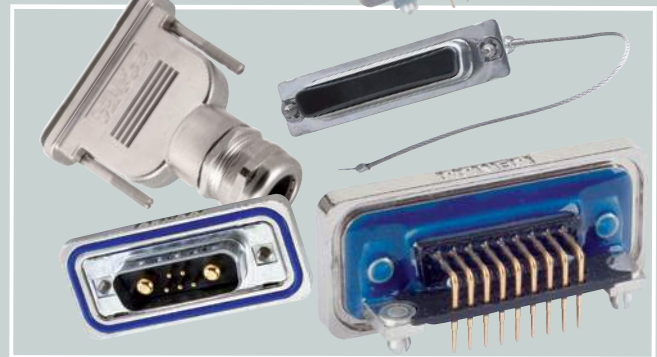


CONEC®

TECHNOLOGY IN CONNECTORS™

IP67 WATER RESISTANT I/O CONNECTORS



CONEC[®]

TECHNOLOGY IN CONNECTORS[™]

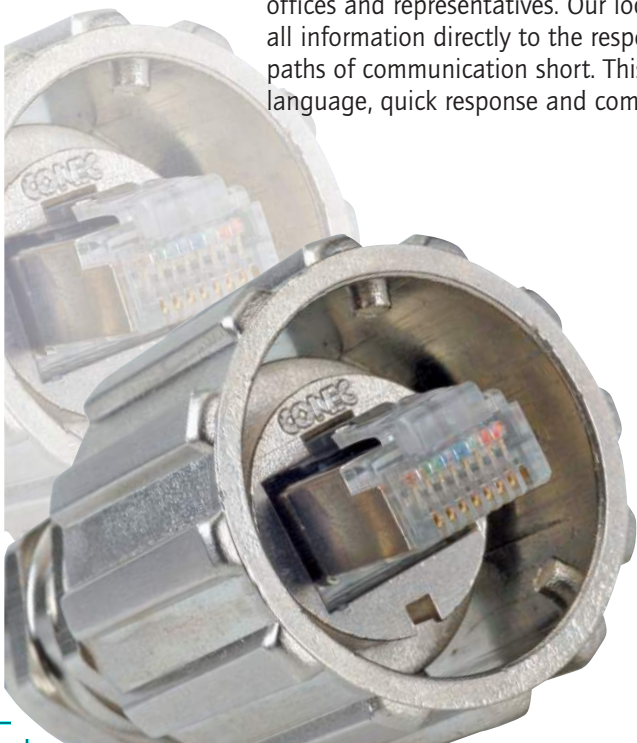


GERMANY

As a leading manufacturer of connectors, CONEC develops, produces and markets its products around the world to customers in the machine-tool, electronics and communications industries.

CONEC has dedicated itself to make a contribution to progress in the connector industry and to satisfy its customers through innovation, quality and excellent service. Around the world, our organization operates as a customer-oriented team.

CONEC is present in numerous countries with its own branch offices and representatives. Our local sales consultants transmit all information directly to the responsible departments to keep the paths of communication short. This provides support in the local language, quick response and competent consulting.





CANADA



USA

CONEC designs and manufactures products in modern facilities. The products are made in accordance to the highest quality standards and industry specifications.

CONEC provides reliable and effective solutions to OEM,EMS and cable houses.



OUR PHILOSOPHY – CUSTOMER SATISFACTION.



Quality is realized right from the beginning with Total Quality Management concept. Therefore our customers are included into all our processes, starting with 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/TS16949:2002.

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



CONEC IS YOUR SPECIALIST FOR DESIGN AND PRODUCTION OF SPECIAL CUSTOMIZED PRODUCTS.

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.



Are you looking for application-specific solutions?
Standard products do not meet your needs?
The implementation deadline is tight?

CONEC experienced design team can create your solution for you:

- Special Interconnect solutions to customers specifications
- Prototypes and small series production batches
- Connectors with increased IP ratings for harsh environments.

Contact us to discuss your special requirements.



PRODUCT LINES



I/O Connectors

D-SUB connectors, Standard, Combination and Water Resistant; D-SUB Hoods and D-SUB accessories; Filter D-SUB Connectors, Standard, Combination and Water Resistant; Filter Adapters; Filter Plates; RJ45-IP67 Industrial Ethernet Connector System; USB 2.0-IP67 Connector System; RJ45 Magnetic Modular Jacks



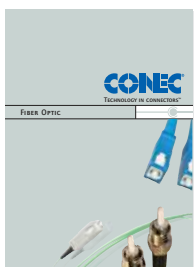
Embedded Connectors

DIN 41617 Connectors; DIN EN 60603-2 Connectors; DIN 41651 Insulation Displacement Connectors CompactPCI Connectors; AdvancedTCA Connectors; MicroTCA Connectors; PC104-, PC104+ Connectors



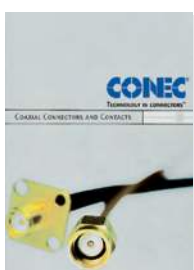
Sensor Actor Line / Circular Connectors

M12x1 Connectors, Overmolded and Field Attachable, Sockets, Junction Boxes, M12x1 Connector Systems for High Temperature, Food+Beverage, Bus Systems; M8x1 Overmolded Connectors; 7/8" Connectors; Rund24 Connectors; Valve Connectors



Fiber Optic

SC-LC-FC-ST-Connectors; Adapters; Hybrid Adapters; IP67 Outdoor Connectors; Patch cords



Coaxial Connectors

SMA, SSMA, MMCX, TNC, N, MCX, Mixed Adapters und BNC connectors; D-SUB and DIN Coaxial Contacts; D-SUB and DIN High-Current Contacts

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SECTION 1

IP67 D-SUB CONNECTORS

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.

The system includes D-Subminiature Connectors in standard and high density configurations as well as corresponding accessories, such as water resistant hoods and protective caps.

The Solid Body connector series is an advanced development of the CONEC water resistant D-SUB series.

This series is designed with a one piece, "Solid Body" zinc diecast housing. This robust design performs better to mechanical impacts during installation and operation and has less possible leak paths. It complies to current solder requirements with RoHS compliant solder temperatures.

The type of protection is defined by IEC 60529 which also specifies the suitability of electrical components for various ambient conditions.

CONEC water resistant connectors ensure a continuously secure connection compliant with the IP67 rating. They are dustproof and protect against temporary submersion in water.





System details:

- Standard design with metal shell and O-ring
- One piece "solid body" design available for increased mechanical stresses
- Seal in the connector, water cannot penetrate into the housing
- Available for front and rear side panel mounting
- Connector without frame for cable housing
- Special threaded parts, 4-40 UNC and M 3
- Plastic materials comply with UL 94 V0
- Machined precision contacts for heavy duty usage
- Various gold plating options available
- All conventional contact termination types available
- Various accessories, including waterproof hoods and protective caps

The following pages indicate examples from our extensive product line. For additional and detail information please contact us direct or visit us at www.conec.com.



TECHNICAL DATA

Materials	D-Subminiature, Standard 9, 15, 25, 37 and 50 position	D-Subminiature, High Density 15, 26, 44, 62 and 78 position
Insulator	Polyester GF UL94 V-0	
Contacts	CU alloy	
Contact plating	Gold plated over nickel	
Shell	Brass tin plated (Standard) Stainless steel on request	
Mechanical and electrical characteristics		
Test voltage U eff/NN	1000 V	
Working voltage	125 V ≈ depending on isolation coordination (refer to DIN VDE 0110/IEC 664-1)	60 V ≈
Current rating	7.5 A (UL) / 5 A (CSA,VDE)	3 A (UL,VDE) / 2.5 A (CSA)
Contact resistance	max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing per DIN 41652, Part 2	
Insulation resistance	≥ 5 GΩ	
Clearance and creepage distance	contact – contact ≥ .004"/1.0 mm contact – earth ≥ .047"/1.2 mm	≥ .024"/0.6 mm
Operating temperature	– 25 °C to + 105 °C	
Mating and unmating forces	9 pos. ≤ 30 N 15 pos. ≤ 50 N 25 pos. ≤ 83 N 37 pos. ≤ 123 N 50 pos. ≤ 167 N	15 pos. ≤ 50 N 26 pos. ≤ 84 N 44 pos. ≤ 120 N 62 pos. ≤ 70 N 78 pos. ≤ 200 N
Quality class	A = Quality class 3 = 50 mating cycles B = Quality class 2 = 200 mating cycles C = Quality class 1 = 500 mating cycles	

Technical alterations are subject to change without notice.

IP-CODE FIGURE DEFINITIONS

1. Code figure	Definition	Remark
0	Not protected	
1	Protected against access to hazardous parts by the back of the hand. Protected against fixed foreign objects $\varnothing \geq 1.969'' / 50 \text{ mm}$.	
2	Protected against access to hazardous parts with a finger. Protected against fixed foreign objects $\varnothing \geq .492'' / 12.5 \text{ mm}$.	
3	Protected against access to hazardous parts with a tool. Protected against fixed foreign objects $\varnothing \geq .098'' / 2.5 \text{ mm}$.	
4	Protected against access to hazardous parts with a wire. Protected against fixed foreign objects $\varnothing \geq .039'' / 1 \text{ mm}$.	
5	Protected against access to hazardous parts with a wire. Dust protected.	Ingress of dust is not completely blocked. But dust may not penetrate to the extent that satisfactory operation of the device or safety is impaired.
6	Protected against access to hazardous parts with a wire. Dustproof. No ingress of dust.	

2. Code figure	Definition	Remark
0	Not protected	
1	Protected against dropper.	
2	Protected against dropper when the shell is tipped as much as 15°.	
3	Protected against spray water	Up to 60° of either side of the vertical, such spray water shall have no harmful effects.
4	Protected against splash water	On the shell from all directions, no harmful effects shall be incurred.
5	Protected against jets of water.	
6	Protected against strong jets of water.	
7	Protected against the effects of temporary submersion in water.	Water may not ingress in a volume that would cause harmful effects when the shell is submerged in water for 30 min at a depth of 1 m.
8	Protected against the effects of continuous submersion in water.	Water may not ingress in a volume that would cause harmful effects when the shell is continuously submerged in water under conditions agreed between manufacturer and user. However, these conditions must be more stringent than those described under code figure 7.
9k	Protected against water from high-pressure or steam cleaning.	

Explanation to spray water protected (IP) systems and their environment.

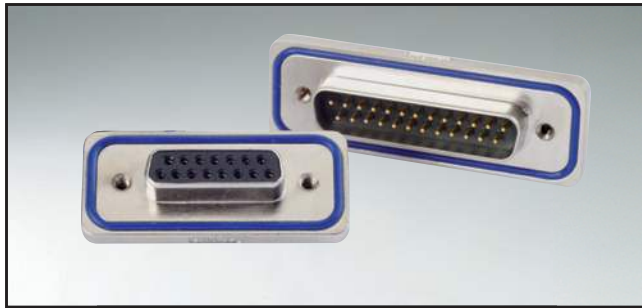
This system, described in IEC 60529, was developed to represent standard values for respective protection:

- a) Contact with, and ingress of, fixed foreign objects
- b) The ingress of liquids to which the inside is to be exposed.

The first digit describes the level of protection for life, contacting objects and the intrusion of foreign bodies. The second digit describes the level of protection against the ingress of liquids. The larger the first and second digits are, the greater afforded protection is, e.g. IP55 must also meet the requirements of all lower protection levels, such as IP22, IP23, IP34 and IP54.

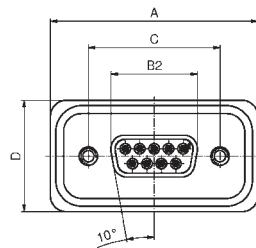
D-SUB STANDARD – IP67 SOLID BODY

Solder cup – Precision machined contacts – For wire size AWG 20

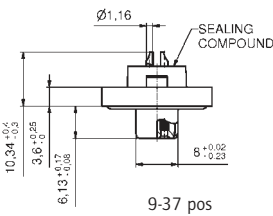


RoHS compliant

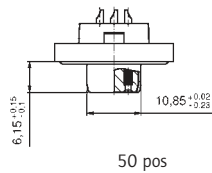
SOCKET CONNECTOR



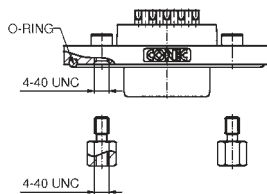
No. of pos.	A	B2 ±0.025	C	D
09	39.40 ^{+0.3} ₀	16.46	25.00 ^{+0.12} _{-0.12}	21.1 ^{+0.3} ₀
15	47.70 ^{+0.3} ₀	24.79	33.32 ^{+0.13} _{-0.12}	21.1 ^{+0.3} ₀
25	61.40 ^{+0.3} ₀	38.50	47.04 ^{+0.13} ₀	21.1 ^{+0.3} ₀
37	78.00 ^{+0.3} ₀	54.96	63.50 ^{+0.13} ₀	21.1 ^{+0.3} ₀
50	75.60 ^{+0.3} _{-0.1}	52.55	61.10 ^{+0.14} _{-0.11}	23.9 ^{+0.3} _{0.1}



9-37 pos



50 pos



ORDER DATA

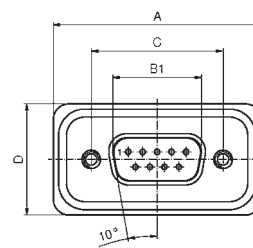
SOCKET CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	15-000613
15	Threaded insert	15-000623
25	Threaded insert	15-000633
37	Threaded insert	15-000643
50	Threaded insert	15-002103

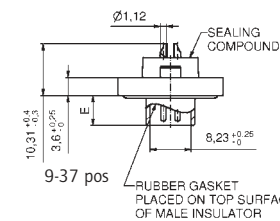
DESCRIPTION

- Suitable for wire size **AWG 20**
- Mounting style:
4-40 UNC threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

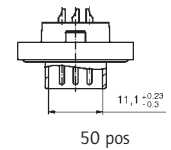
PLUG CONNECTOR



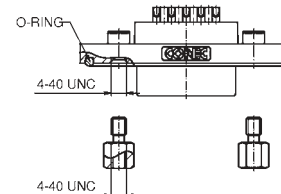
No. of pos.	A	B1	C	D	E
09	39.40 ^{+0.3} ₀	16.81 ^{+0.23} _{0.02}	25.00 ^{+0.12} _{-0.12}	21.1 ^{+0.3} ₀	6.00 ^{+0.12} _{-0.18}
15	47.70 ^{+0.3} ₀	25.14 ^{+0.23} _{0.02}	33.32 ^{+0.13} _{-0.12}	21.1 ^{+0.3} ₀	6.00 ^{+0.12} _{-0.18}
25	61.40 ^{+0.3} ₀	38.86 ^{+0.23} _{0.02}	47.04 ^{+0.13} ₀	21.1 ^{+0.3} ₀	5.99 ⁺⁰ _{-0.3}
37	78.00 ^{+0.3} ₀	55.32 ^{+0.23} _{0.02}	63.50 ^{+0.13} ₀	21.1 ^{+0.3} ₀	5.99 ⁺⁰ _{-0.3}
50	75.60 ^{+0.3} _{-0.1}	52.80 ^{+0.13} _{-0.12}	61.10 ^{+0.14} _{-0.11}	23.9 ^{+0.3} _{-0.1}	5.99 ⁺⁰ _{-0.3}



9-37 pos



50 pos



PLUG CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	15-000573
15	Threaded insert	15-000583
25	Threaded insert	15-000593
37	Threaded insert	15-000603
50	Threaded insert	15-002093

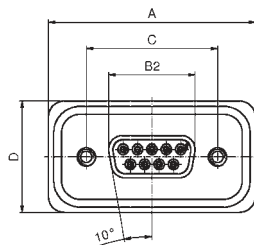
D-SUB STANDARD – IP67 SOLID BODY

Solder pin – Straight – Precision machined contacts

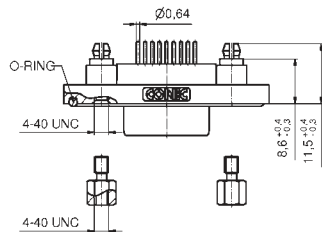
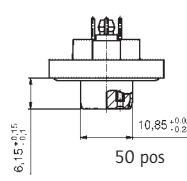
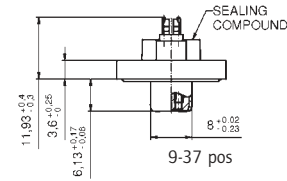


RoHS compliant

SOCKET CONNECTOR



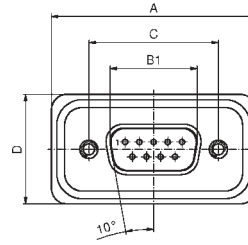
No. of pos.	A	B2 ⁺⁰ / _{-0.25}	C	D
09	39.40 ^{+0.3} / ₋₀	16.46	25.00 ^{+0.12} / _{-0.13}	21.1 ^{+0.3} / ₋₀
15	47.70 ^{+0.3} / ₋₀	24.79	33.32 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₋₀
25	61.40 ^{+0.3} / ₋₀	38.50	47.04 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₋₀
37	78.00 ^{+0.3} / ₋₀	54.96	63.50 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₋₀
50	75.60 ^{+0.3} / _{-0.1}	52.55	61.10 ^{+0.14} / _{-0.11}	23.9 ^{+0.3} / _{-0.1}



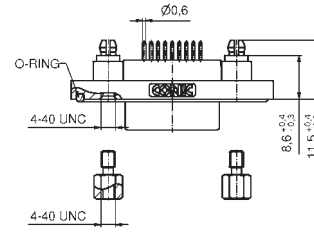
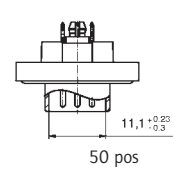
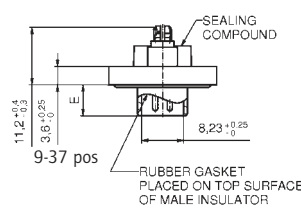
DESCRIPTION

- Mounting style:
4-40 UNC threaded rear spacer with PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

PLUG CONNECTOR



No. of pos.	A	B1	C	D	E
09	39.40 ^{+0.3} / ₋₀	16.81 ^{+0.23} / _{-0.02}	25.00 ^{+0.12} / _{-0.13}	21.1 ^{+0.3} / ₋₀	6.00 ^{+0.12} / _{-0.18}
15	47.70 ^{+0.3} / ₋₀	25.14 ^{+0.23} / _{-0.02}	33.32 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₋₀	6.00 ^{+0.12} / _{-0.18}
25	61.40 ^{+0.3} / ₋₀	38.86 ^{+0.23} / _{-0.02}	47.04 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₋₀	5.99 ⁺⁰ / _{-0.3}
37	78.00 ^{+0.3} / ₋₀	55.32 ^{+0.23} / _{-0.02}	63.50 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₋₀	5.99 ⁺⁰ / _{-0.3}
50	75.60 ^{+0.3} / _{-0.1}	52.80 ^{+0.13} / _{-0.12}	61.10 ^{+0.14} / _{-0.11}	23.9 ^{+0.3} / _{-0.1}	5.99 ^{+0.12} / _{-0.1}



ORDER DATA

SOCKET CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded rear spacer PCB clip	15-000453
15	Threaded rear spacer PCB clip	15-000463
25	Threaded rear spacer PCB clip	15-000473
37	Threaded rear spacer PCB clip	15-000483
50	Threaded rear spacer PCB clip	15-002063

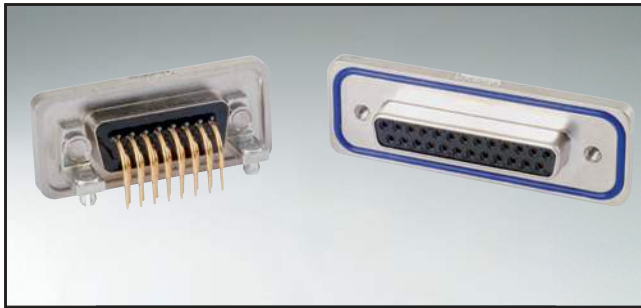
PLUG CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded rear spacer PCB clip	15-000413
15	Threaded rear spacer PCB clip	15-000423
25	Threaded rear spacer PCB clip	15-000433
37	Threaded rear spacer PCB clip	15-000443
50	Threaded rear spacer PCB clip	15-002053

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness
For different PCB thickness please contact factory.

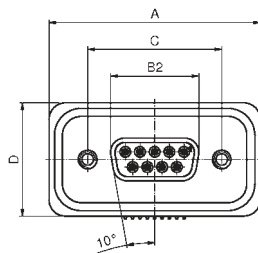
D-SUB STANDARD – IP67 SOLID BODY

Solder pin – Angled – .402" / 10.2 mm – Precision machined contacts – Metal bracket

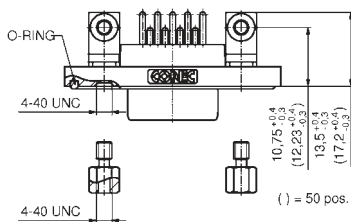
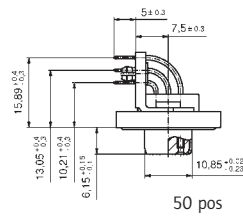
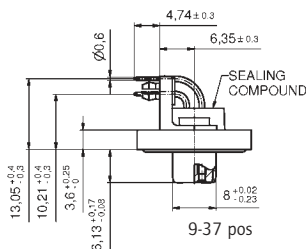


RoHS compliant

SOCKET CONNECTOR



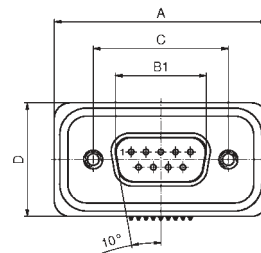
No. of pos.	A	B2 ±0.025	C	D
09	39.40 ^{+0.3} ₀	16.46	25.00 ^{+0.12} _{-0.12}	21.1 ^{+0.3} ₀
15	47.70 ^{+0.3} ₀	24.79	33.32 ^{+0.13} _{-0.12}	21.1 ^{+0.3} ₀
25	61.40 ^{+0.3} ₀	38.50	47.04 ^{+0.13} ₀	21.1 ^{+0.3} ₀
37	78.00 ^{+0.3} ₀	54.96	63.50 ^{+0.13} ₀	21.1 ^{+0.3} ₀
50	75.60 ^{+0.3} _{-0.1}	52.55	61.10 ^{+0.14} _{-0.11}	23.9 ^{+0.3} _{0.1}



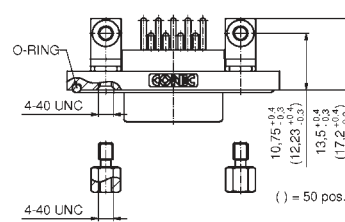
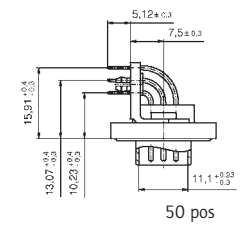
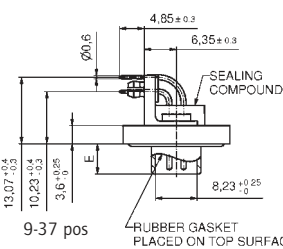
DESCRIPTION

- Mounting style:
mounting bracket, 4-40 UNC PCB clip
including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

PLUG CONNECTOR



No. of pos.	A	B1	C	D	E
09	39.40 ^{+0.3} ₀	16.81 ^{+0.23} _{0.02}	25.00 ^{+0.12} _{-0.12}	21.1 ^{+0.3} ₀	6.00 ^{+0.12} _{-0.18}
15	47.70 ^{+0.3} ₀	25.14 ^{+0.23} _{0.02}	33.32 ^{+0.13} _{-0.12}	21.1 ^{+0.3} ₀	6.00 ^{+0.12} _{-0.18}
25	61.40 ^{+0.3} ₀	38.86 ^{+0.23} _{0.02}	47.04 ^{+0.13} ₀	21.1 ^{+0.3} ₀	5.99 ^{+0.12} _{-0.18}
37	78.00 ^{+0.3} ₀	55.32 ^{+0.23} _{0.02}	63.50 ^{+0.13} ₀	21.1 ^{+0.3} ₀	5.99 ^{+0.12} _{-0.18}
50	75.60 ^{+0.3} _{-0.1}	52.80 ^{+0.13} _{-0.12}	61.10 ^{+0.14} _{-0.11}	23.9 ^{+0.3} _{0.1}	5.99 ^{+0.12} _{-0.18}



ORDER DATA

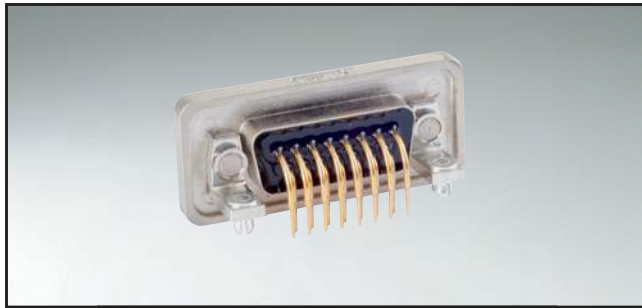
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Mounting bracket / PCB clip	15-000773
15	Mounting bracket / PCB clip	15-000783
25	Mounting bracket / PCB clip	15-000793
37	Mounting bracket / PCB clip	15-000803
50	Mounting bracket / PCB clip	15-002143

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Mounting bracket / PCB clip	15-000733
15	Mounting bracket / PCB clip	15-000743
25	Mounting bracket / PCB clip	15-000753
37	Mounting bracket / PCB clip	15-000763
50	Mounting bracket / PCB clip	15-002133

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness
For different PCB thickness please contact factory.

