

# PRODUCT OVERVIEW

# CONEC<sup>®</sup>

TECHNOLOGY IN CONNECTORS<sup>™</sup>





**TECHNOLOGY IN CONNECTORS™**

Industry 4.0, the current trend of increasing automation and data exchange in manufacturing environments, has resulted in new demands on electronic connectors.

More data, being transferred at faster speeds, and the need for high reliability in sometimes harsh environments, has forced the development of new connectors.

CONEC's over 40 years of experience positions us to be a world leader in these interconnect products.

CONEC is a global player with its own subsidiaries and/or production facilities in Canada, United States, China, Czech Republic, Poland, France and UK.

At the headquarters in Lippstadt, CONEC has a large Research and Development Department, its own tooling shop, a CNC precision turnery and a plastic injection moulding plant.

CONEC Germany, Lippstadt



CONEC Canada, Brampton



CONEC USA, Garner





In addition to a variety of connectors for all current standards, our particular strength is the development of customized solutions.

CONEC products are used in automation, telecommunications and energy technology, machine manufacturing, agriculture and medical technology, transportation and aviation industry.

Our synchronous production system "CONEC active" is based on the principles of lean production and is the key to our sustained success.

In particular, we consider one of our strengths to be in the field of integrated moulding of components and assemblies.

To us, absolute customer orientation means: To deliver the right product at the right time, in the right quantity and the right quality to the right place.



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## Benefits

- Space-saving by transmitting data and power with one cable
- Fast-locking with bayonet
- Connectors are only lockable in completely mated condition
- Degree of protection IP67
- Data element 360° shielded

## Applications

- Drive technology
- Machine manufacturing
- Robotics
- Assembly and production lines
- Renewable energy
- Automation technology



Characteristics	B12		
	overmoulded	field attachable	Receptacles
Coding	1, 2	1, 2	1, 2
Housing Type	Female	Female	Male
Gender mating face: Power = Female Ethernet = Male	✓	✓	✓
Gender mating face: Power = Male Ethernet = Female	✓	✓	✓
Shielding		optional	
Configuration	axial	axial	axial
Number of poles data	4		
Number of poles power	2		
Current rating data contacts	4 A @ 40 °C		
Current rating power contacts	10 A @ 40°C		
Rated voltage data contacts	24 V DC		
Rated voltage power contacts	60 V DC		
Cable quality	TPU		
Bayonet locking	✓	✓	✓
Degree of protection (in mated condition)	IP67		



## Benefits

- Space-saving by transmitting data and power with one cable
- Fast-locking with bayonet
- Connectors are only lockable in completely mated condition
- Degree of protection IP67
- Data element 360° shielded

## Applications

- Drive technology
- Machine manufacturing
- Robotics
- Assembly and production lines
- Renewable energy
- Automation technology



Characteristics	B17		
	overmoulded	field attachable	Receptacles
Coding	1, 2, 3	1, 2, 3	1, 2, 3
Housing Type	Female	Female	Male
Gender mating face: Power = Female Ethernet = Male	✓	✓	✓
Gender mating face: Power = Male Ethernet = Female	✓	✓	✓
Shielding		optional	
Configuration	axial	axial	axial
Number of poles data	4		
Number of poles power	2+PE, 3+PE, 4+PE		
Current rating data contacts	4 A @ 40 °C		
Current rating power contacts	14 A @ 40°C, 20 A @ 40°C		
Rated voltage data contacts	24 V DC		
Rated voltage power contacts	250 V AC/DC, 630 V AC/850 V DC		
Cable quality	TPU		
Bayonet locking	✓	✓	✓
Degree of protection (in mated condition)	IP67		



## Benefits

- Space-saving by transmitting data and power with one cable
- Fast-locking with bayonet
- Connectors are only lockable in completely mated condition
- Adjustable direction of outlet (only receptacle angled)
- degree of protection IP67
- Data element 360° shielded

## Applications

- Drive technology
- Machine manufacturing
- Robotics
- Assembly and production lines
- Renewable energy
- Automation technology



Characteristics	B23		
	overmoulded	field attachable	Receptacles
Coding	1, 2, 3	1, 2, 3	1, 2, 3
Housing Type	Female	Female	Male
Gender mating face: Power = Female Ethernet = Male	✓	✓	✓
Gender mating face: Power = Male Ethernet = Female	✓	✓	✓
Shielding	✓	optional	
Configuration	axial	axial	axial, angled
Number of poles data	4		
Number of poles power	3+PE + 2, 4+PE		
Current rating data contacts	4 A @ 40 °C		
Current rating power contacts	28 A + 20 A @ 40°C, 28 A @ 40°C		
Rated voltage data contacts	24 V DC		
Rated voltage power contacts	630 V AC/850 V DC		
Cable quality	TPU		
Bayonet locking	✓	✓	✓
Degree of protection (in mated condition)	IP67		





## Benefits

- Space-saving by transmitting data and power with one cable
- Fast-locking with bayonet
- Connectors are only lockable in completely mated condition
- Degree of protection IP67
- Data element 360° shielded

## Applications

- Drive technology
- Machine manufacturing
- Robotics
- Assembly and production lines
- Renewable energy
- Automation technology



Characteristics	B40		
	overmoulded	field attachable	Receptacles
Coding	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6
Housing Type	Female	Female	Male
Gender mating face: Power = Female Ethernet = Male	✓	✓	✓
Gender mating face: Power = Male Ethernet = Female	✓	✓	✓
Shielding		optional	
Configuration	axial	axial	axial
Number of poles data	4		
Number of poles power	4+PE		
Current rating data contacts	4 A @ 40 °C		
Current rating power contacts	64 A @ 40°C		
Rated voltage data contacts	24 V DC		
Rated voltage power contacts	630 V AC/850 V DC		
Cable quality	TPU		
Bayonet locking	✓	✓	✓
Degree of protection (in mated condition)	IP67		



## Benefits

- Robust design with minimum space requirements
- Mating can be controlled with torque wrench
- Vibration proof screw lock
- Application-related cable qualities

## Applications

- Machine manufacturing
- Sensors and encoders
- Renewable energy
- Agricultural & construction machines
- Test devices and instruments
- Drive technology
- Communications
- Automation technology



Characteristics	M8x1	M12x1	7/8"	Round24
Coding	A, B	A, C		
Female Connector	✓	✓	✓	✓
Male Connector	✓	✓	✓	✓
Shielding	✓	✓		
Configuration	axial, angled	axial, angled	axial, angled	axial, angled
Number of poles	3, 4, 5, 8	3, 4, 5, 6, 8, 12	2+PE, 4, 4 + PE	3+PE, 6+PE
LED Display	2, 3 LED	2, 3 LED		
Cable quality	PVC, TPU	PVC, TPU	PVC, TPU	PVC
Screw termination with brass coupling screw/nut	✓	✓	✓	
Screw termination with die-cast coupling screw/nut	✓	✓		
Screw termination with plastic coupling screw/nut		✓		✓
Snap-in termination	✓			
Screw-/Snap-in termination	✓			
Degree of protection (in mated condition)	IP67	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available.



