



Selection of connectors for the Non-Automotive Transportation Market

FCI, setting the standard for connectors

With operations in 34 countries and sales of 1.3 billion euros in 2007, FCI is a leading manufacturer of connectors.

Our 14,200 employees are committed to providing customers with high-quality, innovative products for a wide range of consumer and industrial applications.

- FCI full range of interconnect solutions provides robust, reliable solutions with applications beyond the traditional passenger car market such as trucks, busses, construction vehicles, agricultural vehicles, motorbikes, ...

- FCI provides a complete range of connectors customized for harsh environment and on-board electronics and designs solutions that withstand the vibrations and shocks encountered in these specific applications.



- In our engineering competence centers, we have dedicated engineers who - in a combined effort - develop interconnect solutions specially adapted to your needs and requirements.

*DRIVE SAFELY WITH FCI ROBUST
AND RELIABLE CONNECTORS*

This document is non-contractual and is for information purposes only.
The supply of some products displayed in this brochure might be limited to some customers.
For more information, please contact your local sales office.

FCI is a world leader in providing cost-effective and innovative wire to wire, wire to device, wire to circuit board, board to board and wire to board and I/O connectors covering applications such as engine compartment, body, chassis, cockpit and multimedia.

The image shows two overlapping screenshots of the FCI website. The left screenshot displays the 'Mini Sealed Connectors' product page, featuring a list of features, a photograph of various connectors, technical characteristics table, and part references. The right screenshot shows a product detail page for a '14/16/34 way sealed system for 1.5 + 2.8 mm terminals', including dimensional characteristics and technical drawings.

Mini Sealed Connectors Features:

- The most up-to-date reduced size (2.5 mm pitch) sealed connector family
- Housings available for wires from 0.5 mm² (20 AWG) up to 2 mm² (14 AWG)
- Housings accepting terminals carrying up to 19 A at 25°C
- High seating performance ensured by a new seat-and-a-front interfacial head
- Easy and quick connection systems with GO-NO-GO locking principle and male terminal guiding system
- Clear identify with integrated secondary lock device allowing for detection of unseated terminal

Number of ways	2 ways		3 ways		4 ways		6 ways		8 ways		12 ways		20 ways	
	Series 1.0 mm		Series 1.0 mm		Series 1.0 mm		Series 1.0 mm		Series 1.0 mm		Series 1.0 mm		Series 1.0 mm	
Seating position														
Terminal pitch	2.54 mm		2.54 mm		2.54 mm		2.54 mm		2.54 mm		2.54 mm		2.54 mm	
Temperature range	-55 to +125°C		-55 to +125°C		-55 to +125°C		-55 to +125°C		-55 to +125°C		-55 to +125°C		-55 to +125°C	
Terminal insertion force	> 10 N		> 10 N		> 10 N		> 10 N		> 10 N		> 10 N		> 10 N	
Terminal insertion force	> 15 N		> 15 N		> 15 N		> 15 N		> 15 N		> 15 N		> 15 N	
Resistance to vibration	Class 3		Class 3		Class 3		Class 3		Class 3		Class 3		Class 3	
Number of mechanical locking	Female housing: 0 Male housing: 2		Female housing: 0 Male housing: 2		Female housing: 0 Male housing: 2		Female housing: 0 Male housing: 2		Female housing: 0 Male housing: 2		Female housing: 0 Male housing: 2		Female housing: 0 Male housing: 2	

14/16/34 way sealed system for 1.5 + 2.8 mm terminals

Dimensional characteristics

Enter the part reference in FCI website to see full datasheet & drawing for that part

Consult our dedicated on-line motorized vehicle market section. Find your interconnect solution using our interactive catalog for :

- Trucks
- Busses
- Agricultural
- Construction

The screenshot shows the 'Motorized vehicles' market section of the FCI website. It features a navigation menu on the left, a main content area with an image of a truck, bus, and tractor, and a list of categories at the bottom: Truck, Construction, Bus, and Motorcycle. The truck category is selected.

The screenshot shows the 'Truck Body' market section of the FCI website. It features a navigation menu on the left, a main content area with an image of a truck body and connectors, and a list of categories at the bottom: Wire to wire connectors, Wire to circuit board connectors, Wire to device connectors, Automotive Flex cable (post interconnect), and Pin headers.



WIRE TO WIRE CONNECTORS

1 Sealed Connectors

■ Sicma Mini Sealed Connectors .....	■	■	■	.....	5
■ Apex 2.8 mm Sealed Connectors .....	■	■	■	.....	6
■ Apex 150 Sealed Connectors .....	■	■	■	.....	7
■ Sicma Panel Through Sealed Connectors .....		■	■	.....	8

2 Unsealed Connectors

■ MCS Connectors				■	9
------------------------	--	--	--	---	-------	---

WIRE TO CIRCUIT BOARD CONNECTORS

■ Product offering	■	■	■	10
--------------------------	---	---	---	-------	----

WIRE TO DEVICE CONNECTORS

Power Distribution Components

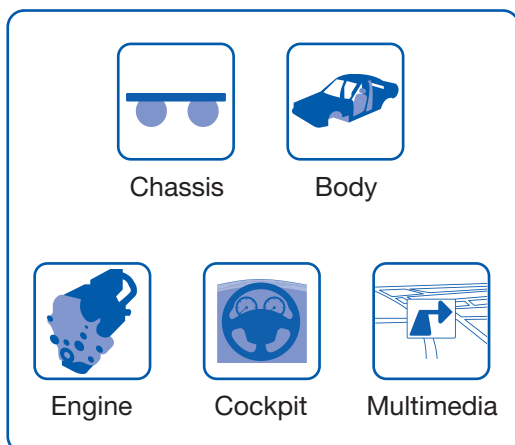
■ PCB fuse holders				■	11
■ Relay holders .....	■	■	■	.....	12
■ Sensor Connectors .....			■	.....	13
■ Lighting Connectors .....		■	.....	14	

