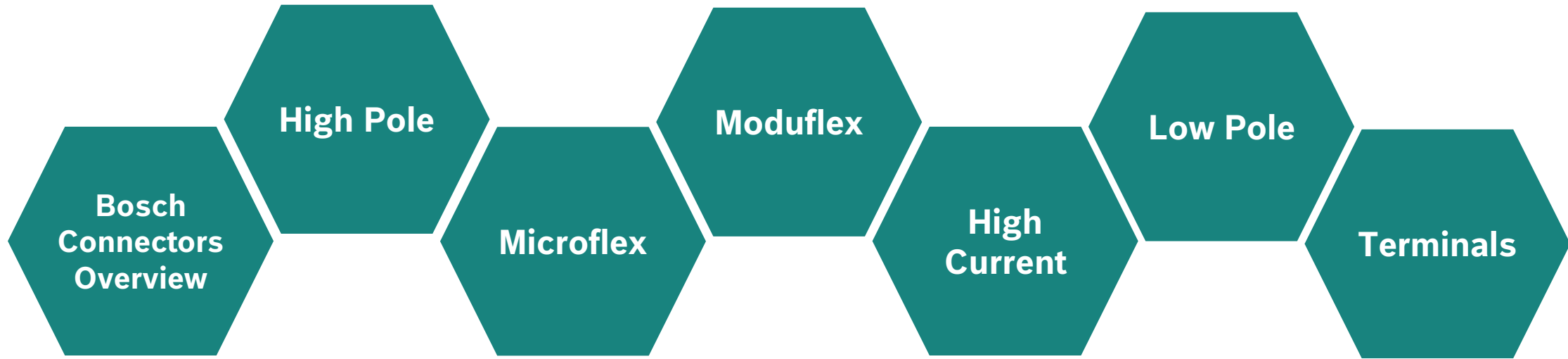


BOSCH CONNECTORS



Bosch Connectors Overview



Bosch Connectors

Bosch Connectors

Solutions For Automotive Connection System Requirements

Automotive trends

Connected mobility



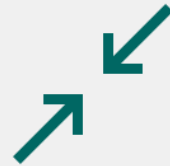
Automated mobility



Electrified mobility



Connection system trends



Miniaturization

- ▶ Higher pin density
- ▶ Automatic assembly



Modularization

- ▶ Increased requirements for functionality
- ▶ Higher pin counts
- ▶ Increased possibilities of usage



Electrification / Ethernet

- ▶ High current
- ▶ High speed



Workability

- ▶ Low insertion force and “click-noise”
- ▶ Ergonomically accessible
- ▶ Key criteria for OEM / Wire harness maker

Bosch Connectors

Proven Experience



Strong position in powertrain and chassis connectors.

Long-term experience:

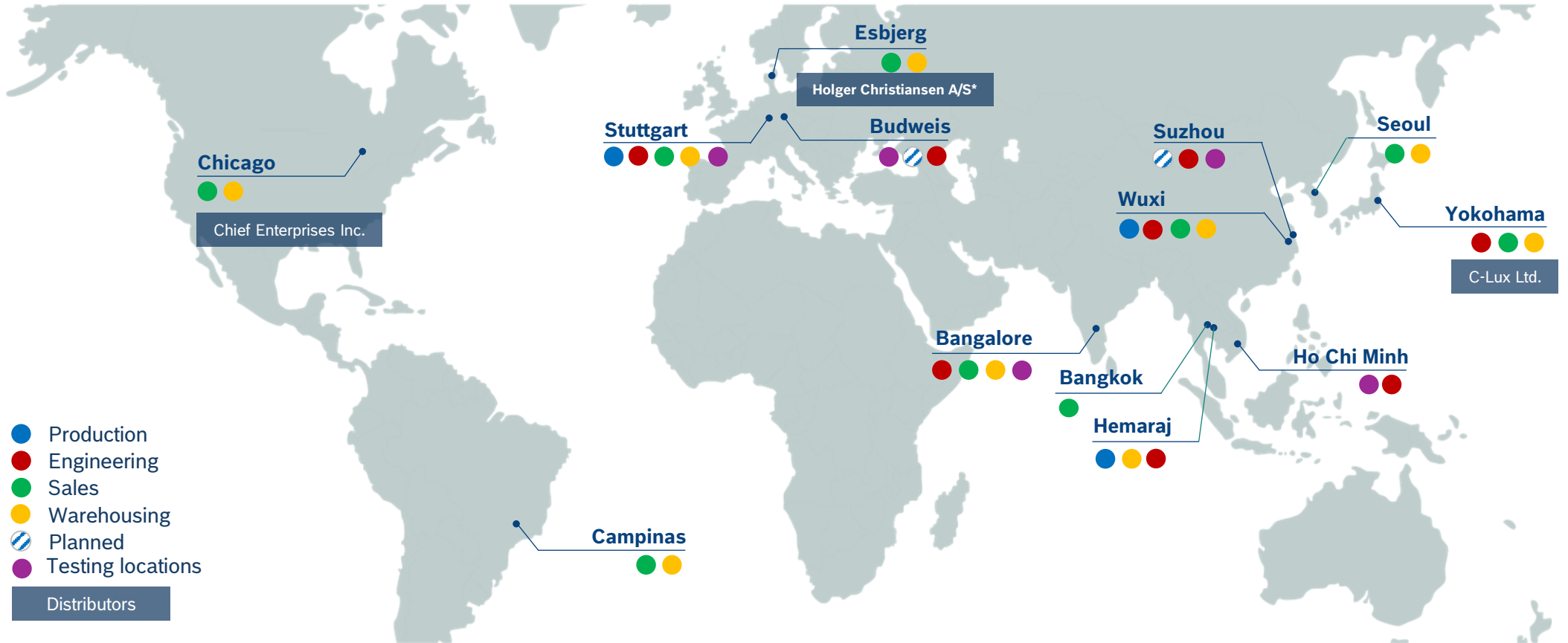
- ▶ SOP for Bosch connectors in 1974.
- ▶ By the end of 2022, over 6.1bn connectors were produced.

Global footprint:

- ▶ Manufacturing in Germany, Thailand, China.
- ▶ Warehouses in USA, Brazil, India, South Korea, China and Thailand.
- ▶ Global sales and engineering infrastructure.

Bosch Connectors

Global footprint – Closer to customers worldwide



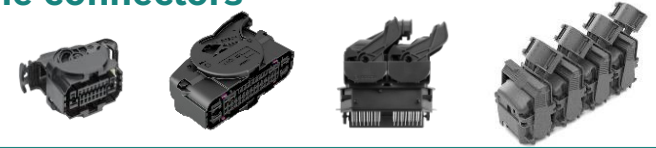
Bosch Connectors Product Portfolio

Connectors

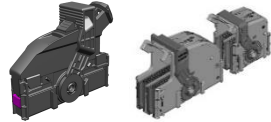
Low pole connectors



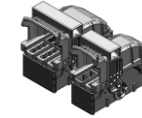
High pole connectors



Microflex connectors



Moduflex connectors



High current connectors



Terminals & Pinheader

Terminals



Pinheader



Applications



Sensors



Fuel injector



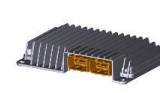
eSteering



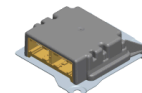
Engine control units



ESP ®



DASy



Airbag ECU



iBooster



eAxle



Visit us on

www.bosch-connectors.com

and get...

- Offer Drawings
- Assembly Instruction
- 3D-Models
- Accessories
- Technical Information
- Test Instructions



HIGH POLE CONNECTORS

16P

26P

38P

46P

112 P

154 P-E

154 P-V

192 P

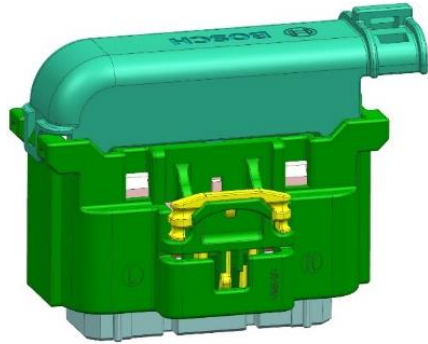
196 P

228 P

336 P

Bosch Connectors

16P



16 way

Facts and Figures

→ **SOP** 2020

Features

- | | |
|-----------------------------------|-----------------------------|
| → Protection Class | IPX9K |
| → Sealing - connector | Radial seal |
| → Sealing - cable | Mat seal |
| → Temp. range | -40... +120° C |
| → Wire size range | 0.3... 1.25 mm ² |
| → Usable terminals | 1.0 Sealed |
| → Secondary locking | Yes |
| → CPA Pre-Stop mechanism | Optional Yes |

General facts

- | | |
|----------------------------|----------------|
| → Application | 2 wheeler ABS |
| → Specific Variants | Cover option |
| → Extras | Compact design |

Bosch Connectors

26P



26 way

Facts and Figures

- **SOP** 2008
- **TCD*** 1 928 A01 90T
- **Offer Drawing** 1 928 A00 508

Features

- **Protection Class** IPX6K, X7, X9K
- **Sealing - connector** Radial seal
- **Sealing - cable** Single wire seal
- **Vibration resistance (Sine)** 5.1 g
- **Temp. range** -40... +125° C
- **Wire size range** 0.35... 6.0 mm²
- **Usable terminals** BTC 1.5 / 2.8 / 4.8
- **Locking** Lever
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** Optional | Yes

General facts

- **Application** iBooster, 2 wheeler ABS
- **Specific Variants** Misc. cover variants (cable exit)
- **Extras** Smart design with low weight
Low insertion force
Kojiri-effect avoids damage of pins

Bosch Connectors

38P



38 way

Facts and Figures

- **SOP** 2014
- **TCD*** 1 928 A00 99T
- **Offer Drawing** 1 928 A00 289

Features

- **Protection Class** IPX6K, X7, X9K
- **Sealing - connector** Radial seal
- **Sealing - cable** Single wire seal
- **Vibration resistance (Sine)** 4.3 g
- **Temp. range** -40... +125° C
- **Wire size range** 0.35... 6.0
- **Usable terminals** BTC or BTL 1.5 / 2.8 / 4.8-6.3
- **Locking** Lever
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** Optional | Yes (depends on variant)

General facts

- **Application** ABS/ESP/ASR
- **Specific variants** Closed cavities
Misc. cover variants (cable exit)
- **Extras** Smart design with low weight
Low insertion force
Kojiri-effect avoids damage of pins