## Benefits

- Mating can be controlled with torque wrench (M8, M12)
- Vibration proof screw lock
- Easy assembly without special tools
- Terminal cross section max. 1.5 mm<sup>2</sup> (M12)

## Applications

- Machine manufacturing
- Industrial interfaces
- Cable Assembly
- Communications
- Medical
- Military
- Process automation
- Telecommunications
- Transport industry
- Sensors and encoders
- Renewable energy
- Agricultural & construction machines
- Test devices and instruments
- Drive technology
- Assembly and production lines



Characteristics	M8x1	M12x1	7/8"	Round24
Coding	A	A		
Female Connector	✓	✓	✓	✓
Male Connector	✓	✓	✓	✓
Shielding	✓	✓		
Configuration	axial, angled	axial, angled	axial	axial, angled
Number of poles	3, 4	4, 5, 8	2+PE, 4, 4+PE	3+PE, 6+PE
Terminal cross section screw termination	max. 0.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>
Terminal cross section crimp termination	max. 0.34 mm <sup>2</sup>	max. 1.0 mm <sup>2</sup>		
Terminal cross section solder termination	max. 0.34 mm <sup>2</sup>			
Terminal cross section clamp termination	max. 0.34 mm <sup>2</sup>			
Screw termination with stainless steel coupling screw/nut		✓		
Screw termination with plastic coupling screw/nut				✓
Degree of protection (in mated condition)	IP67	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available.





## Benefits

- Front and back panel mounting
- Direct circuit board mounting
- High number of poles with minimum space requirements

## Applications

- Drive technology
- Servo motors
- Frequency converters
- Rotary encoders
- Housing and device production
- Medical
- Test & Measurement devices
- Agricultural & construction machines
- Test devices and instruments
- Automation technology



Characteristics	M8x1	M12x1	7/8"
Coding	A, B	A	
Female Connector	✓	✓	✓
Male Connector	✓	✓	✓
Shielding	✓	✓	
Configuration	axial, angled	axial, angled	axial
Number of poles	3, 4, 5, 8	3, 4, 5, 6, 8, 12	2+PE, 4, 4+PE
Front panel mounting	✓	✓	✓
Back panel mounting	✓	✓	✓
Front panel mounting square		✓	
Positionable		✓	
Field attachable		✓ (Square, M20x1,5)	
LED Display		3 LED	
Thread	M8x0.5, M10x1, M12x1	M16x1.5, PG9, M12x1, M20x1.5	PG11, PG13.5
Installation height	depending on version		
Wire termination	✓	✓	✓
PCB-termination	✓	✓	✓
Degree of protection (in mated condition)	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available.

Accessories			
Protection caps	✓	✓	✓
Protection caps with loop	✓	✓	✓
Lock nut	✓	✓	✓





## Benefits

- Front and back panel mounting
- Automatic placement for SMT versions
- Direct circuit board mounting
- High number of poles with minimum space requirements
- Removable
- Low forces on the board
- Low contact resistance on the shielding
- Large tolerance compensation between board and housing

## Applications

- Drive technology
- Servo motors
- Frequency converters
- Rotary encoders
- Housing and device production
- Medical
- Test & Measurement devices
- Agricultural & construction machines
- Test devices and instruments
- Communications
- Automation technology



Characteristics	M8x1	M12x1
Coding	A, B	A
Female Connector	✓	✓
Male Connector	✓	✓
Unshielded	✓	✓
Shielded	✓	✓
Configuration	axial	axial
Number of poles	3, 4, 5, 8	4, 5, 8
Front panel mounting	✓	✓
Back panel mounting	✓	
Thread	M8x1 M10x1 M12x1	M14x1
Installation Height	6 mm, 9 mm, 10 mm, 13 mm	9 mm, 13 mm
SMT mounting	✓	✓
THR mounting	✓	✓ (only X-cod.)
Reflow soldering		✓
Degree of protection (in mated condition)	IP67	IP67

The table just shows a general overview. Some variants might not be available.



Benefits

- Easy installation in housing by pushing in
- Low installation height
- Various connection possibilities

Applications

- Sensors
- Housing and device production



Characteristics	M8x1	M12x1
Coding	A	A
Female Connector	✓	
Male Connector	✓	✓
Shielding	✓	
Configuration	axial	axial
Number of poles	3, 4	4, 5, 8
Housing material	Plastic Metal/plastic transparent Metal	Plastic
Solder termination	✓	✓
PCB-termination	✓	✓
Degree of protection (in mated condition)	IP67	IP67

The table just shows a general overview. Some variants might not be available.



## Benefits

- Transmission of high currents on minimum space requirements
- Polarity reversal prevented with coded insulators
- Robust design with minimum space requirements
- Mating can be controlled with torque wrench
- Vibration proof screw lock

## Applications

- Machine manufacturing
- Sensors and encoders
- Renewable energy
- Agricultural & construction machines
- Test devices and instruments
- Drive technology
- Automation technology



Characteristics	M12x1		7/8"		Round24 overmoulded
	overmoulded	Sockets	overmoulded	Sockets	
Coding	L, S, T	L, S, T			
Female Connector	✓	✓	✓	✓	✓
Male Connector	✓	✓	✓	✓	✓
Configuration	axial, angled (L-cod.)	axial, angled (L-/T-cod.)	axial, angled	axial	axial
Number of poles	3, 4, 2+PE, 3+PE, 4+FE	3, 4, 2+PE, 3+PE, 4+FE	2+PE, 4+PE,	2+PE, 4+PE	3+PE, 6+PE
Terminal cross section	1.5 mm <sup>2</sup> / 2.5 mm <sup>2</sup> (L-cod.)	1.5 mm <sup>2</sup> / 2.5 mm <sup>2</sup> (L-cod.)	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Screw termination with brass coupling screw/nut	✓		✓		
Wire termination		✓	✓	✓	✓
PCB-termination		✓ (L-/T-cod. angled)	✓	✓	
With cable	✓		✓		✓
Degree of protection (in mated condition)	IP67	IP67	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available.



