

# SIAL

The hybrid connector for use with thermal clamps

**SIAL is a modular high density interconnection system that has the capability to mix signal and coax contacts. The contact technology developed for this connector allows the use of thermal clamps. With 3 sizes of modules, the SIAL connectors provide the arrangement needed, from 18 to 392 contacts. In a staggered grid pattern (2.54 x 1.905 [.100x.075]), this connector houses 5 rows of contacts in a low profile board to board format. Additionally, SIAL connectors provide shielding on both plug & receptacle, which allows the dissipation of all the electrical charge while mating.**

### The concept

3 standard modules are available with 18, 58 and 98 signal contacts on 5 rows. These allow arrangements up to 392 contacts. The various modules are maintained in a metallic shell, allowing both protection of male contacts on the plug, and a mix of signal and coax modules.

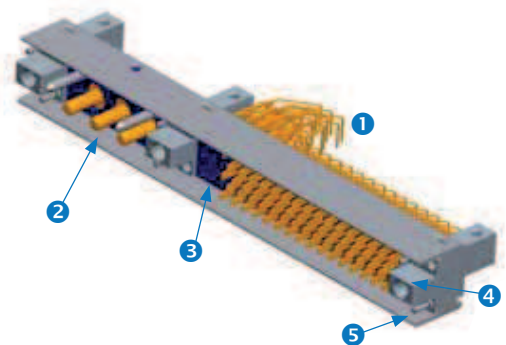
### Compatible with the use of thermal clamps

Its standard contact technology, already used in the monolithic SIHD connector, permits the lateral displacement ( $\pm 0.25$  [.010]) of the pin into the socket without generating any stress on the contact termination on the PCB.

This feature allows the use of thermal clamps to keep the daughter board in position after mating, as well as the dissipation of energy generated by the components on the board from the heat sink (thermal drain) to the cold wall (liquid cooled) or to the chassis. The locking of the thermal clamps provides the lateral movement of the plug into the receptacle. The SIAL allows this lateral displacement of  $\pm 0.25$  [.010] without creating stress on the solder joints or on the contact area.

### A complete range for test, programming, maintenance

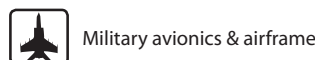
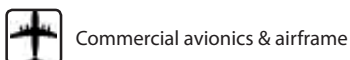
- E = Female receptacle for mother board
- F = Male plug for daughter board
- T = Female test receptacle for daughter board
- S = Male test plug
- P = Female extender receptacle



## QUICK SELECTION GUIDE

Signal contacts 1		Coax contacts 2	Modules 3	Fittings & Guiding 4	Keying 5
<b>FEMALE</b> for receptacles 	<b>MALE</b> for plugs 	<b>COAX SIZE 12</b>  <b>COAX SIZE 16</b>  3 COAX / MODULE 5 COAX / MODULE 	<b>NUMBER OF SIGNAL CONTACTS</b> 018, 036, 058, 076, 098, 116, 156, 196, 214, 254, 312, 370, 392  <b>NUMBER OF COAX CONTACTS</b> Size 12: 03, 06, 09, 12 Size 16: 05, 10	<b>FITTING</b>  <b>FEMALE SOCKET GUIDE</b>  <b>MALE GUIDE PIN</b> 	<b>5 polarizing pins / connector</b> 
<b>PAGE 85</b>	<b>PAGE 84</b>	<b>PAGE 86</b>	<b>PAGE 88</b>	<b>PAGE 89</b>	<b>PAGE 89</b>

The SIAL series serves various markets, including:



All dimensions are given for information only and are in mm [inch], except as otherwise specified

# SIAL Series

Lateral displacement compatibility



SIAL Series

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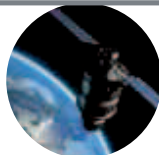
The SIAL series serves various **markets**, including:



Commercial Avionics & Airframe



Military Avionics & Airframe



Space

SIAL>>> GENERAL SPECIFICATIONS



- Modular connector mixing signal and coax contacts in many arrangements
- Lateral displacement capability allowing the use of thermal clamps: ± 0.25 [ ± .010]
- Complete range for test, programming and maintenance
- Designed for severe mechanical environments
- 2.54 [.100] staggered grid (1.27 [.050] offset), 1.905 [.075] between rows

Main characteristics

- Medium density: 0.14 cts/mm<sup>2</sup> [90 cts/inch<sup>2</sup>]
- 13 arrangements on 5 rows of contacts, from 18 to 392 signal contacts
- 5 hybrid arrangements mixing coax and signal contacts
- 3 A per signal contacts / DWV: 750 Vrms
- Lateral rails to protect the male contacts from external damage
- Repairable contacts for easy maintenance

Markets



Main applications



Terminations



Recommended configurations



Standard



How to order

E	Female receptacle
F	Male plug
T	Female test receptacle
S	Male test plug
P	Female extender receptacle

C	Conductive fitting Standard version For E and F types
Blank	Non conductive fitting Test versions and specifics

Size	Male plug	Female receptacle
Size 12	KX	KT
Size 16	NX	NT
No coaxial contact	Blank	

000	Standard
001	ASL F or E with 5 right & left coax
010	ASL E with 2.76 <sub>max</sub> mm PCB thickness
011	ASL E with heatshrink sleeve
100	ASL S and E 392 screw locking system
102	ASL F with Y01 contacts without lateral displacement
103	ASL S Y04 straight/flex locking system
200	ASL 39758119 space customer specification
300	ASL MA3401 space customer specification
500	ASL F or E with 5 coax after signal contacts
502	ASL F or E with 5 coax before signal contacts



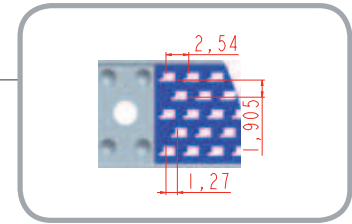
Number of signal contacts (see page 88)		
Signal contacts only		Signal & coaxial contacts
018	156	018 (+3)
036	196	058 (+3)
058	214	098 (+3)
076	254	058 (+5)
098	312	156 (+10)
116	370	196 (+5)
	392	254 (+5)

