

REFERENCE SPECIFICATIONS  
 - DIN 41652 PART 2  
 - DRAFT IEC 352-5  
 - IEC-512 (TESTS PROCEDURE)

PHYSICAL CHARACTERISTICS  
 - INSULATOR MATERIAL:  
 AS PER UL 94 V0  
 PBT COLOR BLACK-RAL 7001/STANDARD MATERIAL  
 - CONTACT MATERIAL: - PHOSPHOR BRONZE  
 - GROUNDING DEVICE MATERIAL : - BRASS  
 - ACCESSORIES : BRASS

ELECTRICAL CHARACTERISTICS  
 - MAXIMUM RATING CURRENT: 5A AT 20°C / 2.5A AT 70°C  
 - NOMINAL CURRENT: 5A (STANDARD CONDITIONS)  
 - CONTACT RESISTANCE : straight terminations: <math><10m\Omega</math>  
 Right angled termination: <math><25m\Omega</math> for 9 to 37 way  
 : <math><35m\Omega</math> for 50 way  
 - VOLTAGE PROOF : >1000 V.r.m.s.  
 - RATED VOLTAGE : 300 V.r.m.s.  
 - insulation resistance: >5000M $\Omega$   
 - creepage and clearance distance: >1mm  
 - average wiping length: 2mm

MECHANICAL CHARACTERISTICS  
 - RETENTION AGAINST TORQUE:  
 - Threaded insert: 0.7 N.m Maximum from front side  
 Threaded insert: 0.3 N.m maximum from rear side  
 0.25N.m minimum from rear side  
 insert L: threaded M3  
 insert X: threaded UNC 4.40  
 - Female screw lock: 0.5 N.m Maximum from front side  
 Female screw V threaded UNC 4.40  
 Female screw I threaded M3  
 - INSERTION AND WITH DRAWAL FORCE: <math><n \times 3.40 \text{ N}</math> (n number of cts)  
 - GAUGE RETENTION FORCE : >0.20 N (gauge PM)  
 - THICKNESS GAUGE =  $\varnothing 0.99 \pm 0.005$  / SURFACE ROUGHNESS:  
 Ra=0.10 $\mu$  mini- 0.25 $\mu$  maxi  
 - CONTACT RETENTION IN INSULATOR : mini 16N for straight contact  
 mini 20N for right angled contact  
 - VIBRATIONS: 10-2000Hz / 1.5 mm - 20g / 3 x 2 HRS  
 INTERRUPTION <math><1\mu s</math> (NOT APPLICABLE FOR PL3)  
 SHOCK: ACC. HALF SINE 50g- 11m.s-6x3 SHOCKS  
 INTERRUPTION <math><1\mu s</math>

PERFORMANCE LEVELS

MECHANICAL ENDURANCE ONLY			MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST(1)		
P/N: DXXXXXCXXXXXX	PERFORMANCE LEVELS		P/N: DXXXXXCXXXXXX	PERFORMANCE LEVELS	
4	200 OPERATIONS	PL3	4	salt spray: 24 hours	PL3
6	500 OPERATIONS	PL1	6	250 op + test (1 or 2)-10 days + 250 op	PL1

1) INDUSTRIAL ATMOSPHERE TEST: 3 GASES available for contacts and grounding device  
 IN ACCORDANCE WITH IEC-68-2-60-TTD - TEST ke - MTH C OR IEC 512-6 TEST 11g  
 MIXED GASES: H2S=10 ppb  $\pm 5.10^{-9}$ vol/vol +N20ppb =200 $\pm 5.10^{-9}$  vol/vol + CL2=10 ppb  $\pm 5.10^{-9}$ vol/vol  
 TEMPERATURE = 30 $\pm 1^{\circ}$ C / RELATIVE HUMIDITY= 70 $\pm 3^{\circ}$ C

ENVIRONMENTAL CHARACTERISTICS

CLIMATIC CATEGORY: 55/125/56  
 TEMPERATURE RANGE -55 $^{\circ}$ C TO +125 $^{\circ}$ C  
 DAMP HEAT STEADY STATE 56 DAYS

