

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

\*REACH | RoHS | CE

## 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.

## CONSTRUCTION

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

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

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

**Sheath :** Flame Retardant (FR) PVC, ST1 to BDS IEC 60502-1

## PROPERTIES

Fire resistance test - IEC 60331-21, BS 6387

Flame retardant test - IEC 60332-1-2

## VOLTAGE GRADE

U<sub>o</sub>/U : 0.6/1.0(1.2)kv

Test Voltage: 3.5 kV

## OPERATING TEMP.

- 20°C to +70°C

Max Short Circuit 750°C

## MIN. BENDING RADIUS

Approx. 15x Cable Diameter

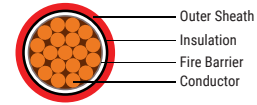
## STANDARD

BDS IEC 60502-1

## COLOR

Insulated Core: ● Black

● (Red or other colors available on request)



## CHARACTERISTICS



## INSTALLATION CONDITION



## CABLE DESIGN PARAMETER

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	Ω/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	19 wire	0.11	1.2	1.8	13.8	486	0.524	155	119	160	114
1 x 50	rmc	19 wire	0.11	1.4	1.8	15.6	652	0.387	185	144	195	138
1 x 70	rmc	19 wire	0.11	1.4	1.8	17.1	865	0.268	225	175	245	171
1 x 95	rmc	19 wire	0.11	1.6	1.8	19.4	1140	0.193	270	211	300	204
1 x 120	rmc	37 wire	0.11	1.6	1.8	21.1	1400	0.153	310	243	350	242
1 x 150	rmc	37 wire	0.11	1.8	1.8	23.1	1726	0.124	350	275	405	280
1 x 185	rmc	37 wire	0.11	2.0	2.0	25.6	2126	0.0991	390	306	460	320
1 x 240	rmc	61 wire	0.11	2.2	2.0	28.2	2714	0.0754	450	351	555	386
1 x 300	rmc	61 wire	0.11	2.4	2.0	31.0	3342	0.0601	515	402	640	448
1 x 400	rmc	61 wire	0.11	2.6	2.2	35.0	4385	0.0470	585	453	770	546
1 x 500	rmc	61 wire	0.11	2.8	2.2	38.0	5400	0.0366	680	526	900	643
1 x 630	rmc	91 wire	0.11	2.8	2.2	42.0	6715	0.0283	800	615	1030	740
1 x 800	rmc	127 wire	0.11	2.8	2.4	48.9	8628	0.0221	945	724	1160	836
1 x 1000	rmc	127 wire	0.11	3.0	2.6	54.3	10800	0.0176	1095	835	1310	949