

**MMI**

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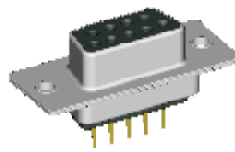
**D-SUB CONNECTOR  
(MACHINE PIN TYPE)**

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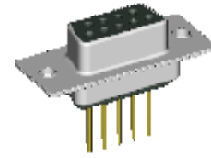
# D-SUBMINIATURE CLASSIFICATION



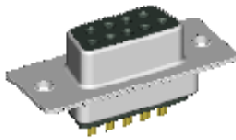
\* RIGHT ANGLE D-SUB( Pa )  
DB 1XX SERIES



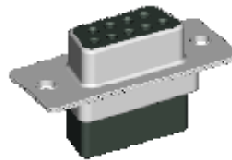
\* STRAIGHT D-SUB( P )  
DB 2XX SERIES



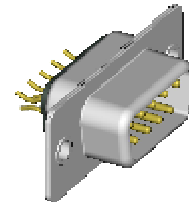
\* WIRING D-SUB( W )  
DB 3XX SERIES



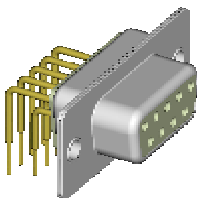
\* SOLDER CUP D-SUB( Sc )  
DB 4XX SERIES



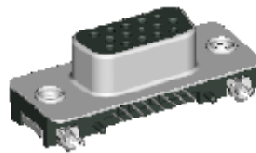
\* CRIMP D-SUB( Cr )  
DB 5XX SERIES



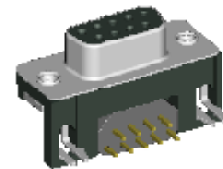
\* STRADDLE D-SUB( Ste )  
DB 6XX SERIES



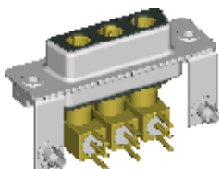
\* MACHINE PIN D-SUB  
DB 9XX SERIES



\* HIGH DENSITY D-SUB  
HDB SERIES



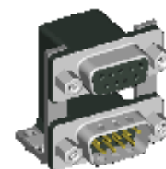
\* EMI D- SUB  
EDB & EHDB SERIES



\* COMBO D-SUB  
CDB SERIES



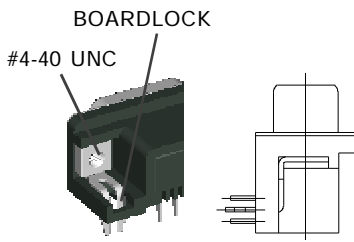
\* IDC D-SUB  
IDB SERIES



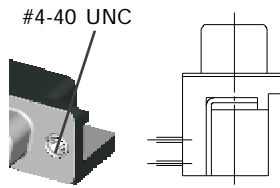
\* STACK D-SUB  
SDB SERIES

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

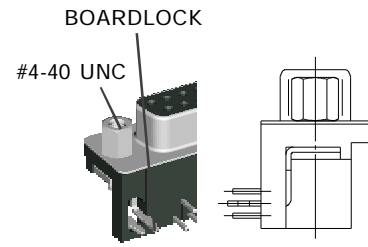
# DB1XX SERIES MOUNTING OPTIONS



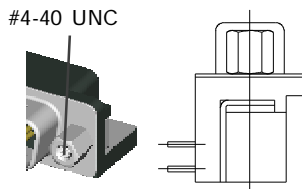
**a TYPE**  
WITH #4-40UNC THREAD INSERT  
GROUNDING BRACKET &  
BOARDLOCK



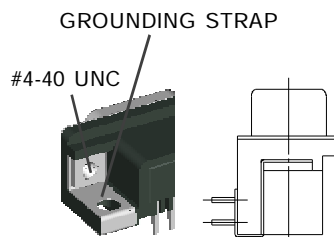
**b TYPE**  
WITH #4-40UNC THREAD INSERT  
GROUNDING BRACKET



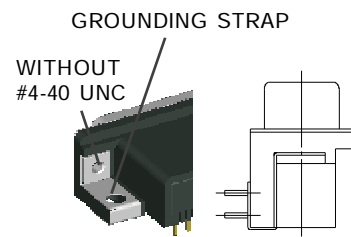
**c TYPE**  
WITH FIXED #4-40UNC HEX NUT  
GROUNDING BRACKET &  
BOARDLOCK



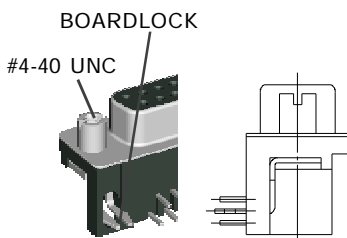
**d TYPE**  
WITH FIXED #4-40UNC HEX NUT  
GROUNDING BRACKET