## Benefits

- Resistance to commercial aggressive cleaning agents
- Robust design with minimum space requirements
- Mating can be controlled with torque wrench
- Vibration proof screw lock
- Use in constantly high ambient temperatures (HT)

## Applications

- Dairies, cheese factories
- Food Processing industry
- Beverage bottling/filling plants
- Drive technology
- Plastics injection molding plant



Characteristics	M8x1		M12x1	
	overmoulded	Sockets	overmoulded	Sockets
Coding	A	A	A	A
Female Connector	✓	✓	✓	✓
Male Connector	✓		✓	
Configuration	axial, angled	axial	axial, angled	axial
High Temperature			✓	✓
Food & Beverage	✓	✓	✓	✓
Number of poles	3, 4	3, 4	4, 5	4, 5
Display	2, 3 LED		3 LED	
Mounting thread		M8x0.5		M16x1.5, PG9
Cable quality	PP orange		PP orange, TPE irradiated	
Wire termination		✓		✓
Degree of protection (in mated condition)	IP67/IP69K (F&B)	IP67/IP69K (F&B)	IP65 (HT), IP67/IP69K (F&B)	IP65 (HT), IP67/IP69K (F&B)

The table just shows a general overview. Some variants might not be available.





## Benefits

- Robust design with minimum space requirements
- Vibration proof screw lock
- SMT versions for automatic placement
- High data transmission up to 10 Gbit/s (X-cod.)
- Flexible cabling in the field by field attachable variants

## Applications

- Assembly and production lines
- Process automation
- Building automation
- Security and surveillance systems
- Industrial interfaces
- Cable Assembly
- Communications
- Medical
- Military
- Telecommunications
- Transport industry
- Automation technology



Characteristics	M8x1				M12x1				RJ45
	overmoulded	field attachable	Sockets	SMT/THR	overmoulded	field attachable	Sockets	SMT/THR	
Coding	D, P	D, P	D, P	D, P	A, B, D, X	B, D, X	A, B, D, X	D, X	
Female Connector	✓	✓	✓	✓	✓	✓	✓	✓	
Male Connector	✓	✓			✓	✓	✓	✓	✓
Configuration	axial, angled	axial	axial, angled	axial	axial, angled	axial, angled (B- und D-cod.)	axial, angled	axial	axial
Profibus DP					✓	✓	✓		
Industrial Ethernet 100 MHz	✓	✓	✓		✓	✓	✓		✓
10 Gigabit Ethernet (x-coded)					✓	✓	✓		
DeviceNet					✓	✓	✓	✓	
CAN-Bus					✓		✓		
Number of poles	4	4	4	4	4, 8	4, 8	4, 8	8	4, 8
Solder termination		✓							
Screw termination		✓				✓			
Clamp termination		✓				✓			
Crimp termination		✓				✓			
Wire termination							✓		
PCB termination			✓				✓		
IDC termination									✓
With wire	✓		✓		✓		✓		✓
Degree of protection (in mated condition)	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP20 / IP67

The table just shows a general overview. Some variants might not be available.



## Benefits

- Reduction of installation costs
- Space saving design
- Robust design with minimum space requirements
- Signals and power are transmitted by standardized plug systems
- Back-to-back assembly with retaining clip

## Applications

- Machine manufacturing
- Assembly and production lines
- Renewable energy
- Drive technology



Characteristics	M12x1/M8x1 Y-Splitter	M12x1 Duo-Splitter	T-Splitter
Coding	A	A	A
Installation size	M12x1, M8x1	M12x1, M8x1	M12x1
Number of poles	3, 4, 5, 8	3, 4, 5	4, 5, 8
Protective circuit	1:1 wiring, signal distribution		
possible cable outlets	3	2	1
Degree of protection (in mated condition)	IP67	IP67	IP67

The table just shows a general overview. Some variants might not be available.

Accessories			
Protection caps	✓	✓	✓
Retaining clip			✓



## Benefits

- Compact design
- Continuous protection from the connector housing to the cable
- Degree of protection: IP67/IP69K
- Version for single wires (2-pos., DT, Superseal)
- Standard mounting options remain (DT, Superseal)
- Cover for protection against pollution (ISOBUS)
- Double outlet to split into 2 connections
- Termination plug (DT, Superseal)

## Applications

- Agricultural & construction machines
- Transport industry
- Emergency vehicles
- Process control



Characteristics	DT-Serie	Superseal 1.5	ISOBUS
Number of poles	2, 3, 4, 6, 8, 12	2, 3, 4, 5, 6	9
Male Connector	✓	✓	✓
Female Connector	✓	✓	✓
Overmould	TPU	TPU	TPU
Cable quality	PUR / PVC, up to AWG 18	PUR, AWG 18	PUR, Hybrid
Single wires possible	✓ (2-pos.)	✓ (2-pos.)	
Flexible protection tube termination with M12 thread	✓		
Termination double-outlet hose nozzle	✓ (2-, 4-, 6-pos.)	✓ (2-, 3-, 4-pos.)	
Corrugated tube			✓
Termination plug	✓	✓	
Optional wit LED & protection circuit	✓ (2-, 3-pos.)		
Current rating (depending on cable and protection circuit)	up to 13 A	up to 14 A	up to 16 mm <sup>2</sup> 60 A x2 10 mm <sup>2</sup> 35 A x2 6 mm <sup>2</sup> 25 A x2 2.5 mm <sup>2</sup> 15 A x2 0.5 mm <sup>2</sup> 5 A x5
Degree of protection (in mated condition)	IP67/IP69K	IP67/IP69K	IP67/IP69K

The table just shows a general overview. Some variants might not be available.



## Benefits

- Reduction of installation costs
- Fully protected cable harnesses
- Space saving design
- Robust design with minimum space requirements
- Different mounting options

## Applications

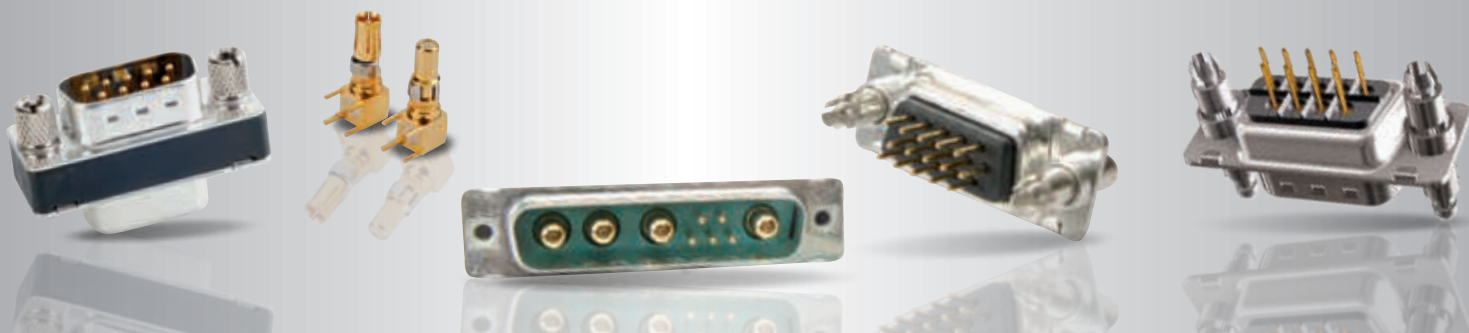
- Agricultural & construction machines
- Transport industry
- Emergency vehicles
- Process control



