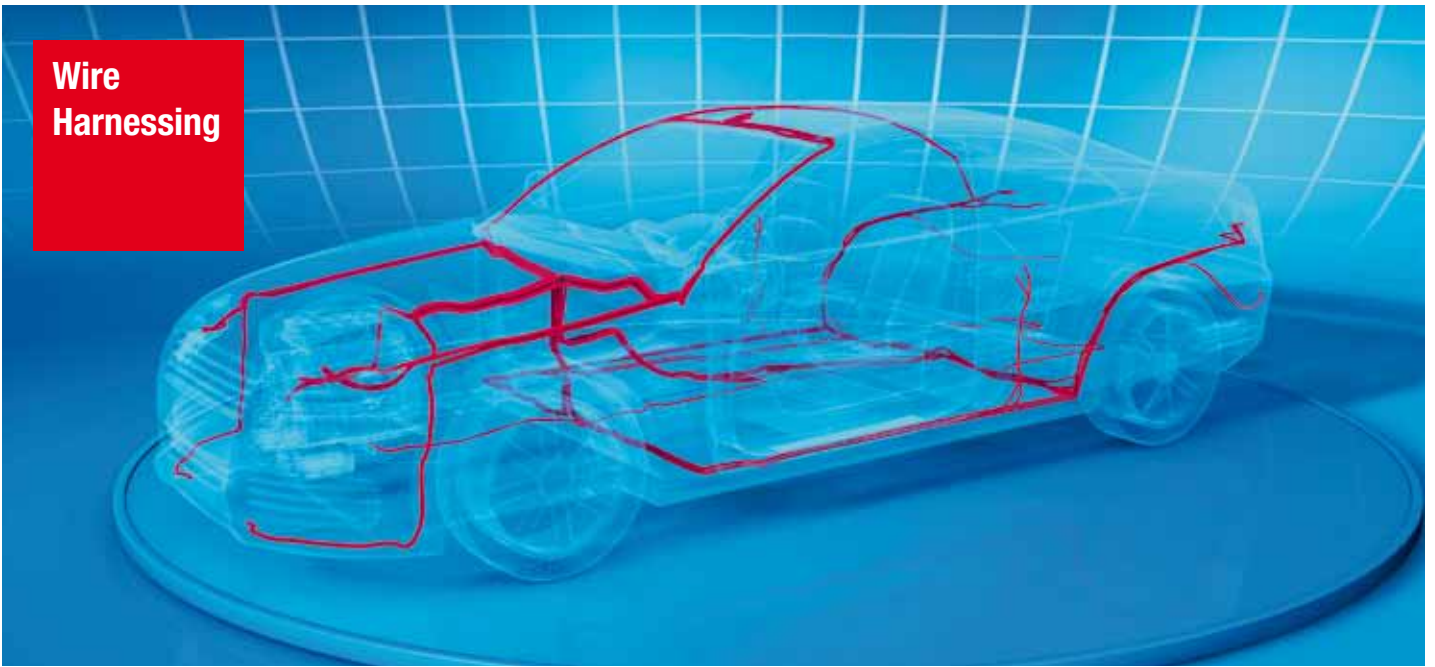


tesa® Automotive Wire Harnessing – Quality and Innovations

Tape technology for the automotive industry
APPLICATION FOLDER



Wire Harnessing



Quality innovations for power supply systems

tesa® Automotive offers an extensive range of wire harnessing tapes featuring woven, non-woven or film backings equipped with high-quality adhesives. Products for the engine compartment must be highly resistant to wear, temperature and chemicals. Large-diameter wire harnesses are primarily found in the vehicle interior. They require excellent flexibility for easy installation, secure bundling and sound-proofing features. tesa® Automotive products fulfill the international OEM specifications for productive materials. The innovative tesa® Sleeve range allows for highly flexible wire harnesses that are easily installed and increase efficiencies during the production process.



