

**SERIES**  
**1075**

# Single core cables type THHW MTW CT-USE AWM TEW TW75

Dynamic application, unshielded



&lt;HAR&gt;



## Use

Single core cables suitable for mobile use in power chains or moving machine parts for travel distances up to 10 m. The THHW/TFF, MTW, AWM single core cables are in accordance with the ANSI/NFPA 79 and ANSI/NFPA 70 "National Electrical Code" (NEC) Art. 310 and 402. They are also certified "for CT use" for 4 AWG sections for ground conductors and 1/0 AWG for power conductors. These cables are TW75, TEW, AWM according to CSA C22.1 "Canadian Electrical Code" (CE Code).

\* Important. The "for CT use" and TW75 version is upon specific request.

## Technical data

| Characteristics           | Value/property                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conductor                 | Extra-flexible bare copper strand, class 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Insulation                | PVC compound                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Temperature range         | +90°C (MTW), +105°C (AWM/TEW), +75°C (TW75), +90°C (IEC), +90°C (HAR H05V2-K/H07V2-K <50 mm²), +70°C (HAR H07V-K ≥50 mm²)<br>-40°C (fixed); -5°C (dynamic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Voltage rating            | 1000 V (AWM), 600 V (MTW/TEW/TW75), 300/500 V (IEC/HAR ≤1 mm²), 450/750 V (IEC/HAR >1 mm²)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Spark test                | 10000 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Speed                     | 180 m/min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Acceleration              | 20 m/s²                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Bending radius            | 8 x cable outer diameter for fixed applications, 12 x cable outer diameter for dynamic applications, 15 x cable outer diameter for drag chain applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Standards of construction | UL/CSA approvals: (UL) Type MTW, THHW (≥2,5 mm²), for CT use (≥4 AWG ground cond., ≥1/0 AWG for ungrounded cond.), c(UL) TW75 (≥2,5 mm²), (UR) AWM Style 10269, AWM Style 1015, TFF (≤1,5 mm²), c(UR) TEW (≤4/0 AWG), AWM I A/B; NEC Art. 310, 402; CSA C22.1 Tab. 19; UL 1581, UL 758, UL 1277, UL 1063, CSA C22.2 No. 75, CSA C22.2 No. 127, CSA C22.2 No. 210   Flame res.: Test B acc. to DIN VDE 0472 part 804, IEC 60332-1-2, UL/CSA FT1   UV res.: UNI EN ISO 4892-2 (nero/black), UNI EN ISO 4892-3 (altri colori/other colors)   Other: CEI EN 50525-2-31 and HD 21.3 S3:1995+A1:1999+A2:2008, Low Voltage Directive (LVD) 2014/35/EU |
| Standards of use          | ANSI/NFPA 70 (NEC), ANSI/NFPA 79, UL 508a, CSA C22.1 (CE Code), CSA C22.2 No.286, Style 10269, Style 1015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Marking

TEKIMA 10750 – H07V2-K IEMMEQU <HAR> 90°C CE 1x2,5 mm² 90°C 450/750V IEC 60332-1-2 RoHS (UL) E361260 MTW 1x14 AWG 600V or THHW or AWM 10269 105°C 1000V or AWM 1015 105°C 600V c(UL) TW75 1x14 AWG 600V or TEW 105°C or AWM I A/B 105°C 1000V FT1 – (prod.reference) = (metric) =

TEKIMA 10750 – H07V2-K IEMMEQU <HAR> 90°C CE 1x35 mm² 90°C 450/750V IEC 60332-1-2 RoHS (UL) E361260 MTW 1x2 AWG 600V or THHW "FOR CT USE" or AWM 10269 105°C 1000V or AWM 1015 105°C 600V c(UL) TW75 1x14 AWG 600V or TEW 105°C or AWM I A/B 105°C 1000V FT1 – (prod.reference) = (metric) =

