

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL: THERMOPLASTIC ,UL94V0
- CONTACT MATERIAL: BRASS
- ACCESSORIES: BRASS
- SHELLS: STEEL

ELECTRICAL CHARACTERISTICS

- NOMINAL CURRENT: 40A
- CONTACT RESISTANCE: <= 7.3 mOhms
- CONTACT/CONTACT : >=1000 V
- CONTACT/GROUND : >=1200 V
- INSULATION RESISTANCE: >=5000 MOhms

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/21
- TEMPERATURE RANGE -55°C TO +125°C
- DAMP HEAT STEADY STATE 21 DAYS
- SALT SPRAY 24 HOURS

MECHANICAL CHARACTERISTICS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum
- Female screw : 0.5 N.m minimum

PRESS FIT PERFORMANCES

PRESS FIT CONTACTS	
INSERTION FORCE	<= 200 N Average insertion 160N
EXTRACTION FORCE	>= 30 N

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-22-008.
- Termination plating spec:
  - Ni 1.27µm+Sn 0.5 to 1.5µ(pure bright)
- Active area plating spec:
  - Ni + Gold
- Shell plating : 2 to 4µm Cu + 3 to 10µmm Sn(pure bright)
- Accessories: Sn pure bright
- Packaging spec: See GS-14-920

# DBL5W5S81C6M40LF

Series ←

Shell size: **E A B C**  
(see sheet 3)

Front accessory definition  
(see sheet 2)

- blank: without accessory
- L : threaded insert M3
- O : threaded insert UNC 4-40
- V : female screw UNC 4-40

Layout of contacts (see sheet 3) ←

Contacts  
**S** : Socket

Termination type  
**81C** Right angle/Europe standard

Plating  
**5** 200 matings/unmatings  
**6** 500 matings/unmatings

PCB accessories definition(see sheet 2) ←

**M** Metal brackets  
**A** Without accessory

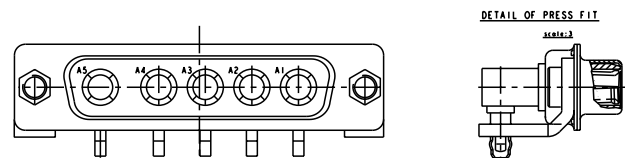
Power contacts  
**40** : Fitted with power contacts 40 Amp.

See note RoHS

TABLE 1: PCB HOLE DIAMETERS

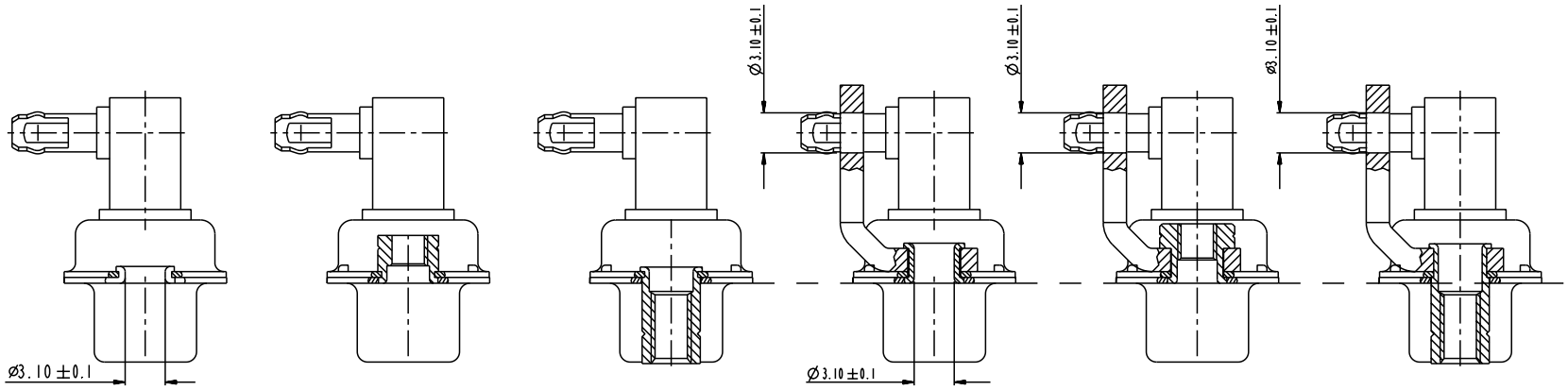
P.C.B HOLE DEFINITION	SnPb holes for CONTACTS		Sn holes for CONTACTS		holes ACCESSORIES
	DRILL DIAMETER	Ø3.22 REF(NOTE 3)	DRILLED HOLE	Ø3.19-3.25	
COPPER PLATING	25µ MINI (RECOMMENDED 50µ MAXI)	25µ MINI (RECOMMENDED 50µ MAXI)	Ø3.10±0.10		
TIN-LEAD PLATING	15µ MAXI (RECOMMENDED 5µ MINI)				
TIN PLATING		0.8 tol,2µ			
(NOTE-1 AND 2) FINISH HOLE (AFTER REFLOW)	Ø 3.02-3.20	Ø3.08-3.20			

