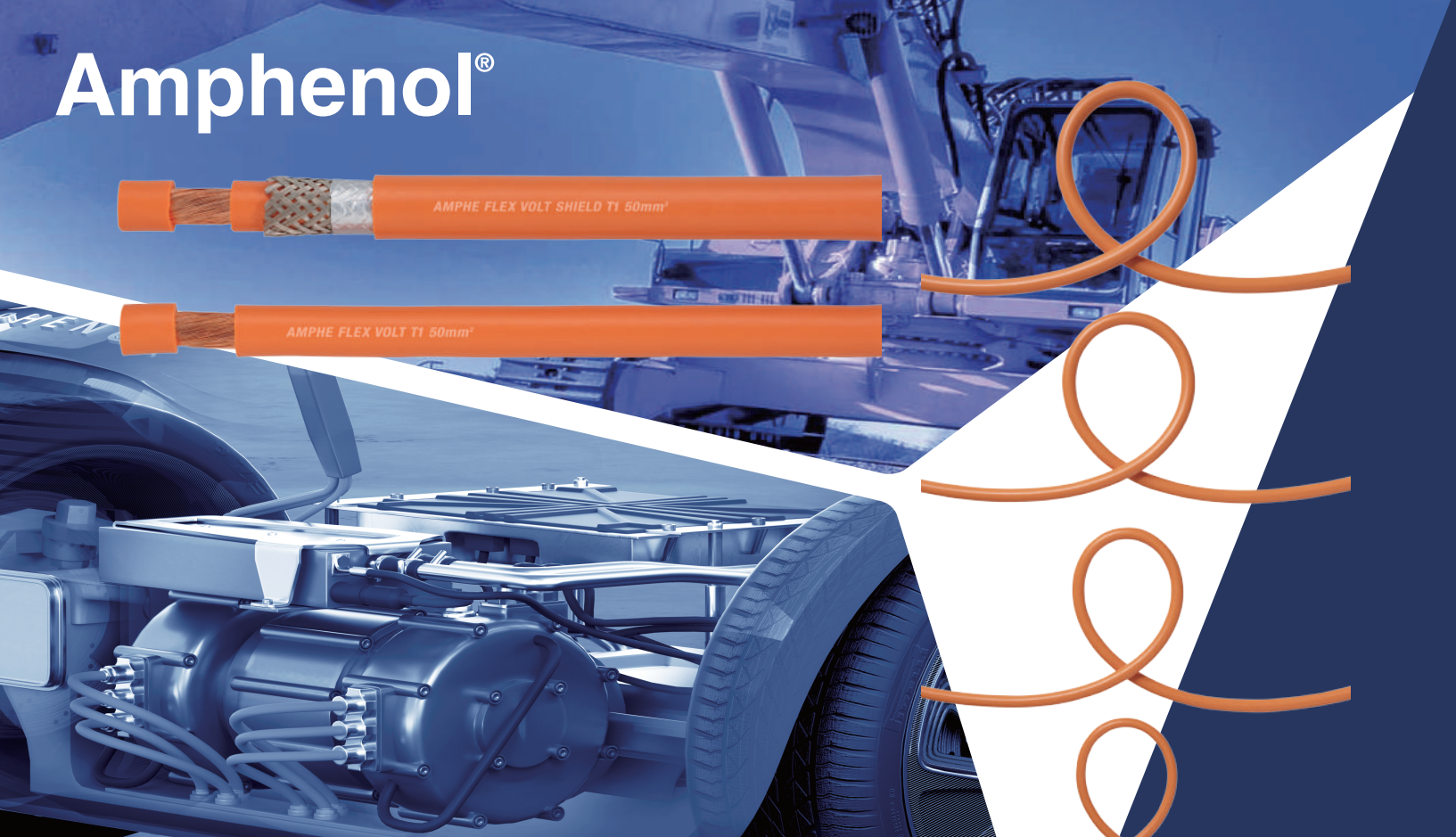
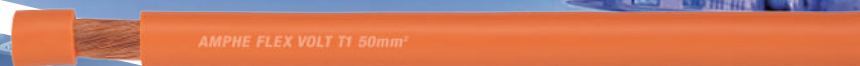
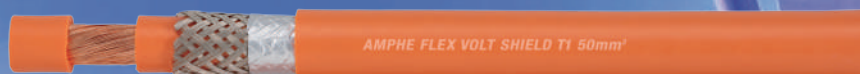


Amphenol®



AMPHE FLEX VOLT

Highly Flexible High Voltage Silicone Cable

Industry-Leading Flexibility

AMPHE FLEX VOLT is a high-voltage cable featuring an annealed copper wire (AC) conductor coated with extruded silicone rubber as insulation. Designed for 1000V/1500V high-voltage applications, it offers excellent heat resistance and operates reliably in temperature ranges from -40°C to +175°C/200°C. With the flexibility provided by silicone rubber insulation, this cable enhances wiring freedom and space efficiency in electrical component interconnections. It is ideally suited for high-voltage applications such as EVs, HEVs, and hybrid construction machinery.