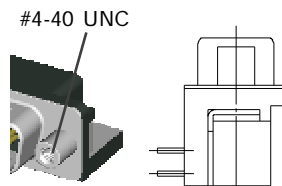
**e TYPE**  
WITH #4-40UNC THREAD INSERT  
GROUNDING STRAP



**en TYPE**  
WITHOUT #4-40UNC THREAD INSERT  
WITH GROUNDING STRAP



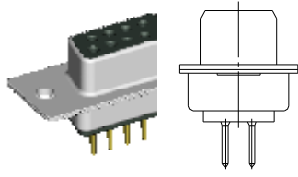
**rc TYPE**  
WITH FIXED #4-40UNC ROUND NUT  
GROUNDING BRACKET &  
BOARDLOCK



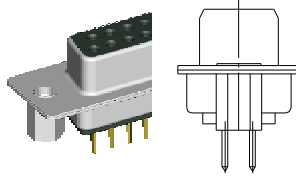
**rd TYPE**  
WITH FIXED #4-40UNC ROUND NUT  
GROUNDING BRACKET

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

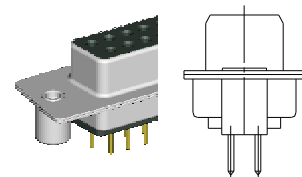
## DB 2XX SERIES MOUNTING OPTIONS



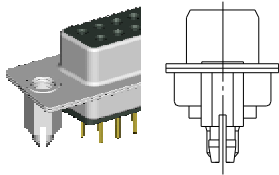
H TYPE  
WITH MOUNTING HOLE ONLY



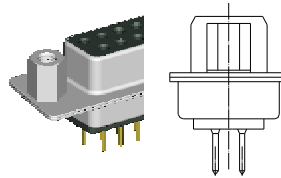
I TYPE  
WITH #4-40UNC HEX NUT  
IN THE REAR OF THE SHELL



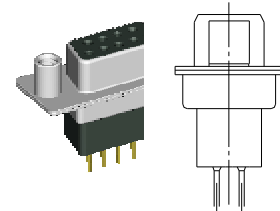
J TYPE  
WITH #4-40UNC ROUND NUT  
IN THE REAR OF THE SHELL



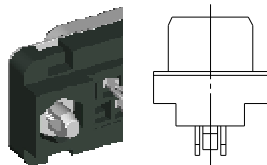
K TYPE  
WITH #4-40UNC IN THE REAR SHELL  
USE RIVET AS BOARDLOCK



L TYPE  
WITH #4-40UNC HEX NUT  
IN THE FRONT OF THE SHELL



M TYPE  
WITH #4-40UNC ROUND NUT  
IN THE FRONT OF THE SHELL



P TYPE  
WITH #4-40UNC IN THE REAR SHELL  
USE PRESS FIT BOARDLOCK

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

# D-SUB CONNECTOR PART NO. INFORMATION

**DB**    **XXX** - **X**    **X**    **XX**    **GX**    -    **X**    **X**

D-SUB CONNECTOR

GENDER

M: MALE  
F: FEMALE

NO. OF CONTACT

09,15,25,37,50

PCB or TERMINAL TYPE

Pa: RIGHT ANGLE TYPE  
P: STRAIGHT TYPE  
W: WIRE TYPE  
Sc: SOLDER CUP TYPE  
Cr: CRIMP TYPE  
Ste: STRADDLE MOUNT TYPE

BOARDLOCK OPTION

X: WITHOUT PRONG BOARD  
2: 2 PRONG BOARD LOCK  
4: 4 PRONG BOARD LOCK

CONTACT PLATING OPTION

Gf: GOLD FLASH  
G30: 30u" GOLD PLATING  
Gft: GOLD FLASH ON CONTACT, TIN PLATED ON SOLDER TAIL  
G15t: 15u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL  
G30t: 30u" GOLD ON CONTACT, TIN PLATED ON SOLDER TAIL

SERIES NO.

