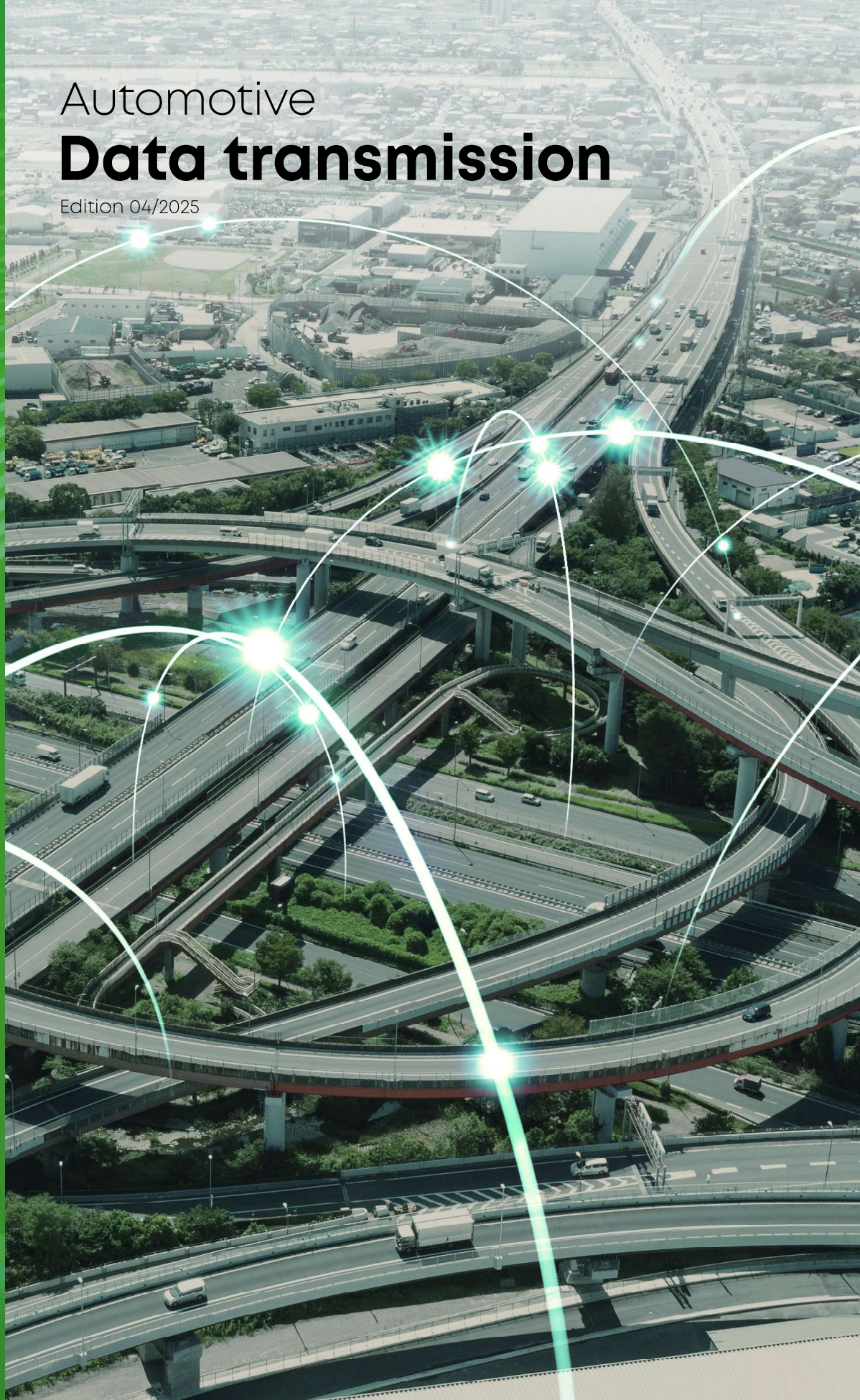


# Automotive **Data transmission**

Edition 04/2025





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# Radio frequency cable connectivity



Product name	<b>ENVIROFLEX_178-AM</b>
Product ID.	<b>/</b>
Description	RG178 LSFH, 50 Ohm, 3 GHz, 105°C, Ø 1.84 mm, RADOX® jacket <ul style="list-style-type: none"> <li>• Halogen free alternative to RG cables</li> <li>• Ozone, UV and weathering resistance</li> <li>• Bus qualified</li> </ul>
Item no.	85183340



## Electrical data

Impedance	50 Ω +/- 2 Ω
Operating frequency	≤ 3 GHz
Capacitance	94.5 pF/m
Velocity of signal propagation	70.7 %
Signal delay	4.71 ns/m
Screening effectiveness	40dB
Insulation resistance	10000000 MΩ*m
Operating Voltage (at sea level)	≤ 1 kVrms
Test voltage (50 Hz/1 min)	≤ 2 kVrms

## Construction

Impedance	Material	Detail	Diameter
Centre conductor	Steel, Copper + Silver plated	Strand-07	0.305 mm
Dielectric	SPEX (Crosslink Foam PE)		0.82 mm
Outer conductor	Copper, Silver plated	Braid, 95%	1.27 mm
Jacket	RADOX	RAL 5010 – bl	1.84 mm +/- 0.07 mm

## Mechanical data

Weight (g)	approx. 6.5g/m
Static bending radius	≥ 5 mm
Repeated bending radius	≥20 mm

## Environmental data

Operation temperature	-40 °C ... 105 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	free of halogenes, acc. standard IEC 60754

## Additional information

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant

For more detailed information, please visit our website's "Products" section.

