



# Wire Harnessing

# Bundling & Protection

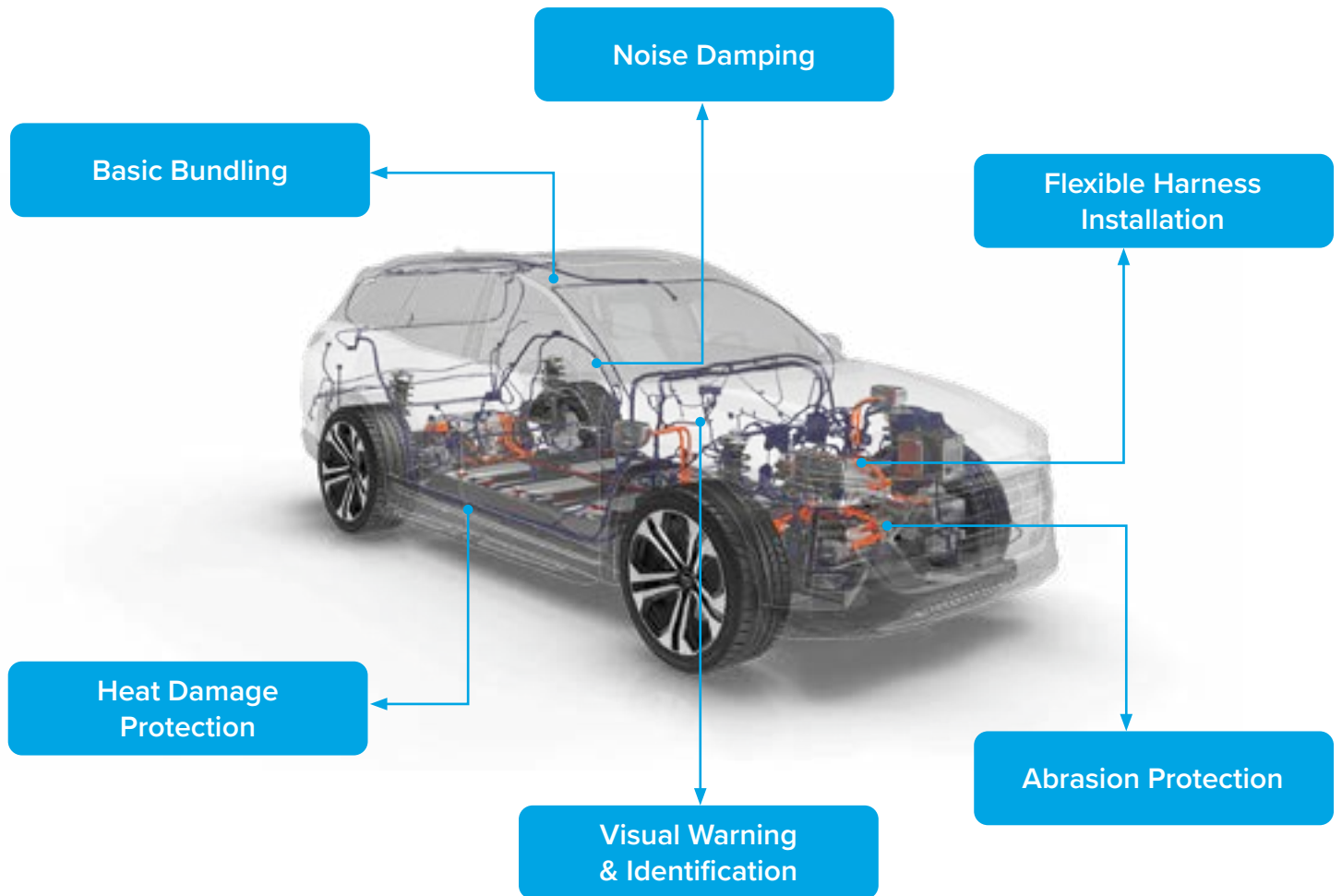
Adhesive Tape Solutions for Automotive Electrical Distribution Systems

# 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® 61638



#### tesa® 61036



Backing	PCR PET fleece	PCR PET cloth
Recycled Content	80%	100%
Adhesive	Waterborn acrylic	Advanced acrylic
Thickness	260 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](http://www.tesa.com/en/about-tesa/sustainability)