Characteristics	Type S	Type M	Type L
Dimensions (L x W x H mm)	66 x 30 x 15	66 x 40 x 15	76 x 55 x 22
Cable entries	1, 2	1, 2, 3	1
Cable exits	1, 2	1, 2, 3	3, 4
Overmould	TPU UL94 V-0	TPU UL94 V-0	TPU UL94 V-0
For use with connector series:			
DT	✓	✓	✓
Superseal	✓	✓	✓
M8	✓	✓	✓
M12	✓	✓	✓
D-Sub	✓	✓	✓
ISOBUS			✓
Cable quality	PUR (0.75 mm²)*	PUR (0.75 mm²)*	PUR (Hybrid)*
Max. cable diameter entry	8 mm	8 mm	17 mm
Max. cable diameter exit	8 mm	8 mm	13 mm (3 Outlets) 8 mm (4 Outlets)
Degree of protection (in mated condition)	IP67	IP67	IP67

\* other cable qualities on request





## Benefits

- One interface for power, RF and control signals
- Quick and easy locking and unlocking (SnapLock)
- Space-saving
- Cost saving – all in one connector
- Low magnetic versions
- Customer-specific solutions possible

## Applications

- Process control
- Control systems
- Telecommunications
- Medical
- Power supplies
- Test and measurement devices
- Transport industry



Characteristics	D-SUB Standard	D-SUB High Density	D-SUB Combination	D-SUB Combination High Density
Shell	Steel tin plated, Brass tin plated, Stainless steel			
Number of poles	9, 15, 25, 37, 50	15, 26, 44, 62, 78	21 different layouts	19W1, 15W4, 45W2
Solder pin straight	✓	✓	✓	✓
Solder pin angled	✓	✓	✓	✓
Press-fit contact straight	✓	✓	✓	
Solder cup	✓	✓	✓	✓
Wire Wrap	✓		✓	
Crimp body (without contacts)	✓	✓	✓	
IDC for flat ribbon cable	✓			
Interface adapter	✓	✓		
Current rating	up to 7.5 A	up to 3 A	up to 7.5 A (Signal), 40 A (Power)	up to 3 A (Signal), 40 A (Power)
Contact plating	Gold over nickel			
Quality class	1 + 3			
Degree of protection (in mated condition)	IP20			

The table just shows a general overview. Some variants might not be available.



## Benefits

- Filtering directly at interface
- Can be used without PCB redesign
- Filter-adapter for retrofitting existing systems
- Up to 3-step low-pass filters
- Selective filtering
- Mixed capacitances
- Low magnetic versions

## Applications

- Medical
- Telecommunications
- Test and diagnostic devices
- Power supplies
- Industrial interfaces
- Military



Characteristics	Filter D-SUB Standard	Filter D-SUB High Density	Filter D-SUB Combination
Shell	Steel tin plated, Brass tin plated		
Number of poles	9, 15, 25, 37, 50	15, 26, 44, 62, 78	2W2C, 3W3, 3W3C, 5W5, 8W8
Solder pin straight	✓	✓	✓
Solder pin angled	✓	✓	✓
Press-fit contact straight			✓
Solder cup	✓	✓	✓
Interface adapter	✓	✓	
C-Filter	up to 33 nF	up to 1000 pF	up to 100 nF
LC-Filter	up to 33 nF	up to 1000 pF	
Pi-Filter	up to 2600 pF		
DWV	up to 1500 V DC	up to 300 V DC	up to 1500 V DC
Current rating	up to 7.5 A	up to 3 A	up to 7.5 A (Signal), 40 A (Power)
Rated voltage	100 V DC		
Contact plating	Gold over nickel		
Quality class	1 + 3		
Degree of protection (in mated condition)	IP20		

The table just shows a general overview. Some variants might not be available.



## Benefits

- Cable entry: straight, lateral, multiple
- Large space for combination D-SUB
- CONEC SnapLock for fast and secured locking
- Screw latching or slide locking
- Touch protection of termination side
- For round and flat ribbon cables

## Applications

- Aviation
- Telecommunications
- Industrial plants
- Transportation industry
- Cable assembly



Characteristics	Metal Hood	Plastic Hood metallized	Plastic Hood	Protection cap plastic	Protection cap metal
Shell size 1-5	✓	✓	✓	✓	✓
Shielding			✓		
Lanyard					✓
Large assembly space		✓	✓		
Cable entry					
Straight	✓	✓	✓		
Side	✓	✓	✓		
Multiple	✓	✓	✓		
Degree of protection (in mated condition)	IP20				
Fastening					
Without screws	depending on type				
Short screws					
Jack screws					
For flat ribbon cable					
Cable to cable connection					
With slide lock					

The table just shows a general overview. Some variants might not be available.

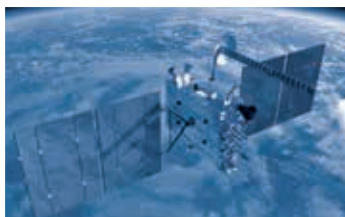


## Benefits

- Use in harsh environments
- Front and back panel mounting
- Solid body (robust, single-part connector housing)
- Increased corrosion protection
- Precision machined contacts
- SlimCon (compact size)
- Suitable for post overmolding (CONEC SlimCon Solder cup)

## Applications

- GPS Navigation
- Renewable energy
- Security and surveillance systems
- Military
- Aviation
- Communications
- Industrial interfaces
- Cable assembly
- Housing and device production
- Medical
- Process automation
- Control systems
- Process control
- Transport industry



Characteristics	IP67 D-SUB Standard	IP67 D-SUB High Density	IP67 D-SUB Combination	IP67 D-SUB Combination High Density
Shell Brass tin plated	✓	✓	✓	✓
Shell Stainless steel	✓	✓	✓	✓
Solid Body (one piece shell) Zinc die-cast nickel plated	✓	✓	✓	✓
CONEC SlimCon (Size1 - 3)	✓	✓	✓	✓
Number of poles	9, 15, 25, 37, 50	15, 26, 44, 62, 78	21 different Layouts	19W1, 15W4, 45W2
Solder pin straight	✓	✓	✓	✓
Solder pin angled	✓	✓	✓	✓
Solder cup	✓	✓	✓	✓
Interface adapter	✓	✓		
Current rating	up to 7.5 A	up to 3 A	up to 7.5 A (Signal), 40 A (Power)	up to 3 A (Signal), 40 A (Power)
Contact plating	Gold over nickel			
Quality class	1 + 3			
Degree of protection (in mated condition)	IP67			

The table just shows a general overview. Some variants might not be available.





