

**REFERENCE SPECIFICATIONS**

- DIN 41652
- MIL-DTL-24308

**PHYSICAL CHARACTERISTICS**

- INSULATOR MATERIAL:
- PBT COLOR BLACK-RAL 7001/STANDARD MATERIAL
- CONTACT MATERIAL: - PHOSPHOR BRONZE FOR STRAIGHT CONTACT AND RA SOCKET  
- BRASS FOR RA PIN
- GROUNDING DEVICE MATERIAL : - BRASS FOR RIGHT ANGLE CONTACT

**ELECTRICAL CHARACTERISTICS**

- MAXIMUM RATING CURRENT: 5A AT 70°C
- NOMINAL CURRENT: 5A (STANDARD CONDITIONS)
- CONTACT RESISTANCE : straight terminations: <10mW  
Right angled termination: <25mΩ  
: <35mΩ for 50 way
- VOLTAGE PROOF : >1000 V.r.m.s.
- RATED VOLTAGE : 300 V.r.m.s.
- insulation resistance: >5000mΩ
- creepage and clearance distance: >1mm
- average wiping length: 2mm

**MECHANICAL CHARACTERISTICS**

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum  
- Female screw lock: 0.5 N.m minimum
- INSERTION AND WITH DRAWAL FORCE: <n x 3.40 N (n number of cts)
- GAUGE RETENTION FORCE : >0.20 N (gauge PM)
- THICKNESS GAUGE = Ø0.99±0.005 / SURFACE ROUGHNESS:  
Ra=0.10µ mini- 0.25µ maxi
- CONTACT RETENTION IN INSULATOR : mini 16N for straight contact  
mini 20N for right angled contact
- VIBRATIONS: 10-2000Hz / 1.5 mm - 20g / 3 x 2 HRS
- INTERRUPTION <1µs (NOT APPLICABLE FOR PL3)
- SHOCK: ACC. HALF SINE 50g- 11m.s-6x3 SHOCKS
- INTERRUPTION <1µs
- HARPOON INSERTION FORCE: <60N

**PERFORMANCE LEVELS**

MECHANICAL ENDURANCE ONLY		
P/N: DXXXXCXXXXXX		PERFORMANCE LEVELS
4	200 OPERATIONS	PL3
6	400 OPERATIONS	PL1

MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST(1)		
P/N: DXXXXCXXXXXX		PERFORMANCE LEVELS
4	salt spray: 24 hours	PL3
6	250 op + test (1 or 2)-10 days + 250 op	PL1

1) INDUSTRIAL ATMOSPHERE TEST: 3 GASES available for contacts and grounding device  
IN ACCORDANCE WITH IEC-68-2-60-TTD - TEST ke - MTH C OR IEC 512-6 TEST 11g  
MIXED GASES: H2S=10 PPB±5.10-9vol/vol +N2O=200±50.10-9 vol/vol + CL2=10±5.10-9vol/vol  
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±3°C

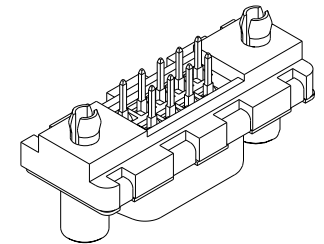
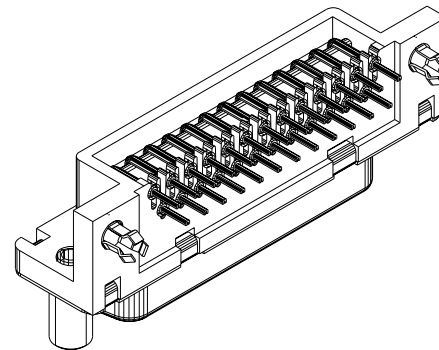
(2) INDUSTRIAL ATMOSPHERE TEST: 4 GASES available for contacts active area only  
BELCORE TEST : MIXED GASES: H2S=10 PPB±5 vol/vol +N2O=200ppb±50 vol/vol + CL2  
=10ppb±3vol/vol + S2O=100ppb±30vol/vol  
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±2°C

**ENVIRONMENTAL CHARACTERISTICS**

- CLIMATIC CATEGORY: 55/125/56
- TEMPERATURE RANGE -55°C TO +125°C
- DAMP HEAT STEADY STATE 56 DAYS

RIGHT ANGLED

STRAIGHT



**PLATING TIN LEAD VERSION**

- CONTACT:
  - GOLD OVER NICKEL ON MATING SURFACES
  - TIN LEAD OVER NICKEL ON TERMINATION PARTS
- SHELL AND ACCESSORIES TIN LEAD OVER COPPER

