

AS/NZS 1802 TYPE 241

YARIİLETKEN EKSPANLI KAPALI KÖMÜR MADENİ KABLOSU
SEMICONDUCTIVE SCREENED CABLE FOR UNDERGROUND COAL MINES

1.1-11 kV

KONSTRÜKSİYON AÇIKLAMASI / CONSTRUCTION DESCRIPTION

3 faz damarı ile aralarına yerleştirmiş 3 toprak damarı, merkezi bir kumanda damarı içeren yarıiletken taşıyıcı fitil etrafında bükülür ve tüm damarlar yarıiletken dolgu ile ekranlanır. Dolgu ve dış kılıf arasında mukavemet artırıcı ip örgü mevcuttur.
3 phase cores and 3 interstitial earth cores laid up around a semiconductive cradle containing a central pilot core.
All cores are screened by semiconductive filler as well. Contains open weave braid reinforcement layer.

KABLO YAPISI

- 1- İLETKEN** : Elektrolitik, kalaylı çoklu bükülmüş esnek bakır tel. (Rope lay) AS/NZS 1125-2.10
- 2- AYIRICI** : Faz (3.3/3.3kV ve üstü)ve toprak (tümü) damarlarında yarıiletken tabaka
- 3- İZOLASYON** : Faz ve kumanda damarları R-EP-90 (AS/NZS 3808'e göre) ile izole edilir. Toprak damarları izole edilmez
- 4- AYIRICI** : Faz damarları izolasyonu üstünde yarıiletken tabaka
- 5- BÜKÜM** : Faz damarlar birbirine değmeyecek ancak toprak damarlarına değecek şekilde içinde kumanda damarı bulunan yarıiletken fitil etrafına sarılarak bükülür
- 6- DOLGU MALZEMESİ** : Yarıiletken elastomerik bileşik
- 7- AYIRICI** : Mukavemet artırıcı aralıklı örgü ip
- 8- 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 conductors (3.3/3.3kV and above) and earth conductors (all)
- 3- INSULATION** : Power and pilot cores are insulated with R-EP-90 (acc. to AS/NZS 3808). Earth cores are not insulated
- 4- SEPERATOR** : Semiconducting layer over power core insulations
- 5- LAYUP** : Cores are laid up over a semiconducting cradle with one pilot core in the center and without contacting each other, but in contact with interstitial earth cores
- 6- BEDDING** : Semiconducting elastomeric compound
- 7- SEPERATOR** : Open weave braid for reinforcement
- 8- OUTER SHEATH** : Heavy-duty elastomer outer sheath (acc.to AS/NZS 3808)



KABLO ÖZELLİKLERİ / CABLE PROPERTIES

İLGİLİ STANDARTLAR / RELATED STANDARDS
ANMA GERİLİMİ / RATED VOLTAGE
TEST GERİLİMİ / TEST VOLTAGE

: AS/NZS 1802
: 1.1/1.1 kV, 3.3/3.3 kV, 6.6/6.6 kV, 11/11 kV
: 4,2 kV, 12 kV, 22 kV, 30 kV

KULLANIM ALANI

Kapalı kömür madenlerinde (nakliye araçları hariç) genel kullanım içindir.

ORTAM

Patlayıcı gaz ve tozların olduğu kapalı maden ocaklarında kullanılır.

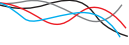
APPLICATION

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

ENVIRONMENT

Used in mines where explosive gasses and dust can accumulate.