## Benefits

- Filtering directly at interface
- Can be used without PCB redesign
- Use in harsh environments
- Selective filtering
- Mixed capacitance
- Low magnetic versions
- CONEC SlimCon either Silicone or EMC sealing

## Applications

- Medical
- Telecommunications
- Test and diagnostic devices
- Power supplies
- Industrial interfaces
- Military
- Aviation



Characteristics	IP67 Filter D-SUB Standard	IP67 Filter D-SUB High Density	IP67 Filter D-SUB CONEC SlimCon
Shell	Brass tin plated		Zinc die-cast nickel plated
Panel sealing	O-Ring		Sealing gasket
Number of poles	9, 15, 25, 37, 50	15, 26, 44, 62, 78	9, 15, 25
Solder pin straight	✓	✓	✓
Solder pin angled	✓	✓	
Solder cup	✓	✓	✓
Filter type			
C-Filter	up to 1300 pF	up to 1000 pF	up to 1200 pF
DWV	424 V DC	300 V DC	424 V DC
Current rating	7.5 A	3 A	5 A
Rated voltage	100 V DC		
Contact plating	Gold over nickel		
Quality class	1 + 3		
Degree of protection (in mated condition)	IP67		

The table just shows a general overview. Some variants might not be available.



## Benefits

- Compact design
- Integrated cable gland
- Large space for combination D-SUB
- With shield connection
- UV resistant
- Assembly without special tools

## Applications

- Aviation
- Telecommunications
- Renewable energy
- Automation technology
- Security and surveillance systems



Characteristics	Plastic Hood black	Plastic Hood metallized	Protection cap metal design
Shell size 1-5	✓	✓	✓
Suitable for	D-SUB, HD-SUB, Combination D-SUB	D-SUB, HD-SUB, Combination D-SUB	D-SUB, HD-SUB, Combination D-SUB
Lanyard shielded		✓	✓
Degree of protection (in mated condition)	IP67		
Short screws	✓	✓	✓
Jack screws	✓	✓	✓

The table just shows a general overview. Some variants might not be available.



## Benefits

- Use in harsh environments
- Easy and secure locking by bayonet lock
- Cable to cable connection
- High current transmission

## Applications

- Telecommunications
- Renewable energy
- Transport industry
- Machine manufacturing
- Security and surveillance systems



Characteristics	2-pos.	2+PE pos.
Cable connector socket	✓	✓
Panel connector socket	✓	✓
Cable connector plug	✓	✓
Panel connector plug	✓	✓
Shell	Plastic black	
Cable glands and fitting	Plastic black; UL94 V-0; UL(f1) rated	
Contact plating	Mating area: Gold over nickel Termination area: Tin over nickel	
Bayonet locking	✓	
Crimp termination	AWG 10 - 12	AWG 12 - 14
Current rating	30 A	20 A
Working voltage	48 V	300 V
Degree of protection (in mated condition)	IP67	

The table just shows a general overview. Some variants might not be available.

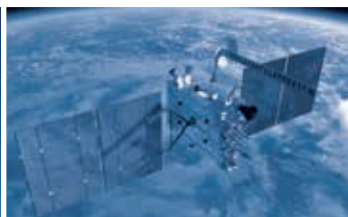


## Benefits

- Use in harsh environments
- Easy and secure locking by bayonet lock
- Front- and back panel mounting
- UV resistant
- Light-weight versions
- Colored interface encoding available
- Cat. 6A variants up to 10 GBit /s

## Applications

- Machine manufacturing
- Security and surveillance systems
- Telecommunications
- Transport industry
- Renewable energy
- Test devices and instruments
- GPS Navigation



Characteristics	Panel mount receptacle	Inline Coupler	Plug Connector Set	Patch cord	Protection cap
Plastic	✓	✓	✓	✓	✓
Plastic metallized	✓	✓	✓	✓	✓
Zinc die-cast	✓		✓	✓	✓
Bayonet locking	✓	double sided	✓	✓	✓
M28 thread	✓		✓	✓	✓
Soldering termination	✓		✓		
IDC	✓		✓		
Screw termination	✓				
Adapter	✓	✓			
Front panel mounting	✓	✓			
Back panel mounting	✓	✓			
UTP Cat. 5e Indoor/Outdoor			✓	✓	
STP Cat. 5e Indoor/Outdoor			✓	✓	
S/STP Cat. 6A	✓	✓	✓	✓	
With shielding	✓	✓	✓	✓	
Without shielding	✓	✓	✓	✓	
Degree of protection (in mated condition)	IP67			IP20/IP67	IP67

The table just shows a general overview. Some variants might not be available.





## Benefits

- Use in harsh environments
- Easy and secure locking by bayonet lock
- Front- and back panel mounting (Type A)
- UV resistant
- USB memory Stick 2 GB integrated into protection cap
- Light-weight versions ideal for portable devices
- USB 3.0 variant

## Applications

- Machine manufacturing
- Wireless controller
- Bluetooth adapter
- Process control



Characteristics	USB 2.0 Type A		Mini USB 2.0 Type B	USB 3.0 Type A
	Single	Dualport		
Plastic	✓	✓	✓	✓
Plastic metallized	✓			✓
Metal	✓			
Panel mount receptacle	✓	✓	✓	✓
Inline Coupler bayonet locking double sided	✓			
Plug Connector Set	✓			✓
Patch cord	✓		✓	✓
Protection cap	✓	✓	✓	✓
USB 2.0 with memory stick	✓			
Adapter	✓			✓
Bayonet locking	✓		✓	✓
M28 thread	✓	✓		
Solder termination	✓			
Adapter	✓			✓
PCB solder termination		✓	✓	
Shielded	✓	✓	✓	✓
Degree of protection (in mated condition)	IP67			
IP20 [Patch cord]	✓		✓	✓
IP67	✓		✓	✓

The table just shows a general overview. Some variants might not be available.

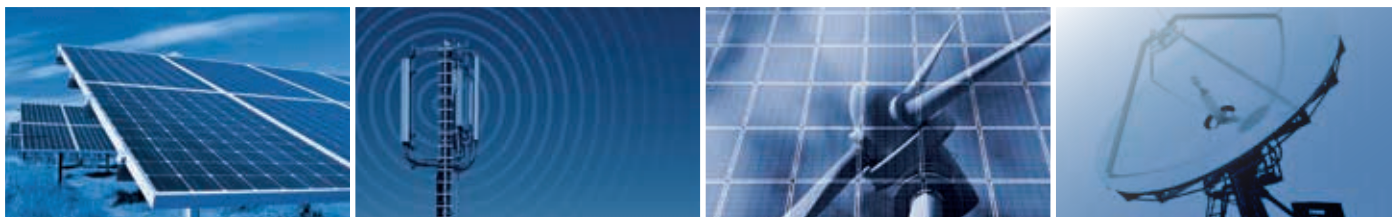


## Benefits

- Use in harsh environments
- Easy and secure locking by bayonet lock
- Extended temperature range
- Interference-free safe data transmission
- Cost efficiency by integrated IP67 protection

## Applications

- Telecommunications
- Industrial Ethernet
- Fiber to the home
- Fiber to the antenna
- Renewable energy



Characteristics	Panel mount receptacle	Inline Coupler	Plug Connector Set	Patch cord	Protection cap
Plastic	✓	✓	✓	✓	✓
Plastic metallized		✓			
Zinc die-cast	✓		✓	✓	✓
Bayonet locking	✓	double sided	✓	✓	✓
Single Mode	✓	✓	✓	✓	
Multi Mode	✓	✓	✓	✓	
APC Single Mode	✓	✓	✓	✓	
Front panel mounting	✓	✓			
Back panel mounting	✓	✓			
Degree of protection (in mated condition)	IP67				

The table just shows a general overview. Some variants might not be available.



