

 ELECTRONICS

# D-Subminiature Connectors Economy Range

## **FCI: SETTING THE STANDARD FOR CONNECTORS**

With operations in 30 countries and sales of 1.25 billion euros in 2008, FCI is a leading manufacturer of connectors.

Our 13,000 employees are committed to providing customers with high-quality, innovative products for a wide range of consumer and industrial applications.

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# D-Subminiature Connectors

## DESCRIPTION

FCI's D-Subminiature connectors are part of an industry standard for applications requiring robust and reliable connectors. These D-Subminiature connectors are one of the most popular Input - Output interconnects, addressing a wide variety of applications in Telecommunications, Data, Consumer, Industrial, Military, Instrumentation and Medical markets. Since many years FCI offers a wide range of D-Subminiature connectors to meet all design requirements, and to address increasing needs for proven connectors for less demanding applications, FCI developed the D-Subminiature Economy Range.



## TECHNICAL DATA

### Electrical Performance

Current rating	: 5 A
Rated Voltage	: 250 V
Contact Resistance	: 25 mΩ (Max) Initial & 40 mΩ (Max) After
Insulation resistance	: >5000 MΩ
Dielectric Strength	: 1000 Vrms
Operating temp range	: -55°C to +105°C

### Material

Insulator	: Glass Filled Thermoplastic (UL 94V-0) Black
Contact	: Copper Alloy
Shell	: SPCC steel

### Mechanical Performance

Mating/Unmating cycles	: 50
Insertion/Extraction force per contact	: 5 NMax / 0.3 NMin

## PERFORMANCE SELECTION CHART

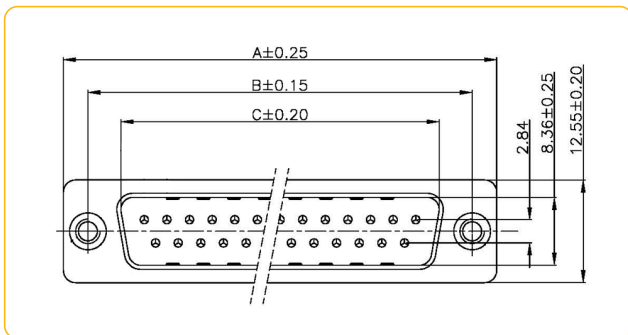
	FCI Economy Range	FCI Std Delta-D
Receptacle contact	Brass	Phosphor Bronze
Durability (cycles)	50	200 / 500
Operating Temp (°C)	- 55°C to +105°C	- 55°C to +125°C
Rated Voltage	250 V	300 V
Torque for Female Clinch nut	0.5 Nm	0.7 Nm
Accessory options	3	24+
PCB thickness	1.6 mm	1.6 and 2.4 mm
Vibration	10G	20G
Target applications	Set Top Box, Consumer devices, Control devices, Energy Meters, Datacom, Dot matrix printers, Desktop PC	Communications (Base station, Switching, Transmission, Routers, ADSL), Medical, Instrumentation, Transportation (Non Automotive), Power Supplies, Robotics

## D-SUB (ECONOMY) RIGHT ANGLE

### ORDERING INFORMATION

<b>Series</b> 10090097: Male-US Style 10090099: Female -US Style 10090767: Male -Europe Style 10090768: Female-Europe Style	<b>P</b>	<b>YY</b>	<b>4</b>	<b>X</b>	<b>LF</b>
<b>Gender</b>	<b>P</b> : Pin	<b>S</b> : Socket			
<b>No: of contacts</b>	<b>09 - 15 - 25 - 37</b>				
<b>Durability</b>	<b>50 cycles</b>				
<b>Mounting options</b>	<b>X</b> : UNC 4-40 Clinch nuts with Board locks <b>L</b> : M3 Clinch nuts with Board locks <b>V</b> : UNC 4-40 Screw locks with Board locks				
<b>RoHS status</b>	RoHS compliant				

