



Mining trailing & reeling cables

# Type W

## 2 kV Portable Mining & Industrial Power Cable

Round 3C/4C (2 kV) and Flat 2C/4C (600–2000 V) EPR/CPE portable power cables



ICEA S-75-381 / NEMA WC 58

600–2,000 V

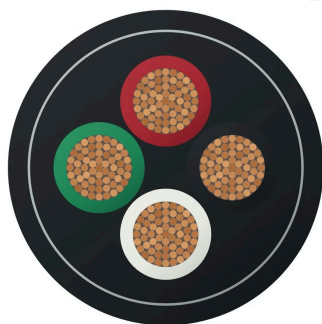
MSHA Flame

### Application

Heavy-duty unshielded portable power cable to ICEA S-75-381 / NEMA WC 58 with rope-lay flexible copper conductors, 90 °C EPR insulation and thermoset CPE jacket for shuttle cars, drills, pumps and mobile industrial power.

**Typical uses:** Underground shuttle cars, Surface & underground drills, Mine dewatering pumps, Mobile generators & load banks, Port & shipyard shore power, Heavy industrial maintenance

### Construction



Cross-section, not to scale

|   |                            |                      |
|---|----------------------------|----------------------|
| 1 | Phase / circuit conductors | ASTM B172 / ASTM B33 |
| 2 | Separator tape             |                      |
| 3 | Insulation                 | ICEA S-75-381 Part 3 |
| 4 | Core assembly & fillers    | ICEA S-75-381        |
| 5 | Reinforcing binder         |                      |
| 6 | Outer jacket               | ICEA S-75-381 / MSHA |

## Technical data

Typical values

|                                 |                                                                |                            |                                                              |
|---------------------------------|----------------------------------------------------------------|----------------------------|--------------------------------------------------------------|
| Rated voltage                   | 2,000 V (Round 3C/4C); 600–2,000 V (Flat 2C/4C)                | Ampacity basis             | 90 °C conductor, 40 °C ambient in free air                   |
| Shielding                       | Unshielded (non-shielded portable power construction)          | Ground-check conductor     | None (specify Type G-GC where pilot monitoring is required)  |
| Max. continuous conductor temp. | +90 °C (dry / wet)                                             | Min. operating temperature | –40 °C                                                       |
| Emergency overload temperature  | +130 °C                                                        | Short-circuit temperature  | +250 °C                                                      |
| Min. bending radius             | 6 × OD (≤ 2.0 in / 50.8 mm OD); 8 × OD (> 2.0 in OD)           | Conductor stranding        | Rope-lay stranded annealed copper (133 to 532 strands)       |
| Reinforcement                   | Two-layer heavy-duty CPE jacket with integral reinforcement    | Cable profiles             | Round (3C, 4C) and Parallel Flat (2C, 4C)                    |
| Flame retardance                | MSHA 30 CFR Part 7 flame test; FT4 vertical flame              | Oil & chemicals            | Oil, grease, acid, alkali and solvent resistant CPE jacket   |
| Water & moisture                | 90 °C wet/dry rating; suitable for wet locations and immersion | Sunlight & weather         | UV-stabilised black CPE sheath (luminous option on Round 4C) |
| Standards                       | ICEA S-75-381 / NEMA WC 58                                     |                            |                                                              |

## Sizes

18 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.