1XX: RIGHT ANGLE TYPE  
-100: FOOTPRINT= 8.08 mm  
-120: FOOTPRINT= 14.84 mm  
-121: FOOTPRINT= 8.00 mm  
-131: FOOTPRINT= 1.60 mm  
-132: FOOTPRINT= 1.20 mm  
-160: FOOTPRINT= 5.08 mm

2XX: STRAIGHT TYPE  
-200: LENTH= 4.85 mm  
-210: LENTH= 5.00 mm  
-250: PRESS FIT PCB TYPE

3XX: WIRE TYPE  
-300: LENTH= 10.50 mm  
-310: LENTH= 13.50 mm  
-320: LENTH= 17.50 mm

4XX: SOLDER CUP TYPE  
- 400

5XX: CRIMP TYPE  
- 500

6XX: STRADDLE MOUNT TYPE  
-600

9XX: MACHINE PIN TYPE  
-900: FOOTPRINT= 8.00 mm  
-910: FOOTPRINT= 10.20 mm  
-930: FOOTPRINT= 8.19 mm  
-931: FOOTPRINT= 10.39 mm

MOUNTING TYPE

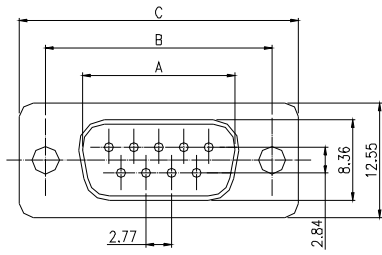
FOR RIGHT ANGLE TYPE  
a :WITH #4-40UNC THREAD INSERT GROUNDING BRACKET & BOARDLOCK  
an: WITHOUT #4-40UNC THREAD INSERT GROUNDING BRACKET & BOARDLOCK  
b: WITH #4-40UNC THREAD INSERT GROUNDING BRACKET  
c: WITH FIXED #4-40UNC HEX NUT GROUNDING BRACKET & BOARDLOCK  
d: WITH FIXED #4-40UNC HEX NUT GROUNDING BRACKET  
e : WITH #4-40UNC THREAD INSERT GROUNDING STRAP  
en: WITHOUT #4-40UNC THREAD INSERT WITH GROUNDING STRAP  
rc: WITH FIXED #4-40UNC ROUND NUT GROUNDING BRACKET & BOARDLOCK  
rd: WITH FIXED #4-40UNC ROUND NUT GROUNDING BRACKET

FOR STRAIGHT TYPE  
H: WITH MOUNTING HOLE ONLY  
I: WITH #4-40UNC HEX NUT IN THE REAR OF THE SHELL  
J: WITH #4-40UNC ROUND NUT IN THE REAR OF THE SHELL  
K: WITH #4-40UNC IN THE REAR SHELL USE RIVET AS BOARDLOCK  
L: WITH #4-40UNC HEX NUT IN THE FRONT OF THE SHELL  
M: WITH #4-40UNC ROUND NUT IN THE FRONT OF THE SHELL  
JP: WITH #4-40UNC ROUND NUT WITH PLASTIC INSERT IN THE REAR OF THE SHELL  
P: WITH #4-40UNC IN THE REAR SHELL USE PRESS FIT BOARDLOCK

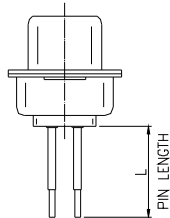
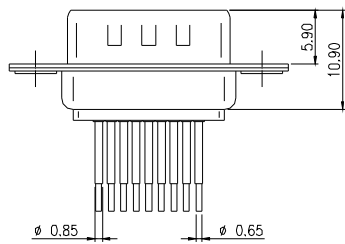
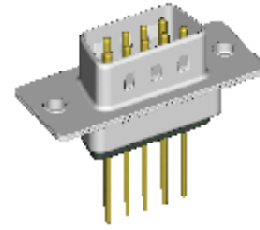
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

# D-SUB 9X0 SERIES *MOUNTING TYPE H* STRAIGHT TYPE - P

## MALE

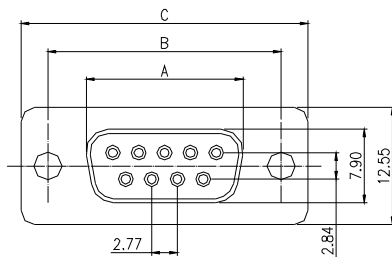


L - PIN LENGTH OPTIONS	
DB900	9.70
DB910	12.70
DB920	17.50

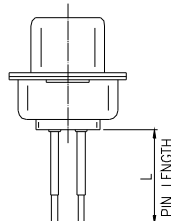
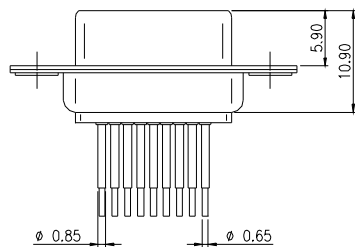
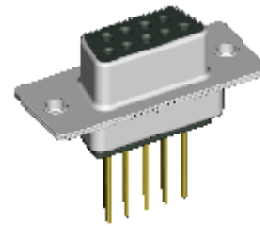


MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION		
		A	B	C
DB0X0-PM09GX-H	9P	16.92	24.99	30.81
DB9X0-PM15GX-H	15P	25.25	33.32	39.14
DB9X0-PM25GX-H	25P	38.96	47.04	53.04
DB9X0-PM37GX-H	37P	54.42	63.50	69.32