## Coding and dimensions

| Code                           | Size<br>[AWG/kcmil] | Size<br>[mm²] | Diameter<br>[mm (inch)] | Weight<br>[kg/km (lb/mft)] | Packaging<br>[m (ft)] |
|--------------------------------|---------------------|---------------|-------------------------|----------------------------|-----------------------|
| CVC150_10750_□□ <sup>(1)</sup> | 16 AWG              | 1,5           | 3,2 (0.126)             | 23 (15)                    | 1000 (3281)           |
| CVC250_10750_□□                | 14                  | 2,5           | 4,2 (0.165)             | 33 (22)                    | 1000 (3281)           |
| CVC400_10750_□□                | 12                  | 4             | 4,3 (0.169)             | 49 (33)                    | 1000 (3281)           |
| CVC600_10750_□□                | 10                  | 6             | 4,9 (0.193)             | 69 (46)                    | 1000 (3281)*          |
| CVCB10_10750_□□                | 8                   | 10            | 6,7 (0.264)             | 118 (79)                   | 500 (1640)*           |
| CVCB16_10750_□□                | 6                   | 16            | 8,5 (0.335)             | 191 (128)                  | 500 (1640)*           |
| CVCB25_10750_□□ <sup>(4)</sup> | 4                   | 25            | 9,7 (0.382)             | 284 (191)                  | 500 (1640)*           |
| CVCB35_10750_□□ <sup>(4)</sup> | 2                   | 35            | 11,5 (0.453)            | 382 (257)                  | 500 (1640)*           |
| CVCB50_10750_□□ <sup>(4)</sup> | 1                   | 50            | 14,3 (0.563)            | 564 (379)                  | 500 (1640)*           |
| CVCB70_10750_□□ <sup>(5)</sup> | 2/0                 | 70            | 16,4 (0.646)            | 774 (520)                  | 500 (1640)*           |
| CVCB95_10750_□□ <sup>(5)</sup> | 3/0                 | 95            | 17,4 (0.685)            | 1003 (674)                 | 500 (1640)*           |

| Code                           | Size<br>[AWG/kcmil] | Size<br>[mm²] | Diameter<br>[mm (inch)] | Weight<br>[kg/km (lb/mft)] | Packaging<br>[m (ft)] |
|--------------------------------|---------------------|---------------|-------------------------|----------------------------|-----------------------|
| CVCL12_10750_□□ <sup>(5)</sup> | 4/0                 | 120           | 18,5 (0.728)            | 1221 (820)                 | 500 (1640)*           |
| CVCL15_10750_□□ <sup>(5)</sup> | 250 kcmil           | 150           | 20,8 (0.819)            | 1537 (1033)                | 500 (1640)*           |
| CVCL18_10750_□□ <sup>(5)</sup> | 350                 | 185           | 22,6 (0.890)            | 1869 (1256)                | 500 (1640)*           |
| CVCL24_10750_□□ <sup>(5)</sup> | 450                 | 240           | 25,5 (1.004)            | 2528 (1699)                | 500 (1640)*           |

\* For this article, an additional UL certified cut-to-length service is carried out on request ("Processed Wire").

(1) This article is c(UR) AWM and TEW but it cannot be c(UL) TW75.

(4) This article is "for CT use" in green or green/yellow colors (grounding conductors).

(5) This article is "for CT use" in all colors.

## Code composition

|            |     |                |    |
|------------|-----|----------------|----|
| <b>CVC</b> | □□□ | <b>_10750_</b> | □□ |
|------------|-----|----------------|----|

| Size                     | To be inserted     |
|--------------------------|--------------------|
| 1,5, 2,5, ..., 6 mm²     | 150, 250, ..., 600 |
| 10, 16, ..., 95 mm²      | B10, B16, ..., B95 |
| 120, 150, ..., 240 mm²   | L12, L15, ..., L24 |
| 1, 2, ..., 26 AWG        | W01, W02, ..., W26 |
| 1/0, ..., 4/0 AWG        | W/1, W/2, ..., W/4 |
| 250, 300, ..., 450 kcmil | X25, X30, ..., X45 |

| Color        | To be inserted |
|--------------|----------------|
| Yellow/green | GV             |
| Black        | NE             |

Note. The double color is such that one of the colours covers at least 30% and not more than 70% of the surface, the other colour covering the remainder of that surface.