

# NYY-FiR

## Single Core (Cu/Mica Tape/PVC-FR/PVC-FR)

### APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed.

During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators and escalators, fire fighting water pumps, fire alarm and ventilation fans.

### STANDARD

VDE 0271/3.69

IEC 60331-21 & BS 6387

### VOLTAGE GRADE

U<sub>0</sub>/U (Um) : 0.6/1.0 (1.2) kV

### COLOR

Insulated core :  (Black)

Sheath :  (Red or Other Colors available on request)

### CONSTRUCTION

**Conductor:** Solid/ Stranded Circular/ Compacted, Plain annealed copper, Class 1 or Class-2 to IEC 60228

**Fire barrier:** Mica tape (Synthetic or Glass)

**Insulation:** Flame retardant (FR) PVC, PVC/A-FR to IEC 60502-1

**Sheath:** Flame retardant (FR) PVC, ST-1 to IEC 60502-1



PHYSICAL DATA								ELECTRICAL DATA				
Nominal cross sectional area of conductor	Shape of Conductor	No. of strands & diameter of wire	Thickness Of Mica Tape	Nominal thickness of insulation	Nominal thickness of sheath	Approx. Overall diameter	Approx. weight of cable	Max. D.C resistance of conductor at 20 °C	Current Carrying Capacity in Ground at 30°C		Current Carrying Capacity in Air at 35°C	
									Direct laid	In duct	Open	In pipes
Core x mm <sup>2</sup>	-	no./mm	mm	mm	mm	mm	Kg/Km	W/Km	amps	amps	amps	amps
1 x 1.5	re	1/1.38	0.11	0.8	1.8	7.2	75	12.1	27	20	22	17
1 x 1.5	rm	7/0.52	0.11	0.8	1.8	7.4	78	12.1	27	20	22	17
1 x 2.5	re	1/1.78	0.11	0.8	1.8	7.6	90	7.41	36	30	30	23
1 x 2.5	rm	7/0.67	0.11	0.8	1.8	7.9	95	7.41	36	30	30	23
1 x 4	rm	7/0.85	0.11	1.0	1.8	8.7	126	4.61	47	36	39	29
1 x 6	rm	7/1.04	0.11	1.0	1.8	9.5	154	3.08	59	45	50	36
1 x 10	rm	7/1.35	0.11	1.0	1.8	10.4	200	1.83	78	60	69	50
1 x 16	rm	7/1.70	0.11	1.0	1.8	11.0	271	1.15	100	76	94	67
1 x 25	rm	7/2.14	0.11	1.2	1.8	13.2	390	0.727	130	101	125	89
1 x 35	rmc	min. 6	0.11	1.2	1.8	13.8	486	0.524	155	119	160	114
1 x 50	rmc	min. 6	0.11	1.4	1.8	15.6	652	0.387	185	144	195	138
1 x 70	rmc	min. 12	0.11	1.4	1.8	17.1	865	0.268	225	175	245	171
1 x 95	rmc	min. 15	0.11	1.6	1.8	19.4	1140	0.193	270	211	300	204
1 x 120	rmc	min. 18	0.11	1.6	1.8	21.1	1400	0.153	310	243	350	242
1 x 150	rmc	min. 18	0.11	1.8	1.8	23.1	1726	0.124	350	275	405	280
1 x 185	rmc	min. 30	0.11	2.0	2.0	25.6	2126	0.0991	390	306	460	320
1 x 240	rmc	min. 34	0.11	2.2	2.0	28.2	2714	0.0754	450	351	555	386
1 x 300	rmc	min. 34	0.11	2.4	2.0	31.0	3342	0.0601	515	402	640	448
1 x 400	rmc	min. 53	0.11	2.6	2.2	35.0	4385	0.0470	585	453	770	546
1 x 500	rmc	min. 53	0.11	2.8	2.2	38.0	5400	0.0366	680	526	900	643
1 x 630	rmc	min. 53	0.11	2.8	2.2	42.0	6715	0.0283	800	615	1030	740
1 x 800	rmc	min. 53	0.11	2.8	2.4	48.9	8628	0.0221	945	724	1160	836
1 x 1000	rmc	min. 53	0.11	3.0	2.6	54.3	10800	0.0176	1095	835	1310	949

Current ratings are valid for cables laid under defined conditions at page no. 165. For current ratings at deviated conditions, apply correction factor as given on page no. 165-17

### Characteristics



### Installation condition

