

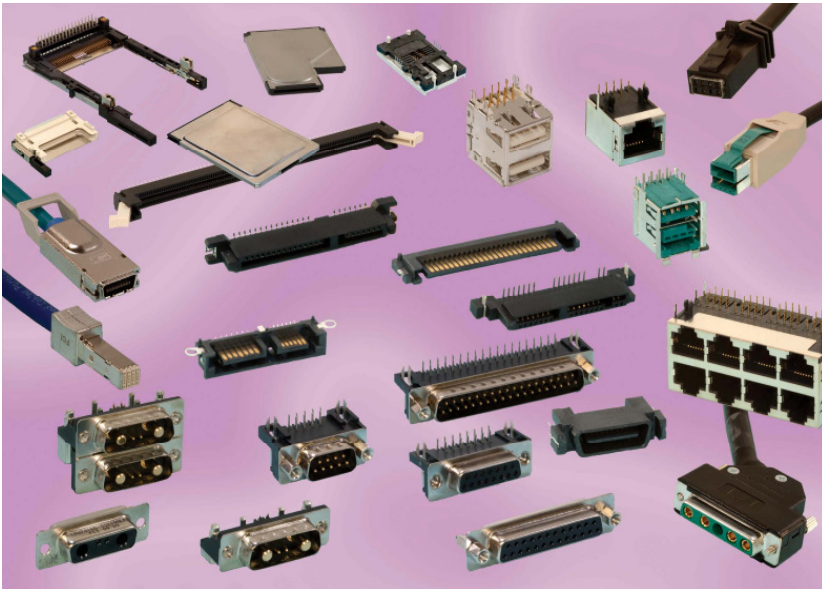


CONNECTI/ONS

D- Subminiature Economy Range

December, 2009

Where does IO-connections stand for?



- FCI's I/O connector solutions:
 - high-density
 - high-speed interfaces
- Applications:
 - networking, storage, and memory, power distribution, media card systems, etc
- Industry standards:
 - Ethernet, SFF, Infiniband, USB, PCMCIA™ or HDMI™, Compact Flash™, SAS, SATA, etc.
- Custom solutions:
 - Cable assemblies.

CONNECTI/ONS

What products is IO Connections comprised of?



Data & Multimedia I/O's



- ▶ HDMI™
- ▶ USB
- ▶ Modular Jacks
- ▶ Latch-N-Lok™

High Speed I/O's



- ▶ DensiShield™ Systems
- ▶ Eyemax®
- ▶ Multilane SAS and SATA Connectors

D-Sub



- ▶ Standard Density
- ▶ High Density
- ▶ Cable Connectors
- ▶ Power Connectors
- ▶ **see more**

Cable Assemblies



- ▶ DensiShield™ I/O System
- ▶ Eyemax® - Infiniband Cable Assembly
- ▶ Fiber Optics
- ▶ Metral® Cable Assembly
- ▶ **see more...**

CONNECTI/ONS

Memory & Media Card Systems



- ▶ Smartcard
- ▶ PCMCIA™
- ▶ ExpressCard™
- ▶ DDR Memory
- ▶ Flash memory products

Storage Interface



- ▶ Serial Attached SCSI (SAS) Connectors
- ▶ Serial-ATA (SATA) Connectors
- ▶ eSATA Connectors
- ▶ iVDR Connectors
- ▶ **see more...**

More information can be found on a dedicated website at www.fci.com/io

- ▶ Product selector tables;
- ▶ Data sheets;
- ▶ Product presentations;
- ▶ 3D view models & 2D drawings;
- ▶ Product specifications;
- ▶ Distributor inventory information;
- ▶ etc

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**.



Performance Selection Chart



	Economy Range	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 Clip	0.5 Nm	0.7Nm
Accessory options	3	24+
PCB thickness in mm	1.6	1.6 and 2.4
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

Electrical Performance

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

Material

Insulator	Glass filled thermoplastic (UL94V-0) Black
Contact	Copper Alloy
Shell	SPCC Steel

Mechanical Performance

Mating/Un Mating cycles	50
Insertion/Extraction force per contact	5N Max / 0.3N Min.

DSub (Economy) Right Angle



- **SIZES AVAILABLE - 9,15,25 & 37 Positions**
- **TERMINATION - R/A US/EU Footprints**

- **Mounting options**
 - **UNC 4-40 Clinch nuts with Board lock (metric)**
 - **M3 clinch nuts with Board lock (imperial)**
 - **UNC 4-40 Screw locks with Board lock**

- **RoHS Status**
 - **RoHS Compliant**

- **Packaging Pattern**
 - **Tray Packing**



DSub (Economy) Right Angle



ORDERING INFORMATION

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

DSub (Economy) Straight Solder

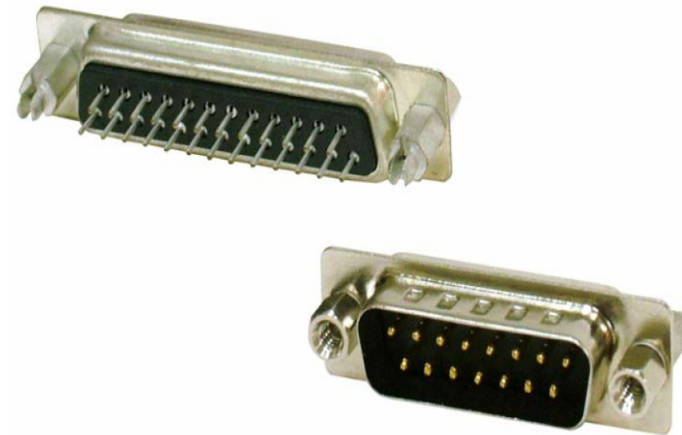


- **SIZES AVAILABLE - 9,15,25 & 37 Positions**
- **TERMINATION - STRAIGHT Solder**

- **Mounting options**
 - **UNC 4-40 Clinch nuts with Board lock (metric)**
 - **M3 clinch nuts with Board lock (imperial)**
 - **UNC 4-40 Screw locks with Board lock**

- **RoHS Status**
 - **RoHS Compliant**

- **Packaging Pattern**
 - **Tray Packing**



DSub (Economy) Straight Solder



ORDERING INFORMATION

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

Typical P/Ns and Description



FCI Part Number (Economy range)	Part Description
10090098-S094VLF	D-sub straight 9 way solder socket
10090096-P154LLF	D-sub straight 15 way solder pin
10090768-S254XLF	D-sub right angle Europe 25 way solder socket
10090767-P374VLF	D-sub right angle Europe 37 way solder pin
10090099-S094LLF	D-sub right angle US 9 way solder socket
10090097-P254XLF	D-sub right angle US 25 way solder pin

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



Associated cable connector offering



Power

DW series - Solder / Crimp

Connector PNs	Description	Power Cont act 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	Metelised	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



- X-ref to Tyco & Amphenol and many others loaded
- Sample box distributed through regional distribution centres
- New product brochure available in website
- GPS, MFG Pro, PDM and Web updates completed
- Drawings and 3D models available in PDM
- Product presentation available in website
- Lead time: 6 weeks
- Friendly MOQ's: 1,000 to 1,980 depending on size
- Samples available through sample rooms
- Product launched during Wk16, 2009



THANK YOU!

