



TECHNOLOGY IN CONNECTORS™

PRODUCT OVERVIEW



CONEC®

TECHNOLOGY IN CONNECTORS™

As a leading connector manufacturer CONEC develops, produces and markets connectors worldwide to the electronic and communications industry.

CONEC is committed to progress in interconnect technology and to satisfy customers through innovation, quality manufacturing and superior services.



CONEC Germany, Lippstadt



CONEC USA, Garner



CONEC Canada, Brampton



CONEC provides global account management in a customer's home country and combines the information received for product design and delivers the end product to the customer's multiple manufacturing locations worldwide.

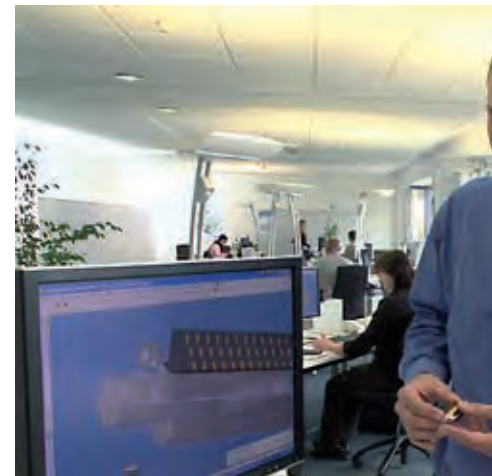
Local sales and engineering support around the globe provides the customer with knowledgeable assistance in their own language to fully communicate and to understand the needs of their business environment.



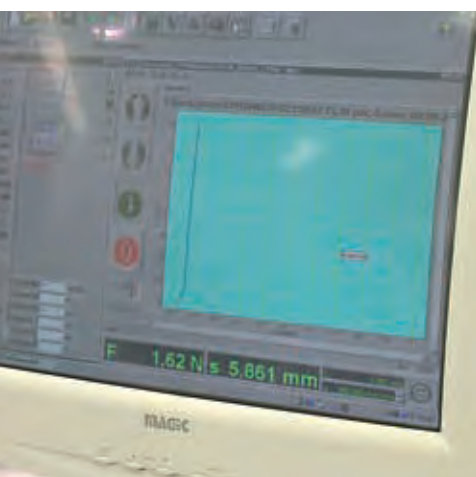
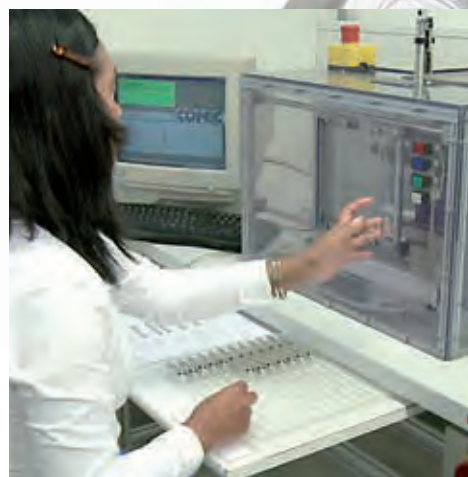
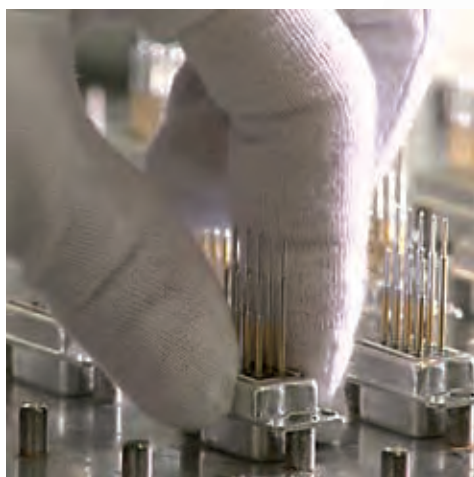
OUR PHILOSOPHY – CUSTOMER SATISFACTION

Quality is recognized right from the beginning with Total Quality Management concept. Therefore our customers are included into all our processes, starting with the design phase, first sampling, series production release and continuous sales support. The phases will be accompanied by drawings, samples and test reports. The entire quality process is documented and approved. CONEC is certified to ISO/TS 16949:2009.

CONEC inhouse is equipped with modern test systems. We can verify the requirements and implement a continuous product improvement process to meet and exceed future requirements. To fulfill international and national requirements most of CONEC product series are registered by UL, CSA or VDE.



Flexibility, assurance and rapid response are required in today's market more than ever before. CONEC fulfills these demands with central order-processing and well implemented quality control systems. Statistical process control as well as just in time deliveries are a common practice. Numerous customers honored this performance by approving CONEC to a "Preferred Supplier" status.



CIRCULAR CONNECTORS
OVERMOULDED
M8, M12, 7/8", RD24



Sensor Actor Line Connectors are used in many applications in the field of automation technology. The installation costs and time spent are drastically reduced through the use of connectors with integral wires. The choice of material and the construction of the connector enable it to be used in harsh industrial environments. Innovative connection technology fulfilling the requirements of protection class IP67. It comes in a standard program with overmoulded versions - with anti vibration locking in various cable lengths and quality.

Characteristics	M8x1	M12x1	7/8"	Rund24
Coding	A, B	A, A shielded, B, C, D, X		
Female Connector	✓	✓	✓	✓
Male Connector	✓	✓	✓	✓
Housing type	axial, angled	axial, angled	axial, angled	axial, angled
Number of poles	3, 4, 5, 8 pos	3, 4, 5, 6, 8, 12 pos	2 + PE, 4, 4 + PE pos	3 + PE pos
Display	2, 3 LED	2, 3 LED		
Cable quality	PVC, TPU	PVC, TPU, TPU irradiated	PVC, TPU	PVC
Type of connection	Screw Snap-in Screw/Snap-in	Screw	Screw	Screw
Degree of protection*	IP67	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.
* in mated condition

CIRCULAR CONNECTORS

FIELD ATTACHABLE

M8, M12, 7/8", RD24, M23



Characteristics	M8x1	M12x1	7/8"	M23	M23 with cable	Round24
Coding	A	A, A shielded, B				
Female Connector	✓	✓	✓	✓	✓	✓
Male Connector	✓	✓	✓			✓
Housing type	axial, angled	axial, angled	axial	axial	axial	axial, angled
Number of poles	3, 4 pos	4, 5 pos	2 + PE, 4, 4 + PE pos	16x Signal + 3x Power 8x Signal + 3x Power	16x Signal + 3x Power 8x Signal + 3x Power	3 + PE, 6 + PE pos
Type of connection	Solder, Clamp, Screw	Clamp, Screw	Screw	Solder, Crimp	Cable: TPU	Screw
Degree of protection*	IP67	IP67	IP67			IP67

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.
 * in mated condition

Field attachable connectors from CONEC allows the freedom and flexibility to react to the cabling situation on site. Practical, cost-effective and, above all, flexible solutions for quick cabling are required for both small series as well as special purpose machines. This program compri-

ses connectors and adapters – naturally with anti-vibration locking – in a straight or angled construction as well as in shielded versions. You can choose between screw and clamp connections as well as a maximum cable diameter of 4 up to 12mm.



