

# SICMA Mini-sealed Connector

## Housing family



**Application:** body and chassis, engine compartment

### Key features & benefits

- Standard commodity connection system
- Reliable inline harness sectioning connectors featuring a mechanical coding
- Compatible with standard interface footprint of several devices used in automotive and commercial vehicles
- Water tightness of high level including jet spray
- Compact design around 1.5 mm terminal
- 2, 3, 4, 5, 6 way connectors use 1.5 terminals
- Additional hybrid 6 way use 1.5 & 2.8 mm terminals

Performance characteristics	
Sealing protection (up to)	IP 67 & IPx9K
Temperature range (up to)	-40°C to +125°C
Vibration performance (up to)	12 g
Terminal retention force (up to)	> 100 N
Terminal insertion force (up to)	< 15 N
Connector mating force	< 80 N
Available cavity configurations	2, 3, 4, 5, 6, 6 (Mixed) way

Part numbers, specifications, dimensions and performance data in this document are for general references only and are subject to change without notice. To verify product information, please contact an Aptiv representative.

# SICMA 3 Plus & SICMA 4 - 1.5 Series \*

Terminal family



\* SICMA 3 Plus are female terminals and SICMA 4 are male terminals

## Key features & benefits

- Reliable contact pressure through life time of the vehicle
- Standard well known terminal cavity compatibility.
- Clean body which prevents of tearing the mat seal
- One piece terminal with high pressure contact
- Several crimping gauges for good slow motion performance and vibrations

## Performance characteristics

Contact resistance	< 2 mΩ
Contact mating force	< 4 N
Contact unmating force	< 3 N
Range of wire gauge	0.13-2 mm² / 24-14 AWG
Current carrying capacity for 2 mm²	
at 23°C up to approx. :	26 A
at 85°C up to approx. :	15 A
at 100°C up to approx. :	12 A

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# Connector design overview

## Benefits

- Easy assembly
- High industry compatibility
- Compact package for space efficiency
- Robust performance to ensure long time duration

## Design features

- 1 CPA (Connector Position Assurance) ensures perfect mating between male and female connectors
- 2 TPA (Terminal Position Assurance) detects not fully inserted terminals
- 3 Mat seal design with ergonomic terminal insertion
- 4 Housing designed for high temperature T4 endurance
- 5 Interfacial seal to ensure high vibration V3 and sealing S3 endurance for Sensomate
- 6 Rear grid provides excellent guidance for terminals



