



Wire Harnessing

Bundling & Protection

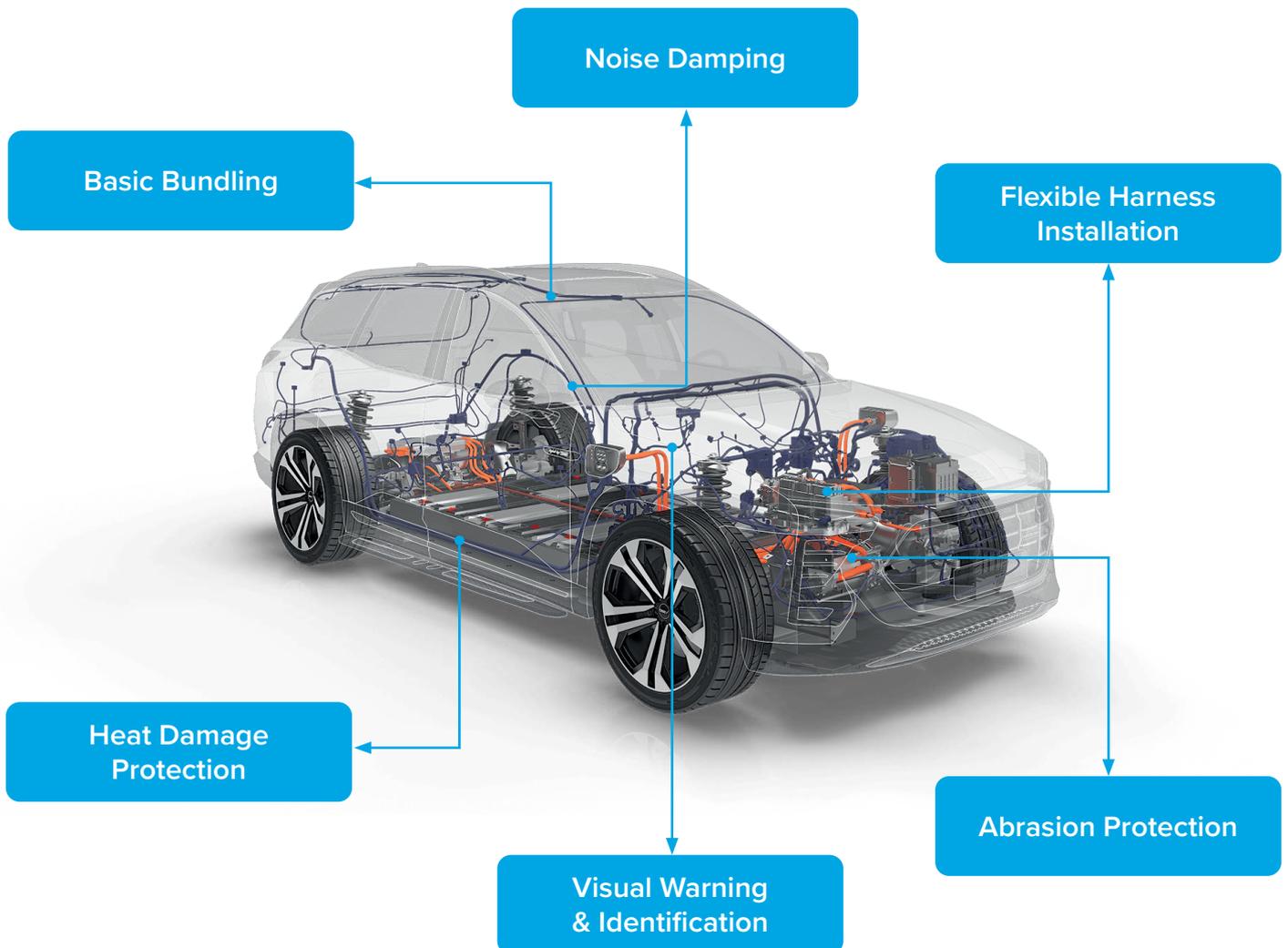
Adhesive Tape Solutions for Automotive Electrical Distribution Systems

Introduction

Wire Harnessing Bundling & Protection

In the automotive industry, today's cars have transformed into high-performance computers packed with sensors and highly complex control systems resulting in wire harnesses of up to 8 km of cables for data and energy transmission. Based on the extensive know-how from tesa in adhesive formulations, backing technologies and coating processes, we can offer reliable, efficient and high-performance tapes for secure bundling & protection of a wide range of applications in wire harnessing. Thereby, all tapes are designed to fulfill the relevant industry standards and specifications of the OEMs and Wire Harness Manufacturers all around the globe.

Our adhesive tape solutions enable space-saving and precise routing as well as heat, abrasion and noise protection. In addition, our products withstand extreme temperatures and environmental conditions providing long-lasting performance and reliability. We are highly committed to our customers such as Wire Harness Manufacturers and OEMs worldwide supporting them in the automotive trends of today and tomorrow, such as e-mobility, sustainability, and production automation.

