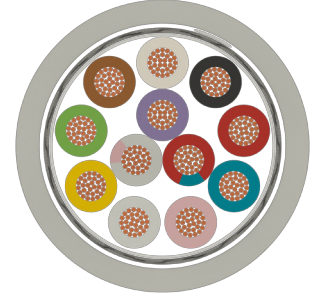
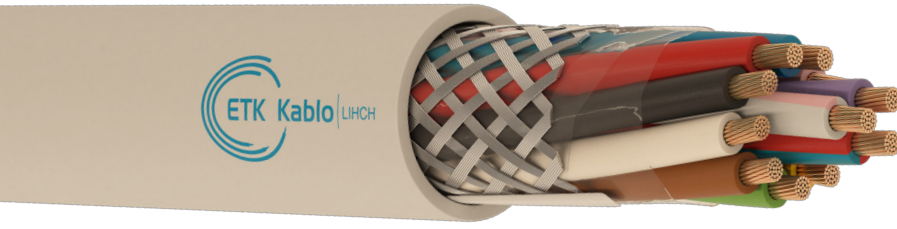


# Elektronik Kontrol Kabloları

## Sinyal Kabloları

### LIHCH



#### Kullanım Alanları

- . Elektromanyetik karışım ve girişimlerin olduğu frekans kontrollü motor beslemelerinde.
- . Enstrüman ve kontrol mühendisliğinde.
- . Endüstriyel elektronikte.
- . Bilgisayar ve ofis makinelerinde.
- . Otomasyon sistemlerinde.
- . Yüksek hızlı data sistemlerinde.
- . İnsan hayatının, değerli malzemelerin ve ekipmanların korunması gereken uygulamalarda.
- . İç ve dış alanlarda uygulanabilir.
- . Kuru ve nemli ortamlara uygun.

#### Kablo Yapısı

- 1 - İletken : Bükülü elektrolitik bakır iletken (Sınıf 5) (IEC 60228, EN 60228, DIN VDE 0295)
- 2 - İzole : Halojensiz (TS IEC 60189-2, EN 50290-2-26) (DIN 47100)
- 3 - Büküm : Katmanlar halinde büküm.
- 4 - Sargı : Polyester bant
- 5 - Ekran : Kalaylı bakır örgü
- 6 - Dış Kılıf : Ultraviyole ışınlara dayanıklı halojensiz dış kılıf. RAL 7035 (Gri)

#### Teknik Özellikler

İletken Kesiti	İletken Direnci $\Omega/\text{km}$ (20 °C)	İzolasyon Direnci $M \Omega/\text{km}$ (20 °C)	Efektif Kapasite $\text{pF/m}$	Akım Taşıma Kapasitesi A	Empedans $\Omega$	Endüktans $\text{mH/km}$	Çalışma Voltajı V DC	Test Voltajı V (DC, 1 dakika)
0.14 mm <sup>2</sup>	138	200	110	2	78	0.67	250	1200
0.22 mm <sup>2</sup>	85	200	110	2.5	78	0.67	250	1200
0.25 mm <sup>2</sup>	77.8	200	110	4.5	78	0.67	250	1200
0.34 mm <sup>2</sup>	56	200	110	6	78	0.67	250	1200
0.50 mm <sup>2</sup>	39	20	120	9	78	0.67	300/500	2000
0.75 mm <sup>2</sup>	26	20	120	12	78	0.67	300/500	2000
1.00 mm <sup>2</sup>	19.5	20	130	15	78	0.67	300/500	2000
1.5 mm <sup>2</sup>	13.3	20	140	18	78	0.67	300/500	2000
2.5 mm <sup>2</sup>	7.98	20	150	26	78	0.67	300/500	2000
4.0 mm <sup>2</sup>	4.95	20	150	34	78	0.67	300/500	2000
6.0 mm <sup>2</sup>	3.3	20	150	44	78	0.67	300/500	2000
10 mm <sup>2</sup>	1.91	20	150	61	78	0.67	300/500	2000
16 mm <sup>2</sup>	1.21	20	150	82	78	0.67	300/500	2000

#### Mekanik Özellikler

Bükülme Yarıçapı	Sıcaklık Aralığı Çalışma
7.5xD mm	-30°C--+70°C

#### Standartlar

Duman Yoğunluk Testi	Korozif Gaz Testi	Halojensizlik Testi	Alev Geciktiricilik Testi	Alev Yayılmı Testi
IEC 61034-2, VDE 0482-1034-2, EN 61034-2	IEC 60754-2, VDE 0482-267-2-3, EN 50267-2-3	IEC 60754-1, VDE 0482-267-2-1, EN 50267-2-1	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2	IEC 60332-3-24, VDE 0482-332-3-24, EN 60332-3-24