Features and benefits of tesa® Automotive products for Wire Harnessing

- Conformity to OEM specifications
- Functional and secure bundling
- Noise reduction and protection against heat, abrasion and chemicals during the entire vehicle lifetime
- Enhanced harness flexibility to facilitate an efficient assembly process
- High quality standards contributing to the final harness performance, durability and appearance
- Cost-efficient alternatives to tubes offering reduced application time and material consumption, part number simplification and harness weight reduction.

tesa® specific backing materials, adhesives and application designs provide highest quality.

Finding the right product for your needs

Depending on the different main requirements and the individual application area, tesa® Automotive developed a comprehensive tape assortment to fulfill customer needs.

Main Requirement		Passenger Compartment	Engine Compartment		
		T1: 85 °C - T2: 105 °C	T3: 125 °C	T4: 150 °C	
Abrasion Protection		tesa® 51036 tesa® 51026 tesa® 51006/51007*	tesa® 51036 tesa® 51026 tesa® 51006/51007*	tesa® 51036 tesa® 51026 tesa® 51006/51007*	
Noise Damping	High	tesa® 51616 tesa® 51606	tesa® 4606		
	Medium	tesa® 51608 / 51609* tesa® 51618 / 51619*	tesa® 51628		
Pure Bundling	High Tensile Strength	tesa® 51025 PV10	tesa® 51025 PV10	tesa® 51028	
	Low Tensile Strength	tesa® 4182 tesa® 4173	tesa® 62309		
Enhanced Flexibility	Radiant Heat Protection		tesa® 68000 PVO tesa® 68000 PV7	tesa® 68000 PVO tesa® 68000 PV7	tesa® 68000 PVO tesa® 68000 PV7
	Abrasion Protection	Very High	tesa Supersleeve® 51026 PV6	tesa Supersleeve® 51026 PV6	tesa Supersleeve® 51026 PV6
		Medium	tesa Sleeve® 51026 PV9 tesa Sleeve® 51036 PV9	tesa Sleeve® 51026 PV9 tesa Sleeve® 51036 PV9	tesa Sleeve® 51026 PV9 tesa Sleeve® 51036 PV9
	Noise Damping	High	tesa Sleeve® 51608 PV6		
		Medium	tesa Sleeve® 51608 PV8 tesa Sleeve® 51608 PV9		

*Automatic Application

tesa® 68000 Heat Reflective

Aluminum laminated glasscloth for superior radiant heat reflection

Product Features:

- Maximum radiant heat protection
- High temperature resistance
- Available as customized kiss-cut on a liner

Product Design

<p>tesa® Heat Reflective PV7</p> 	<p>tesa® Heat Reflective PVO</p> 
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The tesa Sleeve® assortment

Combining the simplicity of adhesive tapes with the properties of tubes

The tesa sleeve assortment offers a broad range of advantages:

- Higher harness flexibility compared to tape
- Weight savings
- Even surface – perfect appearance
- Available with customized perforation for most product versions

Available Product Versions

<p>tesa Sleeve® PV5</p> <ul style="list-style-type: none"> ■ Flexible sleeve and the known spiral application of tape ■ High sealing strength due to adhesive-to-adhesive closure 	<p>tesa Supersleeve® PV6</p> <ul style="list-style-type: none"> ■ High noise damping or abrasion resistance due to double layer product design ■ High flexibility ■ Application aid for simple fixation 
<p>tesa Sleeve® PV8</p> <ul style="list-style-type: none"> ■ High sealing strength due to adhesive-to-adhesive closure ■ Superior flexibility 	<p>tesa Sleeve® PV9</p> <ul style="list-style-type: none"> ■ Cost-efficient Sleeve version due to single layer product design ■ High flexibility ■ Application aid for simple fixation 

