



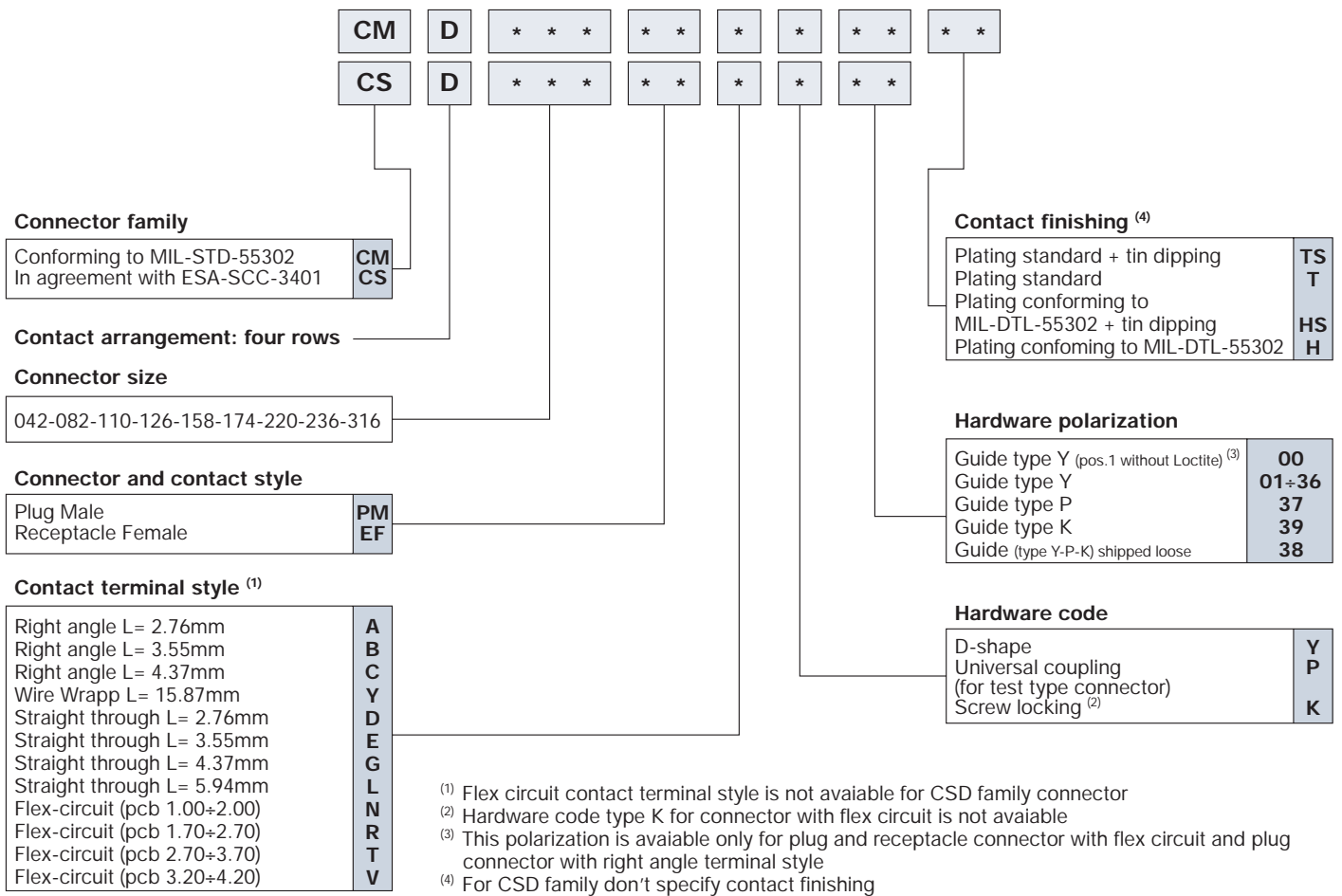
4 Contact Row High Density Signal Connectors

- Offset-grid contact layout, four contact rows within dielectric connector body, 1.905 mm center-to-center contact spacing in each row and 1.905 row-to-row spacing.
- 0.6 mm nominal pin DIA contact size; 42 to 316 contact positions; dip solder and SMT soldering contact termination types.
- High contact density, low connector weight, low mating force. High shock and vibration proof (no micro interruptions - test: 2ns).
- Conforms to MIL-DTL-55302 general requirements, and TPR 02013. CSD conforms to ESA specification.
- For Civil, Military, Aerospace and Space applications.