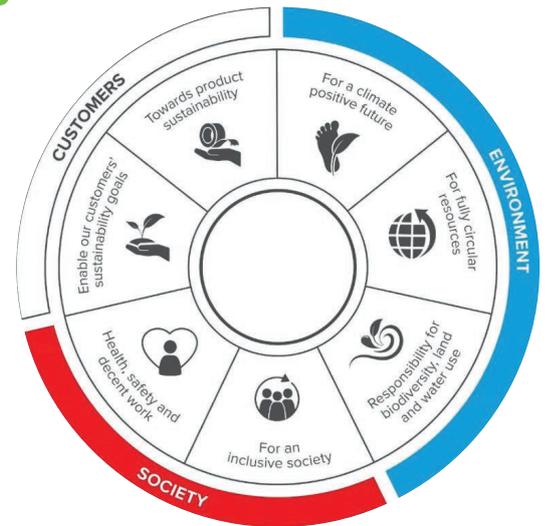


Contributing to Sustainability

Achieving a higher level of sustainability is an important goal for many of our customers – just as it is for us

As a leading provider of adhesive solutions, we have always taken our social and environmental responsibility very seriously. Sustainability has been one of the key strategic targets at tesa for a number of years.

We further increase the importance of our sustainability strategy with five highly ambitious action areas. This also applies to our wire harnessing tapes.



Our five strategic action areas with high impact

To meet our commitment, we have defined a set of goals and indicators aligned with our Sustainability Agenda. This also applies to the packaging tapes, which we use for our carton boxes.

01

Reduction of emission

02

Responsible sourcing

03

Use of recycled and bio-based materials

04

Circularity and reduction of waste

05

Enable sustainability at our customers

Our new assortment

tesa® 61623



tesa® 61036



Backing	PCR PET fleece	PCR PET cloth
Recycled Content	80%	100%
Adhesive	Rubber-based solvent-free	Advanced acrylic
Thickness	250 µm	260 µm
Noise damping	Class C	Class A
Abrasion protection 5mm/ 10mm	Class A/B	Class D/D
Temperature resistance	105° C	150° C

Want to know more?

To learn more about our Sustainability Agenda, visit our website: www.tesa.com/en/about-tesa/sustainability



Our Building Blocks

By using state of the art backing materials and our innovative adhesive technologies, we tailor solutions to meet existing and future TIER and OEM requirements. tesa's global production footprint ensures short supply chains and supplies safety for our customers around the globe.

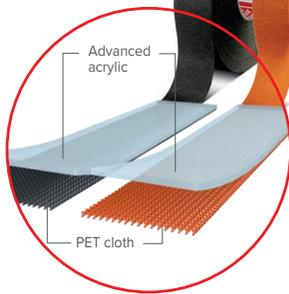
tesa® 51623



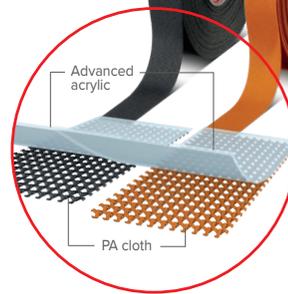
tesa® 51626



tesa® 51036



tesa® 69000



tesa® Sleeve Assortment

With our versatile converting capabilities, we are able to provide product solutions as well as sleeves. Our sleeve solutions are well appreciated in the market as VAVE replacements for other harness coverings such as braided sleeves or convoluted tubes. Our sleeves are minimizing the adhesive contact to the wires to increase flexibility and assembly efficiency. Further benefits are weight and space saving.



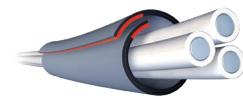
tesa® Spiralsleeve PV5X series

- Combines the well-known spiral application of tapes with the flexibility of sleeves
- Adhesive-to-adhesive closure guarantees secure bonding



tesa Supersleeve® PV6X series

- High noise damping and/or abrasion resistance due to double-layer product design
- Adhesive-to-adhesive closure guarantees secure bonding



tesa Supersleeve® PV7X series

- High abrasion resistance due to double-layer product design
- Also suitable for small-diameter harness branches



tesa® Sleeve PV8X series

- Superior flexibility
- No adhesive contact to wires
- Adhesive-to-adhesive closure guarantees secure bonding



tesa® Sleeve PV9X series

- Superior flexibility
- Cost-efficient sleeve version due to single-layer product design



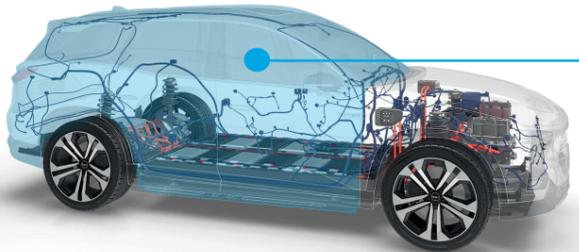
Scan or click the code to get access to the application videos of our sleeve assortment.