#### Notlar

Elektromanyetik uyumluluk (EMC)  
Renk kodu, istenildiği takdirde JZ, OZ, JB, OB olabilir.  
Referans Standardı: DIN VDE 0812

## LIHCH

Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0022.0.0002	2	0.22	3.7	9.7	20	100/500/1000
3.532.2.3.3.0022.0.0003	3	0.22	3.9	11.8	24	100/500/1000
3.532.2.3.3.0022.0.0004	4	0.22	4.2	15.2	29	100/500/1000
3.532.2.3.3.0022.0.0005	5	0.22	4.7	17.5	35	100/500/1000
3.532.2.3.3.0022.0.0006	6	0.22	5.1	20.9	41	100/500/1000
3.532.2.3.3.0022.0.0007	7	0.22	5.1	23	44	100/500/1000
3.532.2.3.3.0022.0.0008	8	0.22	5.7	25.5	51	100/500/1000
3.532.2.3.3.0022.0.0009	9	0.22	6	28.7	57	100/500/1000
3.532.2.3.3.0022.0.0010	10	0.22	6.5	30.8	61	100/500/1000
3.532.2.3.3.0022.0.0012	12	0.22	6.8	35.9	71	100/500/1000
3.532.2.3.3.0022.0.0014	14	0.22	7.2	40.8	81	100/500/1000
3.532.2.3.3.0022.0.0016	16	0.22	7.5	45.8	89	100/500/1000
3.532.2.3.3.0022.0.0018	18	0.22	7.9	51.3	98	100/500/1000
3.532.2.3.3.0022.0.0019	19	0.22	8	53.4	103	100/500/1000
3.532.2.3.3.0022.0.0020	20	0.22	8.4	55.8	108	100/500/1000
3.532.2.3.3.0022.0.0021	21	0.22	8.4	57.9	111	100/500/1000
3.532.2.3.3.0022.0.0024	24	0.22	9.3	68.8	131	100/500/1000
3.532.2.3.3.0022.0.0025	25	0.22	9.3	71	134	100/500/1000
3.532.2.3.3.0022.0.0027	27	0.22	9.7	76.4	147	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0025.0.0002	2	0.25	4.1	11.5	24	100/500/1000
3.532.2.3.3.0025.0.0003	3	0.25	4.3	13.9	29	100/500/1000
3.532.2.3.3.0025.0.0004	4	0.25	4.6	16.3	33	100/500/1000
3.532.2.3.3.0025.0.0005	5	0.25	5.1	20.1	41	100/500/1000
3.532.2.3.3.0025.0.0006	6	0.25	5.5	23	46	100/500/1000
3.532.2.3.3.0025.0.0007	7	0.25	5.5	24.9	49	100/500/1000
3.532.2.3.3.0025.0.0008	8	0.25	6.1	28.7	59	100/500/1000
3.532.2.3.3.0025.0.0009	9	0.25	6.5	31.3	64	100/500/1000
3.532.2.3.3.0025.0.0010	10	0.25	7	34	70	100/500/1000
3.532.2.3.3.0025.0.0012	12	0.25	7.3	39.7	80	100/500/1000
3.532.2.3.3.0025.0.0014	14	0.25	7.7	45.8	91	100/500/1000
3.532.2.3.3.0025.0.0016	16	0.25	8.1	51.4	101	100/500/1000
3.532.2.3.3.0025.0.0018	18	0.25	8.5	59.2	113	100/500/1000
3.532.2.3.3.0025.0.0019	19	0.25	8.5	61.6	116	100/500/1000
3.532.2.3.3.0025.0.0020	20	0.25	9	65.5	125	100/500/1000
3.532.2.3.3.0025.0.0021	21	0.25	9	67.9	129	100/500/1000
3.532.2.3.3.0025.0.0024	24	0.25	9.9	76.7	146	100/500/1000
3.532.2.3.3.0025.0.0025	25	0.25	9.9	79.1	149	100/500/1000
3.532.2.3.3.0025.0.0027	27	0.25	10.2	84.2	160	100/500/1000