## FEMALE



L - PIN LENGTH OPTIONS	
DB900	9.70
DB910	12.70
DB920	17.50



MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION		
		A	B	C
DB9X0-PF09GX-H	9P	16.33	24.99	30.81
DB9X0-PF15GX-H	15P	24.66	33.32	39.14
DB9X0-PF25GX-H	25P	38.38	47.04	53.04
DB9X0-PF37GX-H	37P	54.84	63.50	69.32

<b>DB</b>	<b>9X0</b>	<b>P</b>	<b>X</b>	<b>XX</b>	<b>GX</b>	<b>H</b>
D-SUB CONNECTOR	SERIES NO. 900: L= 9.70 mm 910: L= 12.70mm 920: L= 17.50 mm	GENDER M: MALE F: FEMALE	NO. OF CONTACT 09, 15, 25, 37	CONTACT PLATING OPTION Gf: GOLD FLASH G15: 15u" GOLD PLATING G30: 30u" GOLD PLATING		MOUNTING TYPE H: WITH MOUNTING HOLE ONLY
	PCB TYPE STRAIGHT TYPE					

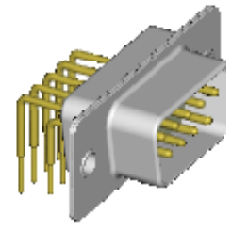
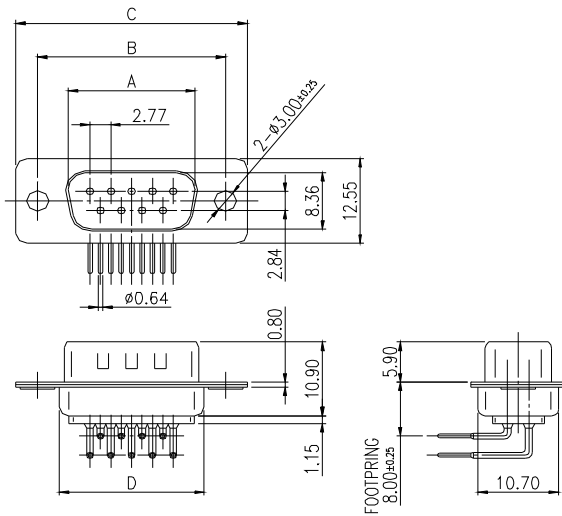
**ELECTRICAL CHARACTERISTIC**  
 CONTACT CURRENT RATING: 1A  
 CONTACT RESISTANCE: 25 mOHM MAX  
 INSULATION RESISTANCE: 5000 MOHM MIN. AT DC 500V  
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V 1 MINUTE  
 OPERATING TEMPERATURE:-55°C~ +105°C

**MECHANICAL CHARACTERISTICS**  
 CONTACT INSERTION FORCE: 341 g MAX.  
 CONTACT SEPARATION FORCE: 21 g MIN.  
**MATERIALS**  
 INSULATOR: P.B.T UL 94V-0 RATED  
 SHELL: COLD ROLLER STEEL  
 CONTACTS: BRASS

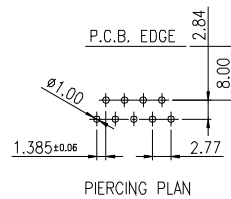
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

# D-SUB 900 SERIES *MOUNTING TYPE H* RIGHT ANGLE TYPE - Pa

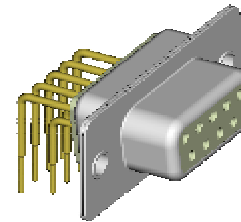
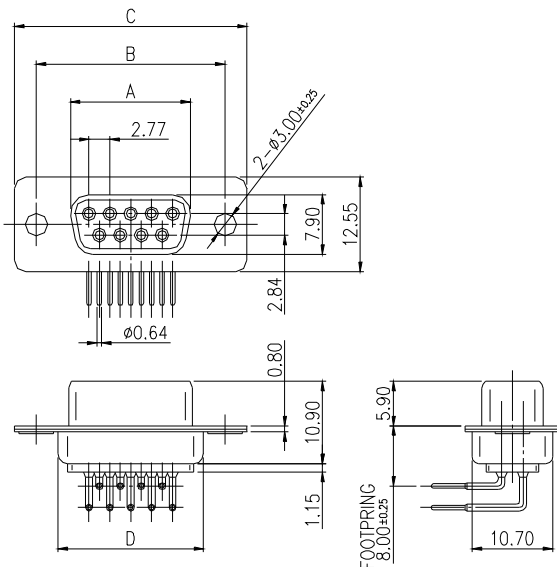
## MALE