Signal contacts (see pages 84 to 85)		
	Male contact	Female contact
E		Y09, Y19
F	Y01, Y02, Y04, U04, U05, U06, U07, U08	
T		Y01, Y02, Y04, U04, U05, U06, U07, U08
P		Y01, Y02, Y04, U04, U05, U06, U07, U08
S	Y03 Y02 Y04	

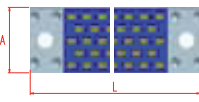
Number of coax contacts (see page 93)		
	Size	Number of coax
		03
	12	06
		09
		12
	16	05
		10
No coaxial contact		Blank

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## SIAL >>> TECHNICAL SPECIFICATIONS



### Dimensional characteristics



L= 22.86[.900] to 231.14[9.100] for signal version  
 L= 53.34[2.100] to 180.34[7.100] for hybrid version  
 A= 12.1<sub>MAX</sub> [.476]  
 H= 6.41<sub>MAX</sub> [.252] for plug  
 H= 10.26<sub>MAX</sub> [.404]

### Female contact



#### Cross cavity by Amphenol: lateral displacement compatible

- Cross section of the lateral displacement of the male contact inside the female cavity
- Maintains 2 points of contact
- Allows a  $\pm 0.25$  [ $\pm .010$ ] lateral displacement
- No stress on solder joints or on the contact area

**Material:** beryllium copper (stamped)

#### Plating:

- Termination: tin lead or lead free
- Active contact area: gold over nickel

### Male contact



**Mating end size:** 0.6 x 1.2 [.047 x .024]

**Contact section** (mating side): 0.72mm<sup>2</sup> [.001 in<sup>2</sup>]

**Material:** beryllium copper (stamped)

#### Plating:

- Termination: tin lead or lead free
- Active contact area: gold over nickel

### Materials

- **Fixing devices:** anodized aluminium
- **Guiding devices:** passivated stainless steel
- **Polarizing pins:** passivated stainless steel
- **Metallic rails:** passivated stainless steel
- **Plastic inserts:** thermoset DAP, 30% glass-fiber filled

MECHANICAL CHARACTERISTICS	
<b>Backoff</b> <sup>1</sup> (mm)	< 0.8 [.031]
<b>Mating force</b> per contact (N)	0.58 <sub>MAX</sub>
<b>Unmating force</b> per contact (N)	0.16 < F < 0.58
<b>Durability</b> cycles	500
<b>Sinusoidal vibrations</b> (10 to 2000 Hz) micro discontinuity 2ns	10 g
<b>Random vibrations</b> (10 to 2000 Hz) micro discontinuity 2ns	0.15 g <sup>2</sup> / Hz
<b>Shocks</b> micro discontinuity 1ns	100 g
ENVIRONMENTAL CHARACTERISTICS	
<b>Thermal shocks</b> (°C)	-55 / +125
<b>Salt Spray</b> (hours)	144* or 96
ELECTRICAL CHARACTERISTICS	
<b>Current rating</b> per contacts (A)	3
<b>Insulation resistance</b> (at 500Vdc) (GΩ)	5 <sub>MIN</sub>
<b>Contact resistance</b> (mΩ)	25 <sub>MAX</sub>
<b>Dielectric Withstanding Voltage</b> (Vrms)	750
<b>Capacitance</b> between contacts (pF)	1.5 <sub>MAX</sub>
<b>Service voltage</b> (at 50 Hz) (Vrms)	250

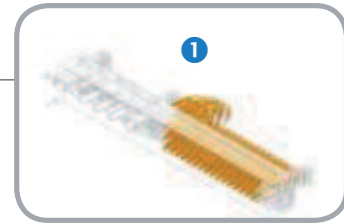
\* "C" standard version

<sup>1</sup>: When both connectors are fully mated, the backoff is the maximum distance the connectors can be unmated while functioning properly

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**SIAL >>> SIGNAL CONTACTS (1)**

**MALE CONTACTS FOR PLUGS**



**Right angle PC tail**

- Thru hole soldering
- Daughter board
- PCB thickness: 3.1<sub>MAX</sub> [.122]

Termination style **Y01**

**Right angle PC tail**

- Thru hole soldering
- Daughter board
- PCB thickness: 2.6<sub>MAX</sub> [.102]

Termination style **Y02**

**SMT double side PCB, centered**

- SMT soldering
- Double-sided daughter board, centered
- PCB thickness: 2.6 ± 0.235 [.102 ± .009]

Termination style **U04**

**Straight PC tail**

- Thru hole soldering
- Daughter board
- PCB thickness: 4.5 ± 0.45 [.177 ± .018]

Termination style **Y04**

**SMT double side, centered**

- SMT soldering
- Double-sided daughter board, centered
- PCB thickness: 1.6 ± 0.160 [.063 ± .006]

Termination style **U06**

**SMT double side, centered**

- SMT soldering
- Double-sided daughter board, centered
- PCB thickness: 2 ± 0.2 [.079 ± .008]

Termination style **U05**

**SMT double side, off centered**

- SMT soldering
- Double-sided daughter board, offset
- PCB thickness: 2.6 ± 0.235 [.102 ± .009]

Termination style **U08**

**SMT double side, off centered**

- SMT soldering
- Double-sided daughter board, offset
- PCB thickness: 2.44 ± 0.42 [.096 ± .016]

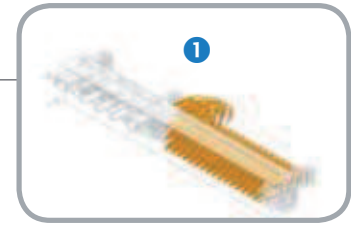
Termination style **U07**

	Y01	Y02	Y04	U04	U05	U06	U07	U08
<b>L<sub>MAX</sub></b>	4.2 ± 0.2 [.165 ± .008]	3.7 ± 0.2 [.146 ± .008]	6 [236]	2.6 ± 0.235 [.102 ± .009]	2 ± 0.2 [.079 ± .008]	1.6 ± 0.160 [.063 ± .006]	2.44 ± 0.42 [.096 ± .016]	2.6 ± 0.235 [.102 ± .009]
<b>Termination section</b>	Ø 0.4 ± 0.03 [.016 ± .001]			0.3 x 0.8 [.012 x .031]				
<b>Mating end size</b>	1.2 x 0.6 [.047 x .024]							
<b>Active contact area plating µm[µin]</b>	2 [.079] Ni + <b>1[.039] Au</b>							
<b>Termination plating µm [µin]</b>	2 [.079] Ni + 3 [.118] SnPb or bright pure Sn for RoHS version				2 [.079] Ni + 7 [.276] SnPb or bright pure Sn for RoHS version			