SOCKETS
M8, M12, 7/8"



There are various requirements for modern device connection technology today. The main issues are progress in miniaturisation in engine and machine design as well as applications with increased power requirements. Safe data transmission must always be guaranteed, even in harsh environmental conditions. For connection on the device side, CONEC offers a broad range of unit side connectors. Fields of application are, amongst others:

- distribution cabinets
- engine and speed sensor connection technology
- signal and power integration

Characteristics	M8x1	M12x1	7/8"	M12x1 SMT
Coding	A, B	A, A A shielded		A, B, D, shielded
Female Connector	✓	✓	✓	✓
Male Connector	✓	✓	✓	✓
Housing type	axial, angled	axial, angled	axial	axial
Number of poles	3, 4, 5, 8 pos	3, 4, 5, 8, 12 pos	2 + PE, 4, 4 + PE pos	4, 5, 8 pos
Assembly type	Front, Back	Front, Back, Positioning	Front Back	Front
Display	3 LED			
Thread	M8x0,5	M16x1,5, PG9, M12x1	PG13,5, PG11	M14x1
Installation Height	depending on version			9 mm, 13 mm
Type of connection	Wire, PCB	Wire, PCB	Wire, PCB	Reflow Soldering
Degree of protection*	IP67	IP67	IP67	IP67

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* in mated condition



PANEL PLUGS

PANEL FEMALE



These connectors were designed specially for use with sensor pipe mounting. Depending on the version, these components come with a screw-on, snap-in or screw-on/snap-in connection. All versions are available either with solder or board contacts for direct circuit board connection. The transparent versions are designed with a recess for attaching a SMD-LED.

Characteristics	M8x1	M12x1
Coding	A-coding A-coding shielded	A-coding
Female Connector	✓	
Male Connector	✓	✓
Housing type	axial	axial
Number of poles	3, 4 pos	4, 5, 8 pos
Housing type	Plastic Semimetal Fullmetal	Plastic
Type of connection	Solder, PCB	Solder, PCB
Degree of protection*	IP67	IP67

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

* in mated condition



CIRCULAR CONNECTORS FOR SPECIAL APPLICATIONS



Characteristics	M8x1 overmoulded	M12x1 overmoulded	M8x1 Sockets	M12x1 Sockets	M12x1 Sensor-Actor Junction box
Coding	A	A	A	A	A
Female Connector	✓	✓	✓	✓	✓
Male Connector	✓	✓			
Housing type	axial, angled	axial, angled	axial	axial	4- and 8-fold
High Temperature		✓		✓	
Food & Beverage	✓	✓	✓	✓	✓
Number of poles	3, 4 pos	4, 5 pos	3, 4 pos	4, 5 pos	4, 5 pos
LED-Display	2, 3 LED	3 LED			1 LED
Thread			M8x0,5	M16x1,5, PG9	
Cable quality	PP orange	PP, TPE irradiated			
Type of connection			Wire	Wire	M23 connector
Degree of protection*	IP69K	IP65 (HT), IP69K (F & B)	IP69K (F & B)	IP67, IP69K (F & B)	IP67

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

* in mated condition

The demands for higher degrees of temperature resistance certainly are not limited to industrial automation. For these kinds of applications, CONEC offers the high temperature family, which can withstand 8000 hours at a constant temperature of +125°C – it can also withstand temporary peak values of up to 150°C over 2000 hours. The Food & Beverage industry has very special requirements regarding chemical

and temperature resistance – for the circular connector. Materials have been selected for the CONEC circular connectors of the Food&Beverage family which meet high hygienic requirements and which are resistant to common, harsh cleaning agents used in high pressure cleaning processes. Food&Beverage circular connectors from CONEC meet protection class IP69K.

CIRCULAR CONNECTORS FOR BUS SYSTEMS



Bus technology continues to advance in industrial automation. To access the very complex world of bus technology, CONEC offers connectors for Profibus DP, DeviceNet and Industrial Ethernet 10 Gbit. Profibus is a manufacture-dependent, open field bus system for a variety of applications in manufacturing, processing and building automation. Industrial Ethernet is the general term for all applications that use the Ethernet standard to network devices used in industrial automation.

Characteristics	M8x1 Panel plugs	M12x1 overmoulded	M12x1 field attachable	M12x1 Sockets
Coding	A	B, D, X	B	B, D, X
Female Connector	✓	✓	✓	✓
Male Connector		✓	✓	✓
Housing type	axial	axial, angled	axial	axial, angled
Profibus DP		✓	✓	✓
Industrial Ethernet 100MHZ	✓	✓		✓
10 Gigabit Ethernet		✓		✓
DeviceNet		✓	✓	✓
RJ45			✓	✓
Number of poles	4 pos	4, 8 pos	4 pos	4, 8 pos
Type of connection	PCB		Clamp Screw	Wire, PCB, with Cable
Degree of protection*	IP67	IP67	IP67	IP67, RJ45: IP20 mated

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

* in mated condition



JUNCTIONS SYSTEMS
M8, M12, 7/8"



Characteristics	M12x1/M8x1 Y-Splitter	M12x1 Duo-Splitter	Junction box	T-Adapter T-Adapter
Connection				
Coding	A	A	A	A
Installation size	M12x1	M12x1	M12x1, M8	M12x1, 7/8"
Number of poles	4, 5 pos	4, 5 pos	3, 4, 5 pos	4, 4 + PE, 5, 8 pos
Protective circuit	1:1 wire connection, signal distribution	1:1 wire connection, signal distribution		1:1 wire connection, signal distribution
Connection			M23x1, TPU	
Degree of protection*	IP67	IP67	IP67	IP67

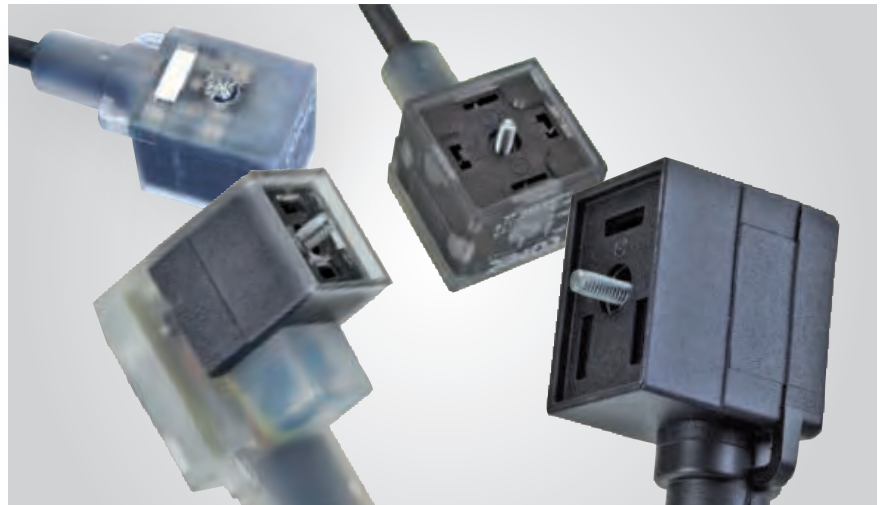
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* in mated condition

This series provides a cost-effective and practical wiring system in the field for sensors and actors with a cabling system that meets IP67 requirement. Junction systems are used anywhere sensor and actor signals need to be extended quickly and easily for control systems. Indi-

vidual signals are either connected directly to the system via a homerun cable or via a connection interface. Optional LED displays for signal and power reduce the effort required to track down errors.



VALVE CONNECTORS



Characteristics	Type A	Type B	Type B Industry	Type C Contact distance 8 mm	Type C Contact distance 9,4 mm
Building					
Ground jumpered with protection circuit	✓			✓	✓
Ground jumpered without protection circuit	✓			✓	✓
With protection circuit		✓	✓		
Without protection circuit		✓	✓		
With protection circuit ground turned 180°			✓		
Without protection circuit ground turned 180°			✓		
Number of poles	2 + PE pos	2 + PE pos	2 + PE pos	2 + PE pos	2 + PE pos
Cable quality	PVC, PUR, TPU	PVC, PUR, TPU	PVC, PUR, TPU	PVC, PUR, TPU	PVC, PUR, TPU
Degree of protection*	IP67	IP67	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

* in mated condition

Valve connectors are a compact and very robust connection solution for the secure transmission of voltages and current for pneumatic, hydraulic and electromagnetic actuators. Five different designs – A, B, B-Industry, C contact distance 8 mm / 9.4 mm – are available that meet EN 175301-

803 specifications. Versions available include an integrated protective circuit to reduce voltage spikes and/or an LED function display for quick error diagnosis. Versions without the integrated protective circuit are also available.