Bosch Connectors

46P



46 way

Facts and Figures

- **SOP** 2014
- **TCD*** 1 928 A02 72T
- **Offer Drawing** 1 928 A00 552

Features

- **Protection Class** IPX6K, X7, X9K
- **Sealing - connector** Radial seal
- **Sealing - cable** Single wire seal
- **Vibration resistance (Sine)** 4.3 g
- **Temp. range** -40... +125° C
- **Wire size range** 0.35... 6.0 mm²
- **Usable terminals** Matrix 1.2 CB / BTC 2.8 / BTC 4.8
- **Locking** Lever
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** Optional | Yes

General facts

- **Application** ABS / ESP / ASR / IPB
- **Specific variants** Closed cavities
Misc. cover variants (cable exit)
- **Extras** Smart design with low weight
Low insertion force
Kojiri-effect avoids damage of pins

[Back to index](#)

Bosch Connectors

112P



112 way (2 x 56)

Facts and Figures

- **SOP** 2007
- **TCD*** 1 928 A01 40T
- **Offer Drawing** 1 928 A00 443

Features

- **Protection Class** IPX6K, X9K
- **Sealing - connector** Radial seal
- **Sealing - cable** Single wire seal
- **Vibration resistance (Sine)** 3 g
- **Temp. range** -40... +105° C
- **Wire size range** 0.5... 4.0 mm²
- **Usable terminals** MQS 1.5 / BCB 0.6
- **Locking** Lever
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** No | Yes

General facts

- **Application** Engine Management System
- **Specific variants** Multiple cable exit variants
Customer specific holding plates / pin outs possible
- **Extras** Bosch pin-header available

Bosch Connectors

154P-E

ENGINE ORIENTATED



154 way (58 / 96)

Facts and Figures

- **SOP** 2003
- **TCD*** 1 928 A00 45T
- **Offer Drawing** 1 928 A00 132

Features

- **Protection Class** IPX6K, X8, X9K
- **Sealing - connector** Radial seal / Silicone gel seal
- **Sealing - cable** Single wire seal
- **Vibration resistance (Sine)** 7 g
- **Temp. range** -40... +125° C
- **Wire size range** 0.35... 2.5 mm²
- **Usable terminals** Matrix 1.2 lance, BDK 2.8
- **Locking** Lever / Slider
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** No | Yes

General facts

- **Application** Engine Management System
- **Specific variants** Cover variants: Left and right
- **Extras** Suitable for automated terminal assembly
High media resistance
Bosch pin-header available

Bosch Connectors

154P-V

VEHICLE ORIENTATED



154 way (60 / 94)

Facts and Figures

→ SOP	2007
→ TCD*	1 928 A01 00T
→ Offer Drawing	1 928 A00 325

Features

→ Protection Class	IPX6K, X9K
→ Sealing - connector	Radial seal
→ Sealing - cable	Single wire seal / Mat seal
→ Vibration resistance (Wide band)	3.8 g (Sn) / 7 g (Ag)
→ Temp. range	-40... +105° C
→ Wire size range	0.35... 2.5 mm ²
→ Usable terminals	BCB 0.6, MQS 1.5, BDK 2.8
→ Locking	Lever / Slider
→ Secondary locking	Yes
→ CPA Pre-Stop mechanism	No Yes

General facts

→ Application	Engine Management System
→ Specific variants	Multiple cable exit variants Customer specific holding plates / pin outs possible
→ Extras	Version with higher vibration resistance available (Code G - Ag pins) Bosch pin-header available

Bosch Connectors

192P

COMMERCIAL VEHICLE



192 way (2 x 96)

Facts and Figures

→ SOP	2008
→ TCD*	1 928 A01 77T
→ Offer Drawing	1 928 A00 142

Features

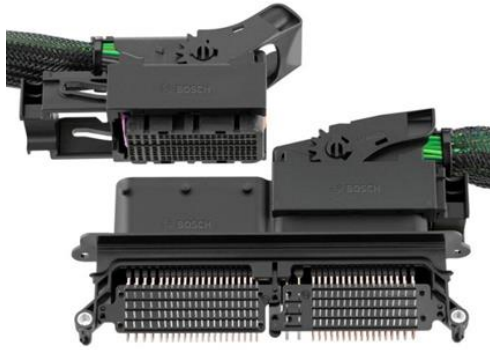
→ Protection Class	IPX6K, X8, X9K
→ Sealing - connector - cable	Radial seal / Silicone gel seal Single wire seal
→ Vibration resistance (Sine)	3.7 g
→ Temp. range	-40... +150° C
→ Wire size range	0.5... 2.5 mm ²
→ Usable terminals	Matrix 1.2 lance, BDK 2.8
→ Locking	Lever / Slider
→ Secondary locking	Yes
→ CPA Pre-Stop mechanism	No Yes

General facts

→ Application	Engine Management System
→ Specific variants	Corrugated pipe covers available
→ Extras	Designed for CV requirements Designed for high tightness requirements Bosch pin-header available

Bosch Connectors

196P



196 way (91 / 105)

Facts and Figures

- **SOP** 2009
- **TCD*** 1 928 A01 49T
- **Offer Drawing** 1 928 A00 468

Features

- **Protection Class** IPX6K, X8, X9K
- **Sealing - connector** Radial seal
- **Sealing - cable** Single wire / Sealing plate
- **Vibration resistance (Sine)** 3 g
- **Temp. range** (Sn) -40 °C... +120 °C
(Ag) -40 °C... +150 °C
- **Wire size range** 0.35... 2.5 mm²
- **Usable terminals** Matrix 1.2 CB, BTL 2.8
- **Locking** Lever / Slider
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** No | Yes

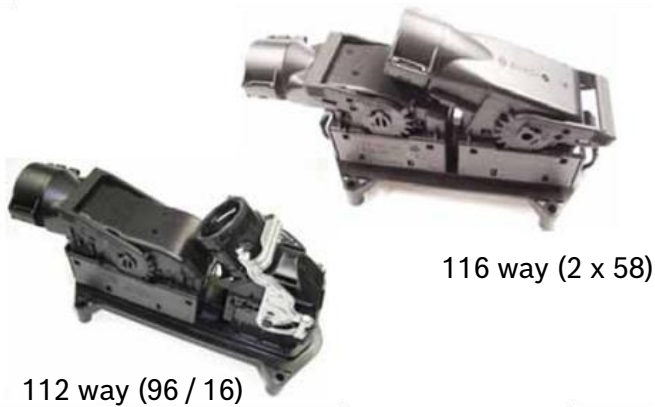
General facts

- **Application** Engine Management System
- **Specific variants** Customer specific holding plates/
pin outs possible
- **Extras** Usable for high tightness
requirements
Bosch pin-header available

Bosch Connectors

228P

COMMERCIAL VEHICLE



Facts and Figures

- **SOP** 2008
- **TCD*** 1 928 A01 77T
- **Offer Drawing** 1 928 A00 492

Features

- **Protection Class** IPX6K, X8, X9K
- **Sealing - connector** Radial seal / Silicone gel seal
- **Sealing - cable** Single wire seal
- **Vibration resistance (Sine)** 3.7 g
- **Temp. range** -40... +150° C
- **Wire size range** 0.5... 2.5 mm²
- **Usable terminals** Matrix 1.2 lance, BDK 2.8
- **Locking** Lever / Slider
- **Secondary locking** Yes
- **CPA | Pre-Stop mechanism** No | Yes

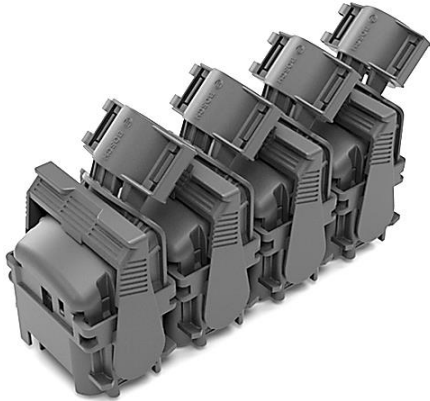
General facts

- **Application** Engine Management System
- **Specific variants** Corrugated pipe covers available
- **Extras** Designed for CV requirements
Designed for high tightness requirements

Bosch Connectors

336P

COMMERCIAL VEHICLE



336 way (4x36/4x48)

Facts and Figures

→ SOP	2017
→ TCD*	1 928 A03 84T
→ Offer Drawing	1 928 A00 709

Features

→ Protection Class	IPX6K, X9K
→ Sealing - connector	Radial seal
→ Sealing - cable	Gel seal
→ Vibration resistance (Sine)	10.5 g
→ Temp. range	-40... +125° C
→ Wire size range	0.35... 1.5 mm ²
→ Usable terminals	Matrix 1.2 Lance (Ag & Au)
→ Locking	Lever
→ Secondary locking	Yes
→ CPA Pre-Stop mechanism	No Yes

General facts

→ Application	Engine Management System
→ Specific variants	Modular configuration possible Several covers, standard and corrugated pipe, inclined & flat Non- flammable material on contact lower housing
→ Extras	Designed for CV requirements