PRESS-FIT PERFORMANCE

	PRESS-FIT CONTACTS	PRESS-FIT HARPONS
INSERTION FORCE	< 100N	< 120N
EXTRACTION FORCE	> 30N	> 30N

METALLIZED HOLE DIMENSION

		HOLE PRESS-FIT PURE TIN BOARD FINISH $\varnothing A$ (signal contact)	HOLE PRESS-FIT PURE TIN BOARD FINISH $\varnothing B$ (harpoon)
P.C.B. HOLE DEFINITION (NOTE -1 AND -2)	DRILL DIAMETER	$\varnothing 1.15$ REF (NOTE -3)	$\varnothing 3.22$ REF (note-3)
	DRILLED HOLE	$\varnothing 1.12 - 1.18$	$\varnothing 3.19 - 3.25$
	COPPER PLATING	25 $\mu$ mini (recommanded 50 $\mu$ maxi)	25 $\mu$ mini (recommanded 50 $\mu$ maxi)
	TIN LEAD PLATING		
	FINISH HOLE(AFTER REFLOW)	$\varnothing 1.00 - 1.09$	$\varnothing 3.08 - 3.20$
	TIN PLATING	0.8 to 1.2 $\mu$	0.8 to 1.2 $\mu$

NOTE1: THESE DIMENSIONS MUST BE RESPECT TO SECURE PRESS-FIT PIN PERFORMANCES.  
 NOTE-2: ACCORDING TO IEC -352-5 SPEC.  
 NOTE-3: MAJOR REQUIEREMENT FOR PRESS-FIT PIN PERFORMANCE

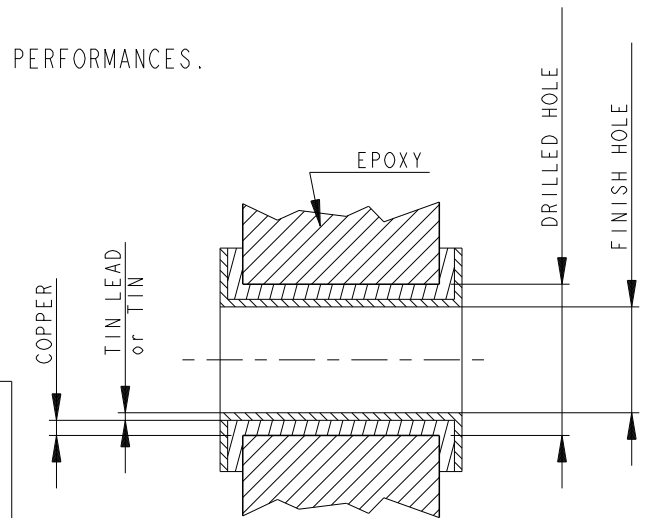
PLATING FOR TIN LEAD VERSIONS

Contacts: PdNi/Gold over nickel on mating area  
 tin lead over nickel on termination  
 - Shells bright pure tin over nickel  
 - Accessories with harpoon: bright pure tin over nickel  
 - Other accessories: bright pure tin over nickel or nickel

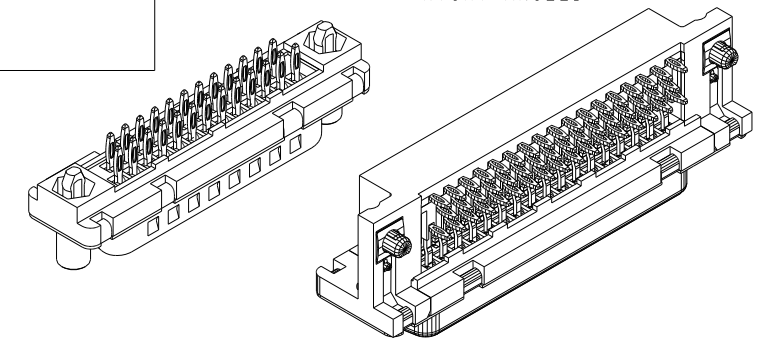
PLATING FOR TIN VERSIONS, TERMINATIONS LF ONLY

NOTE RoHS INFORMATIONS

- The "LF" products meet European union Directives and other country regulations as described in GS-47-0004  
 -Contacts  
 PdNi/Gold over nickel on mating area  
 : 1.27 $\mu$ m Nickel mini, 0.5 to 1.5  $\mu$ m pure matte tin on termination  
 - Shell plating: (copper optional) + nickel + bright pure tin  
 - Accessories with harpoon:(copper optional) +nickel +bright pure tin  
 - Packaging spec: see GS-14-920



STRAIGHT RIGHT ANGLED



spec ref	dr	P-Mathew Nebu	2011/05/14	projection	mm	size	A3	scale	DRAWING SCALE
tolerance std	eng	Gregar Mathew	2021/03/29			ecn no	ELX-I-40505-1	rel level	Released
ISO 406 ISO 1101	chr	-	-						
surface	linear	0.X	$\pm 0.3$	product family	DELTA D PRESS FIT	dwg no	C01-8646-0001	rev	P
		0.XX	$\pm 0.1$						
ISO 1302	angular	0 $^{\circ}$	$\pm 2^{\circ}$	amphenol-icc.com	cat. no.	Product - Customer Drw	sheet 1 of 1		