BOARD TO BOARD/WIRE TO BOARD CONNECTORS

■ 2.00 mm - 2.54 mm board to board and wire to board Connectors .....	■	.....	15-16
■ 0.8 mm / 1.0 mm board-Stacking Connectors .....	■	.....	17
■ 0.5 mm / 2.54 mm FFC - FPC Connectors .....	■	.....	18
■ Floating board to board Connectors .....	■	.....	19

I/O CONNECTORS

■ Smart card / USB / Flash memory solutions	■	20
---	---	-------	----



Sicma Mini Sealed Connectors

Features

- ▶ The most up-to-date reduced size (3.33 mm pitch) sealed connector family
- ▶ Housings suitable for wires from 0.5 mm² (20 AWG) up-to 2 mm² (14 AWG)
- ▶ Housings accepting terminals carrying up-to 19 A at 23°C
- ▶ High sealing performance ensured by a rear mat-seal and a front interfacial seal
- ▶ Easy and quick connection system with GO-NO-GO locking principle and male terminal guiding system
- ▶ User friendly with integrated secondary lock device allowing for detection of unseated terminal



Technical characteristics

Number of ways		2 ways	3 ways	4 ways	5 ways	6 ways	6 ways hybrid	24 ways
Sealing protection		IP 68						
Terminals	Sicma 1.5 mm	2	3	4	5	6	4	18
	Sicma 2.8 mm	-					2	6
Temperature range		-40°C to +125°C						
Terminal retention force		> 100 N						> 65 N
Terminal insertion force		< 15 N						
Connector mating force		< 80 N						
Number of mechanical coding	Female housings	9	8				3	
	Male housings	7	6				3	

Part references

Part references	Female housings	211PC022S0049	211PC032S0049	211PC042S4021	211PC052S0081	211PC062S5049	211PC069S0049	211PC249S0033
	Male housings	211PL022S0049	211PL032S0049	211PL042S0011	211PL052S0049	211PL062S5049	211PL069S0049	211PL249S0033

211PC022S0049 stands for 2 ways female **black color coding**
Other color codings available, please check our website

For terminals, please check following web link
www.fci.com/1.5SicmaTerminals
www.fci.com/2.8SicmaTerminals



Apex 2.8 mm Sealed Connectors

Features

- ▶ The most ruggedized sealed connector family withstanding severe environmental conditions
- ▶ Housings suitable for wires from 0.35 mm² (22 AWG) up-to 4 mm² (10 AWG) and carrying up-to 40 A at 23° C
- ▶ Mid size housings (5.25 mm pitch - 6.40 mm Rows)
- ▶ High sealing performance ensured by a rear mat-seal and a front interfacial seal
- ▶ Easy and quick connection system
- ▶ 100% safe connection system with integrated Connector Position Assurance (CPA) system
- ▶ User friendly with integrated secondary lock device allowing for detection of unseated terminal



Technical characteristics

Number of ways		2 ways	3 ways	4 ways	6 ways	10 ways	14 ways
Sealing protection		IP 68					
Terminals APEX 2.8 mm		2	3	4	6	10	14
Temperature range		-40°C to +150°C		-40°C to +125°C			
Terminal retention force		> 90 N					
Terminal insertion force		< 30 N					
Connector mating force		< 75 N			< 90 N	< 120 N	< 142 N
Number of mechanical coding	Female housings	4				7	4
	Male housings	2(4)	4			4(1)	4

(X) Capability

Part references

Part references	Female housings	54MV0206	54MV0308	54MV0409	54MV0608	54MV1009	54MV1411
	Male housings	54MV0210	54MV0312	54MV0413	54MV0612	54MV1016	54MV1415

54MV0206 stands for **2 ways** female **black color coding, key coding A**
Other color codings available, please check our website

For terminals, please check following web link
www.fci.com/2.8APEXTerminals



Apex 150 Sealed Connectors

Features

- ▶ The most ruggedized sealed family withstanding severe environmental conditions
- ▶ Housings suitable for wires from 0.35 mm² (22 AWG) up-to 1.0 mm² (16 AWG) and carrying up-to 25 A at 23°C
- ▶ Mid size housings (3.5 mm pitch)
- ▶ High sealing performance ensured by rear mat-seals and by a front interfacial seal
- ▶ Easy and quick connection system with CPA locking principle and male terminal guiding system
- ▶ User friendly with integrated secondary lock device allowing detection of unseated terminal



Technical characteristics

Number of ways		10 ways	14 ways	16 ways
Terminal size		1.5 mm	10x1.5 + 4x2.8 mm	1.5 mm
Sealing protection		IP 68		
Temperature range		-40°C to +125°C		
Terminal retention force		> 90 N		
Terminal insertion force		< 30 N		
Connector mating force		< 75 N		
Number of mechanical coding	Female housings	4	8	4
	Male housings	4	8	4

Part references

Part references	Female housings	54VM1030/54VM1030N	55VM1400/55VM1400N	54VM1630/54VM1630N
	Male housings	54VM1000	54VM1400	54VM1600

54MV1000 stands for 10 way male **black color coding**
Other color codings available, please check our website

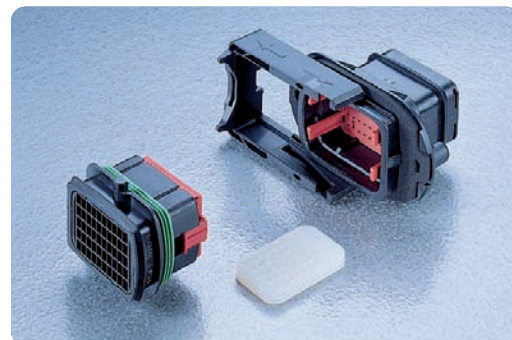
For terminals, please check following web link
www.fci.com/APEX150Terminals



