



Mining trailing &amp; reeling cables

# AS/NZS 1972

## Underground Mining Machine & Feeder Cables

Types 1, 2S &amp; 2S.3 screened machine and lighting cables, 1.1 &amp; 3.3 kV



AS/NZS 1972

1.1 &amp; 3.3 kV

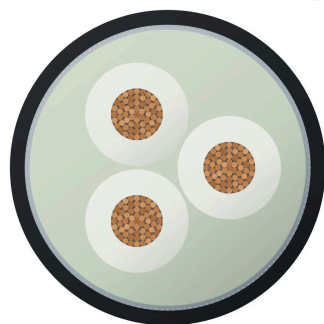
Types 1, 2S &amp; 2S.3

### Application

AS/NZS 1972 fixed and semi-fixed underground mine feeder cables: Type 1 (1.1/1.1 kV V-90/5V-90 PVC), Type 2S (1.1/1.1 kV R-EP-90/HD-90-CPE), and Type 2S.3 (3.3/3.3 kV R-EP-90/HD-90-CPE) with collective or individual copper/textile braid screens.

**Typical uses:** Continuous miner wiring, Roadheader motor leads, Shuttle car interconnects, Longwall face lighting, Personnel transporters, Flameproof switchgear

### Construction



Cross-section, not to scale

|   |                                                     |             |
|---|-----------------------------------------------------|-------------|
| 1 | Flexible tinned copper conductor                    | AS/NZS 1125 |
| 2 | 90 °C core insulation (R-EP-90 EPR or V-90 PVC)     | AS/NZS 3808 |
| 3 | Composite tinned copper / polyester earth screen    | AS/NZS 1972 |
| 4 | Interstitial pilot conductors (Type 2S & Type 2S.3) | AS/NZS 1972 |
| 5 | Outer sheath / covering (HD-90-CPE or 5V-90 PVC)    | AS/NZS 3808 |

## Technical data

Typical values

|                                 |                                                               |                                 |                                                                               |
|---------------------------------|---------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------|
| Rated voltage U0/U              | 1.1/1.1 kV (Types 1 & 2S); 3.3/3.3 kV (Type 2S.3)             | Screening configurations        | Individually screened (2–4C) or collectively screened (2–30C)                 |
| Electrical symmetry             | Cables rated > 20 A are electrically symmetrical              | Pilot conductors (Type 2S/2S.3) | Optional 1, 2 or 3 × 1.0 mm <sup>2</sup> (2S); 3 × 1.5 mm <sup>2</sup> (2S.3) |
| Max. continuous conductor temp. | +90 °C (V-90 PVC on Type 1; R-EP-90 EPR on Type 2S)           | Short-circuit temperature       | +250 °C (R-EP-90 Type 2S); +160 °C (V-90 PVC Type 1)                          |
| Min. installation temperature   | –25 °C (Type 2S / 2S.3); 0 °C (Type 1 PVC)                    | Conductor stranding             | Flexible stranded tinned annealed copper (AS/NZS 1125)                        |
| External protection requirement | Type 1 requires duct/hose; Type 2S self-protected in free air | Minimum bend radius             | 6 × D fixed machine wiring; 10 × D flexing interconnect                       |
| Flame retardance                | AS/NZS 1660.5.6 Cat. C1 (Type 2S/2S.3) & Cat. C3 (Type 1)     | Oil & water performance         | Immersion resistant (Type 2S HD-90-CPE); splash resistant (Type 1)            |
| Standards                       | AS/NZS 1972 (underground coal mining — non-reeling/trailing)  | Standard packing                | 250 m, 500 m or 1,000 m wooden drums; custom machine-kit cut lengths          |

## Sizes

43 standard constructions

Tick the sizes you need and send this page to [info@tebaoflex.com](mailto:info@tebaoflex.com) or WhatsApp +86 185 9591 3361.