D-SUB STANDARD – IP67 SOLID BODY

Solder pin – Angled – .590" / 14.9 mm – Precision machined contacts – Metal bracket

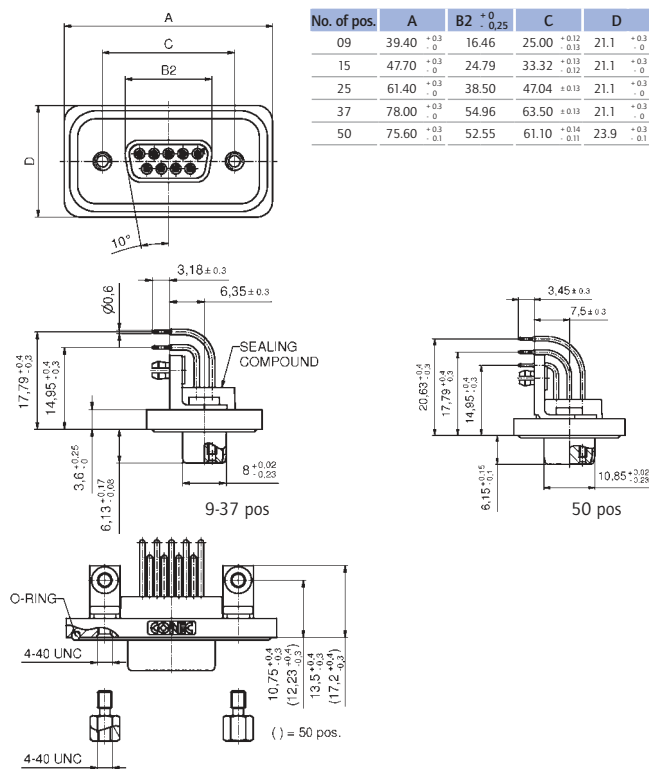


RoHS compliant

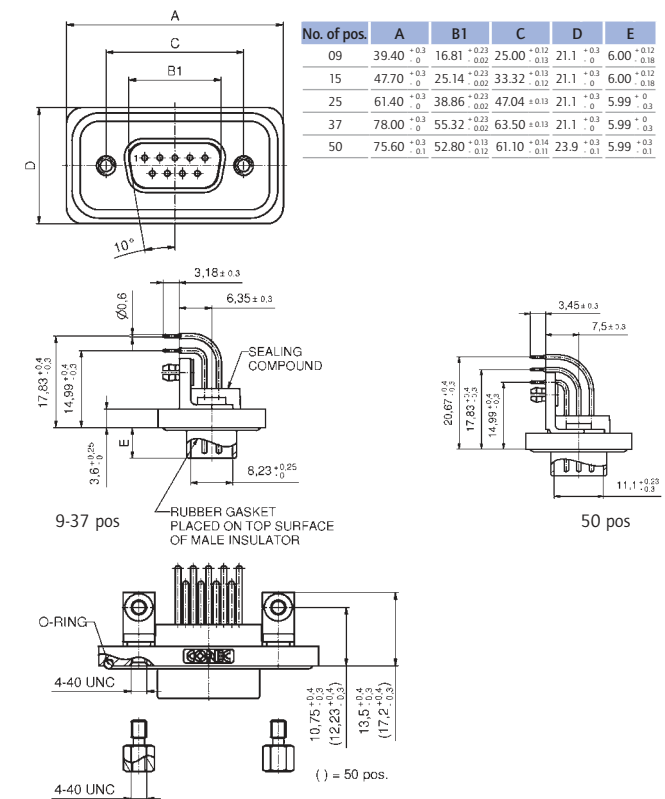
DESCRIPTION

- Mounting style:
mounting bracket, 4-40 UNC PCB clip
including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

SOCKET CONNECTOR



PLUG CONNECTOR



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Mounting bracket / PCB clip	15-000853
15	Mounting bracket / PCB clip	15-000863
25	Mounting bracket / PCB clip	15-000873
37	Mounting bracket / PCB clip	15-000883
50	Mounting bracket / PCB clip	15-002163

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Mounting bracket / PCB clip	15-000813
15	Mounting bracket / PCB clip	15-000823
25	Mounting bracket / PCB clip	15-000833
37	Mounting bracket / PCB clip	15-000843
50	Mounting bracket / PCB clip	15-002153

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness
For different PCB thickness please contact factory.

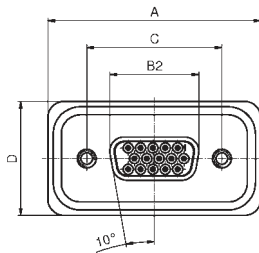
D-SUB HIGH DENSITY – IP67 SOLID BODY

Solder cup – Precision machined contacts – For wire size AWG 22

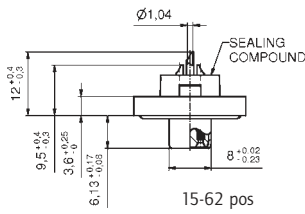


RoHS compliant

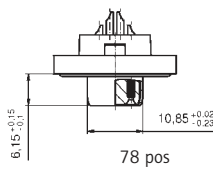
SOCKET CONNECTOR



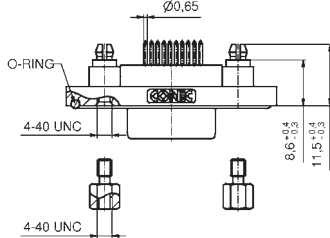
No. of pos.	A	B2 ⁺⁰ / _{-0.25}	C	D
15	39.40 ^{+0.3} / ₀	16.46	25.00 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀
26	47.70 ^{+0.3} / ₀	24.79	33.32 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀
44	61.40 ^{+0.3} / ₀	38.50	47.04 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀
62	78.00 ^{+0.3} / ₀	54.96	63.50 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀
78	75.60 ^{+0.2} / _{-0.1}	52.55	61.10 ^{+0.14} / _{-0.11}	23.9 ^{+0.3} / _{-0.1}



15-62 pos



78 pos



ORDER DATA

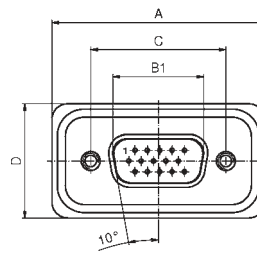
SOCKET CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
15	Threaded insert	15-000693
26	Threaded insert	15-000703
44	Threaded insert	15-000713
62	Threaded insert	15-000723
78	Threaded insert	15-002123

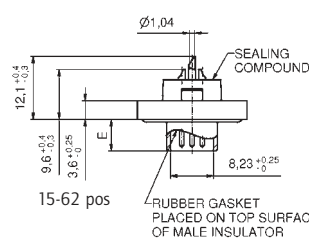
DESCRIPTION

- Suitable for wire size **AWG 22**
- Mounting style:
4-40 UNC threaded insert including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

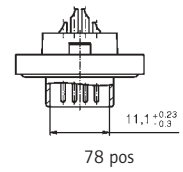
PLUG CONNECTOR



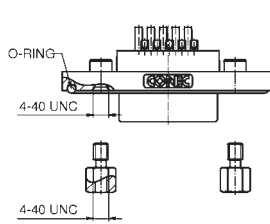
No. of pos.	A	B1	C	D	E
15	39.40 ^{+0.3} / ₀	16.81 ^{+0.23} / _{-0.02}	25.00 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀	6.00 ^{+0.12} / _{-0.18}
26	47.70 ^{+0.3} / ₀	25.14 ^{+0.23} / _{-0.02}	33.32 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀	6.00 ^{+0.12} / _{-0.18}
44	61.40 ^{+0.3} / ₀	38.86 ^{+0.23} / _{-0.02}	47.04 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀	5.99 ^{+0.3} / ₀
62	78.00 ^{+0.3} / ₀	55.32 ^{+0.23} / _{-0.02}	63.50 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀	5.99 ^{+0.3} / ₀
78	75.60 ^{+0.2} / _{-0.1}	52.80 ^{+0.12} / _{-0.12}	61.10 ^{+0.14} / _{-0.11}	23.9 ^{+0.3} / _{-0.1}	5.99 ^{+0.3} / _{-0.1}



15-62 pos



78 pos



PLUG CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
15	Threaded insert	15-000653
26	Threaded insert	15-000663
44	Threaded insert	15-000673
62	Threaded insert	15-000683
78	Threaded insert	15-002113

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness
For different PCB thickness please contact factory.

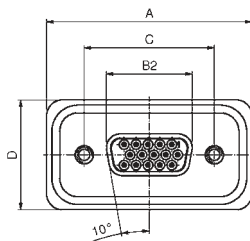
D-SUB HIGH DENSITY – IP67 SOLID BODY

Solder pin – Straight – Precision machined contacts

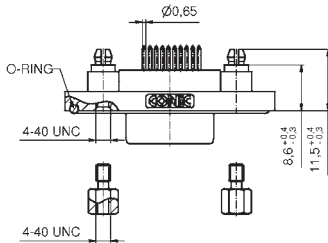
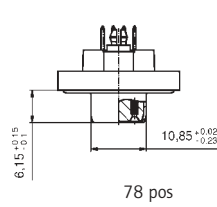
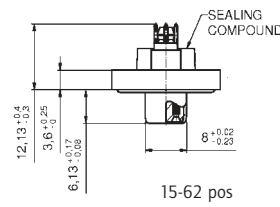


RoHS compliant

SOCKET CONNECTOR



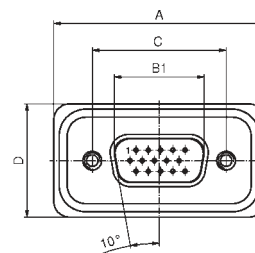
No. of pos.	A	B2 ⁺⁰ / _{-0.25}	C	D
15	39.40 ^{+0.3} / ₀	16.46	25.00 ^{+0.12} / _{-0.13}	21.1 ^{+0.3} / ₀
26	47.70 ^{+0.3} / ₀	24.79	33.32 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₀
44	61.40 ^{+0.3} / ₀	38.50	47.04 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₀
62	78.00 ^{+0.3} / ₀	54.96	63.50 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₀
78	75.60 ^{+0.3} / _{0.1}	52.55	61.10 ^{+0.14} / _{-0.11}	23.9 ^{+0.3} / _{-0.1}



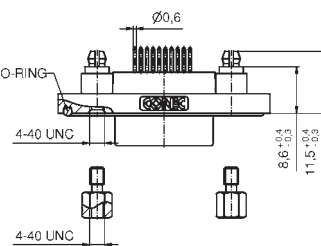
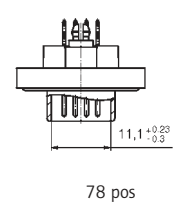
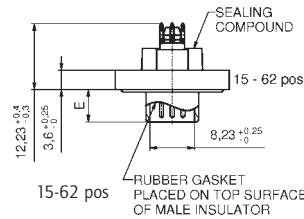
DESCRIPTION

- Mounting style:
4-40 UNC threaded rear spacer with PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

PLUG CONNECTOR



No. of pos.	A	B1	C	D	E
15	39.40 ^{+0.3} / ₀	16.81 ^{+0.23} / _{0.02}	25.00 ^{+0.12} / _{-0.12}	21.1 ^{+0.3} / ₀	6.00 ^{+0.12} / _{-0.18}
26	47.70 ^{+0.3} / ₀	25.14 ^{+0.23} / _{0.02}	33.32 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₀	6.00 ^{+0.12} / _{-0.18}
44	61.40 ^{+0.3} / ₀	38.86 ^{+0.23} / _{0.02}	47.04 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₀	5.99 ⁺⁰ / _{-0.3}
62	78.00 ^{+0.3} / ₀	55.32 ^{+0.23} / _{0.02}	63.50 ^{+0.13} / _{-0.12}	21.1 ^{+0.3} / ₀	5.99 ⁺⁰ / _{-0.3}
78	75.60 ^{+0.3} / _{0.1}	52.80 ^{+0.13} / _{0.12}	61.10 ^{+0.14} / _{-0.11}	23.9 ^{+0.3} / _{-0.1}	5.99 ^{+0.3} / _{-0.1}



ORDER DATA

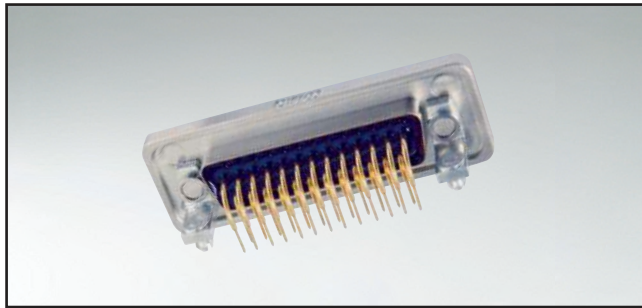
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	Threaded rear spacer PCB clip	15-000533
26	Threaded rear spacer PCB clip	15-000543
44	Threaded rear spacer PCB clip	15-000553
62	Threaded rear spacer PCB clip	15-000563
78	Threaded rear spacer PCB clip	15-002183

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	Threaded rear spacer PCB clip	15-000493
26	Threaded rear spacer PCB clip	15-000503
44	Threaded rear spacer PCB clip	15-000513
62	Threaded rear spacer PCB clip	15-000523
78	Threaded rear spacer PCB clip	15-002073

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness
For different PCB thickness please contact factory.

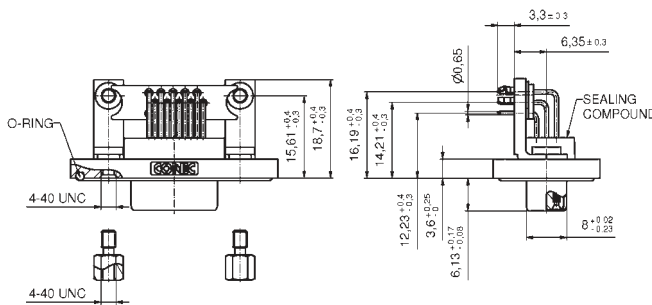
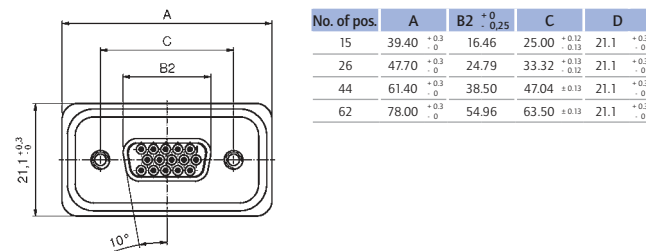
D-SUB HIGH DENSITY – IP67 SOLID BODY

Solder pin – Angled – .485" / 12,3 mm – Precision machined contacts – Metal bracket



RoHS compliant

SOCKET CONNECTOR

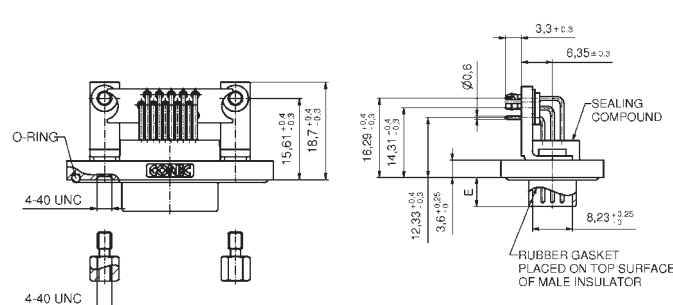
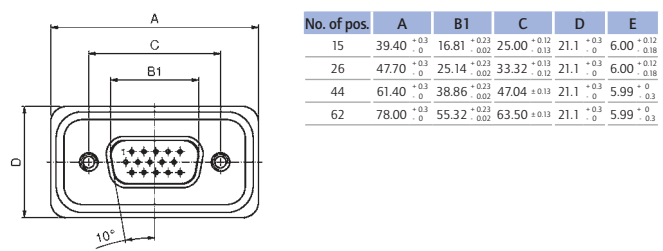


15-62 pos

DESCRIPTION

- Mounting style:
Mounting bracket, 4-40 UNC PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

PLUG CONNECTOR



15-62 pos

ORDER DATA

SOCKET CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
15	Mounting bracket / PCB clip	15-000933
26	Mounting bracket / PCB clip	15-000943
44	Mounting bracket / PCB clip	15-000953
62	Mounting bracket / PCB clip	15-000963

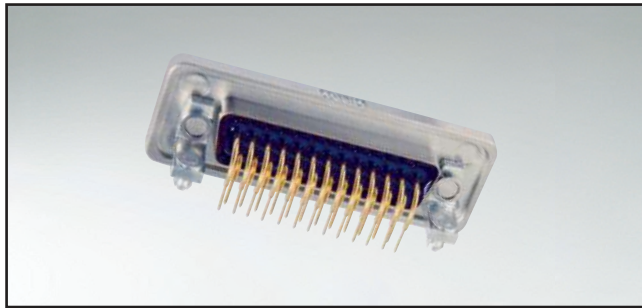
PLUG CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
15	Mounting bracket / PCB clip	15-000893
26	Mounting bracket / PCB clip	15-000903
44	Mounting bracket / PCB clip	15-000913
62	Mounting bracket / PCB clip	15-000923

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness
For different PCB thickness please contact factory.

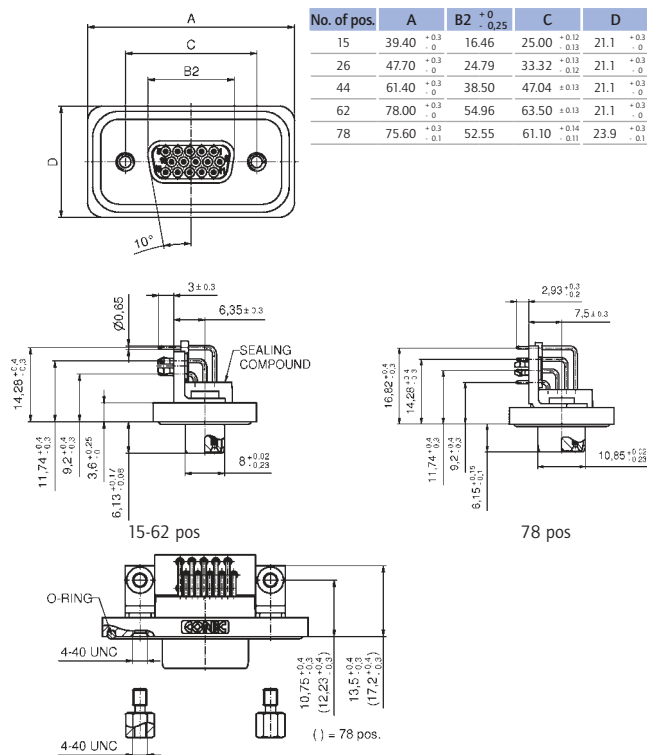
D-SUB HIGH DENSITY – IP67 SOLID BODY

Solder pin – Angled – .362" / 11.7 mm – Precision machined contacts – Metal bracket



RoHS compliant

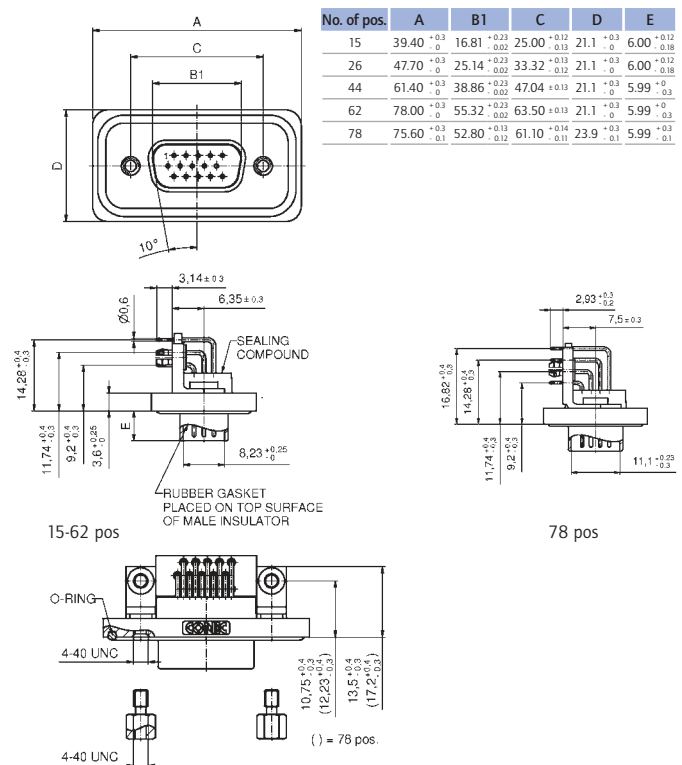
SOCKET CONNECTOR



DESCRIPTION

- Mounting style:
Mounting bracket, 4-40 UNC PCB clip including hex locking bolt
- Quality class 3 (also available in quality class 1)
- One-piece zinc die-cast nickel plated shell
- IP67 for harsh environments, pressure-proof up to 1.45 PSI
- Higher protection on request

PLUG CONNECTOR



ORDER DATA

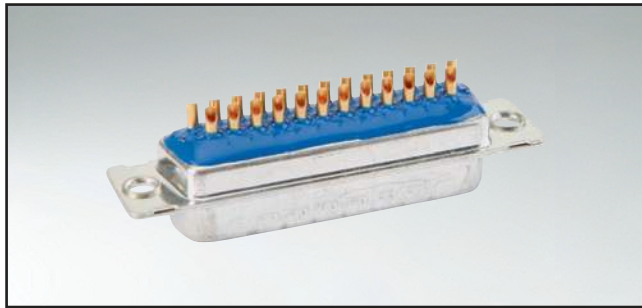
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	Mounting bracket / PCB clip	15-002243
26	Mounting bracket / PCB clip	15-002253
44	Mounting bracket / PCB clip	15-002263
62	Mounting bracket / PCB clip	15-002273
78	Mounting bracket / PCB clip	15-002283

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	Mounting bracket / PCB clip	15-002193
26	Mounting bracket / PCB clip	15-002203
44	Mounting bracket / PCB clip	15-002213
62	Mounting bracket / PCB clip	15-002223
78	Mounting bracket / PCB clip	15-002233

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness
For different PCB thickness please contact factory.

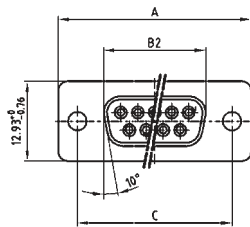
D-SUB STANDARD – IP67

Solder cup – Precision machined contacts – For hood Assembly –
For wire size AWG 20

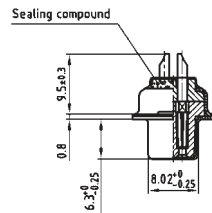
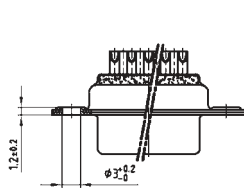


RoHS compliant

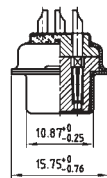
SOCKET CONNECTOR



No. of pos.	A +0.76	B2 -0.25	C
09	31.19	16.46	25.00 ^{+0.12} / _{-0.13}
15	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
25	53.42	38.50	47.04 ^{+0.13} / _{-0.10}
37	69.70	54.96	63.50 ^{+0.13} / _{-0.10}
50	67.31	52.55	61.10 ^{+0.14} / _{-0.11}



9-37 pos.

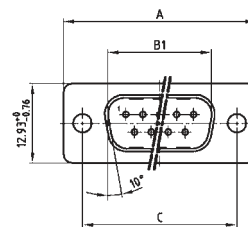


50 pos.

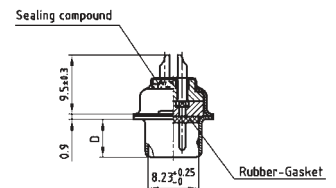
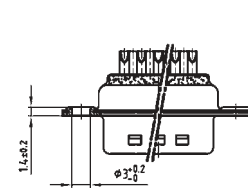
DESCRIPTION

- Suitable for wire size **AWG 20**
- Mounting style:
with through-hole, Ø .118" / 3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)

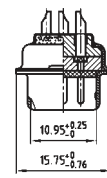
PLUG CONNECTOR



No. of pos.	A +0.76	B1 +0.25	C
09	31.19	16.79	25.00 ^{+0.12} / _{-0.13}
15	39.52	25.12	33.30 ^{+0.15} / _{-0.10}
25	53.42	38.84	47.04 ^{+0.13} / _{-0.10}
37	69.70	55.30	63.50 ^{+0.13} / _{-0.10}
50	67.31	52.68	61.10 ^{+0.14} / _{-0.11}



9-37 pos.



50 pos.

ORDER DATA

SOCKET CONNECTOR

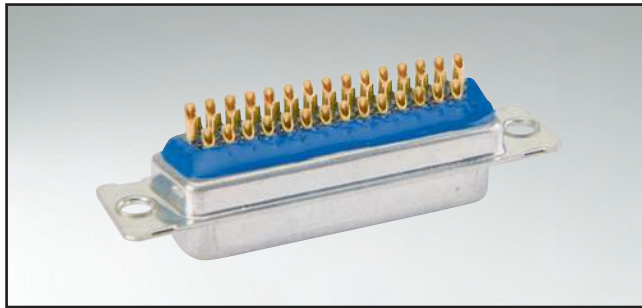
No. of pos.	Mounting style	Part Number
09	Through-hole	4 STD09SAM99A10 X
15	Through-hole	4 STD15SAM99A10 X
25	Through-hole	4 STD25SAM99A10 X
37	Through-hole	4 STD37SAM99A10 X
50	Through-hole	4 STD50SAM99A10 X

PLUG CONNECTOR

No. of pos.	Mounting style	Part Number
09	Through-hole	4 STD09PAM99A10 X
15	Through-hole	4 STD15PAM99A10 X
25	Through-hole	4 STD25PAM99A10 X
37	Through-hole	4 STD37PAM99A10 X
50	Through-hole	4 STD50PAM99A10 X

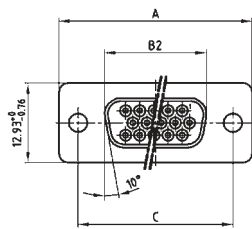
D-SUB HIGH DENSITY – IP67

Solder cup – Precision machined contacts – For hood Assembly –
For wire size AWG 22

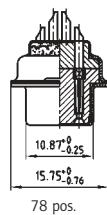
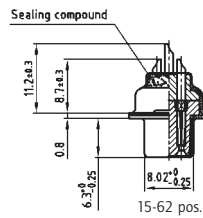
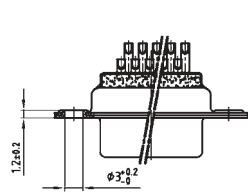


RoHS compliant

SOCKET CONNECTOR



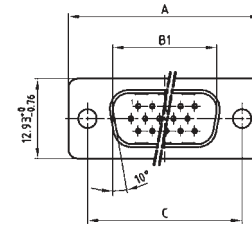
No. of pos.	A +0.76	B2 -0.25	C
15	31.19	16.46	25.00 ^{+0.12} / _{-0.13}
26	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
44	53.42	38.50	47.04 ^{+0.13} / _{-0.13}
62	69.70	54.96	63.50 ^{+0.13} / _{-0.13}
78	67.31	52.55	61.10 ^{+0.14} / _{-0.11}



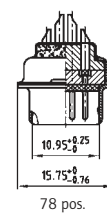
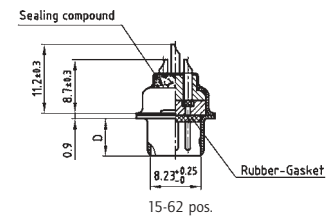
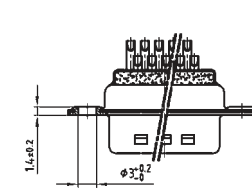
DESCRIPTION

- Suitable for wire size **AWG 22**
- Mounting style:
with through-hole, Ø .118" / 3.0 mm
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel available on request)

PLUG CONNECTOR



No. of pos.	A +0.76	B1 +0.25	C	D1 -0.30
15	31.19	16.79	25.00 ^{+0.12} / _{-0.13}	6.12
26	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
44	53.42	38.84	47.04 ^{+0.13} / _{-0.13}	5.99
62	69.70	55.30	63.50 ^{+0.13} / _{-0.13}	5.99
78	37.31	62.68	61.10 ^{+0.14} / _{-0.11}	5.99



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	4 HDD15SAM99A10 X
26	Through-hole	4 HDD26SAM99A10 X
44	Through-hole	4 HDD44SAM99A10 X
62	Through-hole	4 HDD62SAM99A10 X
78	Through-hole	4 HDD78SAM99A10 X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	4 HDD15PAM99A10 X
26	Through-hole	4 HDD26PAM99A10 X
44	Through-hole	4 HDD44PAM99A10 X
62	Through-hole	4 HDD62PAM99A10 X
78	Through-hole	4 HDD78PAM99A10 X

SECTION 2

IP67 FILTER D-SUB CONNECTORS

Many applications in harsh, industrial environments place additional demands on the interface.

