

**REFERENCE SPECIFICATIONS**

- DIN-41612
- IEC-603-2

**PHYSICAL CHARACTERISTICS**

- **INSULATOR MATERIAL:**
  - Polyester thermoplastic UL94V0 - Color grey
- **CONTACT MATERIAL:** -PHOSPHOR BRONZE : (FEMALE CONTACT)  
-PHOSPHOR BRONZE : (MALE CONTACT-SOLDER TAILS)

**ELECTRICAL CHARACTERISTICS**

- **CURRENT RATING :** 1.5A at 20°C / 1A at 70°C      40A AT 20°C (power contact)
- **MAXIMAL CURRENT:** 2A
- **CONTACT RESISTANCE** ≤20ma      ≤1ma under 10 A (power contact)
- **VOLTAGE PROOF:** contact/contact 1000 V eff (0.5 mA / 50 Hz)  
contact/ground 1550 V eff (0.5 mA / 50 Hz)
- **INSULATION RESISTANCE:** >10<sup>6</sup> Ma
- **CREEPAGE AND CLEARANCE DISTANCE:** >1.2 mm
- **WIPPING/PLUG IN DIRECTION:** >1.8mm
- **ALTERNATIF CURRENT V AC:** 330 V
- **DIRECT CURRENT V DC:** 470 V

**MECHANICAL CHARACTERISTICS**

- **MATING FORCE :** ≤ n x 0.94 N (n = NUMBER OF CTS)      ≤ 10 N (power contact)
  - **UNMATING FORCE :** ≥ n x 0.15 N (n = NUMBER OF CTS)      ≤ 10 N (power contact)
  - **GAUGE RETENTION FORCE:** >0.15 N  
THICKNESS GAUGE = 0.56 0/-0.02 - SURFACE ROUGHNESS: Ra = 0.25µm MAXI
  - **CONTACT RETENTION IN INSULATOR:** ≥ 20 N according to IEC 512 test 6d
  - **VIBRATIONS:** < 1 µs according to IEC 512.4 test 6d  
< 40 ma according to DIN41640 teil 15 test 6d
- |             |                   |
|-------------|-------------------|
| DIN class 3 | (not applicable ) |
| DIN class 2 | 10-500 HZ/5g      |
| DIN class 1 | 10-2000 HZ/20g    |
- **SHOCK:** < 1 µs according to IEC 512 test 6c  
< 40 ma according to DIN 41640 teil 14 test 6c

**ENVIRONMENTAL CHARACTERISTICS**

- **CLIMATIC CATEGORY:** TEMPERATURE RANGE -55°C TO +125°C  
DAMP HEAT STEADY STATE 56 DAYS Class 1  
21 DAYS Class 2  
(not applicable ) Class 3
- **ELECTRICAL LOAD AND TEMPERATURE:** T= +70°C / I= 1A PER CTS - 1000 HRS

**PERFORMANCE LEVELS** TIN LEAD P/N : 8609 XXX XX XX 7XX XXX EX

Pure Tin P/N : 8609 XXX XX XX 7XX XX LF

MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST <sup>(1)</sup>		
		PERFORMANCE LEVELS
4	50 OPERATIONS	DIN Class 3
5	200 OP. + TEST (1) 4 DAYS + 200 OP.	DIN Class 2
6	250 OP. + TEST (1) 21 DAYS + 250 OP.	DIN Class 1

TEST: <sup>(1)</sup> INDUSTRIAL ATMOSPHERE SO<sub>2</sub>

**METALLIZED HOLE DIMENSIONS**

- P.C.B HOLE DEFINITION: FINISH HOLE: Ø 0.90 - 1.10

**CONTACT PLATING**

- **TIN LEAD VERSION:**  
MALE AND FEMALE CONTACTS:
  - GOLD OVER NICKEL or GOLD+PALLADIUM-NICKEL OVER NICKEL ON MATING SURFACES
  - TIN LEAD OVER NICKEL ON SOLDER TERMINATION
- **LEAD FREE VERSION:**

**NOTE RoHS INFORMATION**

- 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 1.6mm minimum thick circuit board.
- Termination plating spec: 1.27µm Nickel mini, 2.5 to 7.5µm Pure Tin (matte)
- Packaging spec: see GS-14-920

**IMPORTANT:**

- For the right angled versions , like the current leaded versions, it's recommended to use high temperature adhesive or metallic device, to protect the nearest plastic part in contact with of the solder wave, to avoid any visual plastic deterioration.