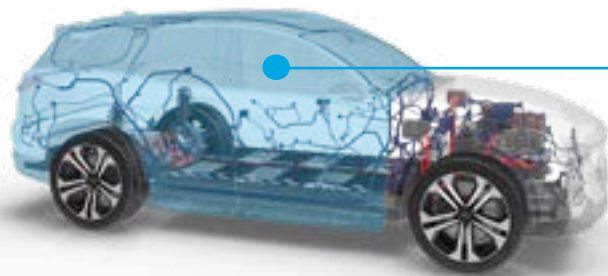


# Best Decision

## 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 105°C	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 PV9	●	Rubber/PET fleece	105	A/A	C	210		
		medium	high	extreme		51626***	●	Acrylic/PA Velour	105	D/E	E	1000
						51616	●●	Rubber/PET fleece	105	C/D	D	650
				high	51617	●	WB Acrylic	105	B/B	D	480	
	basic		high		61638	●●	WB Acrylic	105	A/B	C	260	
					61623***	●	Rubber/rPET fleece	105	A/B	C	260	
			medium	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 ≥ 125°C	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	E/F	D	780		
	high	extreme	basic	medium	yes*	51036 PV78	●●	Adv. Acrylic/PET cloth/thin fleece	150	D/D	C	455		
					yes*	51037 PV50	●	PET cloth	150	D/E	B	460		
			high	high	basic	yes*	51036 PV5	●	Adv. Acrylic/PET cloth	150	D/E	B	530	
						yes*	51036 PV6	●●	Adv. Acrylic/PET cloth	150	D/E	B	530	
		medium	basic	very high	basic	yes*	51036 PV7	●●	Adv. Acrylic/PET cloth	150	D/E	B	485	
						yes*	51036 PV9	●●	Adv. Acrylic/PET cloth	150	B/C	A	220	
			high	very high	basic	medium	yes	69000	●●	Adv. Acrylic/PA cloth	125	E/E	A	350
							yes	51037	●	Adv. Acrylic/PET cloth	150	D/D	A	230
	medium	high	medium	medium	yes	51036***	●●●●●	Acrylic/PET cloth	150	D/D	A	260		
					yes	61036***	●	Acrylic/rPET cloth	150	D/D	A	260		
		medium	medium	medium	yes	51035	●●	Acrylic/PET cloth	150	C/D	A	240		
					yes	51628	●	Acrylic/PET fleece	125	A/B	C	270		
	no	medium	medium	medium	yes	51025 PV10***	●	Rubber/PET cloth	125	A/B	A	160		
					yes	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



# 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® 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 Supersleeve® PV7X series

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



### tesa® Sleeve PV9X series

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



### 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® Spiralsleeve PV5X series

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



### tesa® Sleeve 68000

- Provides temperature resistance suitable for engine compartment
- Acrylic adhesive is compatible with halogen-free cable jacketing



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

# Performance Classification According to Typical OEM Specifications<sup>1)</sup>

## 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	extreme

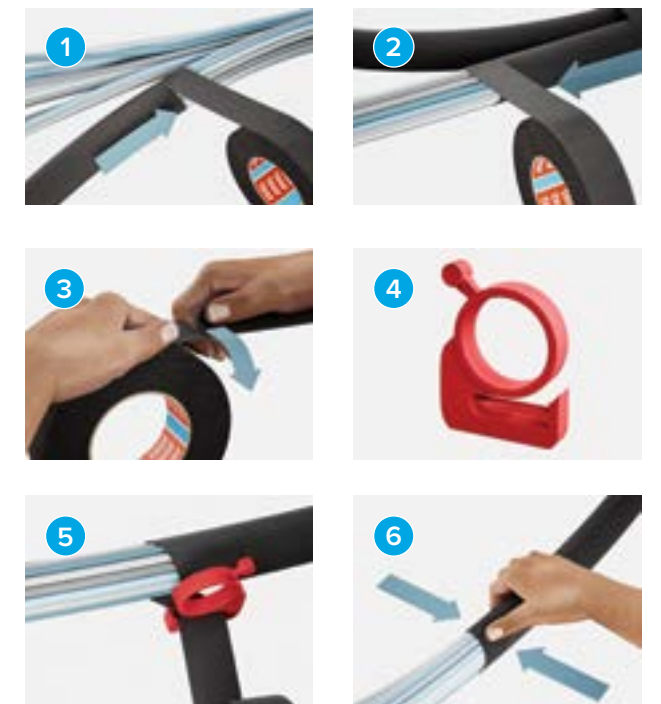
## Abrasion protection

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	extreme	supreme

<sup>1)</sup> 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.





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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