

## UL TYPE TC / TC-ER – 600V/1KV XHHW / XHHW-2 Insulation – with Ground - PVC Jacket

### APPLICATION

TC, TC-ER cables are used in building wiring, feeder and internal secondary industrial distribution, and specially utilized for abrasive environment, grease, gasoline and other chemical contaminated ambient locations.

### CONDUCTORS

- Solid or stranded bare copper per ASTM-B3, ASTM-B8 and ASTM-B787

### INSULATION

- Rated 90°C wet or dry to meet UL 44 for XHHW-2
- Cross-linked polyethylene (XL).
- Heat and moisture-resistant
- Flame retardant compound per UL 44. (QMTT2 PVC compound listed by UL)

### GROUND CONDUCTOR

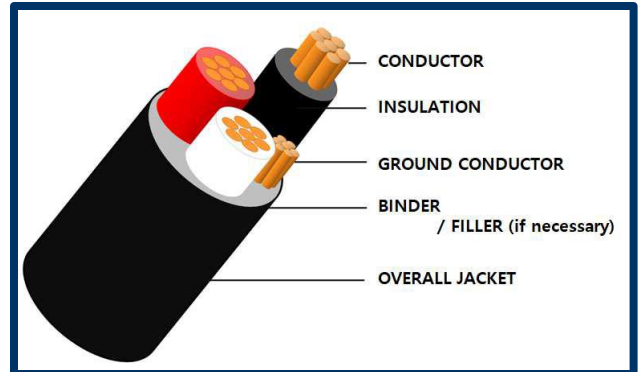
- Insulated conductor or bare conductor.

### ASSEMBLY

- The insulated conductors are cabled together with a insulated ground or bare conductor.
- With or without fillers as required to form a round compact core.
- Nylon ripcord for easy stripping (If necessary)

### PRODUCT PRINT LEGEND

- TC-ER (no ground wire type)  
- □□AWG O/C TYPE TC-ER-JP XHHW-2 90C 600V SUN RES OIL RES-I FT4 / IEEE 1202 DIR BURIAL (UL)  
E519485 0000FTMM/YY
- TC-ER (with ground wire type)  
- □□AWG O/CW/GND TYPE TC-ER-JP XHHW-2 90C 600V SUN RES OIL RES-I FT4 / IEEE 1202 DIR BURIAL (UL)  
E519485 0000FTMM/YY



### OUTER SHEATH (OVERALL JACKET)

- A flame retardant, sunlight-resistant black PVC jackets
- The thickness of the Overall Jacket is in accordance with the UL1277 standard.

### PRODUCT SERVICE DESCRIPTION

- ER (Exposed Run)
- Sunlight resistance
- Oil resistance-I
- Cold bend -25°C
- Direct burial
- Joist pulling
- IEEE 1202/FT4 70,000 BTU/hour flame test

### STANDARDS & REFERENCE

- ASTM B8** Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft
- ASTM B3** Standard Specification for Soft or Annealed Copper Wire
- UL 1581** Reference Standard for Electrical Wires, Cables, and Flexible Cords
- UL 2556** Wire and Cable Test Methods
- UL 1685** Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables
- UL 44** Thermoplastic-Insulated Wires and Cables
- UL 1277** Electrical Power and Control Tray Cables with Optional Optical-Fiber Members



