

**36/69 (72.5) kV COPPER CONDUCTOR WITH CORRUGATED COPPER SHEATH
IEC 60840 STANDARD**

APPLICATION :

Preferably used for urban networks.
Suitable for use in duct, trays and direct burial in ground.

Advantages :

Perfect radial moisture barrier and excellent earth fault current carrying capacity.

Max. Conductor Temperature :

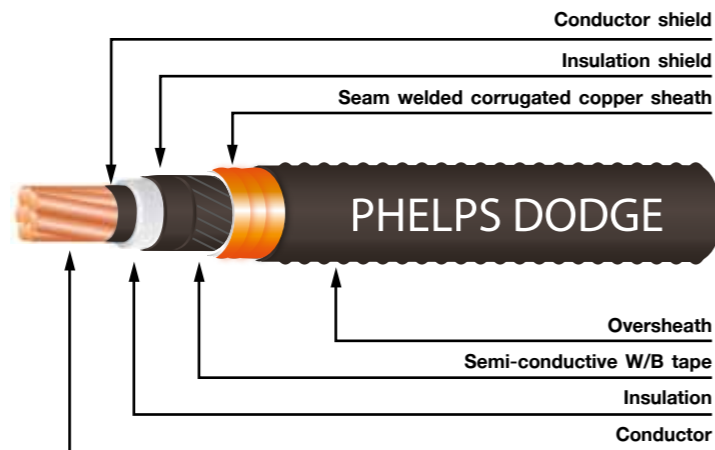
90 °C

AC TEST VOLTAGE :

90 kV (30 minutes)

REFERENCE STANDARD :

IEC 60840



CONSTRUCTION :

- Conductor : Round compact stranded or Milliken conductor
- Conductor shield : Semi-conducting tape and/or extruded semi-conducting cross-linked polyethylene
- Insulation : Cross-linked polyethylene
- Insulation shield : Semi-conducting cross-linked polyethylene
- Longitudinal water blocking layer : Semi-conductive water blocking tape
- Metallic shield and radial water barrier : Seam welded corrugated Aluminium sheath
- Oversheath : Black PE (ST-7)

Cable Construction

Nominal cross-sectional area mm ²	Diameter of conductor (Approx.) mm	Diameter over insulation (Approx.) mm	Nominal thickness of Cu sheath mm	Nominal thickness of oversheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Standard packing m
150	14.2	44.5	1.0	2.9	69	5,640	1,000/R
185	15.8	45.0	1.0	2.9	70	6,000	1,000/R
240	18.2	45.5	1.0	2.9	70	6,510	1,000/R
300	20.3	47.5	1.0	3.0	73	7,270	1,000/R
400	23.0	49.0	1.0	3.1	75	8,180	1,000/R
500	26.0	53.0	1.0	3.2	79	9,550	1,000/R
630	29.9	56.5	1.0	3.3	83	11,250	1,000/R
800	33.8	60.5	1.0	3.4	87	13,280	500/R
1,000	39.8	66.5	1.0	3.5	94	15,770	500/R
1,200	43.0	70.0	1.0	3.7	98	17,730	500/R
1,000(M)	39.1	67.0	1.0	3.5	94	15,770	500/R
1,200(M)	42.2	70.0	1.0	3.7	98	17,650	500/R
1,400(M)	45.7	73.5	1.0	3.8	102	19,830	500/R
1,600(M)	48.8	77.5	1.0	3.9	106	22,100	500/R
1,800(M)	51.6	80.5	1.0	4.0	109	24,110	500/R
2,000(M)	54.7	83.5	1.0	4.1	113	26,400	400/R
2,500(M)	61.1	90.0	1.0	4.3	120	31,590	400/R

(M) is Milliken conductor

R = Packing in reel

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Electrical Properties and Current Rating (A)

Nominal cross-sectional area mm ²	Maximum DC resistance of conductor at 20°C Ω/km	Minimum insulation resistance at 20°C MΩ-km	Current rating in air* (A)		Current rating direct burial* (A)		Current rating in PE duct in ground* (A)	
			Trefoil ≥0.5xD _c	Flat ≥0.5xD _c	Trefoil 1 m	Flat 1 m	Trefoil 1 m	Flat 1 m
150	0.124	11,850	453	504	334	347	320	330
185	0.0991	10,880	517	578	376	392	361	373
240	0.0754	9,460	608	685	434	454	418	432
300	0.0601	8,850	692	784	488	512	471	489
400	0.0470	7,910	796	910	551	582	536	558
500	0.0366	7,170	912	1,050	620	661	608	636
630	0.0283	6,530	1,045	1,218	695	750	690	726
800	0.0221	5,980	1,178	1,393	766	839	772	818
1,000	0.0176	5,310	1,315	1,584	831	927	852	913
1,200	0.0151	5,010	1,401	1,705	872	983	904	974
1,000(M)	0.0176	5,270	1,384	1,640	875	963	891	948
1,200(M)	0.0151	4,980	1,488	1,781	926	1,031	954	1,021
1,400(M)	0.0129	4,700	1,597	1,934	977	1,101	1,020	1,099
1,600(M)	0.0113	4,640	1,685	2,060	1,017	1,159	1,075	1,166
1,800(M)	0.0101	4,440	1,760	2,173	1,050	1,208	1,121	1,222
2,000(M)	0.0090	4,250	1,837	2,291	1,081	1,257	1,167	1,281
2,500(M)	0.0072	3,890	1,977	2,519	1,135	1,348	1,253	1,392

(M) is Milliken conductor

***CONDITION :**

1. Ambient air temperature 40°C
2. Ground temperature 30°C
3. Thermal resistivity of soil 1.2 K-m/W
4. Depth of laying 1.0 m
5. Axial spacing between phase cable is 2xOD_{cable} or 2xOD_{duct}
6. Metallic shield and/or sheath bonded at single point or cross-bonded (no sheath circulating current).