

SERIES
1080S

Single core cables type THHW/TFF MTW CT-USE AWM



Dynamic application, shielded



Use

Shielded single-core cables used for wiring machine tools, industrial electrical and electronic equipments. They are suitable for use in fixed or non-cyclic mobile installations and are certified "for CT use" for 4 AWG sizes for ground conductors and 1/0 AWG for power conductors. The single-core THHW/TFF MTW AWM cables comply with ANSI/NFPA 79, Articles 310 and 402 of ANSI/NFPA 70 "National Electrical Code" (NEC), and CSA C22.1 "Canadian Electrical Code" (CE Code).

Technical data

Characteristics	Value/property
Conductor	Flexible bare copper strand, class 5
Insulation	PVC compound
Internal tape	Polyester tape
Shield	Tinned copper braid, nom. coverage 85%
Jacket	PVC compound. Metric marking.
Temperature range	+90°C -40°C (fixed); -5°C (occasional flexing)
Voltage rating	600 V (MTW), 1000 V (AWM), 600/1000 V (IEC)
Spark test	10000 V
Bending radius	4 x cable outer diameter (13 x cable outer diameter for non-cyclical mobile uses)
Standards of construction	UL/CSA approvals: (UL) Type MTW, TFF (1,5 mm²) / THHW (2,5 mm²), for CT use (≥4 AWG ground cond., ≥1/0 AWG for ungrounded cond.), c(UR)us AWM Style 1032, AWM I A/B; Nec Art. 310, 402; UL 1581, UL 758, UL 1277, UL 1063 Flame res.: Test B acc. to DIN VDE 0472 part 804, IEC 60332-1-2, UL VW-1, CSA FT1 Other: 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 1032

Marking

TEKIMA 1080S – CE 1x2,5 mm² 90°C 600/1000V IEC 60332-1-2 (UL) E361260 MTW 1x14 AWG 600V or THHW or AWM Style 1032 1000V VW-1 c(UR) AWM I A/B 1000V FT1 14 AWG – (prod.reference) = (metric) =

TEKIMA 1080S – CE 1x70 mm² 90°C 600/1000V IEC 60332-1-2 (UL) E361260 MTW 1x2/0 AWG 600V or THHW "FOR CT USE" or AWM Style 1032 1000V VW-1 c(UR) AWM I A/B 1000V FT1 14 AWG – (prod.reference) = (metric) =

Coding and dimensions

Code	Size [AWG/kcmil]	Size [mm²]	Diameter [mm (inch)]	Weight [kg/km (lb/mft)]	Packaging [m (ft)]
CVC250_1080S_□□	14 AWG	2,5	6,4 (0.252)	71 (48)	500 (1640)
CVC400_1080S_□□	12	4	7,1 (0.280)	98 (66)	500 (1640)
CVC600_1080S_□□	10	6	7,7 (0.303)	121 (81)	500* (1640*)
CVCB10_1080S_□□	8	10	9,4 (0.370)	189 (127)	500* (1640*)
CVCB16_1080S_□□	6	16	11,2 (0.441)	276 (185)	500* (1640*)
CVCW05_1080S_□□	5	16,8	11,3 (0.445)	292 (196)	500* (1640*)
CVCB25_1080S_□□ ⁽⁴⁾	4	25	12,7 (0.500)	387 (260)	500* (1640*)
CVCW03_1080S_□□ ⁽⁴⁾	3	26,7	14,3 (0.563)	471 (316)	500* (1640*)
CVCB35_1080S_□□ ⁽⁴⁾	2	35	14,8 (0.583)	533 (358)	500* (1640*)
CVCB50_1080S_□□ ⁽⁴⁾	1	50	17,5 (0.689)	751 (505)	500* (1640*)
CVCW1_1080S_□□ ⁽⁵⁾	1/0	53,5	18,2 (0.717)	828 (556)	500* (1640*)
CVCB70_1080S_□□ ⁽⁵⁾	2/0	70	18,9 (0.744)	950 (638)	500* (1640*)
CVCB95_1080S_□□ ⁽⁵⁾	3/0	95	20,6 (0.811)	1207 (811)	500* (1640*)
CVCL12_1080S_□□ ⁽⁵⁾	4/0	120	23,3 (0.917)	1519 (1021)	500* (1640*)
CVCL15_1080S_□□ ⁽⁵⁾	250 kcmil	150	25,7 (1.012)	1871 (1257)	500* (1640*)
CVCX30_1080S_□□ ⁽⁵⁾	300	152	26,6 (1.047)	2021 (1358)	500* (1640*)

Coding and dimensions

Code	Size [AWG/kcmil]	Size [mm ²]	Diameter [mm (inch)]	Weight [kg/km (lb/mft)]	Packaging [m (ft)]
CVCL18_1080S_□□ ⁽⁵⁾	350	185	27,5 (1.083)	2218 (1490)	500* (1640*)
CVCX40_1080S_□□ ⁽⁵⁾	400	203	28,8 (1.134)	2545 (1710)	500* (1640*)
CVCL24_1080S_□□ ⁽⁵⁾	450	240	30,4 (1.197)	2813 (1890)	500* (1640*)
CVCX50_1080S_□□ ⁽⁵⁾	500	254	32,3 (1.272)	3184 (2140)	500* (1640*)
CVCL30_1080S_□□ ⁽⁵⁾	550	300	35,7 (1.406)	3687 (2478)	500* (1640*)

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

(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

CVC	□□□	_1080S_	□□	Color	To be inserted
				Black	NE

Size	To be inserted
2,5, 4, ..., 6 mm ²	250, 400, ..., 600
10, 16, ..., 95 mm ²	B10, B16, ..., B95
120, 150, ..., 400 mm ²	L12, L15, ..., L40
1, 2, ..., 26 AWG	W01, W02, ..., W26
1/0, ..., 4/0 AWG	W/1, W/2, ..., W/4
250, 300, ..., 500 kcmil	X25, X30, ..., X50