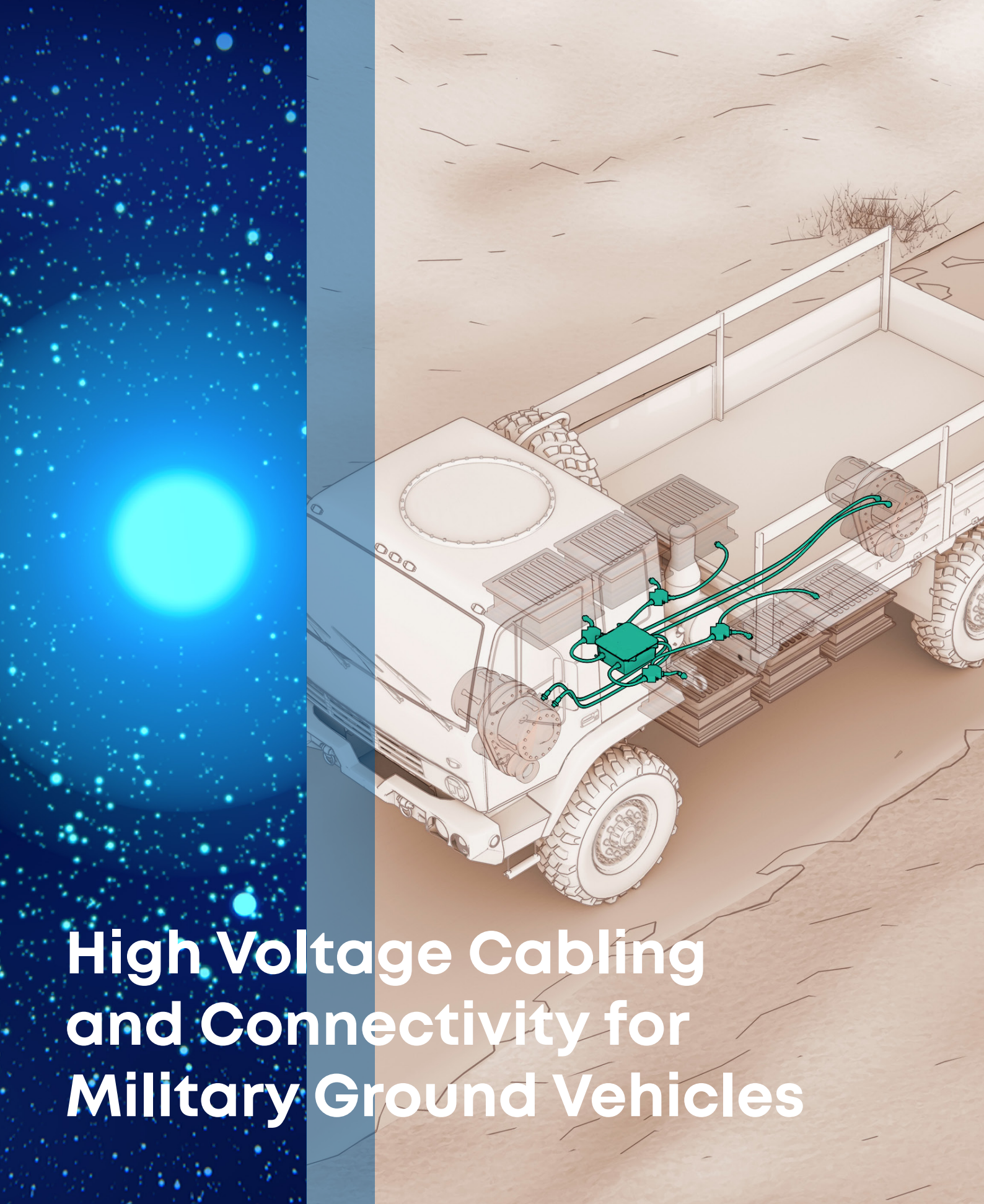


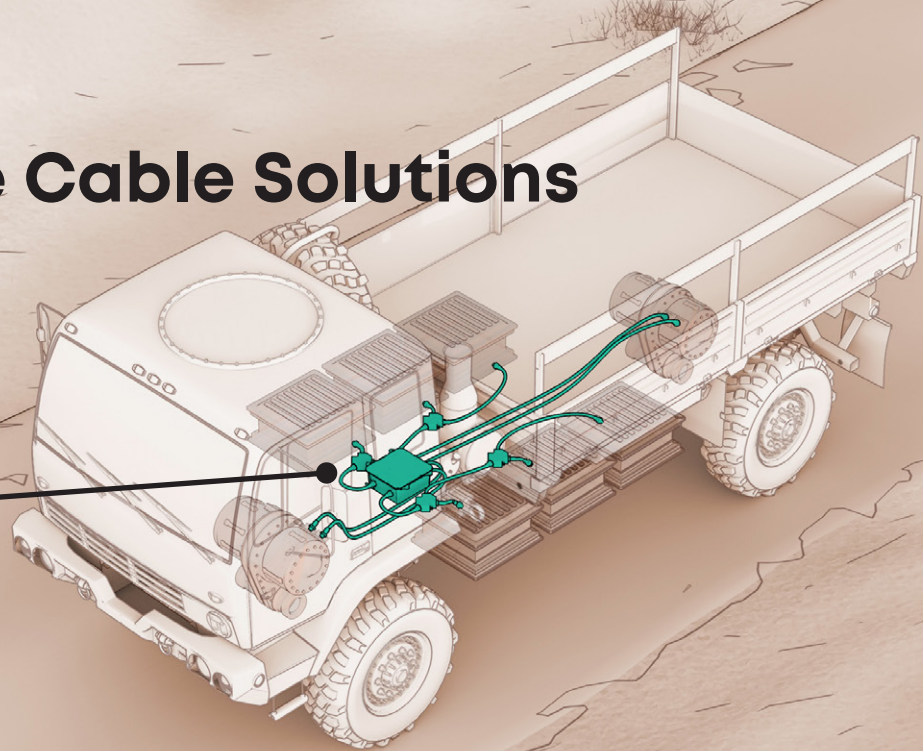


High Voltage Cabling and Connectivity for Military Ground Vehicles

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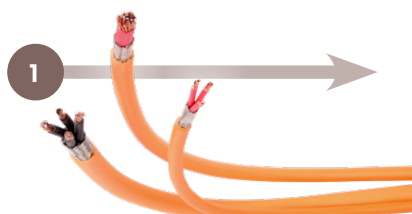
HUBER+SUHNER

High Voltage Cable Solutions



HUBER+SUHNER has vast heritage serving the connectivity needs within the defense and transportation markets. Our offerings utilize copper, radio frequency and fiber optic technologies to deliver products addressing current military vehicular trends, including power generation, hybrid propulsion electrification, autonomous driving, and position navigation and timing (PNT). These products include cables and interconnects, road and radar antennas, RF to optical transceivers, coaxial EMP surge and HEMT protectors, and integrated solutions such as cable harnessing to provide reliable transmission of high power and communications for modern military vehicles.

RADOX® HV cables



HV EV-C cable system