Technical Characteristics

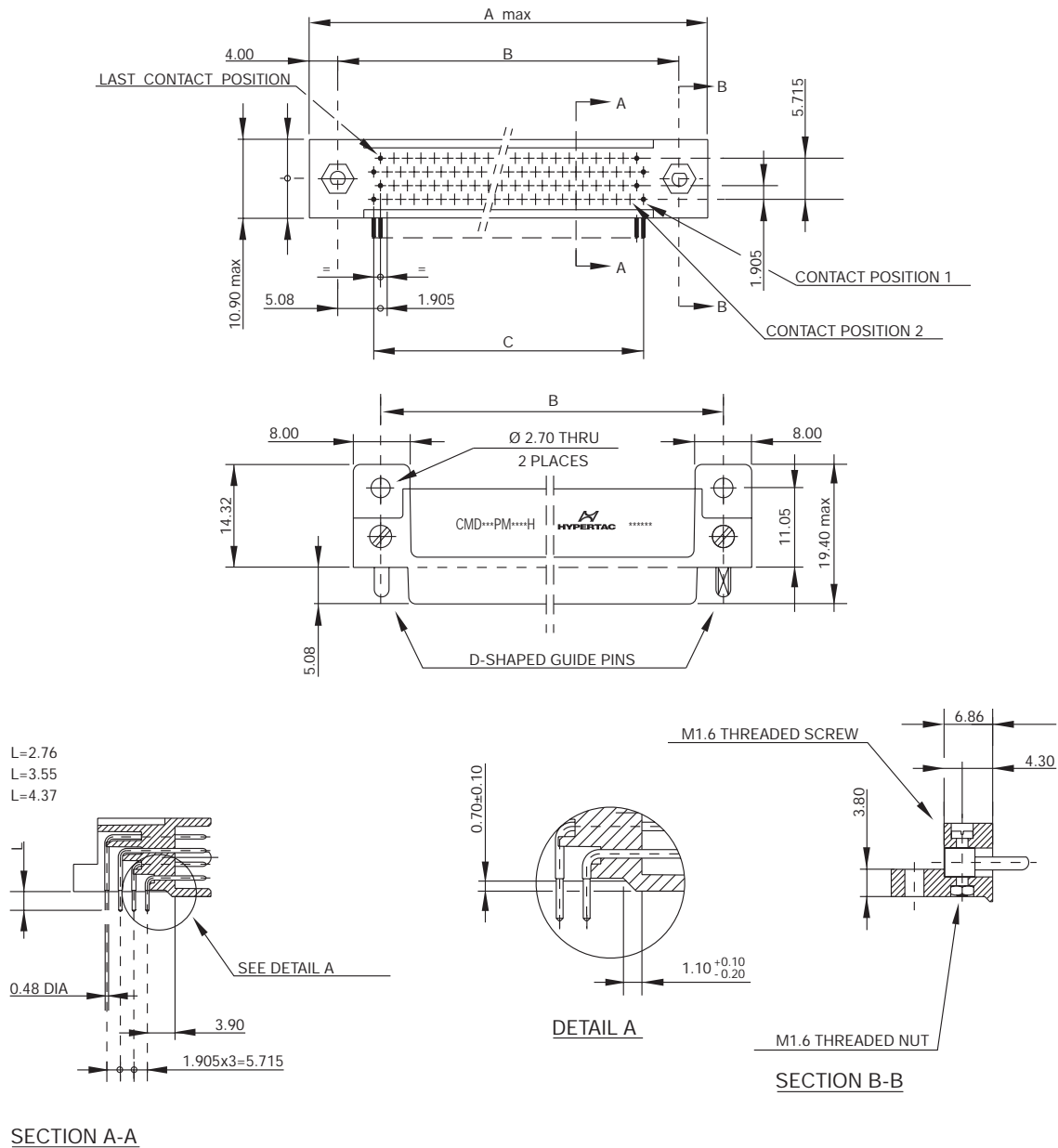
Contact Number	42, 82, 110, 126, 158, 174, 220, 236, 316
Contact Diameter	0.6 mm nominal pin DIA
Current Rating	3A
Contact Resistance	5.0 mΩ maximum individual
Engagement/ Withdrawal Forces	0.6 N nominal per contact
Contact Life Cycle	30.000 insertion and withdrawal cycles
Dielectric Withstanding Voltage	750 VRMS, 60 Hz - sea level
Temperature Range	-65 °C to +125 °C
Insulation Resistance	>5x10 ³ MΩ at 500 V dc
Insulator	- thermoplastic according to MIL-M-24519 Type GST 40 F; V-0/5VA per UL 94 - ESA SCC 3401 Outgassing requirements compliance
Contact - Material - Plating	Brass & BeCu Gold Plate
Hardware	stainless steel passivated or beryllium-copper alloy nickel plated
Plating Reference	according to MIL-DTL-55302 requirements