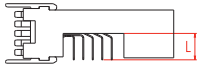
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**SIAL >>> SIGNAL CONTACTS (1)**

**MALE CONTACT FOR TEST PLUGS**



**Right angle PC tail**



- Thru hole soldering
- Daughter board
- PCB thickness:  $1.6 \pm 0.16$  [.063 ± .006]

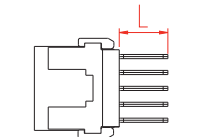


Termination style

**Y03**

**FEMALE CONTACTS FOR RECEPTACLES**

**Straight PC tail, standard length**



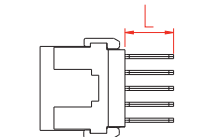
- Thru hole soldering
- Mother board
- PCB thickness:  $3.75 \pm 0.75$  [.148 ± .030]



Termination style

**Y09**

**Straight PC tail, short length**



- Thru hole soldering
- Mother board
- PCB thickness: up to  $2 \pm 0.2$  [.079 ± .008]

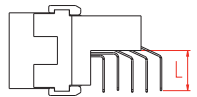


Termination style

**Y19**

**FEMALE CONTACT FOR EXTENDER RECEPTACLES**

**Right angle PC tail, short length**

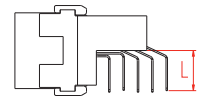


- Thru hole soldering
- Extender card
- PCB thickness:  $2.6_{MAX}$  [.102]

Termination style

**Y02**

**Right angle PC tail**



- Thru hole soldering
- Extender card
- PCB thickness  $3.1_{MAX}$  [.122]

Termination style

**Y01**

	<b>Y03</b>	<b>Y02</b>	<b>Y01</b>	<b>Y09</b>	<b>Y19</b>
<b>L<sub>MAX</sub></b>	$2.8 \pm 0.2$ [.165 ± .008]	$3.7 \pm 0.2$ [.146 ± .008]	$4.2 \pm 0.2$ [.165 ± .008]	6 [.236]	$4.5 \pm 0.2$ [.177 ± .008]
<b>Mating end size</b>	1.2 x 0.6 [.047 x .024]				
<b>Termination section</b>	$\varnothing 0.4 \pm 0.03$ [.016 ± .001]			$\varnothing 0.5 \pm 0.03$ [.020 ± .001]	
<b>Active contact area plating <math>\mu\text{m}[\mu\text{in}]</math></b>	2 [.079] Ni + 1 [.039] Au				
<b>Termination plating <math>\mu\text{m}[\mu\text{in}]</math></b>	2 [.079] Ni + 3 [.118] SnPb or bright pure Sn for RoHS version				

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## SIAL >>> SPECIAL CONTACTS (2)

### SIZE 16 COAXIAL CONTACTS



#### Male contacts for plugs – 5-cavity module

##### Straight crimp barrel

- For 5-cavity module
- For 2 [.079] cable
- Size 16: 6 GHz depending on cable – 50 Ω

2 [.079]

32008

##### Straight PC tail - UT47

- For 5-cavity module
- For UT47 semi-rigid cable
- Size 16: 6 GHz depending on cable – 50 Ω

Consult us

320033

##### Right angle PC tail

- For 5-cavity module
- Size 16: 6 GHz depending on cable – 50 Ω

Consult us

320032

#### Female contacts for receptacles – 5-cavity module

##### Straight crimp barrel

- For 5-cavity module
- For 2, 1.2, 2.7 or 2.4 cable [for .079, .047, .106 or .094 cable]
- Size 16: 6 GHz depending on cable – 50 Ω

2 [.079]

1.2 [.047]

2.7 [.106]

2.4 [.094]

320009

320011

320017

320018

##### Straight PC tail - UT47

- For 5-cavity module
- For UT47 semi-rigid cable
- Size 16: 6 GHz depending on cable – 50 Ω

Consult us

320006

##### Straight PC tail - Sucoform

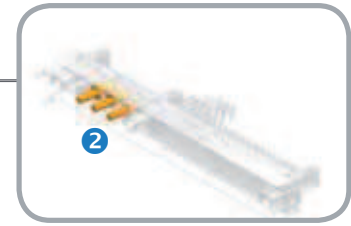
- For 5-cavity module
- For Sucoform cable 0.086 [.003]
- Size 16: 6 GHz depending on cable – 50 Ω
- No lateral displacement

Consult us

320021

**SIAL >> SPECIAL CONTACTS (2)**

**SIZE 12 COAXIAL CONTACTS**



**Male contacts for plugs – 3-cavity module**

**Right angle PC tail**

- For 3-cavity module
- Size 12: 0 to 3 GHz – 50 Ω

Consult us

320000

**Straight crimp barrel**

- For 3-cavity module
- Size 12: 0 to 3 GHz – 50 Ω
- Standard designation: M39029 / 28 - 211

Consult us

900340

**Female contacts for receptacles – 3-cavity module**

**Right angle crimp barrel – KX22A**

- For 3-cavity module
- For KX22A cable
- Size 12: 0 to 3 GHz – 50 Ω

Consult us

320001

**Right angle crimp barrel – F 1703/66**

- For 3-cavity module
- For F 1703 / 66 cable
- Size 12: 0 to 3 GHz – 50 Ω

Consult us

320004

**Straight PC tail**

- For 3-cavity module
- For test only, specific application
- Size 12: 0 to 3 GHz – 50 Ω
- No lateral displacement

Consult us

320002

**Straight crimp barrel**

- For 3-cavity module
- Standard designation: M39029 / 27 - 210
- Size 12: 0 to 3 GHz – 50 Ω
- With lateral displacement

Consult us

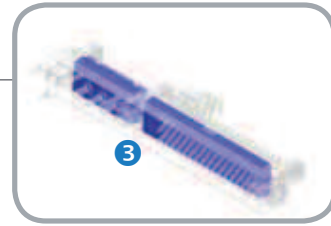
900354

	16-SIZE CONTACT	12-SIZE CONTACT
<b>Impedance Ω</b>	50	50
<b>Voltage rating V</b>	180	180
<b>Current rating mA</b>	500	500
<b>Contact retention N</b>	≥ 50	≥ 50
<b>Frequency range GHz</b>	0 to 1	0 to 1
<b>Contact resistance mΩ</b>	≤ 12	≤ 12
<b>VSWR at 1 GHz</b>	1.3 <sub>MAX</sub>	1.3 <sub>MAX</sub>
<b>Insertion and extraction force per contact N</b>	1 ≤ F ≤ 15	1 ≤ F ≤ 15
<b>Dielectric and extraction force per contact N</b>		at sea level, 1000 V. at 15240 m, 250 V.

