

NYFGbY / NAYFGbY or YFGY / AYFGY

3 Core (Cu or Al/PVC/FSA/PVC)

APPLICATION

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected.

STANDARD

IEC 60502-1
VDE 0271/3.69 & DIN VDE 0276-603

VOLTAGE GRADE

U₀/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 or Aluminium, Class-2 to IEC 60228

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

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

Armour: Flat Galvanized Steel strip to IEC 60502-1

Binder (optional): Galvanized Steel tape to IEC 60502-1

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 Cu/Al	Nominal thickness of insulation	Nominal thickness of flat steel strip armour	Nominal thickness of sheath	Approx. Overall diameter	Approx. weight of cable	
							Cu	Al
Core x mm ²	-	nos./mm	mm	mm	mm	mm	kg/km	kg/km
3 x 25	rm	7/2.14	1.2	0.8	1.8	27.0	1800	1281
3 x 35	sm	min. 6	1.2	0.8	1.8	26.0	1900	1330
3 x 50	sm	min. 6	1.4	0.8	1.9	28.0	2500	1600
3 x 70	sm	min. 12	1.4	0.8	2.0	31.0	3115	1963
3 x 95	sm	min. 15	1.6	0.8	2.2	36.4	4325	2478
3 x 120	sm	min. 18/15	1.6	0.8	2.3	39.0	5220	2835
3 x 150	sm	min. 18/15	1.8	0.8	2.4	43.0	6375	3336
3 x 185	sm	min. 30	2.0	0.8	2.6	47.0	7650	3995
3 x 240	sm	min. 34/30	2.2	0.8	2.8	53.0	9650	4864
3 x 300	sm	min. 34/30	2.4	0.8	3.0	58.5	12080	5820

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			
				Copper		Aluminium		Copper		Aluminium	
		Copper	Aluminium	Direct laid	In duct	Direct laid	In duct	Open	In pipes	Open	In pipes
Core x mm ²	-	W/km	W/km	amp	amp	amp	amp	amp	amp	amp	amp
3 x 25	rm	0.727	1.20	110	81	86	61	98	62	76	47
3 x 35	sm	0.524	0.868	130	94	101	72	120	74	93	57
3 x 50	sm	0.387	0.641	155	114	120	82	150	93	116	68
3 x 70	sm	0.268	0.443	190	140	148	109	190	116	148	82
3 x 95	sm	0.193	0.320	225	166	175	135	230	134	179	90
3 x 120	sm	0.153	0.253	260	193	202	152	270	162	210	108
3 x 150	sm	0.124	0.206	295	220	229	175	305	180	237	121
3 x 185	sm	0.0991	0.164	330	246	257	195	350	210	272	148
3 x 240	sm	0.0754	0.125	385	286	299	227	410	241	318	167
3 x 300	sm	0.0601	0.100	425	312	329	253	470	278	364	199

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