- NOTE-1: THESE DIMENSIONS MUST BE RESPECT TO SECURE PRESS-FIT PIN PERFORMANCES.
- NOTE-2: ACCORDING TO IEC-352-5 SPEC.
- NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE



5W5 FOR EXAMPLE

www.fciconnect.com		surface	tolerance	projection	size	Scale
Dr	M PESSON	11/10/05	Product family	-	A2	2:1
Eng	11/10/05	P LEGARE	Spec ref	SEE NOTES	ECN	
Chr			Material			
Appr						
SUB FEMALE DW EUROPE foot print			part no	C01-8639-2316	Rev.	A
full power right angle press fit			catalog no	CUSTOMER COPY	sheet 1 of 5	



FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40
PCB ACCESSORIES	A Without	A Without	A Without	M Metal brackets	M Metal brackets	M Metal bracket

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SCALE: 4

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Eng	11/10/05	P LEGARE	Spec ref	
Chr			Material	SEE NOTES ECN
Appr				
Title		SUB FEMALE DW EUROPE foot print		Rev. A
full power right angle press fit		C01-8639-2316		
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PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxS81C5A40LF	40	200	without	without
D*LxWxS81C5A40LF	40	200	insert M3	without
D*OxWxS81C5A40LF	40	200	insert UNC 4.40	without
D*VxWxS81C5A40LF	40	200	female screw UNC 4.40	without
D*xWxS81C5M40LF	40	200	without	metal bracket
D*LxWxS81C5M40LF	40	200	insert M3	metal bracket
D*OxWxS81C5M40LF	40	200	insert UNC 4.40	metal bracket
D*VxWxS81C5M40LF	40	200	female screw UNC 4.40	metal bracket

shell size  
 \*  
 E  
 A  
 A  
 B  
 C

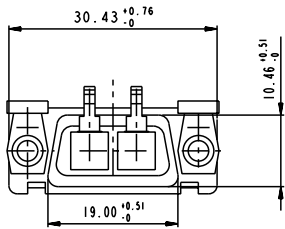
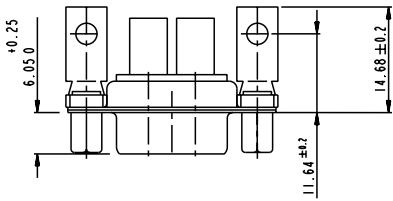
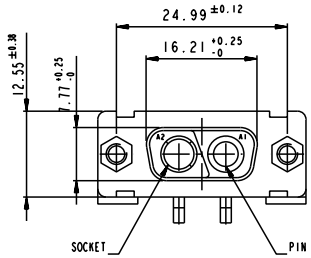
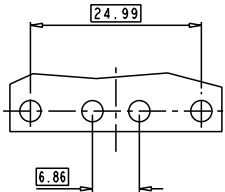
LAYOUTS  
 xWx  
 2V2  
 3V3  
 3W3  
 5W5  
 8W8

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxS81C6A40LF	40	500	without	without
D*LxWxS81C6A40LF	40	500	insert M3	without
D*OxWxS81C6A40LF	40	500	insert UNC 4.40	without
D*VxWxS81C6A40LF	40	500	female screw UNC 4.40	without
D*xWxS81C6M40LF	40	500	without	metal bracket
D*LxWxS81C6M40LF	40	500	insert M3	metal bracket
D*OxWxS81C6M40LF	40	500	insert UNC 4.40	metal bracket
D*VxWxS81C6M40LF	40	500	female screw UNC 4.40	metal bracket