| Configuration · size                                | Strands count | Insulation mils | Insulation mm | Nominal OD in | Nominal OD mm | Weight ≈ lb/ft | Mass ≈ kg/km | Ampacity A (40 °C) |
|-----------------------------------------------------|---------------|-----------------|---------------|---------------|---------------|----------------|--------------|--------------------|
| Round 3C · 2,000 V · CPE 9 sizes                    |               |                 |               |               |               |                |              |                    |
| <input type="checkbox"/> Type W Round · 3 × 8 AWG   | 133           | 60              | 1.52          | 0.91          | 23.1          | 550            | 818          | 59                 |
| <input type="checkbox"/> Type W Round · 3 × 6 AWG   | 133           | 60              | 1.52          | 1.01          | 25.7          | 730            | 1,086        | 79                 |
| <input type="checkbox"/> Type W Round · 3 × 4 AWG   | 259           | 60              | 1.52          | 1.17          | 29.7          | 1,020          | 1,518        | 104                |
| <input type="checkbox"/> Type W Round · 3 × 2 AWG   | 259           | 60              | 1.52          | 1.34          | 34.0          | 1,430          | 2,128        | 138                |
| <input type="checkbox"/> Type W Round · 3 × 1 AWG   | 259           | 80              | 2.03          | 1.51          | 38.4          | 1,800          | 2,679        | 161                |
| <input type="checkbox"/> Type W Round · 3 × 1/0 AWG | 266           | 80              | 2.03          | 1.65          | 41.9          | 2,140          | 3,185        | 186                |
| <input type="checkbox"/> Type W Round · 3 × 2/0 AWG | 323           | 80              | 2.03          | 1.75          | 44.4          | 2,580          | 3,839        | 215                |
| <input type="checkbox"/> Type W Round · 3 × 3/0 AWG | 418           | 80              | 2.03          | 1.89          | 48.0          | 2,922          | 4,348        | 249                |
| <input type="checkbox"/> Type W Round · 3 × 4/0 AWG | 532           | 80              | 2.03          | 2.04          | 51.8          | 3,800          | 5,655        | 287                |
| Round 4C · 2,000 V · CPE (Std. & Luminous) 9 sizes  |               |                 |               |               |               |                |              |                    |
| <input type="checkbox"/> Type W Round · 4 × 8 AWG   | 133           | 60              | 1.52          | 0.99          | 25.1          | 670            | 997          | 54                 |
| <input type="checkbox"/> Type W Round · 4 × 6 AWG   | 133           | 60              | 1.52          | 1.10          | 27.9          | 890            | 1,324        | 72                 |
| <input type="checkbox"/> Type W Round · 4 × 4 AWG   | 259           | 60              | 1.52          | 1.27          | 32.3          | 1,250          | 1,860        | 93                 |
| <input type="checkbox"/> Type W Round · 4 × 2 AWG   | 259           | 60              | 1.52          | 1.48          | 37.6          | 1,800          | 2,679        | 122                |
| <input type="checkbox"/> Type W Round · 4 × 1 AWG   | 259           | 80              | 2.03          | 1.68          | 42.7          | 2,270          | 3,378        | 143                |
| <input type="checkbox"/> Type W Round · 4 × 1/0 AWG | 266           | 80              | 2.03          | 1.79          | 45.5          | 2,680          | 3,988        | 165                |
| <input type="checkbox"/> Type W Round · 4 × 2/0 AWG | 323           | 80              | 2.03          | 1.93          | 49.0          | 3,200          | 4,762        | 192                |
| <input type="checkbox"/> Type W Round · 4 × 3/0 AWG | 418           | 80              | 2.03          | 2.07          | 52.6          | 3,627          | 5,398        | 221                |
| <input type="checkbox"/> Type W Round · 4 × 4/0 AWG | 532           | 80              | 2.03          | 2.26          | 57.4          | 4,650          | 6,920        | 255                |

– Ampacity based on 90 °C conductor temperature at 40 °C ambient in free air per ICEA S-75-381.

– Round 4C dimensions apply to both standard black CPE and the luminous CPE option.