**PLATING TIN VERSION**

**NOTE RoHS INFORMATIONS**

- The "LF" products meet European union Directives and other country regulations as described in GS-22-008
- The housing will withstand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6 mm minimum thickcircuit board. See application notes/procedures if they are available.
- Termination plating spec: 1.27µm Nickel mini, 2.5 to 7.5 µm Sn (pure matte)
- Shell plating: 2 to 4 µm Cu + 3 to 10 µm Sn (pure bright)
- Accessories: Sn pure bright
- Packaging spec: see GS-14-920

1) INDUSTRIAL ATMOSPHERE TEST: 3 GASES available for contacts and grounding device  
IN ACCORDANCE WITH IEC-68-2-60-TTD - TEST ke - MTH C OR IEC 512-6 TEST 11g

MIXED GASES: H2S=10 PPB±5.10-9vol/vol +N2O=200±50.10-9 vol/vol + CL2=10±5.10-9vol/vol  
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±3°C

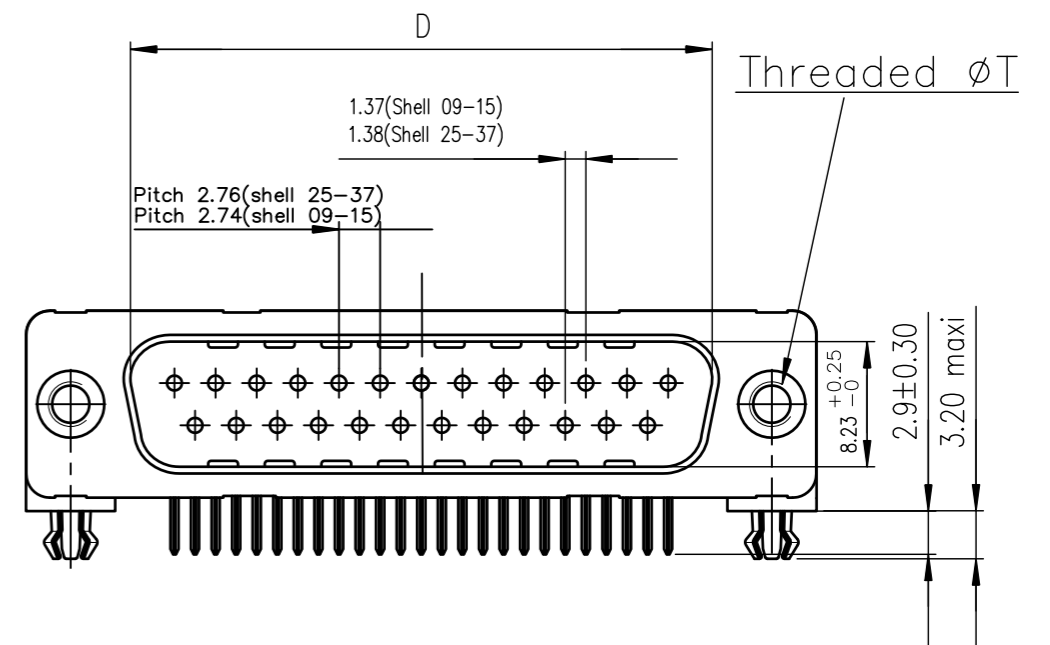
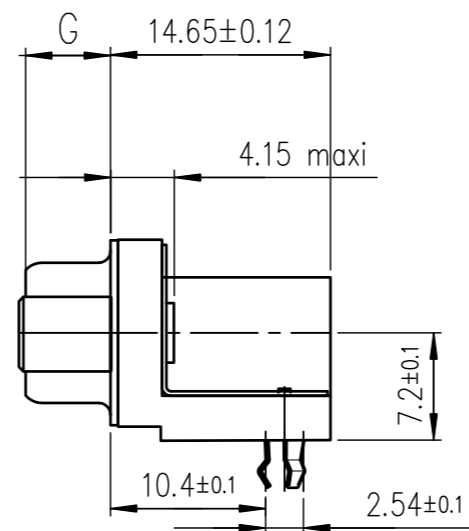
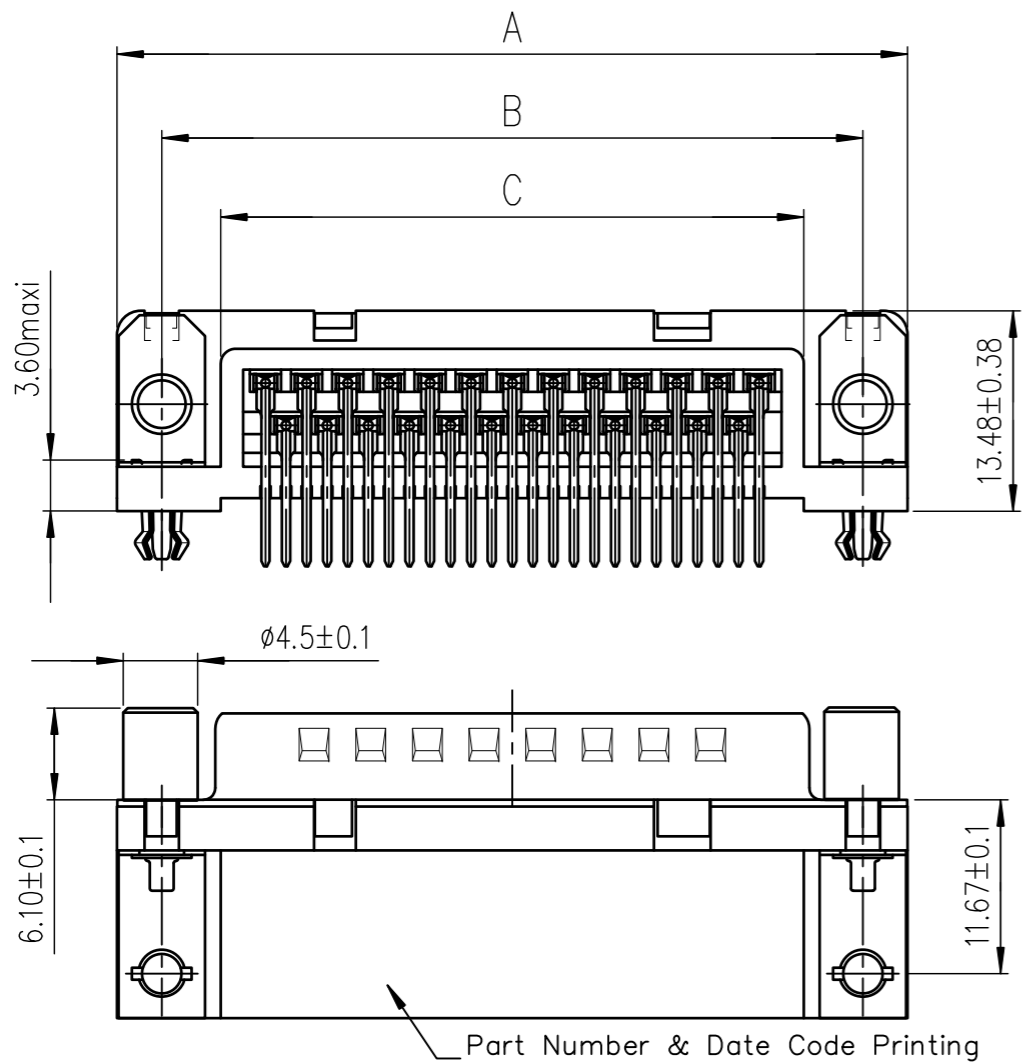
(2) INDUSTRIAL ATMOSPHERE TEST: 4 GASES available for contacts active area only  
BELCORE TEST : MIXED GASES: H2S=10 PPB±5 vol/vol +N2O=200ppb±50 vol/vol + CL2  
=10ppb±3vol/vol + S2O=100ppb±30vol/vol  
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±2°C