HV distribution unit



Power Distribution

- Complete high-voltage solutions for highest power level
- Robust and reliable performance even in harsh environments
- Space- and weight-saving design



Scan the QR code to try the RADOX® mCAY configurator

Features

- Modularity
- Full validation (automotive)
- RADOX® technology
- Smart design
- UV resistant cables

Benefits

- Easy configuration
- Accelerated homologation process
- Longer operation time in harsh environments
- Easy integration into high voltage systems
- System usage without corrugated tubes

USPs

- Short lead-times and early cost reduction planning
- Improvement in time-to-market
- High abrasion resistance and mechanical durability
- Reduced development effort at customer side
- Proven acc. to ISO6722 / DIN 53 509-1

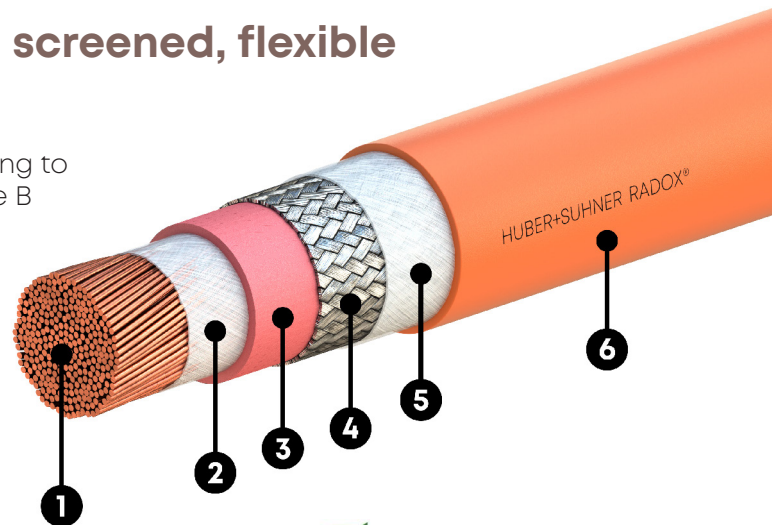
Available Connectors: EV-C, HVP HD 1400, HVP HD 1000, HVA HD 400, IPT HD Powerbolt, Powerlok GEN2

RADOX® 155(S) / RADOX® Elastomer S (FHLR91XC13X and FHLR4GC13X)