European Views

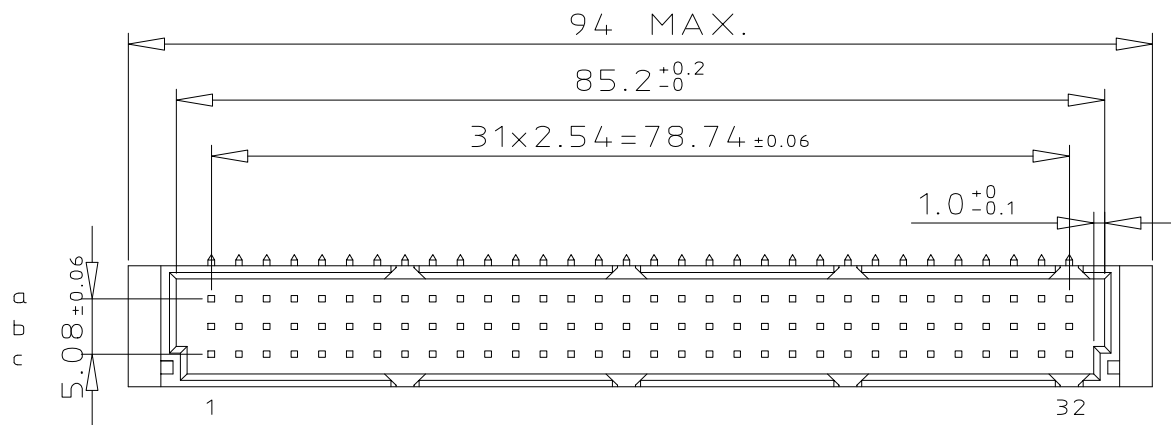
www.fciconnect.com		surface ISO 1302 ✓	tolerance std ISO 406 ISO 1101	projection mm	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		size A3	Scale 1
Dr	GOISNARD	2005/04/07	ANGULAR	0.X ±0.1	ECN LS07-0211
Eng	TARON	2005/04/07	LINEAR	0.XX ±0.1	
Chr	LEGARE	2005/04/07	0.XX ±2°	0.XXX ±0.1	
Appr	LEGARE	2005/04/07	Product family DIN 8609 Spec ref -		
FCI		title DIN 41612 STB CONNECTORS		dwg no C-8609-0000A	Rev. F
		catalog no		CUSTOMER	sheet 1 of 1

rev	ecn no	dr	date
A	LS05-0039	LGO	2005/04/07
B	LS05-0070	LGO	2005/09/13
C	LS06-0097	LGO	2006/07/11
D	LS06-0142	LGO	2006/09/18
E	LS06-0201	HLE	2006/11/29
F	LS07-0211	HLE	2007/08/16
-	-	-	-

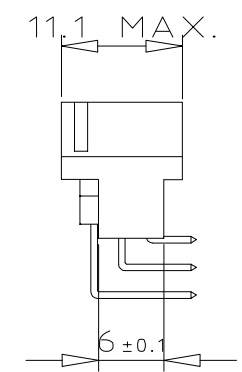
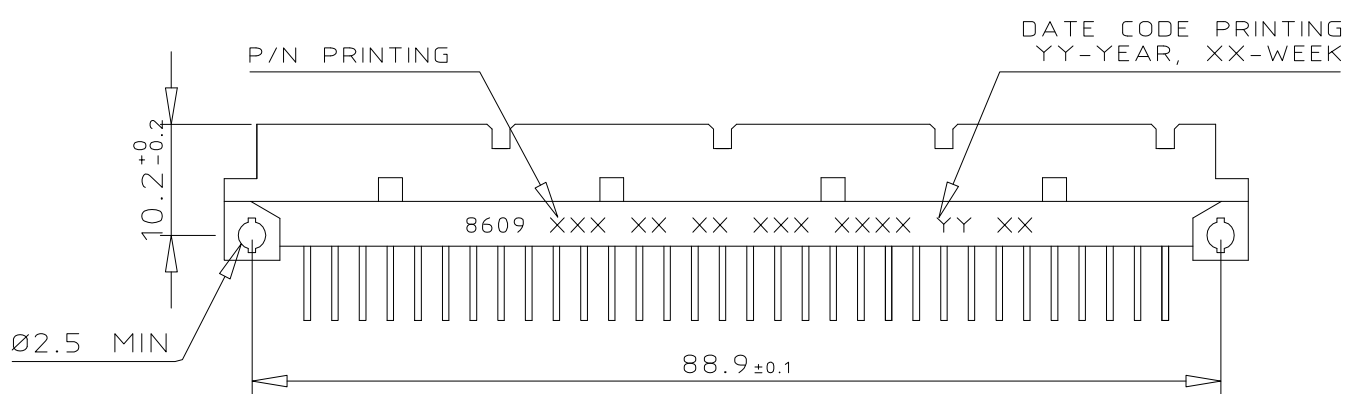
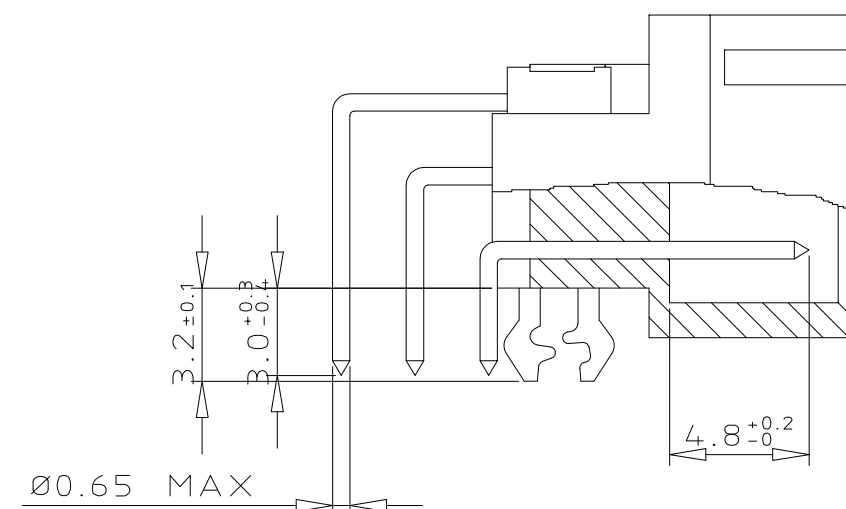