| Type · grade · size                                                              | Voltage U0/U | Main cores | Core area mm <sup>2</sup> | Pilot cores             | Conductor Ø mm | Insulation wall mm | Outer wall mm | Nominal OD mm | Total mass kg/km |
|----------------------------------------------------------------------------------|--------------|------------|---------------------------|-------------------------|----------------|--------------------|---------------|---------------|------------------|
| Type 1 · Individually Screened · 1.1/1.1 kV · V-90/5V-90 PVC 7 sizes             |              |            |                           |                         |                |                    |               |               |                  |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 2×1.5 mm <sup>2</sup>        | 1.1/1.1 kV   | 2          | 1.5                       | None                    | 1.6            | 0.8                | 0.8           | 10.2          | 150              |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 3×1.5 mm <sup>2</sup>        | 1.1/1.1 kV   | 3          | 1.5                       | None                    | 1.6            | 0.8                | 0.8           | 10.8          | 200              |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 3×10 mm <sup>2</sup>         | 1.1/1.1 kV   | 3          | 10.0                      | None                    | 4.6            | 1.0                | 1.0           | 18.1          | 600              |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 3×16 mm <sup>2</sup>         | 1.1/1.1 kV   | 3          | 16.0                      | None                    | 6.2            | 1.0                | 1.3           | 22.0          | 850              |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 4×1.5 mm <sup>2</sup>        | 1.1/1.1 kV   | 4          | 1.5                       | None                    | 1.6            | 0.8                | 0.8           | 11.9          | 250              |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 4×10 mm <sup>2</sup>         | 1.1/1.1 kV   | 4          | 10.0                      | None                    | 4.6            | 1.0                | 1.3           | 20.5          | 750              |
| <input type="checkbox"/> Type 1 Ind. · 1.1/1.1 kV · 4×16 mm <sup>2</sup>         | 1.1/1.1 kV   | 4          | 16.0                      | None                    | 6.2            | 1.0                | 1.3           | 24.3          | 1,100            |
| Type 1 · Collectively Screened · 1.1/1.1 kV · V-90/5V-90 PVC 6 sizes             |              |            |                           |                         |                |                    |               |               |                  |
| <input type="checkbox"/> Type 1 Coll. · 1.1/1.1 kV · 2×1.5 mm <sup>2</sup>       | 1.1/1.1 kV   | 2          | 1.5                       | None                    | 1.6            | 0.8                | 0.8           | 9.4           | 150              |
| <input type="checkbox"/> Type 1 Coll. · 1.1/1.1 kV · 3×1.5 mm <sup>2</sup>       | 1.1/1.1 kV   | 3          | 1.5                       | None                    | 1.6            | 0.8                | 0.8           | 9.9           | 150              |
| <input type="checkbox"/> Type 1 Coll. · 1.1/1.1 kV · 4×1.5 mm <sup>2</sup>       | 1.1/1.1 kV   | 4          | 1.5                       | None                    | 1.6            | 0.8                | 0.8           | 10.7          | 200              |
| <input type="checkbox"/> Type 1 Coll. · 1.1/1.1 kV · 6×1.5 mm <sup>2</sup>       | 1.1/1.1 kV   | 6          | 1.5                       | None                    | 1.6            | 0.8                | 1.0           | 12.8          | 250              |