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SIAL >> MODULES (3)

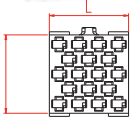
SIGNAL MODULES



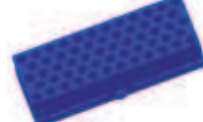
18 signal contacts



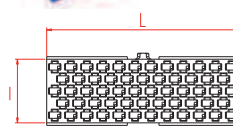
- Arrangement available:
- 18
- 18 x 2
- 18 + 58



58 signal contacts



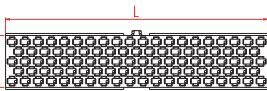
- Arrangement available:
- 58
- 58 + 18
- 58 x 2
- 58 + 98
- 58 x 2 + 98
- 58 + 98 x 2
- 58 x 2 + 98 x 2
- 58 x 3 + 98 x 2



98 signal contacts



- Arrangement available:
- 98
- 98 + 58
- 98 x 2
- 98 + 2 x 58
- 98 x 2 + 58
- 98 x 2 + 58 x 2
- 98 x 2 + 58 x 3
- 98 x 4

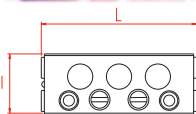


HYBRID MODULES

3 coax contacts – size 12



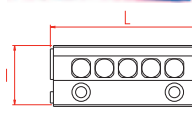
- 3-cavity module for 12-size coaxial contact
- Arrangement available:
- 3 + 18
- 3 + 58



5 coax contacts – size 16



- 5-cavity module for 16-size coaxial contact
- Arrangement available:
- 5 + 98
- 5 x 2 + 98 + 58



	18 signal contacts	58 signal contacts	98 signal contacts	3 coax contacts	5 coax contacts
L	10.16 [.400]	30.48 [1.200]	50.8 [2.1000]	25.4 <sub>MAX</sub> [1.000]	
I		10.05 [.396]		9.95 [.392]	
Receptacle Plug		10.8 [.425]		10.8 [.425]	

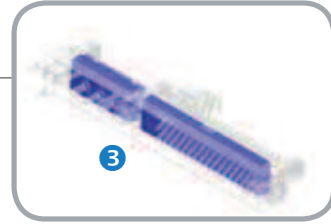
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SIAL Series

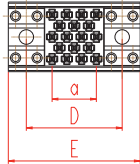


**SIAL >> SIGNAL VERSION (3)**

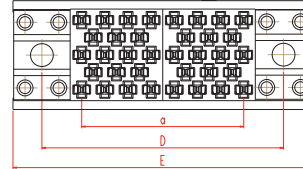
**TYPICAL ARRANGEMENTS**



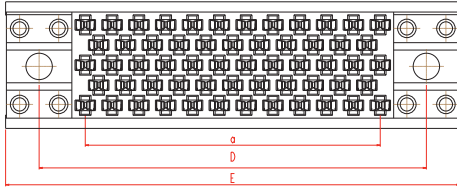
18 signal contacts



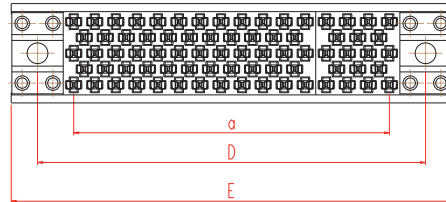
36 signal contacts



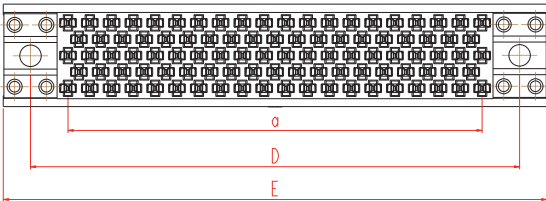
58 signal contacts



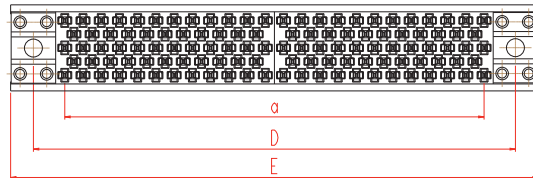
76 signal contacts



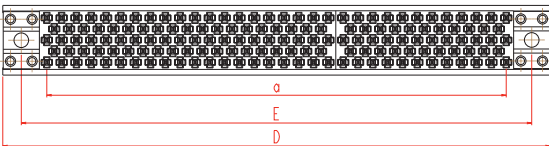
98 signal contacts



116 signal contacts



156 signal contacts

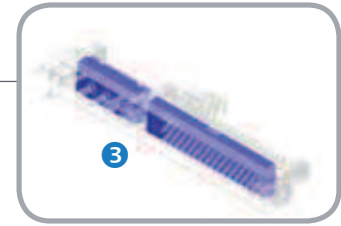


	18	36	58	76	98	116	156
<b>D</b>	16.51 [.650]	26.67 [1.050]	36.83 [1.450]	46.99 [1.850]	57.15 [2.250]	67.31 [2.650]	87.63 [3.450]
<b>E<sub>MAX</sub></b>	22.86 [.900]	33.02 [1.300]	43.18 [1.700]	53.34 [2.100]	63.5 [2.500]	73.66 [2.900]	93.98 [3.700]
<b>a</b>	7.62 [.340]	17.78 [.700]	27.94 [1.100]	38.1 [1.500]	48.26 [1.900]	58.42 [2.300]	81.28 [3.200]