D-SUB CONNECTORS STANDARD/HIGH DENSITY/ COMBINATION



Characteristics	D-SUB Standard	D-SUB High Density	D-SUB Combination
Shell	Steel tin plated, Brass tin plated, Stainless steel		
Number of poles	up to 50 pos	up to 78 pos	Shell size 1-5 up to 8 Power/Coaxial/HV up to 42 Signal
Contact plating	Gold plated over nickel		
Version			
Solder pin straight	✓	✓	✓
Solder pin angled	✓	✓	✓
Press-fit contact straight	✓	✓	✓
Solder cup	✓	✓	✓
Wire Wrap	✓		✓
Crimp body (without contacts)	✓	✓	✓
IDC for flat cable	✓		
Interface adapter	✓	✓	
Current rating	up to 7,5 A	up to 3 A	up to 7,5 A (Signal), 40 A (Power)
Quality class for connectors	up to Quality class 1		
Degree of protection*	IP20		

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

* in mated condition

CONEC D-SUBminiature connector dimensions conform to IEC 60807-2 (formerly DIN 41652) or MIL-C-24308. These cable device connectors each consist of a plug jack mating pair and are available in five standardized housing sizes with standard pole counts of 9, 15, 25, 37 and 50. In addition to this, CONEC also has a high density series deliverable with pole counts of 15, 26, 44, 62 and 78. The Combination D-SUB connectors can be used in a wide variety of applications. Different combinations of contact styles like signal, high power, high voltage and

coaxial contacts, are possible within one connector. The advantage of these connectors is by combining different contact styles within one connector, space and cost savings at the IO interface can be achieved. In general the connectors are supplied with signal contacts up to the crimp version. The high current, high voltage and coaxial contacts can be ordered separately or they can be factory assembled. These connectors are utilized in control, regulation and communications technology.

FILTER D-SUB STANDARD/HIGH DENSITY/ COMBINATION/ADAPTER



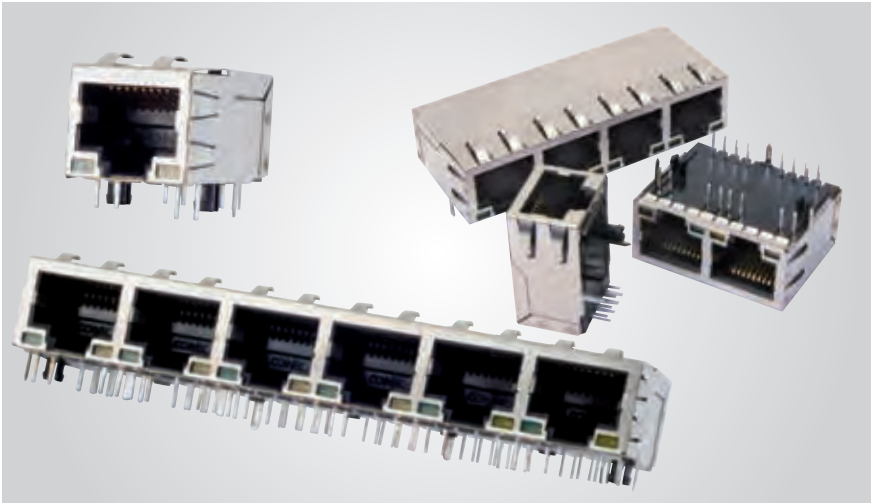
Characteristics	Filter D-SUB Standard	Filter D-SUB High Density	Filter D-SUB Combination
Shell	Steel tin plated, Brass tin plated		
Number of poles	up to 50 pos	up to 78 pos	2W2C, 3W3, 3W3C, 5W5, 8W8
Contact plating	Gold plated over nickel		
Version			
Solder pin straight	✓	✓	✓
Solder pin angled	✓	✓	✓
Press-fit contact straight			✓
Solder cup	✓	✓	✓
Interface adapter	✓	✓	
Filter Type			
C-Filter	33 nF	1000 pF	bis/up to 100 NF
LC-Filter	33 nF	2600 pF	
Pi-Filter	up to 2000 pF		
DWV	up to 1500 VDC	up to 300 VDC	up to 1500 VDC
Current rating	up to 7,5 A	up to 3 A	up to 7,5 A (Signal), 40 A (Power)
Quality class for connectors	up to Quality class 1		
Degree of protection*	IP20		

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.
* in mated condition

At increasing data transfer rates and operating frequencies it becomes increasingly important to safeguard the function of electrical devices and systems in their interactive relationship so that operation can be free of interference. In applications where connectors are used with shielded enclosures a breakdown in shielding is common since the connector's plastic isolating body provides no shielding against any interference signals that may be present. CONEC filter connectors contribute to the

protection of EMC zones. The integrated filter inside the connector saves PCB-space and can be installed into an existing PCB layout. To replace an unfiltered connector into filtered one is simple and effective. D-SUBminiature connectors as a standard layout, high density, combination or as adapter provide favourable conditions for equipping interface applications with different filter elements.

RJ45 MODULAR JACK
WITH MAGNETIC FILTER



The CONEC RJ45 Magnetic Modular Jack offers ideal protection from electromagnetic interference and common-mode noise in Ethernet applications.

The advantages are that susceptibility to interference is reduced and space is saved on the printed circuit board through the integration of the components into the connector. The requirements of signal transmission are specified in the IEEE 802.3 Standard. The series is available in single and multi ports (2-4-6-8) as solder and SMT fixtures.

Characteristics	Solder pin straight	SMT
Contact finish	min. 50 micro inch gold plated over nickel other plating options available on request	
Shielding	Fully shielded	
Number of ports	1, 2, 4, 6, 8	
Turns ratio of transformers (TX/Rx)	1:1/1:1, 1:1,414/1:1	
LED	with (green yellow), without	
Degree of protection	IP20	

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.



D-SUB HOODS AND ACCESSORIES



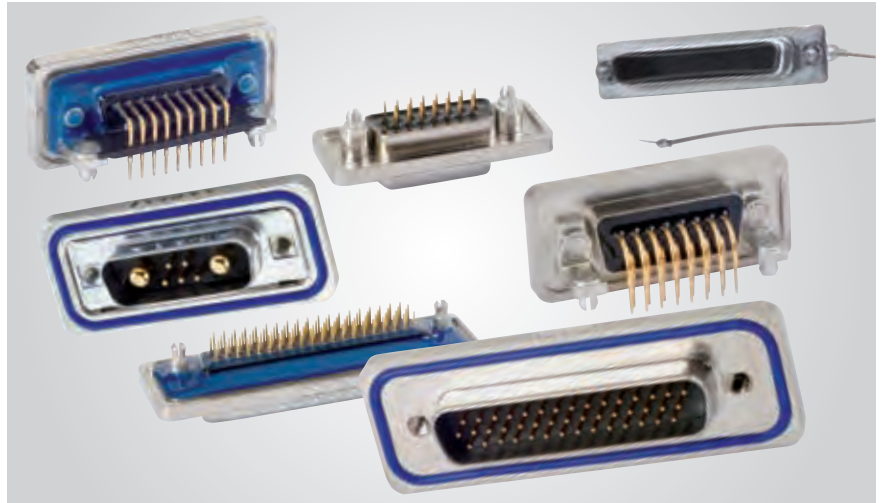
Characteristics	Metal Hood	Plastic Hood metallized	Plastic Hood	Protection cap plastic design	Protection cap metal design
Shell size 1-5	✓	✓	✓	✓	✓
Shielding			✓	✓	✓
Lanyard				✓	✓
Cable entry					
straight	✓	✓	✓		
side	✓	✓	✓		
multiple	✓	✓	✓		
Degree of protection*	IP20	IP20/IP67	IP20/IP67	IP20	IP20/IP67
Fastening	depending on type				
Without screws					
Short screws					
Jack screws					
For Flat cable					
Cable to cable connection					
With slide lock					

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.
 * in mated condition

CONEC offers an extensive range of housings for different areas of application or requirements. Different versions like plastic, metallized plastic, plastic hoods with integrated shielding plate and up to full metal hoods are available. Special housings are available for combination D-SUB connectors, which have a large interior area for coaxial or high power contacts.

