

Multi-Standard wiring cable UL(MTW)-CSA-HAR 1015

The “international” approved single core Style 1015



Application

- The approvals for several markets (“Multi-Standard”) mean that different national requirements can be fulfilled with only one product
- Complies with the European harmonisation standards (HAR), as well as the US and Canadian standards (UL, CSA) and can therefore be used in the most important global markets
- Allow international or export-oriented manufacturers of machinery, equipment and plants to work more efficiently and avoid acceptance problems with approval authorities / inspectors or foreign customers

Special feature

- AWM (Appliance Wiring Material) recognition
- Additional UL-MTW-listing
The MTW (Machine Tool Wire) listing extends the permissible area of application to the entire machine tool industry (not only in appliances)
- Simplified technical acceptance of your final product through use of a UL-listed product, since UL listed products are included in general standards such as National Electric Code and NFPA 79 in the USA
- These standards are available to any safety inspector

Advantage

- Economy in production is increased

● The technical documentation expense is reduced

- Storage is made significantly easier

Note

Please note:

- Multi-Standard cables with mm² and AWG/MCM sizes normally have special conductor strands, which means that one of the specified conductor cross-sections works out greater than the other

- UL(MTW)-CSA-HAR Style 1015 as special version “untinned” available on request

Cable Make-up

- Stranded conductor of tinned copper wires in acc. with UL-CSA

- Fine wire in acc. with VDE 0295 Cl.5/IEC 60228 Cl. 5
- Special PVC compound insulation in acc. with IEC 60227 / VDE 0207, UL 1581 Class 12 and 43
- Oil resistant
- Flame-retardant and self extinguishing in acc. with IEC 60332.1/HD 405.2 and CSA FT1

Accessories

Conductor end sleeves XL see page 869
Protective Cable Conduit Systems and Cable Carrier Systems see page 695
Conductor end sleeves see page 864
Cable Marking see page 791

UL-CSA-HAR Style 1007 + 1569 without MTW listing

Technical Data



Approvals
UL: AWM Style 1007, 1569
CSA: TEW
HAR: H05V-K
(VDE 0281/HD21)



Specific insulation resistance
> 10 GOhm x cm



Conductor stranding
Fine wire (tinned) in acc. with:
VDE 0295 Cl. 5 /
IEC 60228 Cl. 5



Rated voltage
H05V-K: U_n/U: 300/500 V
UL + CSA: U: 300V



Test voltage
2500 V

Part number	Conductor cross-section in mm ²	Conductor cross-section in AWG	Outer diameter mm approx.	Copper weight kg/km	Weight kg/km approx.
UL AWM Style 1007 + 1569, CSA TEW, H05V-K					
41804..	0,5	22	2,2	4,8	8,6
41805..	0,75	20	2,4	7,2	11,2
41806..	1,0	18	2,5	9,6	13,6

Copper price basis: EUR 150 / 100 kg
Packaging size: Coil < 30 kg, above automatically drum
Coil 100 m; 35 mm² and larger: 50 m

Multi-Standard wiring cable UL(MTW)-CSA-HAR 1015

The “international” approved single core Style 1015



UL(MTW)-CSA-HAR Style 1015 with MTW listing

Technical Data



Approvals
UL standard 1063 MTW,
UL rec. AWM-Style 1015
CSA: TEW
HAR: H07V-K, X07V-K
(VDE 0281 / HD 21)



Conductor stranding
Fine wire (tinned) in acc. with:
VDE 0295 Cl. 5 /
IEC 60228 Cl. 5



Rated voltage
Acc. HAR: U₀/U: 450/750 V
Acc. CSA: U: 600 V
Acc. UL (AWM): U: 600 V
Acc. UL (MTW): U: 600 V



Range of temperature
Fixed installation:
HAR / IEC: -40°C to +70°C
UL (AWM): -40°C to +105°C
UL (MTW): -40°C to +90°C
CSA (TEW): -40°C to +105°C



Test voltage
2500 V

Part number	Conductor cross-section (mm²)	Conductor cross-section in AWG	Outer diameter mm approx.	Copper weight kg/km	Weight kg/km approx.
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UL AWM Style 1015 + MTW, CSA TEW, H07V-K

41601..*	0,5	22	2,5	4,8	10,0
41602..*	0,75	20	2,7	7,2	12,5
41603..*	1,0	18	2,9	9,6	16,0
41604..	1,5	16	3,1	14,4	20,0
41605..	2,5	14	3,7	24,0	31,0
41606..	4,0	12	4,4	38,4	45,0
41607..	6,0	10	4,9	58,0	63,0
41608..	10,0	8	6,8	96,0	120,0
41609..*	16,0	6	8,9	154,0	185,0
41610..	25,0	4	10,1	240,0	260,0
41611..	35,0	2	11,4	336,0	360,0
41612..*	50,0	1	14,0	480,0	535,0
41613..*	70,0	2/0	15,8	672,0	735,0
41614..	95,0	3/0	18,1	912,0	930,0
41615..	120,0	4/0	19,4	1152,0	1.160,0

Copper price basis: EUR 150 / 100 kg
Packing size: Coil < 30 kg, above automatically drum
Coil 100 m; 35 mm² and larger: 50 m

UL(MTW)-CSA-HAR Style 1015 with MTW listing in one-way cardboards

Part number	Conductor cross-section (mm²)	Conductor cross-section in AWG	Box capacity in m	Outer diameter mm approx.	Copper weight kg/km	Weight kg/box approx.
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UL AWM Style 1015 + MTW, CSA TEW, H07V-K

41601..K*	0,5	22	3000	2,5	4,8	32,2
41602..K*	0,75	20	2500	2,7	7,2	28,2
41603..K*	1,0	18	2000	2,9	9,6	34,2
41604..K	1,5	16	1500	3,1	14,4	32,2
41605..K	2,5	14	900	3,7	24,0	30,1
41606..K	4,0	12	600	4,4	38,4	29,2
41607..K	6,0	10	400	4,9	58,0	27,8

Copper price basis: EUR 150 / 100 kg
Bitte ergänzen Sie die jeweilige Artikel-Nr. um die folgenden Farbkennzahlen: 00=GREENYELLOW; 01=BLACK; 02=BLUE; 03=BROWN; 04=RED; 05=WHITE; 06=GREY; 07=PURPLE; 08=PINK; 09=ORANGE; 10=YELLOW (up from 1,5mm² no HAR); 11=GREEN (up from 1,5mm² no HAR); 14=DARKBLUE
Further colours on request.

* In acc. to the HAR standard as X07V-K without “HAR” marking

A few partnumber-combinations are not yet included into our assortment. For valid combinations pls. see our Index of Partnumbers.