| <input type="checkbox"/> Type 1 Coll. · 1.1/1.1 kV · 16×1.5 mm <sup>2</sup>      | 1.1/1.1 kV   | 16         | 1.5                       | None                    | 1.6            | 0.8                | 1.3           | 18.8          | 550              |
| <input type="checkbox"/> Type 1 Coll. · 1.1/1.1 kV · 30×1.5 mm <sup>2</sup>      | 1.1/1.1 kV   | 30         | 1.5                       | None                    | 1.6            | 0.8                | 1.5           | 24.7          | 900              |
| Type 2S · Individually Screened · 1.1/1.1 kV · R-EP-90/HD-90-CPE 16 sizes        |              |            |                           |                         |                |                    |               |               |                  |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 2×10 mm <sup>2</sup>        | 1.1/1.1 kV   | 2          | 10.0                      | None                    | 4.6            | 1.0                | 1.8           | 18.9          | 600              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 2×16 mm <sup>2</sup>        | 1.1/1.1 kV   | 2          | 16.0                      | None                    | 6.2            | 1.0                | 1.8           | 22.1          | 850              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×10 mm <sup>2</sup>        | 1.1/1.1 kV   | 3          | 10.0                      | None                    | 4.6            | 1.0                | 1.8           | 20.1          | 750              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×16 mm <sup>2</sup>        | 1.1/1.1 kV   | 3          | 16.0                      | None                    | 6.2            | 1.0                | 1.8           | 23.5          | 1,050            |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 4×10 mm <sup>2</sup>        | 1.1/1.1 kV   | 4          | 10.0                      | None                    | 4.6            | 1.0                | 1.8           | 22.1          | 950              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 4×16 mm <sup>2</sup>        | 1.1/1.1 kV   | 4          | 16.0                      | None                    | 6.2            | 1.0                | 1.8           | 25.9          | 1,300            |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 2×16 + 1×1P mm <sup>2</sup> | 1.1/1.1 kV   | 2          | 16.0                      | 1 × 1.0 mm <sup>2</sup> | 6.2            | 1.0                | 1.8           | 22.1          | 1,000            |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 2×6 + 2×1P mm <sup>2</sup>  | 1.1/1.1 kV   | 2          | 6.0                       | 2 × 1.0 mm <sup>2</sup> | 3.5            | 1.0                | 1.8           | 16.9          | 500              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 2×10 + 2×1P mm <sup>2</sup> | 1.1/1.1 kV   | 2          | 10.0                      | 2 × 1.0 mm <sup>2</sup> | 4.6            | 1.0                | 1.8           | 19.0          | 650              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 2×16 + 2×1P mm <sup>2</sup> | 1.1/1.1 kV   | 2          | 16.0                      | 2 × 1.0 mm <sup>2</sup> | 6.2            | 1.0                | 1.8           | 22.1          | 900              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×6 + 3×1P mm <sup>2</sup>  | 1.1/1.1 kV   | 3          | 6.0                       | 3 × 1.0 mm <sup>2</sup> | 3.5            | 1.0                | 1.8           | 19.8          | 700              |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×10 + 3×1P mm <sup>2</sup> | 1.1/1.1 kV   | 3          | 10.0                      | 3 × 1.0 mm <sup>2</sup> | 4.6            | 1.0                | 1.8           | 21.3          | 850              |