Sicma Panel Through Sealed Connectors

Features

- High density connectors particularly suitable for door to body or engine to cockpit connections
- Suitable for a combination of low and medium current applications
- Mating assistance system with slider to minimize mating force and allowing blind mating
- Male terminals can be protected from hazardous damage thanks to a front grid protection



Technical characteristics

Number of ways		14 ways	16 ways	24 ways	34 ways	50 ways
Sealing protection		IP 67		IP 68	IP 67	IP 64
Terminals	Sicma 1.5 mm	10	16	18	30	50
	Sicma 2.8 mm	4	-	6	4	-
Temperature range		-40°C to +125°C				
Terminal retention force	Sicma 1.5 mm	> 60 N				> 80 N
	Sicma 2.8 mm	> 75 N				
Terminal insertion force	Sicma 1.5 mm	< 12 N				
	Sicma 2.8 mm	< 17 N				
Connector mating force		< 70 N				< 90 N

Part references

Part references	Female housings	DTBFHPE14BKSV	SICFHPE16BKSV	211PC249S0031	211PC349S0033*	DTB50GMFH*
	Male housings	DTBMHPE14BKSV	SICMHPE16BKSV	HCCMHPE24BKAFSV	211PL349S0033*	DTB50GMMH*

* Other color codings available, please check our website

For terminals, please check following web link

www.fci.com/Sicma1.5Terminals
www.fci.com/Sicma2.8Terminals



MCS unsealed Connectors

Features

- ▶ The most commonly used unsealed connector family
- ▶ Housings suitable for wires from 0.35 mm² up-to 1.5 mm² and carrying up-to 14 A at 23°C
- ▶ The most cost effective solution for unsealed applications
- ▶ User friendly with integrated secondary lock device allowing for detection of unseated terminal
- ▶ Easy and quick connection system with latching locking principle



Technical characteristics

Number of ways with MCS		1 way	2 ways	3 ways	4 ways	6 ways	8 ways	10 ways	12 ways	14 ways	18 ways	20 ways	
1.8 mm terminals													
Temperature range		-30°C to +105°C											
Terminal retention force		> 80 N											
Terminal insertion force		< 10 N											
Connector mating force		< 35 N					< 65 N			< 120 N			
Number of mechanical coding	Female housings	1	3	2	1	3	2	1	4	1	2	3	
	Male housings	1	2	2	0	2	2	1	3	1	2	3	

Part references

Part references	Female housings	MCHFHPE01BK	MCHFHPE ^{xx} yy									
	Male housings	MCHMHPE01BK	MCHMHPE ^{xx} yy	/	MCHMHPE ^{xx} yy							

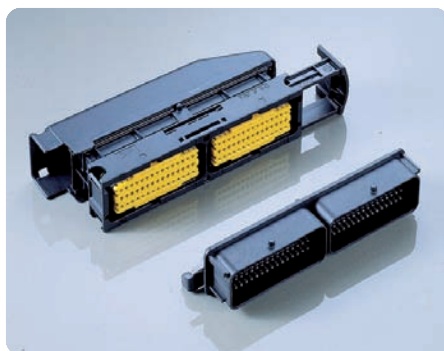
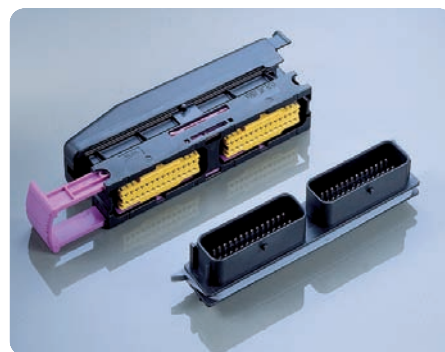
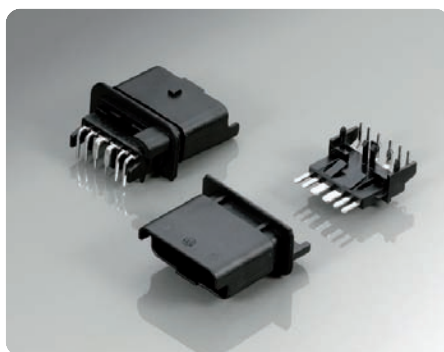
xx stands for number of ways
 yy stands for color coding
 Example : MCHFHBE02WH stands for **2 ways** female **white color coding**
 Other color codings available, please check our website

For terminals, please check following web link
www.fci.com/1.8MCSTerminals



Features

- Female housings and their mating male housings for PCB mount
- High sealing performance ensured by a rear mat-seal and a front interfacial seal
- Mating assistance system with slider to minimize mating force and allowing blind mating
- User friendly with integrated secondary lock device allowing for detection of unseated terminals



Technical characteristics

Number of ways	6 ways mini sealed	8 & 16 ways DCS-2	24 ways Sicma	56 ways Sicma	90 ways Sicma
Number of rows	1	2	3	2	3
Pitch between rows	-	-	5 mm	6 mm	6 mm
Sealing protection	IP 68	-	IP 68		
1.5 mm Sicma terminal	4	-	18	56	90
1.5 mm Sicma terminal pitch	3.33 mm	-	3.33 mm		
2.8 mm terminal	2 (Sicma)	8/16 (DCS)	6 (Sicma)		
2.8 mm terminal pitch	5 mm	4.15 mm			
Temperature range	-40°C to + 105°C			-40°C to + 125°C	
Male orientation to PCB	90°C	180°	90° & 180°	90°	90° & 180°

Part references

Part references	Female housings	211PC069S0049	Consult us	211PC249S0033*	211PC562S0009	211PC902S0009
	Male housings	211PL069L0084	Consult us	HCCPHPE24BKA90F*	211PL562L0011	211PL902Y0008 (180°) PPI0001336 (90°)