For our IP67 connectors a special hood in plastic or plastic metallized is available. Our hoods can also be combined with a broad range of applicable accessories for shielding, sealing and securing of connections and interfaces.

IP67 D-SUB CONNECTORS STANDARD/HIGH DENSITY/ COMBINATION



Characteristics	IP67 D-SUB Standard	IP67 D-SUB High Density	IP67 D-SUB Combination
Shell	Brass tin plated, Stainless steel, One piece zinc die-cast nickel plated shell (Solid Body)		
Number of poles	up to 50 pos	up to 78 pos	Shell size 1-5, up to 8 Power/Coaxial/HV, up to 42 Signal
Contact plating	Gold plated over nickel		
Version			
Solder pin straight	✓	✓	✓
Solder pin angled	✓	✓	✓
Press-fit contact straight	✓	✓	✓
Solder cup	✓	✓	✓
Interface adapter	✓	✓	
Current rating	up to 7,5 A	up to 3 A	up to 7,5 A (Signal), 40 A (Power)
Quality class for connectors	up to Quality class 1		
Degree of protection*	IP67		

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

* in mated condition

Connector systems able to meet special demands are needed for industrial use in harsh environments. The water resistant connector system developed by CONEC is intended for applications where dust and water are factors. Corresponding accessories, such as water resistant hoods and protective caps are available.

CONEC Solid Body D-SUB connector series was a consequent development to establish a D-SUB connector family which is especially designed for application in harsh industrial environment. The one piece body - made of zinc diecast - provides outstanding mechanical robustness and protection against splash water and dust under aggressive conditions. The connectors are available as D-SUB Standard versions with solder cup, solder pin straight and angled terminations and with a variety of mounting options. A broad range of High Density and combination versions complete the program as well.

IP67 FILTER D-SUB STANDARD/HIGH DENSITY



Special applications place certain demands on the connector. CONEC has developed the filtered water-proof D-SUB connector according to IP67 for this area of application. Special measures for waterproofing the connector as well as the sealing frame are necessary to ensure the requirements are addressed. These connectors are used in areas where dust and splash water may cause a functional disturbance. The connectors are available as Standard or High Density in the specified number of pins. Various filter technologies are used depending on the area of application and requirements. A large selection of capacitance values are available as a standard, depending on the requirement specifications. Special capacitance values or even mixed capacitance values can be realized within the connector.

Characteristics	IP67 Filter D-SUB Standard	IP67 Filter D-SUB High Density
Shell	Brass tin plated	
Number of poles	up to 50 pos	up to 78 pos
Contact plating	Gold plated over nickel	
Version		
Solder pin straight	✓	✓
Solder pin angled	✓	✓
Solder cup	✓	✓
Filter Type		
C-Filter	✓	✓
DWV	up to 424 VDC	up to 300 VDC
Current rating	up to 7,5 A	up to 3 A
Quality class for connectors	up to Quality class 1	
Degree of protection*	IP67	

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 * in mated condition



IP67 RJ45
INDUSTRIAL ETHERNET
CONNECTORS

The RJ45 connector is the most used interface in data communications. Based on this connector interface, CONEC has designed a rugged versatile connector system for Cat. 5e and Cat. 6A, that ensures reliable protection and the convenience of easily mating under the most difficult and harsh environments. The housing with bayonet coupling mechanism is in compliance with IEC 61076-3-106 and provide increased protection for the connector system against contamination and moisture (IP67 rating). Furthermore, the increased demands for mechanical stability, temperature resistance, vibration immunity and protection against EMI and UV radiation will be fulfilled. This program is supplemented by preassembled patch cables with IP67 rating in various lengths and designs. The zinc die-cast version provides an excellent protection against harsh environments.



Characteristics	Installation Housing Set	Plug Connector Set	Patch cord	Protection cap
Plastic	✓	✓	✓	✓
Plastic metallized	✓	✓	✓	✓
Zinc die-cast	✓	✓	✓	✓
Locking mechanism				
Bayonet locking type	✓	✓	✓	✓
M28 thread	✓	✓	✓	✓
Cable termination				
Soldering termination	✓			
IDC	✓	✓		
Screw termination	✓	✓		
Adapter	✓			
Assembly				
Frontmounting	✓			
Backmounting	✓			
Cable				
UTP Cat. 5e Indoor/ Outdoor		✓	✓	
STP Cat. 5e Indoor/ Outdoor		✓	✓	
S/STP Cat. 6A		✓	✓	
Shielding				
with	✓	✓	✓	
without	✓	✓	✓	
Degree of protection*	IP67	IP67	IP20 IP67	IP67

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IP67 Mini USB, USB 2.0 CONNECTORS



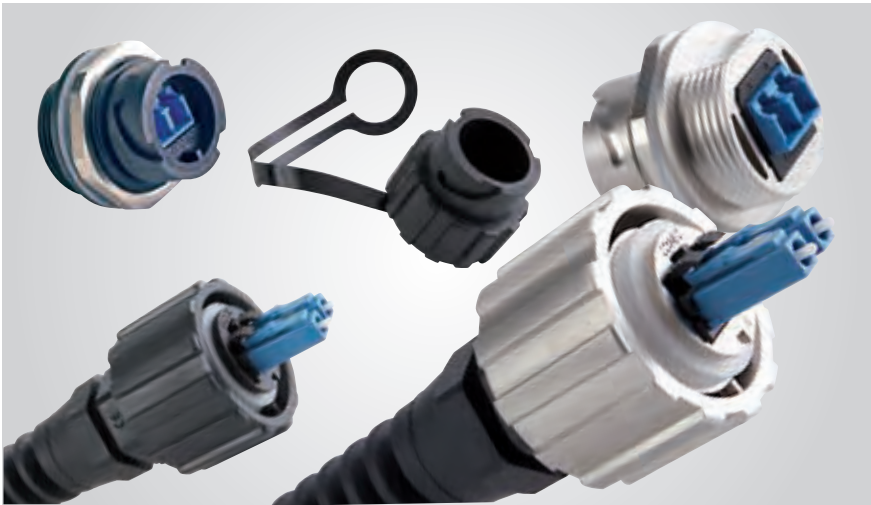
CONEC completed its product line of bayonet locking series with watertight Mini- USB 2.0 Type B connectors. The product line includes a panel receptacle for PCB installation or termination to a flexible circuit. The overall dimensions are compact and require a 12 mm diameter panel cutout. The pre – terminated patch cables with an overmoulded IP67 Mini USB Type B plug and an overmoulded USB Type A are available in 2, 3 and 5 m length. The housings for the USB 2.0 Type A connectors have a bayonet latching mechanism according to the IEC 61076-3-106 standard. The housing can be mounted on the front or rear side of enclosure panels with thickness up to 3,2 mm. USB 2.0 plug set with solder termination is available for cable side and there are also preassembled patch cords available in various IP protection grades and lengths. This robust design with IP67 rating ensures reliable protection and easy connection under harsh environmental conditions.

