

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 $\leq 20\text{m}\Omega$ $\leq 1\text{m}\Omega$ 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: $\geq 10^6 \text{ M}\Omega$
- CREEPAGE AND CLEARANCE DISTANCE: $\geq 1.2 \text{ mm}$
- WIPPING/PLUG IN DIRECTION: $\geq 1.8\text{mm}$
- ALTERNATIF CURRENT V AC: 330 V
- DIRECT CURRENT V DC: 470 V

MECHANICAL CHARACTERISTICS

- MATING FORCE : $\leq n \times 0.94 \text{ N}$ (n = NUMBER OF CTS) $\leq 10 \text{ N}$ (power contact)
- UNMATING FORCE : $\geq n \times 0.15 \text{ N}$ (n = NUMBER OF CTS) $\leq 10 \text{ N}$ (power contact)
- GAUGE RETENTION FORCE: $\geq 0.15 \text{ N}$
THICKNESS GAUGE = 0.56 0/-0.02 - SURFACE ROUGHNESS: Ra = 0.25 μm MAXI
- CONTACT RETENTION IN INSULATOR: $\geq 20 \text{ N}$ according to IEC 512 test 6d
- VIBRATIONS: $\leq 1 \mu\text{s}$ according to IEC 512.4 test 6d
 $\leq 40 \text{ ma}$ according to DIN41640 teil 15 test 6d
- SHOCK: $\leq 1 \mu\text{s}$ according to IEC 512 test 6c
 $\leq 40 \text{ ma}$ 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 ⁽¹⁾		
		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: ⁽¹⁾ INDUSTRIAL ATMOSPHERE SO₂

METALLIZED HOLE DIMENSIONS

- P.C.B HOLE DEFINITION: FINISH HOLE: $\emptyset 0.90 - 1.10$

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: 1.27 μm Nickel mini, 2.5 to 7.5 μm Pure Tin (matte)
- Packaging spec: see GS-14-920

IMPORTANT:

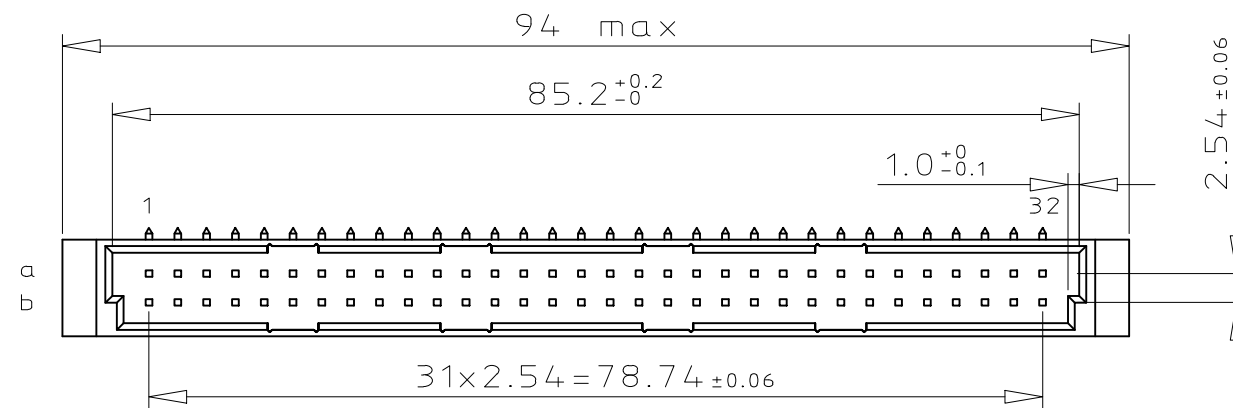
- For the right angled versions, like the current leaded versions, it's recommended to use high temperature adhesive or metallic device, to protect the nearest plastic part in contact with of the solder wave, to avoid any visual plastic deterioration.