The filtered, water resistant connector system developed by CONEC is well suited for applications that require increased EMC protection under ambient conditions where there is risk of dust and moisture.

The system includes D-Subminiature Connectors in standard and high-density designs.

This connector system designed to IEC 60529 with an IP67 rating. In order to ensure these requirements are met, special sealing measures have been taken for these connectors and their sealing frames. Special water resistant accessories and protective caps supplement the product line.

System details:

- Metal frame with O-ring for sealing
- Seal in the connector plug- water cannot penetrate into the housing
- Available for front side or rear side panel of the enclosure
- Connector without frame for cable housing
- Special threaded parts, 4-40 UNC and M 3
- Plastic materials comply with UL 94 V0
- Machined precision contacts for heavy duty usage
- Various gold plating options available
- All conventional contact termination types available
- Special accessories, e.g. water resistant hoods and sealing caps

The following pages indicate examples from our extensive product line. For additional and detail information please contact us direct or visit us at www.conec.com.



TECHNICAL DATA

Materials	Filter D-SUB Standard 9, 15, 25, 37 and 50 position	Filter D-SUB High Density 15, 26, 44, and 62 position
Insulator	Polyester GF UL94 V-0	
Contacts	CU alloy	
Contact plating	Gold plated over nickel, solder area tin plated	
Shell	Brass tin plated (standard) / Stainless steel on request	
Mechanical and electrical characteristics		
Dielectric with standing voltage	Standard 424 VDC	Standard 300 VDC
Working voltage	100 VDC Depending on isolation coordination (refer to DIN VDE 0110/IEC 664-1)	
Contact resistance	Max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing per DIN 41652, Part 2	
Insulation resistance	≥ 1GΩ	
Current rating	7.5 A (UL) / 5 A (CSA, VDE)	3 A (UL, VDE) / 2.5 A (CSA)
Voltage surge 10/700μs	Standard 300 V	Standard 300 V
Temperature working range	-25°C to +105°C	-25°C to +85°C
Capacitor values For other capacitance values please contact the factory.	180 pF ± 20% tolerance 370 pF ± 20% tolerance 830 pF ± 20% tolerance 1300 pF ± 20% tolerance	180 pF ± 20% tolerance 370 pF ± 20% tolerance 830 pF ± 20% tolerance
Mating and unmating forces	9 pos. ≤ 30 N 15 pos. ≤ 50 N 25 pos. ≤ 83 N 37 pos. ≤ 123 N 50 pos. ≤ 167 N	15 pos. ≤ 50 N 26 pos. ≤ 84 N 44 pos. ≤ 120 N 62 pos. ≤ 170 N
Quality class	A = Quality class 3 = 50 mating cycles B = Quality class 2 = 200 mating cycles C = Quality class 1 = 500 mating cycles	
Degree of protection	Requirement according to IEC 60529 – IP67	

Technical alterations are subject to change without notice

D-SUB STANDARD – IP67

Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26

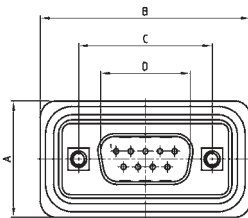


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 202784

DESCRIPTION

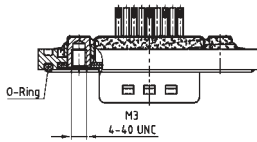
- Suitable for wire size AWG 26
- Mounting style: with 4-40 UNC or M3 threaded insert
- incl. hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel on request)
- Nickel plated die-cast frame (Black plastic frame on request)

PRODUCT DRAWING

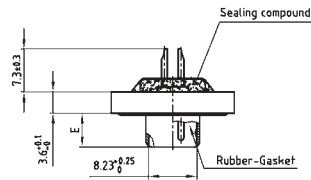


No. of pos.	A +0.20	B +0.20	C	D +0.25	E -0.30
09	21.10	39.40	25.00 ^{+0.12} _{-0.13}	16.79	5.82
15	21.10	47.70	33.30 ^{+0.15} _{-0.10}	25.12	5.82
25	21.10	61.40	47.04 ^{+0.13}	38.84	5.69
37	21.10	77.90	63.50 ^{+0.13}	55.30	5.69
50	23.90	75.50	61.10 ^{+0.14} _{-0.11}	52.68	5.69

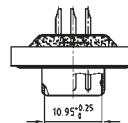
Mounting style: Threaded insert



9-37 pos.



50 pos.



ORDER DATA

Capacitance 180 pF

PLUG CONNECTOR

No. of pos.	Mounting style M3	Part Number
09	Threaded insert	6 STF09PAM01 B20 X
15	Threaded insert	6 STF15PAM01 B20 X
25	Threaded insert	6 STF25PAM01 B20 X
37	Threaded insert	6 STF37PAM01 B20 X
50	Threaded insert	6 STF50PAM01 B20 X

PLUG CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	6 STF09PAM01 B30 X
15	Threaded insert	6 STF15PAM01 B30 X
25	Threaded insert	6 STF25PAM01 B30 X
37	Threaded insert	6 STF37PAM01 B30 X
50	Threaded insert	6 STF50PAM01 B30 X

C-FILTER D-SUB STANDARD – IP67

Plug connector – Solder cup – Precision machined contacts – For wire size AWG 26

ORDER DATA

Capacitance 370 pF

PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style M3	Part Number	No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	6 STF09PAM03B20 X	09	Threaded insert	6 STF09PAM03B30 X
15	Threaded insert	6 STF15PAM03B20 X	15	Threaded insert	6 STF15PAM03B30 X
25	Threaded insert	6 STF25PAM03B20 X	25	Threaded insert	6 STF25PAM03B30 X
37	Threaded insert	6 STF37PAM03B20 X	37	Threaded insert	6 STF37PAM03B30 X
50	Threaded insert	6 STF50PAM03B20 X	50	Threaded insert	6 STF50PAM03B30 X

Capacitance 830 pF

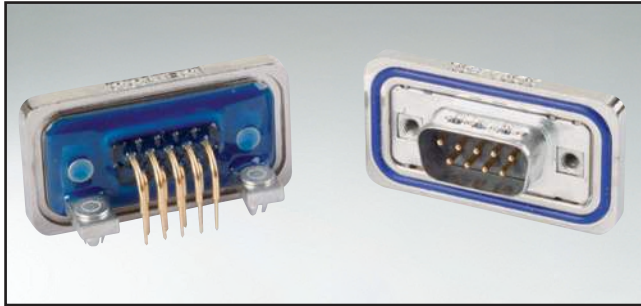
PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style M3	Part Number	No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	6 STF09PAM04B20 X	09	Threaded insert	6 STF09PAM04B30 X
15	Threaded insert	6 STF15PAM04B20 X	15	Threaded insert	6 STF15PAM04B30 X
25	Threaded insert	6 STF25PAM04B20 X	25	Threaded insert	6 STF25PAM04B30 X
37	Threaded insert	6 STF37PAM04B20 X	37	Threaded insert	6 STF37PAM04B30 X
50	Threaded insert	6 STF50PAM04B20 X	50	Threaded insert	6 STF50PAM04B30 X

Capacitance 1300 pF

PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style M3	Part Number	No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	6 STF09PAM05B20 X	09	Threaded insert	6 STF09PAM05B30 X
15	Threaded insert	6 STF15PAM05B20 X	15	Threaded insert	6 STF15PAM05B30 X
25	Threaded insert	6 STF25PAM05B20 X	25	Threaded insert	6 STF25PAM05B30 X
37	Threaded insert	6 STF37PAM05B20 X	37	Threaded insert	6 STF37PAM05B30 X
50	Threaded insert	6 STF50PAM05B20 X	50	Threaded insert	6 STF50PAM05B30 X

C-FILTER D-SUB STANDARD – IP67

Plug connector – Solder pin – Angled – .189" / 4.8 mm –
Precision machined contacts – Metal bracket

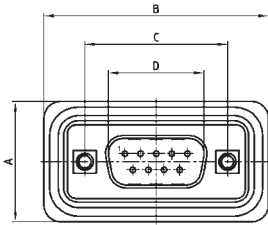


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 202784

DESCRIPTION

- Mounting styles:
 - with 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- incl. hex locking bolt
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (stainless steel on request)
- Nickel plated die-cast frame (Black plastic frame on request)

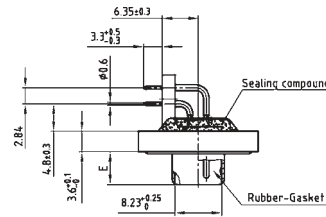
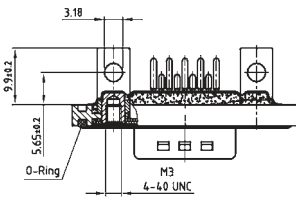
PRODUCT DRAWING



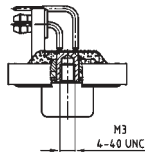
No. of pos.	A +0.20	B +0.20	C	D +0.25	E -0.30
09	21.10	39.40	25.00 ^{+0.12} _{-0.13}	16.79	5.82
15	21.10	47.70	33.30 ^{+0.15} _{-0.10}	25.12	5.82
25	21.10	61.40	47.04 ^{+0.13}	38.84	5.69
37	21.10	77.90	63.50 ^{+0.13}	55.30	5.69

PCB-Layout: Kat1kGSA

Mounting style: Threaded insert



Mounting style: PCB clip, threaded insert



ORDER DATA

Capacitance 180 pF

PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number	No. of pos.	Mounting style	Part Number
09	M3 Threaded insert	6 STF09PAT01S10 X	09	PCB clip / M3 Threaded insert	6 STF09PAT01S30 X
15	M3 Threaded insert	6 STF15PAT01S10 X	15	PCB clip / M3 Threaded insert	6 STF15PAT01S30 X
25	M3 Threaded insert	6 STF25PAT01S10 X	25	PCB clip / M3 Threaded insert	6 STF25PAT01S30 X
37	M3 Threaded insert	6 STF37PAT01S10 X	37	PCB clip / M3 Threaded insert	6 STF37PAT01S30 X
09	4-40 UNC Threaded insert	6 STF09PAT01S20 X	09	PCB clip / 4-40 UNC Threaded insert	6 STF09PAT01S40 X
15	4-40 UNC Threaded insert	6 STF15PAT01S20 X	15	PCB clip / 4-40 UNC Threaded insert	6 STF15PAT01S40 X
25	4-40 UNC Threaded insert	6 STF25PAT01S20 X	25	PCB clip / 4-40 UNC Threaded insert	6 STF25PAT01S40 X
37	4-40 UNC Threaded insert	6 STF37PAT01S20 X	37	PCB clip / 4-40 UNC Threaded insert	6 STF37PAT01S40 X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

C-FILTER D-SUB STANDARD – IP67

Plug connector – Solder pin – Angled – .189" / 4.8 mm –
Precision machined contacts – Metal bracket

ORDER DATA

Capacitance 370 pF

PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number	No. of pos.	Mounting style	Part Number
09	M3 Threaded insert	6 STF09PAT03S10 X	09	PCB clip / M3 Threaded insert	6 STF09PAT03S30 X
15	M3 Threaded insert	6 STF15PAT03S10 X	15	PCB clip / M3 Threaded insert	6 STF15PAT03S30 X
25	M3 Threaded insert	6 STF25PAT03S10 X	25	PCB clip / M3 Threaded insert	6 STF25PAT03S30 X
37	M3 Threaded insert	6 STF37PAT03S10 X	37	PCB clip / M3 Threaded insert	6 STF37PAT03S30 X
09	4-40 UNC Threaded insert	6 STF09PAT03S20 X	09	PCB clip / 4-40 UNC Threaded insert	6 STF09PAT03S40 X
15	4-40 UNC Threaded insert	6 STF15PAT03S20 X	15	PCB clip / 4-40 UNC Threaded insert	6 STF15PAT03S40 X
25	4-40 UNC Threaded insert	6 STF25PAT03S20 X	25	PCB clip / 4-40 UNC Threaded insert	6 STF25PAT03S40 X
37	4-40 UNC Threaded insert	6 STF37PAT03S20 X	37	PCB clip / 4-40 UNC Threaded insert	6 STF37PAT03S40 X

Capacitance 830 pF

PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number	No. of pos.	Mounting style	Part Number
09	M3 Threaded insert	6 STF09PAT04S10 X	09	PCB clip / M3 Threaded insert	6 STF09PAT04S30 X
15	M3 Threaded insert	6 STF15PAT04S10 X	15	PCB clip / M3 Threaded insert	6 STF15PAT04S30 X
25	M3 Threaded insert	6 STF25PAT04S10 X	25	PCB clip / M3 Threaded insert	6 STF25PAT04S30 X
37	M3 Threaded insert	6 STF37PAT04S10 X	37	PCB clip / M3 Threaded insert	6 STF37PAT04S30 X
09	4-40 UNC Threaded insert	6 STF09PAT04S20 X	09	PCB clip / 4-40 UNC Threaded insert	6 STF09PAT04S40 X
15	4-40 UNC Threaded insert	6 STF15PAT04S20 X	15	PCB clip / 4-40 UNC Threaded insert	6 STF15PAT04S40 X
25	4-40 UNC Threaded insert	6 STF25PAT04S20 X	25	PCB clip / 4-40 UNC Threaded insert	6 STF25PAT04S40 X
37	4-40 UNC Threaded insert	6 STF37PAT04S20 X	37	PCB clip / 4-40 UNC Threaded insert	6 STF37PAT04S40 X

Capacitance 1300 pF

PLUG CONNECTOR			PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number	No. of pos.	Mounting style	Part Number
09	M3 Threaded insert	6 STF09PAT05S10 X	09	PCB clip / M3 Threaded insert	6 STF09PAT05S30 X
15	M3 Threaded insert	6 STF15PAT05S10 X	15	PCB clip / M3 Threaded insert	6 STF15PAT05S30 X
25	M3 Threaded insert	6 STF25PAT05S10 X	25	PCB clip / M3 Threaded insert	6 STF25PAT05S30 X
37	M3 Threaded insert	6 STF37PAT05S10 X	37	PCB clip / M3 Threaded insert	6 STF37PAT05S30 X
09	4-40 UNC Threaded insert	6 STF09PAT05S20 X	09	PCB clip / 4-40 UNC Threaded insert	6 STF09PAT05S40 X
15	4-40 UNC Threaded insert	6 STF15PAT05S20 X	15	PCB clip / 4-40 UNC Threaded insert	6 STF15PAT05S40 X
25	4-40 UNC Threaded insert	6 STF25PAT05S20 X	25	PCB clip / 4-40 UNC Threaded insert	6 STF25PAT05S40 X
37	4-40 UNC Threaded insert	6 STF37PAT05S20 X	37	PCB clip / 4-40 UNC Threaded insert	6 STF37PAT05S40 X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

SECTION 3

IP67 COMBINATION D-SUB CONNECTORS

CONEC Combination D-SUB Connectors with IP67-rating are suitable for use in environments where increased protection against moisture and contamination is necessary. All IP67 protected Combination D-SUB Connectors are supplied already populated with signal, high voltage, high power or coaxial contacts. This is necessary to provide factory assurance that the connector is properly sealed thus ensuring its reliable protection in harsh environments.

The type of protection is defined by IEC 60529 which also specifies the suitability of electrical components for various ambient conditions. CONEC water resistant connectors ensure a continuously secure connection compliant with the IP67 rating. They are dustproof and protected against temporary submersion into water.



Power details:

- Standard design with metal frame and O-ring
- Inside seal in the connector plug - water cannot penetrate into the housing
- Available for front or rear panel mounting on the enclosure
- Connector without frame for cable mounting
- 4-40 UNC or M 3 threaded insert
- Plastic materials comply with UL 94 V0
- Machined precision contacts for heavy duty usage
- Various gold plating options available
- Basic connector dimensions - without frame - in compliance with DIN 41652 / MIL-C-24308
- Special accessories, including waterproof hoods and sealing caps

The following pages indicate examples from our extensive product line. For additional and detail information please contact us direct or visit us at www.conec.com.

TECHNICAL DATA

Mechanical and electrical characteristics	Signal contacts	Coaxial contacts	High power contacts
Insulator	Polyester GF (UL 94V-0)	PTFE	
Shell	Brass tin plated (standard) / Stainless steel on request		
Contact plating	Gold plated over nickel		
Contact material	CU alloy		
Retaining clip		CU alloy	CU alloy
Current rating	7.5 A (UL) / 5 A (CSA, VDE)		
Test voltage between 2 contacts shell and contact	1000 V, 50Hz 1 min.		
Resistance between mated contacts	≤ 2.7mΩ		
Insulation resistance	5GΩ	≤ 1GΩ	5GΩ
Volume resistivity	10 ¹⁶ Ωcm		
Dielectric with standing voltage	50KV/mm		
Impedance		50/75Ω	
Contact resistance inner- /outer conductor	≤ 2.7mΩ	≤ 2.7mΩ	≤ 1mΩ
VSWR-value at according MIL-C-39012 1.2GHz 1.5GHz 2.0GHz		≤ 1.2 ≤ 1.3 ≤ 1.5	
Dielectric with standing voltage		750 V 50Hz	
Frequency range		0-2GHz	
Working voltage	250 V	250 V	
Temperature range	-25°C to +105°C		
Degree of protection	Requirements according to IEC 60529 – IP67		
Insertion force per signal contact	≤ 3.4N	≤ 7N	≤ 7N
Extraction force per signal contact	≤ 0.2N	≤ 7N	ca. 5N
Quality class	A = Quality class 3 = 50 mating cycles B = Quality class 2 = 200 mating cycles C = Quality class 1 = 500 mating cycles		

Technical alterations are subject to change without notice.

IP67 COMBINATION D-SUB

Solder cup – Precision machined contacts – For wire size AWG 20

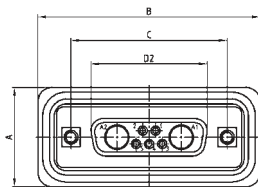


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

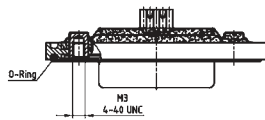
DESCRIPTION

- Signal contacts for wire size **AWG 20**
- Contacts: high power or coaxial contacts
- Mounting style: with 4-40 UNC or M3 threaded insert
- Quality class 3 (Also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame (Black plastic frame on request)
- Suitable hex bolts are supplied loose

SOCKET CONNECTOR



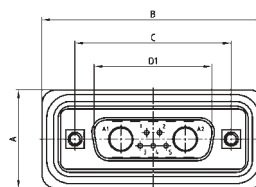
Shellsize	A +0.2	B +0.2	C	D2 -0.25
1	21.10	39.40	25.00 ^{+0.12} _{-0.13}	16.46
2	21.10	47.70	33.30 ^{+0.15} _{-0.10}	24.79
3	21.10	61.40	47.04 ^{+0.13}	38.50
4	21.10	77.90	63.50 ^{+0.13}	54.96
5	23.90	75.50	61.10 ^{+0.14} _{-0.11}	52.55



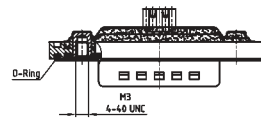
Shell size 1-4

Shell size 5

PLUG CONNECTOR

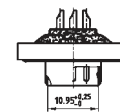
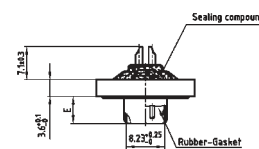
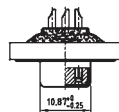
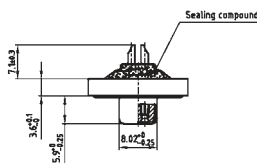


Shellsize	A +0.2	B +0.2	C	D1 +0.25	E -0.30
1	21.10	39.40	25.00 ^{+0.12} _{-0.13}	16.79	5.82
2	21.10	47.70	33.30 ^{+0.15} _{-0.10}	25.12	5.82
3	21.10	61.40	47.04 ^{+0.13}	38.84	5.69
4	21.10	77.90	63.50 ^{+0.13}	55.30	5.69
5	23.90	75.50	61.10 ^{+0.14} _{-0.11}	52.68	5.69



Shell size 1-4

Shell size 5



ORDER DATA

SOCKET CONNECTOR		High power contact	Part Number
Design	Mounting style 4-40 UNC		
5W1	Threaded insert	10 A	6 005W1SAM 61 B30 X
7W2	Threaded insert	10 A	6 007W2SAM 61 B30 X
11W1	Threaded insert	10 A	6 011W1SAM 61 B30 X
9W4	Threaded insert	10 A	6 009W4SAM 61 B30 X
13W3	Threaded insert	10 A	6 013W3SAM 61 B30 X
17W2	Threaded insert	10 A	6 017W2SAM 61 B30 X
21W1	Threaded insert	10 A	6 021W1SAM 61 B30 X
13W6	Threaded insert	10 A	6 013W6SAM 61 B30 X
17W5	Threaded insert	10 A	6 017W5SAM 61 B30 X
21WA4	Threaded insert	10 A	6 21WA4SAM 61 B30 X
25W3	Threaded insert	10 A	6 025W3SAM 61 B30 X
27W2	Threaded insert	10 A	6 027W2SAM 61 B30 X
24W7	Threaded insert	10 A	6 024W7SAM 61 B30 X
36W4	Threaded insert	10 A	6 036W4SAM 61 B30 X
43W2	Threaded insert	10 A	6 043W2SAM 61 B30 X
47W1	Threaded insert	10 A	6 047W1SAM 61 B30 X

PLUG CONNECTOR		High power contact	Part Number
Design	Mounting style 4-40 UNC		
5W1	Threaded insert	10 A	6 005W1PAM 61 B30 X
7W2	Threaded insert	10 A	6 007W2PAM 61 B30 X
11W1	Threaded insert	10 A	6 011W1PAM 61 B30 X
9W4	Threaded insert	10 A	6 009W4PAM 61 B30 X
13W3	Threaded insert	10 A	6 013W3PAM 61 B30 X
17W2	Threaded insert	10 A	6 017W2PAM 61 B30 X
21W1	Threaded insert	10 A	6 021W1PAM 61 B30 X
13W6	Threaded insert	10 A	6 013W6PAM 61 B30 X
17W5	Threaded insert	10 A	6 017W5PAM 61 B30 X
21WA4	Threaded insert	10 A	6 21WA4PAM 61 B30 X
25W3	Threaded insert	10 A	6 025W3PAM 61 B30 X
27W2	Threaded insert	10 A	6 027W2PAM 61 B30 X
24W7	Threaded insert	10 A	6 024W7PAM 61 B30 X
36W4	Threaded insert	10 A	6 036W4PAM 61 B30 X
43W2	Threaded insert	10 A	6 043W2PAM 61 B30 X
47W1	Threaded insert	10 A	6 047W1PAM 61 B30 X

For other contact configurations refer to part number creator.

Contact	Code
High power 10 A	= 61
High power 20 A	= 62

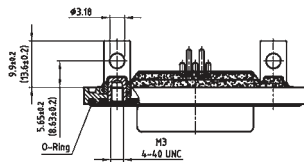
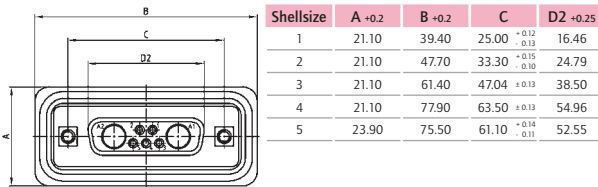
IP67 COMBINATION D-SUB

Solder pin – Angled – .189" / 4.8 mm – Precision machined contacts – Metal bracket



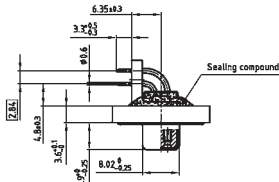
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR

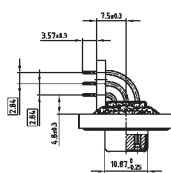


Dim. in (_) = Shellsize 5

Shell size 1-4



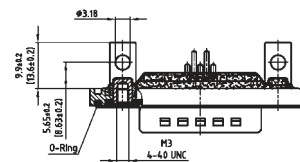
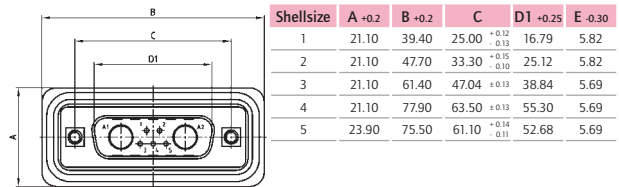
Shell size 5



DESCRIPTION

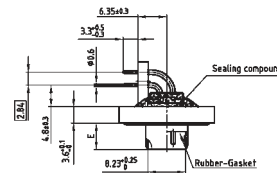
- Contacts: high power or coaxial contacts
- Mounting style: metal bracket with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Brass tin plated (Stainless steel on request)
- Nickel plated die-cast frame (Black plastic frame on request)
- Suitable hex bolts are supplied loose

PLUG CONNECTOR

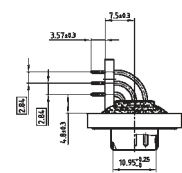


Dim. in (_) = Shellsize 5

Shell size 1-4



Shell size 5



ORDER DATA

SOCKET CONNECTOR		High power contact	Part Number
Design	Mounting style 4-40 UNC		
5W1	Threaded insert	15 A	6 005W1SAT59 S20 X
7W2	Threaded insert	15 A	6 007W2SAT59 S20 X
11W1	Threaded insert	15 A	6 011W1SAT59 S20 X
9W4	Threaded insert	15 A	6 009W4SAT59 S20 X
13W3	Threaded insert	15 A	6 013W3SAT59 S20 X
17W2	Threaded insert	15 A	6 017W2SAT59 S20 X
21W1	Threaded insert	15 A	6 021W1SAT59 S20 X
13W6	Threaded insert	15 A	6 013W6SAT59 S20 X
17W5	Threaded insert	15 A	6 017W5SAT59 S20 X
21WA4	Threaded insert	15 A	6 21WA4SAT59 S20 X
25W3	Threaded insert	15 A	6 025W3SAT59 S20 X
27W2	Threaded insert	15 A	6 027W2SAT59 S20 X
24W7	Threaded insert	20 A	6 024W7SAT81 S20 X
36W4	Threaded insert	20 A	6 036W4SAT81 S20 X
43W2	Threaded insert	20 A	6 043W2SAT81 S20 X
47W1	Threaded insert	20 A	6 047W1SAT81 S20 X

PLUG CONNECTOR		High power contact	Part Number
Design	Mounting style 4-40 UNC		
5W1	Threaded insert	15 A	6 005W1PAT59 S20 X
7W2	Threaded insert	15 A	6 007W2PAT59 S20 X
11W1	Threaded insert	15 A	6 011W1PAT59 S20 X
9W4	Threaded insert	15 A	6 009W4PAT59 S20 X
13W3	Threaded insert	15 A	6 013W3PAT59 S20 X
17W2	Threaded insert	15 A	6 017W2PAT59 S20 X
21W1	Threaded insert	15 A	6 021W1PAT59 S20 X
13W6	Threaded insert	15 A	6 013W6PAT59 S20 X
17W5	Threaded insert	15 A	6 017W5PAT59 S20 X
21WA4	Threaded insert	15 A	6 21WA4PAT59 S20 X
25W3	Threaded insert	15 A	6 025W3PAT59 S20 X
27W2	Threaded insert	15 A	6 027W2PAT59 S20 X
24W7	Threaded insert	20 A	6 024W7PAT81 S20 X
36W4	Threaded insert	20 A	6 036W4PAT81 S20 X
43W2	Threaded insert	20 A	6 043W2PAT81 S20 X
47W1	Threaded insert	20 A	6 047W1PAT81 S20 X

For other contact configurations refer to part number creator.