Characteristics	USB	Mini USB
Plastic	✓	✓
Plastic metallized	✓	
Metall	✓	
Version		
Installation Housing Set	✓	✓
Plug Connector Set	✓	
Patch cord	✓	✓
Protection cap	✓	✓
Adapter	✓	
Locking mechanism		
Bayonet locking type	✓	✓
M28 thread	✓	
Cable termination		
Soldering termination	✓	
Adapter	✓	
PDB soldering termination		✓
Shielding		
shield	✓	✓
Degree of protection*		
IP20 [Patch]	✓	✓
IP67	✓	✓

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.
 * in mated condition



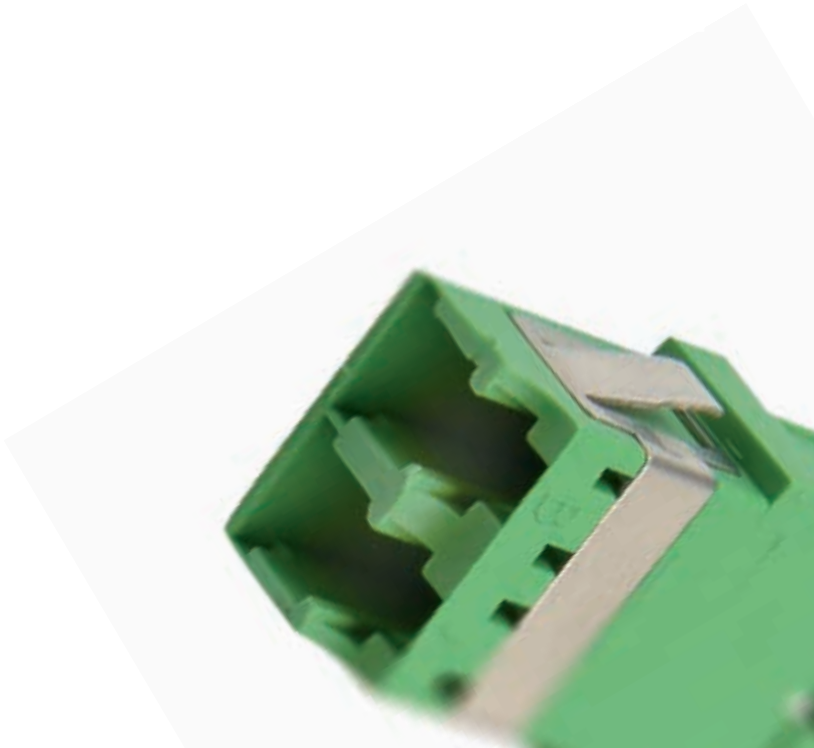
IP67 FIBER OPTIC
LC-DUPLEX



CONEC has developed an ODVA compatible IP67 Fiber Optic connection for harsh indoor and outdoor environment. The new system is a bayonet locking enclosure with integrated LC Duplex Connectors and Adapters. The bayonet locking enclosure provides an easy and secured connection also under adverse conditions. The available materials for the housings are plastic or nickel plated zinc die-cast for extreme harsh conditions. The LC connections are available for single mode or multimode transmission, depending on the requirements of the operated system. The major application for these connectors are connections from base stations to the transmission modules based on antenna poles or for network connections on the last mile into end users homes. This program is supplemented by preassembled patch cables in various lengths.

Characteristics	Installation Housing Set	Plug Connector Set	Patch cord	Protection cap
Plastic	✓	✓	✓	✓
Zinc die-cast	✓	✓	✓	✓
Locking mechanism				
Bayonet locking type	✓	✓	✓	✓
Version				
Single Mode	✓	✓	✓	
Multi Mode	✓	✓	✓	
APC Single Mode	✓	✓	✓	
Assembly				
Frontmounting	✓			
Backmounting	✓			
Degree of protection*	IP67	IP67	IP67	IP67

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* in mated condition



FIBER OPTIC ADAPTERS



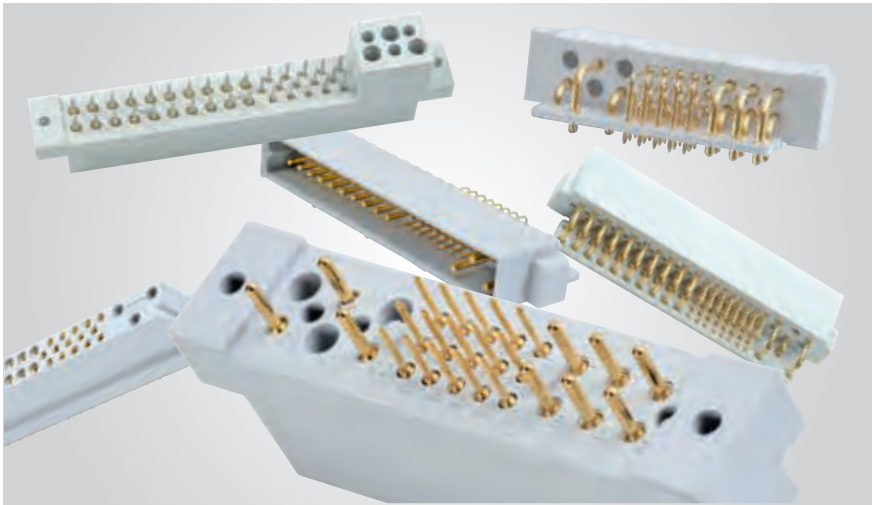
Characteristics	LC	SC	ST	FC	SC/FT	SC/FC	FC/ST
Plastic	✓	✓	✓	✓	✓	✓	
Zinc die-cast	✓	✓	✓	✓	✓	✓	✓
Version							
Simplex		✓	✓	✓	✓	✓	✓
Duplex	✓	✓	✓	✓	✓	✓	
Material Sleeve							
Single Mode Ceramic	✓	✓	✓	✓	✓	✓	✓
Multi Mode Ceramic, Phosphor bronze	✓	✓	✓	✓	✓	✓	✓
APC Single Mode Ceramic	✓	✓	✓	✓			
Mounting options							
Clip/Snap in	✓	✓			✓	✓	
Schraube/Screw version	✓	✓	✓	✓	✓	✓	✓
Degree of protection*				IP20			

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.
 * in mated condition

For a variety of different Fiber Optic connections CONEC supplies a wide range of Fiber Optic adapters. To support different application requirements in regards to transmission. CONEC adapters are available with Phosphor-Bronze or ceramic sleeves for precise positioning of the connector ferrules to each other. Adapters are available in both, plastic or zinc die-cast housing. The adapters are offered in simplex and duplex

configurations. For installation of the Fiber Optic adapters CONEC offers a stainless steel clip for push-in installation or adapters with integrated threads for simple fastening by screws. All CONEC Fiber Optic Adapters are supplied with pre-installed dust caps. For customer specific applications, please contact us.

COMPACTPCI
CONNECTORS



Characteristics	38 pos		47 pos		24 pos		26 pos	
	Pin	Socket	Pin	Socket	Pin	Socket	Pin	Socket
Precision machined contacts	✓	✓	✓	✓	✓		✓	
stamped contacts		✓		✓		✓		✓
Current rating Power	up to 40 A				up to 5 A		up to 40A	
Current rating Signal	up to 5 A		up to 3A		up to 3A		up to 3A	
Contact Layout	23 Power/15 Signal		23 Power/24 Signal		9 Power/15 Signal		11 Power/15 Signal	
Termination								
Solder pin straight	✓	✓	✓	✓	✓	✓	✓	✓
Solder pin angled	✓	✓	✓	✓	✓		✓	
Press-fit contact straight	✓	✓	✓	✓	✓	✓	✓	✓
Crimp body (without contacts)		✓		✓				

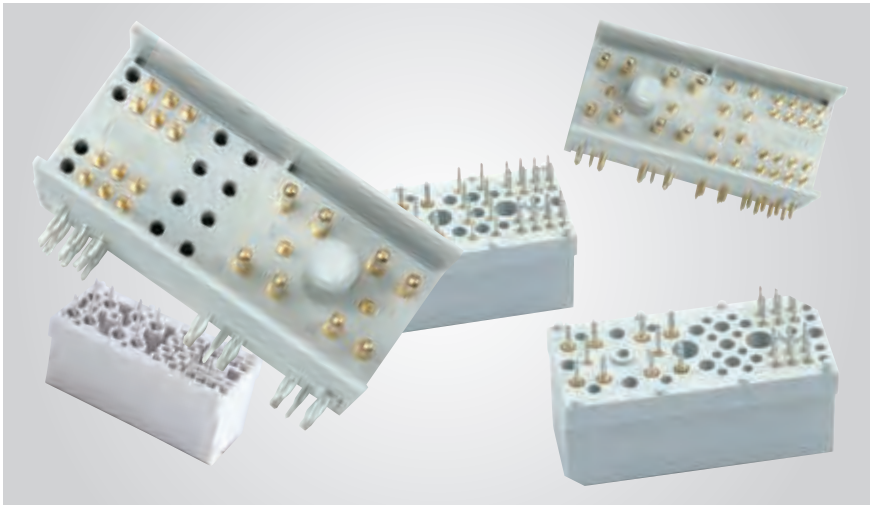
The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

The CompactPCI system has been defined by the PICMG group in PICMG 2.0. Besides the standardized 47-pin connector according to PICMG 2.11 R1.0, variations have been developed for different industrial applications. The CONEC product range covers a wide range of standard types of 47W23 and 38W23 connectors and also the compact sizes 26W11

and 24W9. Optional versions available with screw machine contacts for solder, pressfit and crimp termination. Also available with stamped and formed contacts for pressfit termination. Special types with pre- or post-mating contacts, inverted models and special assemblies are available on request.