## LIHCH

Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0034.0.0002	2	0.34	4.5	13.4	29	100/500/1000
3.532.2.3.3.0034.0.0003	3	0.34	4.7	16.7	34	100/500/1000
3.532.2.3.3.0034.0.0004	4	0.34	5.1	21.4	41	100/500/1000
3.532.2.3.3.0034.0.0005	5	0.34	5.6	25	49	100/500/1000
3.532.2.3.3.0034.0.0006	6	0.34	6.1	29.7	57	100/500/1000
3.532.2.3.3.0034.0.0007	7	0.34	6.1	33	62	100/500/1000
3.532.2.3.3.0034.0.0008	8	0.34	6.7	37	70	100/500/1000
3.532.2.3.3.0034.0.0009	9	0.34	7.7	40.9	80	100/500/1000
3.532.2.3.3.0034.0.0010	10	0.34	7.8	45	87	100/500/1000
3.532.2.3.3.0034.0.0012	12	0.34	8	53	99	100/500/1000
3.532.2.3.3.0034.0.0014	14	0.34	8.5	62.7	115	100/500/1000
3.532.2.3.3.0034.0.0016	16	0.34	9	71	128	100/500/1000
3.532.2.3.3.0034.0.0018	18	0.34	9.5	79	143	100/500/1000
3.532.2.3.3.0034.0.0019	19	0.34	9.6	82.3	151	100/500/1000
3.532.2.3.3.0034.0.0020	20	0.34	10.1	86	158	100/500/1000
3.532.2.3.3.0034.0.0021	21	0.34	10.1	89.3	163	100/500/1000
3.532.2.3.3.0034.0.0024	24	0.34	11.3	101.7	190	100/500/1000
3.532.2.3.3.0034.0.0025	25	0.34	11.3	105	195	100/500/1000
3.532.2.3.3.0034.0.0027	27	0.34	11.6	116	210	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0050.0.0002	2	0.5	5.1	16.9	37	100/500/1000
3.532.2.3.3.0050.0.0003	3	0.5	5.4	21.3	44	100/500/1000
3.532.2.3.3.0050.0.0004	4	0.5	5.8	26	52	100/500/1000
3.532.3.3.3.0050.0.0005	5	0.5	6.4	31.5	63	100/500/1000
3.532.3.3.3.0050.0.0006	6	0.5	6.9	37.6	75	100/500/1000
3.532.3.3.3.0050.0.0007	7	0.5	6.9	42	79	100/500/1000
3.532.3.3.3.0050.0.0008	8	0.5	7.6	46.9	94	100/500/1000
3.532.3.3.3.0050.0.0009	9	0.5	8.8	51.9	107	100/500/1000
3.532.3.3.3.0050.0.0010	10	0.5	8.8	57.1	111	100/500/1000
3.532.3.3.3.0050.0.0012	12	0.5	9.2	69.5	130	100/500/1000
3.532.3.3.3.0050.0.0014	14	0.5	9.7	80.5	149	100/500/1000
3.532.3.3.3.0050.0.0016	16	0.5	10.2	89.7	165	100/500/1000
3.532.3.3.3.0050.0.0018	18	0.5	10.8	96.1	183	100/500/1000
3.532.3.3.3.0050.0.0019	19	0.5	10.8	100.5	187	100/500/1000
3.532.3.3.3.0050.0.0020	20	0.5	11.4	106.3	202	100/500/1000
3.532.3.3.3.0050.0.0021	21	0.5	11.4	110.7	203	100/500/1000
3.532.3.3.3.0050.0.0024	24	0.5	12.7	125.3	236	100/500/1000
3.532.3.3.3.0050.0.0025	25	0.5	12.7	129.7	248	100/500/1000
3.532.3.3.3.0050.0.0027	27	0.5	12.9	139.9	258	100/500/1000