Contact for shellsize 1-4	Code	Contact for shellsize 5	Code
High power 15 A; E=.075/1.90 mm	= 59	High power 20 A; E=.110/2.85 mm	= 81
High power 20 A; E=.110/2.85 mm	= 73	High power 30 A; E=.150/3.75 mm	= 85
High power 30 A; E=.126/3.20 mm	= 74	High power 30 A; E=.126/3.20 mm	= 82
High power 40 A; E=.150/3.75 mm	= 75	High power 40 A; E=.150/3.75 mm	= 77

SECTION 4

D-SUB HOODS AND ACCESSORIES

The diversity of different applications and market requirements makes it necessary to offer a comprehensive line of hoods and backshells. The CONEC product line includes shielded hoods made of metal, plastic, metallized plastic and plastic with metal inserts.

Connectors with high current or coaxial contacts require special hoods with adapted interiors. In these cases the height of the housing is particularly important to assure faultless seating of the contacts. The cable should exit from the hood or backshell without introducing any strain on the contacts.

The input/output connector product line is supplemented by a wide array of accessories.

The various caps, hardware and latches are available for use with these D-subminiature connectors, whether standard, high density, combination or filter designs are selected.

Various materials and designs in plastic, steel or stainless steel, as well as M3 or 4-40 UNC thread designs, are deliverable as standard or on request.

A special developed hood with an IP67 rating is available to provide optimal water resistance for D-SUB Connectors.

The following pages indicate examples from our extensive product line. For additional and detail information please contact us direct or visit us at www.conec.com.



D-SUB PLASTIC HOOD IP67

Straight cable entry – 9-50 pos.



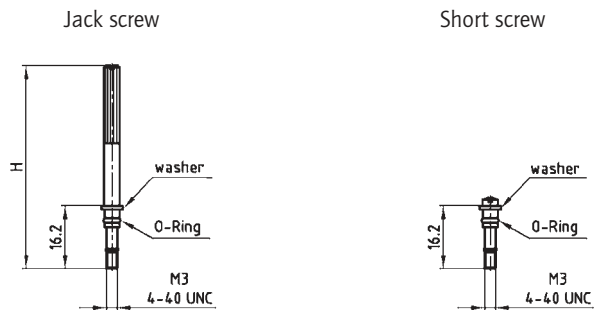
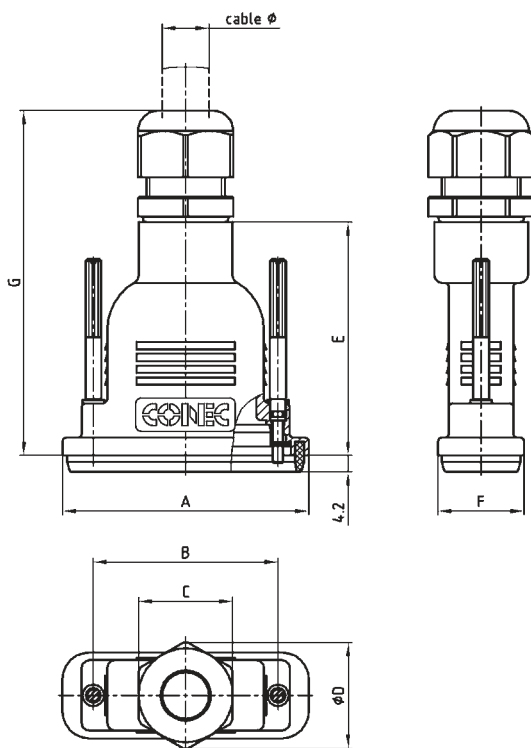
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

FOR SOCKET CONNECTOR

DESCRIPTION

- Water resistant hood for Standard D-SUB and Combination D-SUB Connectors
- With large internal space for high power and coaxial contacts
- Material:
 - Plastic hood black: PBT + Glas filled, UL 94 V-0
 - Plastic hood metallized: ABS, UL 94 V-0
- Fastening:
 - M3 or 4-40 UNC short screws stainless steel
 - M3 or 4-40 UNC jack screws stainless steel
- Bulk or single packaged units

FOR PLUG CONNECTOR



Shellsize	A	B	C	Ø D	E	F	G	H	Cable Ø
1	40.76	25.00	SW 22	24.60	51.00	22.00	77.00	44.00	5 - 10
2	49.06	33.30	SW 24	26.50	51.00	22.00	79.00	52.00	6 - 12
3	62.80	47.04	SW 24	26.50	59.50	22.00	87.50	52.00	6 - 12
4	78.86	63.50	SW 33	36.20	67.00	22.00	99.00	52.00	9 - 16
5	76.46	61.10	SW 42	47.00	67.00	24.80	107.00	52.00	13 - 20

ORDER DATA

D-SUB PLASTIC HOOD – BLACK		
No. of pos.	Design	Part Number
09	Black housing / M3 Jack screw	165 X 15119 X
15	Black housing / M3 Jack screw	165 X 15129 X
25	Black housing / M3 Jack screw	165 X 15139 X
37	Black housing / M3 Jack screw	165 X 15149 X
50	Black housing / M3 Jack screw	165 X 15159 X
09	Black housing / 4-40 UNC Jack screw	165 X 14819 X
15	Black housing / 4-40 UNC Jack screw	165 X 14829 X
25	Black housing / 4-40 UNC Jack screw	165 X 14839 X
37	Black housing / 4-40 UNC Jack screw	165 X 14849 X
50	Black housing / 4-40 UNC Jack screw	165 X 14859 X
09	Black housing / M3 Short screw	165 X 15169 X
15	Black housing / M3 Short screw	165 X 15179 X
25	Black housing / M3 Short screw	165 X 15189 X
37	Black housing / M3 Short screw	165 X 15199 X
50	Black housing / M3 Short screw	165 X 15209 X
09	Black housing / 4-40 UNC Short screw	165 X 14869 X
15	Black housing / 4-40 UNC Short screw	165 X 14879 X
25	Black housing / 4-40 UNC Short screw	165 X 14889 X
37	Black housing / 4-40 UNC Short screw	165 X 14899 X
50	Black housing / 4-40 UNC Short screw	165 X 14909 X

D-SUB PLASTIC HOOD – METALLIZED		
No. of pos.	Design	Part Number
09	Metallized housing / M3 Jack screw	165 X 15319 X
15	Metallized housing / M3 Jack screw	165 X 15329 X
25	Metallized housing / M3 Jack screw	165 X 15339 X
37	Metallized housing / M3 Jack screw	165 X 15349 X
50	Metallized housing / M3 Jack screw	165 X 15359 X
09	Metallized housing / 4-40 UNC Jack screw	165 X 15019 X
15	Metallized housing / 4-40 UNC Jack screw	165 X 15029 X
25	Metallized housing / 4-40 UNC Jack screw	165 X 15039 X
37	Metallized housing / 4-40 UNC Jack screw	165 X 15049 X
50	Metallized housing / 4-40 UNC Jack screw	165 X 15059 X
09	Metallized housing / M3 Short screw	165 X 15369 X
15	Metallized housing / M3 Short screw	165 X 15379 X
25	Metallized housing / M3 Short screw	165 X 15389 X
37	Metallized housing / M3 Short screw	165 X 15399 X
50	Metallized housing / M3 Short screw	165 X 15409 X
09	Metallized housing / 4-40 UNC Short screw	165 X 15069 X
15	Metallized housing / 4-40 UNC Short screw	165 X 15079 X
25	Metallized housing / 4-40 UNC Short screw	165 X 15089 X
37	Metallized housing / 4-40 UNC Short screw	165 X 15099 X
50	Metallized housing / 4-40 UNC Short screw	165 X 15109 X

For single packaged add the letter „E“ at the end of the part number.

D-SUB PROTECTION CAP – IP67

Metal design – Shielded – 9-50pos. – Jack screw – Lanyard



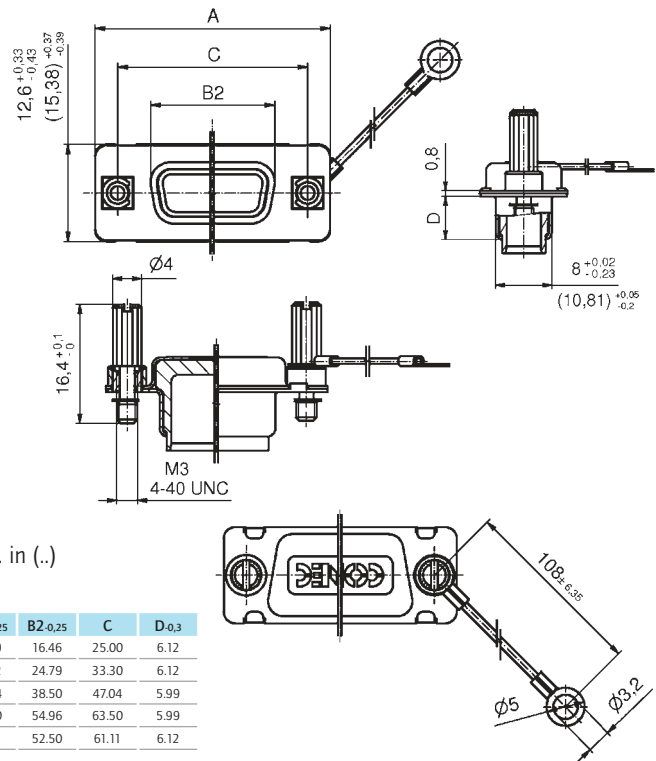
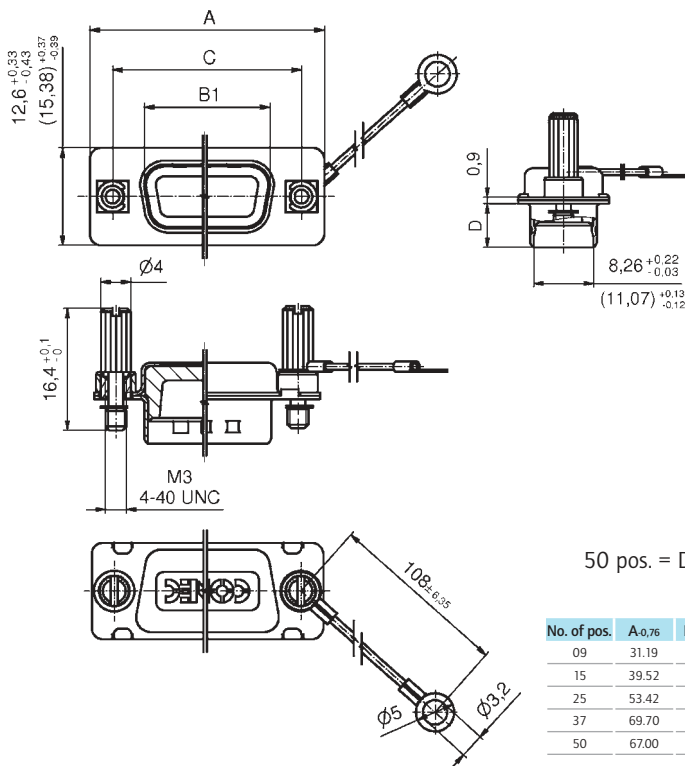
RoHS compliant

FOR SOCKET CONNECTOR

DESCRIPTION

- IP67 Protection cap with gasket and Lanyard
- Protection against EMI/RFI
- Material:
 - Shell: Brass tin plated
 - Lanyard: Stainless steel
 - Jack screw: Stainless steel
- Mounting style:
 - with M3 or 4-40 UNC Jack screws
- Bulk packaged

FOR PLUG CONNECTOR



50 pos. = Dim. in (..)

No. of pos.	A±0.76	B1±0.25	B2±0.25	C	D±0.3
09	31.19	16.79	16.46	25.00	6.12
15	39.52	25.12	24.79	33.30	6.12
25	53.42	38.84	38.50	47.04	5.99
37	69.70	55.30	54.96	63.50	5.99
50	67.00	52.81	52.50	61.11	6.12

ORDER DATA

SHIELDED CAP FOR SOCKET CONNECTOR

No. of pos.	Design	Part Number
09	Metal / M3 Jack screw stainless steel / Lanyard	15-000060
15	Metal / M3 Jack screw stainless steel / Lanyard	15-000070
25	Metal / M3 Jack screw stainless steel / Lanyard	15-000080
37	Metal / M3 Jack screw stainless steel / Lanyard	15-000090
50	Metal / M3 Jack screw stainless steel / Lanyard	15-000100
09	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000010
15	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000020
25	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000030
37	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000040
50	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000050

SHIELDED CAP FOR PLUG CONNECTOR

No. of pos.	Design	Part Number
09	Metal / M3 Jack screw stainless steel / Lanyard	15-000160
15	Metal / M3 Jack screw stainless steel / Lanyard	15-000170
25	Metal / M3 Jack screw stainless steel / Lanyard	15-000180
37	Metal / M3 Jack screw stainless steel / Lanyard	15-000190
50	Metal / M3 Jack screw stainless steel / Lanyard	15-000200
09	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000110
15	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000120
25	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000130
37	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000140
50	Metal / 4-40 UNC Jack screw stainless steel / Lanyard	15-000150

D-SUB PROTECTION CAP – IP67

Metal design – Shielded – 9-50 pos. – Fastening screws



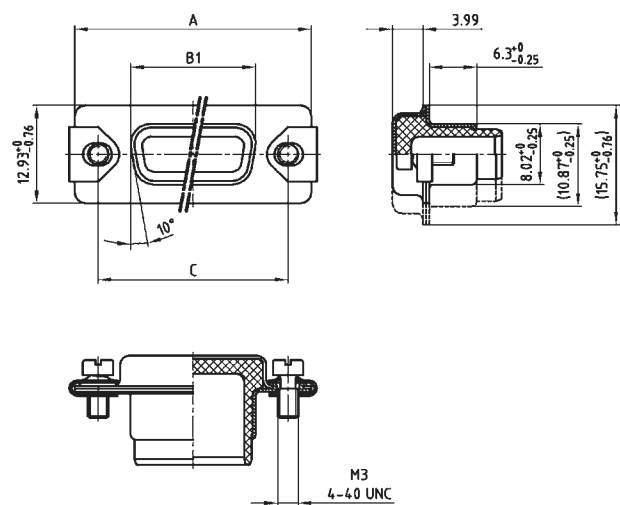
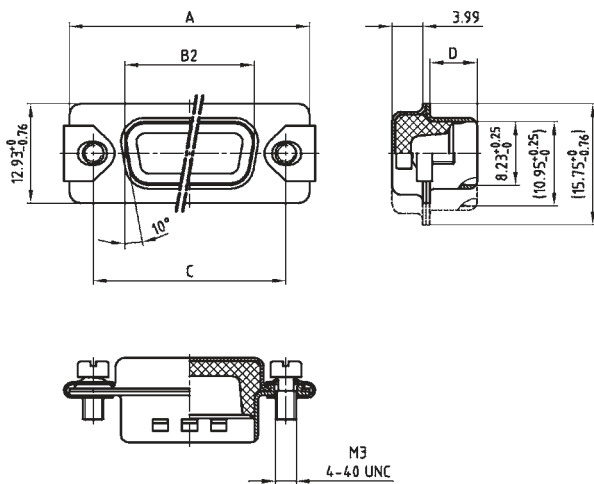
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

- IP67 Protection cap with gasket
- EMI/RFI protection
- Material: Brass tin plated
- Mounting style:
with M3 or 4-40 UNC screw and stainless steel clip
- Bulk packaged

FOR SOCKET CONNECTOR

FOR PLUG CONNECTOR



50 pos. = Dim. in (..)

No. of pos.	A-0.76	B1-0.25	B2-0.25	C	D-0.3
09	31.19	16.46	16.79	25.00	6.12
15	39.52	24.79	25.12	33.30	6.12
25	53.42	38.50	38.84	47.04	5.99
37	69.70	54.96	55.30	63.50	5.99
50	67.31	52.55	52.68	61.10	5.99

ORDER DATA

PROTECTION CAP FOR SOCKET CONNECTOR IP67

No. of pos.	Design	Part Number
09	Metal / M3 Screw and clip	165 X 16619 X
15	Metal / M3 Screw and clip	165 X 16629 X
25	Metal / M3 Screw and clip	165 X 16639 X
37	Metal / M3 Screw and clip	165 X 16649 X
50	Metal / M3 Screw and clip	165 X 16659 X
09	Metal / 4-40 UNC Screw and clip	165 X 14719 X
15	Metal / 4-40 UNC Screw and clip	165 X 14729 X
25	Metal / 4-40 UNC Screw and clip	165 X 14739 X
37	Metal / 4-40 UNC Screw and clip	165 X 14749 X
50	Metal / 4-40 UNC Screw and clip	165 X 14759 X

PROTECTION CAP FOR PLUG CONNECTOR IP67

No. of pos.	Design	Part Number
09	Metal / M3 Screw and clip	165 X 16669 X
15	Metal / M3 Screw and clip	165 X 16679 X
25	Metal / M3 Screw and clip	165 X 16689 X
37	Metal / M3 Screw and clip	165 X 16699 X
50	Metal / M3 Screw and clip	165 X 16709 X
09	Metal / 4-40 UNC Screw and clip	165 X 14769 X
15	Metal / 4-40 UNC Screw and clip	165 X 14779 X
25	Metal / 4-40 UNC Screw and clip	165 X 14789 X
37	Metal / 4-40 UNC Screw and clip	165 X 14799 X
50	Metal / 4-40 UNC Screw and clip	165 X 14809 X

SECTION 5

RJ45-IP67 INDUSTRIAL ETHERNET CONNECTOR SYSTEM

The RJ45 connector is the most used interface in data communications.

In Ethernet networks, this proven connector assures quick, secure communications between all devices connected in a network

The ethernet network technology has now been made "industry capable" as an Industrial Ethernet version. Naturally this required some adaptation to different requirements and harsher environmental conditions. This applies equally to the connection technology employed. The focus here was to provide increased protection for the connector system against contamination and moisture (IP67 rating). Furthermore, there are also increased demands for mechanical stability, temperature resistance, vibration immunity and protection against EMI/RFI.

In addition to protection against ambient influences in a connected state, the handling aspects to make quick, reliable connections also plays an important role.

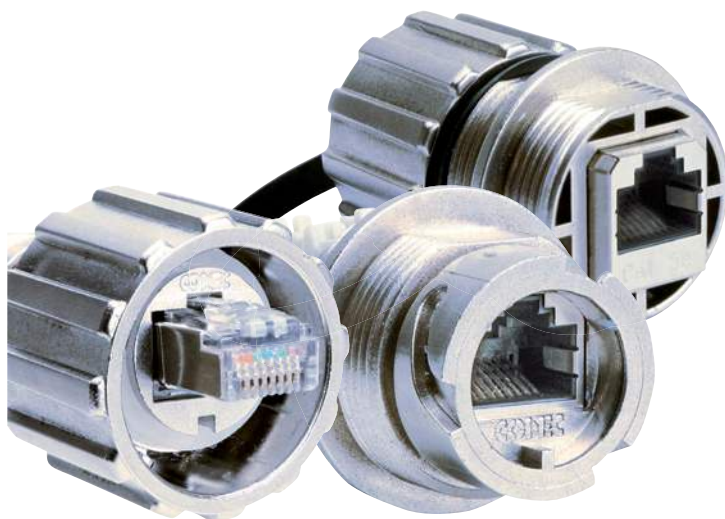
For industrial real-time-Ethernet, CONEC has developed a RJ45 connector type with a bayonet latching mechanism according to the IEC 61076-3-106 standard. This robust design with IP67 rating ensures reliable protection and easy connection under harsh environmental conditions.

Example applications:

- Industrial production, CNC machines
- Communications equipment
- Food & Beverage and chemical process controllers
- Mass transportation
- Oil exploration
- Industrial process control
- Diagnostic and instrument
- Printers, displays
- Factory automation
- Outdoor telecommunications systems

A socket connector with IP67 rating, bayonet coupling and protective cap is available for installation into equipment.

The mating counterpart consists of a RJ45 Cat. 5e plug set with IP67 rating. This program is supplemented by preassembled patch cables with IP67 rating in various lengths and designs.



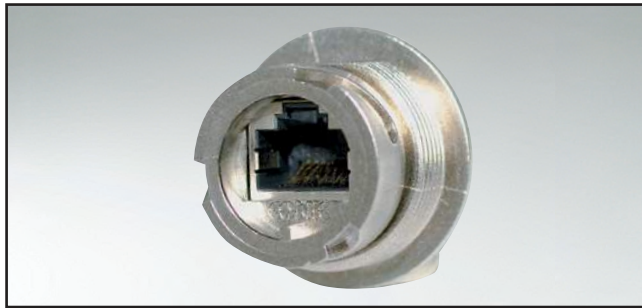
TECHNICAL DATA

Mechanical and electrical characteristics	
Interface connector	RJ45 Cat. 5e per EIA/TIA-568-B2
Lock mechanism	Bayonet socket connector per IEC 61076-3-106
IP Degree of protection	IP67
Temperature range	-40°C to + 85°C
Strength of current	1.2 A max. to 25°C
Voltage	100 VDC
Contact resistance	20 mΩ max.
Insulation resistance	500 mΩ min.
Electric strength contact to contact	1000 VDC/60 sec.
Electric strength contact to metal Housing	1500 VDC/60 sec.
Materials	
Housing	PBT (black) or ABS metallized (nickel plated), flame protection per UL 94-V0
Fastening nut	Brass nickel plated
Housing sealing	Silicone (white)
RJ45 Socket metal housing	Copper alloy, nickel plated
RJ45 Socket and plug connector plastic housing	PBT (black), flame protection per UL 94-V0
RJ45 Socket and plug contacts	Phosphor bronze, gold plated
Connector housing	PBT (black) or ABS metallized (nickel plated), flame protection peer UL 94-V0
Metal socket coupling ring	PBT (black) or ABS metallized (nickel plated), flame protection per UL 94-V0, or zinc die-cast (nickel plated)
Cable termination	PBT (black) or brass nickel plated, flame protection per UL 94-V0
Cable seal	NBR (black)
Interface seal	Silicone (white)
RJ45 plug connector metal housing	Copper alloy, nickel plated
Protection cap	PBT (black) or ABS metallized (nickel plated), flame protection per UL 94-V0
Seal	Silicone (red)
Protection cap	PE (black)

Technical alterations are subject to change without notice.