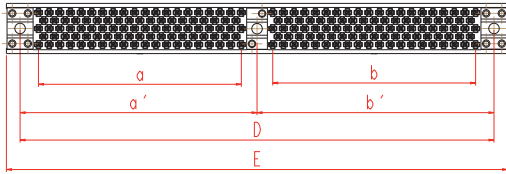
All dimensions are given for information only and are in mm [inch], except as otherwise specified

**SIAL >> SIGNAL VERSION (3)**

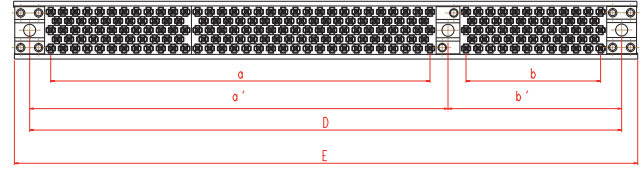
**TYPICAL ARRANGEMENTS**



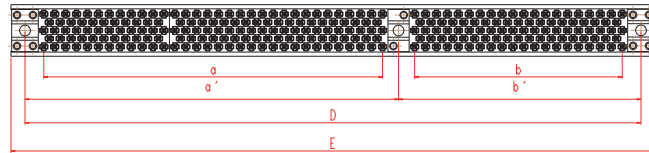
**196 signal contacts**



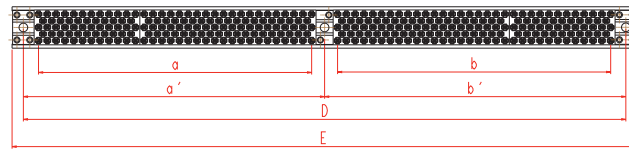
**214 signal contacts**



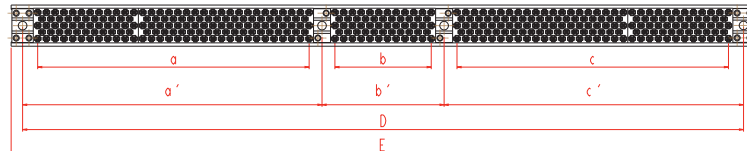
**254 signal contacts**



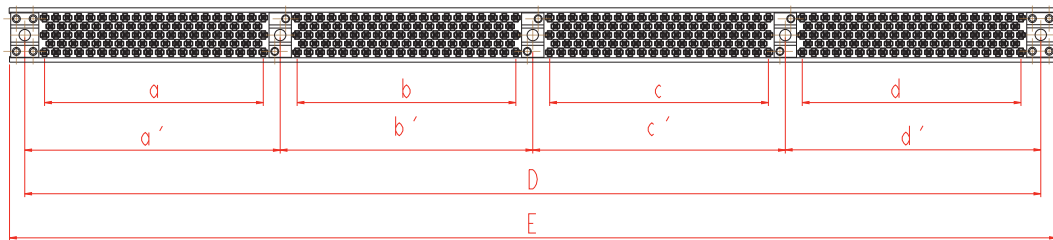
**312 signal contacts**



**370 signal contacts**



**392 signal contacts**

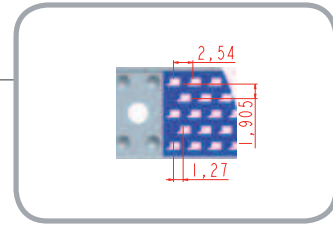


	196	214	254	312	370	392
<b>D</b>	113.03 [4.450]	123.19 [4.850]	143.51 [5.650]	173.99 [6.850]	209.55 [8.250]	224.79 [8.850]
<b>E<sub>MAX</sub></b>	119.38 [4.700]	129.54 [5.100]	149.86 [5.900]	180.34 [7.100]	215.9 [8.500]	231.14 [9.100]
<b>a</b>	48.26 [1.900]	81.28 [3.200]	81.28 [3.200]	81.28 [3.200]	81.28 [3.200]	48.26 [1.900]
<b>a'</b>	56.515 [2.225]	86.995 [3.425]	86.995 [3.425]	86.995 [3.425]	86.995 [3.425]	56.515 [2.225]
<b>b</b>	48.26 [1.900]	27.94 [1.100]	48.26 [1.900]	81.28 [3.200]	27.94 [1.100]	48.26 [1.900]
<b>b'</b>	56.515 [2.225]	36.195 [1.425]	56.515 [2.225]	86.995 [3.425]	35.56 [1.400]	55.88 [2.200]
<b>c</b>					81.28 [3.200]	48.26 [1.900]
<b>c'</b>					86.995 [3.425]	55.88 [2.200]
<b>d</b>						48.26 [1.900]
<b>d'</b>						56.515 [2.225]

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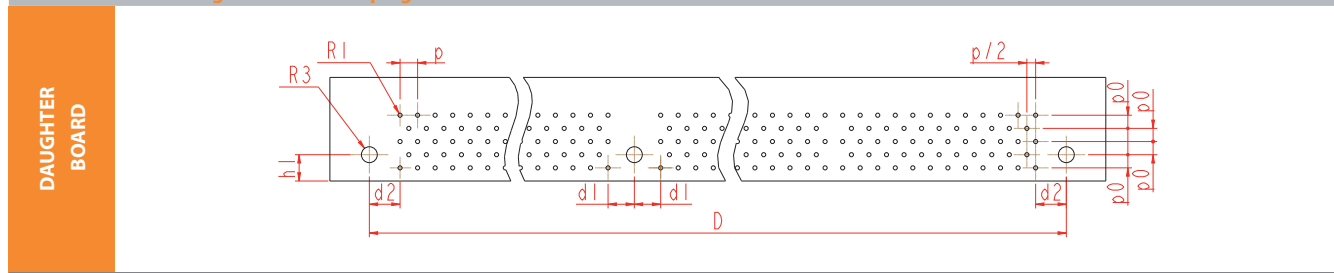
SIAL >> SIGNAL VERSION (S)