Automotive cable, single-core, screened, flexible

Construction

- | | | |
|----------|------------|---|
| 1 | Conductor | Bare copper, stranded according to ISO 6722-1 / ISO 19642-9, structure B |
| 2 | Coverage | Tape |
| 3 | Insulation | RADOX 155S (91X) for $\leq 6 \text{ mm}^2$
RADOX 155 (4G) for $> 6 \text{ mm}^2$ |
| | Color | Red |
| 4 | EMC screen | Tin plated copper braid optimised |
| 5 | Wrapping | Tape |
| 6 | Sheath | RADOX Elastomer S (13X) |
| | Color | Orange |



Properties

- Excellent resistance to
 - High and low temperature
 - Ozone, UV and weathering resistance
 - Pressure at high temperature
 - Motor oil, fuels and hydrolysis
- Design according to ISO 19642-9 class D and ISO 6722-1 class D
- Complies with EU directive 2000/53/EG on end of life vehicles
- All materials are free from lead, mercury, cadmium and chrome VI

Application

Cable, for use in road vehicle applications.

Technical data

Voltage rating AC	U0 1000 V AC
Voltage rating DC	V0 1500 V DC
Test voltage, 50Hz, 5min	10000 V AC
Temperature range (3000h)	-40 °C ... +150 °C
Min. bending radius fixed	4 × D
Min. bending radius flexing	6 × D

List of products

RADOX® 155(S) / RADOX® Elastomer S (FHLR91XC13X and FHLR4GC13X)										
Core Size [mm²]	Conductor			Wall Thickness min. [mm]	Insulator ø nom. [mm]	Screen ø max. [mm]	Cable ø nom. [mm]	Z _T at 30 MHz nom. [mΩ/m]	Cable weight nom. tolerance ±3% [kg/100m]	Part No.
	Type nom. [n×mm]	ø max. [mm]	R ₉₀ max. [Cl/km]							
1 × 2.5	50 × 0.26	2	7.6	0.32	2.85	3.5	5±0.2	100	4.9	12582675**
1 × 4.0	56 × 0.31	2.5	4.71	0.4	3.55	4.2	5.8±0.2	110	7	12582674
1 × 6.0	84 × 0.31	3	3.14	0.45	4.15	4.9	6.6±0.3	70	9.8	12582309
1 × 8.0	60 × 0.41	3.8	2.38	0.47	5.05	5.8	7.6±0.3	40	12.5	84119801
1 × 10.0	78 × 0.41	4.3	1.82	0.52	5.75	6.5	8.4±0.3	30	15.8	84100295
1 × 12.0	92 × 0.41	4.7	1.52	0.52	6.1	6.7	8.9±0.3	30	17.9	84119803
1 × 16.0	126 × 0.41	5.4	1.16	0.54	6.9	7.7	9.7±0.3	40	23	84116032
1 × 20.0	154 × 0.41	6.2	0.955	0.49	7.6	8.5	10.6±0.3	30	28.2	84119804
1 × 25.0	189 × 0.41	6.7	0.743	0.57	8.2	9.1	11.2±0.3	40	32.8	84100604
1 × 35.0	273 × 0.41	7.9	0.527	0.65	9.7	10.7	12.7±0.3	60	44.7	84100296
1 × 40.0	301 × 0.41	8.5	0.473	0.69	10.4	11.6	13.6±0.3	20	51.3	84119806
1 × 50.0	385 × 0.41	9.4	0.368	0.78	11.5	12.9	14.9±0.3	30	64.2	84096257
1 × 70.0	360 × 0.51	11.6	0.259	0.78	13.7	14.9	17±0.3	30	85.8	84100298
1 × 95.0	480 × 0.51	13.5	0.196	1.03	16.2	17.6	19.9±0.4	20	115.3	84100299
1 × 120.0	589 × 0.51	15.1	0.153	1.12	18	19.4	22.6±0.4	20	145.5	84103410
1 × 150.0	741 × 0.51	17	0.122	1.16	20	21.6	24.9±0.5	30	177.4	84111254

**Insulation colour black

Connecting – today and beyond

HUBER+SUHNER offers a comprehensive portfolio of ancillary products and capabilities for the military ground vehicle market:

- Antennas
- Coaxial EMPs
- Cable management – hybrid harnessing and turnkey solutions
- Build-to-print electronics/fiber optics manufacturing services
- Sourcing and kitting services
- Design consultation and R&D services

Visit hubersuhner.com
for more information



HUBER+SUHNER Phoenix Dynamics provides

- Electro-mechanical integration
- Engineering
- Prototyping
- Production

To find out more, scan
the QR code



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HUBER+SUHNER is certified to ISO 9001, ISO 14001, ISO 45001, EN/AS 9100, IATF 16949 and ISO/TS 22163-IRIS.

Waiver

The facts and figures provided herein are for information only and do not represent any warranty of any kind.