## Flat 2C & 4C · 600–2,000 V

16 sizes

| Configuration · size                               | Strands     | Insulation<br>in | Insulation<br>mm | H × W<br>in | H × W<br>mm | Weight ≈<br>lb/ft | Mass ≈<br>kg/km | Ampacity<br>A (40 °C) |
|----------------------------------------------------|-------------|------------------|------------------|-------------|-------------|-------------------|-----------------|-----------------------|
| Flat 2C · 600–2,000 V · Underground mining 8 sizes |             |                  |                  |             |             |                   |                 |                       |
| Type W Flat · 2 × 8 AWG                            | 133 (7×19)  | 0.060            | 1.5              | 0.51 × 0.84 | 13.0 × 21.3 | 340               | 505             | 72                    |
| Type W Flat · 2 × 6 AWG                            | 133 (7×19)  | 0.060            | 1.5              | 0.56 × 0.93 | 14.2 × 23.6 | 440               | 655             | 95                    |
| Type W Flat · 2 × 4 AWG                            | 259 (7×37)  | 0.060            | 1.5              | 0.61 × 1.05 | 15.5 × 26.7 | 580               | 863             | 127                   |
| Type W Flat · 2 × 2 AWG                            | 259 (7×37)  | 0.060            | 1.5              | 0.73 × 1.24 | 18.5 × 31.5 | 850               | 1,265           | 167                   |
| Type W Flat · 2 × 1 AWG                            | 259 (7×37)  | 0.080            | 2.0              | 0.81 × 1.40 | 20.6 × 35.6 | 1,070             | 1,592           | 191                   |
| Type W Flat · 2 × 1/0 AWG                          | 259 (7×37)  | 0.080            | 2.0              | 0.93 × 1.51 | 23.6 × 38.4 | 1,310             | 1,949           | 217                   |
| Type W Flat · 2 × 2/0 AWG                          | 329 (7×47)  | 0.080            | 2.0              | 0.99 × 1.63 | 25.1 × 41.4 | 1,600             | 2,381           | 250                   |
| Type W Flat · 2 × 4/0 AWG                          | 532 (19×28) | 0.080            | 2.0              | 1.10 × 1.89 | 27.9 × 48.0 | 2,300             | 3,423           | 328                   |
| Flat 4C · 600–2,000 V · Underground mining 8 sizes |             |                  |                  |             |             |                   |                 |                       |
| Type W Flat · 4 × 6 AWG                            | 133         | 0.060            | 1.5              | 0.67 × 1.69 | 17.0 × 42.9 | 895               | 1,332           | 72                    |
| Type W Flat · 4 × 4 AWG                            | 259         | 0.060            | 1.5              | 0.75 × 1.89 | 19.0 × 48.0 | 1,185             | 1,764           | 93                    |
| Type W Flat · 4 × 2 AWG                            | 259         | 0.060            | 1.5              | 0.84 × 2.23 | 20.6 × 56.6 | 1,620             | 2,411           | 122                   |
| Type W Flat · 4 × 1 AWG                            | 259         | 0.080            | 2.0              | 0.97 × 2.60 | 24.6 × 66.0 | 2,100             | 3,125           | 143                   |
| Type W Flat · 4 × 1/0 AWG                          | 259         | 0.080            | 2.0              | 1.01 × 2.73 | 25.7 × 69.3 | 2,500             | 3,721           | 165                   |
| Type W Flat · 4 × 2/0 AWG                          | 329         | 0.080            | 2.0              | 1.10 × 2.96 | 27.9 × 75.2 | 2,900             | 4,316           | 192                   |
| Type W Flat · 4 × 3/0 AWG                          | 413         | 0.080            | 2.0              | 1.18 × 3.25 | 30.0 × 82.6 | 3,500             | 5,209           | 221                   |
| Type W Flat · 4 × 4/0 AWG                          | 532         | 0.080            | 2.0              | 1.29 × 3.46 | 32.8 × 87.9 | 4,225             | 6,288           | 255                   |

– Flat dimensions are stated as Nominal Height (thickness) × Nominal Width.

## Standards and approvals

### 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/type-w-cable-icea-nema-msha



Typical values for this cable type, based on ICEA S-75-381 / NEMA WC 58. Values for your order are confirmed in the quotation. Subject to change without notice.  
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.