

AS/NZS 2802 TYPE 440

GENEL KULLANIM İÇİN MADEN KABLOSU (KAPALI KÖMÜR MADENLERİ HARİÇ)
MINING CABLE FOR GENERAL USE (EXCEPT FOR UNDERGROUND COAL MINES)

1.1-22 kV

KONSTRÜKSİYON AÇIKLAMASI / CONSTRUCTION DESCRIPTION

3 faz damarı ile aralarına yerleştirilmiş 3 kumanda damarı, yarıiletken taşıyıcı ve koruyucu fitil etrafında bükülür.
3 phase cores and 3 interstitial pilot cores laid up around a semiconductive cradle for support and protection of power cores.

KABLO YAPISI

- 1- İLETKEN** : Elektrolitik, kalaylı çoklu bükülmüş esnek bakır tel. (Rope lay) AS/NZS 1125-2.10
- 2- AYIRICI** : 3.3/3.3kV ve üstü tiplerde faz iletkenlerinde yarıiletken tabaka kaplı
- 3- İZOLASYON** : R-EP-90 (Sınıf 2, AS/NZS 3808'e göre)
- 4- AYIRICI** : Yarıiletken tabaka (3.3/3.3kV ve üstü) (Kumanda damarları hariç)
- 5- EKLAN** : Faz damarların üzeri kalaylı bakır tel ve ip ekran ile örgülü.
- 6- BÜKÜM** : Faz damarlar birbirine değmeyecek ancak kumanda damarlarına değecek şekilde yarıiletken fitil etrafına sarılarak bükülür
- 7- DIŞ KILIF** : Ağır hizmete yönelik elastomer dış kılıf (AS/NZS 3808'e göre).

CABLE STRUCTURE

- 1- CONDUCTOR** : Electrolytic, multiple-stranded circular flexible tinned copper wire (rope lay) AS/NZS 1125-2.10
- 2- SEPERATOR** : Semiconducting layer over power cores in 3.3/3.3kV and above types
- 3- INSULATION** : R-EP-90 (Class 2, acc. to AS/NZS 3808)
- 4- SEPERATOR** : Semiconducting layer (3.3/3.3kV and above) (Except for pilot cores)
- 5- SCREEN** : Tinned copper / Nylon braided screen over phase cores.
- 6- LAYUP** : Cores are laid up over a semiconducting cradle without contacting each other, but in contact with interstitial pilot cores.
- 7- OUTER SHEATH** : Heavy-duty elastomer outer sheath (acc. to AS/NZS 3808)



KABLO ÖZELLİKLERİ / CABLE PROPERTIES

İLGİLİ STANDARTLAR / RELATED STANDARDS : AS/NZS 2802
ANMA GERİLİMİ / RATED VOLTAGE : 1.1/1.1 kV, 3.3/3.3 kV, 6.6/6.6 kV, 11/11 kV, 22/22 kV
TEST GERİLİMİ / TEST VOLTAGE : 4,2 kV, 12 kV, 22 kV, 30 kV 45 kV

KULLANIM ALANI

Madenlerde genel kullanım içindir (kapalı kömür madenleri hariç)

ORTAM

Açık ve kapalı maden ocaklarında kullanılır

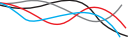
APPLICATION

General use cable for mines (except for underground coal mines)