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Eng	11/10/05	P LEGARE	Spec ref				2:1
Chr			Material	SEE NOTES	ECN		
Appr							
Title				SUB FEMALE DW EUROPE foot print		Rev.	
				full power right angle press fit		A	
catalog no				- CUSTOMER COPY		sheet 3 of 5	

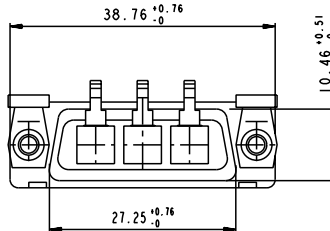
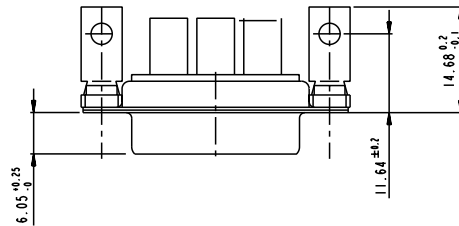
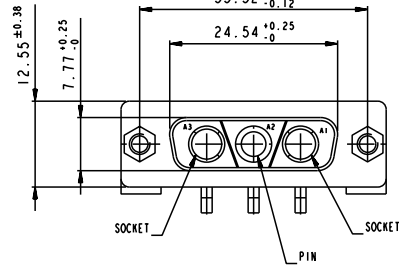
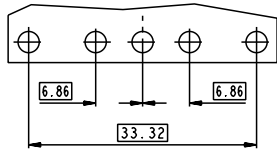
2V2

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet I

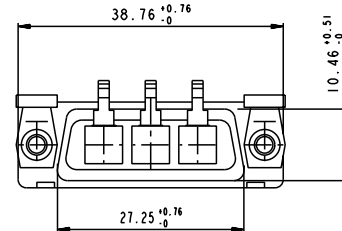
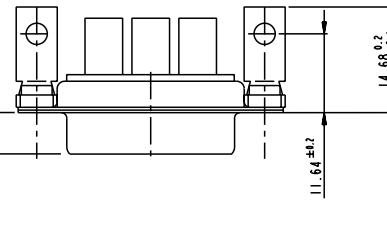
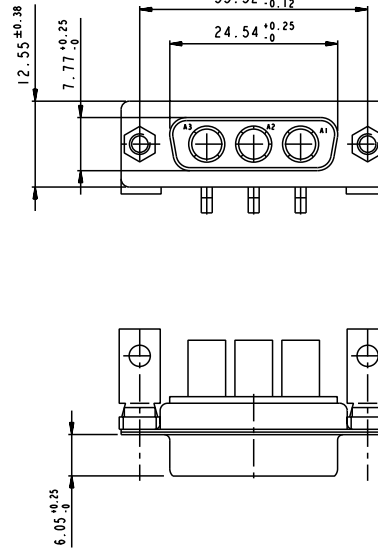
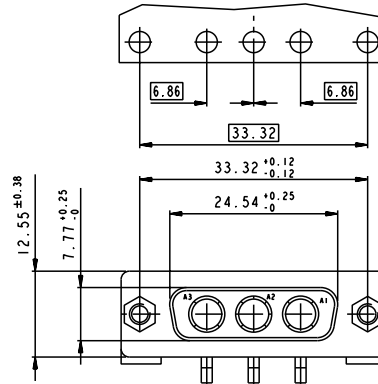


3V3

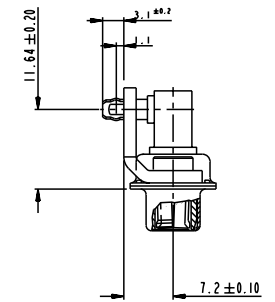
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet I