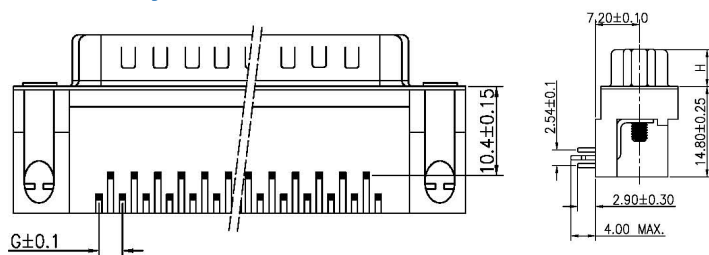
### DIMENSION



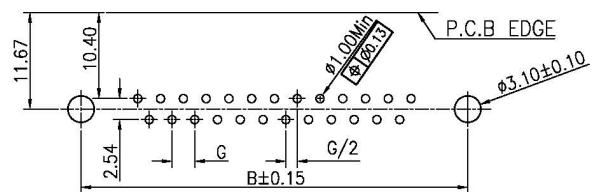
### DIMENSIONS (in mm)

No. of Contacts		A	B	C	G	H
<b>9</b>	P	30.81	24.99	16.92	2.74	$5.9^{+0.15}$
	S	30.81	24.99	16.33	2.74	5.8
<b>15</b>	P	39.24	33.32	25.25	2.74	$5.9^{+0.15}$
	S	39.24	33.32	24.66	2.74	5.8
<b>25</b>	P	53.04	47.04	38.96	2.77	$5.7^{+0.25}$
	S	53.04	47.04	38.38	2.77	5.8
<b>37</b>	P	69.32	63.5	55.42	2.77	$5.7^{+0.25}$
	S	69.32	63.5	54.84	2.77	5.8