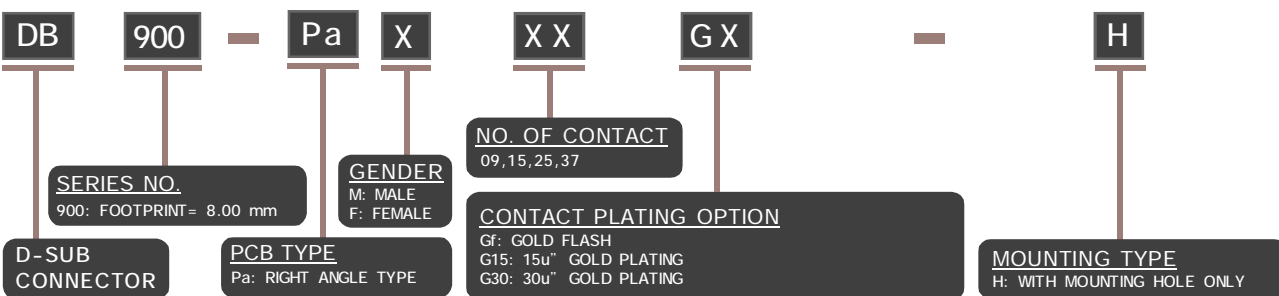
MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION			
		A $\pm 0.2$	B $\pm 0.25$	C $\pm 0.38$	D $\pm 0.2$
DB900-PaM09GX-H	9P	16.92	24.99	30.81	19.28
DB900-PaM15GX-H	15P	25.25	33.32	39.14	27.51
DB900-PaM25GX-H	25P	38.96	47.04	53.04	41.26
DB900-PaM37GX-H	37P	55.42	63.50	69.32	57.71



## FEMALE



MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION			
		A $\pm 0.2$	B $\pm 0.25$	C $\pm 0.38$	D $\pm 0.2$
DB900-PaF09GX-H	9P	16.33	24.99	30.81	19.28
DB900-PaF15GX-H	15P	24.86	33.32	39.14	27.51
DB900-PaF25GX-H	25P	38.38	47.04	53.04	41.26
DB900-PaF37GX-H	37P	54.84	63.50	69.32	57.71



### SPECIFICATION

INSULATION RESISTANCE: 1000 MOHM MIN. AT DC 500V  
 DIELECTRIC WITHSTANDING VOLTAGE: AC 500V 1 MINUTE  
 OPERATING TEMPERATURE: -40°C - +105°C

### MATERIALS

INSULATOR: P.B.T + 30% GLASS FIBER ( UL 94V-0)  
 CONTACT PLATED: GOLD FLASH OVER NICKEL  
 CONTACT: PHOSPHOR BRONZE OR BRASS  
 SHELL: STEEL ZINC PLATED OR TIN PLATED

### FEATURE

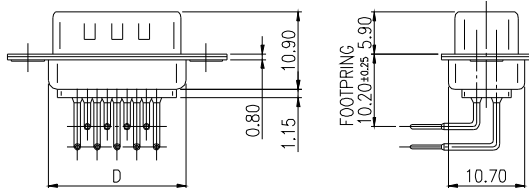
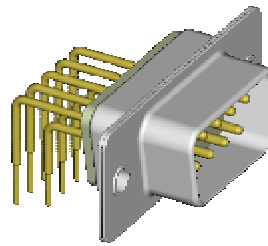
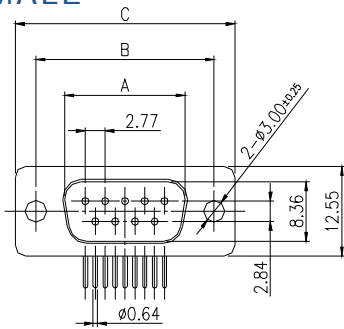
THE CONTACT IS A ROUND PIN AND PIN INSERTION HOLE IN THE INSULATOR IS OF THE CLOSED ENTRY TYPE, SO THAT THE CONNECTION IS SECURE AND RELIABLE.