3W3



SIDE VIEW FOR ALL LAYOUTS



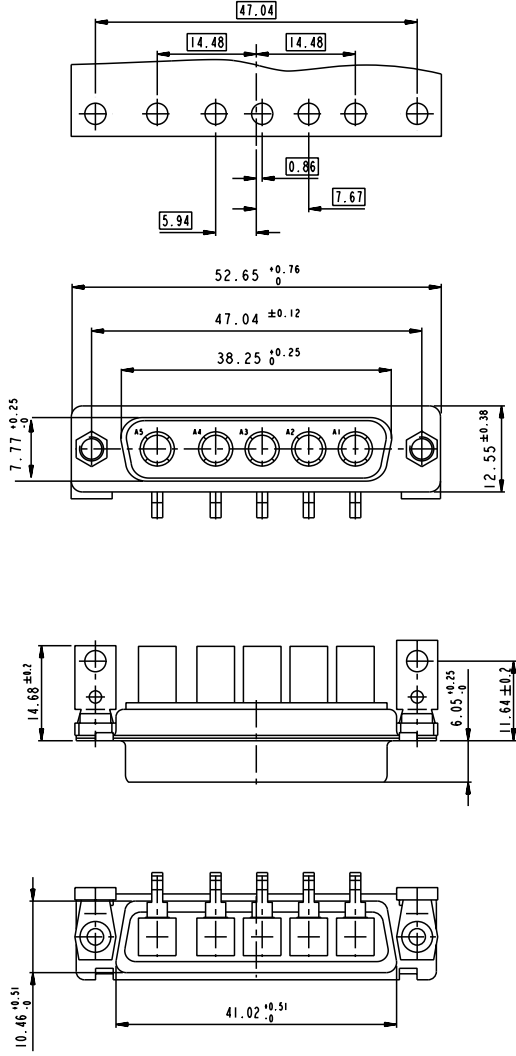
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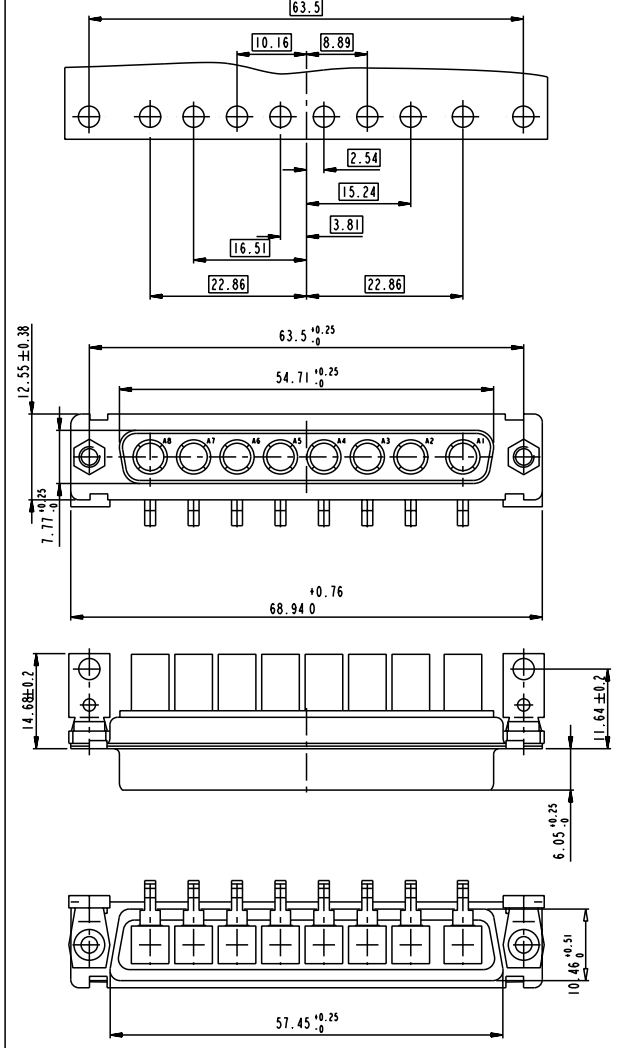
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Eng 11/10/05	P LEGARE	Spec ref	A2	2:1
Chr		Material	SEE NOTES	ECN
Appr				
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**5W5**  
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



**8W8**  
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



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Dr M PESSON	11/10/05	Product family	size A2	Scale 2:1
Eng 11/10/05	P LEGARE	Spec ref	Material	ECN
Chr		SEE NOTES		
Appr				
Title SUB FEMALE DW EUROPE foot print			part no C01-8639-2316	Rev. A
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catalog no				