MICROFLEX CONNECTORS

93P Unsealed

41P Sealed

124P Sealed

52P Unsealed

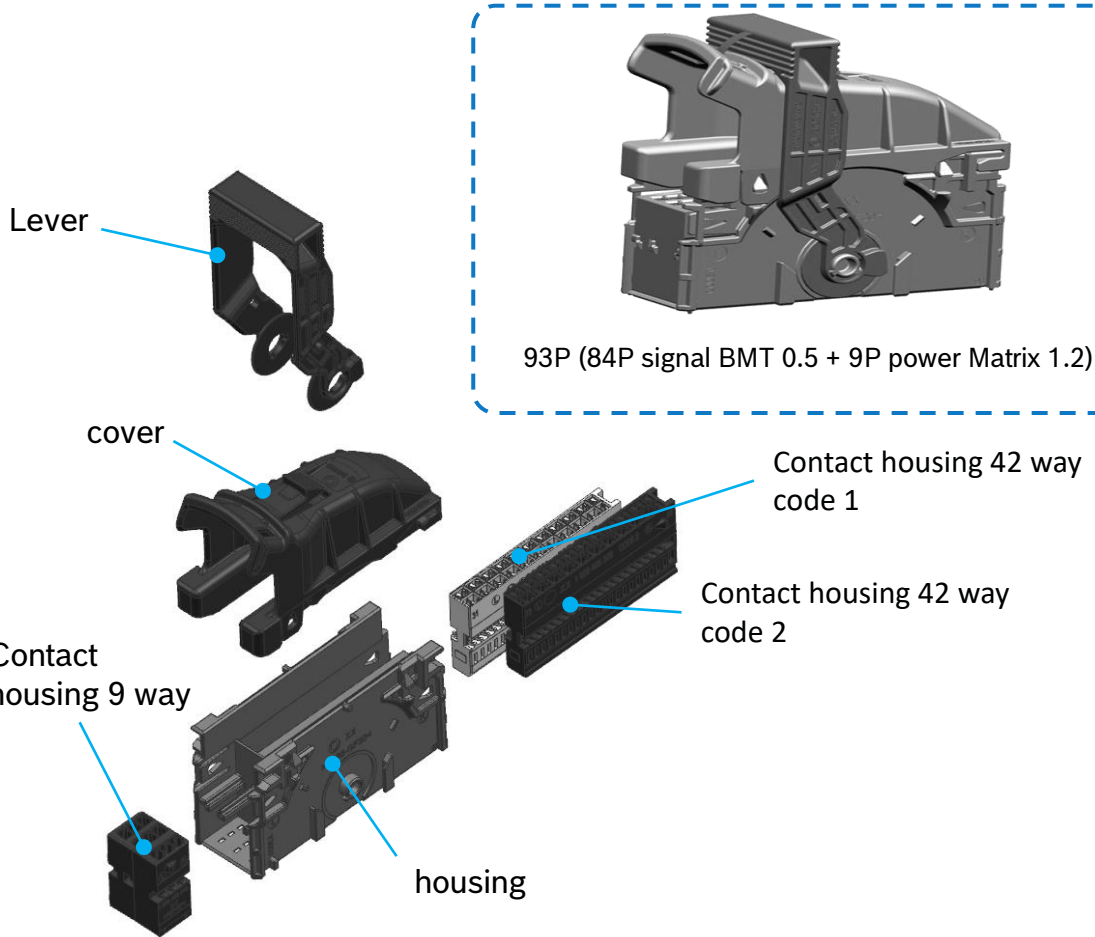
156P Unsealed

176P Unsealed

[Check here a
general overview](#)

Bosch Connectors

93P - Unsealed Connector



Features

- **Sealing** unsealed
- **Vibration resistance** 3g Chassis
- **Temp. range** -40...+105°C
- **Min. pitch distance** 1,8 mm
- **Wire size range** 0.13 - 0.35 mm² (outer diameter max. 1.3mm)
- **Usable terminals** BMT0.5 lance and Matrix 1.2 lance
- **Secondary locking** TPA integrated in connector housing

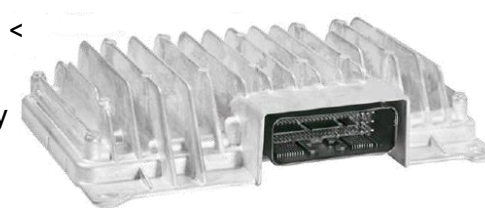


Customer Benefits

- Ethernet capability:
 - > 5 Ethernet Ports **100Mbit/s** <
- 1,2 and 0,5 terminals
- Suitable for automated terminal assembly
- Cable exit to the right or to the left

Driver Assistance ECU Platform

93 pol. Microflex 0.5 Interface Series: 2019



Facts and Figures

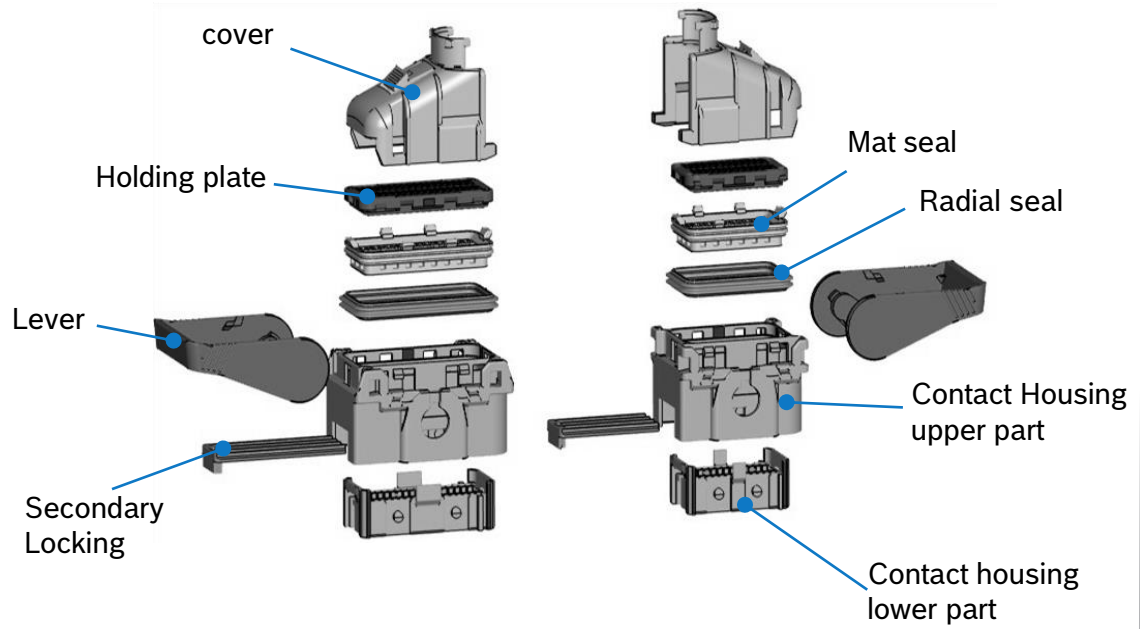
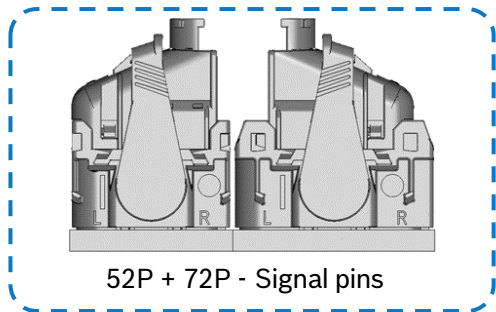
- SOP 04/2019
- Testing spec. USCAR 2
- Automotive Ethernet 100 Mbit/s;
- 100BASE T1 & 1000Base T1

Back to index



Bosch Connectors

124P (52P+72P) - Sealed Connector



Features

→ Tightness	IPX6K, X7, X9k
→ Sealing:	
Connector	Radial seal
Cable	Mat seal
→ Vibration resistance	3 g, Chassis
→ Temp. range	-40...100° C
→ Min. pitch distance	1.8 mm
→ Wire size range	0.13 – 0.35 mm ² (FLR-A)
→ Usable terminals	BMT0.5 CB
→ Secondary locking	Yes, comb

Customer Benefits

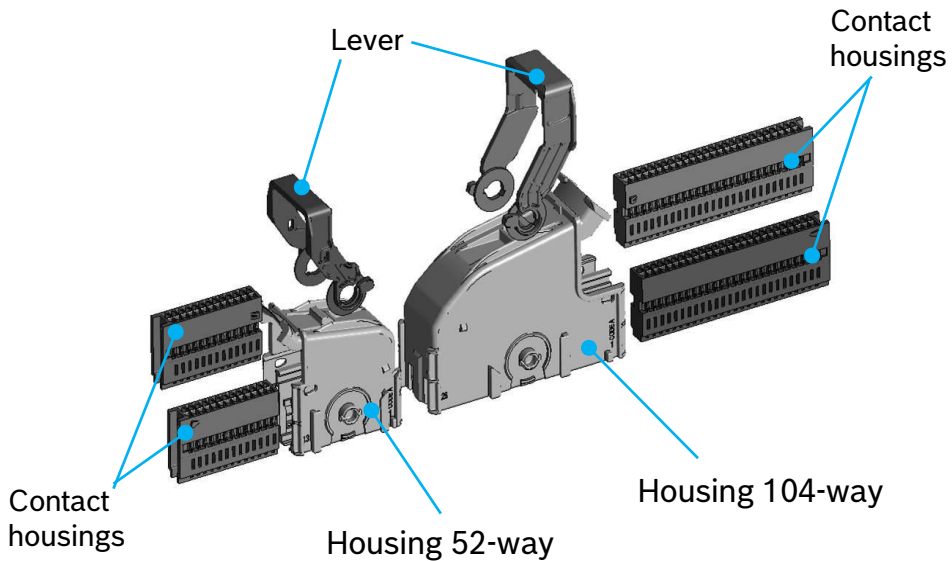
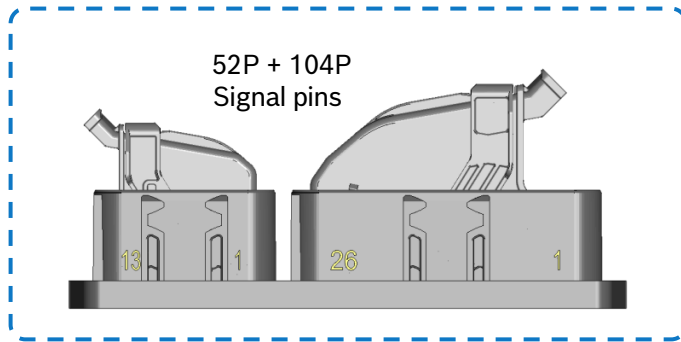
- Miniaturized connectors with reduced mounting space and weight
- Kojiri-effect avoids damage of pins
- Lever of unmated connector in pre-locked condition
- Suitable for automated terminal assembly
- Five cable exit variants available (with two different covers)
- Same pin header for sealed and unsealed connectors
- Ethernet capability: 100 Mbit/s

Facts and Figures

→ SOP	E2016
→ TCD*	1 928 A03 81T
→ Offer Drawing	1 928 A00 751
→ Specification	USCAR 2

Bosch Connectors

156P(52P+104P) - Unsealed Connector



Features

- | | |
|-------------------------------|-------------------------------------|
| → Sealing | unsealed |
| → Vibration resistance | 3 g - Chassis |
| → Temp. range | -40...+100° C |
| → Min. pitch distance | 1,8 mm |
| → Wire size range | 0.13 – 0.35 mm ² (FLR-A) |
| → Usable terminals | BMT0.5 lance |
| → Secondary locking | Yes, in housing |

Customer Benefits

- Miniaturized connectors with reduced mounting space and weight
- Kojiri-effect avoids damage of pins
- Lever of unmated connector in pre-locked condition
- Suitable for automated terminal assembly
- Same pin header for sealed and unsealed connectors
- Ethernet capability: 100 Mbit/s