211PC249S0033 stands for 24 ways female **black color coding**

* Other color codings available, please check our website

For terminals, please check following web link

www.fci.com/1.5SicmaTerminals

www.fci.com/2.8SicmaTerminals

www.fci.com/2.8DCSTerminals

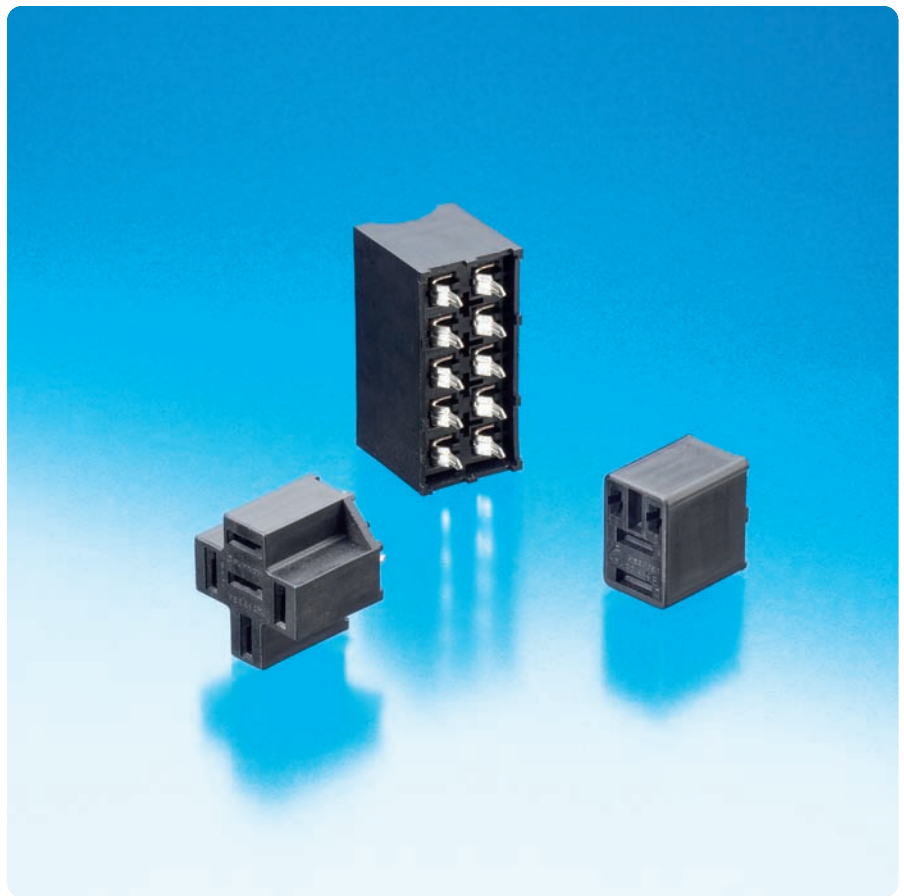


Power Distribution Components

PCB fuse holders

Features

- ▶ Block of ATO fuse holders from 1 to 40 A
- ▶ Connectors suitable for unsealed environment
- ▶ Connectors suitable for PCB soldering process



Technical characteristics

Number of ways	Relay 35 A	Mini relay	Relay 9 ways
Temperature range	-30°C to +105°C		

Part references

Part references	FEC014TSP2	FEC005BKTV1	SH100BK0900T
-----------------	------------	-------------	--------------

Technical characteristics

Number of ways	3 fuses	5 fuses
Temperature range	-30°C to +105°C	

Part references

Part references	FEC011T	FEC111T
-----------------	---------	---------

For more details, please contact us

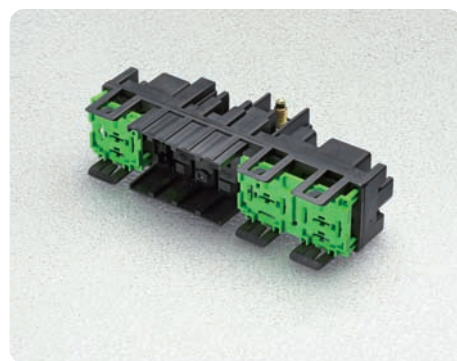
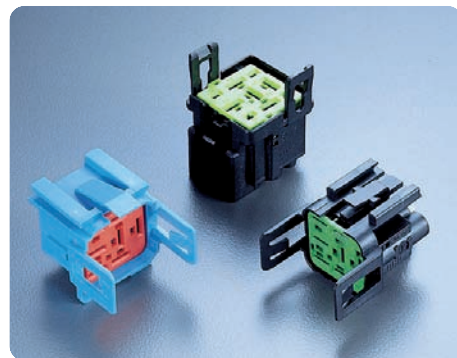


Power Distribution Components

Relay holders

Features

- ▶ Sealed and unsealed relay holders
- ▶ Multi-relay is a 3 relays holder protected by 4 maxifuses
- ▶ Suitable for applications requesting up-to 28 A (2.8 mm terminal), and/or 50 A (6.3 mm terminal) and/or 75 A (9.5 mm terminal)
- ▶ Unseated terminal detected by front grid
- ▶ Leg relay holders for 35, 25 A relays



Technical characteristics

Number of ways	4 ways		8 ways			5 ways	13 ways		
Sealing protection	IP67						-	-	
Terminal size (mm)	6.35	9.5	2.8	6.35	9.5	6.35	6.35	8	
Number of DCS terminals	2	2	4	2	2	5	11	2	
Temperature range	-40°C to +85°C		-40°C to +120°C			-40°C to +85°C			
Terminal retention force	> 200 N	> 180 N	> 80 N			> 100 N			
Terminal insertion force	< 17 N	< 32 N	< 20 N			< 15 N		< 20N	
Connector mating force	< 100 N		< 160 N			< 100 N			

Part references

Part references	60434502	60431011	60430601	230BF139S0002
-----------------	----------	----------	----------	---------------