LAYOUTS

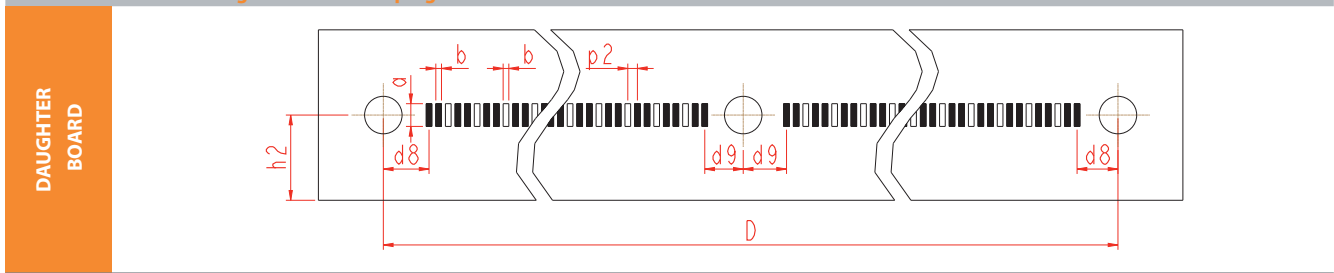


The boards are shown from the connector side  
All contact locations are equidistant.

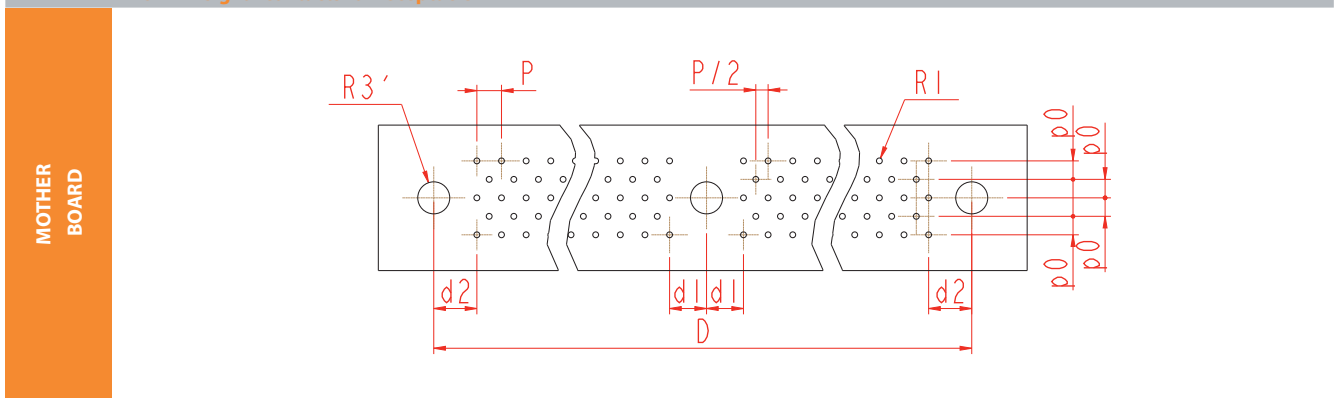
With YC signal contacts for plug



With U --- signal contacts for plug



With Y -- signal contacts for receptacle

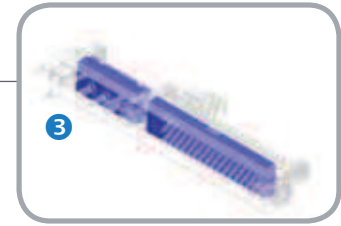


$R_1$	$R_3$	$R_3'$	$p$	$p/2$	$p_0$	$p_2$	$d_1$	$d_2$	$d_8$	$d_9$	$a$	$b$	$h_1$	$h_2$
$\varnothing 0.6_{MIN}$ [.024]	$\varnothing 2.3^{+0.15}_{-0.1}$ [.091 <sup>+</sup> .004]	$\varnothing 3.3$ [.130]	2.54 [.100]	1.27 [.050]	1.905 [.075]	0.85 [.033]	3.81 [.150]	4.445 [.175]	4.02 [.158]	3.39 [.133]	$2_{MAX}$ [.079]	$0.5_{MAX}$ [.020]	3.81 [.150]	3.81 [.150]

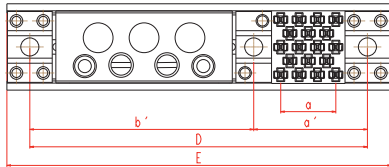
All dimensions are given for information only and are in mm [inch], except as otherwise specified

SIAL >> COAXIAL VERSION (3)

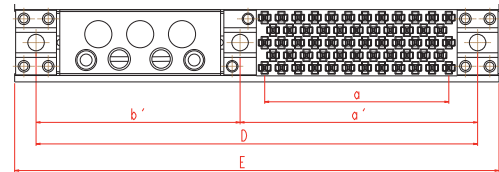
TYPICAL ARRANGEMENTS



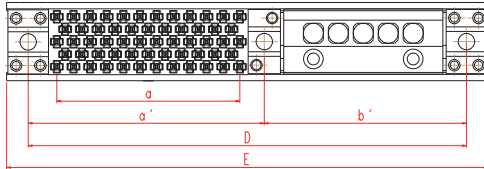
18 signal contacts + 3 coax



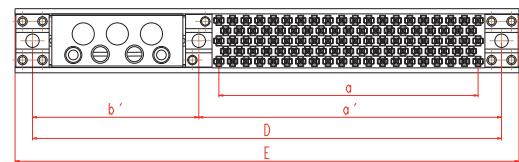
58 signal contacts + 3 coax



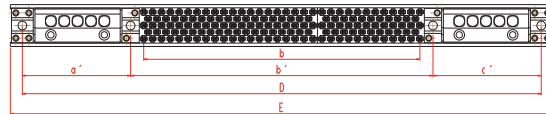
58 signal contacts + 5 coax



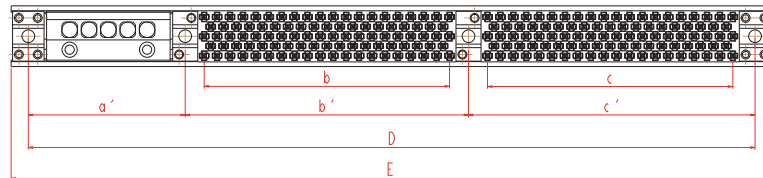
98 signal contacts + 3 coax



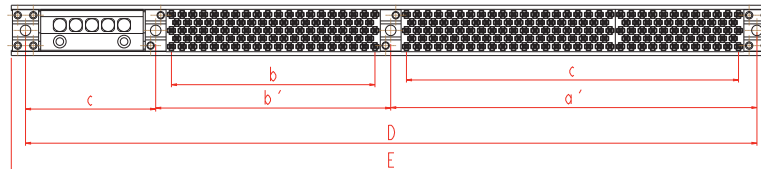
5 coax + 98 + 58 signal contacts + 5 coax