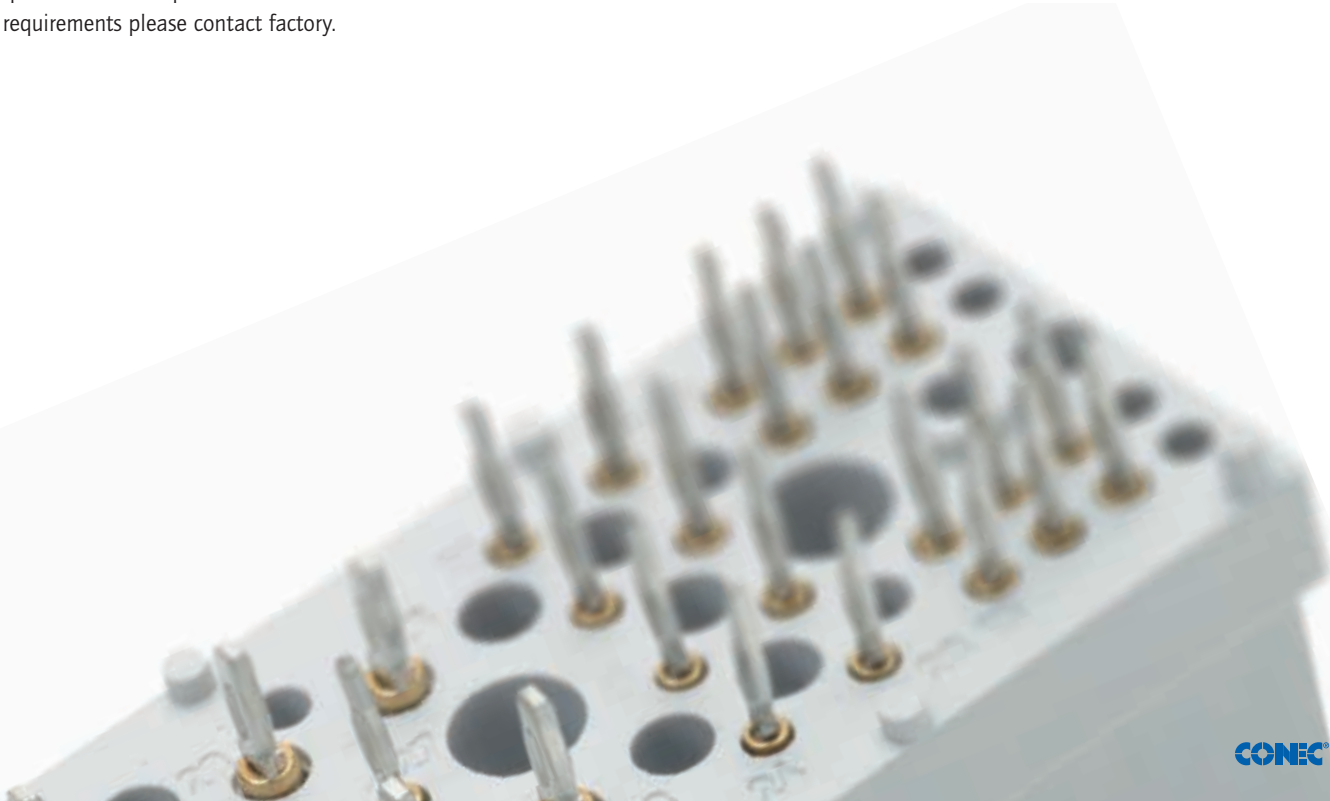
ADVANCEDTCA CONNECTORS



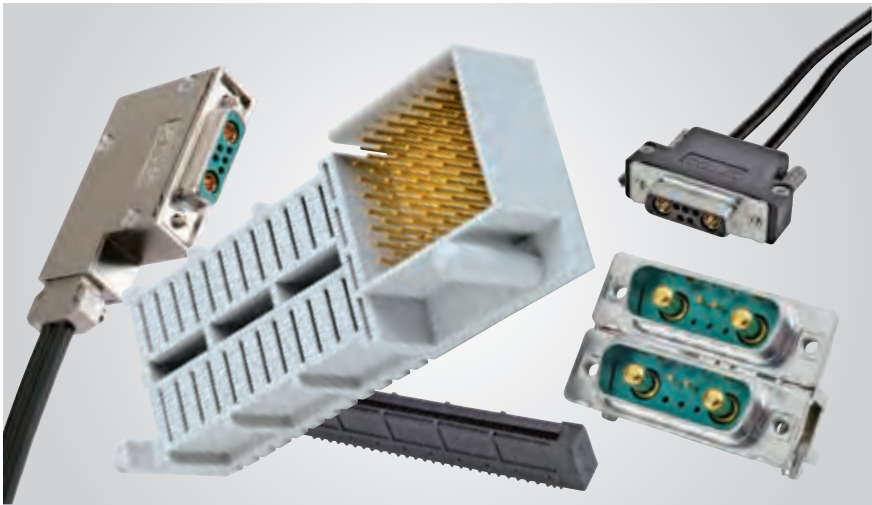
CONEC offers Power Connectors for AdvancedTCA backplanes and front boards, these are called "Zone 1 connectors". The straight AdvancedTCA female connector is used on the backplane and the angled AdvancedTCA male connectors is used on the front boards of the system. Both versions are available with solder or press-fit contacts. Precision machined contacts are used for the solder version. For the pressfit version, a combination of a precision machined mating site with a stamped and formed flexible press-fit zone is used. For the straight AdvancedTCA female connectors there is also a version available that is loaded with completely stamped and formed contacts. CONEC offers the 22-, 30- and 34-pin versions as optional models. For special requirements please contact factory.

Characteristics	22, 30, 34 pos	
	Pin	Socket
Precision machined contacts	✓	✓
Stamped contacts		✓
Current rating Power	up to 30 A	
Current rating Signal	up to 2 A	
Contact Layout	8 Power/26 Signal	
Termination		
Solder pin straight		✓
Solder pin angled	✓	
Press-fit contact straight	✓	✓

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.



