Smoke Density: Maximum smoke density of 60% as per ASTM-D 2843  
 Acid Gas Generation: HCL content maximum 20% as per IEC 754-1  
 Flammability in acc. with IS 10810-53 / IEC 60332-1  
 Tests acc. to IS 10810

### Special properties

This product conforms to  
RoHS directive (Restriction of the use of certain hazardous substances)

Article No.	Conductor Cross Section	Nominal Outer Diameter (mm)	Copper Weight (Kg/Km) Approx.	Cable Weight (Kg/Km) Approx.	Current rating (A)	Standard Pack Length (m)
4610..1U	1 x 0.5 mm <sup>2</sup>	2.2	4.6	10.7	12	100, 300, 500
4610..2U	1 x 0.75 mm <sup>2</sup>	2.4	6.7	13.5	14	100, 300, 500
4610..3U	1 x 1.0 mm <sup>2</sup>	2.6	8.7	16.0	17	100, 300, 500
4620..1U	1 x 1.5 mm <sup>2</sup>	2.9	12.6	21.0	22	100, 300, 500
4620..2U	1 x 2.5 mm <sup>2</sup>	3.6	21.1	32.9	29	100, 300, 500
4620..3U	1 x 4 mm <sup>2</sup>	4.3	34.9	51.6	36	100, 300, 500
4620..4U	1 x 6 mm <sup>2</sup>	4.8	52.6	72.5	48	100, 300, 500
4620..5U	1 x 10 mm <sup>2</sup>	6.2	87.6	119.5	70	100, 300, 500
4620..6U	1 x 16 mm <sup>2</sup>	7.2	137.1	176.2	98	100, 300, 500
4621..1U	1 x 25 mm <sup>2</sup>	9.1	225.8	285.7	129	100, 300, 500
4621..2U	1 x 35 mm <sup>2</sup>	10.3	298.4	369.4	158	100, 300, 500
4621..3U	1 x 50 mm <sup>2</sup>	12.3	424.0	523.4	198	100, 300, 500
4621..4U	1 x 70 mm <sup>2</sup>	15.3	656.0	790.6	248	100, 300, 500
4621..5U	1 x 95 mm <sup>2</sup>	16.7	849.0	1013.6	292	100, 300, 500
4621..6U	1 x 120 mm <sup>2</sup>	17.9	1105.8	1287.2	344	100, 300, 500
4621..7U	1 x 150 mm <sup>2</sup>	21.1	1369.0	1613.9	391	100, 300, 500
4621..8U	1 x 185 mm <sup>2</sup>	23.5	1654.0	1957.2	448	100, 300, 500
4621..9U	1 x 240 mm <sup>2</sup>	25.9	2225.0	2592.6	528	100, 300, 500

### Product details

This product is offered in following colours

00 – Yellow/Green    01 – Black    02 – Blue    03 – Brown    04 – Red    05 – White  
 06 – Grey    07 – Violet    08 – Pink    09 – Orange    11 – Yellow    12 – Green  
 14 – Dark Blue

The current rating values given in the table are based on following parameters:  
(Values declared in Air)

- 1 Maximum conductor temperature : 70 °C
- 2 Ambient Temperature in air : 40 °C
- 3 Maximum diameter is governed by IS 694:2010.

**Important:**

The current rating shown in the table is by considering maximum possible conductor temperature and ambient conditions for facilitating the heat dissipation. The current rating values depend on various conditions like method of laying, ambient temperature, grouping of cables which have to consider before cable selection and installation process.

Derating factors apply based on application guidelines specified.