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Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0075.0.0002	2	0.75	5.5	21.6	43	100/500/1000
3.532.2.3.3.0075.0.0003	3	0.75	5.8	28.2	53	100/500/1000
3.532.2.3.3.0075.0.0004	4	0.75	6.3	35.9	65	100/500/1000
3.532.3.3.3.0075.0.0005	5	0.75	6.9	43.4	80	100/500/1000
3.532.3.3.3.0075.0.0006	6	0.75	7.5	51.9	94	100/500/1000
3.532.3.3.3.0075.0.0007	7	0.75	7.5	58.5	99	100/500/1000
3.532.3.3.3.0075.0.0008	8	0.75	8.3	65.9	119	100/500/1000
3.532.3.3.3.0075.0.0009	9	0.75	9.6	76.1	137	100/500/1000
3.532.3.3.3.0075.0.0010	10	0.75	9.6	83.7	143	100/500/1000
3.532.3.3.3.0075.0.0012	12	0.75	10	98.3	166	100/500/1000
3.532.3.3.3.0075.0.0014	14	0.75	10.6	109.3	186	100/500/1000
3.532.3.3.3.0075.0.0016	16	0.75	11.1	123.9	207	100/500/1000
3.532.3.3.3.0075.0.0018	18	0.75	11.8	138.3	235	100/500/1000
3.532.3.3.3.0075.0.0019	19	0.75	11.8	144.9	240	100/500/1000
3.532.3.3.3.0075.0.0020	20	0.75	12.5	156.9	263	100/500/1000
3.532.3.3.3.0075.0.0021	21	0.75	12.5	163.5	266	100/500/1000
3.532.3.3.3.0075.0.0024	24	0.75	13.9	185	307	100/500/1000
3.532.3.3.3.0075.0.0025	25	0.75	13.9	191.6	323	100/500/1000
3.532.3.3.3.0075.0.0027	27	0.75	14.2	206.6	337	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0100.0.0002	2	1	5.9	26	50	100/500/1000
3.532.2.3.3.0100.0.0003	3	1	6.2	34.2	62	100/500/1000
3.532.3.3.3.0100.0.0004	4	1	6.6	43.3	75	100/500/1000
3.532.3.3.3.0100.0.0005	5	1	7.5	52.2	94	100/500/1000
3.532.3.3.3.0100.0.0006	6	1	8.2	66.1	116	100/500/1000
3.532.3.3.3.0100.0.0007	7	1	8.2	74.4	122	100/500/1000
3.532.3.3.3.0100.0.0008	8	1	9.1	83.6	146	100/500/1000
3.532.3.3.3.0100.0.0009	9	1	10.5	91	162	100/500/1000
3.532.3.3.3.0100.0.0010	10	1	10.5	99.3	169	100/500/1000
3.532.3.3.3.0100.0.0012	12	1	10.9	116.5	195	100/500/1000
3.532.3.3.3.0100.0.0014	14	1	11.6	134	223	100/500/1000
3.532.3.3.3.0100.0.0016	16	1	12.2	151.8	249	100/500/1000
3.532.3.3.3.0100.0.0018	18	1	12.9	173.6	287	100/500/1000
3.532.3.3.3.0100.0.0019	19	1	12.9	181.8	293	100/500/1000
3.532.3.3.3.0100.0.0020	20	1	13.6	191.6	316	100/500/1000
3.532.3.3.3.0100.0.0021	21	1	13.6	199.8	320	100/500/1000
3.532.3.3.3.0100.0.0024	24	1	15.1	227	366	100/500/1000
3.532.3.3.3.0100.0.0025	25	1	15.1	235.3	386	100/500/1000
3.532.3.3.3.0100.0.0027	27	1	15.4	254.2	403	100/500/1000

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Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0150.0.0002	2	1.5	6.6	35.7	64	100/500/1000
3.532.2.3.3.0150.0.0003	3	1.5	7	48.5	81	100/500/1000
3.532.2.3.3.0150.0.0004	4	1.5	7.7	62.7	102	100/500/1000
3.532.3.3.3.0150.0.0005	5	1.5	8.4	76.6	126	100/500/1000
3.532.3.3.3.0150.0.0006	6	1.5	9.2	94.8	153	100/500/1000
3.532.3.3.3.0150.0.0007	7	1.5	9.2	107.7	163	100/500/1000
3.532.3.3.3.0150.0.0008	8	1.5	10.1	119.6	187	100/500/1000
3.532.3.3.3.0150.0.0009	9	1.5	11.7	132.6	214	100/500/1000
3.532.3.3.3.0150.0.0010	10	1.5	11.8	146.8	228	100/500/1000
3.532.3.3.3.0150.0.0012	12	1.5	12.3	173.7	265	100/500/1000
3.532.3.3.3.0150.0.0014	14	1.5	13	204.9	309	100/500/1000
3.532.3.3.3.0150.0.0016	16	1.5	13.7	232.1	345	100/500/1000
3.532.3.3.3.0150.0.0018	18	1.5	14.5	259.8	391	100/500/1000
3.532.3.3.3.0150.0.0019	19	1.5	14.5	272.7	402	100/500/1000
3.532.3.3.3.0150.0.0020	20	1.5	15.3	286	432	100/500/1000
3.532.3.3.3.0150.0.0021	21	1.5	15.3	298.9	438	100/500/1000
3.532.3.3.3.0150.0.0024	24	1.5	17.1	340.8	506	100/500/1000
3.532.3.3.3.0150.0.0025	25	1.5	17.1	353.7	533	100/500/1000
3.532.3.3.3.0150.0.0027	27	1.5	17.5	380	556	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0250.0.0002	2	2.5	7.8	58.8	94	100/500/1000
3.532.2.3.3.0250.0.0003	3	2.5	8.3	80.2	122	100/500/1000
3.532.2.3.3.0250.0.0004	4	2.5	9.3	103.4	156	100/500/1000
3.532.3.3.3.0250.0.0005	5	2.5	10.3	123.9	194	100/500/1000
3.532.3.3.3.0250.0.0006	6	2.5	11.2	148.1	231	100/500/1000
3.532.3.3.3.0250.0.0007	7	2.5	11.2	169.5	247	100/500/1000
3.532.3.3.3.0250.0.0008	8	2.5	12.3	192.4	295	100/500/1000
3.532.3.3.3.0250.0.0009	9	2.5	14.5	219.2	340	100/500/1000
3.532.3.3.3.0250.0.0010	10	2.5	14.5	242.5	359	100/500/1000
3.532.3.3.3.0250.0.0012	12	2.5	15.1	285.9	417	100/500/1000
3.532.3.3.3.0250.0.0014	14	2.5	16	332	480	100/500/1000
3.532.3.3.3.0250.0.0016	16	2.5	16.8	378.5	539	100/500/1000
3.532.3.3.3.0250.0.0018	18	2.5	17.8	422.7	610	100/500/1000
3.532.3.3.3.0250.0.0019	19	2.5	17.8	444.1	627	100/500/1000
3.532.3.3.3.0250.0.0020	20	2.5	18.8	466.7	675	100/500/1000
3.532.3.3.3.0250.0.0021	21	2.5	18.8	488.2	686	100/500/1000
3.532.3.3.3.0250.0.0024	24	2.5	21	562.1	790	100/500/1000
3.532.3.3.3.0250.0.0025	25	2.5	21	583.5	833	100/500/1000
3.532.3.3.3.0250.0.0027	27	2.5	21.4	626.4	869	100/500/1000