| Type · grade · size                                                                   | Voltage U0/U | Main cores | Core area<br>mm <sup>2</sup> | Pilot cores             | Conductor Ø<br>mm | Insulation wall<br>mm | Outer wall<br>mm | Nominal OD<br>mm | Total mass<br>kg/km |
|---------------------------------------------------------------------------------------|--------------|------------|------------------------------|-------------------------|-------------------|-----------------------|------------------|------------------|---------------------|
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×16 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 16.0                         | 3 × 1.0 mm <sup>2</sup> | 6.2               | 1.0                   | 1.8              | 23.5             | 1,100               |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×25 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 25.0                         | 3 × 1.0 mm <sup>2</sup> | 7.2               | 1.2                   | 1.8              | 26.8             | 1,550               |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×35 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 35.0                         | 3 × 1.0 mm <sup>2</sup> | 8.4               | 1.2                   | 1.8              | 29.5             | 1,900               |
| <input type="checkbox"/> Type 2S Ind. · 1.1/1.1 kV · 3×50 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 50.0                         | 3 × 1.0 mm <sup>2</sup> | 9.7               | 1.4                   | 1.9              | 33.4             | 2,450               |
| Type 2S · Collectively Screened · 1.1/1.1 kV · R-EP-90/HD-90-CPE 6 sizes              |              |            |                              |                         |                   |                       |                  |                  |                     |
| <input type="checkbox"/> Type 2S Coll. · 1.1/1.1 kV · 2×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 2          | 1.5                          | None                    | 1.6               | 1.0                   | 1.8              | 12.2             | 200                 |
| <input type="checkbox"/> Type 2S Coll. · 1.1/1.1 kV · 3×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 3          | 1.5                          | None                    | 1.6               | 1.0                   | 1.8              | 12.7             | 250                 |
| <input type="checkbox"/> Type 2S Coll. · 1.1/1.1 kV · 4×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 4          | 1.5                          | None                    | 1.6               | 1.0                   | 1.8              | 13.7             | 250                 |
| <input type="checkbox"/> Type 2S Coll. · 1.1/1.1 kV · 6×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 6          | 1.5                          | None                    | 1.6               | 1.0                   | 1.8              | 16.0             | 350                 |
| <input type="checkbox"/> Type 2S Coll. · 1.1/1.1 kV · 16×1.5 mm <sup>2</sup>          | 1.1/1.1 kV   | 16         | 1.5                          | None                    | 1.6               | 1.0                   | 1.8              | 22.8             | 750                 |
| <input type="checkbox"/> Type 2S Coll. · 1.1/1.1 kV · 30×1.5 mm <sup>2</sup>          | 1.1/1.1 kV   | 30         | 1.5                          | None                    | 1.6               | 1.0                   | 1.8              | 29.1             | 1,200               |
| Type 2S.3 · Individually Screened · 3.3/3.3 kV · R-EP-90/HD-90-CPE 8 sizes            |              |            |                              |                         |                   |                       |                  |                  |                     |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×10 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 10.0                         | 3 × 1.5 mm <sup>2</sup> | 4.6               | 3.0                   | 1.8              | 30.5             | 1,400               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×16 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 16.0                         | 3 × 1.5 mm <sup>2</sup> | 6.2               | 3.0                   | 1.9              | 34.7             | 1,850               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×25 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 25.0                         | 3 × 1.5 mm <sup>2</sup> | 7.2               | 3.0                   | 2.0              | 37.3             | 2,350               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×35 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 35.0                         | 3 × 1.5 mm <sup>2</sup> | 8.4               | 3.0                   | 2.0              | 39.8             | 2,750               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×50 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 50.0                         | 3 × 1.5 mm <sup>2</sup> | 9.7               | 3.0                   | 2.1              | 42.8             | 3,250               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×70 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 70.0                         | 3 × 1.5 mm <sup>2</sup> | 12.0              | 3.0                   | 2.3              | 48.3             | 4,350               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×95 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 95.0                         | 3 × 1.5 mm <sup>2</sup> | 13.3              | 3.0                   | 2.4              | 51.4             | 5,150               |
| <input type="checkbox"/> Type 2S.3 Ind. · 3.3/3.3 kV · 3×120 + 3×1.5P mm <sup>2</sup> | 3.3/3.3 kV   | 3          | 120.0                        | 3 × 1.5 mm <sup>2</sup> | 15.3              | 3.0                   | 2.5              | 56.4             | 6,400               |