RJ45 INSTALLATION HOUSING SET

Inline socket connector version

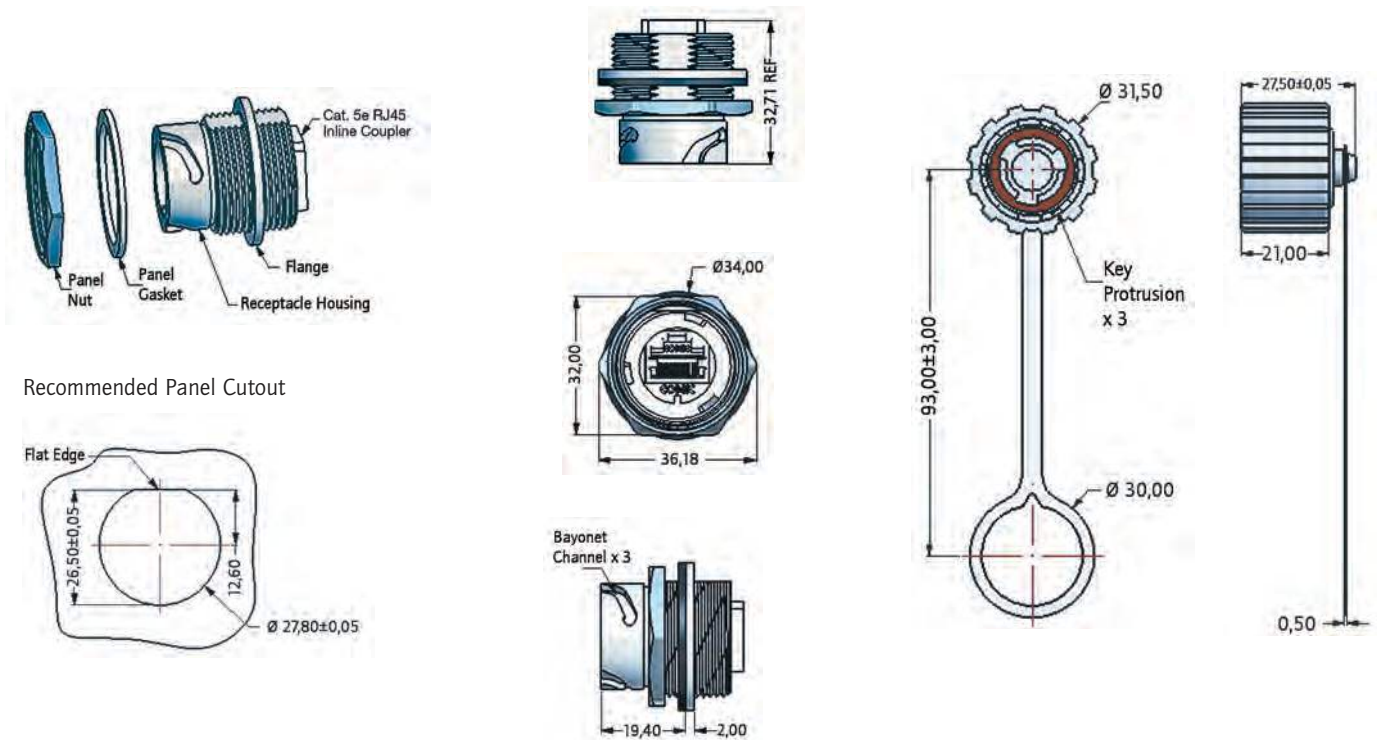


RoHS compliant

DESCRIPTION

- For front- or rear panel mounting up to wall thickness of .013"/3.2 mm
- Design: Black plastic or metallized plastic
- Unshielded RJ45 Inline socket connector or shielded RJ45 Inline socket connector Cat.5e
- Available as a set with protection cap

PRODUCT DRAWING



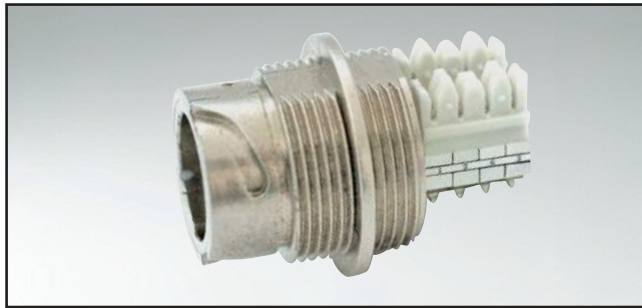
Recommended Panel Cutout

ORDER DATA

Type	Material	RJ45 Cat.5e design	Protection cap	Part Number
Housing	Black plastic	Inline socket connector shielded		17-10009
Housing	Black plastic	Inline socket connector unshielded		17-10019
Housing	Metallized plastic	Inline socket connector shielded		17-10012
Housing	Black plastic	Inline socket connector shielded	With protection cap	17-10000
Housing	Black plastic	Inline socket connector unshielded	With protection cap	17-10020
Housing	Metallized plastic	Inline socket connector shielded	With protection cap	17-10011

RJ45 INSTALLATION HOUSING SET

Insulation displacement termination version

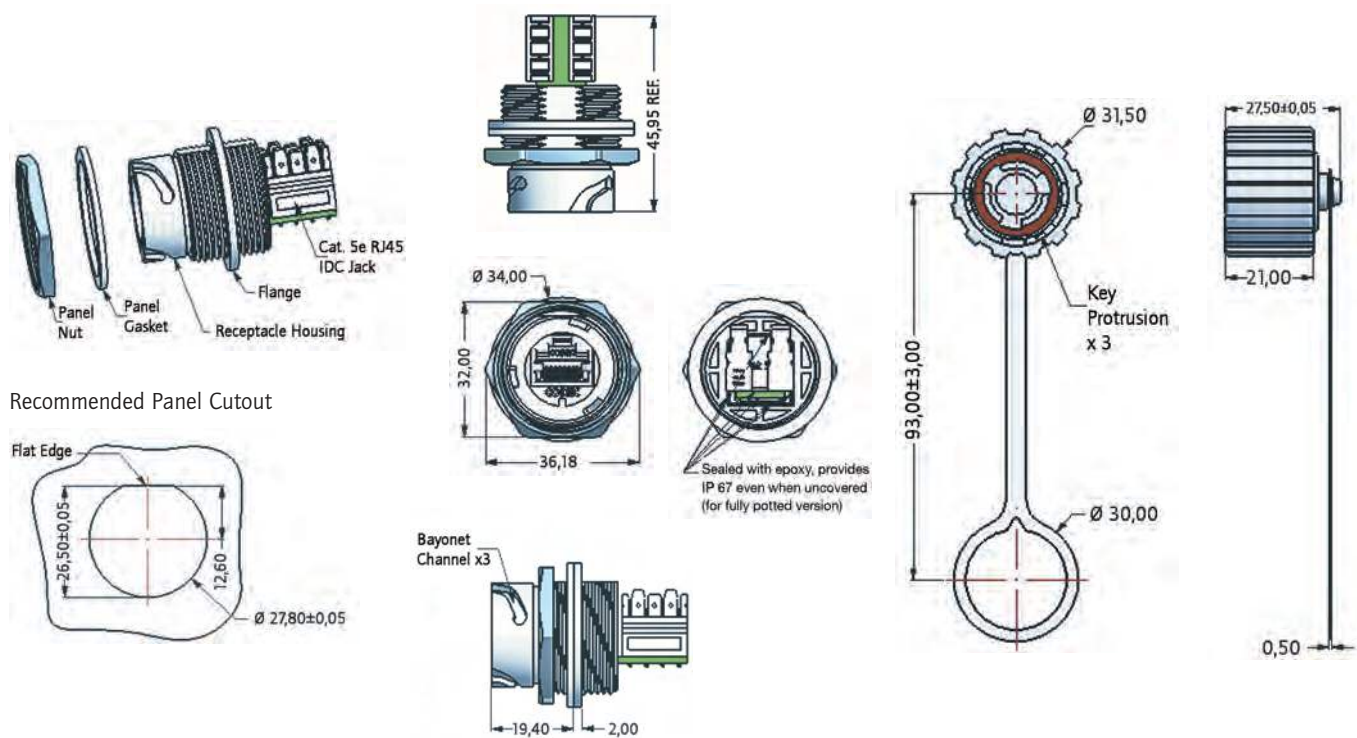


RoHS compliant

DESCRIPTION

- For front or rear panel mounting up to wall thickness of .013"/3.2 mm
- Design: Black plastic or metallized plastic
- Shielded RJ45 plug connector, insulation displacement termination (IDC) Cat.5e
- Available as a set with protection cap

PRODUCT DRAWING



ORDER DATA

Type	Material	RJ45 Cat.5e design	Sealing	Protection cap	Part Number
Housing	Black plastic	Socket IDC-termination / Shielded			17-10015
Housing	Metallized plastic	Socket IDC-termination / Shielded			17-10016
Housing	Black plastic	Socket IDC-termination / Shielded	Sealing compound		17-10033
Housing	Metallized plastic	Socket IDC-termination / Shielded	Sealing compound		17-10034
Housing	Black plastic	Socket IDC-termination / Shielded		With protection cap	17-10021
Housing	Metallized plastic	Socket IDC-termination / Shielded		With protection cap	17-10022
Housing	Black plastic	Socket IDC-termination / Shielded	Sealing compound	With protection cap	17-10037
Housing	Metallized plastic	Socket IDC-termination / Shielded	Sealing compound	With protection cap	17-10038

RJ45 INSTALLATION HOUSING SET

Solder termination (PCB)

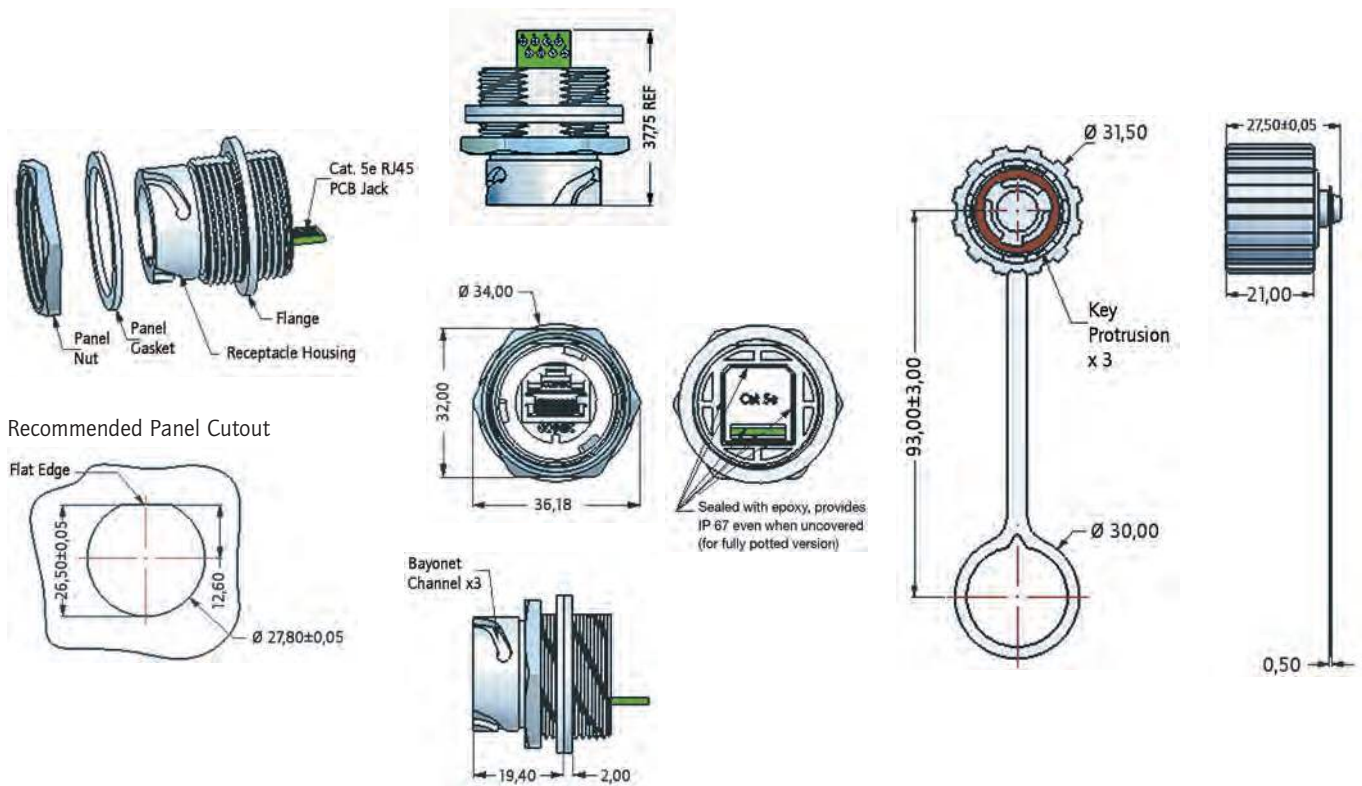


RoHS compliant

DESCRIPTION

- For front or rear panel mounting up to wall thickness of .013"/3.2 mm
- Design: Black plastic or metallized plastic
- Solder termination to shielded RJ45 Inline socket connector Cat. 5e
- Available as a set with protection cap

PRODUCT DRAWING

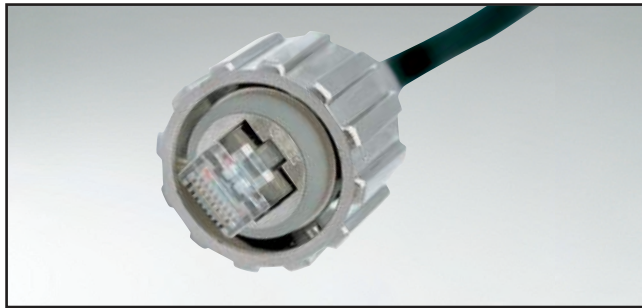


ORDER DATA

Type	Material	RJ45 Cat.5e design	Sealing	Protection cap	Part Number
Housing	Black plastic	Socket Solder termination/Shielded			17-10017
Housing	Metallized plastic	Socket Solder termination/Shielded			17-10018
Housing	Black plastic	Socket Solder termination/Shielded	Sealing compound		17-10035
Housing	Metallized plastic	Socket Solder termination/Shielded	Sealing compound		17-10036
Housing	Black plastic	Socket Solder termination/Shielded		With protection cap	17-10023
Housing	Metallized plastic	Socket Solder termination/Shielded		With protection cap	17-10024
Housing	Black plastic	Socket Solder termination/Shielded	Sealing compound	With protection cap	17-10039
Housing	Metallized plastic	Socket Solder termination/Shielded	Sealing compound	With protection cap	17-10040

RJ45 PLUG CONNECTOR SET

Standard version

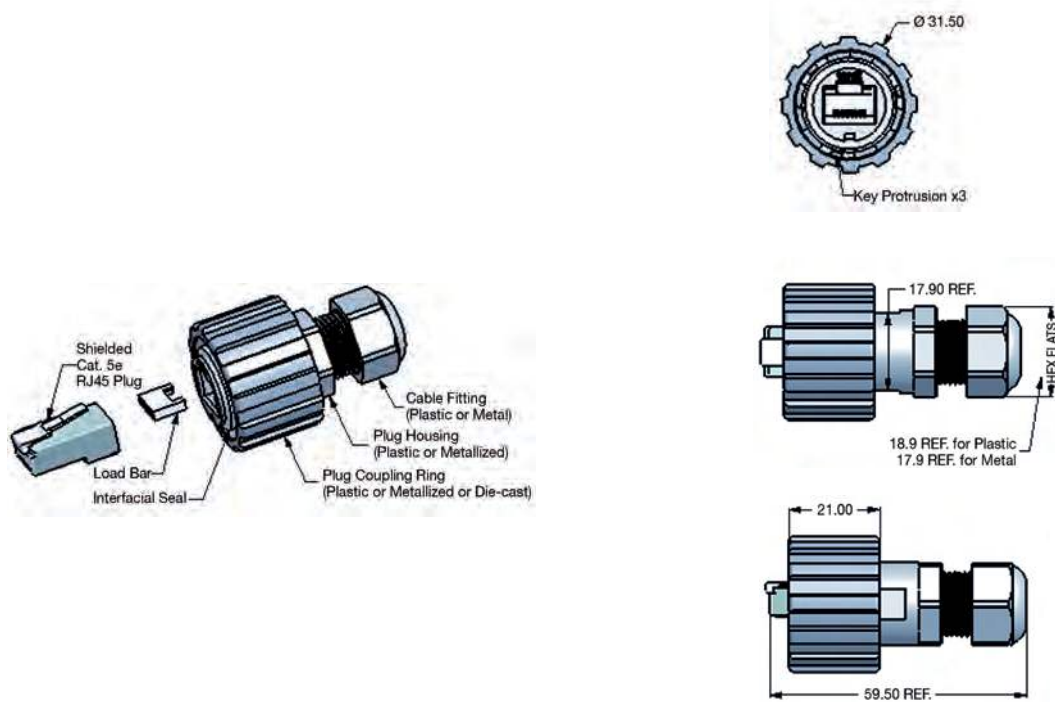


RoHS compliant

DESCRIPTION

- Shielded RJ45 plug connector Cat.5e
- For use with solid or stranded, shielded or unshielded cable size AWG24
- Designs:
 - Housing and socket connector: black plastic
 - Housing and socket connector: metallized plastic
 - Housing: metallized plastic, socket connector and coupling ring die-cast

PRODUCT DRAWING



ORDER DATA

Type	Material	RJ45 Cat.5e design	Part Number
Plug connector set	Housing and socket connector / Black plastic	Plug connector / Shielded	17-10001
Plug connector set	Housing and socket connector / Metallized plastic	Plug connector / Shielded	17-10013
Plug connector set	Housing: Metallized plastic / Socket connector and coupling ring: zinc die-cast	Plug connector / Shielded	17-10044

RJ45 INSTALLATION HOUSING SET

Inline socket connector metal version – M28 threaded termination

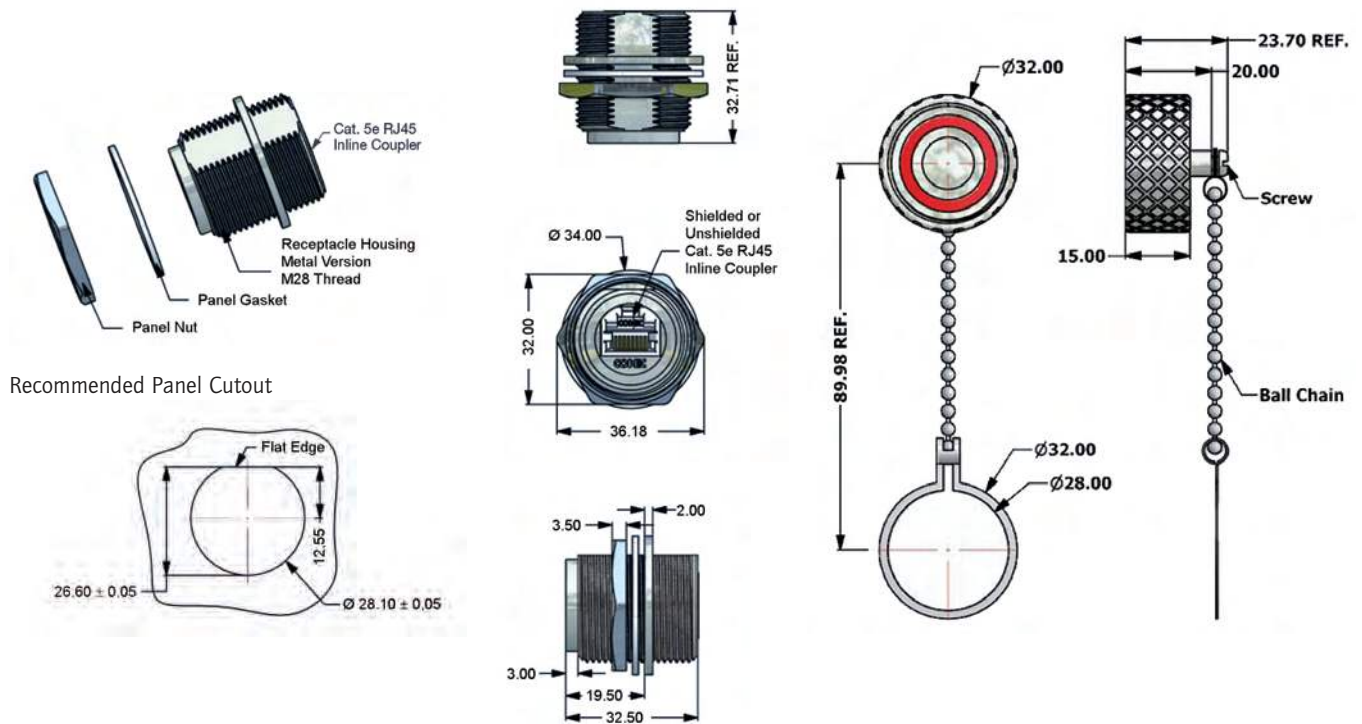


RoHS compliant

DESCRIPTION

- For front or rear panel mounting up to wall thickness of .013"/3.2 mm
- Metal version, brass nickel plated, M28 threaded connection
- Unshielded RJ45 Inline socket connector or shielded RJ45 Inline socket connector Cat.5e
- Protection cap M28 threaded termination
- Available as a set with protection cap

PRODUCT DRAWING

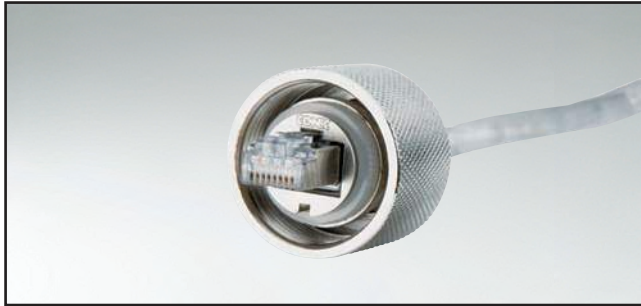


ORDER DATA

Type	Material	RJ45 Cat.5e design	Protection cap	Part Number
Housing	Metal	Inline socket connector shielded		17-100934
Housing	Metal	Inline socket connector unshielded		17-101494
Housing	Metal	Inline socket connector shielded	With protection cap	17-101604
Housing	Metal	Inline socket connector unshielded	With protection cap	17-101614

RJ45 PLUG CONNECTOR SET

Metal version – M28 threaded termination

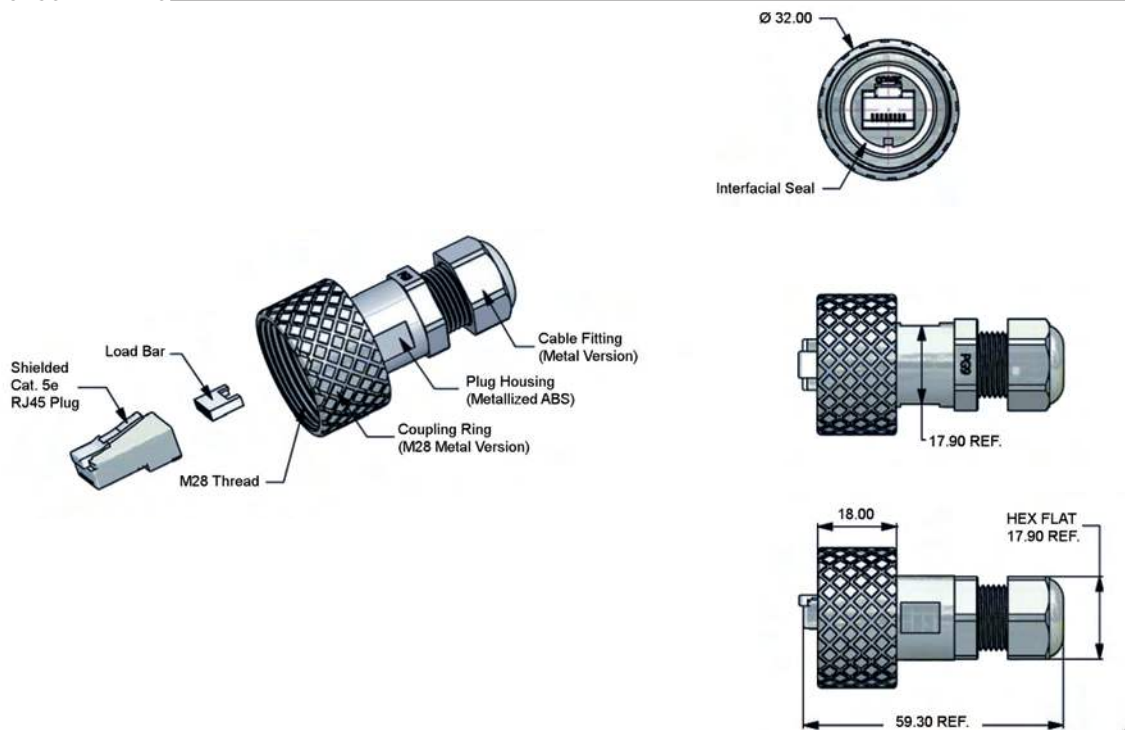


RoHS compliant

DESCRIPTION

- Shielded RJ45 plug connector Cat.5e
- For use with solid or stranded, shielded or unshielded cable size AWG24
- Metal connector fastening ring, M28 thread
- Housing: Metallized plastic

PRODUCT DRAWING



ORDER DATA

Type	Material	RJ45 Cat.5e design	Part Number
Plug connector set	Metal housing/ Coupling ring	Plug connector/Shielded	17-100944

RJ45 PLUG CONNECTOR SET

M28 threaded termination – Plastic strain relief version

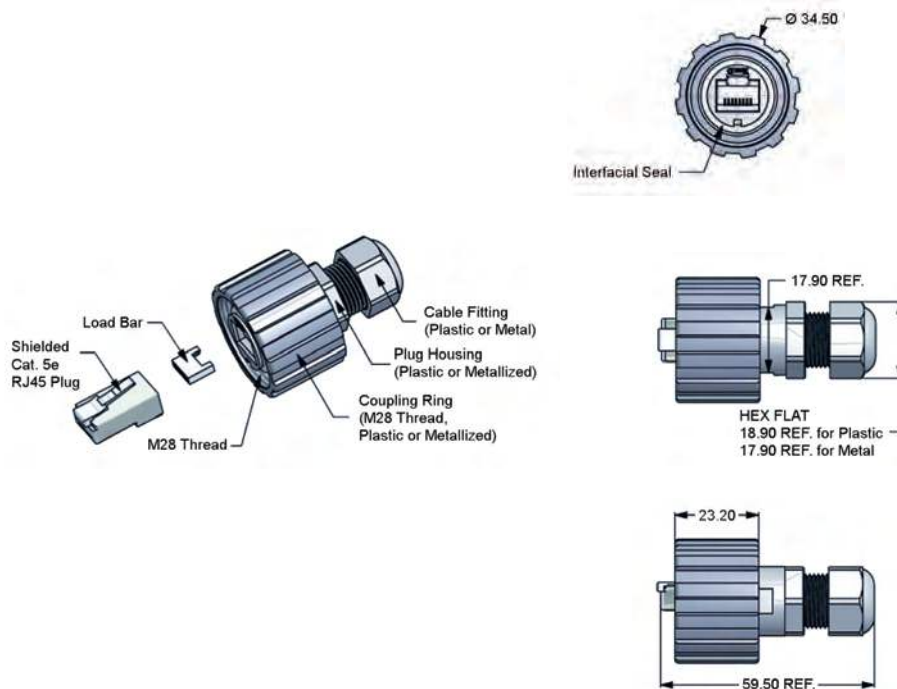


RoHS compliant

DESCRIPTION

- Shielded RJ45 plug connector Cat.5e
- For use with solid or stranded, shielded or unshielded cable size AWG24
- Threaded connection for application inside of enclosure (IP20) to inline socket connector
- Designs:
 - M28 Housing and socket connector black plastic
 - M28 Housing and socket connector metallized plastic

PRODUCT DRAWING

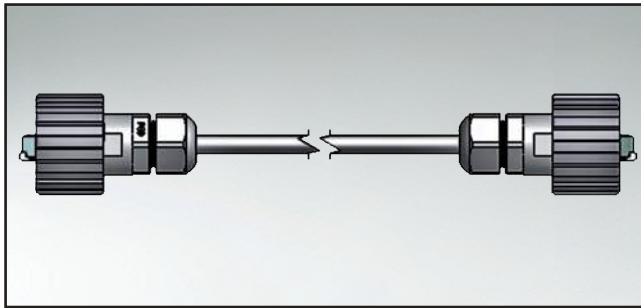


ORDER DATA

Type	Material	RJ45 Cat.5e design	Part Number
Plug connector set	Housing and socket connector: Black plastic	Plug connector/Shielded	17-100464
Plug connector set	Housing and socket connector: Metallized plastic	Plug connector/Shielded	17-100474

RJ45 PATCH CORD

IP67 to IP67 – Plastic design – Bayonet plug connector

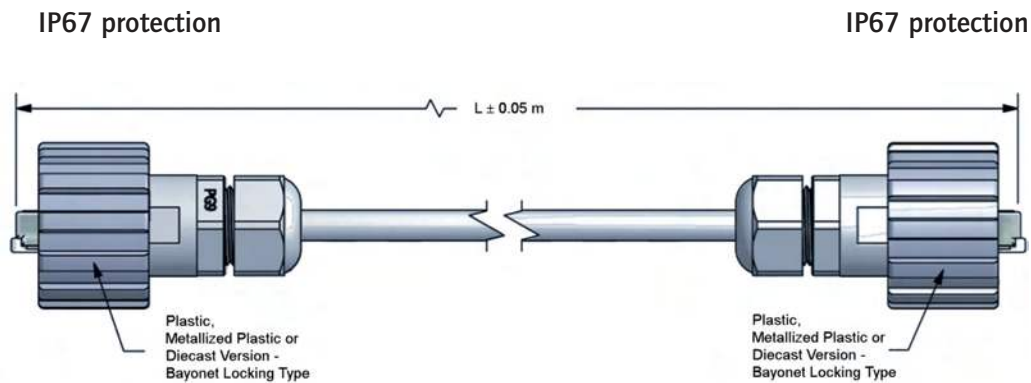


RoHS compliant

DESCRIPTION

- Field attachable patch cord
- 2 x Industrial RJ45-IP67
- Designs:
 - Housing and plug connector: Black plastic; Cable UTP* black
 - Housing and plug connector: Metallized plastic; Cable STP** black
 - Housing: Metallized plastic plug connector and screw connection zinc die-cast, cable: STP** black
- Outdoor version with cable "Drain wire" and "Waterproof tape"
- Special lengths on request