European Views

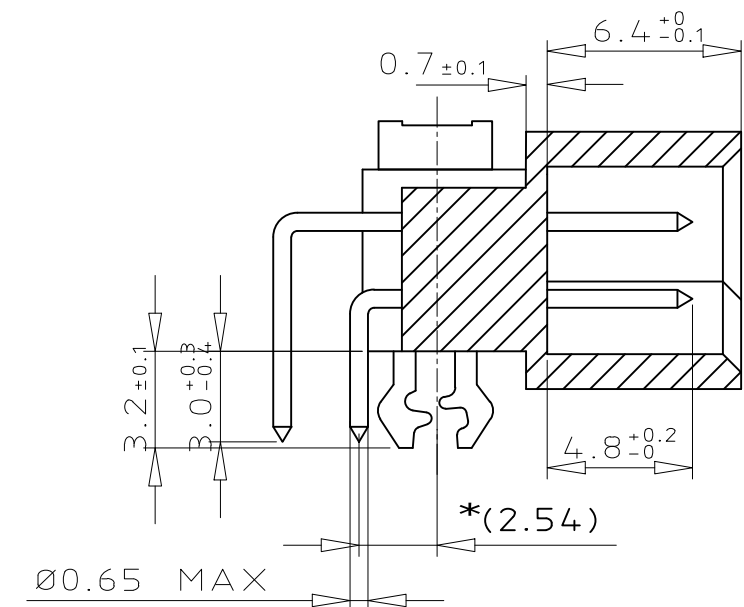
www.fciconnect.com		surface <input checked="" type="checkbox"/> ISO 1302	tolerance std ISO 406 ISO 1101	projection	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	GOISNARD	2005/04/07	ANGULAR	0.X ± 0.1	size A3
Eng	TARON	2005/04/07	LINEAR	0.XX ± 0.1	Scale 1
Chr	LEGARE	2005/04/07	0.XX' $\pm 2'$	0.XXX ± 0.1	ECN LS07-0211
Appr	LEGARE	2005/04/07	Product family	DIN 8609	Spec ref -
		title DIN 41612 STB CONNECTORS		o dng C-8609-0000A	Rev. F
		GENERAL CHARACTERISTICS		CUSTOMER	sheet 1 of 1
		catalog no -			