ENVIRONMENT

Used in underground and open mines

AS/NZS 2802 TYPE 440



Nominal Kesit Cross-section mm ²	Güç damarları Power Cores				Ekran Core screen		Kumanda damarı Pilot core		Kılıf Sheath		Ağırlıklar Mass	
	Büküm Strand no/mm	İletken Çapı Conductor Diameter Nom. mm	İzolasyon kalınlığı Insulation thickness mm	İzolasyon çapı Insulation diameter Nom. mm	Örgü telleri Braid wires no/mm	Nominal Kesit Cross- section mm ²	Büküm Strand no/mm	İzolasyon kalınlığı Insulation thickness mm	Kalınlık Thickness mm	Kablo çapı Overall diameter Nom. Mm	Yaklaşık kablo ağırlığı Approx. cable weight kg/km	Bakır ağırlığı Copper weight kg/km
Type 440.1 1.1/1.1 kV Class 2 insulation												
6	840/0.30	3.4	1.5	6.5	7/0.25	7.2	18/0.30	1	3.8	30	1,350	418
10	770/0.40	4.6	1.5	7.7	7/0.25	8.6	27/0.30	1	3.8	32.6	1,650	594
16	1260/0.40	5.7	1.6	9	7/0.25	9.6	42/0.30	1	4	35.8	2,050	824
25	2090/0.40	7.2	1.6	10.5	7/0.25	11.3	66/0.30	1.2	4.3	39.7	2,700	1,181
35	2850/0.40	8.5	1.6	11.8	7/0.25	12.4	90/0.30	1.2	4.6	43.1	3,250	1,550
50	3800/0.40	10	1.7	13.5	7/0.25	14.1	120/0.30	1.2	5	47.7	4,050	2,091
70	2030/0.67	12	1.8	16	7/0.25	16.5	39/0.67	1.2	5.4	53.9	5,400	2,889
95	2590/0.67	13.2	2	17.6	7/0.30	21.8	39/0.67	1.2	6	59.3	6,600	3,762
120	3360/0.67	15.3	2.1	20	7/0.30	24.7	42/0.67	1.4	6.4	65.1	8,050	4,597
150	4270/0.67	17.1	2.3	22.2	7/0.40	36.1	54/0.67	1.4	6.9	72.1	10,200	5,910
185	5180/0.67	19.2	2.5	24.7	7/0.40	40.5	63/0.67	1.4	7.4	78.6	12,000	7,137
240	6720/0.67	21.8	2.8	27.9	7/0.50	57.7	77/0.67	1.6	8.2	88.6	15,500	9,358
300	8540/0.67	24.4	3	30.9	7/0.50	63.2	98/0.67	1.6	8.8	96.3	18,700	11,457
Type 440.3 3.3/3.3 kV Class 2 insulation												
16	1260/0.40	5.7	3	12.5	7/0.25	13.1	42/0.30	1.4	5.3	46.2	3,050	925
25	2090/0.40	7.2	3	14	7/0.25	14.8	66/0.30	1.4	5.6	50.1	3,800	1,282
35	2850/0.40	8.5	3	15.3	7/0.25	15.8	90/0.30	1.4	5.9	53.5	4,450	1,648
50	3800/0.40	10	3	16.8	7/0.25	17.2	120/0.30	1.4	6.3	57.6	5,250	2,181
70	2030/0.67	12	3	18.8	7/0.25	18.6	39/0.67	1.4	6.6	62.5	6,600	2,950
95	2590/0.67	13.2	3	20	7/0.25	20.3	39/0.67	1.6	7.1	66.2	7,550	3,719
120	3360/0.67	15.3	3	22.1	7/0.30	27.2	42/0.67	1.6	7.4	72	9,150	4,669
150	4270/0.67	17.1	3	23.9	7/0.40	39.6	54/0.67	1.6	7.8	78	11,200	6,011
185	5180/0.67	19.2	3	26	7/0.40	42.2	63/0.67	1.6	8.2	83.4	12,900	7,186
240	6720/0.67	21.8	3	28.6	7/0.40	46.6	77/0.67	1.6	8.8	90.3	15,600	9,038
300	8540/0.67	24.4	3	31.2	7/0.50	63.2	98/0.67	1.6	9.4	98.4	19,200	11,457
Type 440.6 6.6/6.6 kV Class 2 insulation												
16	1260/0.40	5.7	5	16.5	7/0.25	17.2	42/0.30	1.4	6.4	57.3	4,450	1,043
25	2090/0.40	7.2	5	18	7/0.25	18.6	66/0.30	1.6	6.7	61.2	5,250	1,392
35	2850/0.40	8.5	5	19.3	7/0.25	18.6	90/0.30	1.6	7	64.6	6,000	1,728
50	3800/0.40	10	5	20.8	7/0.25	21.3	120/0.30	1.6	7.3	68.5	6,900	2,299
70	2030/0.67	12	5	22.8	7/0.25	23.4	39/0.67	1.6	7.7	73.7	8,350	3,088
95	2590/0.67	13.2	5	24	7/0.30	29.2	39/0.67	1.8	8.1	77.8	9,650	3,975
120	3360/0.67	15.3	5	26.1	7/0.30	31.7	42/0.67	1.8	8.5	83.1	11,200	4,799
150	4270/0.67	17.1	5	27.9	7/0.40	45.7	54/0.67	1.8	8.9	89.1	13,500	6,187
185	5180/0.67	19.2	5	30	7/0.40	48.4	63/0.67	1.8	9.3	94.5	15,300	7,365
240	6720/0.67	21.8	5	32.6	7/0.40	52.8	77/0.67	1.8	9.9	101.4	18,100	9,216
300	8540/0.67	24.4	5	35.2	7/0.50	71.5	98/0.67	1.8	10.4	109.3	21,900	11,696
Type 440.11 11/11 kV Class 2 insulation												
25	2090/0.40	7.2	7.6	23.4	7/0.25	23.7	66/0.30	2	8.1	75.6	7,600	1,538
35	2850/0.40	8.5	7.6	24.7	7/0.30	30.2	90/0.30	2	8.4	79.7	8,700	2,063
50	3800/0.40	10	7.6	26.2	7/0.30	31.7	120/0.30	2	8.7	83.6	9,750	2,598
70	2030/0.67	12	7.6	28.2	7/0.30	34.1	39/0.67	2	9.1	88.8	11,400	3,396
95	2590/0.67	13.2	7.6	29.4	7/0.40	47.5	39/0.67	2.2	9.6	93.7	13,200	4,502
120	3360/0.67	15.3	7.6	31.5	7/0.40	51	42/0.67	2.2	9.9	98.8	14,900	5,354
150	4270/0.67	17.1	7.6	33.3	7/0.40	53.7	54/0.67	2.2	10.3	103.5	16,800	6,417
185	5180/0.67	19.2	7.6	35.4	7/0.40	57.2	63/0.67	2.2	10.7	108.8	18,800	7,618
Type 440.22 22/22 kV Class 2 insulation												
35	2850/0.40	8.5	10.5	32.6	7/0.40	55.4	90/0.30	2.5	10	105	14,300	2,788
50	3800/0.40	10	10.5	34.1	7/0.40	58.1	120/0.30	2.5	10.3	108.9	15,500	3,359