## Benefits

- Hybrid adapters
- Clip or panel mounting
- Metal or plastic housings
- Ceramic or phosphor-bronze sleeves
- Shutter port protection (SC, LC)

## Applications

- Telecommunications
- Network technology



Characteristics	LC	SC	ST	FC	SC/FT	SC/FC	FC/ST
Plastic	✓	✓	✓	✓	✓	✓	
Zinc die-cast	✓	✓	✓	✓	✓	✓	✓
Version							
Simplex		✓	✓	✓	✓	✓	✓
Duplex	✓	✓	✓	✓	✓	✓	
Sleeve							
Ceramic	✓	✓	✓	✓	✓	✓	✓
Multi Mode Ceramic, Phosphor bronze	✓	✓	✓	✓	✓	✓	✓
APC Single Mode Ceramic	✓	✓	✓	✓			
Fastening							
Snap in	✓	✓			✓	✓	
Screw version	✓	✓	✓	✓	✓	✓	✓
Degree of protection (in mated condition)	IP20						

The table just shows a general overview. Some variants might not be available.

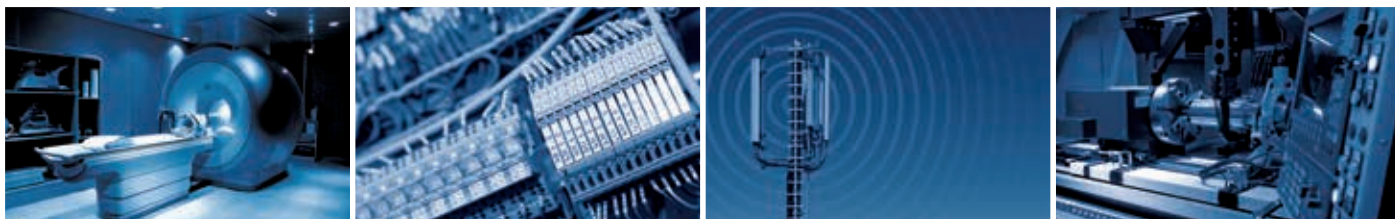


## Benefits

- Stamped flexible press-fit zone
- Selective contact assembly upon request
- First and last mate contacts
- Inverted versions
- Touch-safe crimp connections

## Applications

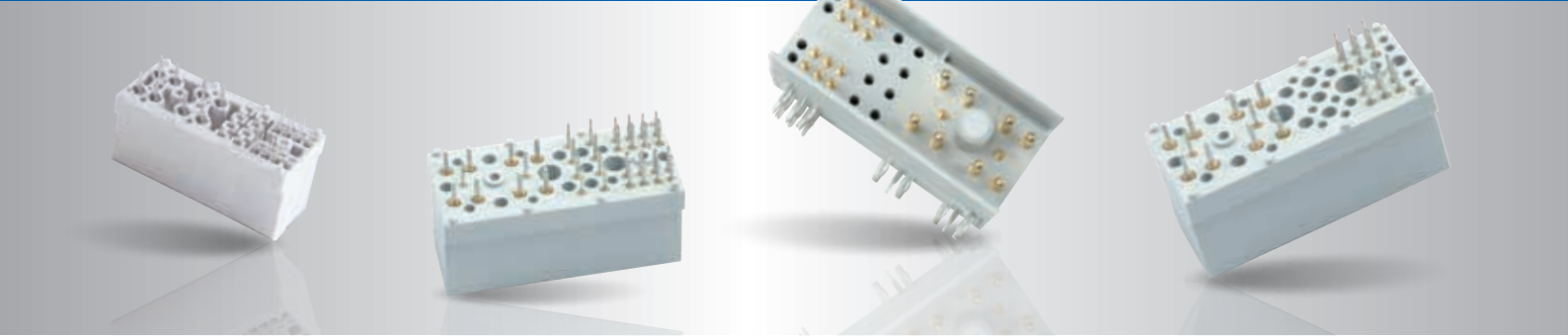
- IT
- Process control
- Medical
- Telecommunications



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 45 A		up to 34 A	
Current rating Signal	up to 5 A		up to 3 A		up to 3 A		up to 3 A	
Contact layout	23 Power/15 Signal		23 Power/24 Signal		9 Power/15 Signal		11 Power/15 Signal	
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.





Benefits

- Compact design
- First and last mate contacts
- Stamped flexible press-fit zone
- Selective contact assembly upon request
- Reserve contacts for system expansion
- Safe mating by integrated GuidePin

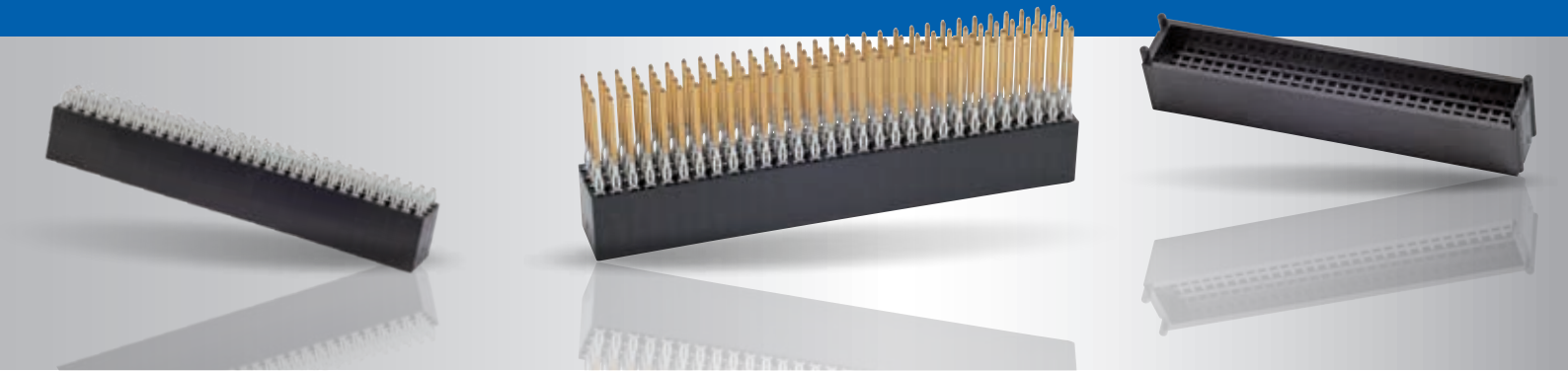
Applications

- Telecommunications
- Medical
- Network technology
- Server applications
- Electronic packaging



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	
Solder pin straight		✓
Solder pin angled	✓	
Press-fit contact	✓	✓

The table just shows a general overview. Some variants might not be available.