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Conductor Size (AWG)	No. of Conductors	No. of Strands	Insulation Thickness		Jacket Thickness		Overall Diameter	
			mm	inch	mm	inch	mm	inch
14AWG	2	19	0.76	0.030	1.14	0.045	9.0	0.354
	3	19	0.76	0.030	1.14	0.045	9.5	0.374
	4	19	0.76	0.030	1.14	0.045	10.4	0.409
	5	19	0.76	0.030	1.14	0.045	11.4	0.449
	7	19	0.76	0.030	1.14	0.045	12.4	0.488
	9	19	0.76	0.030	1.52	0.060	15.2	0.598
	12	19	0.76	0.030	1.52	0.060	17.0	0.669
	19	19	0.76	0.030	1.52	0.060	19.9	0.783
	25	19	0.76	0.030	2.03	0.080	24.3	0.957
	30	19	0.76	0.030	2.03	0.080	25.7	1.012
	37	19	0.76	0.030	2.03	0.080	27.7	1.091
12AWG	2	7	0.76	0.030	1.14	0.045	10.0	0.394
	3	7	0.76	0.030	1.14	0.045	10.6	0.417
	4	7	0.76	0.030	1.14	0.045	11.5	0.453
	5	7	0.76	0.030	1.14	0.045	12.6	0.496
	7	7	0.76	0.030	1.52	0.060	14.6	0.575
	9	7	0.76	0.030	1.52	0.060	16.9	0.665
	12	7	0.76	0.030	1.52	0.060	19.0	0.748
	19	7	0.76	0.030	2.03	0.080	23.3	0.917
	25	7	0.76	0.030	2.03	0.080	27.1	1.067
	30	7	0.76	0.030	2.03	0.080	28.7	1.130
	37	7	0.76	0.030	2.03	0.080	30.9	1.217
10AWG	2	7	0.76	0.030	1.14	0.045	11.2	0.441
	3	7	0.76	0.030	1.14	0.045	11.9	0.469
	4	7	0.76	0.030	1.14	0.045	13.1	0.516
	5	7	0.76	0.030	1.52	0.060	15.1	0.594
	7	7	0.76	0.030	1.52	0.060	16.5	0.650
	9	7	0.76	0.030	1.52	0.060	19.2	0.756
	12	7	0.76	0.030	2.03	0.080	22.6	0.890
	19	7	0.76	0.030	2.03	0.080	26.4	1.039

Conductor Size (AWG)	No. of Conductors	No. of Strands	Ground Wire Size (AWG)	Insulation Thickness		Jacket Thickness		Overall Diameter	
				mm	inch	mm	inch	mm	inch
12	3	7	12	0.76	0.030	1.14	0.045	11.5	0.453
10	3	7	10	0.76	0.030	1.14	0.045	13.0	0.512
8	3	7	10	1.14	0.045	1.52	0.060	17.2	0.677
8	4	7	10	1.14	0.045	1.52	0.060	18.3	0.720
6	3	7	8	1.14	0.045	1.52	0.060	19.4	0.764
6	4	7	8	1.14	0.045	1.52	0.060	20.8	0.819
4	3	7	8	1.14	0.045	1.52	0.060	20.6	0.811
4	4	7	8	1.14	0.045	2.03	0.080	23.8	0.937
2	3	19	6	1.14	0.045	2.03	0.080	25.0	0.984
2	4	19	6	1.14	0.045	2.03	0.080	27.5	1.083
1	3	19	6	1.4	0.055	2.03	0.080	28.3	1.114
1/0	3	19	6	1.4	0.055	2.03	0.080	30.5	1.201
1/0	4	19	6	1.4	0.055	2.03	0.080	33.6	1.323
2/0	3	19	6	1.4	0.055	2.03	0.080	33.0	1.299
3/0	4	19	6	1.4	0.055	2.03	0.080	36.5	1.437
3/0	3	19	4	1.4	0.055	2.03	0.080	35.8	1.409
3/0	4	19	4	1.4	0.055	2.03	0.080	39.6	1.559
4/0	3	19	4	1.4	0.055	2.03	0.080	39.0	1.535
4/0	4	19	4	1.4	0.055	2.79	0.110	44.7	1.760
250	3	37	4	1.65	0.065	2.79	0.110	44.2	1.740
250	4	37	4	1.65	0.065	2.79	0.110	48.8	1.921
350	3	37	3	1.65	0.065	2.79	0.110	50.0	1.969
350	4	37	3	1.65	0.065	2.79	0.110	55.3	2.177
500	3	37	2	1.65	0.065	2.79	0.110	57.2	2.252

Product details and specifications are subject to manufacturing variations and accepted industry tolerances. Please contact your DWC Account Manager with questions or to confirm specific product requirements.

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