THE CONTACT ARE PRECISION STAMPED OR MACHINED. INSULATOR IS MADE OF P.B.T AND GLASS FIBER REINFORCED ( UL 94V-0) PROVIDING SUPERIOR HEAD AND CHEMICAL RESISTANCE

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

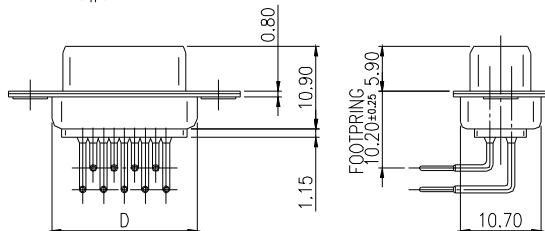
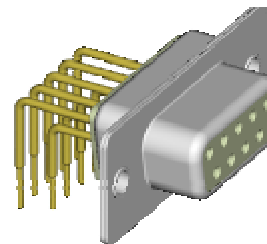
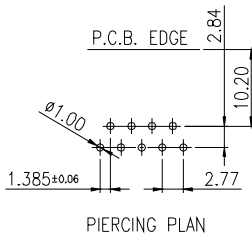
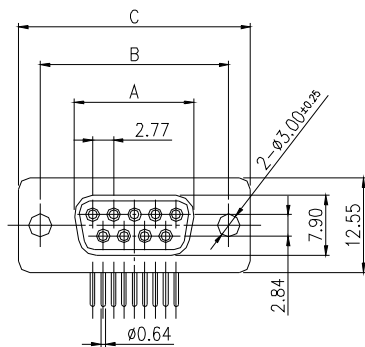
# D-SUB 910 SERIES *MOUNTING TYPE H* RIGHT ANGLE TYPE - Pa

## MALE

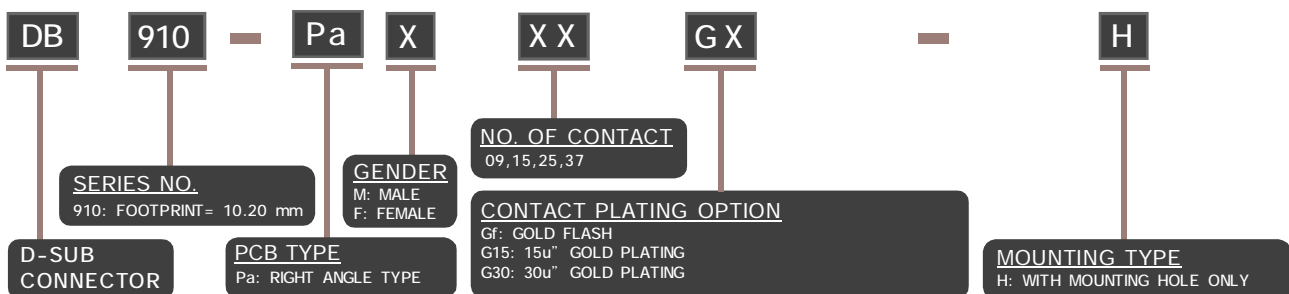


MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION			
		A±0.2	B±0.25	C±0.38	D±0.2
DB910-PaM09GX-H	9P	16.92	24.99	30.81	19.28
DB910-PaM15GX-H	15P	25.25	33.32	39.14	27.51
DB910-PaM25GX-H	25P	38.96	47.04	53.04	41.26
DB910-PaM37GX-H	37P	55.42	63.50	69.32	57.71

## FEMALE



MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION			
		A±0.2	B±0.25	C±0.38	D±0.2
DB910-PaF09GX-H	9P	16.33	24.99	30.81	19.28
DB910-PaF15GX-H	15P	24.86	33.32	39.14	27.51
DB910-PaF25GX-H	25P	38.38	47.04	53.04	41.26
DB910-PaF37GX-H	37P	54.84	63.50	69.32	57.71



### SPECIFICATION

INSULATION RESISTANCE: 1000 MOHM MIN. AT DC 500V.  
 DIELECTRIC WITHSTANDING VOLTAGE: AC 500V 1 MINUTE  
 OPERATING TEMPERATURE: -40°C ~ +105°C

### MATERIALS

INSULATOR: P.B.T + 30% GLASS FIBER ( UL 94V-0)  
 CONTACT PLATED: GOLD FLASH OVER NICKEL  
 CONTACT: PHOSPHOR BRONZE OR BRASS  
 SHELL: STEEL ZINC PLATED OR TIN PLATED