For more details, please contact us

For terminals, please check following web link

www.fci.com/2.8DCSTerminals

www.fci.com/6.3DCSTerminals

www.fci.com/9.5DCSTerminals

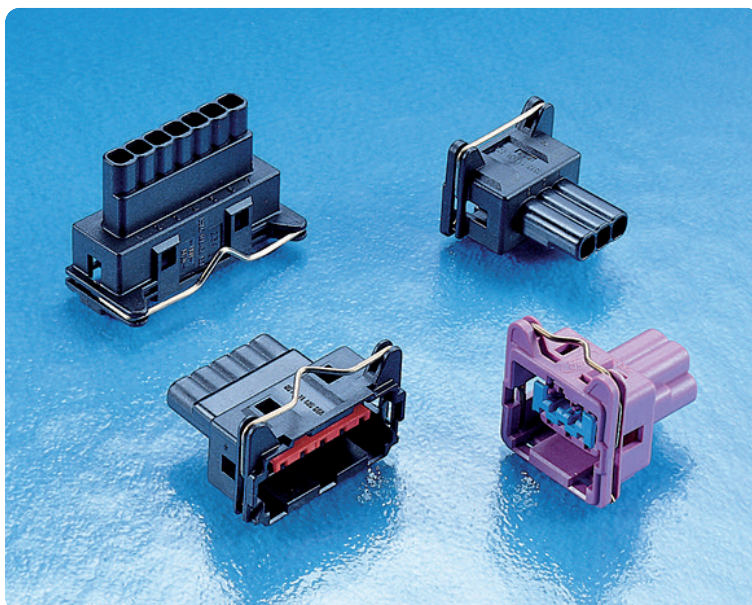


Power Distribution Components

Sensor connectors

Features

- ▶ Sealed connectors for sensors or integrated housing
- ▶ Suitable for application requesting mid-power up-to 28 A at 23°C
- ▶ High level of sealing with Single wire seals and flat seal
- ▶ Unseated terminal detected by front grid



Technical characteristics

Number of ways	2 ways	3 ways	4 ways	5 ways	7 ways
Sealing protection	IP 67				
Terminal DCS-1 2.8 mm	2	3	4	5	7
Temperature range	- 40°C to +125°C			-40°C to +120°C	
Terminal retention force	> 80 N				
Terminal insertion force	< 20 N				
Connector mating force	< 50 N			< 90 N	
Number of codings	9	4	3	1	2

Part references

Part references	240PC02S1004	240PC03S0005	240PC04S0007	60400401	60400551
-----------------	--------------	--------------	--------------	----------	----------

240PC03S0004 stands for 3 ways **black color coding**
 Other color codings or part numbers available, please check our website or consult us



Lighting connectors (PG18.5, PGJ19, PG20, H3, H4)

Features

PGJ 19

- ▶ IP69k high pressure spray protected
- ▶ Additional terminal locking device on front part of the housing
- ▶ Terminal Position Assurance (T.P.A.), two mechanical polarization either H8-H11 or H9
- ▶ Go-No-Go housing locking principle
- ▶ Suitable for wires from 0.35 mm² to 2.5 mm²



PG 18.5

- ▶ Unsealed version
- ▶ Easy unmating by rear latch feature
- ▶ Go housing locking principle additional terminal locking device on front part of the housing
- ▶ Terminal Position Assurance (T.P.A.)
- ▶ Suitable for wires from 0.35 mm² to 2 mm²



H4

- ▶ Female 3 way 8 mm 90° terminal with hinged back cover
- ▶ Suitable for lamp H4 lamps, wire size from 1 to 2.5 mm²

Technical characteristics

	PGJ19	PG18.5	H4
Number of ways	2 ways		3 ways
Lamp	H8-H9-H11	P13W	H3-H4
Sealing protection	IP69K	No	No
Terminal	DCS-2 2.8 mm	GTS-2 1.5 mm	8 mm Finclick
Temperature range	- 40°C to +125°C		
Terminal retention force	> 100 N		
Terminal insertion force	< 15 N	< 5 N	< 15 N
Connector mating force	< 60 N		NA
Number of codings	-	5	12

Part references

Part references	240PC023S4019 for H8-H11 240PC023S8019 for H9	PPI0001038*	PPI0000813
-----------------	--	-------------	------------

* Other codings available, please consult us
Sealed version PG18.5 and PG20, consult us

For terminals, please check following web link
www.fci.com/2.8DCSTerminals
www.fci.com/1.5GTSTerminals
www.fci.com/8FinclickTerminals



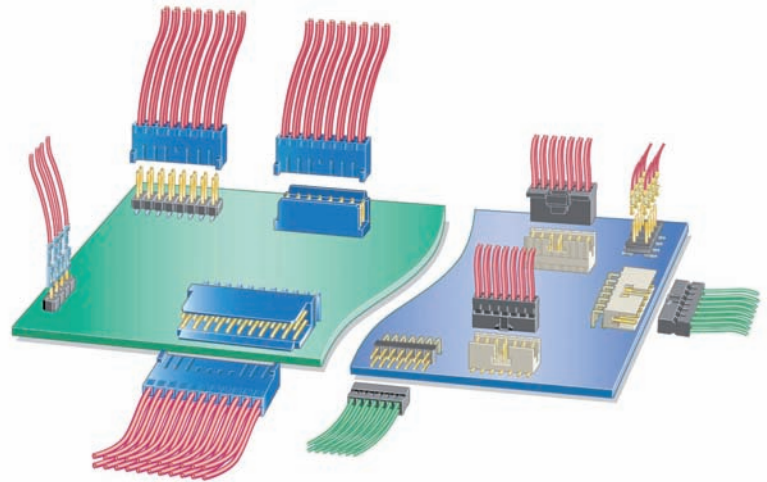
2.00 mm - 2.54 mm wire-to-board solutions