196 signal contacts + 5 coax



254 signal contacts + 5 coax



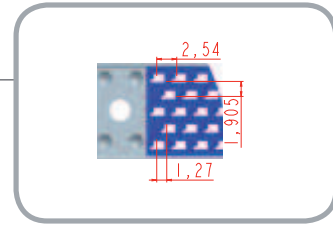
	18 + 3	58 + 3	58 + 5	98 + 3	5 + 98 + 58 + 5	196 + 5	254 + 5
<b>D</b>	46.99 [1.850]	67.31 [2.650]	67.31 [2.650]	87.63 [3.450]	148.59 [5.850]	143.51 [5.650]	173.99 [6.850]
<b>E<sub>MAX</sub></b>	53.34 [2.100]	73.66 [2.900]	73.66 [2.900]	93.98 [3.700]	154.94 [6.100]	149.86 [5.900]	180.34 [7.100]
<b>a</b>	7.62 [.340]	27.94 [1.100]	27.94 [1.100]	48.26 [1.900]	/	48.26 [1.900]	81.28 [3.200]
<b>a'</b>	15.875 [.625]	36.195 [1.425]	36.195 [1.425]	56.515 [2.225]	31.115 [1.225]	56.515 [2.225]	86.995 [3.425]
<b>b</b>	/	/	/	/	81.28 [3.200]	48.26 [1.900]	48.26 [1.900]
<b>b'</b>	31.115 [1.225]	31.115 [1.225]	31.115 [1.225]	31.115 [1.225]	86.36 [3.400]	55.88 [2.200]	55.88 [2.200]
<b>c</b>					31.115 [1.225]	31.115 [1.225]	31.115 [1.225]

All dimensions are given for information only and are in mm [inch], except as otherwise specified

**SIAL >> SIZE 16 COAXIAL VERSION (3)**

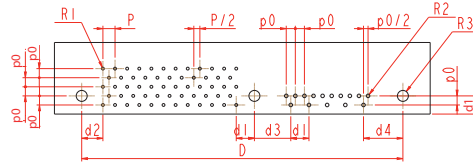
**LAYOUTS**

The boards are shown from the connector side  
All contact locations are equidistant.



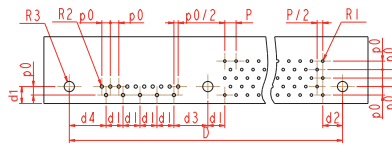
With Y0, male signal contacts and 5 coaxial contacts for plug

NX05-002  
DAUGHTER  
BOARD



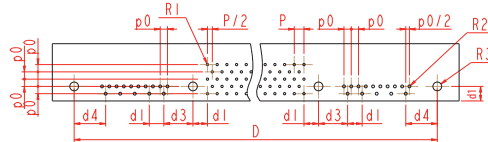
With Y0, male signal contacts and 5 coaxial contacts for plug

NX05-000  
DAUGHTER  
BOARD



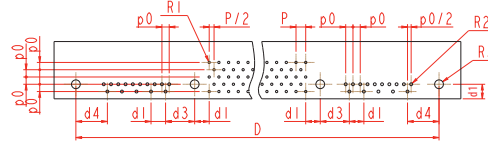
With Y0, male signal contacts and 10 coaxial contacts for plug

NX10-001  
DAUGHTER  
BOARD



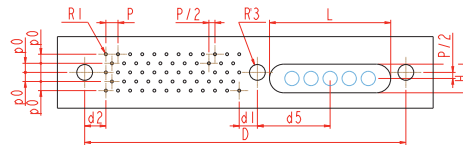
With Y0, male signal contacts and 10 coaxial contacts for plug

NX10-000  
DAUGHTER  
BOARD



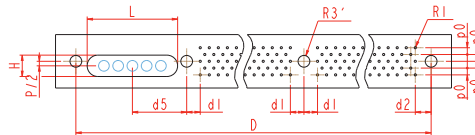
With Y09 female signal contacts and 5 coaxial contacts for receptacle

NT05-002  
MOTHER BOARD



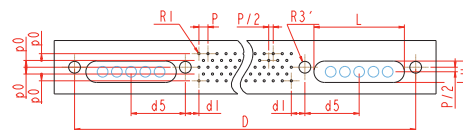
With Y09 female signal contacts and 5 coaxial contacts for receptacle

NT05-000  
MOTHER BOARD



With Y09 female signal contacts and 10 coaxial contacts for receptacle

NT10-000  
MOTHER BOARD

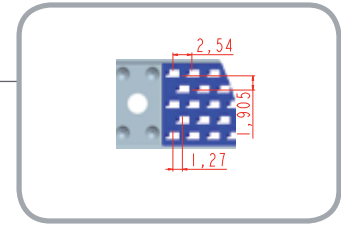


All dimensions are given for information only and are in mm [inch], except as otherwise specified

**SIAL >> SIZE 12 COAXIAL VERSION (3)**

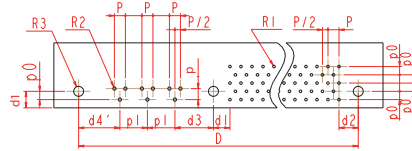
**LAYOUTS**

The boards are shown from the connector side  
All contact locations are equidistant.



