

ÖLFLEX® UNIPLUS FR
DS 4510011U

valid from: 2018-03-01

Application

ÖLFLEX® UNIPLUS FR are ISI marked single-conductor cables with Flame Retardant thermoplastic PVC-insulation for fixed installation inside panels. They are suitable for protected, stationary use in or control units/ switchgear in conjunction with voltages up to 1100 V AC.

Design

Conductor	annealed bare copper, Class V in acc. to IS 8130/IEC 60228
Approval	IS 694:2010
Insulation	PVC compound Type A 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
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)

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Article number	Conductor cross section mm ²	Nominal outer diameter (mm)	Copper weight (kg/km) Approx.	Weight (kg/km) Approx.	Current rating (A) maximum	Standard pack length (m)
ÖLFLEX® UNIPLUS FR						
4510..1U	1 x 0.5	2.2	4.6	10.5	12	100, 300, 500
4510..2U	1 x 0.75	2.4	6.7	13.2	14	100, 300, 500
4510..3U	1 x 1.0	2.6	8.7	15.7	17	100, 300, 500
4520..1U	1 x 1.5	2.9	12.6	20.7	22	100, 300, 500
4520..2U	1 x 2.5	3.6	21.1	32.4	29	100, 300, 500
4520..3U	1 x 4	4.3	34.9	50.9	36	100, 300, 500
4520..4U	1 x 6	4.8	52.6	71.7	48	100, 300, 500
4520..5U	1 x 10	6.2	87.6	118.1	70	100, 300, 500
4520..6U	1 x 16	7.2	137.1	174.5	98	100, 300, 500
4521..1U	1 x 25	9.1	225.8	283.1	129	100, 300, 500
4521..2U	1 x 35	10.2	298.4	366.3	158	100, 300, 500
4521..3U	1 x 50	12.1	424.0	519.1	198	100, 300, 500
4521..4U	1 x 70	14.8	656.0	784.7	248	100, 300, 500
4521..5U	1 x 95	16.9	849.0	1006.4	292	100, 300, 500
4521..6U	1 x 120	18.4	1105.8	1279.3	344	100, 300, 500
4521..7U	1 x 150	19.6	1369.0	1603.2	391	100, 300, 500
4521..8U	1 x 185	21.6	1654.0	1943.9	448	100, 300, 500
4521..9U	1 x 240	24.1	2225.0	2576.5	528	100, 300, 500

Product details

This product is offered in following colours

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

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

Maximum conductor temperature : 70 °C

Ambient temperature in air : 40 °C

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.