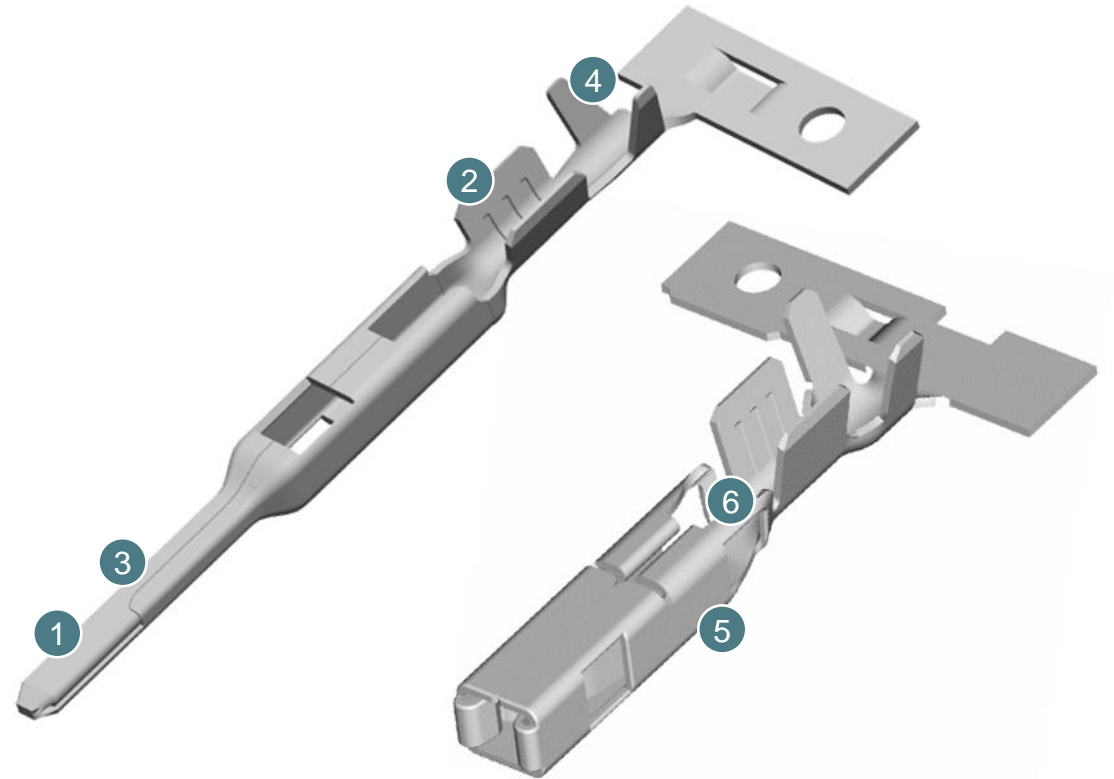
# Terminal design overview

## Benefits

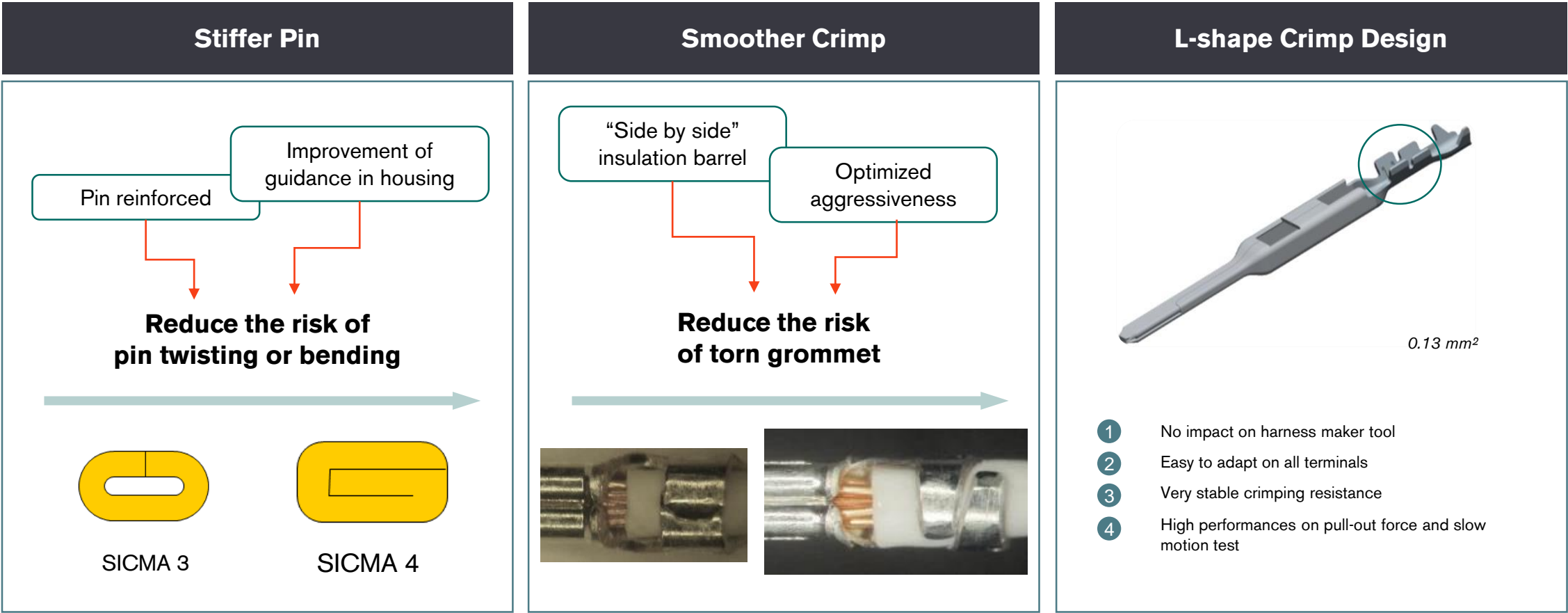
- Standard well know cavity compatibility
- Several crimping gauges for good slow motion performance and vibration
- Clean body design for terminals to prevent any damages to wires and seals

## Design features

- 1 No seam in contact area, enabling smooth contact area on both sides and enhancing electrical connection
- 2 SICMA terminals have very stable crimping resistance and high performances on pull-out force and slow motion test, and thanks to L-shape technology, 0.13 mm<sup>2</sup> cable is able to be crimped
- 3 Reinforced pin improves the guidance in housing and reduces the risk of pin twisting or bending
- 4 “Side by side” insulation crimping barrel optimizes aggressiveness and reduces the risk of torn grommet
- 5 Smooth edges to enable easy assembly without damage mat seal
- 6 Optimization of brace for better insertion and extraction




# SICMA terminal technology




# Housing part numbers

## SICMA Mini-sealed Connector

Mini-sealed Connector	Cavity Count	Blade Size (mm)	Gender	Color	Part Number	Codings Offered
 <p>SICMA Mini-Sealed Connectors</p>	2	1.5	F	Black	10820158	9
	2	1.5	M	Black	10787262	7
	3	1.5	F	Black	10820167	8
	3	1.5	M	Black	10788983	6
	4	1.5	F	Black	10763691	3
	4	1.5	M	Black	10768812	3
	5	1.5	F	Black	10820113	3
	5	1.5	M	Black	33500323	3
	6	1.5	F	Black	10866615	3
	6	1.5	M	Black	13716617	3
	6*	1.5(4), 2.8(2)	F	Black	10866611	3
	6*	1.5(4), 2.8(2)	M	Black	15396354	3

# Terminal part numbers

## SICMA 3 Plus & SICMA 4 - 1.5 Series

SICMA 3 Plus & SICMA 4 1.5 Series	Blade Size (mm)	Gender	Plating	Wire Size Range	Part Number	Other Available Platings
	1.5	F	Tin	0.13-0.22mm <sup>2</sup> (26-24AWG)	33308333	Gold
	1.5	F	Tin	0.35-0.70mm <sup>2</sup> (22-18AWG)	10863984	Gold
	1.5	F	Tin	0.75-1.30mm <sup>2</sup> (18-16AWG)	10865152	Gold
	1.5	F	Tin	1.35-2mm <sup>2</sup> (*2.5mm <sup>2</sup> ) (16-14AWG)	10863985	Gold
	1.5	M	Tin	0.13-0.22mm <sup>2</sup> (26-24AWG)	33400435	Silver
	1.5	M	Tin	0.35-0.70mm <sup>2</sup> (22-18AWG)	33501792	Gold, Silver
	1.5	M	Tin	0.75-1.30mm <sup>2</sup> (18-16AWG)	33512109	Silver
	1.5	M	Tin	1.35-2.00mm <sup>2</sup> (16-14AWG)	33512190	Silver

\* 2.5 mm<sup>2</sup> is only applicable to unsealed connectors