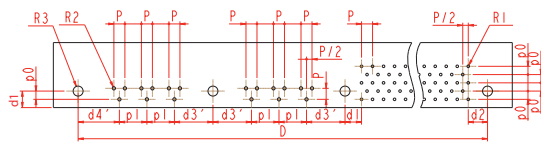
With Y male signal contacts and 3x320000 right angle dip solder coaxial contacts/plug

K(2)03-000  
DAUGHTER  
BOARD



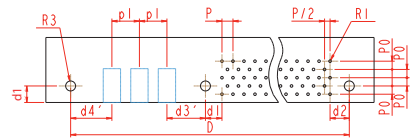
With Y0 male signal contacts and 6x320000 right angle dip solder coaxial contacts/plug

K(2)06-000  
DAUGHTER  
BOARD



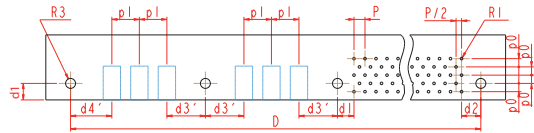
With Y male signal contacts and 3x900340 crimp coaxial contacts/plug

K(1)03-000  
DAUGHTER  
BOARD



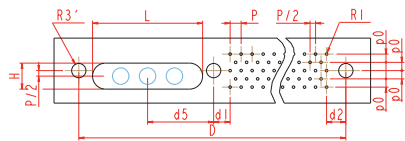
With Y0 male signal contacts and 6x900340 crimp coaxial contacts/plug

K(1)06-000  
DAUGHTER  
BOARD



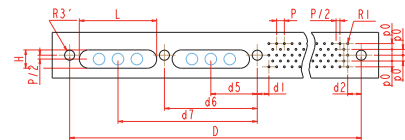
With Y09 female signal contacts and 3 coaxial contacts/receptacle

KT03-000  
MOTHER BOARD



With Y09 female signal contacts and 6 coaxial contacts/receptacle

KT06-000  
MOTHER BOARD

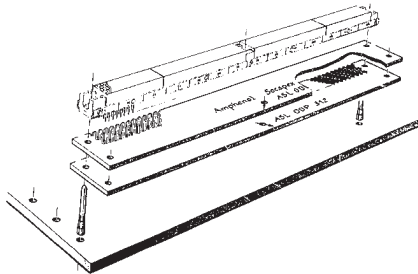


R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>3</sub> '	p	p/2	p <sub>1</sub>	p <sub>0</sub>	p <sub>0</sub> /2	L	H
Ø 0.6 <sub>MIN</sub> [.024]	Ø 0.75 <sub>MIN</sub> [.340]	Ø 2.3 <sup>+0.15</sup> <sub>-0.1</sub> [.091 <sup>+0.006</sup> <sub>-0.04</sub> ]	Ø 3.3 <sup>+0.15</sup> <sub>-0.1</sub> [.130 <sup>+0.006</sup> <sub>-0.04</sub> ]	2.54 [.100]	1.27 [.050]	6.35 [.250]	1.905 [.075]	0.9525 [.037]	25.4 <sub>MAX</sub> [1.000] 19 <sub>MIN</sub> [.748]	6 <sub>MIN</sub> [.236]
d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	d <sub>7</sub>	d <sub>3</sub> '	d <sub>4</sub> '		
3.81 [.150]	4.445 [.175]	7.62 [.300]	8.255 [.325]	15.24 [.600]	30.48 [1.200]	45.72 [1.800]	8.89 [.350]	9.525 [.375]		

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**SIAL >>> TOOLING**

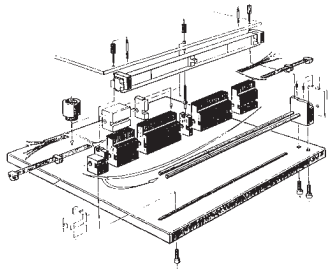
**Receptacle mounting on mother board (Y09)**



- Insertion of all connector sizes with Y09 dip solder contacts
- Into 0.6 mm [.024] thru plated holes
- Consult us for additional references

ASL ODP 058 ASL ODP 098 ASL ODP 116	ASL ODP 156 ASL ODP 254 ASL ODP 312
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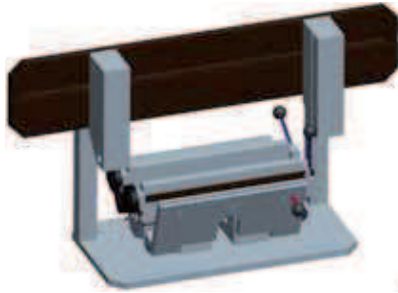
**Plug mounting on daughter board (Y01 or Y02)**



- Insertion of all connector sizes with Y01 or Y02 right angle dip solder contacts
- Into 0.6 mm [.024] thru plated holes
- Consult us for additional references

ASL ODI YC 312 ASL ODI YC 392
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**Plug mounting on daughter board (SMT)**



- Insertion of all connector sizes with U04, U05, U06, U07 or U08 SMT contacts (Surface Mount Terminations)
- Consult us for additional references

ASL ODI SMT
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**Mounting tool for size 16 coax contacts**



- On mother board or daughter board
- Consult us for additional references
- For ASLF \*\*\* \*\* NX05-002 and ASLF \*\*\* \*\* NX05-502 connectors, use the ASL ODP NX10 tool.

ASL ODP NX05
ASL ODP NX10

**Extraction tool for coax contacts**

Size 12



809839
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Size 16



ASL OD COAX FEMELLE TAILLE 16
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All dimensions are given for information only and are in mm [inch], except as otherwise specified

## SIAL &gt;&gt;&gt; TOOLING

## CRIMPING TOOL FOR 12-SIZE COAX CONTACTS

## Inner contact crimping tool



- For 12-size coaxial contacts
- Additional turret:  
PN 809932 (M22520/2-34)
- Military reference : M22520/2-01

Part number

809801

## Outer contact crimping tool



- For 12-size coaxial contacts
- Additional turret:  
PN 809927 (M22520/31-02)
- Military reference : M22520/3-1-01

Part number

809926

## INSERTION AND REMOVAL TOOLS FOR 12-SIZE COAX CONTACTS

## Insertion tool



- Size 12
- Metallic

Part number

809838

## Removal tool



- Size 12
- Metallic
- For 900340 and 900354 contacts

Part number

809839

## Insertion/Removal tool



- Size 12
- Plastic

Part number

809859

## Removal tool



- Size 12
- Metallic
- For 320001 contact

Part number

809933

All dimensions are given for information only and are in mm [inch], except as otherwise specified