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Nominal Kesit Cross-section mm ²	Güç damarları Power Cores				Toprak damarları Earth cores			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	Büküm Strand Min.no/mm	Nominal Kesit Cross- section mm ²	Yarı İletken Kılıf Kalınlığı Semiconductive covering thickness mm ²	Büküm Strand no/mm	İzolasyon kalınlığı Insulation thickness Min.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	241.1	1.1/1.1kV											
6	84/0.30	3.4	1.5	6.5	15/0.30	1.1	1	24/0,20	0.8	3.8	28.5	1,050	212
10	77/0.40	4.6	1.5	7.7	24/0.30	1.7	1	24/0,20	0.8	3.8	31.1	1,300	345
16	126/0.40	5.7	1.6	9	39/0.30	2.8	1	24/0,20	0.8	3.9	34.1	1,700	549
25	209/0.40	7.2	1.6	10.5	63/0.30	4.5	1	24/0,20	0.8	4.2	37.9	2,250	862
35	285/0.40	8.5	1.6	11.8	87/0.30	6.2	1	24/0,20	0.8	4.4	41.2	2,750	1,199
50	380/0.40	10	1.7	13.5	114/0.30	8.1	1	40/0,20	0.8	4.9	45.9	3,500	1,686
70	203/0.67	12	1.8	16	36/0.67	12.7	1	40/0,20	0.8	5.3	52.2	4,800	2,394
95	259/0.67	13.2	2	17.6	36/0.67	12.7	1	40/0,20	0.8	5.8	56.7	5,700	3,114
120	336/0.67	15.3	2.1	20	39/0.67	13.8	1.2	40/0,20	0.8	6.3	62.7	7,100	3,866
150	427/0.67	17.1	2.3	22.2	48/0.67	17	1.2	40/0,20	0.8	6.7	68.3	8,650	4,822
185	518/0.67	19.2	2.5	24.7	63/0.67	22.3	1.4	40/0,20	0.8	7.3	74.9	10,300	5,983
240	672/0.67	21.8	2.8	27.9	77/0.67	27.2	1.4	40/0,20	0.8	8	83.3	13,000	7,708
300	854/0.67	24.4	3	30.9	98/0.67	34.6	1.4	40/0,20	0.8	8.7	91.2	16,000	9,649
Type	241.3	3.3/3.3kV											
16	126/0.40	5.7	3	12.5	39/0.30	2.8	1	24/0,20	0.8	5	43.8	2,500	549
25	209/0.40	7.2	3	14	63/0.30	4.5	1	24/0,20	0.8	5.3	47.7	3,150	862
35	285/0.40	8.5	3	15.3	87/0.30	6.2	1	24/0,20	0.8	5.6	51.1	3,750	1,199
50	380/0.40	10	3	16.8	114/0.30	8.1	1.2	40/0,20	0.8	6	55.2	4,550	1,686
70	203/0.67	12	3	18.8	36/0.67	12.7	1.2	40/0,20	0.8	6.4	60.3	5,800	2,394
95	259/0.67	13.2	3	20	36/0.67	12.7	1.2	40/0,20	0.8	6.8	63.8	6,750	3,114
120	336/0.67	15.3	3	22.1	39/0.67	13.8	1.2	40/0,20	0.8	7.2	69.1	8,150	3,866
150	427/0.67	17.1	3	23.9	48/0.67	17	1.2	40/0,20	0.8	7.6	73.8	9,650	4,822
185	518/0.67	19.2	3	26	63/0.67	22.3	1.4	40/0,20	0.8	8	79.2	11,300	5,983
240	672/0.67	21.8	3	28.6	77/0.67	27.2	1.4	40/0,20	0.8	8.6	86	13,800	7,708
300	854/0.67	24.4	3	31.2	98/0.67	34.6	1.4	40/0,20	0.8	9.1	92.6	16,600	9,649
Type	241.6	6.6/6.6kV											
16	126/0.40	5.7	5	16.5	39/0.30	2.8	1.4	24/0,20	0.8	6.1	54.9	3,700	549
25	209/0.40	7.2	5	18	63/0.30	4.5	1.4	24/0,20	0.8	6.4	58.8	4,450	862
35	285/0.40	8.5	5	19.3	87/0.30	6.2	1.4	24/0,20	0.8	6.7	62.2	5,150	1,199
50	380/0.40	10	5	20.8	114/0.30	8.1	1.4	40/0,20	0.8	7.1	66.2	6,000	1,686
70	203/0.67	12	5	22.8	36/0.67	12.7	1.4	40/0,20	0.8	7.4	71.2	7,350	2,394
95	259/0.67	13.2	5	24	36/0.67	12.7	1.4	40/0,20	0.8	7.9	74.8	8,450	3,114
120	336/0.67	15.3	5	26.1	39/0.67	13.8	1.4	40/0,20	0.8	8.3	80.2	9,950	3,866
150	427/0.67	17.1	5	27.9	48/0.67	17	1.4	40/0,20	0.8	8.6	84.6	11,500	4,822
185	518/0.67	19.2	5	30	63/0.67	22.3	1.4	40/0,20	0.8	9	90	13,300	5,983
240	672/0.67	21.8	5	32.6	77/0.67	27.2	1.4	40/0,20	0.8	9.6	96.8	16,000	7,708
300	854/0.67	24.4	5	35.2	98/0.67	34.6	1.4	40/0,20	0.8	10.2	103.6	19,000	9,649
Type	241.11	11/11kV											
25	209/0.40	7.2	7.6	23.4	63/0.30	4.5	1.8	24/0,20	0.8	7.8	73.2	6,550	862
35	285/0.40	8.5	7.6	24.7	87/0.30	6.2	1.8	24/0,20	0.8	8.1	76.6	7,350	1,199
50	380/0.40	10	7.6	26.2	114/0.30	8.1	1.8	40/0,20	0.8	8.5	80.6	8,300	1,686
70	203/0.67	12	7.6	28.2	36/0.67	12.7	1.8	40/0,20	0.8	8.9	85.7	9,850	2,394
95	259/0.67	13.2	7.6	29.4	36/0.67	12.7	1.8	40/0,20	0.8	9.3	89.1	11,000	3,114
120	336/0.67	15.3	7.6	31.5	39/0.67	13.8	1.8	40/0,20	0.8	9.7	94.4	12,700	3,866
150	427/0.67	17.1	7.6	33.3	48/0.67	17	1.8	40/0,20	0.8	10	98.9	14,400	4,822
185	518/0.67	19.2	7.6	35.4	63/0.67	22.3	1.8	40/0,20	0.8	10.4	104.2	16,300	5,983