Minitek™ / BergStik® / Dubox™

2.54 mm pitch

Features

- ▶ Unique beryllium copper contact maintains perfect conductivity & contact pressure through multiple mating cycles
- ▶ Shock and vibration proof
- ▶ Choice of retention forces with different spring pressures



2.00 mm

Features

- ▶ Optional active latching system
- ▶ High reliable electrical performance due to dual beam design
- ▶ 4-wall keyed header design prevents mismatching

	BergStik® / Dubox™		Minitek™	
Pitch	2.54 mm		2.00 mm	
Gender	Header	Receptacle	Header	Receptacle
Orientation	Straight, Right angled			Straight
Termination	Through hole or SMT			
Plating	Tin or selective AU			
Packaging	Tubes, tape-on-reel, Continuous reel		Tubes, Tape-on-Reel	

www.fci.com/minitek
www.fci.com/bergstik
www.fci.com/dubox



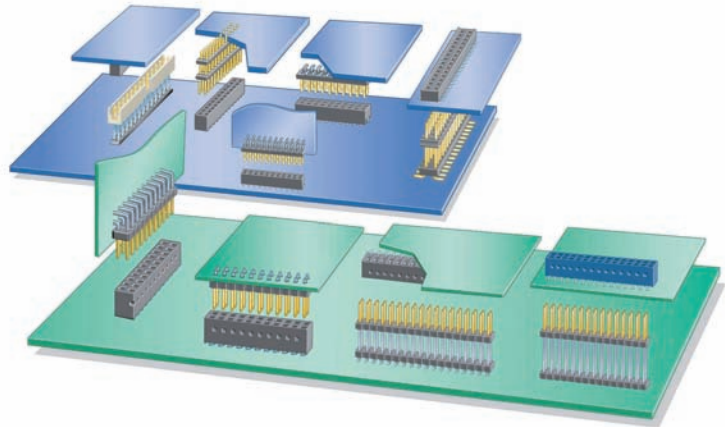
2.00 - 2.54 mm board-to-board solutions

Minitek™ / BergStik® / Dubox™

2.54 mm pitch

Features

- ▶ Option of shrouded or unshrouded headers
- ▶ Vertical & Right angle systems
- ▶ Continuous headers-on-reel option
- ▶ Variable board spacings



2.00 mm pitch

Features

- ▶ Option of shrouded and unshrouded headers
- ▶ Vertical and Right angled systems
- ▶ Variable board spacings

	BergStik® / Dubox™		Minitek™	
Pitch	2.54 mm		2.00 mm	
Gender	Header	Receptacle	Header	Receptacle
Orientation	Straight, Right angled			Straight
Termination	Through hole or SMT			
Plating	Tin or selective AU			
Packaging	Tubes, Tape-on-Reel, Continuous reel		Tubes, Tape-on-Reel	
Temperature range	-60° - +125° C		-40° - +125° C	
Terminal size	0.635 mm SQ		0.5 mm SQ	
Ways	4-72		4-50	
Current rating	2-3A		2 A	
Cycles	200		100	
Rows	Single / double		Double	

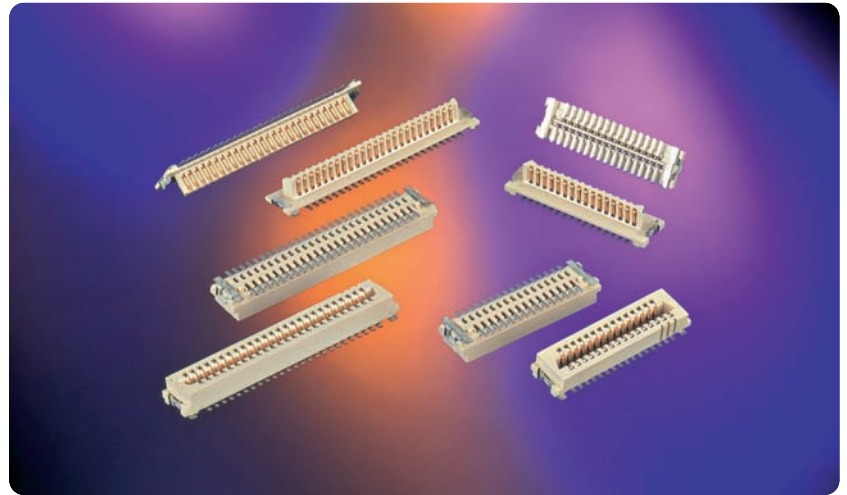
www.fci.com/minitek
www.fci.com/bergstik
www.fci.com/dubox



0.8 mm / 1.0 mm board-Stacking Connectors BergStak® / Conan®

Features

- ▶ Parallel board-to-board interconnects
- ▶ Surface mount
- ▶ Blade-on-beam contacts allow “peeling” and prevent “sticking”
- ▶ BergStak® 0.8 mm pitch connectors offer 5 mm-16 mm stack heights and 40-200 contacts (in increments of 20)
- ▶ Conan® 1.0 mm pitch connectors offer 4.15 mm-7 mm stack heights with options for 9, 11, 15, 21, 25, 31, 41, 51 or 69 contacts. Snap together for sure mating
- ▶ Reliable & economic selective plating
- ▶ Tape & reel or tube packing (with or without cap)



Applications

- ▶ Tachographs
- ▶ Head-up display
- ▶ Electronic Toll Collect systems (ETC)
- ▶ Automotive Multimedia Systems like: car audio, navigation, car phone systems



Technical characteristics

Conan®	
Number of contacts	9-69
Material (Housing)	LCP
Material (Contact)	Copper Alloy, Gold over Nickel plated
Current rating	1 A
Voltage rating	500 volts
Resistance (Insulation)	1000 MΩ
Resistance (Contact)	30 mΩ
Temperature (Range)	-55°C to +130°C
Durability (Mating cycles)	30 cycles

