MTW, TEW, UL 1015 & UL 1230 Hook-Up Wire

UL 105°C, 600V, VW-1 / 1032 1000V

CSA 105°C, 600V, FT1

PRODUCT DATA SHEET

UL 1015 hook-up wire is a PVC hook-up wire used for internal wiring for appliance and electronic equipment, panels, meters, point to point wiring, and many other applications. This PVC hook-up wire has multiple ratings, including MTW, TEW, UL 1015, and UL 1230. UL 1015 is an Appliance Wiring Material (AWM) style. Machine Machine Tool Wire (MTW) is a completely different UL Standard that covers both wires and cables designed for use on industrial machines. This allows the hook-up wire to be used in applications that required either type of UL approval.

CONSTRUCTION

Conductor Stranded bare or tinned copper
Insulation Material Polyvinyl Chloride
Color A variety of insulation colors available
Operating Temperature 105°C
Min Temperature Rating -40°C
Operating Voltage 600V / 1000V

STANDARDS

UL 1426 Boat Cable
UL 1063 Machine - Tool Wire
UL 758 Appliance Wiring Material - Component
CSA C22.2 No 127 Equipment and Lead Wires

IEWC Family	Conductor Type	AWG	Stranding	Nominal Insulation Thickness		Nominal O.D		UL Type	CSA Type
				Inch	mm	Inch	mm		
1028/08B19	Bare Copper	8	19/0295	0.0465	1.18	0.240	6.10	MTW, BC-5W2, 1028, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1028/08T19	Tinned Copper	8	19/0295	0.0465	1.18	0.240	6.10	MTW, BC-5W2, 1028, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1028/08B133	Bare Copper	8	133/29	0.0465	1.18	0.260	6.60	MTW, BC-5W2, 1028, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1028/08T133	Tinned Copper	8	133/29	0.0465	1.18	0.260	6.60	MTW, BC-5W2, 1028, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1028/08T168	Tinned Copper	8	168/30	0.0465	1.18	0.260	6.60	MTW, BC-5W2, 1028, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1015/10B01	Bare Copper	10	Solid	0.031	0.79	0.164	4.17	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/10T01	Tinned Copper	10	Solid	0.031	0.79	0.164	4.17	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/10B105	Bare Copper	10	105/30	0.030	0.76	0.173	4.39	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/10T105	Tinned Copper	10	105/30	0.030	0.76	0.173	4.39	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/10B19	Bare Copper	10	19/0234	0.031	0.78	0.178	4.52	MTW, BC-5W2, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1015/10T19	Tinned Copper	10	19/0234	0.031	0.78	0.178	4.52	MTW, BC-5W2, 1231, 1015, 1336, 1344, 1032	TEW, AWM I A/B
1015/12B01	Bare Copper	12	Solid	0.031	0.79	0.144	3.66	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/12T01	Tinned Copper	12	Solid	0.031	0.79	0.144	3.66	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/12B65	Bare Copper	12	65/30	0.030	0.76	0.148	3.76	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/12T65	Tinned Copper	12	65/30	0.030	0.76	0.148	3.76	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/12B19	Bare Copper	12	19/0185	0.031	0.78	0.153	3.89	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/12T19	Tinned Copper	12	19/0185	0.031	0.78	0.153	3.89	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/14B01	Bare Copper	14	Solid	0.031	0.79	0.127	3.23	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/14T01	Tinned Copper	14	Solid	0.031	0.79	0.127	3.23	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/14B41	Bare Copper	14	41/30	0.030	0.76	0.130	3.30	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/14T41	Tinned Copper	14	41/30	0.030	0.76	0.130	3.30	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/14B19	Bare Copper	14	19/0147	0.031	0.78	0.133	3.38	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/14T19	Tinned Copper	14	19/0147	0.031	0.78	0.133	3.38	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16B01	Bare Copper	16	Solid	0.031	0.79	0.113	2.87	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16T01	Tinned Copper	16	Solid	0.031	0.79	0.113	2.87	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B

Design Number		10852
Revision History		
00	2023/09/18	Initial Release
01	2024/04/23	Add some new parts
02	2024/06/12	Add 22AWG, 24AWG, 26AWG sizes
03	2024/10/22	Add 2207AWG Bare copper, Topcoat copper size
04	2025/02/08	Add some new parts
Created L. Jian		Approved T. Plochocki