### FEATURE

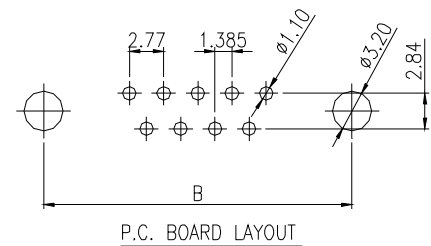
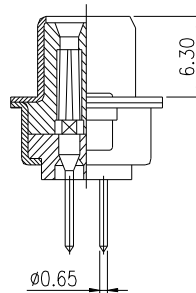
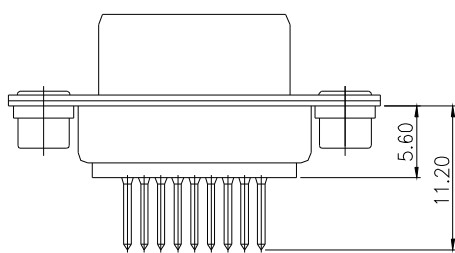
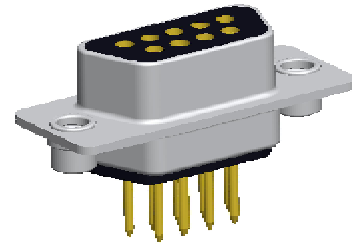
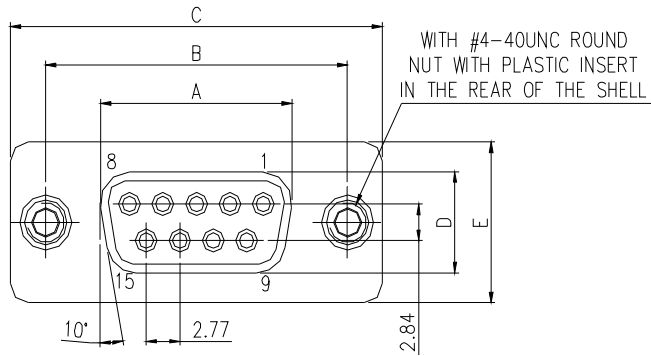
THE CONTACT IS A ROUND PIN AND PIN INSERTION HOLE IN THE INSULATOR IS OF THE CLOSED ENTRY TYPE, SO THAT THE CONNECTION IS SECURE AND RELIABLE.  
 THE CONTACT ARE PRECISION STAMPED OR MACHINED.  
 INSULATOR IS MADE OF P.B.T AND GLASS FIBER REINFORCED ( UL 94V-0) PROVIDING SUPERIOR HEAD AND CHEMICAL RESISTANCE

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

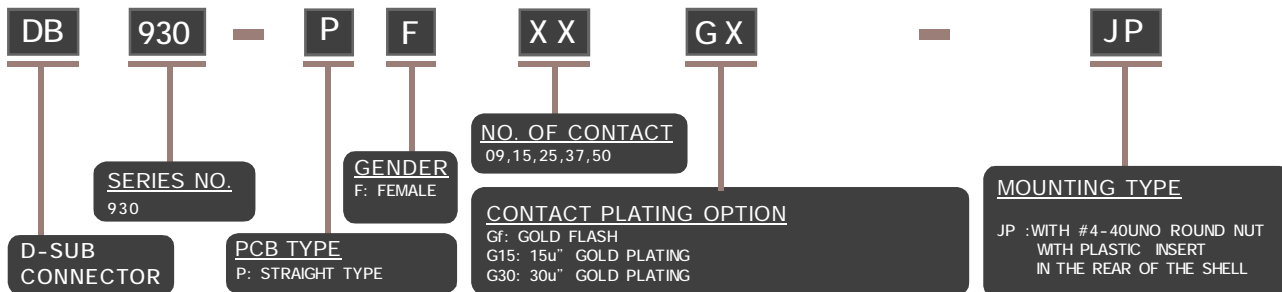


# D-SUB 930 SERIES *MOUNTING TYPE JP* STRAIGHT TYPE - P

## FEMALE



PART NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION				
		A	B	C	D	E
DB930-PF09GX-JP	9P	16.46	25.00	31.19	8.02	12.93
DB930-PF15GX-JP	15P	24.79	33.30	39.52	8.02	12.93
DB930-PF25GX-JP	25P	38.50	47.04	53.42	8.02	12.93
DB930-PF37GX-JP	37P	54.96	63.50	69.70	8.02	12.93
DB930-PF50GX-JP	50P	52.55	61.00	67.31	10.87	15.75



### ELECTRICAL CHARACTERISTIC

CONTACT CURRENT RATING: 1A  
 CONTACT RESISTANCE 25 mOHM MAX 10 SEC  
 INSULATION RESISTANCE: 5000 MOHM MIN. AT DC 500V.  
 DIELECTRIC WITHSTANDING VOLTAGE: AC 1000V 1 MINUTE R.M.S  
 OPERATING TEMPERATURE:-55°C~ +105°C

### FINISHES

CONTACT: GOLD FLASH  
 SHELL: NICKEL PLATED

### MECHANICAL CHARACTERISTICS

CONTACT INSERTION FORCE: 341 g MAX.  
 CONTACT SEPARATION FORCE: 21 g MIN.

