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 ≤20mΩ   ≤1mΩ 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: ≥10^6 MΩ
- 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 mΩ 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 mΩ 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 SO_2

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 whistand 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 nearlest plastic part in contact with of the solder wave, to avoid any visual plastic deterioration.
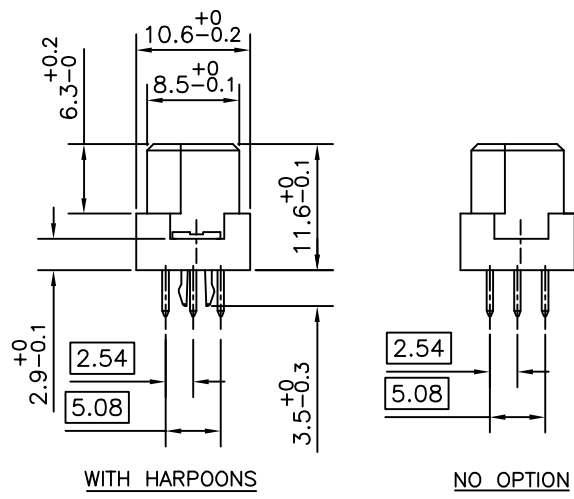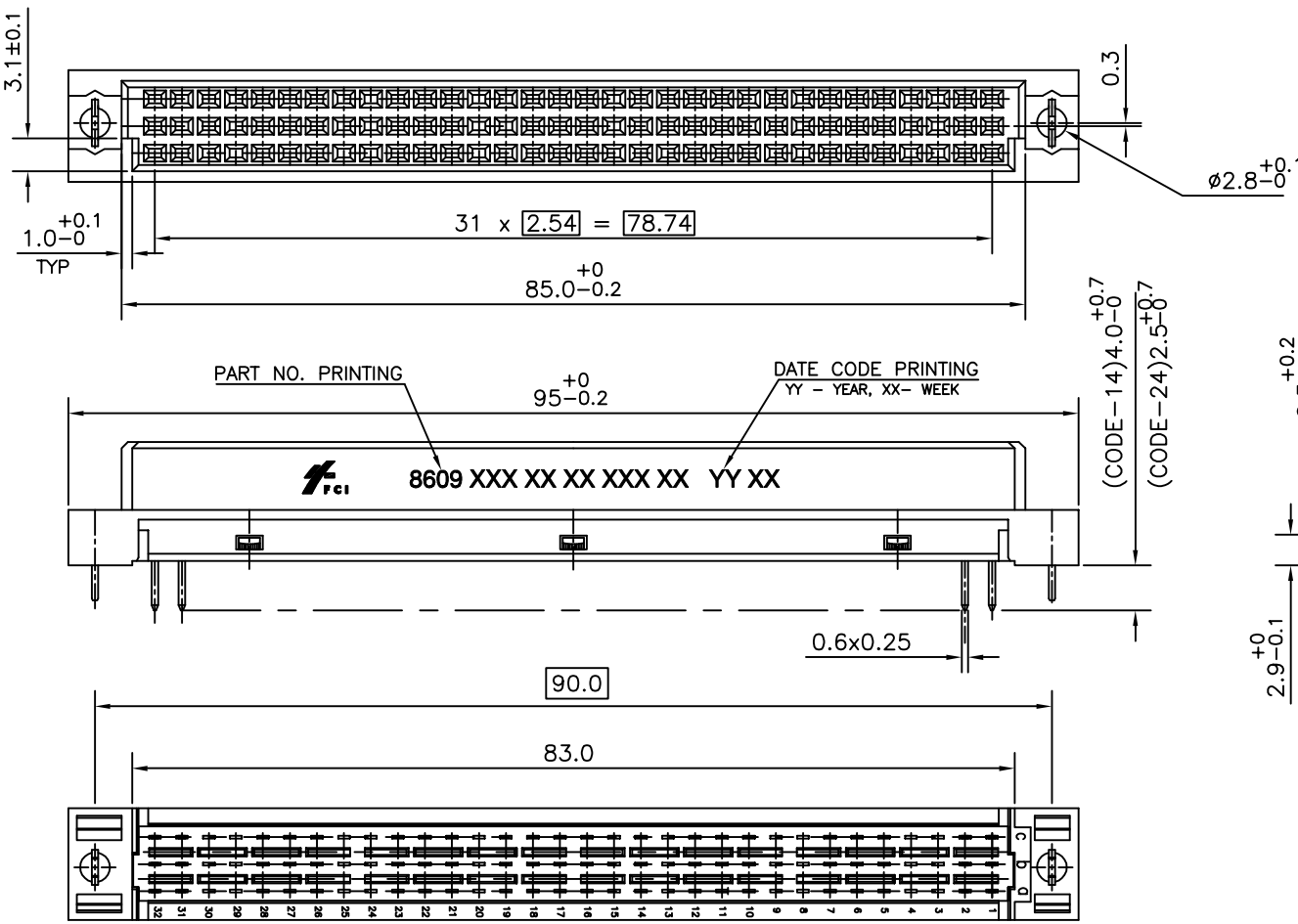
European Views

www.fciconnect.com

surface	tolerance std	projection	mm
ISO 1302 √	ISO 406 ISO 1101		

TOLERANCES UNLESS OTHERWISE SPECIFIED

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
-			

		date			0.X	±0.1	size	Scale
Dr	GOISNARD	2005/04/07	ANGULAR	LINEAR			A3	1
Eng	TARON	2005/04/07			0.XX	±0.1		
Chr	LEGARE	2005/04/07	0.XX' ±2'		0.XXX	±0.1	ECN	LS07-0211
Appr	LEGARE	2005/04/07	Product family	DIN 8609			Spec ref -	