- Type 1 cables have a 5V-90 PVC outer covering and require external mechanical protection (conduit, duct or protective hose) when installed outside enclosures.
- Type 2S and Type 2S.3 cables have a heavy-duty HD-90-CPE elastomer outer sheath and do not require further mechanical protection for external non-protected machine interconnections.

## Electrical parameters

43 sizes

| Type · grade · size                                   | Voltage U0/U | Main cores | Core area<br>mm <sup>2</sup> | AC resistance 90 °C<br>Ω/km | Reactance 50 Hz<br>Ω/km | Voltage drop<br>mV/A·m | Max. DC res. combined<br>Ω/km |
|-------------------------------------------------------|--------------|------------|------------------------------|-----------------------------|-------------------------|------------------------|-------------------------------|
| Type 1 · Individually Screened · 1.1/1.1 kV 7 sizes   |              |            |                              |                             |                         |                        |                               |
| Type 1 Ind. · 1.1/1.1 kV · 2×1.5 mm <sup>2</sup>      | 1.1/1.1 kV   | 2          | 1.5                          | 17.500                      | 0.1200                  | 30.300                 | 13.700                        |
| Type 1 Ind. · 1.1/1.1 kV · 3×1.5 mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 1.5                          | 17.500                      | 0.1200                  | 30.300                 | 13.700                        |
| Type 1 Ind. · 1.1/1.1 kV · 3×10 mm <sup>2</sup>       | 1.1/1.1 kV   | 3          | 10.0                         | 2.580                       | 0.0923                  | 4.470                  | 6.060                         |
| Type 1 Ind. · 1.1/1.1 kV · 3×16 mm <sup>2</sup>       | 1.1/1.1 kV   | 3          | 16.0                         | 1.580                       | 0.0854                  | 2.740                  | 3.720                         |
| Type 1 Ind. · 1.1/1.1 kV · 4×1.5 mm <sup>2</sup>      | 1.1/1.1 kV   | 4          | 1.5                          | 17.500                      | 0.1280                  | 30.300                 | 13.700                        |
| Type 1 Ind. · 1.1/1.1 kV · 4×10 mm <sup>2</sup>       | 1.1/1.1 kV   | 4          | 10.0                         | 2.580                       | 0.0998                  | 4.470                  | 6.060                         |
| Type 1 Ind. · 1.1/1.1 kV · 4×16 mm <sup>2</sup>       | 1.1/1.1 kV   | 4          | 16.0                         | 1.580                       | 0.0929                  | 2.740                  | 3.720                         |
| Type 1 · Collectively Screened · 1.1/1.1 kV 6 sizes   |              |            |                              |                             |                         |                        |                               |
| Type 1 Coll. · 1.1/1.1 kV · 2×1.5 mm <sup>2</sup>     | 1.1/1.1 kV   | 2          | 1.5                          | 17.500                      | 0.1060                  | 30.300                 | 13.700                        |
| Type 1 Coll. · 1.1/1.1 kV · 3×1.5 mm <sup>2</sup>     | 1.1/1.1 kV   | 3          | 1.5                          | 17.500                      | 0.1060                  | 30.300                 | 13.700                        |
| Type 1 Coll. · 1.1/1.1 kV · 4×1.5 mm <sup>2</sup>     | 1.1/1.1 kV   | 4          | 1.5                          | 17.500                      | 0.1140                  | 30.300                 | 13.700                        |
| Type 1 Coll. · 1.1/1.1 kV · 6×1.5 mm <sup>2</sup>     | 1.1/1.1 kV   | 6          | 1.5                          | 17.500                      | 0.1230                  | 30.300                 | 13.700                        |
| Type 1 Coll. · 1.1/1.1 kV · 16×1.5 mm <sup>2</sup>    | 1.1/1.1 kV   | 16         | 1.5                          | 17.500                      | 0.1520                  | 30.300                 | 13.700                        |
| Type 1 Coll. · 1.1/1.1 kV · 30×1.5 mm <sup>2</sup>    | 1.1/1.1 kV   | 30         | 1.5                          | 17.500                      | 0.1690                  | 30.300                 | 13.700                        |
| Type 2S · Individually Screened · 1.1/1.1 kV 16 sizes |              |            |                              |                             |                         |                        |                               |
| Type 2S Ind. · 1.1/1.1 kV · 2×10 mm <sup>2</sup>      | 1.1/1.1 kV   | 2          | 10.0                         | 2.580                       | 0.0953                  | 4.470                  | 6.060                         |
| Type 2S Ind. · 1.1/1.1 kV · 2×16 mm <sup>2</sup>      | 1.1/1.1 kV   | 2          | 16.0                         | 1.580                       | 0.0879                  | 2.740                  | 3.720                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×10 mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 10.0                         | 2.580                       | 0.0953                  | 4.470                  | 6.060                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×16 mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 16.0                         | 1.580                       | 0.0879                  | 2.740                  | 3.720                         |