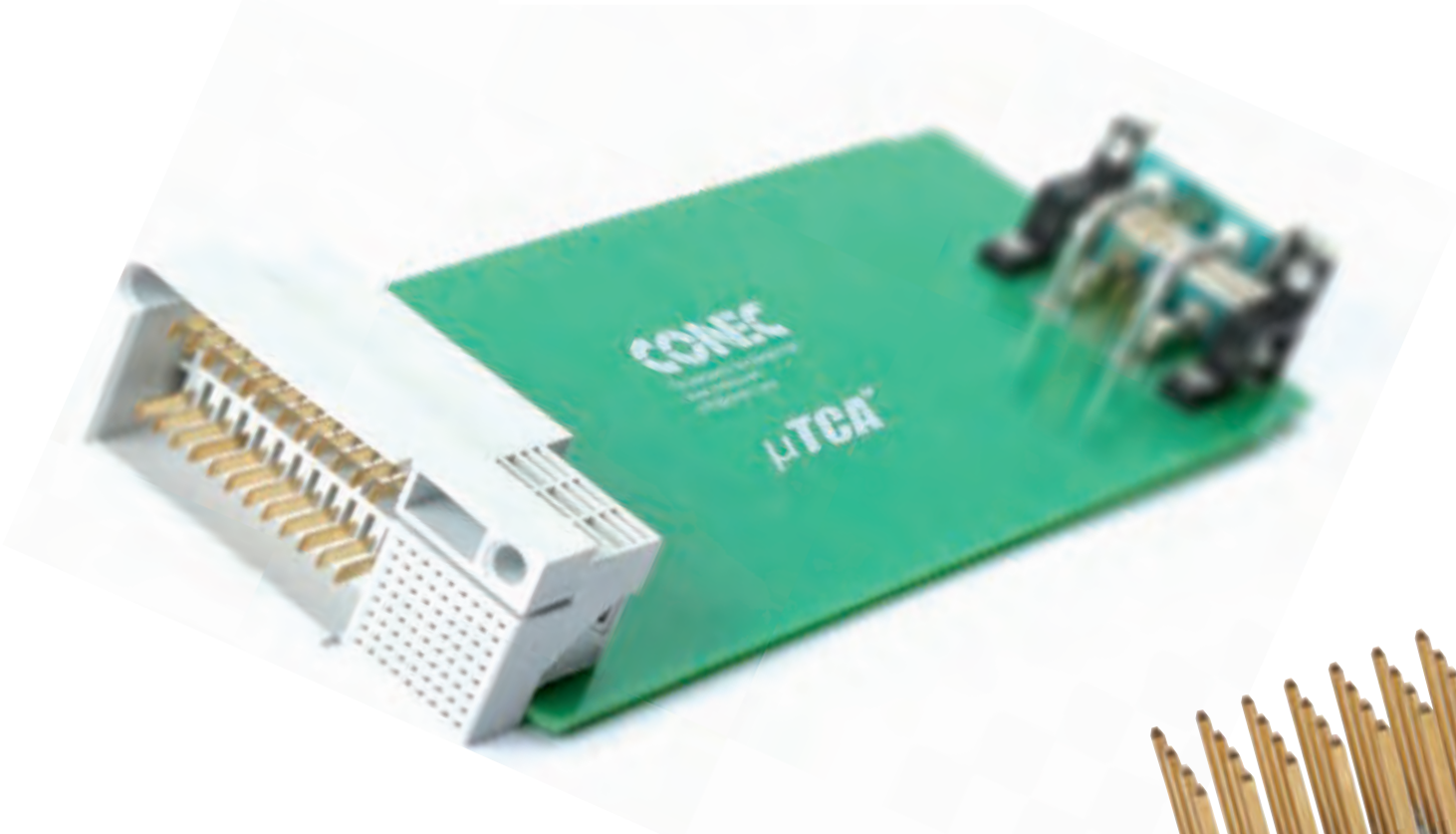
MICROTCA
CONNECTORS



CONEC offers the complete product range of MicroTCA.0 specified connectors. Power Module Input connector types 7W2 and 9W4 are available with through hole solder or SMT termination. CONEC also delivers versions with integrated low pass filter. The Power Module supplies the power through the Power Output Connector, a two piece hybrid connector system, into the MicroTCA backplane. CONEC AdvancedMC Connectors with pressfit contacts have an additional internal shielding, ensuring a fast and safe high-speed data transmission.

Characteristics	Power Input	Power Output	AdvancedMC Connector
Layout	7W2, 9W4	24 Power/72 Signal	170 High Speed Signal
Termination			
Solder pin angled	✓		
Press-fit contact straight		✓	✓
Press-fit contact angled		✓	
SMT angled	✓		
Solder cup	✓		
Crimp body (without contacts)	✓		

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.



PC104 AND PC104PLUS CONNECTORS



CONEC offers, the standard connector according contacts to the PC/104 specification with 40 - and 64 contacts, variants with up to 100 contacts per connector. The footprint of the PC104 connectors is 2,54 mm. The non-stack-through version is available with solder and pressfit termination. The stack-through version is available with pressfit termination and contact length of 12,2 mm and 17,0 mm. The PC104plus connector provides 120 contacts with a 2,0 mm footprint to the PCI BUS according PC/104. The non-stack-through version is available with solder and pressfit termination, the stack-through version with pressfit termination and contact length of 12,2 mm.

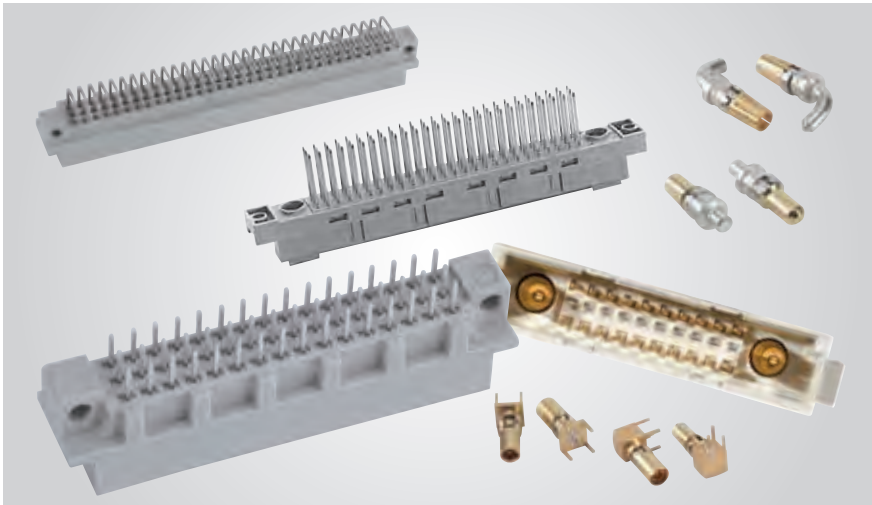
Also a shroud for the PC104plus connector and a spacer for PC104 is offered to complete this series.

Characteristics	PC104	PC104Plus
Number of poles	40, 64, 100 pos	120 pos
Insulator	PBT GF	
Material Contacts	Copper alloy	
Termination		
Press-fit contact straight	✓	✓
Solder pin straight	✓	✓

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.



DIN EN 60603-2
CONNECTORS



Characteristics		Type										Mixed version		Type		
		B	B/2	C	C/2	R	R/2	D	E	F	G	H	F	H	M	M/2
Number of poles		32, 64	16, 32	32, 64, 96	16, 32, 48	32, 64, 96	32, 48	32, 48	32, 48	64	up to 15	24 Signal 7 Power		78 Signal/ 2 Power/Coax 24 Signal/ 8 Power/Coax	30 Signal/ 2 Power/Coax 12 Signal/ 4 Power/Coax	
		PBT GF										PC Polycarbonat		PBT GF		
		Copper alloy														
		Gold over nickel										silver	Gold over nickel	silver	Gold over nickel	
Contact plating												silver	Gold over nickel	silver	Gold over nickel	
Working voltage		250 V					125 V			500 V	125 V	500 V	250 V			
Current rating		20°C	2 A					5,5 A			15 A	5,5 A	15 A	2 A 40 A High voltage		
	70°C	1 A					4 A			12 A	4 A	12 A				
	100°C	0,5 A					2,5 A			8 A	2,5 A	8 A				

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

Connectors for printed circuits according to DIN EN 60603-2 have been a part of CONEC's product range for many years. These connectors are used in equipment for data, measurement and control technology as well as power and industrial electronics. The advantage of this product family is that the connectors have the same or similar installation characteristics, which allows them to be used within a package. Within this connector series the variants B, C, D, E, F, G, H, M und R are available, depending on the contact density the current carrying capability could vary from low through mid range to high current conductivity. This product family also includes half configurations.