Bergstak®	
Number of contacts	40 - 200
Material (Housing)	LCP
Material (Contact)	Copper Alloy, Gold over Nickel plated
Current rating	0.5 A
Voltage rating	100 volts AC
Resistance (Insulation)	100 MΩ
Resistance (Contact)	50 mΩ
Temperature (Range)	-40°C to +85°C
Durability (Mating cycles)	100 cycles

Part references

Main products	Receptacle	Header
BergStak® system	61082	61083
Conan® system	91921/91931	91901/91911

www.fci.com/conan
www.fci.com/bergstak



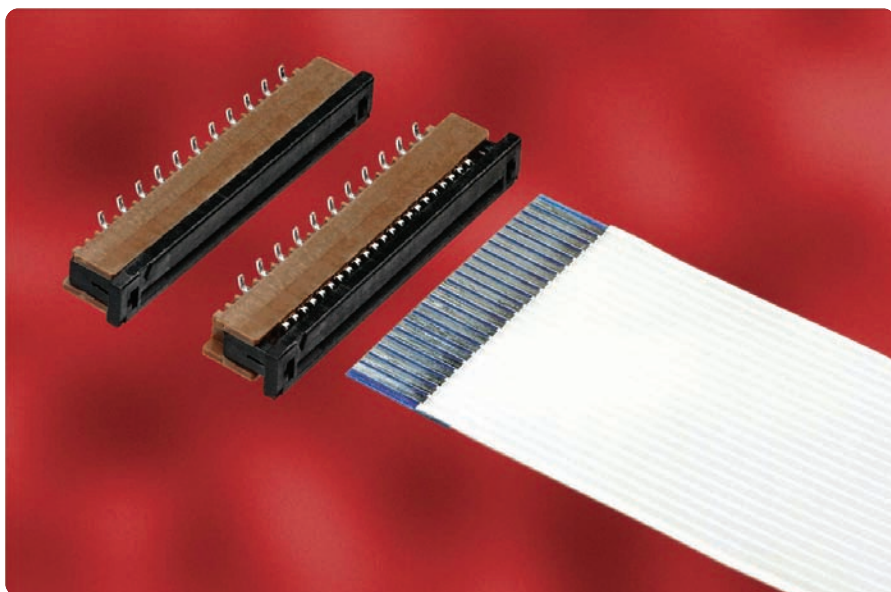
0.5 mm / 2.54 mm FFC - FPC Connectors

Features

- Suitable for FFC / FPC / CIC cable
- 0.50 - 1.00 - 2.54 mm pitch sizes
- Highly reliable Gas Tight High pressure (GTH) contact system
- Zero Insertion Force (ZIF) and Low Insertion Force (LIF) options
- Straight and Right-Angle versions
- Surface Mount and Through Hole

Applications

- LC Display to Board connections
- Interior Automotive electronics
- DVD / HDD connection
- Tachographs



Technical characteristics

FFC - FPC	
Number of contacts	4-30
Material (Housing)	Thermoplastic (UL94V-0)
Material (Contact)	Phosphor Bronze, Tin Plated
Current rating	0.5 A (0.5 mm pitch)
Voltage rating	100V AC/DC (0.5 mm pitch)
Resistance (Insulation)	500 MΩ (0.5 mm pitch)
Resistance (Contact)	30 mΩ max
Temperature (Range)	-55°C to +85°C
Durability (Mating cycles)	20 cycles (0.5 mm pitch)

Part references

Main products	Description	Lower type	Part references	
0.50 mm Pitch ZIF SMT	Right angle	SFVL Connector	59453	
	Right angle	SFV Connector	SFVxxR	
	Straight angle	SFV-S Connector	62674	
	Right angle	OPU Connector	62684	
	Right angle	SFVA Connector	10014265	
	Right angle	VLL Connector Lower type	10051922	
	Right angle	VLH Connector Lower type	10042867	
1.00 mm Pitch ZIF SMT	Right angle	SFW Connector	SFWxxR	
	Straight angle	SFW Connector	SFWxxS	
	Non-ZIF SMT	Right angle	HFW Connector	HFWxxR
		Straight angle	HFW Connector	HFWxxS
	ZIF DIP	Right angle	SLW Connector	SLWxxR
		Straight angle	SLW Connector	SLWxxS
	Non-ZIF DIP	Right angle	HLW Connector	HLWxxR
		Straight angle	HLW Connector	HLWxxS
2.54 mm Pitch	Duflex contacts and housings		76785 / 67013 / 66987	
	Clincher pre-assembled snap-shut system (mates to PCB headers)		66226 / 65801 / 10027313 / 10022753 / 67516 / 67368	
	Shrouded PCB headers for 2.54 mm clincher		95735 / 95736	