Airbag control unit



Integrated safety unit

Facts and Figures

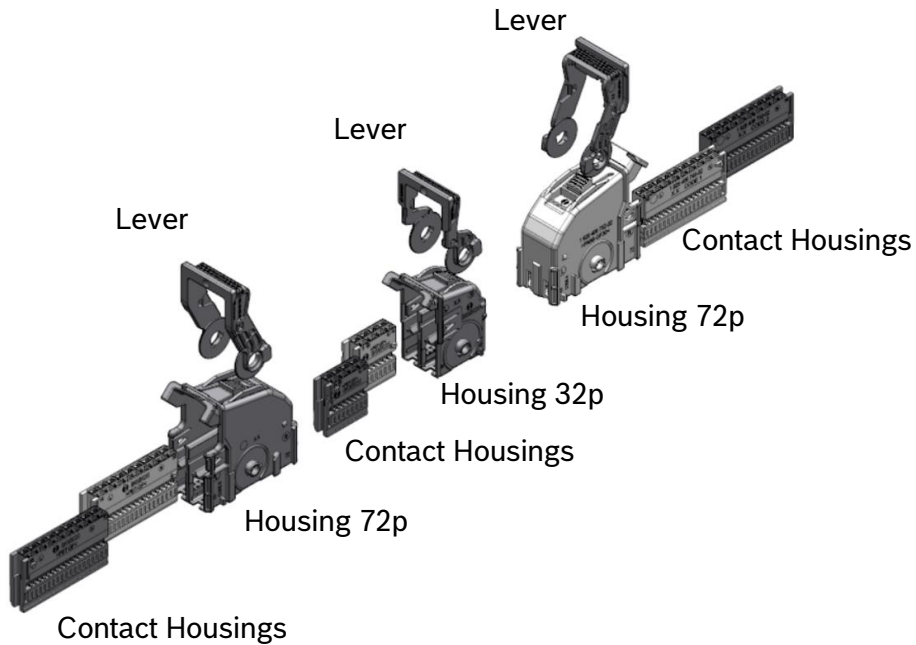
- | | |
|-----------------|---------------|
| → SOP | E2016 |
| → TCD* | 1 928 A03 78T |
| → Offer Drawing | 1 928 A00 707 |
| → Specification | USCAR 2 |



[Back to index](#)

Bosch Connectors

176P (72P + 32P +72P) - Unsealed Connector



Features

- **Sealing** unsealed
- **Vibration resistance** 3 g - Chassis
- **Temp. range** -40...+100° C
- **Min. pitch distance** 1,8 mm
- **Wire size range** 0.13 – 0.35 mm² (FLR-A)
- **Usable terminals** BMT0.5 lance
- **Secondary locking** Yes, in housing

Customer Benefits

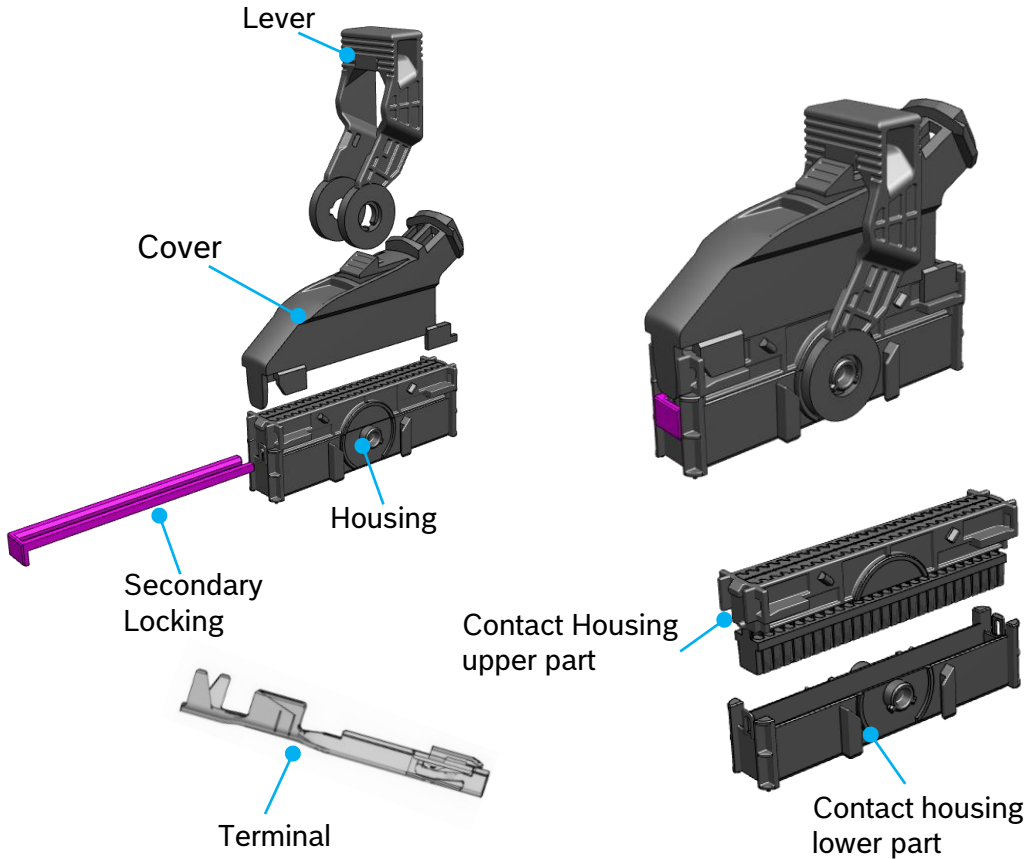
- Miniaturized connectors with reduced mounting space and weight
- Kojiri-effect avoids damage of pins
- Lever of unmated connector in pre-locked condition
- Suitable for automated terminal assembly
- Same pin header for sealed and unsealed connectors
- Ethernet capability: 100 Mbit/s

Facts and Figures

- SOP 2025
- TCD* 1 928 AT0 021
- Offer Drawing 1 928 A00 088
- Specification USCAR 2

Bosch Connectors

52P - Unsealed Connector



Features

- | | |
|-------------------------------|---|
| → Sealing | unsealed |
| → Vibration resistance | 3g Chassis |
| → Temp. range | -40...+105°C |
| → Min. pitch distance | 1,8 mm |
| → Wire size range | 0.13 - 0.35 mm ² (outer diameter max. 1.3mm) |
| → Usable terminals | BMT0.5 clean body |
| → Secondary locking | TPA comb |

Customer Benefits

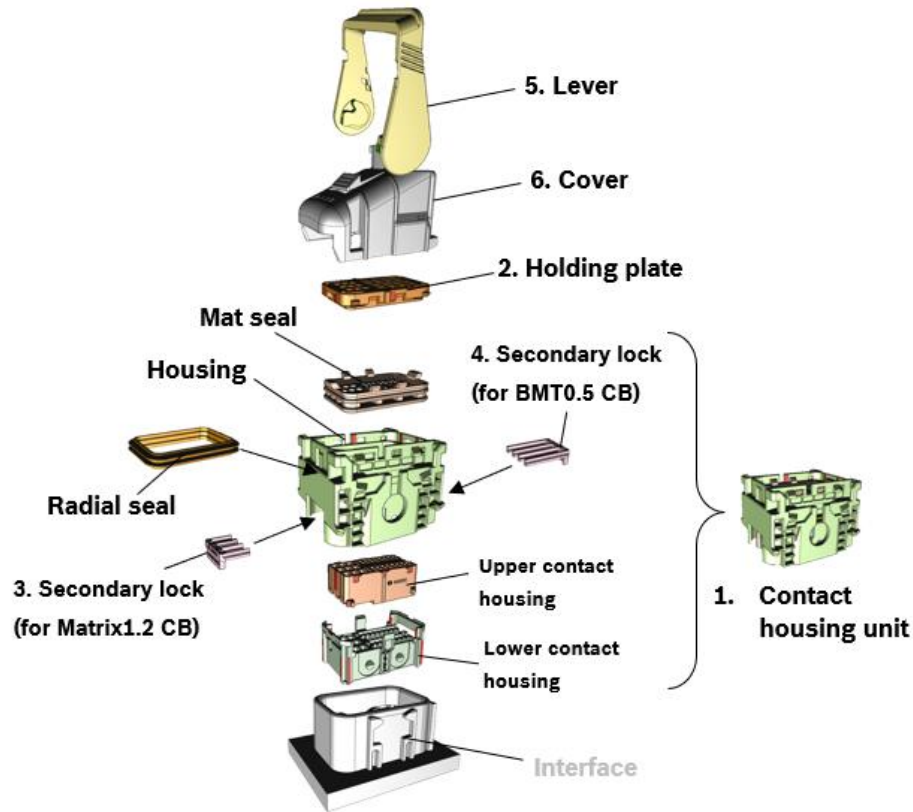
- Small width > [smallest control unit height](#)<
- Ethernet capability: > [100Mbit/s](#)<
- Suitable for automated terminal assembly
- Cable exit to the right or to the left

Facts and Figures

- | | |
|-----------------|------------------------|
| → B-sample | 06/22 |
| → C-sample | 11/23 |
| → SOP | 12/24 |
| → Testing spec. | Bosch TCD, USCAR 2 tbd |

Bosch Connectors

41P - Sealed Connector



Features

→ Sealing	Radial seal
→ Vibration resistance	3 g (Sn)
→ Temp. range	-40...100° C
→ Min. pitch distance	BMT: 1.8 mm / Matrix: 2,5mm
→ Wire size range	0.13 – 0.35 mm ² (FLR-A) 0,35 – 0,75 mm ² (FLR-B)
→ Usable terminals	BMT0.5 CB + Matrix 1,2 CB
→ Secondary locking	Yes

Customer Benefits

- Miniaturized connectors with reduced mounting space and weight
- Kojiri-effect avoids damage of pins
- 9 power pins (Matrix 1,2 CB) available
- Lever of unmated connector in pre-locked condition
- Suitable for automated terminal assembly
- Different cable exit variants available
- Same pin header for sealed and unsealed connectors
- Ethernet capability: 100 Mbit/s

