REFERENCE SPECIFICATIONS

- DIN-41612
- IEC-603-2

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL:
- Polyester thermoplastic UL94V0 – Color grey
- CONTACT MATERIAL: -COPPER ALLOY : (MALE & FEMALE CONTACT)

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

PART NUMBER PRINTING OPTION:

- INKJET OR LASER PRINTING AT MANUFACTURER'S DISCRETION

PRESS FIT PERFORMANCES

	signal ct ø 1	power ct ø 3.2
INSERTION FORCE	≤ 75 N	≤ 120 N
EXTRACTION FORCE	≥ 20 N	≥ 40 N

PERFORMANCE LEVELS

PURE TIN P/N : 8609 XXX XX XX 7XX XX LF

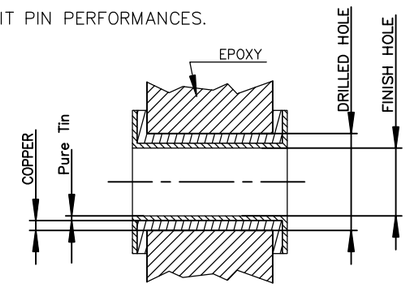
TEST:(1) INDUSTRIAL ATMOSPHERE SO_2

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

METALLIZED HOLE DIMENSIONS

		PRESS-FIT TERMINATION	
		SIGNAL HOLE PRESS FIT and PURE TIN BOARD FINISH	POWER HOLE PRESS FIT and PURE TIN BOARD FINISH
P.C.B HOLE DEFINITION (NOTE-1 AND 2)	DRILL DIAMETER	ø 1.15 REF (NOTE-3)	ø 3.25 REF (NOTE-3)
	DRILLED HOLE	ø 1.15 ± 0.025	ø 3.25 +0.01/-0.04
	COPPER PLATING	25µ mini-50µ MAXI	25µ mini-50µ MAXI
	TIN PLATING	0.8µ mini-1.2µ MAXI	0.8µ mini-1.2µ MAXI
	FINISH HOLE (NOTE-4)	ø 1.00 mini – 1.09 MAXI	ø 3.08 mini – 3.20 MAXI

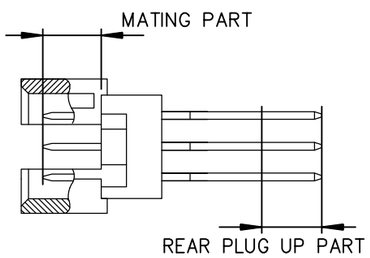
NOTE-1: THESE DIMENSIONS ARE MANDATORY TO SECURE PRESS-FIT PIN PERFORMANCES.
NOTE-2: ACCORDING TO IEC-352-5 SPEC.
NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE
NOTE-4: DIMENSIONS AFTER REFLOW



CONTACT PLATING

- LEAD FREE VERSION:

MALE AND FEMALE CONTACTS:
- GOLD OVER NICKEL or GOLD+PALLADIUM-NICKELOVER NICKEL ON MATING SURFACES
- TIN OVER NICKEL ON PRESS FIT ZONE
- GOLD OVER NICKEL or GOLD+PALLADIUM-NICKEL OVER NICKEL ON REAR PLUG UP PART



NOTE: RoHS INFORMATIONS

- The "LF" products meet European Union Directives and other country regulations as described in GS-47-0004.
- Termination plating spec: 0.5 to 3 µm Nickel maxi 0.5 to 1.5 µm Pure Tin maxi
- Packaging spec: see GS-14-920

ltr	ecn no	dr	date
A	LS05-0039	LGO	2005-04-13
B	LS06-0097	LGO	2006-07-11
C	LS06-0201	HLE	2006-11-28
D	LS07-0211	HLE	2007-08-16
E	ELX-I-17271	MJA	2014-03-22
F	ELX-I-39994	MJA	2021-02-10
-	-	-	-

appd	SANOJ		2021-02-10
chr	M JACOB		2021-02-10
engr	TARON		2005-04-13
dr	GOISNARD		2005-04-13

mat'l. code -
surface ISO 1302
tolerance ISO 406 ISO 1101
tolerances unless otherwise specified
angles 0°±2°
linear 0.X ±0.1; 0.XX ±0.1; 0.XXX ±0.1
projection
mm
scale 1:1
sheet index | revision F | sheet 1

product family: 8609
title: DIN 41612 PRESS-FIT CONNECTORS GENERAL CHARACTERISTICS
dwg no C-8609-0000C
sheet 1 of 1
size A3
type Product Customer Drawing

PDS: Rev :F
STATUS:Released
Printed: Feb 10, 2021

form: A3