



APPLICATION

Topflex[®] MS Tri-rated H07V2-K cable has been designed for the internal wiring of electrical cabinets, switch boards and small electrical devices. Due to its manufacturing characteristics, it can be used in conduit or in flexible motor ducts, transformers and other machinery in general.

- Industrial use.
- Electrical panel wiring.

CONSTRUCTION

Conductor

Electrolytic annealed copper conductor, class 5 (flexible), according to EN 60228, IEC 60228 and BS 6360.

Insulation

Flexible PVC, extra sliding, high service temperature type T13 according to EN 50363-3, and Class 43 UL 1581. The special characteristics of the material ensure good easy-slide properties to the cable.

The standard identification of insulated conductors is the following:

Blue	RAL 5012
Brown	RAL 8003
Black	RAL 9005
Red	RAL 3000
Green/Yellow	RAL 6018/1021
Grey	RAL 7000
Dark Blue	RAL 5010
White	RAL 9010
Orange	RAL 2003
Violet	RAL 4005
Pink	RAL 3015

CHARACTERISTICS

⚡ Electrical performance

Low voltage

H05V2-K 300/500 V. - H07V2-K 450/750 V

BS 600/1000 V. - UL 600V. - CSA 600V

🌡 Thermal performance

Maximum service temperature: 90°C s/HD and BS,

105°C s / UL and CSA.

Maximum short-circuit temperature: 160°C (max 5 s).

Minimum service temperature: -40°C (fixed and protected installations).

🔥 Fire performance

Flame non-propagation according to EN 60332-1 / IEC 60332-1. VW-1 and FT2 according to UL 2556

Reaction to fire CPR: E_{ca} according to EN 50575.

⤵ Mechanical performance

Minimum bending radius: 5x cable diameter.

🔄 Environmental performance

Chemical & Oil resistance: Acceptable.

Water resistance: AD3 Sprays.

CROSS SECTION PACKAGING	
0,50-6 mm ²	100 m reels (or barrels upon request)
10-16 mm ²	100 m reels or bulk drums
25 mm ² onwards	100 m reels or bulk drums

STANDARDS / COMPLIANCE



According to

EN 50525-2-31 / UL 758 / CSA C22.2 / BS 6231.



Standards and approvals

HAR / AENOR / UL LISTED / RoHS / CE.



CPR (Construction Products Regulation)

E_{ca}



TOPFLEX[®] MS

TRI-RATED / H07V2-K

DIMENSIONS & ADMISSIBLE INTENSITIES



Section (mm ²)	AWG	EN 50525-2-31	BS 6231	UL 758	UL 2556	CSA 22.2
0,50	22	H05V2-K	CK	Style 1015	FT2	Type TEW
0,75	20	H05V2-K	CK	Style 1015	FT2	Type TEW
1	18	H05V2-K	CK	Style 1015	FT2	Type TEW
1,5	16	H07V2-K	CK	Style 1015	FT2	Type TEW
2,5	14	H07V2-K	CK	Style 1015	FT2	Type TEW
4	12	H07V2-K	CK	Style 1015	FT2	Type TEW
6	10	H07V2-K	CK	Style 1015	FT2	Type TEW
10	8	H07V2-K	CK	Style 1028	FT2 - VW-1	Type TEW
16	6	H07V2-K	CK	Style 1283	FT2 - VW-1	Type TEW
25	4	H07V2-K	CK	Style 1283	FT2 - VW-1	Type TEW
35	2	H07V2-K	CK	Style 1283	FT2 - VW-1	Type TEW
50	1	07V2-K	CK	Style 1284	FT2 - VW-1	Type TEW
70	2/0	07V2-K	CK	Style 1284	FT2 - VW-1	Type TEW
95	3/0	07V2-K	CK	Style 1284	FT2 - VW-1	Type TEW
120	4/0	07V2-K	CK	Style 1284	FT2 - VW-1	Type TEW
150	250 MCM	07V2-K	CK	Style 1284	FT2 - VW-1	---
185	350 MCM	07V2-K	CK	Style 1284	FT2 - VW-1	---
240	450 MCM	07V2-K	CK	Style 1284	FT2 - VW-1	---
300	550 MCM	07V2-K	---	Style 1284	FT2 - VW-1	---
400	750 MCM	07V2-K	---	Style 1284	FT2 - VW-1	---

Equivalences and designation applicable for every size and standard

Cross-Section (mm ²)	Diameter (mm)	Weight (kg/km)	Current (A)		Voltage drop (V/A · km) ²
			2 cond. ¹	3 cond. ¹	
1 x 0,50	2,5	10	12	10	99,5
1 x 0,75	2,7	13	15	13	66,6
1 x 1	2,8	15	18	16	49,9
1 x 1,5	3	20	23	20	34,0
1 x 2,5	3,5	30	31	28	20,4
1 x 4	4	45	42	37	12,7
1 x 6	4,6	65	54	48	8,45
1 x 10	6,4	115	75	66	4,89
1 x 16	8,1	180	100	88	3,10
1 x 25	9,5	265	133	117	2,00
1 x 35	10,6	355	164	144	1,42
1 x 50	13,1	505	198	175	0,99
1 x 70	14,8	685	253	222	0,696
1 x 95	16,6	890	306	269	0,527
1 x 120	17,8	1.115	354	312	0,412
1 x 150	20,2	1.400	393	342	0,330

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Cross-Section (mm ²)	Diameter (mm)	Weight (kg/km)	Current (A) 2 cond. ¹	Current (A) 3 cond. ¹	Voltage drop (V/A · km) ²
1 x 185	21,9	1.675	449	384	0,270
1 x 240	24,3	2.180	528	450	0,205
1 x 300	27,7	2.790	603	514	0,164
1 x 400	31,6	3.650	725	620	0,124

¹ Reference method B1 for 90°C insulation cables according to IEC 60364-5-52 in open air at 30°C ambient temperature.

² At maximum service temperature, $\cos\phi=1$ and single-phase circuit.