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CSA 105°C, 600V, FT1

PRODUCT DATA SHEET

IEWC Family	Conductor Type	AWG	Stranding	Nominal Insulation Thickness		Nominal O.D		UL Type	CSA Type
				Inch	mm	Inch	mm		
1015/16B07	Bare Copper	16	7/0192	0.031	0.79	0.121	3.07	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16B26	Bare Copper	16	26/30	0.030	0.76	0.114	2.90	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16P26	Bare Copper	16	26/30	0.031	0.79	0.121	3.07	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16T26	Tinned Copper	16	26/30	0.030	0.76	0.114	2.90	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16Q26	Topcoat Copper	16	26/30	0.031	0.79	0.121	3.07	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16B19	Bare Copper	16	19/0117	0.031	0.79	0.121	3.07	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/16T19	Tinned Copper	16	19/0117	0.031	0.79	0.121	3.07	MTW, BC-5W2, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18B01	Bare Copper	18	Solid	0.031	0.79	0.103	2.62	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18T01	Tinned Copper	18	Solid	0.031	0.79	0.103	2.62	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18P07	Prebond Copper	18	7/0152	0.031	0.79	0.108	2.74	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18P16	Prebond Copper	18	16/30	0.031	0.79	0.108	2.74	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18B16	Bare Copper	18	16/30	0.030	0.76	0.104	2.64	MTW, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18T16	Tinned Copper	18	16/30	0.030	0.76	0.104	2.64	MTW, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18Q16	Overcoat Copper	18	16/30	0.031	0.79	0.108	2.74	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18V16	Overcoat Copper	18	16/30	0.031	0.79	0.108	2.74	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18T19	Tinned Copper	18	19/0092	0.031	0.79	0.110	2.79	MTW, 1011, 1013,1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18B41	Bare Copper	18	41/34	0.031	0.79	0.110	2.79	MTW, 1011, 1013,1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/18T41	Tinned Copper	18	41/34	0.031	0.79	0.110	2.79	MTW, 1011, 1013,1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20B01	Bare Copper	20	Solid	0.031	0.79	0.094	2.39	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20T01	Tinned Copper	20	Solid	0.031	0.79	0.094	2.39	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20P07	Prebond Copper	20	7/28	0.031	0.79	0.099	2.51	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20Q07	Topcoat Copper	20	7/28	0.031	0.79	0.099	2.51	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20B10	Bare Copper	20	10/30	0.030	0.76	0.095	2.41	MTW, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20T10	Tinned Copper	20	10/30	0.030	0.76	0.095	2.41	MTW, 1011, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/20Q10	Topcoat Copper	20	10/30	0.031	0.79	0.098	2.49	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22B01	Bare Copper	22	Solid	0.031	0.79	0.088	2.24	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22B07	Bare Copper	22	7/0096	0.031	0.79	0.092	2.34	MTW, 1011, 1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22T01	Tinned Copper	22	Solid	0.031	0.79	0.088	2.24	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22T07	Tinned Copper	22	7/0096	0.031	0.79	0.092	2.34	MTW, 1011, 1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22P07	Prebond Copper	22	7/30	0.031	0.79	0.092	2.34	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22Q07	Topcoat Copper	22	7/30	0.031	0.79	0.092	2.34	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22V07	Overcoat Copper	22	7/30	0.031	0.79	0.092	2.34	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/22T19	Tinned Copper	22	19/34	0.031	0.79	0.093	2.36	MTW, 1011, 1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/24B01	Bare Copper	24	Solid	0.031	0.79	0.083	2.10	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/24T01	Tinned Copper	24	Solid	0.031	0.79	0.083	2.10	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/24B07	Tinned Copper	24	7/32	0.031	0.79	0.086	2.18	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/24T07	Tinned Copper	24	7/32	0.031	0.79	0.086	2.18	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/24Q07	Topcoat Copper	24	7/32	0.031	0.79	0.086	2.18	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/24B19	Bare Copper	24	19/36	0.031	0.79	0.086	2.18	1013, 1015, 1032, 1230, 1335	TEW, AWM I A/B
1015/26B01	Bare Copper	26	Solid	0.031	0.79	0.078	1.98	1015, 1230	TEW
1015/26T01	Tinned Copper	26	Solid	0.031	0.79	0.078	1.98	1015, 1230	TEW
1015/26T07	Tinned Copper	26	7/34	0.031	0.79	0.081	2.06	1015, 1230	TEW
1015/28T01	Tinned Copper	28	Solid	0.031	0.79	0.075	1.90	1015, 1032	TEW

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