Best Decision

Choosing the Right Product for Your Application

Passenger Compartment

Protection against noise and environmental conditions



Passenger Compartment
105°C

Thermal Management	Flexibility	Abrasion protection	Noise damping	Hand tearable	Product	Color	Adhesive / Backing	Temperature resistance (°C/3000h)	Abrasion resistance 5mm/10mm mandrel	Noise damping class	Total thickness [µm]		
Passenger Compartment	high	basic	high	yes	51618 PV5	●	Rubber/ PET fleece	105	B/B	D	580		
				yes*	51608 PV6	●	Rubber/ PET fleece	105	B/B	D	560		
			yes*	51608 PV8/9	●	Rubber/ PET fleece	105	A/A	C	210			
		high	very high				51626***	●	Acrylic/ PA Velour	105	D/E	E	1000
							51030	●	PET cloth	105	C/D	A	260
							51616	●●	Rubber/ PET fleece	105	C/D	D	650
	medium	basic	high	high	yes	51617	●	Rubber/ PET fleece	105	B/B	D	480	
					yes	51623***	●●	Rubber/ PET fleece	105	A/B	C	250	
			yes	61623***	●	Rubber/ rPET fleece	105	A/B	C	250			
		medium	medium	medium	medium	yes	4182	●	Acrylic/ PVC Film	105	A/A	A	104

* Perforation upon request *** Available as spool upon request ■ Product contributes to sustainability ● Black ● Orange ● Black with identifier

Engine Compartment

Protection against abrasion, demanding temperatures and environmental conditions



Engine Compartment
≥ 125°C

Thermal Management	Flexibility	Abrasion protection	Noise damping	Hand tearable	Product	Color	Adhesive / Backing	Temperature resistance (°C/3000h)	Abrasion resistance 5mm/10mm mandrel	Noise damping class	Total thickness [µm]			
Engine Compartment	yes	high	medium	yes**	68000 PV1	●	Adv. Acrylic/ Aluminum/ Glass cloth	150	A/A	A	210			
				yes**	68000 PV17	●	Adv. Acrylic/ Aluminum/ Glass cloth	150	A/A	C	450			
		medium	very high	basic	yes*	51057 PV50	●	PET cloth	150	E/E	B	460		
					yes*	51036 PV76	●	Adv. Acrylic/ PET cloth/fleece	150	D/E	D	780		
	high	high	high	high	yes*	51037 PV50	●	PET cloth	150	D/E	B	460		
					yes*	51036 PV5	●	Adv. Acrylic/ PET cloth	150	D/E	B	530		
				yes*	51036 PV6	●●	Adv. Acrylic/ PET cloth	150	D/E	B	530			
		basic	medium	medium	medium	yes*	51036 PV7	●●	Adv. Acrylic/ PET cloth	150	D/E	B	485	
						yes*	51036 PV9	●●	Adv. Acrylic/ PET cloth	150	B/C	A	220	
						yes*	69000	●●	Adv. Acrylic/ PA cloth	125	E/E	A	350	
	no	high	high	high	high	yes	51037	●	Adv. Acrylic/ PET cloth	150	D/D	A	230	
						yes	51036***	●●●●●	Acrylic/ PET cloth	150	D/D	A	260	
						yes	61036***	●	Acrylic/ rPET cloth	150	D/D	A	260	
		medium	medium	medium	medium	medium	yes	51035	●●	Acrylic/ PET cloth	150	C/D	A	240
							yes	51628	●	Acrylic/ PET fleece	125	A/B	C	270
							yes	51025 PV10***	●	Rubber/ PET cloth	125	A/B	A	160
						62309***	●	Acrylic/ PE film	125	A/A	A	95		

* Perforation upon request ** Kiss-cut upon request ■ Product contributes to sustainability ● Black ● Orange ● Silver ● Blue ● Violet ● Yellow
 *** Available as spool upon request

Performance Classification According to Typical OEM Specifications ¹⁾

Temperature

Class	T1	T2	T3	T4	T5	T6
[°C]	-40 to 85	-40 to 105	-40 to 125	-40 to 150	-40 to 175	-40 to 200

Noise damping

Class	A	B	C	D	E
Attenuation db [A]	0 to ≤ 2	> 2 to ≤ 5	> 5 to ≤ 10	> 10 to ≤ 15	> 15
Level of noise damping	-	basic	medium	high	very high

Abrasion protection

Class	A	B	C	D	E	F
# of strokes	< 100	100 - 499	500 - 999	1000 - 4999	5000 - 14999	15000 - 29999
Level of abrasion protection	-	basic	medium	high	very high	extremely high

¹⁾ tests are based on the SAE 2192 / ISO 6722 norms which reflect the tests required by most OEM wire harness specifications

Application Manual

- 1 Begin the taping process at the terminals going towards the main harness.
- 2 Wrap the main harness.
- 3 **For hand tearable tapes:**
Tear the tape apart, starting from the upper edge down to the lower edge.
- 4 **For non hand tearable tapes:**
Use appropriate tools, such as the tesa® ring cutter (tesa® 6291), available in two different versions.
- 5 Cut through the backing side of the tape and don't allow the blade to touch the adhesive.
- 6 After the tape separation, it is important to firmly press down the tape end with your thumb.





06/2023



Our management system is certified according to the standards ISO 9001, IATF 16949, and ISO 14001. All our products delivered to automotive customers are listed in the International Material Data System (IMDS).

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