NYCY / YCY

3 Core (Cu /PVC/CWS/PVC)

APPLICATION

Power cables for increased electrical and also mechanical protection are required. Those cables are installed in open air, in underground, in water, indoors and in cable ducts. The concentric conductor (C) is allowed to be used as neutral-, protective or earthed conductor. Simultaneously, this also is permitted to apply as a screen for example earth-connected protection against contact.

STANDARD

IEC 60502-1

VDE 0271/3.69 & DIN VDE 0276-603

VOLTAGE GRADE

U_o/U (Um) : 0.6/1.0 (1.2) kV

Permissible Service Voltage: 0.72/1.2 kV

COLOR

Insulated core : (Red, Yellow & Blue)

Sheath : (Black or Other Colors available on request)

CONSTRUCTION

Conductor: Stranded Circular/ Sector shaped, Plain annealed Copper, Class-2 to IEC 60228

Insulation: PVC, PVC/A to IEC 60502-1

Inner covering : PVC, ST-1 to IEC 60502-1

Screen: Solid copper wire concentric

Binder: Helically copper tape

Sheath: PVC, ST-1 to IEC 60502-1

PHYSICAL DATA							
Nominal cross sectional area of conductor	Shape of Conductor	No. of strands & diameter of wire	Number & diameter of concentric wire	Nominal thickness of insulation	Nominal thickness of sheath	Approx. Overall diameter	Approx. weight of cable
Core x mm^2	-	no./mm	no./mm	mm	mm	mm	kg/km
3 x 25+16C	rm	7/2.14	19/1.05	1.2	1.8	24.3	1302
3 x 35+16C	sm	min. 6	19/1.05	1.2	1.8	26.2	1623
3 x 50+25C	sm	min. 6	29/1.05	1.4	1.9	30.4	2266
3 x 70+35C	sm	min. 12	35/1.13	1.4	2.1	33.7	3011
3 x 95+50C	sm	min. 15	50/1.13	1.6	2.2	38.4	4005
3 x 120+70C	sm	min. 18	70/1.13	1.6	2.4	42.1	5031
3 x 150+70C	sm	min. 18	70/1.13	1.8	2.5	45.3	6013
3 x 185+95C	sm	min. 30	67/1.35	2.0	2.6	50.1	7458
3 x 240+120C	sm	min. 34	65/1.53	2.2	2.8	55.8	9497
3 x 300+150C	sm	min. 34	72/1.63	2.4	3.2	61.3	11730

ELECTRICAL DATA						
Nominal cross sectional area of conductor	Shape of Conductor	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^2	-	W/km	amp	amp	amp	amp
3 x 25+16C	rm	0.727	110	81	98	62
3 x 35+16C	sm	0.524	130	94	120	74
3 x 50+25C	sm	0.387	155	114	150	93
3 x 70+35C	sm	0.268	190	140	190	116
3 x 95+50C	sm	0.193	225	166	230	134
3 x 120+70C	sm	0.153	260	193	270	162
3 x 150+70C	sm	0.124	295	220	305	180
3 x 185+95C	sm	0.0991	330	246	350	210
3 x 240+120C	sm	0.0754	383	284	410	241
3 x 300+150C	sm	0.0601	425	312	470	278

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

Operating Temperature -20°C to 70°C

Maximum Short Circuit 160°C

Rigid

Meter Marking

Flame Retardant

Lead free

Test 3.5kV

Installation condition

Industrial Use

Outdoor Installation

Open air

Buried

In Duct

In water