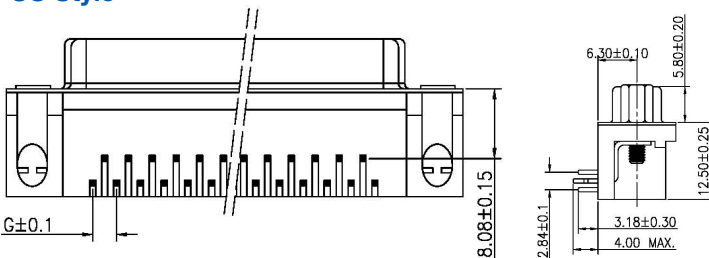
### EUROPE Style



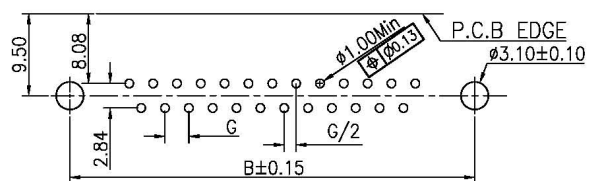
### PCB layout



### US Style



### PCB layout

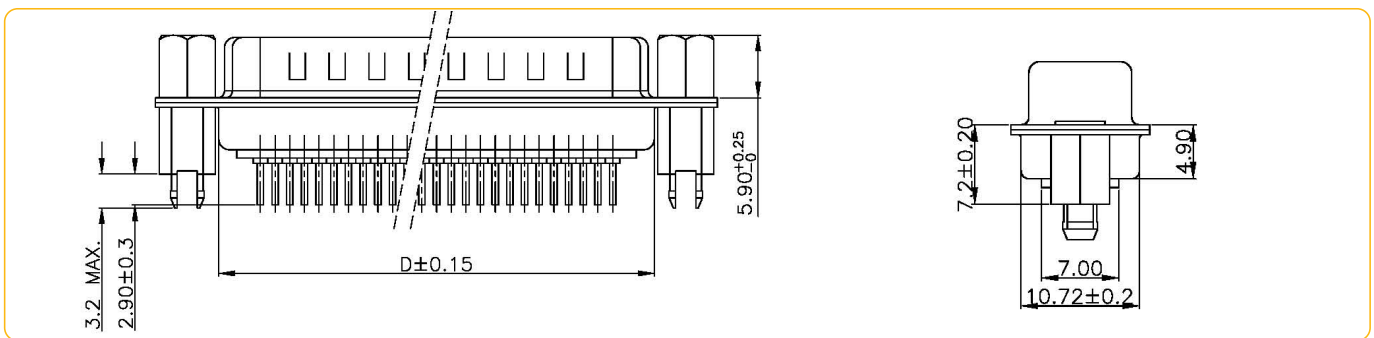
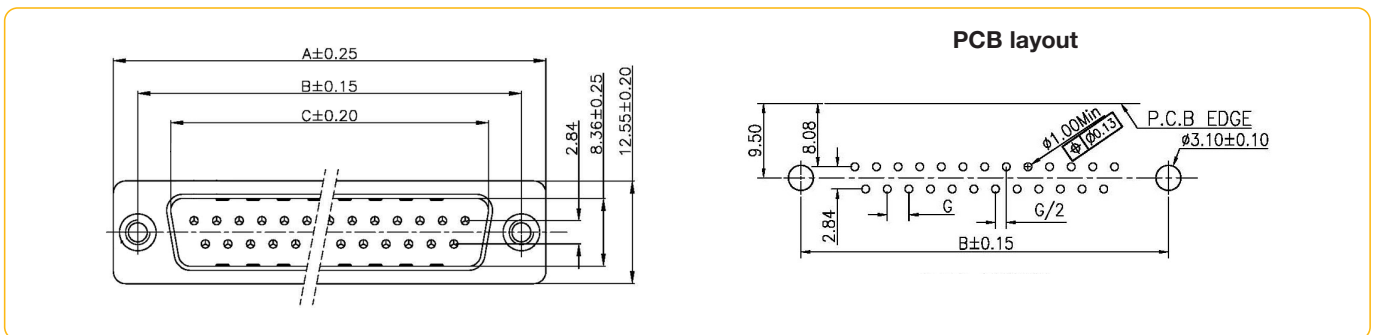


## D-SUB (ECONOMY) STRAIGHT

### ORDERING INFORMATION

<b>Series</b> 10090096: Male Straight 10090098: Female Straight	<b>P</b>	<b>YY</b>	<b>4</b>	<b>X</b>	<b>LF</b>
<b>Gender</b>	<b>P</b> : Pin	<b>S</b> : Socket			
<b>No: of contacts</b>	<b>09 - 15 - 25 - 37</b>				
<b>Durability</b>	<b>50 cycles</b>				
<b>Mounting options</b>	<b>X</b> : UNC 4-40 Clinch nuts with Board locks <b>L</b> : M3 Clinch nuts with Board locks <b>V</b> : UNC 4-40 Screw locks with Board locks				
<b>RoHS status</b>	RoHS compliant				

### DIMENSION



### DIMENSIONS (in mm)

No. of Contacts		A	B	C	D	G	H
9	P	30.81	24.99	16.92	19.28	2.74	5.9 <sup>+0.15</sup>
	S	30.81	24.99	16.33	19.28	2.74	5.8
15	P	39.24	33.32	25.25	27.65	2.74	5.9 <sup>+0.15</sup>
	S	39.24	33.32	24.66	27.75	2.74	5.8
25	P	53.04	47.04	38.96	41.10	2.77	5.7 <sup>+0.25</sup>
	S	53.04	47.04	38.38	41.30	2.77	5.8
37	P	69.32	63.5	55.42	57.44	2.77	5.7 <sup>+0.25</sup>
	S	69.32	63.5	54.84	57.40	2.77	5.8

## ASSOCIATED CABLE CONNECTOR OFFERING

### Signal

#### Solder Bucket series

Standard PNs	Description
DE09S064TLF	09 Way Socket Solder Bucket
DE09P064TXLF	09 Way Pin Solder Bucket
DA15S064TLF	15 Way Socket Solder Bucket
DA15P064TXLF	15 Way Pin Solder Bucket
DB25S064TLF	25 Way Socket Solder Bucket
DB25P064TXLF	25 Way Pin Solder Bucket
DC37S064TLF	37 Way Socket Solder Bucket
DC37P064TXLF	37 Way Pin Solder Bucket