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Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.2.3.3.0400.0.0002	2	4	8.9	86	136	100/500/1000
3.532.3.3.3.0400.0.0003	3	4	9.5	120.3	169	100/500/1000
3.532.3.3.3.0400.0.0004	4	4	10.8	156.1	226	100/500/1000
3.532.3.3.3.0400.0.0005	5	4	11.8	190.8	276	100/500/1000
3.532.3.3.3.0400.0.0006	6	4	12.8	232.3	330	100/500/1000
3.532.3.3.3.0400.0.0007	7	4	12.8	266.6	357	100/500/1000
3.532.3.3.3.0400.0.0008	8	4	14.1	303	423	100/500/1000
3.532.3.3.3.0400.0.0009	9	4	16.5	339.9	478	100/500/1000
3.532.3.3.3.0400.0.0010	10	4	16.5	375	505	100/500/1000
3.532.3.3.3.0400.0.0012	12	4	17.2	444.6	591	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.3.3.3.0600.0.0002	2	6	10.5	121.3	187	100/500/1000
3.532.3.3.3.0600.0.0003	3	6	11.2	172.7	236	100/500/1000
3.532.3.3.3.0600.0.0004	4	6	12.4	225.7	305	100/500/1000
3.532.3.3.3.0600.0.0005	5	6	13.9	284	392	100/500/1000
3.532.3.3.3.0600.0.0006	6	6	15.2	341.1	471	100/500/1000
3.532.3.3.3.0600.0.0007	7	6	15.2	392.5	511	100/500/1000
3.532.3.3.3.0600.0.0008	8	6	16.7	447.7	606	100/500/1000
3.532.3.3.3.0600.0.0009	9	6	19.7	500.5	682	100/500/1000
3.532.3.3.3.0600.0.0010	10	6	19.7	553.2	724	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.3.3.3.1000.0.0002	2	10	12.5	204.7	285	100/500/1000
3.532.3.3.3.1000.0.0003	3	10	13.4	293.7	357	100/500/1000
3.532.3.3.3.1000.0.0004	4	10	14.9	385.4	480	100/500/1000
3.532.3.3.3.1000.0.0005	5	10	16.6	478.2	609	100/500/1000
3.532.3.3.3.1000.0.0006	6	10	18.2	573.6	734	100/500/1000
3.532.3.3.3.1000.0.0007	7	10	18.2	662.6	803	100/500/1000
Part Numarası	İletken Sayısı	İletken Kesiti (mm <sup>2</sup> )	Ortalama Dış Çap (mm)	Bakır Ağırlığı (kg/km)	Ortalama Ağırlık (kg/km)	Makara Boyu (m)
3.532.3.3.3.1600.0.0002	2	16	16.9	311.2	439	100/500/1000
3.532.3.3.3.1600.0.0003	3	16	18.1	451.4	605	100/500/1000
3.532.3.3.3.1600.0.0004	4	16	20.1	594	788	100/500/1000
3.532.3.3.3.1600.0.0005	5	16	22.1	738.5	989	100/500/1000