Cable Specification

AMPHE FLEX VOLT

High Voltage Silicone Cable

- + Standards : ISO19642
- + Rated Voltage : AC 1000V / DC 1500V
- + Spark Test : 8000V AC
- + Insulation Resistance : $\geq 10^{12} \Omega \cdot m$
- + Temperature class rating : Class F -40°C to +200°C (3,000h)
- + Minimum Bending Radius (R) : 4×OD (Static installation)
8×OD (Dynamic installation*)
*Intended for rocking or vibration, not for cyclic bending.
- + Recommended connector : SurLok Plus, PowerLok, HVSL,
other Amphenol's HV connectors

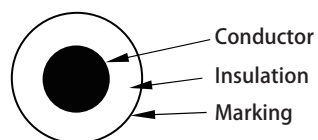
AMPHE FLEX VOLT SHIELD

High Voltage Silicone Shielded Cable

- + Standards : ISO19642
- + Rated Voltage : AC 1000V / DC 1500V
- + Spark Voltage : 8000V AC(Insulation) 3000V AC(Sheath)
- + Insulation Resistance : $\geq 10^{12} \Omega \cdot m$
- + Temperature class rating : Class F -40°C to +175°C (3,000h)
- + Minimum Bending Radius (R) : 4×OD (Static installation)
8×OD (Dynamic installation*)
*Intended for rocking or vibration, not for cyclic bending.
- + Recommended connector : SurLok Plus, PowerLok, HVSL,
other Amphenol's HV connectors

Cable Specification

AMPHE FLEX VOLT High Voltage Silicone Cable

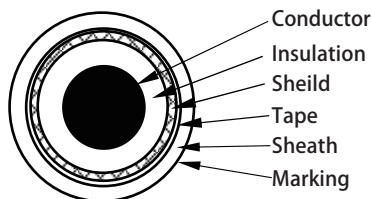


Annealed copper wire (AC)
Silicone rubber Color : Orange (According to RAL2003)
AMPHE FLEX VOLT TX XXmm² Amphenol

Size	Conductor			Conductor resistance at 20℃	Insulation thickness nom.	Outside diameter nom.		Cable weight
	Composition	Calculated cross-sectional area	Diameter nom.					
	number of twists/ number of strands/ strand diameter(mm)	mm ²	mm			mΩ/m	mm	
16f	19/26/0.20	15.68	5.6	≤1.16	1.25	8.1	±0.2	188
25f	19/40/0.20	24.12	6.8	≤0.743	1.7	10.2	±0.2	291
35f	19/56/0.20	33.76	8.1	≤0.527	1.7	11.5	±0.3	395
50f	19/80/0.20	48.23	9.7	≤0.368	1.95	13.6	±0.3	562
70f	19/112/0.20	67.52	11.5	≤0.259	2.0	15.5	±0.3	754
95f	19/150/0.20	90.43	13.4	≤0.196	2.4	18.2	±0.3	1019

Note: The conductor resistance refers to the resistance of bare annealed copper wire (AC).

AMPHE FLEX VOLT SHIELD High Voltage Silicone Shielded Cable



Annealed copper wire (AC)
Silicone rubber Color : Orange (According to RAL2003)
Tin-plated (TA) annealed copper wire
AL-PET
Silicone rubber Color : Orange (According to RAL2003)
AMPHE FLEX VOLT SHIELD TX XXmm² Amphenol

Size	Conductor			Conductor resistance at 20°C	Insulation thickness nom.	Core diameter nom.		Braided Shield Strand OD nom.	Sheath Thickness nom.	Finished outside diameter nom.		Cable weight
	Composition	Calculated cross-sectional area	Diameter nom.									
	number of twists/ number of strands/ strand diameter(mm)					mm ²	mm			mm		
16f	19/26/0.20	15.68	5.6	≤1.16	1.25	8.1	±0.2	0.12	1.25	11.2	±0.3	272
25f	19/40/0.20	24.12	6.8	≤0.743	1.7	10.2	±0.2	0.18	1.40	13.9	±0.3	427
35f	19/56/0.20	33.76	8.1	≤0.527	1.7	11.5	±0.3	0.18	1.05	14.5	±0.5	524
50f	19/80/0.20	48.23	9.7	≤0.368	1.95	13.6	±0.3	0.18	1.25	17.0	±0.5	723
70f	19/112/0.20	67.52	11.5	≤0.259	2.0	15.5	±0.3	0.20	1.55	19.5	±0.5	964

Note: The conductor resistance refers to the resistance of bare annealed copper wire (AC).

How to Order

AMPHE FLEX VOLT High Voltage Silicone Cable

AFV

T1

35

①

②

③

- ① Cable Type : **AFV** : AMPHE FLEX VOLT
② Compatible Connector : **T1** : SurLok Plus/PowerLok Gen1 or Gen3
T2 : PowerLok Gen2
T3 : HVSL
T4 : HVC/HVMC

- ③ Cable Size :
16 : 16mm² **70** : 70mm²
25 : 25mm² **95** : 95mm²
35 : 35mm²
50 : 50mm²

AMPHE FLEX VOLT SHIELD High Voltage Silicone Shielded Cable

AFVS

T4

70

①

②

③

- ① Cable Type : **AFVS** : AMPHE FLEX VOLT (Shielded)
② Compatible Connector : **T1** : SurLok Plus/PowerLok Gen1 or Gen3
T2 : PowerLok Gen2
T3 : HVSL
T4 : HVC/HVMC

- ③ Cable Size :
16 : 16mm² **70** : 70mm²
25 : 25mm²
35 : 35mm²
50 : 50mm²

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