#### Crimp 8656 series

Standard PNs	Description	Crimp Contact PNs	Description
865609SLTLF	09 Way Socket, Crimp	8656350064LF	Pin 24/28 AWG, Pack: 500/Box
865609PLTXLF	09 Way Pin, Crimp	86564510064LF	Pin 24/28 AWG, Pack: 5000/Reel
865615SLTLF	15 Way Socket, Crimp	8656351064LF	Socket 24/28 AWG, Pack: 500/Box
865615PLTXLF	15 Way Pin, Crimp	86566510064LF	Socket 24/28 AWG, Pack: 5000/Reel
865625SLTLF	25 Way Socket, Crimp		
865625PLTXLF	25 Way Pin, Crimp		
865637SLTLF	37 Way Socket, Crimp		
865637PLTXLF	37 Way Pin, Crimp		

#### IDC 8657 series

Standard PNs	Description
865709S065TLF	09 Way Socket, Flat Cable IDC
865709P065TXLF	09 Way Pin, Flat Cable IDC
865715S065TLF	15 Way Socket, Flat Cable IDC
865715P065TXLF	15 Way Pin, Flat Cable IDC
865725S065TLF	25 Way Socket, Flat Cable IDC
865725P065TXLF	25 Way Pin, Flat Cable IDC
865737S065TLF	37 Way Socket, Flat Cable IDC
865737P065TXLF	37 Way Pin, Flat Cable IDC

### Power

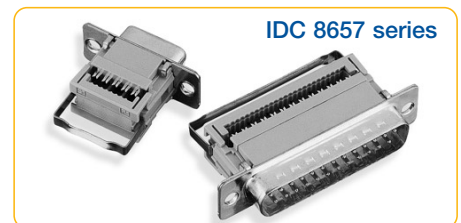
#### DW series - Solder / Crimp

Connector PNs	Description	Power Contact PNs	Description
DA3W3SA00LF	Power Cable Connector 3W3 Socket	8638PSS1005LF	10A Socket, Solder Bucket
DA3W3PA00LF	Power Cable Connector 3W3 Pin	8638PPS1005LF	10A Pin, Solder Bucket
DA7W2SA00LF	Power Cable Connector 7W2 Socket	8638PSS4005LF	40A Socket, Solder Bucket
DA7W2PA00LF	Power Cable Connector 7W2 Pin	8638PPS4005LF	40A Pin, Solder Bucket
DC8W8SA00LF	Power Cable Connector 8W8 Socket	8638PSC1005LF	10A Socket, Crimp
DC8W8PA00LF	Power Cable Connector 8W8 Pin	8638PPC1005LF	10A Pin, Crimp
DB5W5SA00LF	Power Cable Connector 5W5 Socket	8638PSC2005LF	20A Socket, Crimp
DB5W5PA00LF	Power Cable Connector 5W5 Pin	8638PPC2005LF	20A Pin, Crimp

## ACCESSORIES

### Straight Exit Hoods

	Plastic	Metallised	Metallic
Position	Standard PNs	Standard PNs	Standard PNs
09 Way	86303637BLF	10039449-00002LF	8655MH0901BLF
15 Way	86303638BLF	10039450-00002LF	8655MH1501BLF
25 Way	86303639BLF	10039451-00002LF	8655MH2501BLF
37 Way	86303640BLF	10039452-00002LF	8655MH3701BLF