| Type · grade · size                                          | Voltage U0/U | Main cores | Core area<br>mm <sup>2</sup> | AC resistance 90 °C<br>Ω/km | Reactance 50 Hz<br>Ω/km | Voltage drop<br>mV/A·m | Max. DC res. combined<br>Ω/km |
|--------------------------------------------------------------|--------------|------------|------------------------------|-----------------------------|-------------------------|------------------------|-------------------------------|
| Type 2S Ind. · 1.1/1.1 kV · 4×10 mm <sup>2</sup>             | 1.1/1.1 kV   | 4          | 10.0                         | 2.580                       | 0.1030                  | 4.470                  | 6.060                         |
| Type 2S Ind. · 1.1/1.1 kV · 4×16 mm <sup>2</sup>             | 1.1/1.1 kV   | 4          | 16.0                         | 1.580                       | 0.0954                  | 2.740                  | 3.720                         |
| Type 2S Ind. · 1.1/1.1 kV · 2×16 + 1×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 2          | 16.0                         | 1.580                       | 0.0786                  | 2.740                  | 3.720                         |
| Type 2S Ind. · 1.1/1.1 kV · 2×6 + 2×1P mm <sup>2</sup>       | 1.1/1.1 kV   | 2          | 6.0                          | 4.320                       | 0.0936                  | 7.480                  | 8.210                         |
| Type 2S Ind. · 1.1/1.1 kV · 2×10 + 2×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 2          | 10.0                         | 2.580                       | 0.0860                  | 4.470                  | 6.060                         |
| Type 2S Ind. · 1.1/1.1 kV · 2×16 + 2×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 2          | 16.0                         | 1.580                       | 0.0786                  | 2.740                  | 3.720                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×6 + 3×1P mm <sup>2</sup>       | 1.1/1.1 kV   | 3          | 6.0                          | 4.320                       | 0.1190                  | 7.490                  | 8.210                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×10 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 10.0                         | 2.580                       | 0.1040                  | 4.470                  | 6.060                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×16 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 16.0                         | 1.580                       | 0.0879                  | 2.740                  | 3.720                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×25 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 25.0                         | 0.951                       | 0.0870                  | 1.650                  | 2.240                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×35 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 35.0                         | 0.698                       | 0.0837                  | 1.220                  | 1.640                         |
| Type 2S Ind. · 1.1/1.1 kV · 3×50 + 3×1P mm <sup>2</sup>      | 1.1/1.1 kV   | 3          | 50.0                         | 0.523                       | 0.0828                  | 0.917                  | 1.230                         |
| Type 2S · Collectively Screened · 1.1/1.1 kV 6 sizes         |              |            |                              |                             |                         |                        |                               |
| Type 2S Coll. · 1.1/1.1 kV · 2×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 2          | 1.5                          | 17.500                      | 0.1180                  | 30.300                 | 13.700                        |
| Type 2S Coll. · 1.1/1.1 kV · 3×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 3          | 1.5                          | 17.500                      | 0.1190                  | 30.300                 | 13.700                        |
| Type 2S Coll. · 1.1/1.1 kV · 4×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 4          | 1.5                          | 17.500                      | 0.1260                  | 30.300                 | 13.700                        |
| Type 2S Coll. · 1.1/1.1 kV · 6×1.5 mm <sup>2</sup>           | 1.1/1.1 kV   | 6          | 1.5                          | 17.500                      | 0.1350                  | 30.300                 | 13.700                        |
| Type 2S Coll. · 1.1/1.1 kV · 16×1.5 mm <sup>2</sup>          | 1.1/1.1 kV   | 16         | 1.5                          | 17.500                      | 0.1640                  | 30.300                 | 13.700                        |
| Type 2S Coll. · 1.1/1.1 kV · 30×1.5 mm <sup>2</sup>          | 1.1/1.1 kV   | 30         | 1.5                          | 17.500                      | 0.1810                  | 30.300                 | 13.700                        |
| Type 2S.3 · Individually Screened · 3.3/3.3 kV 8 sizes       |              |            |                              |                             |                         |                        |                               |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×10 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 10.0                         | 2.580                       | 0.1250                  | 4.470                  | 6.060                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×16 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 16.0                         | 1.580                       | 0.1160                  | 2.740                  | 3.720                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×25 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 25.0                         | 0.951                       | 0.1100                  | 1.660                  | 2.240                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×35 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 35.0                         | 0.698                       | 0.1050                  | 1.220                  | 1.640                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×50 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 50.0                         | 0.523                       | 0.1010                  | 0.923                  | 1.230                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×70 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 70.0                         | 0.346                       | 0.0950                  | 0.621                  | 0.813                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×95 + 3×1.5P mm <sup>2</sup>  | 3.3/3.3 kV   | 3          | 95.0                         | 0.271                       | 0.0926                  | 0.496                  | 0.636                         |
| Type 2S.3 Ind. · 3.3/3.3 kV · 3×120 + 3×1.5P mm <sup>2</sup> | 3.3/3.3 kV   | 3          | 120.0                        | 0.210                       | 0.0897                  | 0.396                  | 0.492                         |

– Cables rated in excess of 20 A are electrically symmetrical per AS/NZS 1972.

– 'Max. DC res. combined (Ω/km)' specifies the maximum combined DC resistance at 20 °C of the composite earth screen (plus any earth conductor) for fault-loop impedance verification.

## Standards and approvals

- ✓ AS/NZS 1972 Underground Coal Mining Machine & Interconnect Cable
- ✓ AS/NZS 1660.5.6 Category C1 (Type 2S/2S.3) & Category C3 (Type 1)

## Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

### Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/as-nzs-1972-mine-feeder-cable



Typical values for this cable type, based on AS/NZS 1972. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.