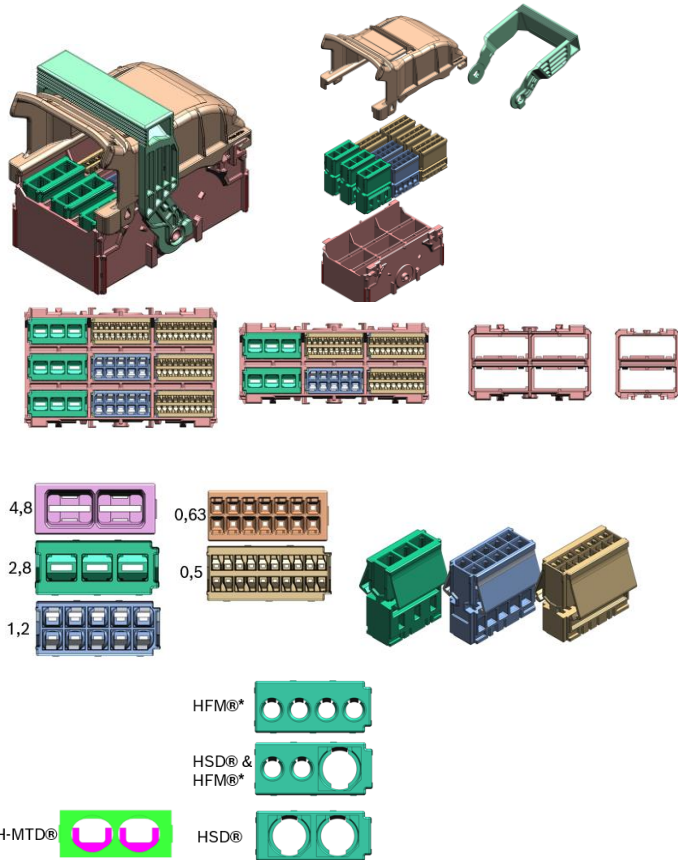
Facts and Figures

→ SOP	Q3/4 2024	→ Offer Drawing	1928A00087
→ TCD*	1928AT0020	→ Specification	HES
		* Preliminary	

MODUFLEX CONNECTORS

Bosch Connectors

Moduflex



Facts

- SOP B-Sample Phase
- TCD 1928AT0028
- Offer Drawing *tbd*
- Specification USCAR2

Features

- | | |
|-------------------------------|---|
| → Sealing | unsealed |
| → Vibration resistance | V1 |
| → Temp. range | -40°C – 100 °C |
| → Min. pitch distance | see terminals |
| → Wire size range | 0.13 – 0.35 mm ² (FLR-A)
0.35 – 6.0 mm ² (FLR-B) |
| → Usable terminals | 0.5; 0.63; 1.2; 2.8; 4.8;
HFM; HSD; H-MTD |
| → Secondary locking | Yes, film hinge |

Customer Benefits

- 4 different housing sizes, 8+ different module types, flexible composition
- Suitable for automatic terminal assembly
- Coding of modules in housing slots
- CPA possible

HFM® & H-MTD® are trademarks of Rosenberger Hochfrequenztechnik / MATE-AX® is a trademark of TE Connectivity *Mini COAX Solutions available for HFM® and MATE-AX cavities

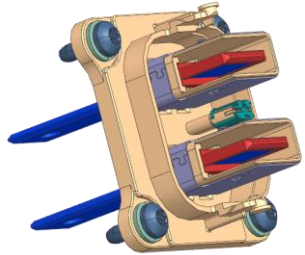
HIGH CURRENT CONNECTORS

VHC 4

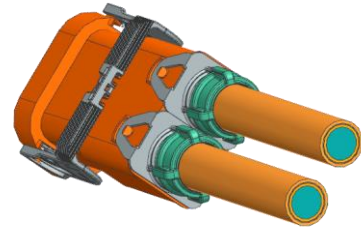
VHC 5

Bosch Connectors

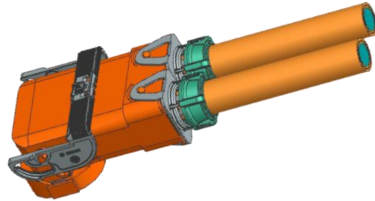
VHC Class 4



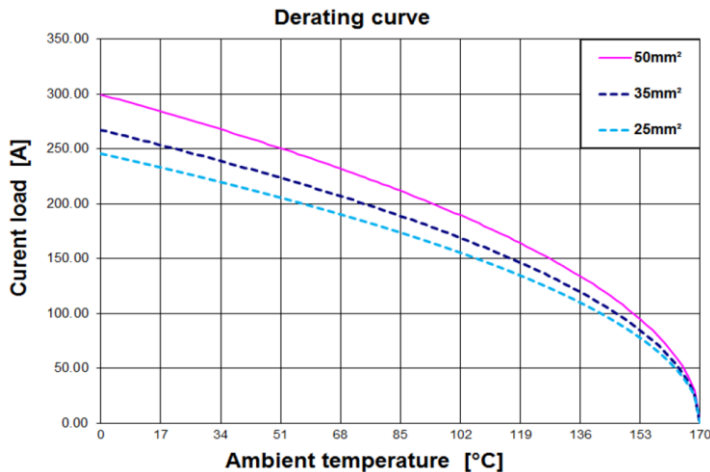
HV Header for 90° and 180°



VHC 2P 180°



VHC 2P 90°



¹⁾ 20% of measured value already deducted

Facts and Figures

- SOP: 2025
- TCD: On Demand
- Offer Drawing: On Demand
- Specification: USCAR 2, USCAR 37, LV 214, LV 215
- Production Location: CN(2025)
- Target Applications: INV, BAT, EAXLE

Features

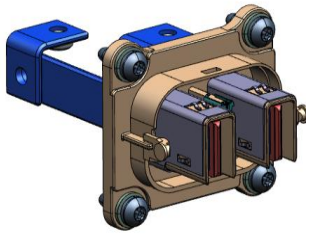
→ Sealing (Unmated)	IPXXB
→ Sealing(Mated)	IP 6K9K , IPXXD
→ Operational Voltage	1000VDC
→ Vibration resistance	LV214 SG2
→ Temp. range	-40°C to 125 °C
→ Min. pitch distance	23mm
→ Cable Cross Section	25, 35 and 50mm ²
→ Cable Outlet	90° and 180°
→ Secondary locking	Yes, In housing
→ Usable terminals	CL4 Header (Flat-Ag)
→ Shielding type	Individual
→ No. of poles	2
→ Mating Force	<75N
→ Altitude	5500m

Customer Benefits / General Facts

- Miniaturized connectors with reduced mounting space and weight
- Design with and without HVIL interlock possible
- Lever operated by CPA
- Unified header for 90° + 180° wire harness connectors.
- Connector body made from Plastic V0.
- Outstanding Current Capacity: 25 mm² (85°C) > 150A , 50 mm² (85°C) > 251A

Bosch Connectors

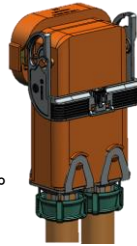
VHC Class 5



HV Header for 90° and 180°

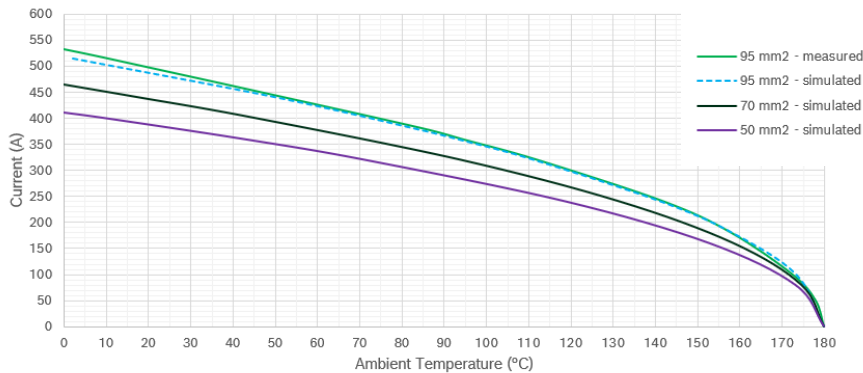


VHC 2P 180°



VHC 2P 90°

VHC Class 5 - Derating Curves
Free in air: 80% of measured input current



¹⁾ 20% of measured value already deducted

Facts and Figures

- SOP: 2025
- TCD: On Demand
- Offer Drawing: On Demand
- Specification: USCAR 2, USCAR 37, LV 214, LV 215
- Production Location: CN(2025)
- Target Applications: INV, BAT, EAXLE

Features

- | | |
|------------------------|------------------------------|
| → Sealing (Unmated) | IPXXB |
| → Sealing(Mated) | IP 6K9K , IPXXD |
| → Operational Voltage | 1000VDC |
| → Vibration resistance | ISO 16750 Test XV |
| → Temp. range | -40°C to 140 °C |
| → Min. pitch distance | 30mm |
| → Cable Cross Section | 50, 70 and 95mm ² |
| → Cable Outlet | 90° and 180° |
| → Secondary locking | Yes, In housing |
| → Usable terminals | CL5 Header (Flat-Ag) |
| → Shielding type | Individual |
| → No. of poles | 2 |
| → Altitude | 5500m |
| → Transfer Impedance | <10mΩ @2MHz // <50mΩ @30MHz |

Customer Benefits / General Facts

- Miniaturized connectors with reduced mounting space and weight
- Design with and without HVIL interlock possible
- Lever operated by CPA
- Connector body made from Plastic V0.
- Outstanding Current Capacity: 70 mm² (85°C) > 320A , 95 mm² (85°C) > 380A

LOW POLE CONNECTORS

Kompakt 1.1/1.1a/1.1m

Kompakt 4

Kompakt Mini

BAK 6

Glow Plug Connector

Trapez 2P/5P

Trapez Slim Line Mini

5P

8P

Bosch Connectors

Kompakt 1.1 / 1.1a / 1.1m



Kompakt 1.1, 3 way



Kompakt 1.1a, 2 way



Kompakt 1.1m, 7 way

Facts and Figures

- **SOP** 2007
- **TCD*** 1 928 K00 008 / 012 / 103
- **Offer Drawing** A 928 000 453

Features

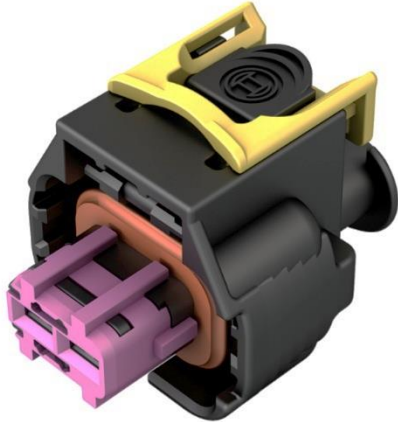
- **Terminal range** 2 – 7
- **Protection Class** IPX4K, X6K, X9K
- **Sealing - connector - cable** Radial seal
Single wire seal
- **Vibration resistance** > 20 g
- **Temp. range** -40... +150° C (Au)
- **Min. pitch distance** 5 mm
- **Wire size range** 0.5 – 2.5 mm²
- **Usable terminals** BDK 2.8
- **Locking** Plastic clip
- **Secondary locking** No