tesa® Automotive Wire Harnessing

		Backing	Adhesive	Total Thickness [µm]	Temperature Resistance [°C/3000h]	Noise Damping	Abrasion Resistance 5mm/10mm Mandrel	Hand Tearability	Flame Resistance tested as Composite
Abrasion Resistance	tesa® 51006	PET-cloth	natural rubber	320	150	A	B/C	–	B
	tesa® 51007*	PET-cloth	natural rubber	320	150	A	B/C	–	B
	tesa® 51036	PET-cloth	advanced acrylic	260	150	A	D/D	–	B
	tesa® 51026	PET-cloth	acrylic	260	150	A	C/D	–	B
Noise Damping	tesa® 51608	PET-fleece	natural rubber	280	105	C	A/B	✓	B
	tesa® 51609*	PET-fleece	natural rubber	280	105	C	A/B	✓	B
	tesa® 51618	PET-fleece	natural rubber	250	105	C	A/B	✓	B
	tesa® 51619*	PET-fleece	natural rubber	250	105	C	A/B	✓	B
	tesa® 51628	PET-fleece	acrylic	270	125	C	A/B	✓	B
	tesa® 51616	PET-fleece	natural rubber	650	105	D	C/C	✓	B
	tesa® 51606	PET-fleece	natural rubber	800	105	D	C/D	–	B
	tesa® 4606	PE-velour	acrylic	500	125	D	B/B	–	B
Standard Wrapping	tesa® 4182 PV2	PVC-film	acrylic	112	105	A	A/A	✓	B
	tesa® 4173 PV2	PVC-film	acrylic	128	105	A	A/A	✓	B
	tesa® 62309	halogen-free PE-film	acrylic	95	125	A	A/A	✓	B
	tesa® 51025 PV10	PET-cloth	synthetic rubber	200	125	A	A/B	✓	B
	tesa® 51028	PET-cloth	acrylic	180	150	A	A/B	✓	B
Flexibility	tesa® 51608 PV8	PET-fleece	natural rubber	210	105	C	A/A	–	B
	tesa® 51608 PV9	PET-fleece	natural rubber	210	105	C	A/A	–	B
	tesa® 51608 PV6	PET-fleece	natural rubber	560	105	D	B/B	–	B
	tesa® 51026 PV9	PET-cloth	acrylic	220	150	A	B/C	–	B
	tesa® 51026 PV6	PET-cloth	acrylic	530	150	B	D/E	–	B
	tesa® 51026 PV5	PET-cloth	acrylic	530	150	B	D/E	–	B
	tesa® 51036 PV9	PET-cloth	advanced acrylic	220	150	A	B/C	–	B
Heat Reflection	tesa® 68000 PV0	aluminium laminated glasscloth	acrylic	250	150 (232°C/168 h)	C	A/A	–	A
	tesa® 68000 PV7	aluminium laminated glasscloth	acrylic	500	150 (232°C/168 h)	C	A/A	–	A

Abrasion Resistance (LV312)	Class	A	B	C	D	E
	Resistance	No abrasion Resistance	Little	Medium	High	Very High
	Number of Strokes	< 100	100 – 499	500 – 999	1000 – 4999	≥ 5000

Noise Damping (LV312)	Class	A	B	C	D	E
	Requirement db(A)	0 to ≤ 2	> 2 to ≤ 5	> 5 to ≤ 10	> 10 to ≤ 15	> 15

Flame Resistance (LV312)	Class	A	B	C
	Requirement	not flammable	self-extinguishing	burn rate ≤ 100 mm / min

*Automatic Application

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless tesa SE can make no warranties, expressed or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. Therefore, the user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to advise you.



tesa Automotive: from tradition, passion and conviction

For the past 75 years tesa Automotive has been a constant generator of ideas and a reliable partner to automobile manufacturers and their suppliers. tesa's high-performance self-adhesive tape solutions and pioneering inventions impress customers worldwide. tesa Automotive is working on the future of adhesive tape technology, a key technology of the 21st century, with enthusiasm.



NEW: the tesa® ACX technology

Time and again tesa has been able to set milestones in adhesive tape technology. tesa® ACX is a new, future-oriented technology, specially developed by tesa for constructive bonding. This development will open up a new dimension of possibilities for automobile manufacturers and suppliers in the future. tesa Automotive is equipped to collaboratively find new ideas for constructive bonding applications.



The tesa management system is certified according to the standards ISO 9001, ISO/TS 16949 and ISO 14001. All tesa® products delivered to automotive customers are listed in the International Material Data System (IMDS).

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