## D-Subminiature Connectors

FCI part number	Part Description
10090768-S094VLF	D-sub right angle Europe style 9 way solder socket
10090768-S154VLF	D-sub right angle Europe style 15 way solder socket
10090768-S254VLF	D-sub right angle Europe style 25 way solder socket
10090768-S374VLF	D-sub right angle Europe style 37 way solder socket
10090768-S094LLF	D-sub right angle Europe style 9 way solder socket
10090768-S154LLF	D-sub right angle Europe style 15 way solder socket
10090768-S254LLF	D-sub right angle Europe style 25 way solder socket
10090768-S374LLF	D-sub right angle Europe style 37 way solder socket
10090768-S094XLF	D-sub right angle Europe style 9 way solder socket
10090768-S154XLF	D-sub right angle Europe style 15 way solder socket
10090768-S254XLF	D-sub right angle Europe style 25 way solder socket
10090768-S374XLF	D-sub right angle Europe style 37 way solder socket
10090767-P094VLF	D-sub right angle Europe style 9 way solder pin
10090767-P154VLF	D-sub right angle Europe style 15 way solder pin
10090767-P254VLF	D-sub right angle Europe style 25 way solder pin
10090767-P374VLF	D-sub right angle Europe style 37 way solder pin
10090767-P094LLF	D-sub right angle Europe style 9 way solder pin
10090767-P154LLF	D-sub right angle Europe style 15 way solder pin
10090767-P254LLF	D-sub right angle Europe style 25 way solder pin
10090767-P374LLF	D-sub right angle Europe style 37 way solder pin
10090767-P094XLF	D-sub right angle Europe style 9 way solder pin
10090767-P154XLF	D-sub right angle Europe style 15 way solder pin
10090767-P254XLF	D-sub right angle Europe style 25 way solder pin
10090767-P374XLF	D-sub right angle Europe style 37 way solder pin
10090099-S094VLF	D-sub right angle US style 9 way solder socket
10090099-S154VLF	D-sub right angle US style 15 way solder socket
10090099-S254VLF	D-sub right angle US style 25 way solder socket
10090099-S374VLF	D-sub right angle US style 37 way solder socket
10090099-S094LLF	D-sub right angle US style 9 way solder socket
10090099-S154LLF	D-sub right angle US style 15 way solder socket
10090099-S254LLF	D-sub right angle US style 25 way solder socket
10090099-S374LLF	D-sub right angle US style 37 way solder socket
10090099-S094XLF	D-sub right angle US style 9 way solder socket
10090099-S154XLF	D-sub right angle US style 15 way solder socket
10090099-S254XLF	D-sub right angle US style 25 way solder socket
10090099-S374XLF	D-sub right angle US style 37 way solder socket
10090097-P094VLF	D-sub right angle US style 9 way solder pin
10090097-P154VLF	D-sub right angle US style 15 way solder pin
10090097-P254VLF	D-sub right angle US style 25 way solder pin
10090097-P374VLF	D-sub right angle US style 37 way solder pin
10090097-P094LLF	D-sub right angle US style 9 way solder pin
10090097-P154LLF	D-sub right angle US style 15 way solder pin
10090097-P254LLF	D-sub right angle US style 25 way solder pin
10090097-P374LLF	D-sub right angle US style 37 way solder pin
10090097-P094XLF	D-sub right angle US style 9 way solder pin
10090097-P154XLF	D-sub right angle US style 15 way solder pin
10090097-P254XLF	D-sub right angle US style 25 way solder pin
10090097-P374XLF	D-sub right angle US style 37 way solder pin

FCI part number	Part Description
10090098-S094VLF	D-sub straight 9 way solder socket
10090098-S154VLF	D-sub straight 15 way solder socket
10090098-S254VLF	D-sub straight 25 way solder socket
10090098-S374VLF	D-sub straight 37 way solder socket
10090098-S094LLF	D-sub straight 9 way solder socket
10090098-S154LLF	D-sub straight 15 way solder socket
10090098-S254LLF	D-sub straight 25 way solder socket
10090098-S374LLF	D-sub straight 37 way solder socket
10090098-S094XLF	D-sub straight 9 way solder socket
10090098-S154XLF	D-sub straight 15 way solder socket
10090098-S254XLF	D-sub straight 25 way solder socket
10090098-S374XLF	D-sub straight 37 way solder socket
10090096-P094VLF	D-sub straight 9 way solder pin
10090096-P154VLF	D-sub straight 15 way solder pin
10090096-P254VLF	D-sub straight 25 way solder pin
10090096-P374VLF	D-sub straight 37 way solder pin
10090096-P094LLF	D-sub straight 9 way solder pin
10090096-P154LLF	D-sub straight 15 way solder pin
10090096-P254LLF	D-sub straight 25 way solder pin
10090096-P374LLF	D-sub straight 37 way solder pin
10090096-P094XLF	D-sub straight 9 way solder pin
10090096-P154XLF	D-sub straight 15 way solder pin
10090096-P254XLF	D-sub straight 25 way solder pin
10090096-P374XLF	D-sub straight 37 way solder pin

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