<b>FCI</b> www.fciconnect.com		surface - ✓	tolerance	projection	↔	
Dr	JOUBERT	30/11/00	Product family	size	A3	
Eng			Spec ref	Scale	1:1	
Chr			Material	SEE NOTES	ECN	LS05-0039
Appr	LEGARE	30/11/00				
DELTA D SOLDER CTS CONNECTORS				dwg no	C01-8646-0000	
GENERAL CHARACTERISTICS						Rev. C
catalog no				CUSTOMER COPY	sheet 1 of 1	

Tous droits strictement réservés. Reproduction ou utilisation sans autorisation écrite du propriétaire. Interdit sous quelque forme que ce soit sans autorisation écrite du propriétaire. Property of FCI. Droits de reproduction FCI.

**FCI**

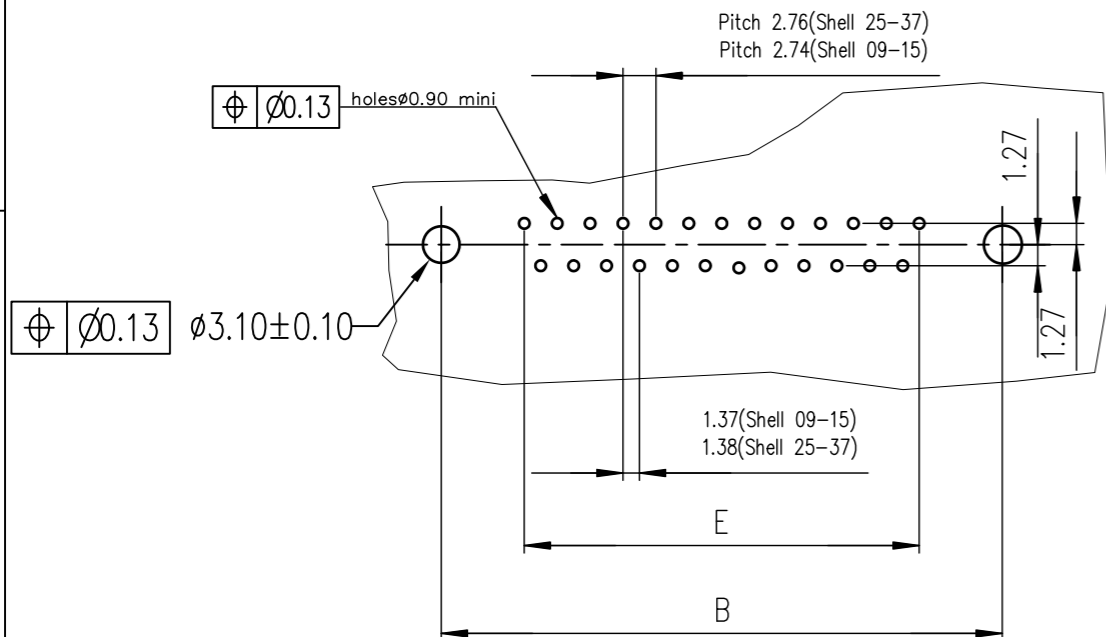
All rights strictly reserved. Reproduction or use in third parties is strictly prohibited without written authority from the proprietor. Property of FCI. Copyright FCI.



SHELL	A±0.38	B±0.12	C±0.10	D±0.25	E±0.07	G±0.25
09	30.81	24.99	16.96	16.79	10.96	5.90
15	39.14	33.32	25.18	25.12	19.18	5.90
25	53.03	47.04	39.12	38.84	33.12	5.70
37	69.32	63.50	55.68	55.30	49.68	5.70

GENERAL CHARACTERISTICS : SEE DWG.NO:C01-8646-0000

PC card drilling dimensions(after plating)  
(thickness 1.60±0.20mm)



LF FOR LEAD FREE

SHELL	PART NUMBER	DESIGNATIONS
09	D09P13A*G*00**	HEADER 9 CTS RIGHT ANGLED-SOLDER TO BOARD-PCB HARPOON-SCREWLOCK -ELEC.CONTIN.
15	D15P13A*G*00**	HEADER 15 CTS RIGHT ANGLED-SOLDER TO BOARD-PCB HARPOON-SCREWLOCK -ELEC.CONTIN.
25	D25P13A*G*00**	HEADER 25 CTS RIGHT ANGLED-SOLDER TO BOARD-PCB HARPOON-SCREWLOCK -ELEC.CONTIN.
37	D37P13A*G*00**	HEADER 37 CTS RIGHT ANGLED-SOLDER TO BOARD-PCB HARPOON-SCREWLOCK -ELEC.CONTIN.

4 = Performance level PL3 ≥ 200 OPERATIONS

6 = Performance level PL1 ≥ 500 OPERATIONS

I =SCREWLOCK Threaded M3

V =SCREWLOCK Threaded UNC 4.40 sellers

mat'l. code		surface		tolerance		projection		product family	
SEE.NOTES		ISO 1302	ISO 406	ISO 1101	MM		DELTA-D		
ltr	ecn no	dr	date	tolerances unless otherwise specified		MM		title	
D	I05-0124	JS	2005/07/27	angles	linear	O.X± 0.1		MALE DELTA-D RIGHT ANGLED	
E	I06-0074	SK	2006/06/08			O.XX± 0.1		WITH SCREW LOCK, HARPOON & METAL BRACKET	
F	I09-0023	AS	2009/02/11	X±1*		O.XXX± 0.1		scale 1:1	
G	ELXI-I-15060	AB	2013/06/25	dr	GEORGE.V.J	2006/10/17	FCI		dwg no
-	-	-	-	enr	ALIAS.BABU	2013/06/25	sheet 1 of 1		size
-	-	-	-	chr	MITHUN.PAUL	2013/06/25	C01-8646-0742		A3
-	-	-	-	appd	BIJU.K.PAUL	2013/06/25	type		CUSTOMER Drawing
sheet index	revision sheet	G	1	-	-	-	-	-	-