Benefits

- Press-fit technology with flexible press-fit zone
- Stackable systems according to PC104 standard
- Different number of positions upon request

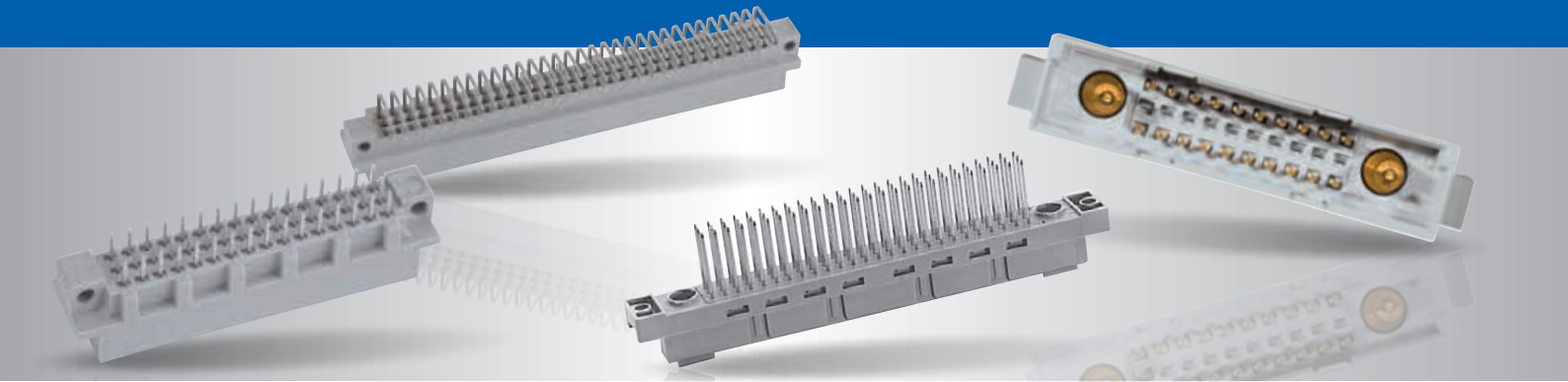
Applications

- Process control
- "Embedded computing"
- Industrial PCs
- Medical
- Military



Characteristics	PC104	PC104Plus
Number of positions	40, 64, up to 100	120
Insulator	PBT GF	
Contacts	Copper alloy	
Press-fit contact straight	✓	✓
Solder pin straight	✓	✓

The table just shows a general overview. Some variants might not be available.



Benefits

- Special assemblies possible
- Various contact surface platings
- Compact design (mixed pin connector)

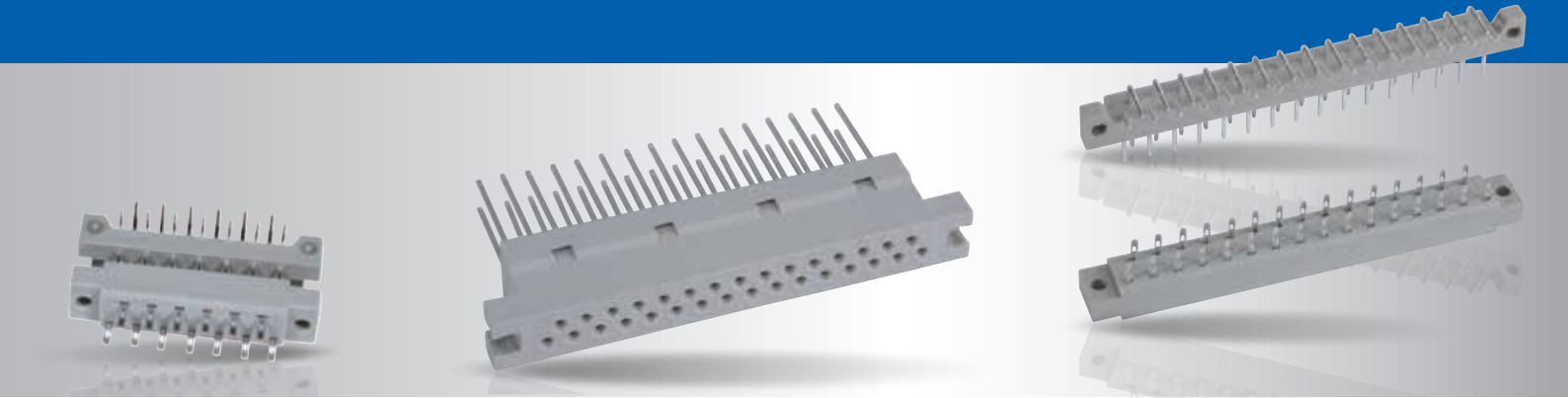
Applications

- Telecommunications
- Process control
- Test and measurement devices
- Electronic packaging



Characteristics		Typ										Mixed pin connector		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/Koax 24 Signal/ 8 Power/Koax		30 Signal/ 2 Power/Koax 12 Signal/ 4 Power/Koax
Insulator		PBT GF										PC Polycarbonat		PBT GF		
Contacts		Copper alloy														
Contact plating		Gold over nickel										Silver	Gold over nickel	Silver	Gold over nickel	
Working voltage		250 V					125 V			500 V	125 V	500 V	250 V			
		depending on the isolation coordination (refer to DIN VDE 0110/IEC 664-1)														
Max. current rating		2 A					5.5 A			15 A	5,5 A	15 A	2 A			
20°C																
70°C		1 A					4 A			12 A	4 A	12 A	40 A High power contacts			
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.