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# DIMENSIONS



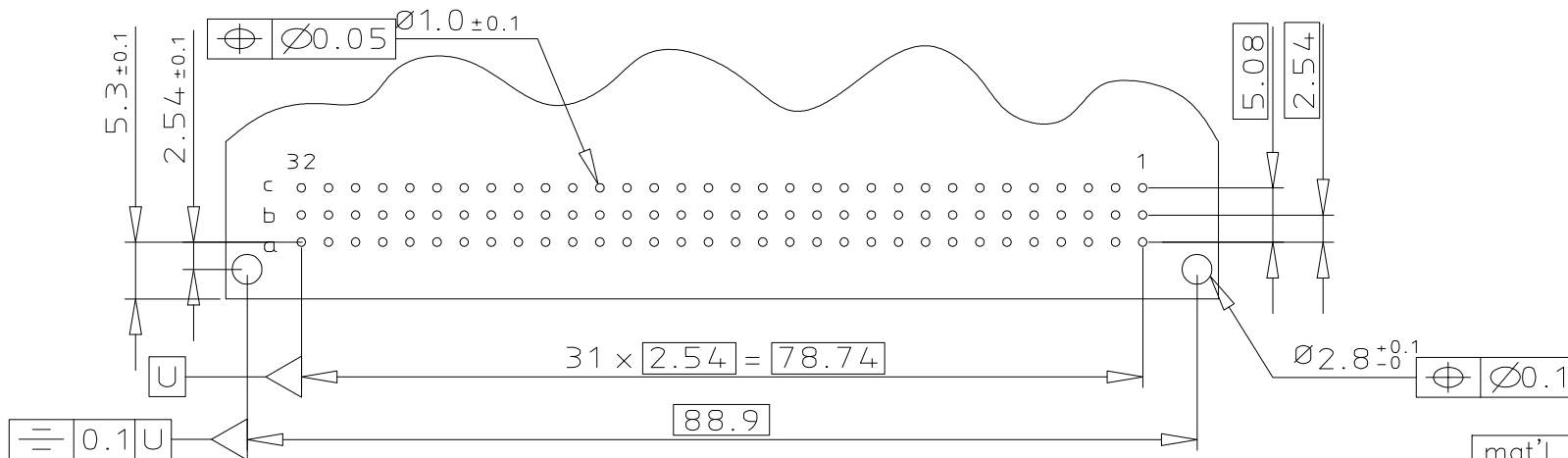
# TERMINATION



# ORDERING INFORMATION

SERIES	8609	3	96	7	1	13	7	4	5	ELF
ROWS FITTED WITH CONTACTS										
ROW a b c			3	96						
ROW a - c			4	64						
NO. OF CONTACTS										
TYPE OF INSULATOR										
3 ROW MALE INSULATOR			7							
METHOD OF MOUNTING										
STANDARD MOUNTING - STYLE C			1							
TERMINATION										
ANGLED SPILL			13							
OPTIONS										
NO OPTION			7							
WITH HARPOONS			H							
PERFORMANCE CLASS										
DIN 41612 CLASS 3			4							
DIN 41612 CLASS 2			5							
DIN 41612 CLASS 1			6							
AS PER MIL C 55302 / JSS 50808			8							
PITCH PER ROW										
2.54 mm			5							
LEAD FREE VERSION			ELF							

# PCB LAYOUT



GENERAL CHARACTERISTICS & RoHS INFO

REFER DRAWING C-8609-0000A

mat'l. code	surface	tolerance	projection	product family
SEE DRAWING C-8609-0000A	ISO 1302 ✓	ISO 406 ISO 1101		8609
ltr	ecn	no	dr	date
A	104-0063	MINI	2004-09-16	
B	105-0042	MINI	2005-05-19	
C	106-0061	MINI	2006-05-31	
D	107-0100	KR	2007-08-20	
E	108-0146	KR	2008-10-21	
tolerances unless otherwise specified		angles	linear	0.X ± 0.1
		0° ± 2°		0.XX ± 0.1
				0.XXX ± 0.1
sheet index	revision	E		
	sheet	1		
product family		title		size
8609		DIN STANDARD HEADER DIN 41612 STYLE C		A3
dwg no		sheet 1 of 1		
C-8609-2001				
type		Product Customer Drawing		



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