PRODUCT DRAWING



* unshielded twisted pair
 ** shielded twisted pair

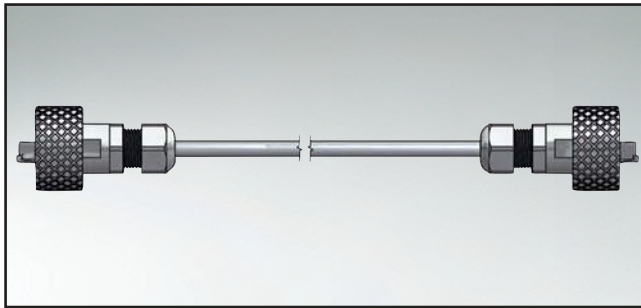
ORDER DATA

Type Standard	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP67	Black plastic	UTP / Unshielded	2 m	17-10003
Patch cord	IP67 / IP67	Black plastic	UTP / Unshielded	4 m	17-10004
Patch cord	IP67 / IP67	Black plastic	UTP / Unshielded	5 m	17-10005
Patch cord	IP67 / IP67	Metallized plastic	STP / Shielded	2 m	17-10025
Patch cord	IP67 / IP67	Metallized plastic	STP / Shielded	4 m	17-10026
Patch cord	IP67 / IP67	Metallized plastic	STP / Shielded	5 m	17-10027
Patch cord	IP67 / IP67	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	2 m	17-100514
Patch cord	IP67 / IP67	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	4 m	17-100524
Patch cord	IP67 / IP67	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	5 m	17-100534

Type Outdoor	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP67	Black plastic	UTP / Unshielded	2 m	17-101144
Patch cord	IP67 / IP67	Black plastic	UTP / Unshielded	4 m	17-101154
Patch cord	IP67 / IP67	Black plastic	UTP / Unshielded	5 m	17-101164
Patch cord	IP67 / IP67	Metallized plastic	STP / Shielded	2 m	17-101174
Patch cord	IP67 / IP67	Metallized plastic	STP / Shielded	4 m	17-101184
Patch cord	IP67 / IP67	Metallized plastic	STP / Shielded	5 m	17-101194
Patch cord	IP67 / IP67	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	2 m	17-101204
Patch cord	IP67 / IP67	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	4 m	17-101214
Patch cord	IP67 / IP67	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	5 m	17-101224

RJ45 PATCH CORD

IP67 to IP67 – Metal design – M28 plug connector screw termination

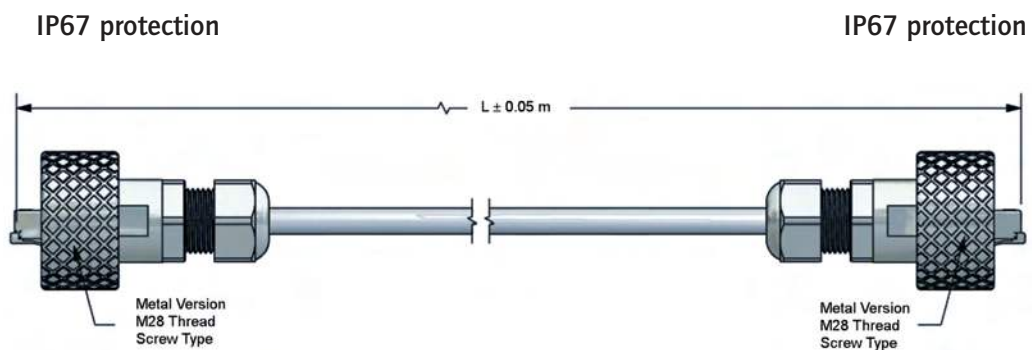


RoHS compliant

DESCRIPTION

- Field attachable patch cable
- 2 x Metal Industrial RJ45-IP67
- Designs:
 - Metal socket coupling ring Metal, M28 thread; Housing Metallized plastic; Cable UTP* black
 - Metal socket coupling ring Metal, M28 thread; Housing Metallized plastic; Cable STP** black
- Outdoor version with cable "Drain wire" and "Waterproof tape"
- Special lengths on request

PRODUCT DRAWING



* unshielded twisted pair
** shielded twisted pair

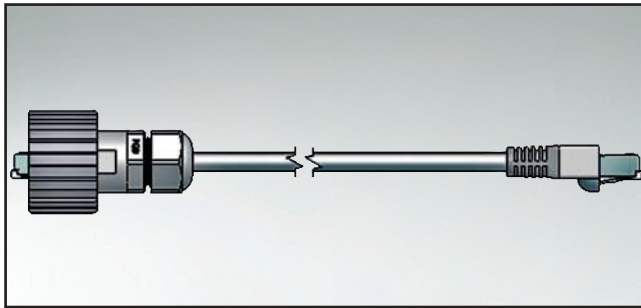
ORDER DATA

Type Standard	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	2 m	17-100994
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	4 m	17-101004
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	5 m	17-101014

Type Outdoor	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	UTP / Unshielded	2 m	17-101084
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	UTP / Unshielded	4 m	17-101094
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	UTP / Unshielded	5 m	17-101104
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	2 m	17-101114
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	4 m	17-101124
Patch cord	IP67 / IP67	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	5 m	17-101134

RJ45 PATCH CORD

IP67 to IP20 – Plastic design – Bayonet plug connector

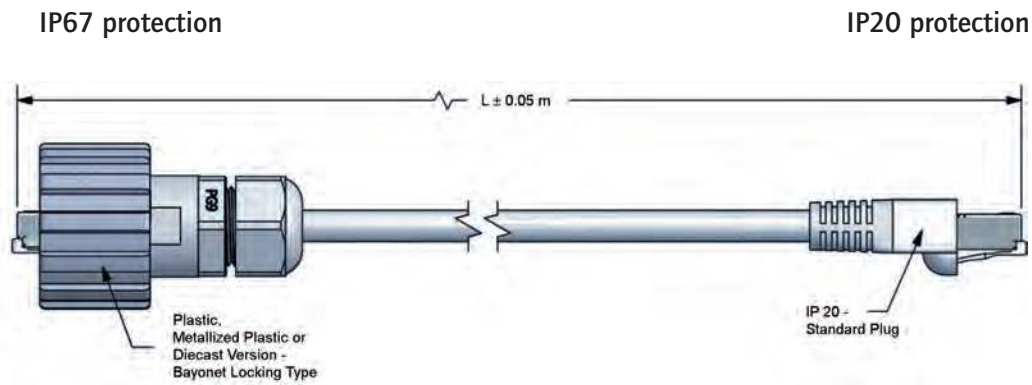


RoHS compliant

DESCRIPTION

- Field attachable patch cord
- 1 x Industrial RJ45-IP67 – 1 x Standard RJ45-IP20
- Designs:
 - Housing and plug connector: Black plastic; Cable: UTP* black
 - Housing and plug connector: Metallized plastic; Cable: STP** black
 - Housing: Metallized plastic; plug connector and screw connection zinc die-cast; Cable STP** black
- Outdoor version with cable "Drain wire" and "Waterproof tape"
- Special lengths on request

PRODUCT DRAWING



* unshielded twisted pair
 ** shielded twisted pair

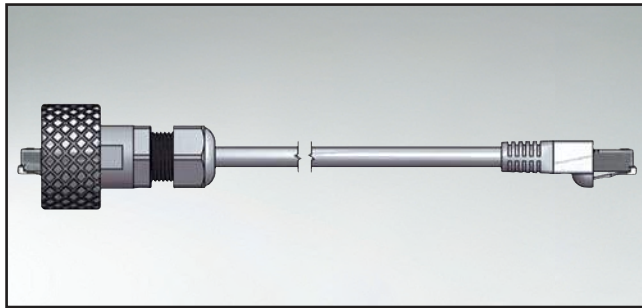
ORDER DATA

Type Standard	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP20	Black plastic	UTP / Unshielded	2 m	17-10006
Patch cord	IP67 / IP20	Black plastic	UTP / Unshielded	4 m	17-10007
Patch cord	IP67 / IP20	Black plastic	UTP / Unshielded	5 m	17-10008
Patch cord	IP67 / IP20	Metallized plastic	STP / Shielded	2 m	17-10028
Patch cord	IP67 / IP20	Metallized plastic	STP / Shielded	4 m	17-10029
Patch cord	IP67 / IP20	Metallized plastic	STP / Shielded	5 m	17-10030
Patch cord	IP67 / IP20	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	2 m	17-101264
Patch cord	IP67 / IP20	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	4 m	17-101274
Patch cord	IP67 / IP20	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	5 m	17-101284

Type Outdoor	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP20	Black plastic	UTP / Unshielded	2 m	17-101234
Patch cord	IP67 / IP20	Black plastic	UTP / Unshielded	4 m	17-101244
Patch cord	IP67 / IP20	Black plastic	UTP / Unshielded	5 m	17-101254
Patch cord	IP67 / IP20	Metallized plastic	STP / Shielded	2 m	17-101264
Patch cord	IP67 / IP20	Metallized plastic	STP / Shielded	4 m	17-101274
Patch cord	IP67 / IP20	Metallized plastic	STP / Shielded	5 m	17-101284
Patch cord	IP67 / IP20	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	2 m	17-101294
Patch cord	IP67 / IP20	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	4 m	17-101304
Patch cord	IP67 / IP20	Metallized plastic / Plug connector and screw connection: zinc die-cast	STP / Shielded	5 m	17-101314

RJ45 PATCH CORD

IP67 to IP20 – Metal design – M28 plug connector screw termination

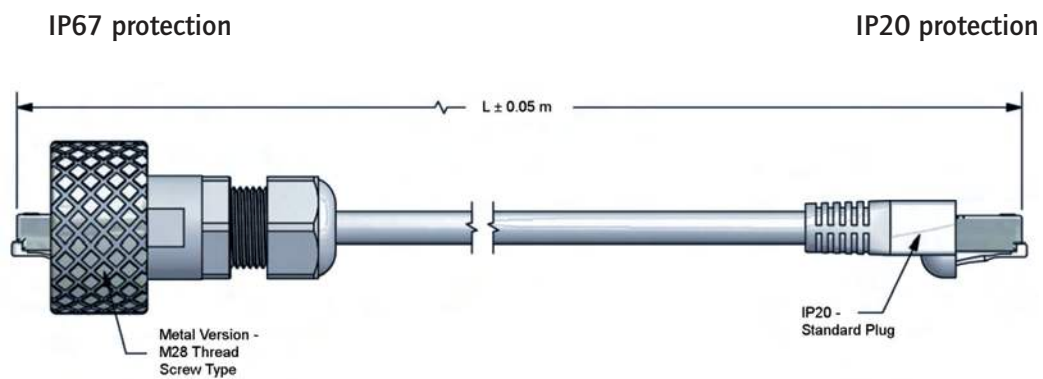


RoHS compliant

DESCRIPTION

- Field attachable patch cord
- 1 x Metal Industrial RJ45-IP67 – 1 x Standard RJ45-IP20
- Designs:
 - Metal plug coupling ring, M28 thread; Housing metallized plastic; Cable UTP* black
 - Metal plug coupling ring, M28 thread; Housing metallized plastic; Cable STP** black
- Outdoor version with cable "Drain wire" and "Waterproof tape"
- Special lengths on request

PRODUCT DRAWING



* unshielded twisted pair
 ** shielded twisted pair

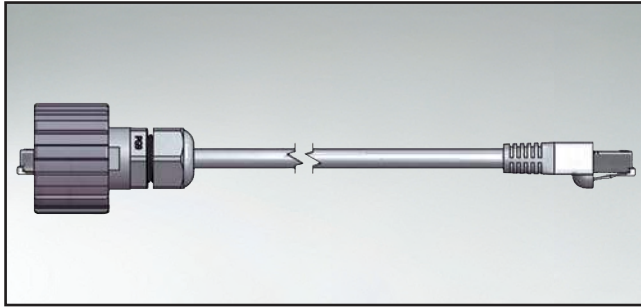
ORDER DATA

Type Standard	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	2 m	17-100964
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	4 m	17-100974
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	5 m	17-100984

Type Outdoor	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	UTP / Unshielded	2 m	17-101024
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	UTP / Unshielded	4 m	17-101034
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	UTP / Unshielded	5 m	17-101044
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	2 m	17-101054
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	4 m	17-101064
Patch cord	IP67 / IP20	M28 Metal plug coupling ring / Housing metallized plastic	STP / Shielded	5 m	17-101074

RJ45 PATCH CORD

IP20 to IP20 – Plastic design – M28 screw termination

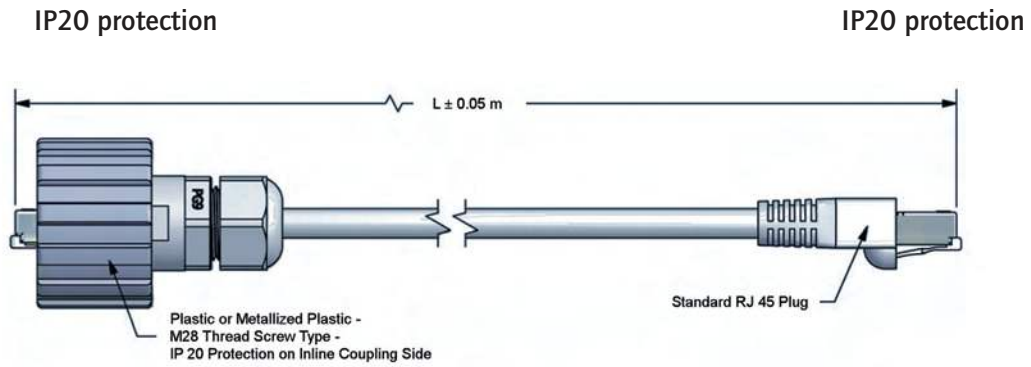


RoHS compliant

DESCRIPTION

- Field attachable patch cord
- 1 x Industrial RJ45 plug connector for screw termination (IP20)
- 1 x Standard RJ45 (IP20)
- Designs:
 - Housing and plug connector black plastic; Cable UTP* black
 - Housing and plug connector metallized plastic; Cable STP** black
- Special lengths on request

PRODUCT DRAWING



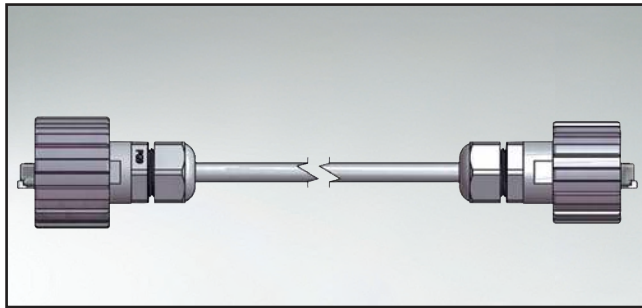
* unshielded twisted pair
 ** shielded twisted pair

ORDER DATA

Type Standard	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP20/IP20	Black plastic	UTP/Unshielded	2 m	17-100574
Patch cord	IP20/IP20	Black plastic	UTP/Unshielded	4 m	17-100584
Patch cord	IP20/IP20	Black plastic	UTP/Unshielded	5 m	17-100594
Patch cord	IP20/IP20	Metallized plastic	STP/Shielded	2 m	17-100604
Patch cord	IP20/IP20	Metallized plastic	STP/Shielded	4 m	17-100614
Patch cord	IP20/IP20	Metallized plastic	STP/Shielded	5 m	17-100624

RJ45 PATCH CORD

IP20 to IP67 – One side M28 threaded and one side bayonet locking

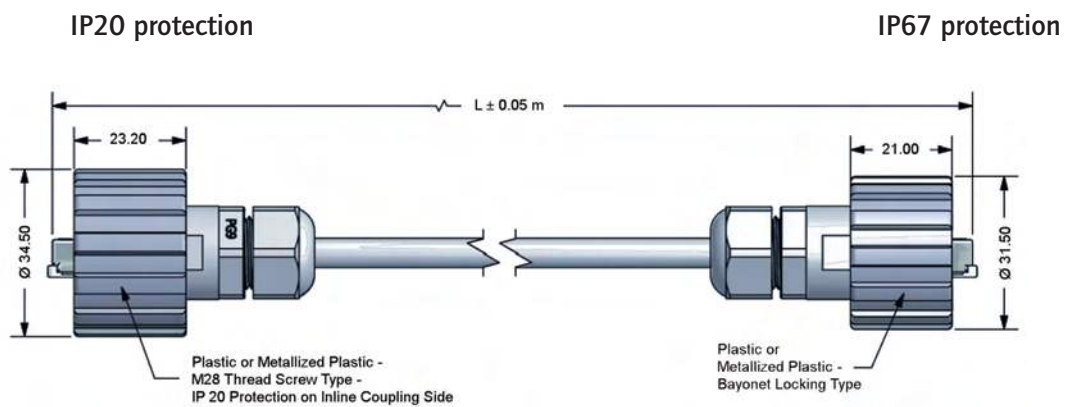


RoHS compliant

DESCRIPTION

- Field attachable patch cord
- 1x RJ45 IP67 plug connector with bayonet locking
- 1x RJ45 IP67 plug connector with M28 coupling RWG
- Designs:
 - Housing and socket connector black plastic; Cable UTP* black
 - Housing and socket connector metallized plastic; Cable STP** black
- Outdoor version with cable "Drain wire" and "Waterproof tape"
- Special lengths on request

PRODUCT DRAWING



* unshielded twisted pair
 ** shielded twisted pair

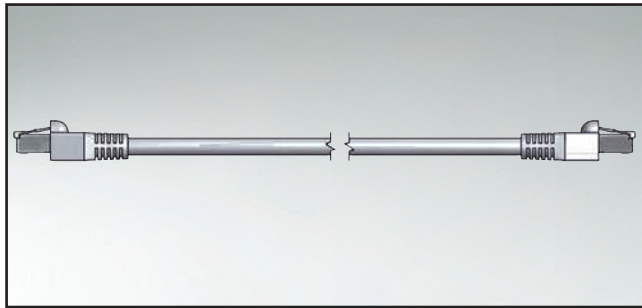
ORDER DATA

Type Standard	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP20/IP67	Black plastic	UTP/Unshielded	2 m	17-101374
Patch cord	IP20/IP67	Black plastic	UTP/Unshielded	4 m	17-101384
Patch cord	IP20/IP67	Black plastic	UTP/Unshielded	5 m	17-101394
Patch cord	IP20/IP67	Metallized plastic	STP/Shielded	2 m	17-101434
Patch cord	IP20/IP67	Metallized plastic	STP/Shielded	4 m	17-101444
Patch cord	IP20/IP67	Metallized plastic	STP/Shielded	5 m	17-101454

Type Outdoor	Degree of protection	Material	Cable	Length (L)	Part Number
Patch cord	IP20/IP67	Black plastic	UTP/Unshielded	2 m	17-101404
Patch cord	IP20/IP67	Black plastic	UTP/Unshielded	4 m	17-101414
Patch cord	IP20/IP67	Black plastic	UTP/Unshielded	5 m	17-101424
Patch cord	IP20/IP67	Metallized plastic	STP/Shielded	2 m	17-101464
Patch cord	IP20/IP67	Metallized plastic	STP/Shielded	4 m	17-101474
Patch cord	IP20/IP67	Metallized plastic	STP/Shielded	5 m	17-101484

RJ45 PATCH CORD

IP20 to IP20

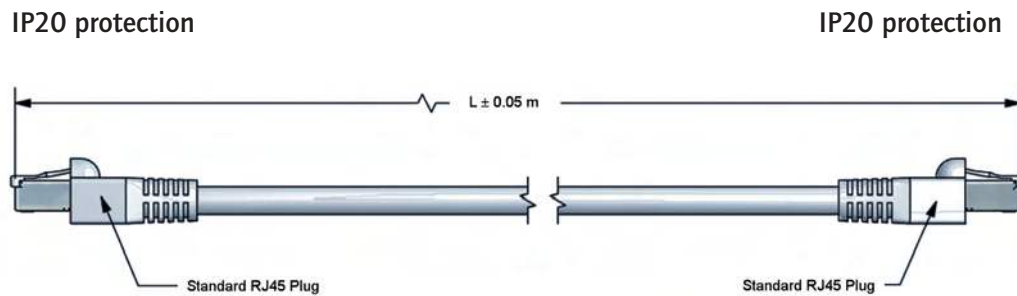


RoHS compliant

DESCRIPTION

- Field attachable patch cord
- 2 x Standard RJ45 IP20
- Design:
 - Cat.5e RJ45 plug connector; cable STP* black or cable UTP** black
 - Additional cable colors: black, blue, red, green, yellow and white
- Special lengths on request

PRODUCT DRAWING



* unshielded twisted pair
 ** shielded twisted pair

ORDER DATA

Type Standard	Degree of protection	Cable	Colour	Length (L)	Part Number
Patch cord	IP20/IP20	STP/shielded	Black	2 m	17-101324
Patch cord	IP20/IP20	STP/shielded	Black	4 m	17-101334
Patch cord	IP20/IP20	STP/shielded	Black	5 m	17-101344
Patch cord	IP20/IP20	UTP/unshielded	Black	2 m	17-100654
Patch cord	IP20/IP20	UTP/unshielded	Black	4 m	17-100664
Patch cord	IP20/IP20	UTP/unshielded	Black	5 m	17-100674
Patch cord	IP20/IP20	UTP/unshielded	Blue	2 m	17-100684
Patch cord	IP20/IP20	UTP/unshielded	Blue	4 m	17-100694
Patch cord	IP20/IP20	UTP/unshielded	Blue	5 m	17-100704
Patch cord	IP20/IP20	UTP/unshielded	Red	2 m	17-100714
Patch cord	IP20/IP20	UTP/unshielded	Red	4 m	17-100724
Patch cord	IP20/IP20	UTP/unshielded	Red	5 m	17-100734
Patch cord	IP20/IP20	UTP/unshielded	Green	2 m	17-100744
Patch cord	IP20/IP20	UTP/unshielded	Green	4 m	17-100754
Patch cord	IP20/IP20	UTP/unshielded	Green	5 m	17-100764
Patch cord	IP20/IP20	UTP/unshielded	Yellow	2 m	17-100774
Patch cord	IP20/IP20	UTP/unshielded	Yellow	4 m	17-100784
Patch cord	IP20/IP20	UTP/unshielded	Yellow	5 m	17-100794
Patch cord	IP20/IP20	UTP/unshielded	White	2 m	17-100804
Patch cord	IP20/IP20	UTP/unshielded	White	4 m	17-100814
Patch cord	IP20/IP20	UTP/unshielded	White	5 m	17-100824

RJ45 ACCESSORIES

Plastic and metal cap – Protection cap



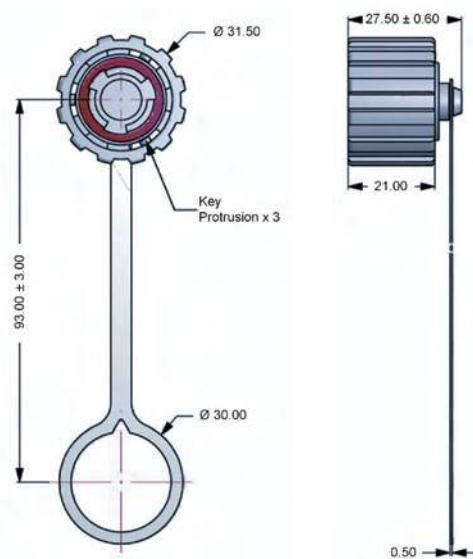
RoHS compliant

DESCRIPTION

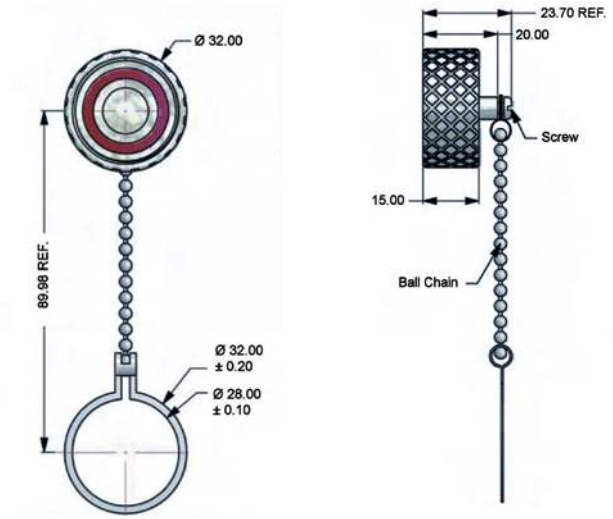
- IP67 rated
- Cap black plastic, metallized plastic with bayonet locking
- Metal cap with M28 thread

PRODUCT DRAWING

Plastic or metal design – Bayonet locking



Metal cap – M28 thread



* unshielded twisted pair
 ** shielded twisted pair

ORDER DATA

Accessories	Part Number
Protection cap/Black plastic/Bayonet locking	17-10002
Protection cap/Metallized plastic/Bayonet locking	17-10014
Protection cap/Full metal/M28 Screw thread	17-100950

ACCESSORIES/ INSTALLATION TOOLS

For RJ45 products



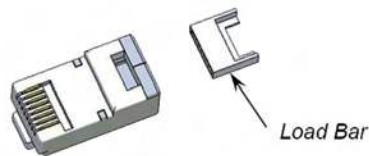
RoHS compliant

DESCRIPTION

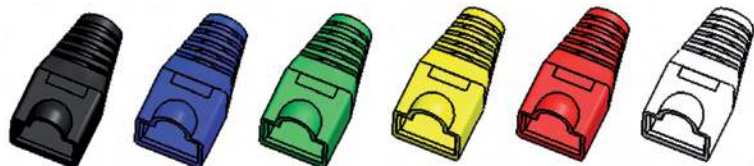
- RJ45 plug connector Cat. 5e shielded
- Grommets black, blue, green, yellow, red and white color
- RJ45 plug connector crimp tool
- Insertion tool for RJ45 IDC version
- Cable tester

PRODUCT DRAWING

RJ45 Cat.5e Plug connector, shielded



Grommets



RJ45 plug connector crimp tool



Multi-Modular cable tester



Insertion tool for RJ45 IDC version



ORDER DATA

Accessories	Part Number
RJ45 Cat5e. Plug connector, shielded	391J00039 X
Plug connector grommet black	795-601302
Plug connector grommet blue	795-601303
Plug connector grommet green	795-601304
Plug connector grommet yellow	795-601305
Plug connector grommet red	795-601306
Plug connector grommet white	795-601307

Tools	Part Number
Crimp tool for RJ45 plug connector	360X30029 X
Insertion tool for RJ45 insulation displacement termination version (IDC)	360X30049 X
Cable tester	360X30039 X

SECTION 6

USB 2.0-IP67 WATER RESISTANT CONNECTOR SYSTEM

CONEC completed its product line of bayonet locking series, IP67 rated industrial USB 2.0 connector system for harsh environments.

The housing can be mounted on the front or rear side of enclosure panels with thickness up to 3.2 mm. The USB Connector are designed to meet USB 2.0 specification.

This interface meets IP67 rating requirements when a mating connector is inserted or when covered with a secured protective cap.

USB 2.0 plug set is available for the cable side and there are also preassembled patch cords available in various IP protection designs and lengths.