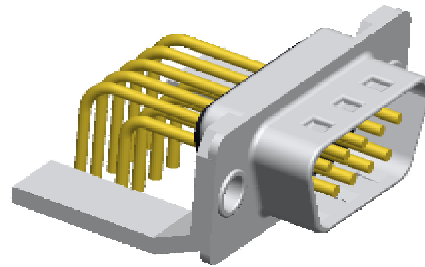
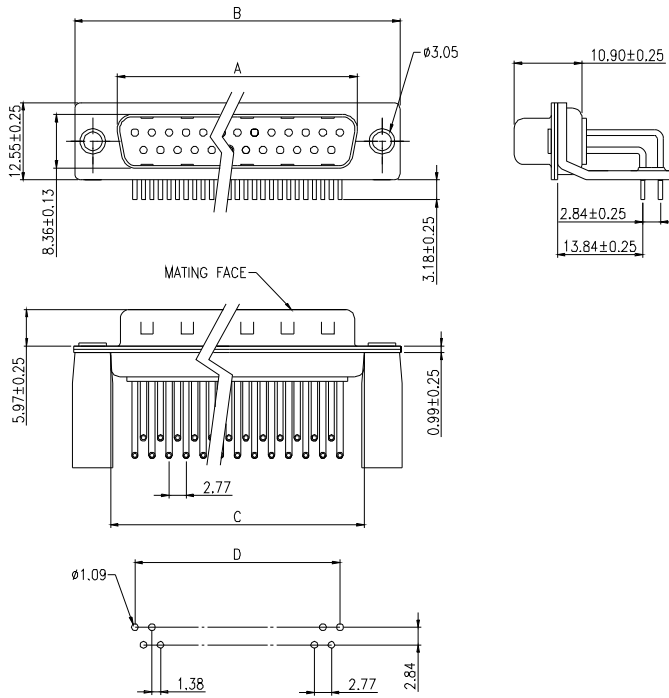
### MATERIALS

INSULATOR: P.B.T UL 94V-0 RATED.  
 SHELL: COLD ROLLER STEEL  
 CONTACTS: BRASS

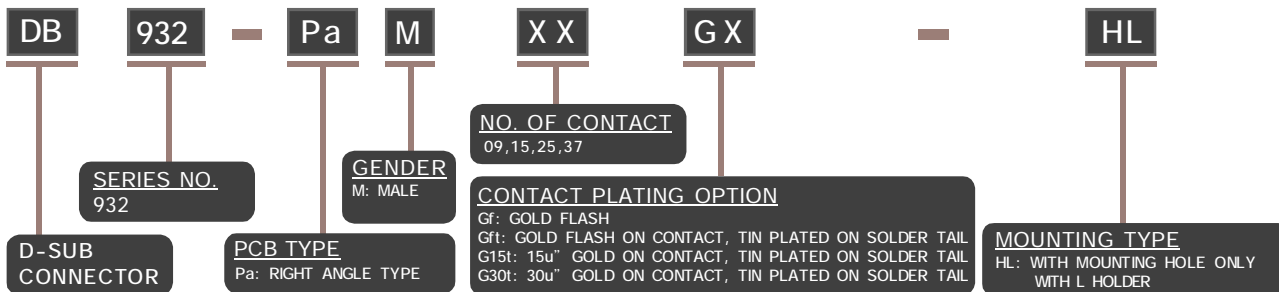
NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE

# D-SUB 932 SERIES *MOUNTING TYPE HL* RIGHT ANGLE TYPE - Pa

## MALE



MODEL NO.	NO.OF CONTACTS (SHELL SIZE)	DIMENSION			
		A	B	C	D
DB932-PaF09Gf-2a	9P	16.92	30.81	19.28	11.08
DB932-PaF15Gf-2a	15P	25.25	39.14	27.51	19.39
DB932-PaF25Gf-2a	25P	38.96	53.04	41.28	33.24
DB932-PaF37Gf-2a	37P	55.42	69.32	57.71	49.86



### ELECTRICAL CHARACTERISTICS

CONTACT CURRENT RATING: 5 A  
 CONTACT RESISTANCE: 30 MILLIOHMS MAX.  
 INSULATION RESISTANCE: 5000 MOHM MIN  
 DIELECTRIC WITHSTANDING VOLTAGE: 1000V AC MIN.  
 OPERATING TEMPERATURE:-55°C ~ +105°C

### MATERIALS AND FINISH

SHELL: STEEL MATERIAL, FRONT SHELL NICKEL FINISHED, BACK SHELL TIN FINISHED DIMPLES ON PLUG ONLY  
 INSULATOR: P.B.T THERMOPLASTIC, 30% GLASS FILLED, UL 94V-0 RATED, BLACK COLOR  
 CONTACT MATERIAL: BRASS  
 CONTACT FINISH: FULL GOLD FLASH

NOTE : SOME SIZES, STYLES AND OPTION ARE NON-STANDARD, NON-CANCELLABLE, NON-RETURNABLE