General facts

- **Application** For engine- and chassis-mounted application
- **Extras** Reduced space requirements
Molded protective wall
Compact and robust

Bosch Connectors

Kompakt 4



Kompakt 4, 2 way

Facts and Figures

→ SOP	2009
→ TCD*	1 928 A02 11T
→ Offer Drawing	Y 928 A00 484

Features

→ Terminal range	2 – 4
→ Protection Class	IPX4K, X6K, X9K
→ Sealing - connector	Radial seal
→ Sealing - cable	Single wire seal
→ Vibration resistance	20 g
→ Temp. range	-40... +150° C (Au)
→ Min. pitch distance	5 mm
→ Wire size range	0.5, 0.75, 1.0, 1.5, 2.5 mm ²
→ Usable terminals	BDK 2.8
→ Locking	Optional CPA
→ Secondary locking	Yes

General facts

→ Application	For engine- and chassis-mounted application
→ Extras	Usable for high tightness requirements High vibration and temp. resistance Small and robust

Bosch Connectors

Kompakt Mini



Kompakt mini (2 way)

Kompakt mini (4 way)

Facts and Figures

- **SOP** 2016
- **TCD*** 1 928 A03 20T
- **Offer Drawing** 1 928 A00 748 / 749

Features

- **Terminal range** 2, (4)
- **Protection Class** IPX7, X6 (only with cover)
- **Sealing - connector** Radial seal
- **Sealing - cable** Mat seal
- **Vibration resistance (Sine)** 10 g
- **Temp. range** -40... +130° C
- **Min. pitch distance** 1.8 mm
- **Wire size range** 0.13 – 0.35 mm² (FLR-A)
- **Usable terminals** BMT 0.5 lance
- **Locking** Plastic clip
- **Secondary locking** Integrated latch

Bosch Connectors

BAK 6



Facts and Figures

- **SOP** 2001
- **TCD*** 1 928 A00 16T
- **Offer Drawing** 1 928 A00 039

Features

- **Terminal range** 6
- **Protection Class** IPX4K, X6K, X9K, X7
- **Sealing - connector** Radial seal
- **- cable** Single wire seal
- **Vibration resistance** 40 g
- **Temp. range** -40... +150° C (Au)
- **Min. pitch distance** 4 mm
- **Wire size range** 0.5 – 1.0 mm²
- **Usable terminals** MCP 1.5K (Au)
- **Locking** Optional CPA
- **Secondary locking** Yes

General facts

- **Application** For engine application
- **Extras** Bosch male connector for oxygen sensor

Bosch Connectors

Glow Plug Connector



Facts and Figures

- **SOP** 2003
- **TCD*** 1 928 A00 41T
- **Offer Drawing** A 928 000 665

Features

- **Vibration resistance (Sine)** 30 g
- **Temp. range** -40... +140° C
- **Wire size range** 1.5 mm²
2.5 mm²
- **Usable terminals** Socket terminal 4.0

General facts

- **Application** Glow plug
- **Extras** High mating force

Bosch Connectors

Trapez 2P / 5P



Trapez, 2 way



Trapez, 5 way

Facts and Figures

- **SOP** 2003
- **TCD*** 1 928 A00 69T
- **Offer Drawing** 1 928 A00 152

Features

- **Terminal range** 2 - 5
- **Protection Class** IPX4K, X6K, X7, X9K
- **Sealing - connector - cable** Radial seal
Single wire seal
- **Vibration resistance** 45 g
- **Temp. range** -40... +150° C (Au)
- **Wire size range** 0.35 – 1.0 mm²
- **Usable terminals** Matrix 1.2
- **Locking** Optional CPA
- **Secondary locking** Yes

General facts

- **Application** Engine, gearbox
- **Specific variants** Variants with 3P and 4P available (closed cavities)
- **Extras** High vibration resistance
Small and robust

Bosch Connectors

Trapez Slim Line Mini



Trapez Slim Line Mini, 2 way

Facts and Figures

- **SOP** 2014
- **TCD*** 1 928 A03 72T
- **Offer Drawing** 1 928 A00 152

Features

- **Terminal range** 2
- **Protection Class** IPX4K, X6K, X7, X9K
- **Sealing - connector** Radial seal
- **- cable** Single wire seal
- **Vibration resistance (Sine)** 30 g
- **Temp. range** -40... +150° C (Au, Ag)
- **Min. pitch distance** 4 mm
- **Wire size range** 0.35 – 1.0 mm²
- **Usable terminals** Matrix 1.2 lance (HV)
- **Locking** Locking hatch
- **Secondary locking** No (Push-Back-Test)

General facts

- **Application** Injectors, sensors & actuators
- **Extras** High vibration resistance
Small and robust

Bosch Connectors

5P



Facts and Figures

→ SOP	2019
→ TCD*	1 928 A03 39T
→ Offer Drawing	1 928 A00 823

Features

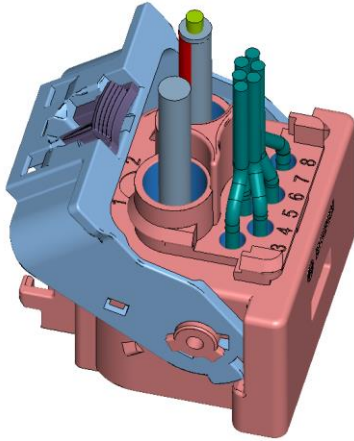
→ Terminal range	5 x 0.6 mm
→ Protection Class	IPX6K, IPX7, IPX9K
→ Sealing - connector	Radial seal
→ Sealing - cable	Mat seal
→ Temp. range	-40... 125° C
→ Min. pitch distance	2.54 mm ²
→ Wire size range	0.35 – 0.5 mm ²
→ Usable terminals	BCB 0,6
→ Locking	Lance + TPA
→ Secondary locking	Yes

General facts

→ Application	eSteering / autonomous driving
---------------	--------------------------------

Bosch Connectors

8P



Facts and Figures

→ SOP	2019
→ TCD*	1 928 A03 98T
→ Offer Drawing	1 928 A00 815

Features

→ Terminal range	6, 2
→ Protection Class	IPX6K, IPX7, IPX9K, PG23
→ Sealing - connector	Radial seal
→ Sealing - cable	Single wire seal
→ Temp. range	-40... 125° C
→ Min. pitch distance	6... 11 mm ²
→ Wire size range	6 mm ²
→ Usable terminals	BTL, MCP, MQS
→ Locking	Lance + TPA
→ Secondary locking	Yes

General facts

→ Application	eSteering /autonomous driving
---------------	-------------------------------

TERMINALS

BMT 0.5 Clean Body

BMT 0.5 Lance

BCB 0.6 Clean Body

BMK 0.6

Matrix 1.2 Clean Body

Matrix Mono

Matrix 1.2 Lance

BTC 1.5 Clean Body

BTL 1.5 Lance

BTC 2.8 Clean Body

BTL 2.8 Lance

BDK 2.8 Lance

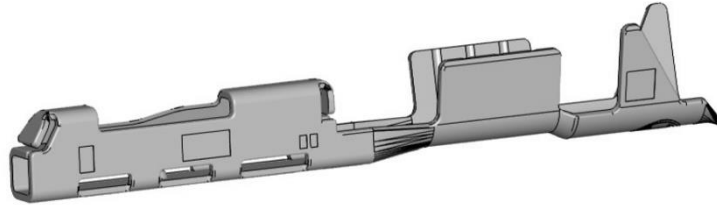
BTC 4.8 Clean Body

BTL 4.8 Lance

HFC – 1 GIG

Bosch Connectors

BMT 0.5 Clean Body



Facts and Figures

- **SOP** 2016
- **TCD*** 1 928 A03 86T
- **Offer Drawing** 1 928 A00 747

Features

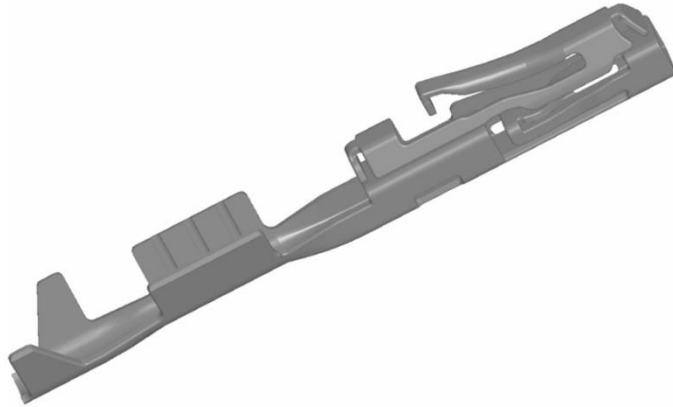
- **Female clean-body terminal**
- **Dimension of male contact** 0.4 x 0.5 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 0.13, ... 0.35 mm² (FLR-A)
- **Max. temperature range** -40... +130° C
- **Mating force** ≤ 3.5 N
- **Sealing system** Mat seal

General facts

- **Application** 124P sealed, 254P, 284P
- **Extras** Miniaturized terminal
Reduced weight
Mat seal compatible

Bosch Connectors

BMT 0.5 Lance



Facts and Figures

- **SOP** 2016
- **TCD*** 1 928 A03 20T
- **Offer Drawing** 1 928 A00 698

Features

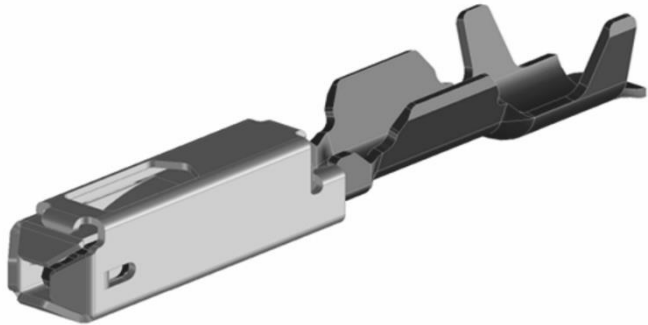
- **Female lance terminal**
- **Dimension of male contact** 0.4 x 0.5 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 0.13... 0.35 mm² (FLR-A)
- **Max. temperature range** -40... +150° C (Ag)
- **Mating force** ≤ 3.5 N
- **Sealing system** Mat seal