The program is rounded out by a metal version for heavy duty applications.

In this case the installation sockets, plug sets and protective caps have a metal jacket with M28 thread design. Applications for this version include machine tool, automation, automotive, mass transportation and extreme harsh environmental applications.

Typical applications:

- Industrial production, CNC machines
- Communications equipment
- Food & Beverage and chemical controllers process
- Outdoor wireless
- Bluetooth adapters
- Industrial process control
- Diagnostic and test instruments
- Outdoor displays
- Factory automation
- Outdoor telecommunications systems
- Oil and gas industries
- Mass transportation
- Outdoor monitoring devices
- Outdoor metering
- Upsevation platform



TECHNICAL DATA

Mechanical and electrical characteristics	
Interface connector	USB Connector per USB 2.0 specification
Locking mechanism	Bayonet socket connector per IEC 61076-3-106 or screw termination M28 thread
IP Degree of protection	IP67
Temperature range	Connector: -40°C to + 85°C / Patch cable: -40°C to +80°C
Current rating	1.5 A max. at 25°C
Voltage	100 VDC
Contact resistance	30 mΩ max.
Insulation resistance	500 mΩ
Electric strength contact to contact	500 VAC / 60 sec.
Electric strength contact to metal shell	1000 VAC / 60 sec.
Materials	
Housing	PBT (black), flame protection per UL 94-V0 or brass nickel plated
Fastening nut	Brass nickel plated
Shell sealing	Silicone (white)
USB Socket metal shell	SPCC nickel plated
USB Socket and plug connector plastic shell	PBT (white), flame protection per UL 94-V0
USB Socket and plug contacts	Phosphor bronze, gold plated
Connector housing	PBT (black), flame protection per UL 94-V0
Metal socket coupling ring	PBT (black), flame protection per UL 94-V0 or brass nickel plated
Cable termination	PA (black), flame protection per UL 94-V0 or brass nickel plated
Cable seal	NBR (black)
Interface seal	Silicone (white)
USB plug connector metal shell	Copper alloy, nickel plated
Protection cap	PBT (black), flame protection per UL 94-V0 or brass nickel plated
Seal	Silicone (red)
Protection cap	PE (black) or copper alloy nickel plated

Technical alterations are subject to change without notice.

USB 2.0 INSTALLATION HOUSING-SET

Socket connector version – Plastic design – Bayonet locking type

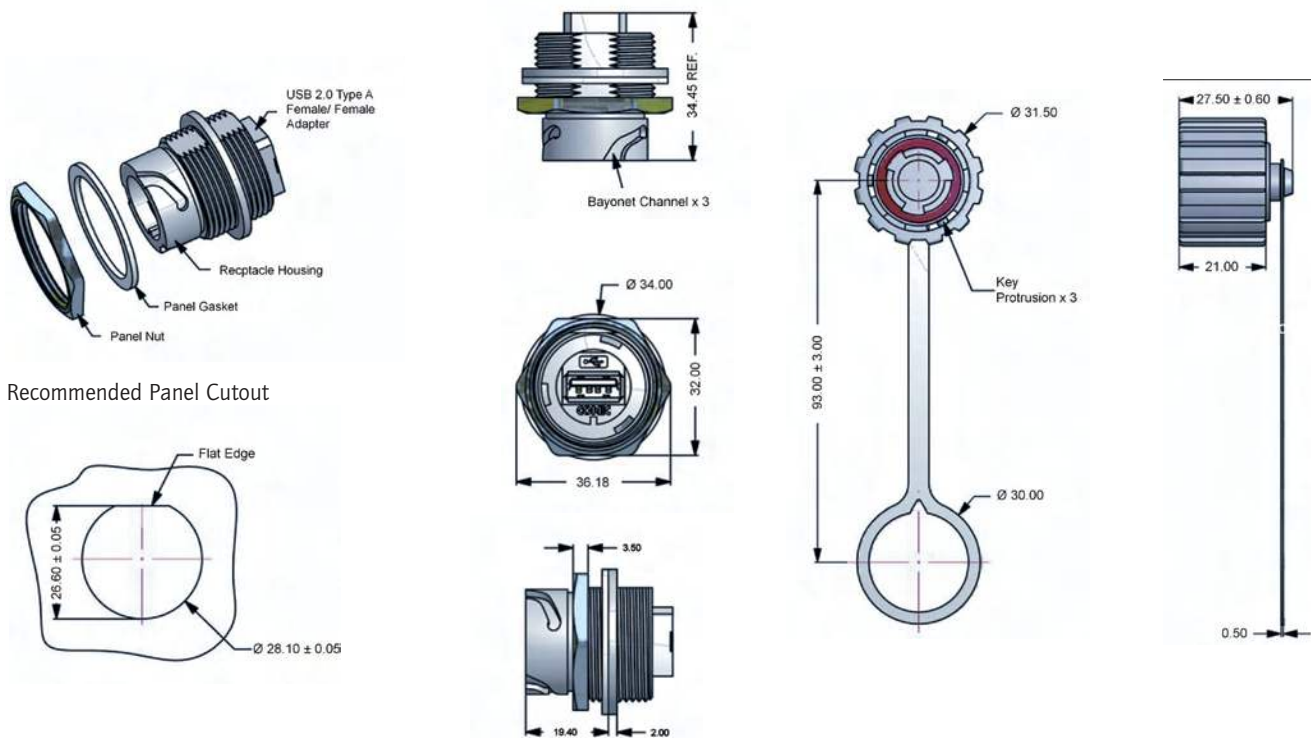


RoHS compliant

DESCRIPTION

- For front- and rear panel mounting up to wall thickness of .013"/3.2 mm
- Design: Black plastic
- Termination with USB 2.0 type A coupler, IP20 rated
- Bayonet locking per IEC 61076-3-106
- Available as housing with or without protection cap

PRODUCT DRAWING



ORDER DATA

Type	Material	Termination	Protection cap	Part Number
Installation housing	Black plastic	Bayonet locking	Without protection cap	17-200001
Installation housing	Black plastic	Bayonet locking	With protection cap	17-200161

USB 2.0 CONNECTOR SET

Standard version – Bayonet locking type

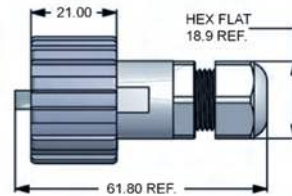
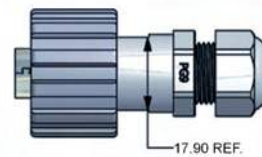
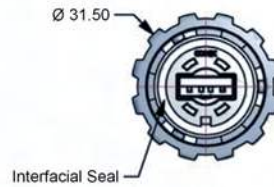
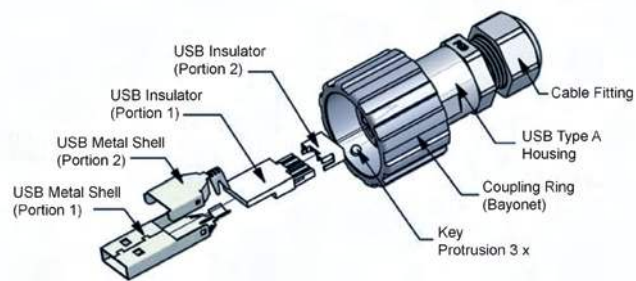


RoHS compliant

DESCRIPTION

- Design: Black plastic
- USB Connector per USB 2.0 specification Type A
- Bayonet locking per IEC 61076-3-106

PRODUCT DRAWING

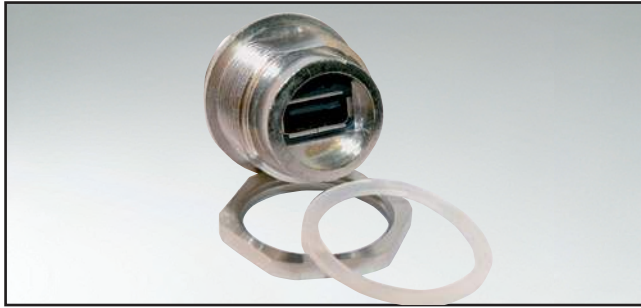


ORDER DATA

Type	Material	Termination	Part Number
Connector set	Black plastic	Bayonet locking	17-200121

USB 2.0 INSTALLATION HOUSING SET

Socket connector version – Metal design – M28 threaded termination

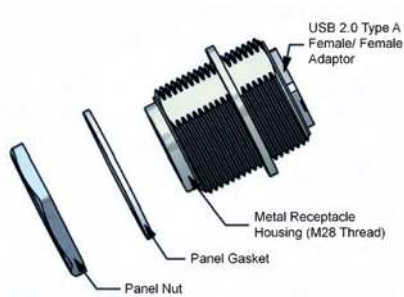


RoHS compliant

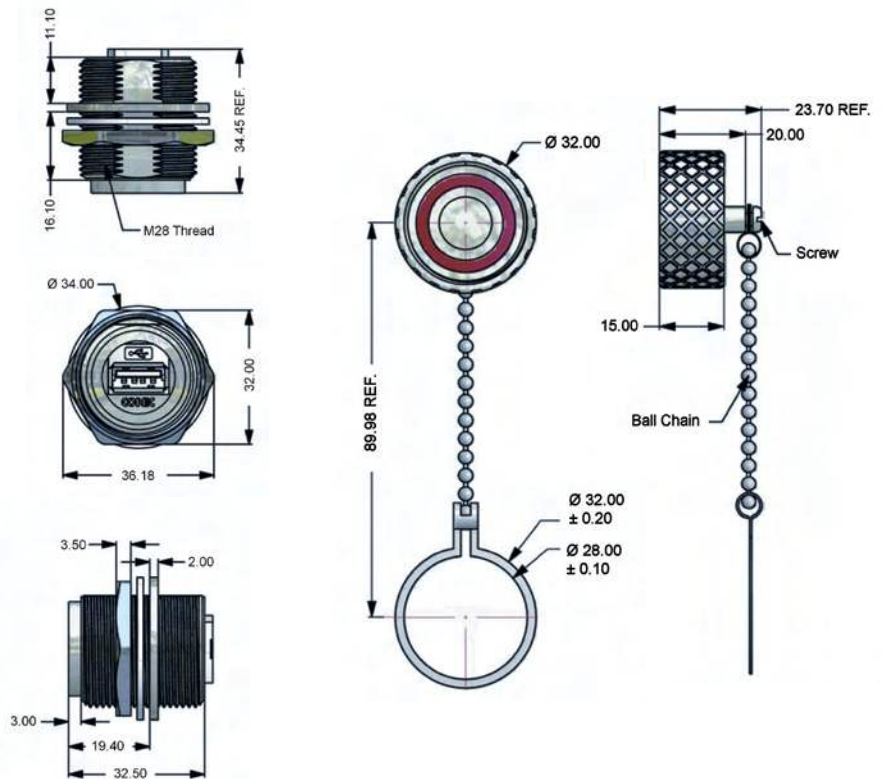
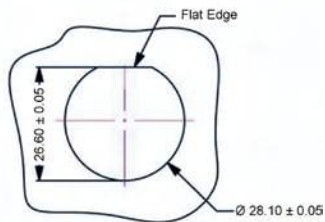
DESCRIPTION

- For front- and rear panel mounting
- Design: Metal shell brass nickel plated
- Termination with USB 2.0 type A coupler, IP20 rated
- IP67 protection over M28 thread termination
- Available as housing with or without protection cap

PRODUCT DRAWING



Recommended Panel Cutout



ORDER DATA

Type	Material	Termination	Protection cap	Part Number
Installation housing	Brass nickel plated	M28 Thread	Without protection cap	17-200321
Installation housing	Brass nickel plated	M28 Thread	With protection cap	17-200431

USB 2.0 CONNECTOR SET

Standard version – M28 threaded termination

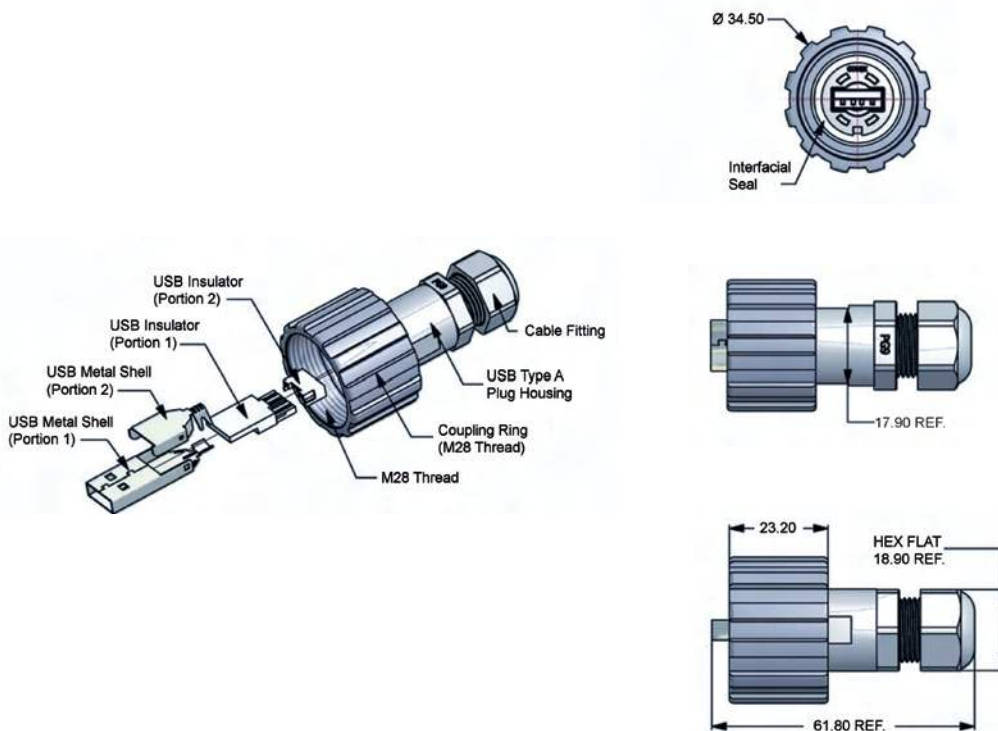


RoHS compliant

DESCRIPTION

- Design: Black plastic
- USB Connector per USB 2.0 specification Type A
- M28 thread

PRODUCT DRAWING

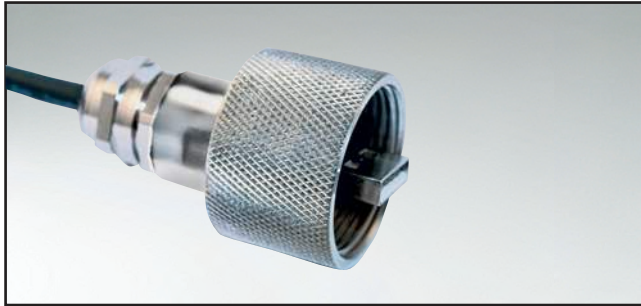


ORDER DATA

Type	Material	Termination	Part Number
Connector set	Black plastic	M28 Thread	17-200151

USB 2.0 CONNECTOR SET

Metal version – M28 threaded termination

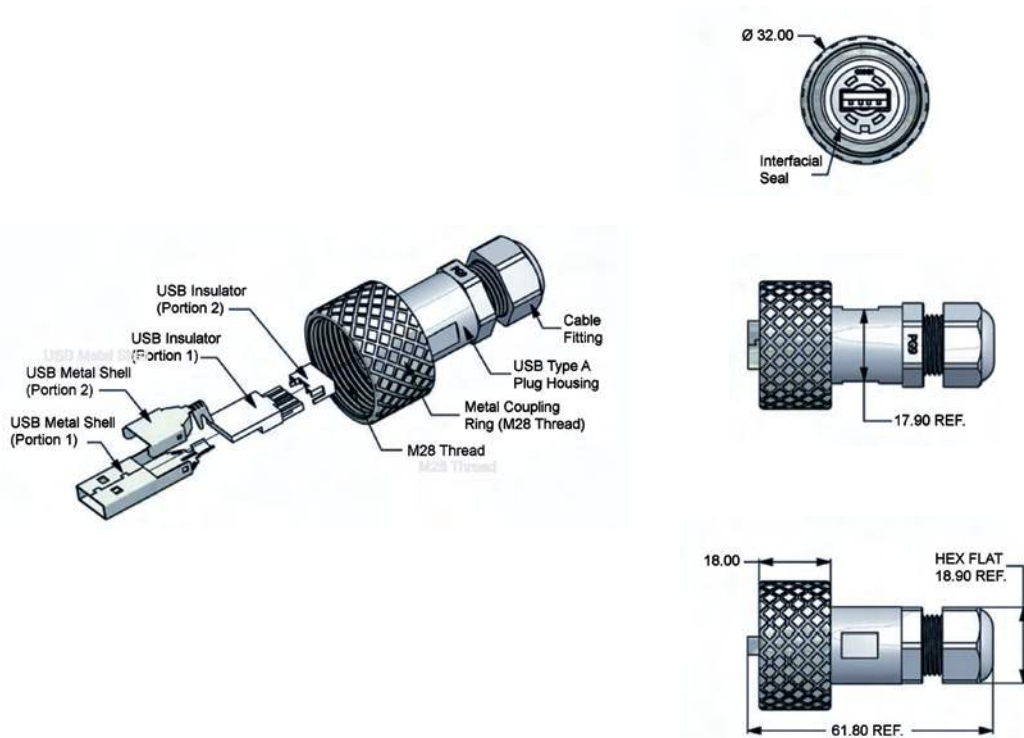


RoHS compliant

DESCRIPTION

- Design: Metal, brass nickel plated
- USB Connector per USB 2.0 specification Type A
- M28 thread

PRODUCT DRAWING

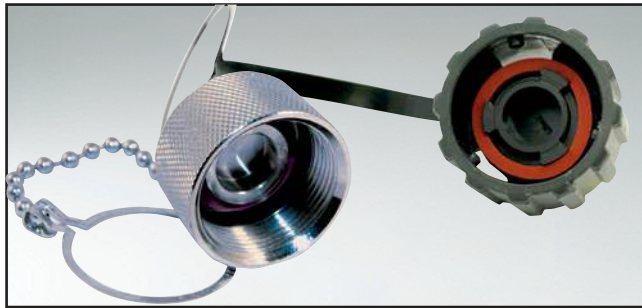


ORDER DATA

Type	Material	Termination	Part Number
Connector set	Brass nickel plated	M28 Screw termination	17-200331

USB 2.0 PROTECTION CAPS FOR INSTALLATION SHELL

Plastic- and metal design



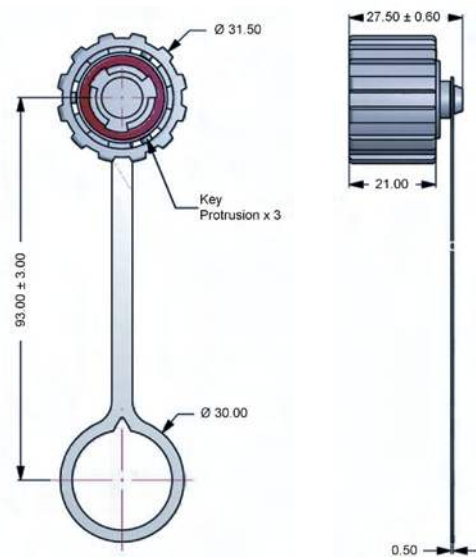
RoHS compliant

DESCRIPTION

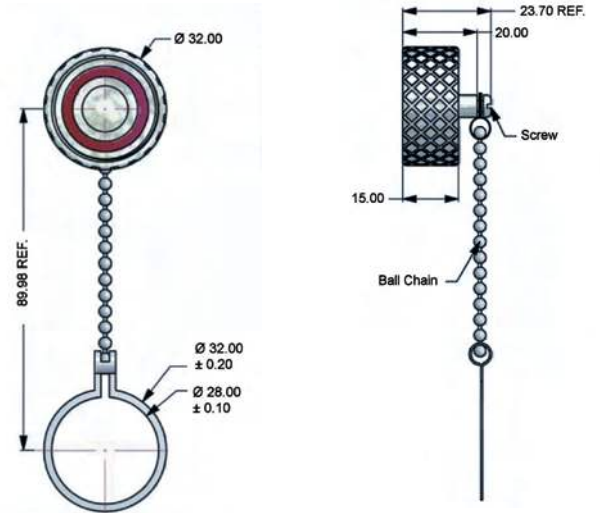
- Optimal IP67 protection of the interface in unmated condition
- Metal design with M28 thread
- Plastic design with bayonet locking

PRODUCT DRAWING

Plastic design / Bayonet locking



Metal design / M28 thread

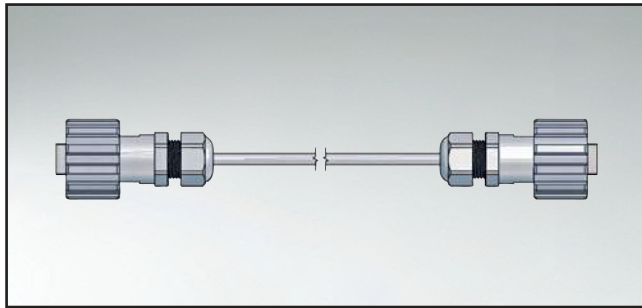


ORDER DATA

Type	Material	Termination	Part Number
Protection cap	Plastic / Black	Bayonet locking	17-10002
Protection cap	Metal / Brass nickel plated	M28 Thread	17-100950

USB 2.0 PATCH CORD

IP67 to IP67, IP67 to IP20 – Type A – in plastic or metal design



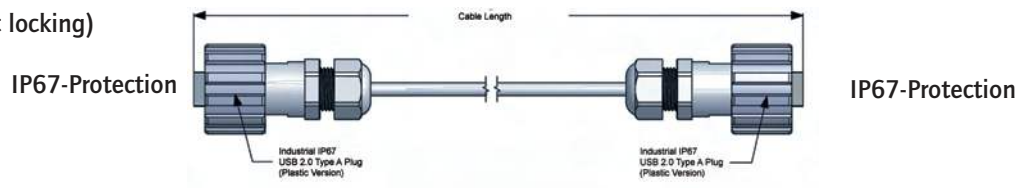
RoHS compliant

DESCRIPTION

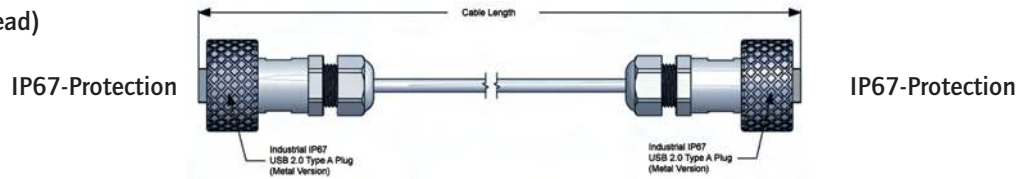
- Field attachable patch cord
- IP67 protected on both cable endings
- IP67 protected at one end
- IP20 rated type A on the other end
- Plastic design with bayonet locking
- Metal design with M28 thread
- Special lengths on request

PRODUCT DRAWING

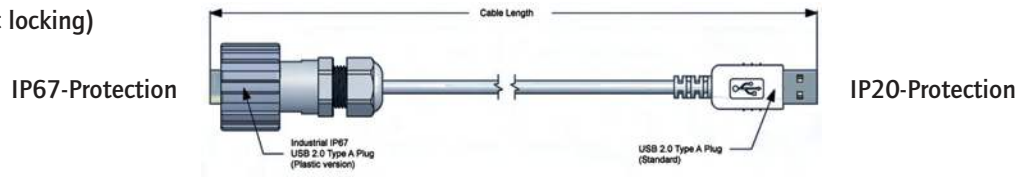
Type 1: Plastic design (Bayonet locking)



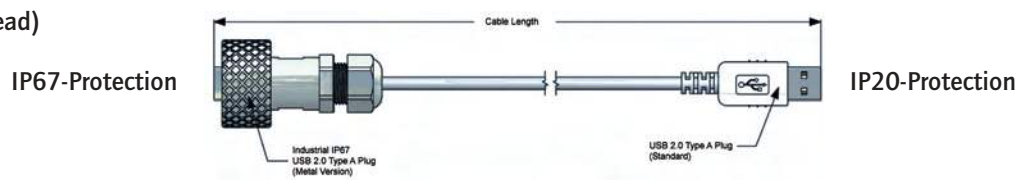
Type 2: Metal design (M28 thread)



Type 3: Plastic design (Bayonet locking)



Type 4: Metal design (M28 thread)

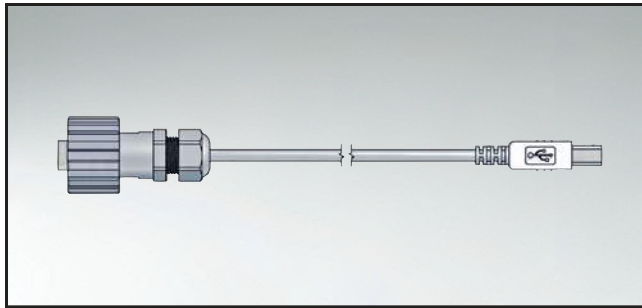


ORDER DATA

Type	Degree of protection	Material	Cable	Length	Part Number
Patch cord Type 1	IP67-IP67	Black / Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-200281
Patch cord Type 1	IP67-IP67	Black / Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-200291
Patch cord Type 1	IP67-IP67	Black / Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-200311
Patch cord Type 2	IP67-IP67	Metal/Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-200401
Patch cord Type 2	IP67-IP67	Metal/Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-200411
Patch cord Type 2	IP67-IP67	Metal/Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-200421
Patch cord Type 3	IP67-IP20 type A	Black / Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-200231
Patch cord Type 3	IP67-IP20 type A	Black / Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-200241
Patch cord Type 3	IP67-IP20 type A	Black / Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-200261
Patch cord Type 4	IP67-IP20 type A	Metal/Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-200371
Patch cord Type 4	IP67-IP20 type A	Metal/Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-200381
Patch cord Type 4	IP67-IP20 type A	Metal/Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-200391

USB 2.0 PATCH CORD

IP67 to IP20, IP20 to IP20 – TypeA/Type B – in plastic or metal design



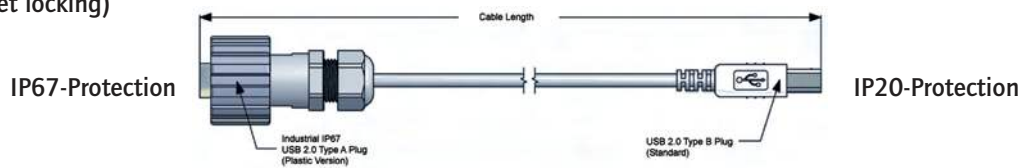
RoHS compliant

DESCRIPTION

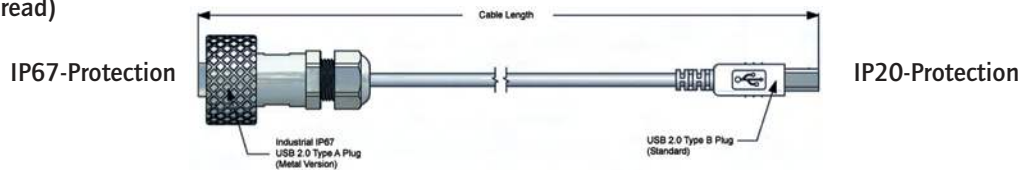
- Field attachable patch cord
- IP67 protected at one end and IP20 rated on the other end
- Plastic design with bayonet locking
- Metal design with M28 thread
- Double-sided plug connector in IP20 design
- USB 2.0 connector type A to type A or type A to type B
- Special lengths on request

PRODUCT DRAWING

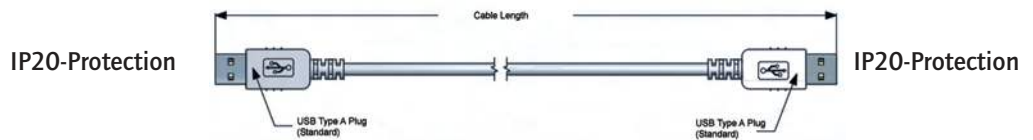
Type 1: Plastic design (Bayonet locking)



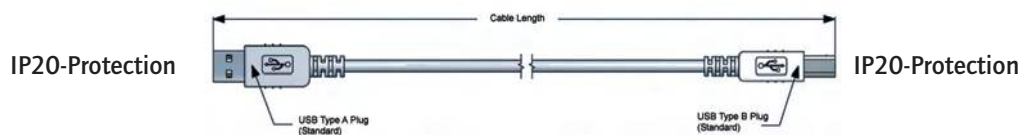
Type 2: Metal design (M28 thread)



Type 3: Type A to Type A



Type 4: Type A to Type B



ORDER DATA

Type	Degree of protection	Material	Cable	Length	Part Number
Patch cord Type 1	IP67-IP20 type B	Black/Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-200181
Patch cord Type 1	IP67-IP20 type B	Black/Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-200191
Patch cord Type 1	IP67-IP20 type B	Black/Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-200211
Patch cord Type 2	IP67-IP20 type B	Metal/ Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-200341
Patch cord Type 2	IP67-IP20 type B	Metal/ Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-200351
Patch cord Type 2	IP67-IP20 type B	Metal/ Brass nickel plated	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-200361
Patch cord Type 3	IP20 type A-IP20 type A	Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-201031
Patch cord Type 3	IP20 type A-IP20 type A	Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-201041
Patch cord Type 3	IP20 type A-IP20 type A	Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-201061
Patch cord Type 4	IP20 type A-IP20 type B	Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	2 m	17-201081
Patch cord Type 4	IP20 type A-IP20 type B	Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	3 m	17-201091
Patch cord Type 4	IP20 type A-IP20 type B	Plastic	AWM2725 AWG 28/1p and AWG 24/2c, black	4.5m	17-201111

SECTION 7

IP67 FIBER OPTIC OUTDOOR

CONEC has developed a ruggedized Fiber Optic connector in IP67 on SC-Connector basis. The outer housing is a standard D-Sub metal housing and fits into customary panels. In combination with special outdoor cable this connector is favoured for outdoor applications. The compact style allows high density packaging.