**ENVIROFLEX**

Product name	<b>ENVIROFLEX_316_D-AM</b>
Product ID.	<b>/</b>
Description	RG316D LSFH, 50 Ohm, 8 GHz, 105°C, Ø 3.16 mm, RADOX® jacket · Halogen free alternative to RG cables · Ozone, UV and weathering resistance · Bus qualified
Item no.	85070084

**Electrical data**

Impedance	50 Ω +/- 2 Ω
Operating frequency	≤ 8 GHz
Capacitance	94.5 pF/m
Velocity of signal propagation	70.1 %
Signal delay	4.72 ns/m
Screening effectiveness	70dB
Insulation resistance	10000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.3 kVrms
Test voltage (50 Hz/1 min)	≤ 3 kVrms

**Construction**

Impedance	Material	Detail	Diameter
Centre conductor	Steel, Copper + Silver plated	Strand-07	0.54 mm
Dielectric	SPEX (Crosslink Foam PE)		1.53 mm
Outer conductor	Copper, Silver plated	Braid, 96%	1.99 mm
Outer conductor	Copper, Silver plated	90%	2.44 mm
Jacket	RADOX	RAL 9005 – bk	3.16 mm +/- 0.08 mm

**Mechanical data**

Weight	approx. 21 g/m
Static bending radius	≥ 5 mm
Repeated bending radius	≥ 30 mm

**Environmental data**

Operation temperature	-40 °C ... 105 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	free of halogenes, acc. standard IEC 60754

**Additional information**

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant

For more detailed information, please visit our website's "Products" section.

**SPUMA**

Product name	<b>SPUMA_195-FR-AM</b>
Product ID.	<b>/</b>
Description	Low-loss, 50 Ohm, 8 GHz, 85°C, Ø 4.98 mm, LSFH jacket • Halogen free cable with standard dimensions • Ozone, UV and weathering resistance • Bus qualified
Item no.	85069658

**Electrical data**

Impedance	50 Ω +/- 2 Ω
Operating frequency	≤ 8 GHz
Capacitance	90.8 pF/m
Velocity of signal propagation	76.1 %
Signal delay	4.54 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	1000000 MΩ*m
Operating Voltage (at sea level)	≤ 0.5 kVrms
Test voltage (50 Hz/1 min)	≤ 1.0 kVrms

**Construction**

Impedance	Material	Detail	Diameter
Centre conductor	Copper	Wire	0.94 mm
Dielectric	SPE (Foamed Polyethylene)		2.83 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	2.95 mm
Outer conductor	Copper, Tin plated	Braid	3.52 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 – bk	4.98 mm +/- 0.1 mm

**Mechanical data**

Weight	approx. 39.7 g/m
Static bending radius	≥ 10 mm
Repeated bending radius	≥ 40 mm

**Environmental data**

Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	free of halogenes, acc. standard IEC 60754

**Additional information**

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant

For more detailed information, please visit our website's "Products" section.

**SPUMA**

Product name	<b>SPUMA_240-FR-AM</b>
Product ID.	<b>/</b>
Description	Low-loss, 50 Ohm, 6 GHz, 85°C, Ø 6.17 mm, LSFH jacket <ul style="list-style-type: none"> <li>• Halogen free cable with standard dimensions</li> <li>• Ozone, UV and weathering resistance</li> <li>• Bus qualified</li> </ul>
Item no.	85069656

**Electrical data**

Impedance	50 Ω +/- 2 Ω
Operating frequency	≤ 6 GHz
Capacitance	78.9 pF/m
Inductance	0.2 μH/m
Velocity of signal propagation	82.6 %
Signal delay	4.05 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	1000000 MΩ*m
Operating Voltage (at sea level)	≤ 0.9 kVrms
Test voltage (50 Hz/1 min)	≤ 1.5 kVrms

**Construction**

Impedance	Material	Detail	Diameter
Centre conductor	Copper	Wire	1.42 mm
Dielectric	SPE (Foamed Polyethylene)		3.82 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	3.94 mm
Outer conductor	Copper, Tin plated	Braid, 94%	4.52 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 – bk	6.17 mm +/- 0.1 mm

**Mechanical data**

Weight	approx. 61 g/m
Static bending radius	≥ 14 mm
Repeated bending radius	≥ 53 mm

**Environmental data**

Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	free of halogenes, acc. standard IEC 60754

**Additional information**

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant

For more detailed information, please visit our website's "Products" section.

**SPUMA**

Product name	<b>SPUMA_400-FR-AM</b>
Product ID.	<b>/</b>
Description	Low-loss, 50 Ohm, 8 GHz, 85°C, Ø 10.25 mm, LSFH jacket <ul style="list-style-type: none"> <li>• Halogen free cable with standard dimensions</li> <li>• Ozone, UV and weathering resistance</li> <li>• Bus qualified</li> </ul>
Item no.	<b>/</b>

**Electrical data**

Impedance	50 Ω +/- 2 Ω
Operating frequency	≤ 8 GHz
Capacitance	78 pF/m
Velocity of signal propagation	85 %
Signal delay	3.9 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	1000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.6 kVrms
Test voltage (50 Hz/1 min)	≤ 3 kVrms

**Construction**

Impedance	Material	Detail	Diameter
Centre conductor	Alluminium / copper	Wire	2.74 mm
Dielectric	SPE (Foamed Polyethylene)		7.24 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	7.4 mm
Outer conductor	Copper, Tin plated	Braid, 94%	8.15 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 – bk	10.25 mm +/- 0.1 mm

**Mechanical data**

Weight	approx. 115 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	≥ 100 mm

**Environmental data**

Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	free of halogenes, acc. standard IEC 60754

**Additional information**

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant: qualifications ongoing.

For more detailed information, please visit our website's "Products" section.







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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**

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