General facts

- **Application** 156P unsealed, 93P unsealed, 2xxP CL, Kompakt Mini
- **Extras** Miniaturized terminal
Reduced weight
Mat seal compatible (rounded edges)

Bosch Connectors

BCB 0.6 Clean Body



Facts and Figures

- **SOP** 2003
- **TCD*** 1 928 A00 65T
- **Offer Drawing** 1 928 A00 208

Features

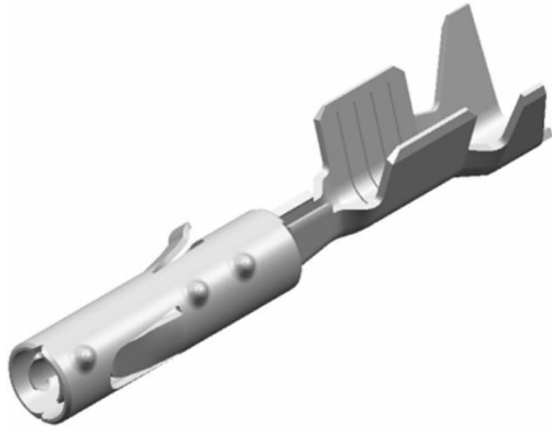
- **Female clean-body terminal**
- **Dimension of male contact** 0.63 x 0.63 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 0.35 – 0.5 mm²
0.75 mm², 0.85 mm²
- **Max. temperature range** -40... +150° C (Ag)
- **Mating force** ≤ 5 N
- **Sealing system** Silicone gel seal

General facts

- **Application** 56P-V, 154P-V, 154P-E
- **Extras** High long-time heat resistance
High vibration resistance
Usable with seal plate

Bosch Connectors

BMK 0.6



Facts and Figures

- **SOP** 1994
- **TCD*** A 928 000 654
- **Offer Drawing** Y 928 K03 000

Features

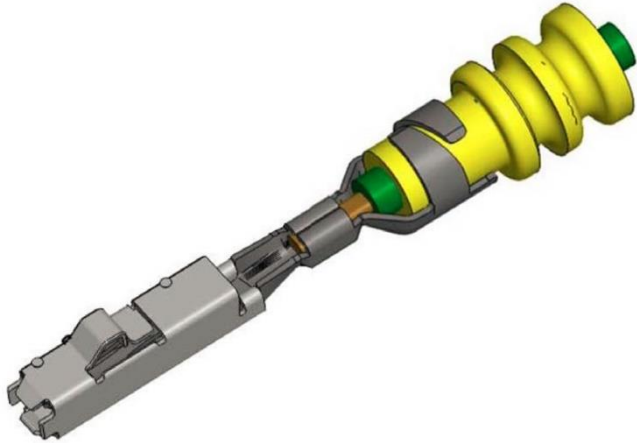
- **Female micro terminal**
- **Dimension of male contact** 0.6 x 0.6 mm
- **Secondary locking** Possible
- **Platings** Au, Sn
- **Cable range** 0.35... 0.75 mm²
- **Max. temperature range**
-40... +130° C (Sn)
-40... +150° C (Au)
- **Mating force** ≤ 4.5 N
- **Sealing system** Gel seal

General facts

- **Application** LWS-7P, 26P gel, 38P gel, 46P gel, 64P, 121P, 141P
- **Extras** For high acceleration loads

Bosch Connectors

Matrix 1.2 Clean Body



Facts and Figures

- **SOP** 2009
- **TCD*** 1 928 A01 85T
- **Offer Drawing** 1 928 A00 491

Features

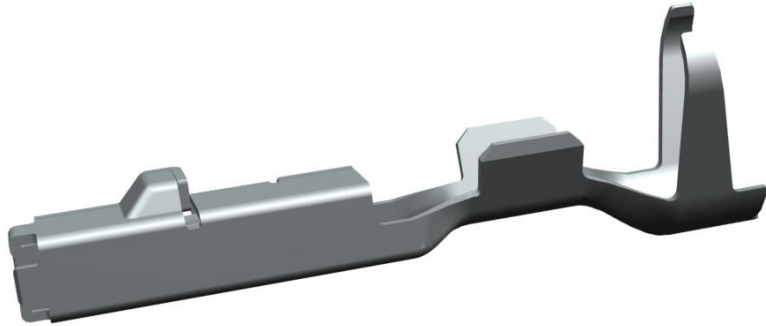
- **Female clean-body terminal**
- **Dimension of male contact** 1.2 x 0.6 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 0.35 – 0.5 mm²
0.75 mm² – 1.0 mm²
1.5 mm²
- **Max. temperature range** -40... +130°C
- **Mating force** ≤ 8 N
- **Sealing system** Mat seal or single wire seal

General facts

- **Application** 196P, 2xxP CB, 46P
- **Extras** Signal and low power currents

Bosch Connectors

Matrix Mono



Facts and Figures

- **SOP** 2024
- **TCD*** 1 928 AT0 022
- **Offer Drawing** 1 928 A00 089

Features

- **Female clean-body terminal**
- **Dimension of male contact** 1.2 x 0.6 mm
- **Secondary locking** Possible
- **Platings** Sn
- **Cable range** 0.35 – 0.5 mm²
0.75 mm² – 1.0 mm²

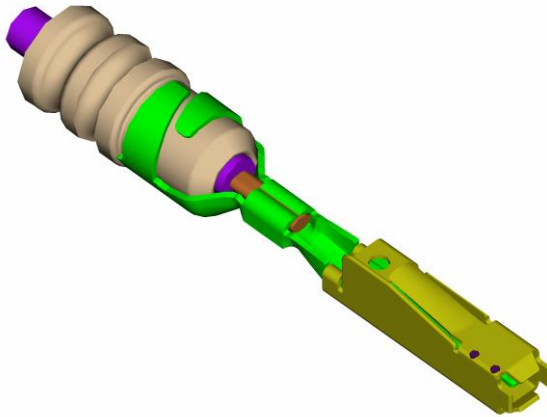
- **Max. temperature range** -40... +130°C
- **Mating force** ≤ 5 N
- **Sealing system** single wire seal

General facts

- **Application** 46P
- **Extras** Signal and low power currents

Bosch Connectors

Matrix 1.2 Lance



Facts and Figures

- **SOP** 2004
- **TCD*** 1 928 A00 46T
- **Offer Drawing** 1 928 A00 378

Features

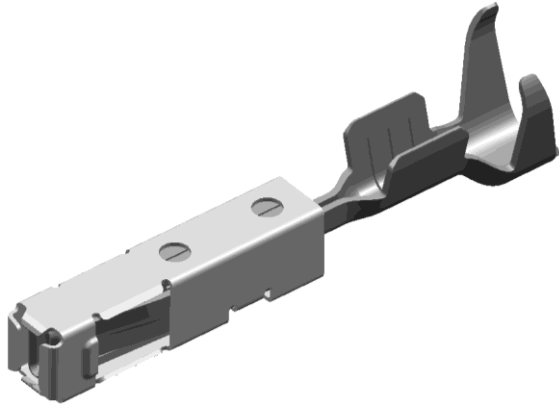
- **Female lance terminal**
- **Dimension of male contact** 1.2 x 0.63 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag, Au
- **Cable range** 0.35 – 0.5 mm² / 0.75 mm² – 1.0 mm²
1.5 mm²
- **Max. temperature range** -40... +150° C (Au, Ag,)
- **Mating force** ≤ 5 N (without Single wire seal)
≤ 7 N (with Single wire seal)
- **Sealing system** Sealing plate or Single wire seal

General facts

- **Application** 154P-E, 228P, 336P-CV
- **Extras** High temperature resistance
Matrix 1.2 lance “high vibration” - available

Bosch Connectors

BTC 1.5 Clean Body



Facts and Figures

- **SOP** 2008
- **TCD*** 1 928 A01 22T
- **Offer Drawing** 1 928 A00 394

Features

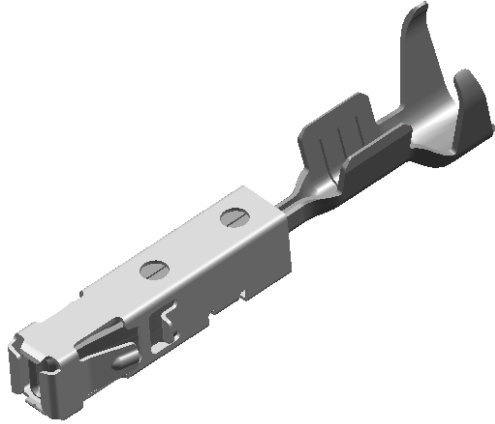
- **Female clean-body terminal**
- **Dimension of male contact** 1.5 x 0.6 mm
- **Secondary locking** Possible
- **Platings** Sn
- **Cable range** 0.35 – 0.5 mm²
0.75 mm² – 1.0 mm²
- **Max. temperature range** -40... +130° C
- **Mating force** ≤ 6 N
- **Sealing system** Single wire seal

General facts

- **Application** 26P-, 38P-CB, 38P-CBO
- **Extras** Designed for high current load
High vibration resistance
Three contact points

Bosch Connectors

BTL 1.5 Lance



Features

- **Female lance terminal**
- **Dimension of male contact** 1.5 x 0.6 mm
- **Secondary locking** Possible
- **Platings** Sn
- **Cable range** 0.35 – 0.5 mm²
0.75 mm² – 1.0 mm²
- **Max. temperature range** -40... +130° C
- **Mating force** ≤ 6 N
- **Sealing system** Single wire seal

Facts and Figures

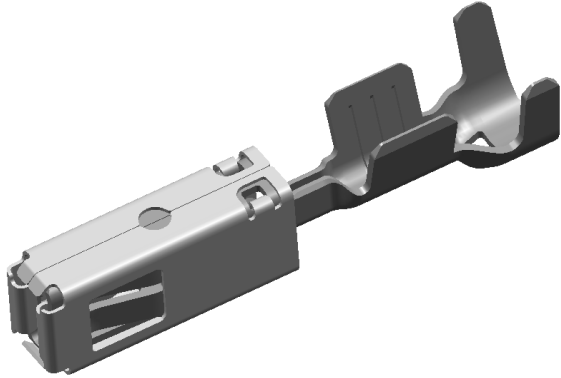
- **SOP** 2007
- **TCD*** 1 928 A01 19T
- **Offer Drawing** 1 928 A00 391