title **DIN 41612 STB CONNECTORS**
GENERAL CHARACTERISTICS

dwg no **C-8609-0000A**   Rev. **F**

catalog no   -   CUSTOMER sheet 1 of 1

REV F - 2006-04-17

TECHNICAL SPECIFICATION

INSULATOR MATERIAL	: THERMOPLASTIC POLYESTER UL94V–0, GREY
	HOUSING CAN WITHSTAND EXPOSURE TO LEAD FREE WAVE SOLDERING TEMPERATURE
	OF 260–265°C FOR STRAIGHT CONNECTORS AS IT IS IN CLASSICAL LEAD WAVE
	SOLDERING AT 235–250°.
CONTACT / HARPOON MATERIAL	: COPPER ALLOY
CONTACT PLATING	
ACTIVE ZONE	: GOLD OVER NICKEL
TERMINATION ZONE	
TIN LEAD VERSION	: TIN LEAD OVER NICKEL
LEAD FREE VERSION	: TIN (PURE MATTE) OVER NICKEL
HARPOON PLATING	
TIN LEAD VERSION	: TIN LEAD OVER NICKEL
LEAD FREE VERSION	: TIN (PURE MATTE) OVER NICKEL

ELECTRICAL DATA

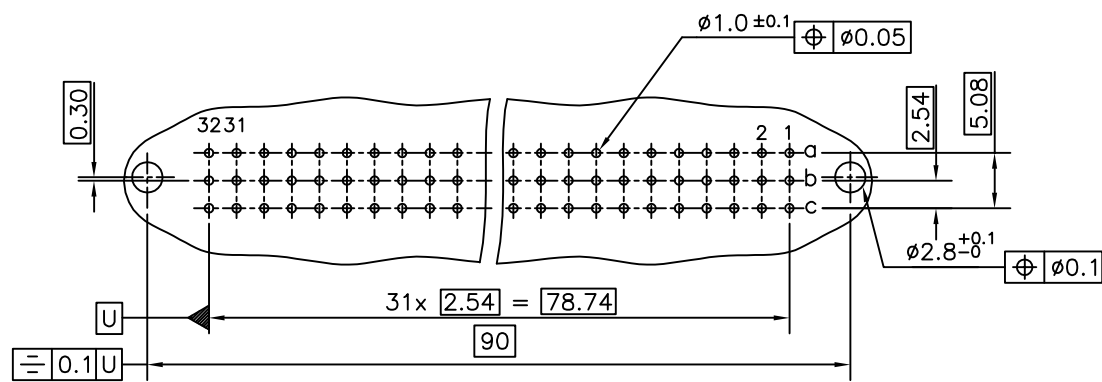|	
CURRENT RATING AT 20°C	: 1.5 A
CURRENT (I MAX)	: 2 A
TEMPERATURE RANGE	: –55°C/+125°C
CONTACT RESISTANCE	: ≤ 20mΩ
INSULATION RESISTANCE	: ≥ 10⁶ MΩ
TEST VOLTAGE (rms)	:1000V

MECHANICAL DATA

INSERTION FORCE PER CONTACT	: ≤ 0.94N
EXTRACTION FORCE PER CONTACT	: ≥ 0.15N

REFERENCE SPECIFICATIONS : DIN 41612 / IEC 603–2

SERIES   8609 3 96 8 1 14 7 5 5 V1

ROWS FITTED WITH CONTACTS

Rows a–b	2	64
Rows a–b–c	3	96
Rows a–c	4	64

NUMBER OF CONTACTS

TYPE OF INSULATOR
3 ROW FEMALE INSULATOR ——————— 8

METHOD OF MOUNTING
STANDARD MOUNTING STYLE– C —————— 1

TERMINATION
STRAIGHT SPILL (LONG) ——————— 14
STRAIGHT SPILL (SHORT) ——————— 24

OPTIONS
NO OPTION ——————— 7
WITH HARPOONS ——————— H

PERFORMANCE CLASS
4 – DIN 41612 CLASS 3 ——————— 4
5 – DIN 41612 CLASS 2 ——————— 5
6 – DIN 41612 CLASS 1 ——————— 6
8 – AS PER MIL C 55302/JSS 50808 ——————— 8

PITCH PER ROW
2.54 ——————— 5
V1 ——————— TIN LEAD VERSION
V1LF ——————— LEAD FREE VERSION

WITH HARPOONS

NO OPTION

PART NO. PRINTING

DATE CODE PRINTING
YY – YEAR, XX– WEEK

8609 XXX XX XX XXX XX   YY XX

P.C.B DRILLING DETAILS

ø1.0 ±0.1

WITH HARPOONS

NO OPTION

NOTES:-
1. THE "LF" PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008
2. 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 THICK CIRCUIT BOARD
3. LEAD FREE OR RoHS DIRECTIVE LABELING TO BE PROVIDED AS PER GS-14-920 FOR LEAD FREE VERSION.

mat'l. code	surface	tolerance	projection	product family
–	ISO 1302	ISO 406 ISO 1101		8609

ltr	ecn no	dr	date	tolerances unless otherwise specified
B	I04–0100	MINI	09/11/2004	
C	I05–0042	MINI	19/05/2005	
D	I05–0086	MINI	02/06/2005	
E	I06–0063	MINI	01/06/2006	

angles
0°±1°

linear
.0±.1

mm
scale –

dr   MINI K VANDANATH 29/09/2004
engr RAKHEE GEORGE 29/09/2004
chr   RAKHEE GEORGE 01/06/2006
appd RAKHEE GEORGE 01/06/2006

title
DIN STANDARD RECEPTACLE
STRAIGHT SPILL DIN 41612 STYLE-C

dwg no   sheet 1 of 1   size
C-8609-2028   A3

type   Product Customer Drawing

sheet index
revision E
sheet 1

form: A3