www.fci.com/flex



Floating board to board BTFW

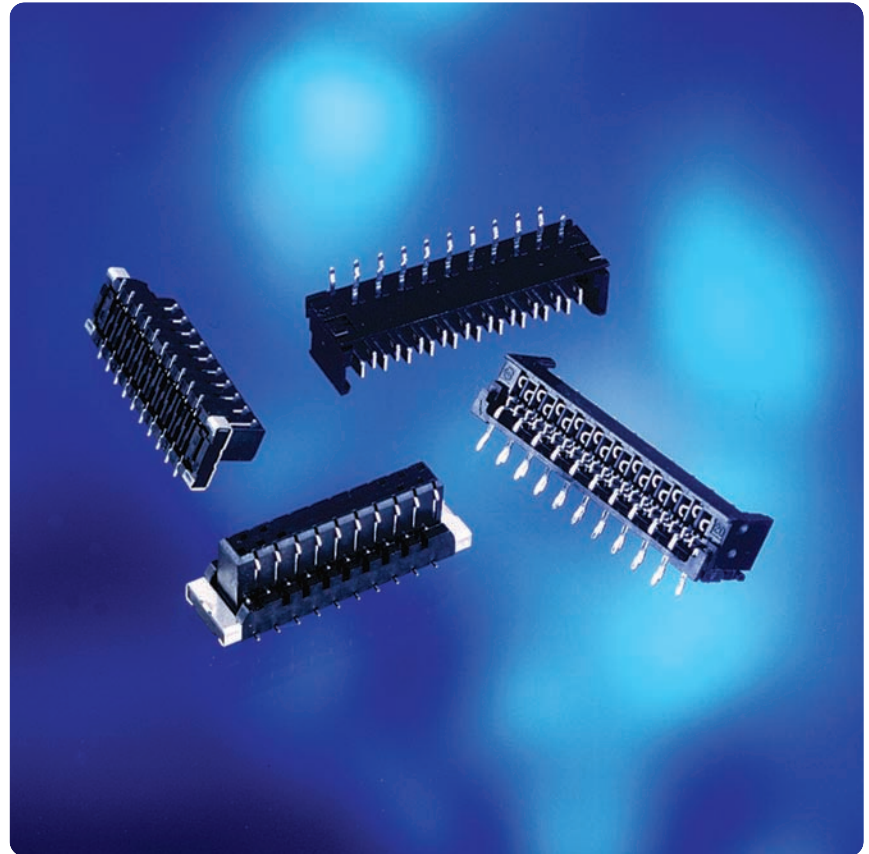
Features

- ▶ BTFW (1.0 mm)
- ▶ Surface mount and Through mount versions
- ▶ Straight and Right Angle versions
- ▶ Reliable mechanical performance due to wide floating allowance (in pitch, width and Z direction)*
- ▶ Easy handling due to rigid guiding design

*Absorbs design tolerances and vibrations

Applications

- ▶ Automobile AV systems and navigation systems, Automobile CD and MD players
- ▶ Fleet Management systems like tachographs
- ▶ Electronic Toll Collect Systems (ETC)
- ▶ Head-up displays



Technical characteristics

BTFW	
Number of contacts	10-30
Material (Housing)	Glass Reinforced PBT UL94 V-0
Material (Contact)	Phosphor Bronze, Tin plated
Current rating	1 A
Voltage rating	100 V AC/DC
Resistance (Insulation)	100 MΩ
Resistance (Contact)	70 mΩ max
Temperature (Range)	-55°C to +85°C
Durability (Mating cycles)	20 cycles

Part references

Main products		Series*	
BTFW	Plug	Vertical, SMT	BTFWxxP-3SSTE1LF
	Receptacle	Right Angle, SMT	BTFWxxR-3RSTE1LF
		Right Angle, Through Hole	BTFWxxR-3RD7LF

www.fci.com/boardmate



Smart card Connectors

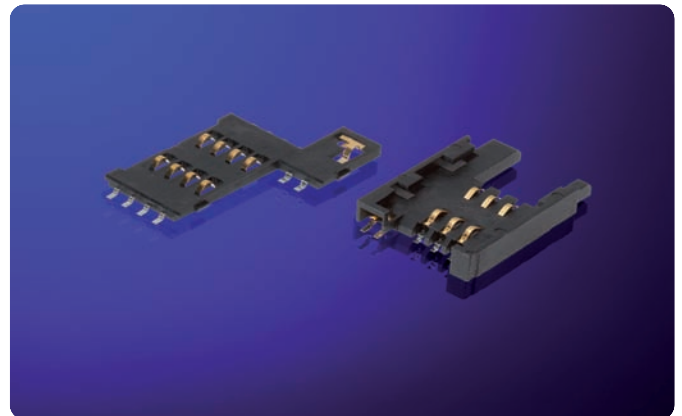
Features

- SIM, SAM or full size card connectors available
- Suitable for friendly, harsh, portable and AUTOMOTIVE environments
- Sliding or Landing contact technology
- Durability upto 30.000 cycles
- Blade or sealed switch available
- 6,8 or 16 contacts available

Product Performance

- Upto 15k mating cycle
- Temperature range -40 + 105°C
- Customization available upon request

www.fci.com/smartcards



USB - Universal Serial Bus

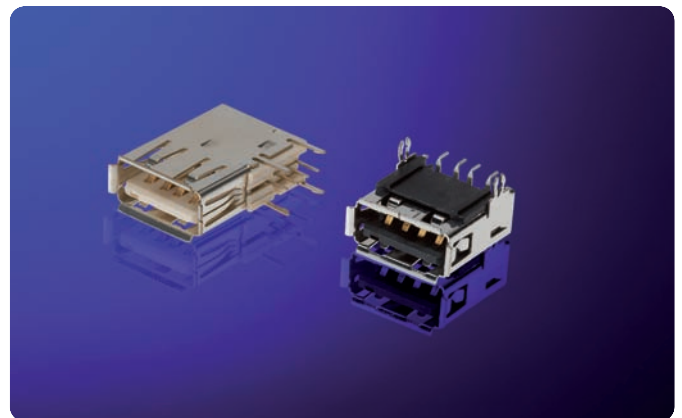
Features

- USB 2.0 compliant – speed upto 480 Mb/sec
- Type A (host) receptacles
- - 4 positions - series 73725 / 87583
- SMT & through hole terminations
- Standard or Side mounted
- USB + Power solutions

Product Performance

- Upto 15k mating cycles
- Temperature range -40 + 85°C

www.fci.com/usb



SD cards

Features

- Product design:
- Top mount position (optional reverse)
- Push-push locking system
- Shielded
- Switch presence for write protection

Product Performance

- Upto 15k mating cycles
- Temperature range -40 + 105°C
- Vibration & Shock proof

www.fci.com/cardsystems



A series of horizontal dotted lines for writing notes.

For more information about e-catalog or FCI
sales offices, headquarters, agents and local distributors,
visit www.fci.com



FCI Headquarters - 145, rue Yves-Le-Coz - 78035 Versailles - France
Phone: +33 1 39 49 21 83 - Fax: +33 1 39 49 20 00