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
-	-	-	-

DIMENSIONS

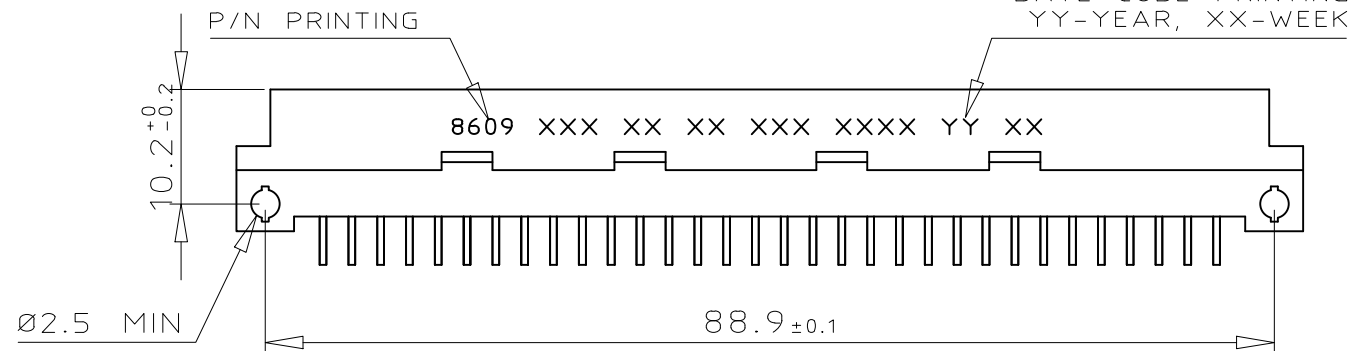


TERMINATION



DATE CODE PRINTING
YY-YEAR, XX-WEEK

P/N PRINTING

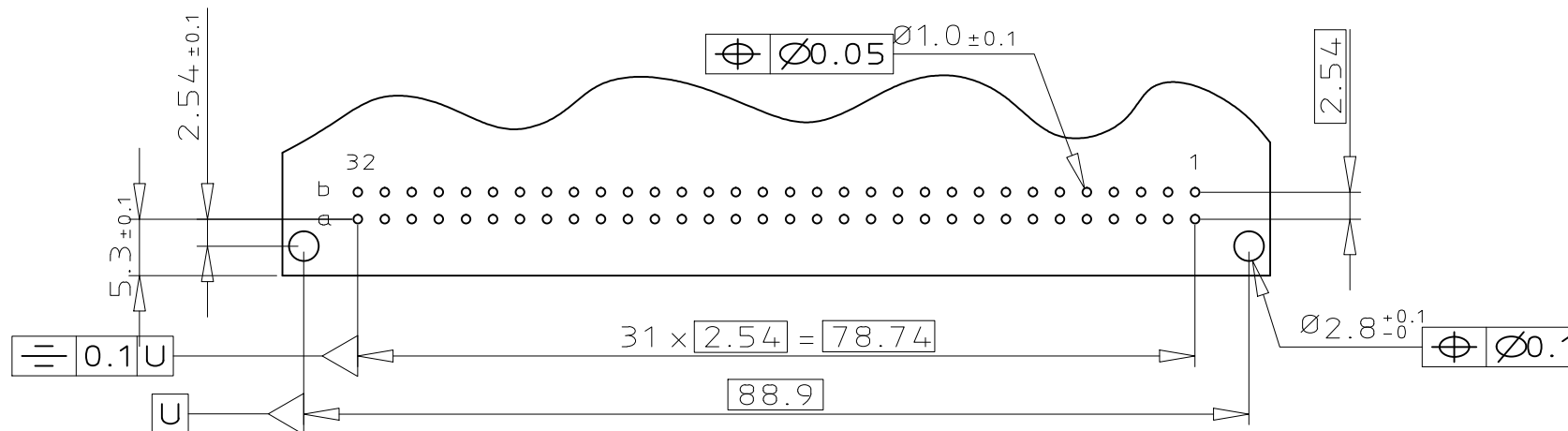


*Foot print dimension (2.54) will be controlled by attribute grid suitability based on the recommended PCB layout.

ORDERING INFORMATION

SERIES	8609	2	64	5	1	13	7	4	5	ELF
ROWS FITTED WITH CONTACTS										
ROW a	-	-	-	-	-	-	-	-	-	32
ROW a	b	-	-	-	-	-	-	-	-	64
NO. OF CONTACTS										
TYPE OF INSULATOR										
2 ROW MALE INSULATOR										5
METHOD OF MOUNTING										
STANDARD MOUNTING - STYLE B										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 SEE DWG C-8609-0000A				surface ISO 1302 ✓		tolerance ISO 406 ISO 1101		projection mm		product family 8609			
ltr ecn no dr date				tolerances unless otherwise specified		angles linear		scale 3:2		title DIN STANDARD HEADER ANGLED SPILL DIN 41612 STYLE B			
A	I04-0063	MINI	2004-09-17			0.X ±0.1							
B	I05-0089	MINI	2005-05-19			0.XX ±0.1							
C	I06-0061	MINI	2006-05-31			0.XXX ±0.1							
D	I06-0164	MINI	2006-08-31	dr	MINI K V	2004-09-17							
E	I08-0146	KR	2008-10-21	enr	RAKHEE G	2004-09-17							
F	ELX-I-14289	MJA	2013-03-19	chr	KESAVAN R	2008-10-21							
				appd	KESAVAN R	2008-10-21							
sheet index	revision sheet	F	1										