Benefits

- Robust connector system
- Converter connectors from DIN 41617 to DIN EN 60603 type D

Applications

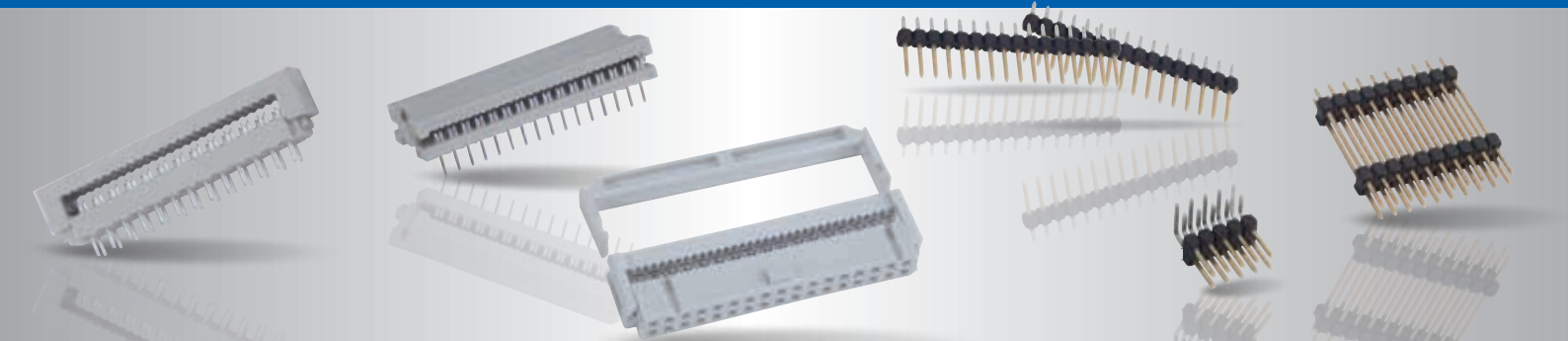
- Military
- Telecommunications
- Renewable energy



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

The table just shows a general overview. Some variants might not be available.



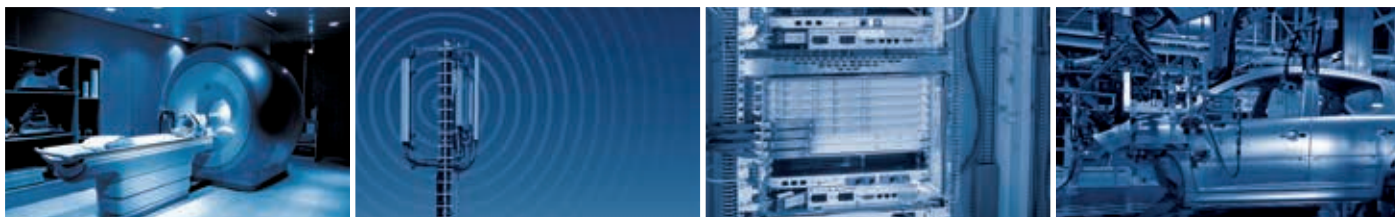


## Benefits

- Flexible cable to circuit board connection
- With optional strain relief
- Compatible plug system
- Lever latching and ejection

## Applications

- Process control
- Medical
- Telecommunications
- Machine manufacturing
- Electronic industry



Characteristics	DIN 41651	DIP + PCB	DIN 41612-IDC	CBL	CSU
Number of poles	6-64	4-64	64	5-40	5-100
Pitch of the contacts	0.100"				
Insulator	PBT GF			PA	
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
Max. current rating	1 A			5 A	5 A
Solder pin straight	✓	Solder pin to IDC		✓	✓
Solder pin angled	✓			✓	✓
IDC	✓		✓		

The table just shows a general overview. Some variants might not be available.



Despite a comprehensive product portfolio of industrial connectors, customer requirements cannot always be satisfied from standard products. In such cases, it is essential to develop custom specific solutions for mechanical and plant engineering as quickly as possible.



Are you looking for application-specific solutions?

The experienced CONEC design team creates solutions for you, for example:

- Special interconnect solutions to customer specifications
- Prototypes and small series production batches
- Connectors with increased IP ratings for harsh environments
- Enclosure technology for industrial use



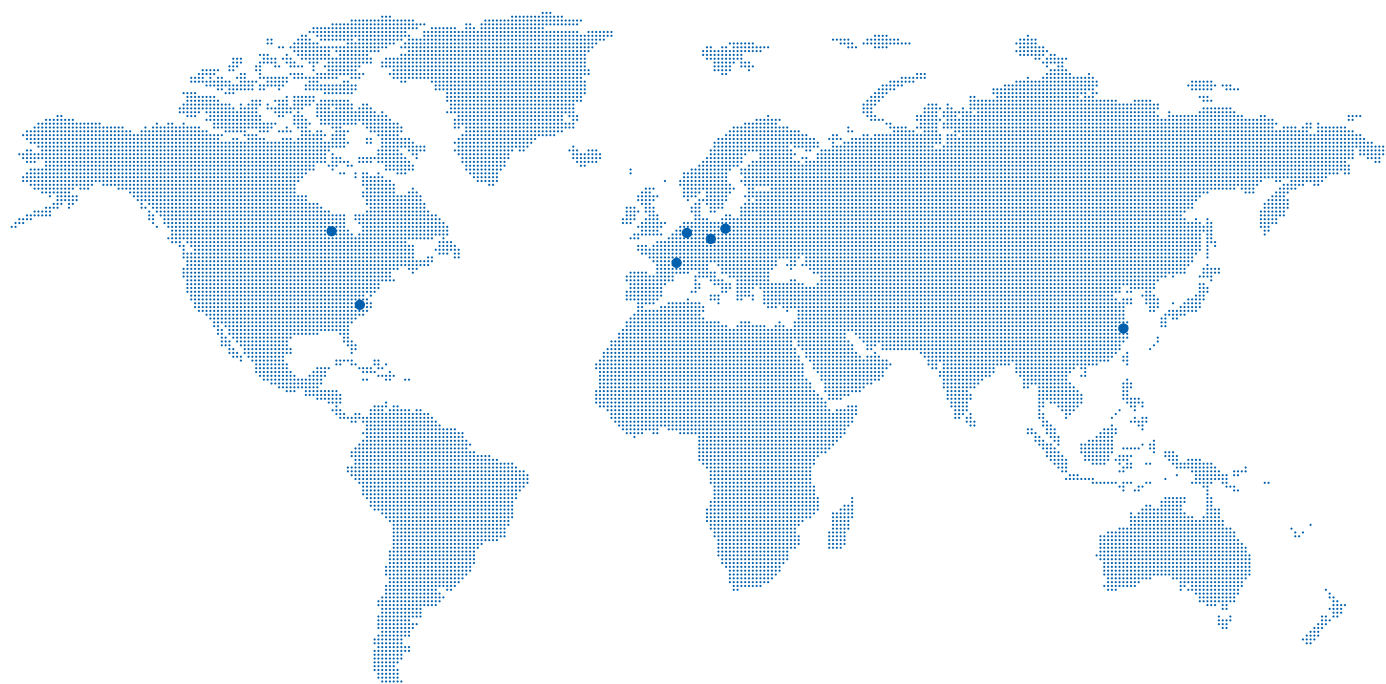
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