The following connection types available are, straight and angled solder, Wire Wrap, screw termination, solder lug and Faston. The M type connector of this series provides the possibility to combine Signal- , Coaxial and High Power contacts within one insulator. The current load for high power contacts is up to 40A. The possibility of contact combination provides a big advantage to save space and reduce costs during the layout process.

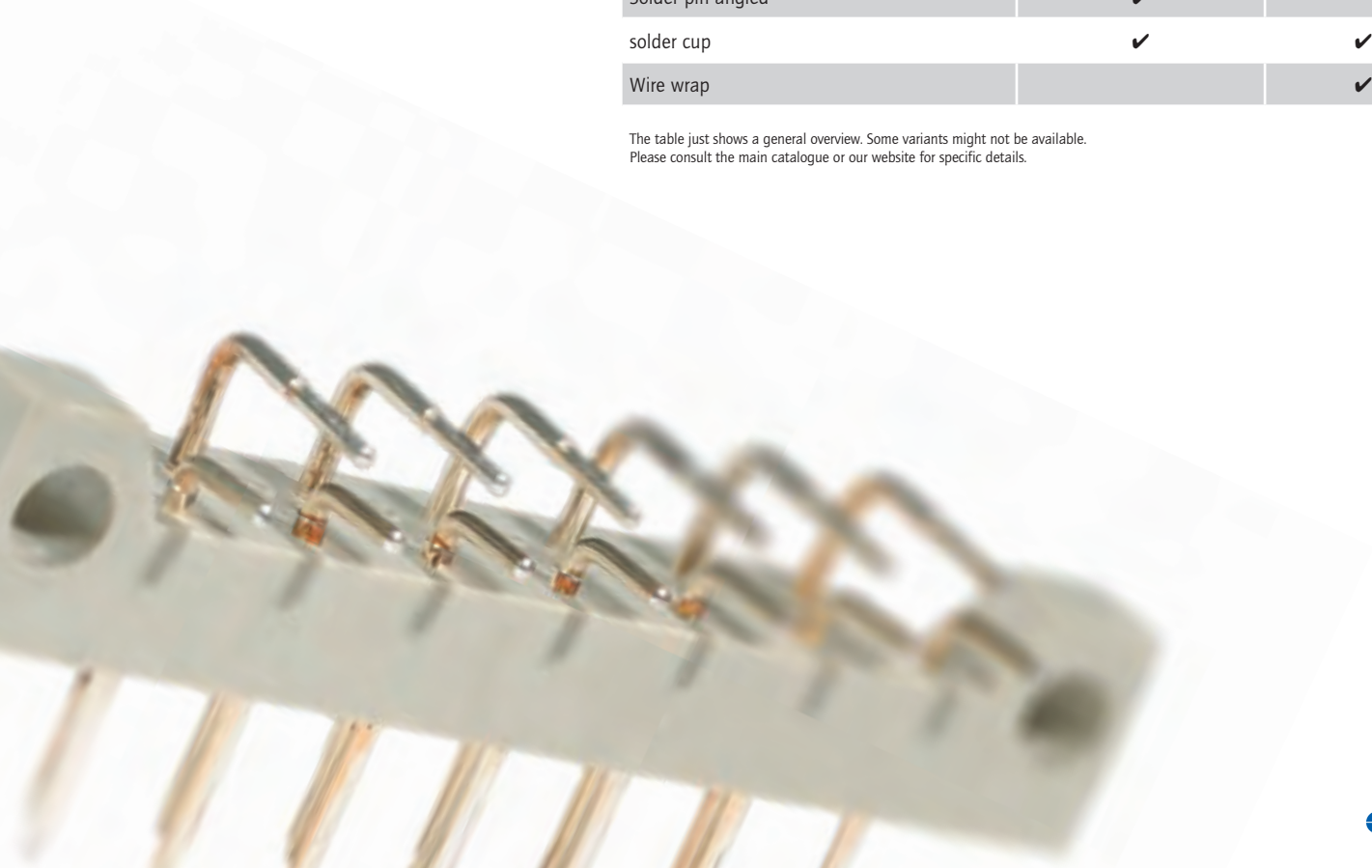
DIN 41617 CONNECTORS



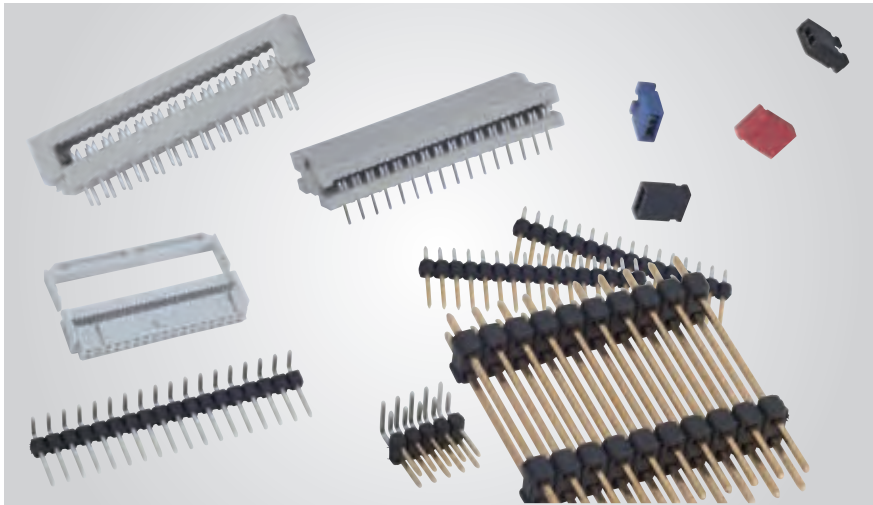
CONEC connectors according to DIN 41617 are continuously used in various industrial applications. The product range comprises male and female connectors in a 13, 21 and 31 pin configuration. Available connection types are straight and angled solder and hand solder. The contacts are available in silver and gold plating, depending on the application. In addition, the product range also includes a connector converter (adapter), which converts from DIN 41617 to DIN EN 60603.

Characteristics	DIN 41617	DIN 41617/ DIN EN 60603
Number of poles	13, 21, 31	31, 32
Insulator	PBT GF	
Material Contacts	Copper alloy	
Working voltage	250 V	
Current rating	Quality class 1 up to 4 A Quality class 3 up to 2 A	4A
Termination		
Solder pin straight	✓	
Solder pin angled	✓	
solder cup	✓	✓
Wire wrap		✓

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.



DIN 41651
FLAT CABLE
CONNECTORS



Characteristics	DIN 41651	DIP + PCB	DIN 41612-IDC	CBL	CSU
Number of poles	6-64 pos	4-64 pos	9-64 pos	5-40 pos	5-100 pos
Insulator	PBT GF			PA	
Material Contacts	Copper alloy				
Contact plating	Gold over nickel	Gold over nickel or tin plated	Gold over nickel	Gold over nickel or tin plated	
Working voltage	250 V			250 V	
Current rating	1A			5 A	
Termination					
Solder pin straight	✓	Solder pin to IDC		✓	✓
Solder pin angled	✓			✓	✓
IDC	✓		✓		

The table just shows a general overview. Some variants might not be available. Please consult the main catalogue or our website for specific details.

CONEC flat cable connectors are designed according to DIN 41651 and are available from 6- (space) to 64 position. These connectors accept flat cables with wire cross section AWG 28 and a footprint of 1,27 mm. The wires are terminated by IDC to the contacts. The corresponding mating connectors for PCB termination are available as straight and right angled

version. Two different latches are available options to secure the flat cable connectors with and without strain relief. Both connectors have a coding to prevent any mismatching. As completion of this series CONEC offers flat cable connectors for direct PCB termination with 2,54 mm x 2,54 mm footprint and DIP format from 4- to 64 position.



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