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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 -PRESS-FIT 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 ≤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:** >10⁶ 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 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

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

TIN LEAD P/N : 8609 XXX XX XX 7XX XXX EX

LEAD FREE P/N : 8609 XXX XX XX 7XX XX LF

TEST: ⁽¹⁾ INDUSTRIAL ATMOSPHERE SO₂

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

P.C.B HOLE DEFINITION (NOTE-1 AND 2)		PRESS-FIT TERMINATION			
		SIGNAL CONTACTS ø 1 REF SnPb	SIGNAL CONTACTS ø 1 REF Sn pure	POWER CONTACTS ø 3.1 REF SnPb	POWER CONTACTS ø 3.1 REF Sn pure
DRILL DIAMETER	Ø 1.17 REF (NOTE-3)	Ø 1.17 REF (NOTE-3)	Ø 3.25 REF (NOTE-3)	Ø 3.25 REF (NOTE-3)	
DRILLED HOLE	Ø 1.15 ± 0.025	Ø 1.15 ± 0.025	Ø 3.25 +0.01/-0.04	Ø 3.25 +0.01/-0.04	
COPPER PLATING	25µ mini-50µ MAXI	25µ mini-50µ MAXI	25µ mini-50µ MAXI	25µ mini-50µ MAXI	
TIN-LEAD PLATING	8µ mini-15µ MAXI		5µ mini-15µ 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 1.00 mini - 1.09 MAXI	Ø 3.08 mini - 3.20 MAXI	Ø 3.08 mini - 3.20 MAXI	

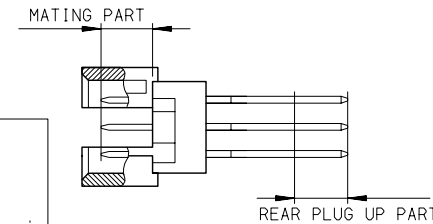
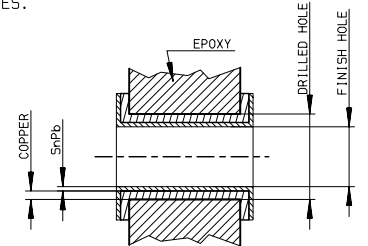
- NOTE-1: THESE DIMENSIONS ARE MANDATORY TO SECURE PRESS-FIT PIN PERFORMANCES.
- NOTE-2: ACCORDING TO IEC-352-5 SPEC.
- NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE
- NOTE-4: DIMENSIONS AFTER REFLOW

CONTACT PLATING

- **TIN LEAD VERSION:**
 - MALE AND FEMALE CONTACTS:
 - GOLD OVER NICKEL ON MATING SURFACES
 - TIN LEAD OVER NICKEL ON PRESS FIT ZONE
 - GOLD OVER NICKEL ON REAR PLUG UP PART
- **LEAD FREE VERSION:**

NOTE:RoHS INFORMATIONS

- The "LF" products meet European Union Directives and other country regulations as described in G5-22-008.
- Termination plating spec: 0.5 to 3 µm Nickel maxi 0.5 to 1.5 µm Sn maxi
- Packaging spec: see G5-14-920



European view

	www.fciconnect.com	ISO 1302	tolerance	projection	mm
			150 406		
Dr	GOISNARD	13/04/05	Product family		DIN
Eng	TARON	13/04/05	Spec ref		-
Chr	LEGARE	13/04/05	Material		-
Appr	LEGARE	13/04/05			
title			DIN 41612 PRESS-FIT CONNECTORS		size
			GENERAL CHARACACTERISTICS		A3
			catalog no		Scale
			- CUSTOMER COPY		1
			sheet		1 of 1
			chng no		Rev.
			C-8609-0000C		A