General facts

- **Application** 38P-N, 38P-NO
- **Extras** Designed for high current load
High vibration resistance
Three contact points

Bosch Connectors

BTC 2.8 Clean Body



Facts and Figures

- **SOP** 2008
- **TCD*** 1 928 A01 23T
- **Offer Drawing** 1 928 A00 395

Features

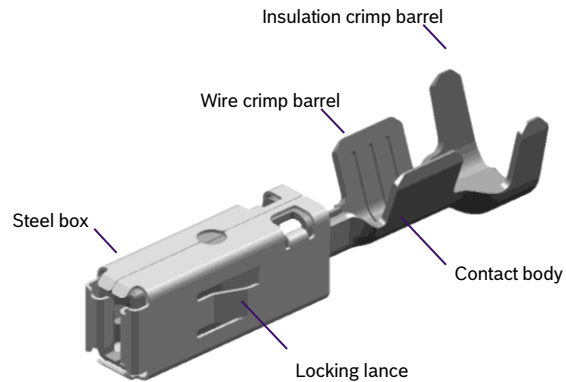
- **Female clean-body terminal**
- **Dimension of male contact** 2.8 x 0.8 mm
- **Secondary locking** Possible
- **Platings** Sn
- **Cable range** 1.5 – 2.5 mm²
- **Max. temperature range** -40... +130° C
- **Mating force** ≤ 13 N
- **Sealing system** Single wire seal

General facts

- **Application** 26P, 38P-CB,
38P-CBO, 46P,
2xxP CB
- **Extras** High current loads

Bosch Connectors

BTL 2.8 Lance



Facts and Figures

- **SOP** 2007
- **TCD*** 1 928 A01 20T
- **Offer Drawing** 1 928 A00 392

Features

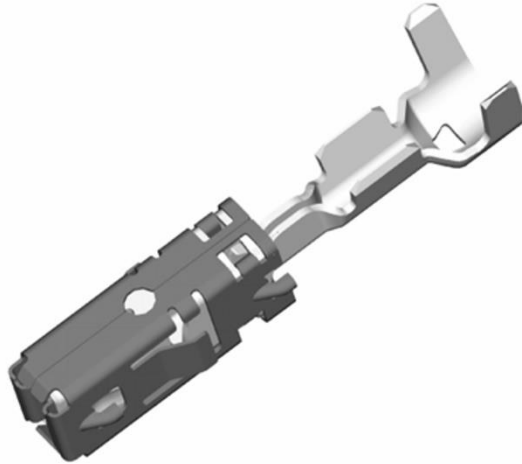
- **Female lance terminal**
- **Dimension of male contact** 2.8 x 0.8 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 1.5 – 2.5 mm²
- **Max. temperature range** -40... +150° C (Ag)
- **Mating force** ≤ 13 N
- **Sealing system** Single wire seal

General facts

- **Application** 38P-N, 38P-NO 196P, 2xxP CL
- **Extras** Designed for high current load

Bosch Connectors

BDK 2.8 Lance



Facts and Figures

- **SOP** 2001
- **TCD*** 1 928 A00 23T
- **Offer Drawing** 1 928 A00 076

Features

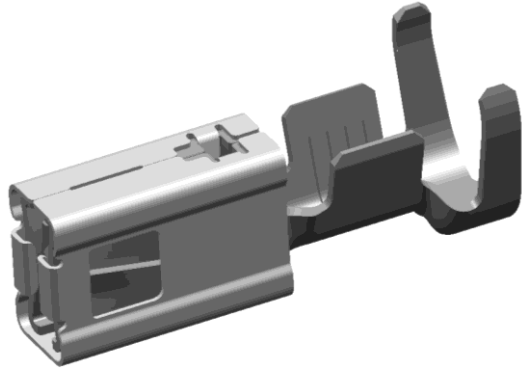
- **Female damping terminal**
- **Dimension of male contact** 2.8 x 0.8 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag, Au
- **Cable range** 0.35 – 1.0 mm²
1.5 mm² – 2.5 mm²
- **Max. temperature range** -40... +150° C
- **Mating force** ≤ 8 N
- **Sealing system** Single wire seal

General facts

- **Application** Kompakt 1.1, Kompakt 3, Kompakt 4, 141P, 154P V, 154P VG, 154P E, 228P
- **Extras** Suitable for high vibration levels
Meander-design in order to damp vibration
Four contact points

Bosch Connectors

BTC 4.8 Clean Body



Facts and Figures

- **SOP** 2008
- **TCD*** 1 928 A01 24T
- **Offer Drawing** 1 928 A00 396

Features

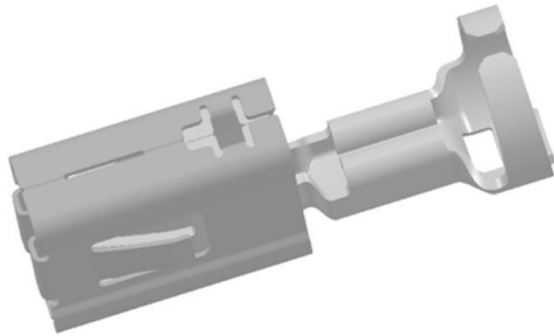
- **Female clean-body terminal**
- **Dimension of male contact** 4.8 / 6.3 x 0.8 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 2.5 – 6.0 mm²
- **Max. temperature range** -40... +130° C
- **Mating force** ≤ 16 N
- **Sealing system** Single wire seal

General facts

- **Application** 26P,, 38P-CB, 38P-CBO, 46P
- **Extras** High current loads

Bosch Connectors

BTL 4.8 Lance



Facts and Figures

- **SOP** 2007
- **TCD*** 1 928 A01 21T
- **Offer Drawing** 1 928 A00 393

Features

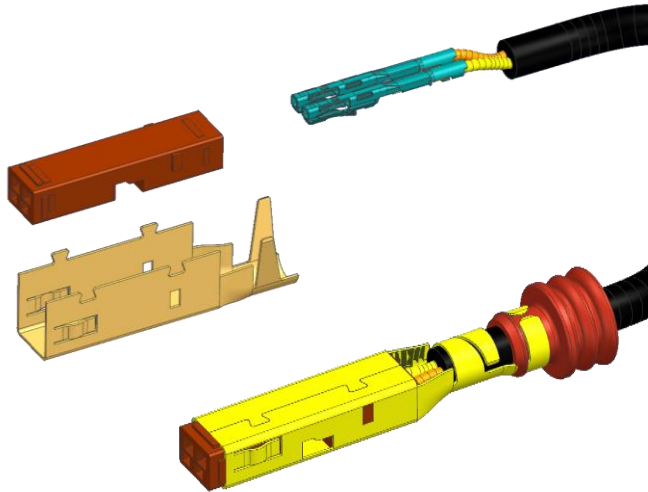
- **Female lance terminal**
- **Dimension of male contact** 4.8 / 6.3 x 0.8 mm
- **Secondary locking** Possible
- **Platings** Sn, Ag
- **Cable range** 2.5 – 6.0 mm²
- **Max. temperature range** -40... +130° C
- **Mating force** ≤ 16 N
- **Sealing system** Single wire seal

General facts

- **Application** 38P-N, 38P-NO, e-Steering
- **Extras** High current loads

Bosch Connectors

HFC – 1GIG | Submodul 1000BASE-T1



Facts and Figures

→ SOP 2025

Features

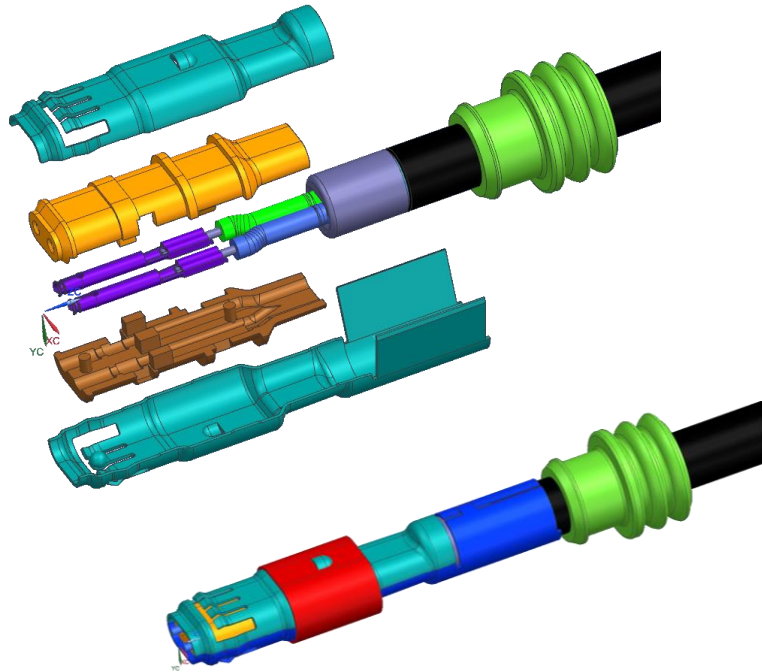
- **Sealing** Sealed with SWS / Unsealed
- **Vibration resistance** SAE/USCAR2-REVISION 7; Vibration class V1, Chassis
- **Temp. range** -40 – +100°C
- **Min. pitch distance** 1,8mm (Fitting to Microflex)
- **Wire size range** 2x0,13mm²
- **Usable terminals** BMT 0,5 Lance
- **Secondary locking** yes
- **Primary locking** yes

General Facts

- Integration of Submodule into Microflex High Pole connectors
- Due to use of standard pins and tab sizes no redesign of ECU required for Upgrade to 1000 Base-T1 (up to STP Class 1)

Bosch Connectors

HFC – B-HSTM | Submodul 10G BASE-T1



Facts and Figures

→ SOP 2024

Features

- **Sealing** Sealed with SWS / Unsealed
- **Vibration resistance** SAE/USCAR2-REVISION 7; Vibration class V1, Chassis
- **Temp. range** -40 - +125°C
- **Min. pitch distance** 2,0mm
- **Wire size range** 2x0,13mm²
- **Usable terminals** BRT 0,5
- **Secondary locking** yes
- **Primary locking** Optional

Customer Benefits

- Compatible to industry standard
- Upgrading multigig technology to automotive standards: optional primary lock and temperature proof to 125 degrees
- Integration ready in Bosch Microflex and Moduflex connectors.