Conec has expanded the IP67 Water Resistant Connector Product Line.

Conec now offers a Duplex LC Fiber Optic Connector, this connector is installed into a protective shell (housing) in accordance to IEC61076-3-106 Type 1.

The connector features Bayonet locking. Included with this connector system is the Duplex LC Plug and Receptacle both are ODVA compliant. This series of products are suitable for outdoor and indoor Harsh Environments and in applications such as Telecom, Industrial Ethernet, Instrumentation, Security Systems. Complete Assemblies with Fiber cable installed are offered.

For more information please contact the factory.



IP67 FIBER OPTIC SC DUPLEX SYSTEM

Metal housing with connector



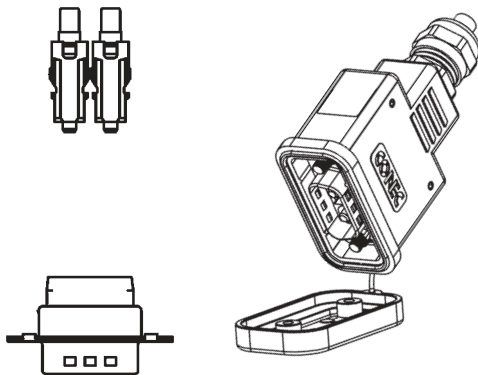
RoHS compliant

DESCRIPTION

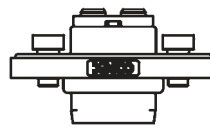
- Temperature range -40 °C to +80 °C
- Mating cycles: 100
- Ferrule: Ceramic
- Duplex connector
- Based on SC-plugs
- Multimode and Singlemode
- D-Sub metal housing
- D-Sub panel adapter
- Protection cap made of metal IP65

PRODUCT DRAWING

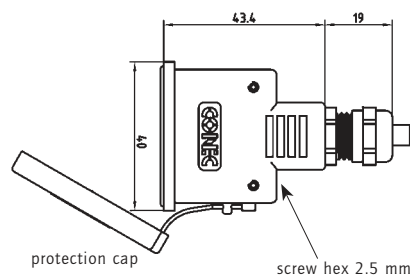
Type A: Hood System with Connector



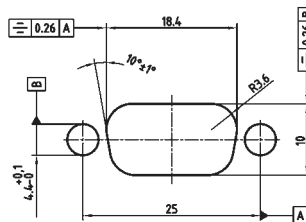
Type B: Panel Adapter



Type C: Panel Connector (2x)



Panel Cut Out



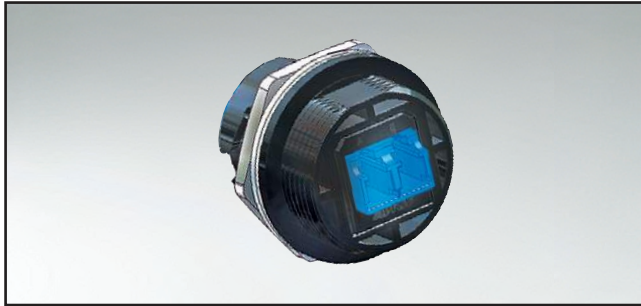
ORDER DATA

Part number	Type	SM/MM Singlemode/Multimode	Fiber type	Insertion loss dB		Return loss dB	
				Typical values for PC-Polishing		Typical values for PC-Polishing	
18-006800	A	Hood System with Connector (SM)	9/125 μm	≤ 0.3		- 40	
18-006820	B	Panel Adapter (SM)					
18-006840	C	Panel Connector (SM)*					
18-006860	A	Hood System with Connector (MM)	50/125 μm 62.5/125 μm	≤ 0.3		- 40	
18-006880	B	Panel Adapter (MM)					
18-006900	C	Panel Connector (MM)*					

*Please note: 2 Panel Connectors are needed to complete one panel adapter.

IP67 FIBER OPTIC INDUSTRIAL DUPLEX LC CONNECTOR

Receptacle Assembly Kit

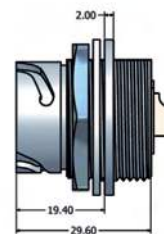
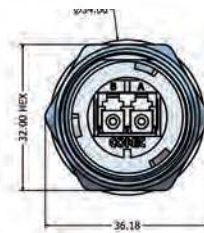
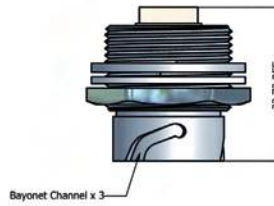
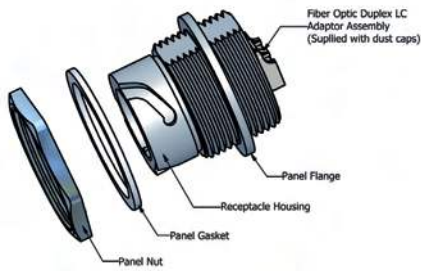


RoHS compliant

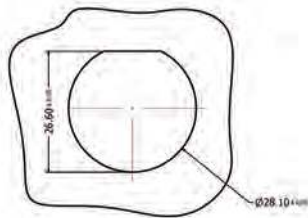
DESCRIPTION

- Industrial version with bayonet coupling
- For front or rear panel mount to a max. panel thickness of 3.2 mm
- Receptacle housing: polyester (black); UL 94 V-0
- Panel nut: brass, nickel plated
- Panel gasket: silicone
- Duplex LC adaptor assembly with dust caps
- Operating temperature: -40°C to +85°C

PRODUCT DRAWING



Recommended Panel Cutout



ORDER DATA

Type	Material	SM/ MM	Part Number
Receptacle assembly kit	Black plastic	Single Mode	17-300010
Receptacle assembly kit	Black plastic	Multi Mode	17-300020

IP67 FIBER OPTIC INDUSTRIAL DUPLEX LC CONNECTOR

Plug Kit – Bayonet locking type

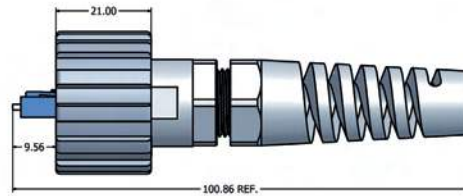
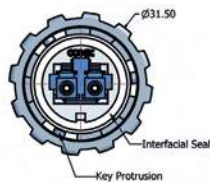
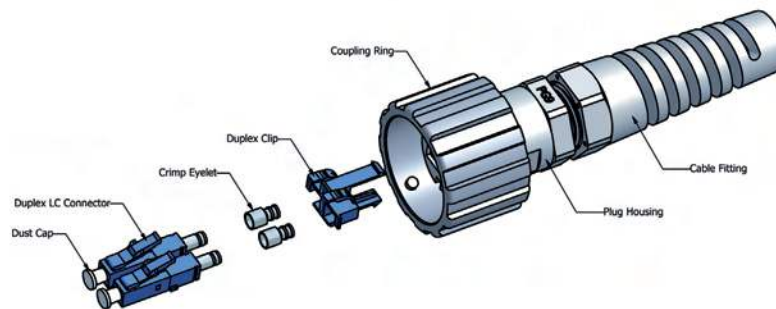


RoHS compliant

DESCRIPTION

- Plug kit with bayonet coupling ring
- Material: polyester (black), UL94 V-0
- Duplex LC connector with dust caps
- Operating temperature: -40°C to +85°C
- Attachable cables are available on request

PRODUCT DRAWING

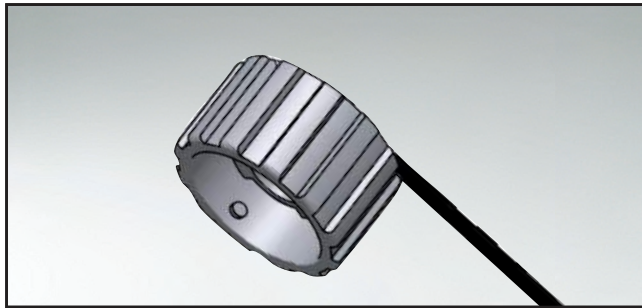


ORDER DATA

Type	Material	SM/ MM	Part Number
Plug kit	Black plastic	Single Mode	17-300030
Plug kit	Black plastic	Multi Mode	17-300040

IP67 FIBER OPTIC ACCESSORIES

Protection cap for receptacle

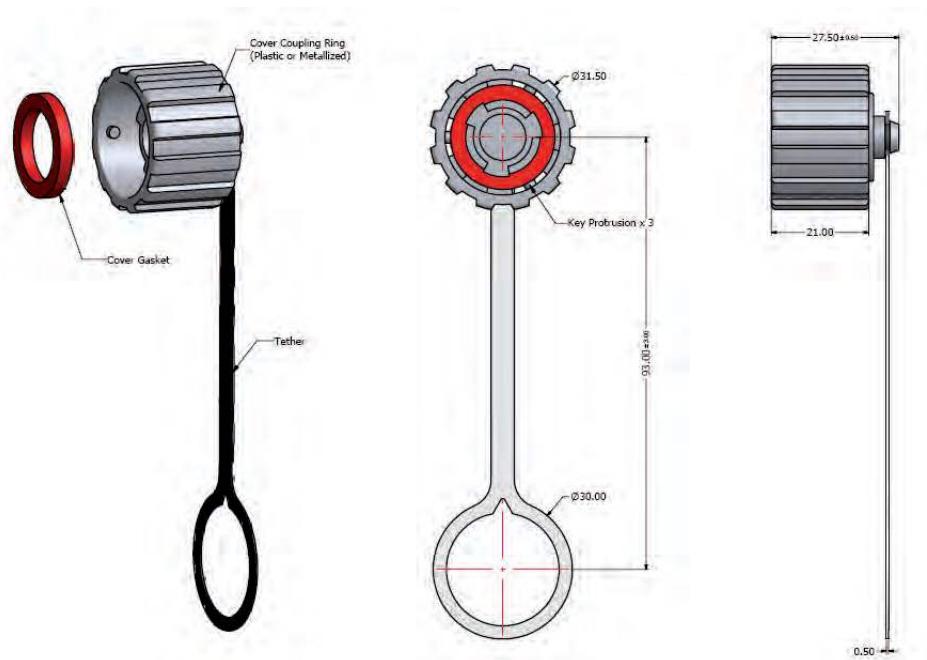


RoHS compliant

DESCRIPTION

- IP67 protection for unmated connectors
- Material protection cap: polyester (black); UL 94 V-0
- Material tether: polycarbonate (black)
- Operating temperature: -40°C to +85°C

PRODUCT DRAWING

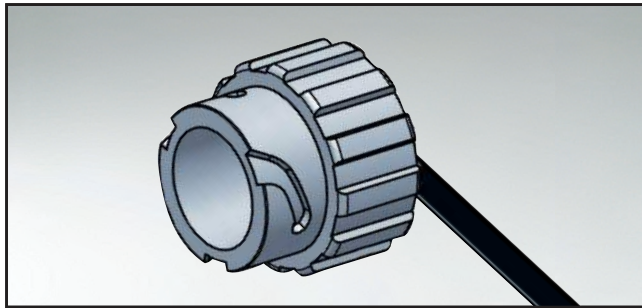


ORDER DATA

Type	Material	Part Number
Protection cap receptacle	Black plastic	17-10002

IP67 FIBER OPTIC ACCESSORIES

Protection cap for plug

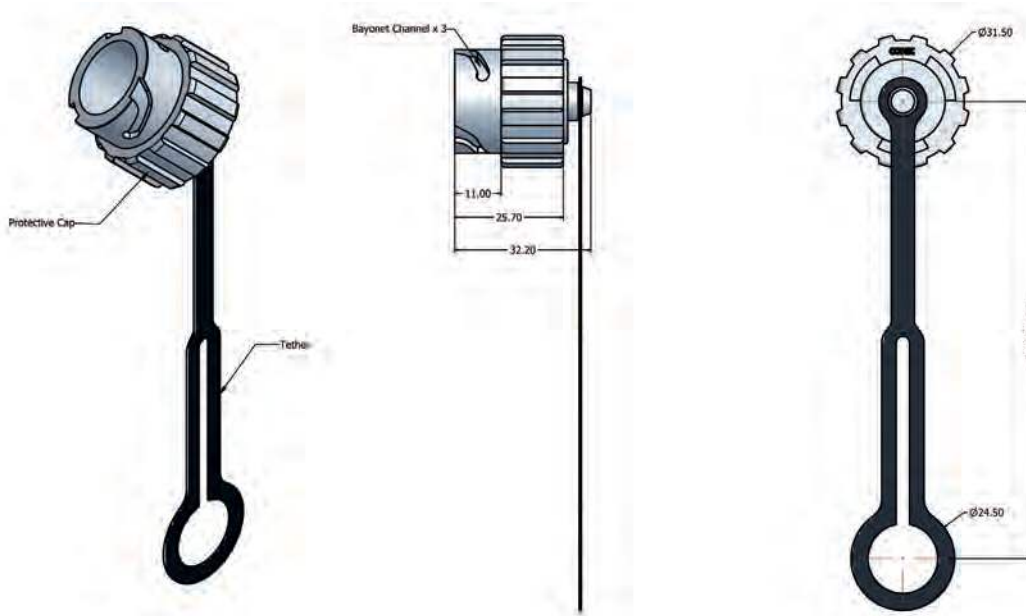


RoHS compliant

DESCRIPTION

- IP67 protection for unmated plug assemblies
- Material protection cap: polyester (black); UL 94 V-0
- Material tether: polycarbonate (black)
- Operating temperature: -40°C to +85°C

PRODUCT DRAWING



ORDER DATA

Type	Material	Part Number
Protection cap receptacle	Black plastic	17-300050

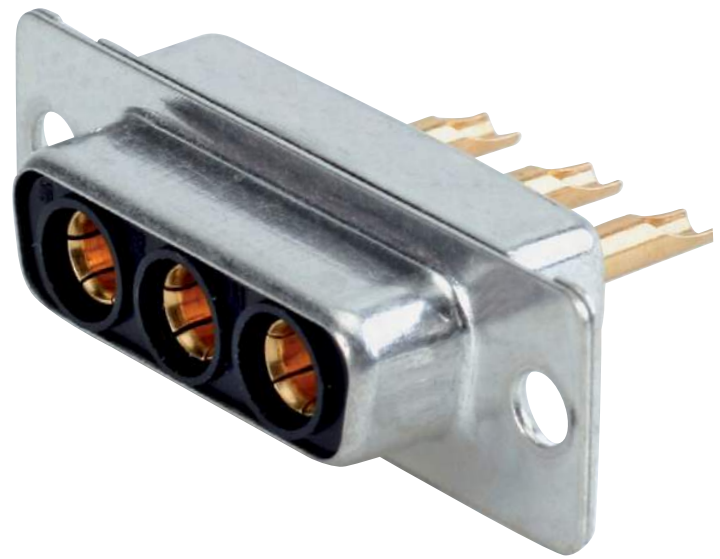
SECTION 8
PART NUMBERS



On the following pages you will find the CONEC catalogue program sorted by part numbers.

66589
66589
66589

66589B 74



9B 75
6 589B 76
B 77

PART NUMBERS

Part Number	Section	Page	Part Number	Section	Page	Part Number	Section	Page	Part Number	Section	Page
4 HDD15PAM99A10 X	1	13	6 021W1PAT59S20 X	3	3	6 STF09PAT03S10 X	2	5	6 STF25PAM05B20 X	2	3
4 HDD15SAM99A10 X	1	13	6 021W1PAT59S20X	3	3	6 STF09PAT03S20 X	2	5	6 STF25PAM05B30 X	2	3
4 HDD26PAM99A10 X	1	13	6 021W1SAM61B30 X	3	2	6 STF09PAT03S30 X	2	5	6 STF25PAT01S10 X	2	4
4 HDD26SAM99A10 X	1	13	6 021W1SAM61B30X	3	2	6 STF09PAT03S40 X	2	5	6 STF25PAT01S20 X	2	4
4 HDD44PAM99A10 X	1	13	6 021W1SAT59S20 X	3	3	6 STF09PAT03S10 X	2	5	6 STF25PAT01S30 X	2	4
4 HDD44SAM99A10 X	1	13	6 021W1SAT59S20X	3	3	6 STF09PAT03S20 X	2	5	6 STF25PAT01S40 X	2	4
4 HDD62PAM99A10 X	1	13	6 21WA4PAM61B30 X	3	2	6 STF09PAT03S30 X	2	5	6 STF25PAT01S10 X	2	4
4 HDD62SAM99A10 X	1	13	6 21WA4PAM61B30X	3	2	6 STF09PAT03S40 X	2	5	6 STF25PAT01S20 X	2	4
4 HDD78PAM99A10 X	1	13	6 21WA4PAT59S20 X	3	3	6 STF09PAT04S10 X	2	5	6 STF25PAT01S30 X	2	4
4 HDD78SAM99A10 X	1	13	6 21WA4PAT59S20X	3	3	6 STF09PAT04S20 X	2	5	6 STF25PAT01S40 X	2	4
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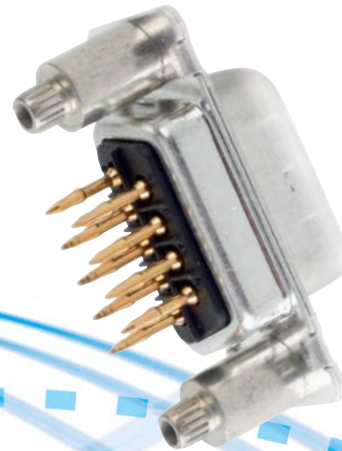
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6 STF50PAM03B20 X	2	3	15-002093	1	4	17-100824	5	15	17-201081	6	9
6 STF50PAM03B30 X	2	3	15-002103	1	4	17-100934	5	6	17-201091	6	9
6 STF50PAM03B20 X	2	3	15-002113	1	8	17-100944	5	7	17-201111	6	9
6 STF50PAM03B30 X	2	3	15-002123	1	8	17-100950	6	7	17-300010	7	2
6 STF50PAM04B20 X	2	3	15-002133	1	6	17-100964	5	12	17-300020	7	2
6 STF50PAM04B30 X	2	3	15-002143	1	6	17-100974	5	12	17-300030	7	3
6 STF50PAM04B20 X	2	3	15-002153	1	7	17-100984	5	12	17-300040	7	3
6 STF50PAM04B30 X	2	3	15-002163	1	7	17-100994	5	10	17-300050	7	5
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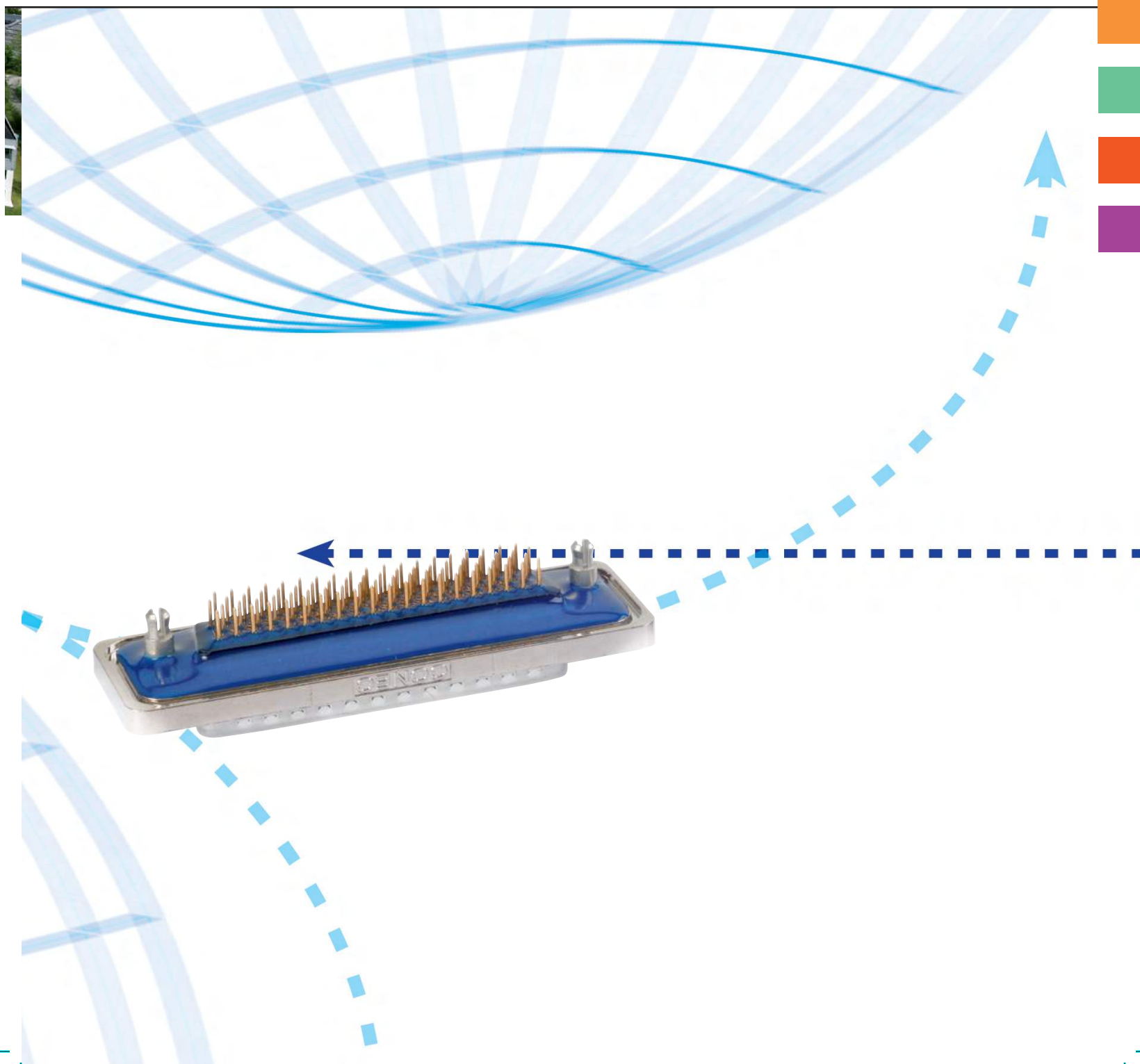
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CONEC

Elektronische Bauelemente GmbH
Ostenfeldmark 16
59557 Lippstadt
Germany

Tel. +49 2941 765-0
Fax +49 2941 76565
E-Mail info@conec.de
www.conec.com



CONEC Corporation

125 Sun Pac Blvd.
Brampton Ontario
Canada L6S 5Z6
Tel. +1 905 790 2200
Fax +1 905 790 2201
E-Mail info@conec.com

CONEC

343 Technology Drive
Garner, NC, USA 27529
Tel. +1 919 460 8800
Fax +1 919 460 0141
E-Mail info@conec.com

CONEC (UK) Limited

Ringway House East
Kelvin Road
Newbury, Berkshire
RG14 2DB
Tel. +44 1635 36929
Fax +44 1635 36925
E-Mail info@conec.co.uk

CONEC Polska Sp. zo.o

ul.Szmaragdowa 10
52-215 Wrocław
Tel. +48 713744045
Fax +48 713744049
E-Mail info@conec.pl

CONEC s.r.o.

Loucka 119
76325 Ujezd, Czech Republic
Tel. +42 0577 350132
Fax +42 0577 350134
E-Mail info@conec.cz

CONEC Nordic Region

Lundtoftevej 264 C
2800 Kgs. Lyngby
Dänemark
Tel. +45 4593 5533
Fax +45 4593 5523
E-Mail info@conec.dk

CONEC France SARL

202 Rue des Chevreuils
30320 Poulx
Tel. +33 9 75267217
Fax +33 4 66570916
E-Mail info@conec.fr

CONEC (Shanghai)

Int. Trading Co., Ltd.
Rm. 715 Yongding Bldg.
No. 3388 Gong He Xin Rd.
200436 Shanghai
Tel. +86 21 66300930
Fax +86 21 66300911
E-Mail info@conec.cn

CONEC GmbH Schatz Electronic

Schubertstr. 14a
99096 Erfurt
Tel. +49 361 340110
Fax +49 361 3401111
E-Mail info@schatz-electronic.de