Ordering Information

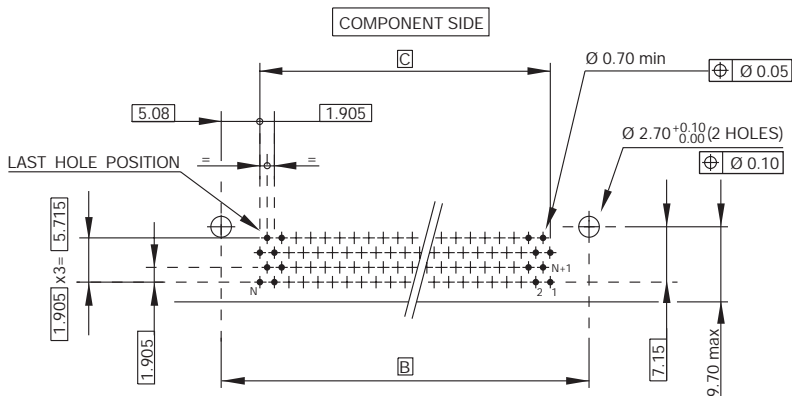


CONTACT POSITION	CONNECTOR STYLE	CONTACT TERMINAL TYPES AVAILABLE ARE:			
		DIP SOLDER		SURFACE MOUNT TAIL	WIRE WRAP POST
		(STRAIGHT THRU)	(RIGHT ANGLE)		
42	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Yes Yes	Yes Yes	Check Firm Check Firm	No Yes
82	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Yes Yes	Yes Yes	Check Firm Check Firm	No Yes
110	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Yes Yes	Yes Yes	Yes Check Firm	No Yes
126	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Yes Yes	Yes Yes	Check Firm Check Firm	No Yes
158	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Yes Yes	Yes Yes	Yes Yes	No Yes
174	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Yes Yes	Yes Yes	Yes Yes	No Yes
220	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Check Firm Yes	Yes Yes	Check Firm Check Firm	No Yes
236	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Check Firm Yes	Yes Yes	Yes Yes	No Yes
316	Plug connector pin contacts equipped Receptacle connector socket contacts equipped	Check Firm Yes	Yes Yes	Yes Yes	No Yes

Plug connector 42 to 174 ways, dip solder, right angle, termination style



Plug connector: 42,82,110,126,158,174, pin contact positions, 1.905 mm spacing, dip solder (right angle) termination style.

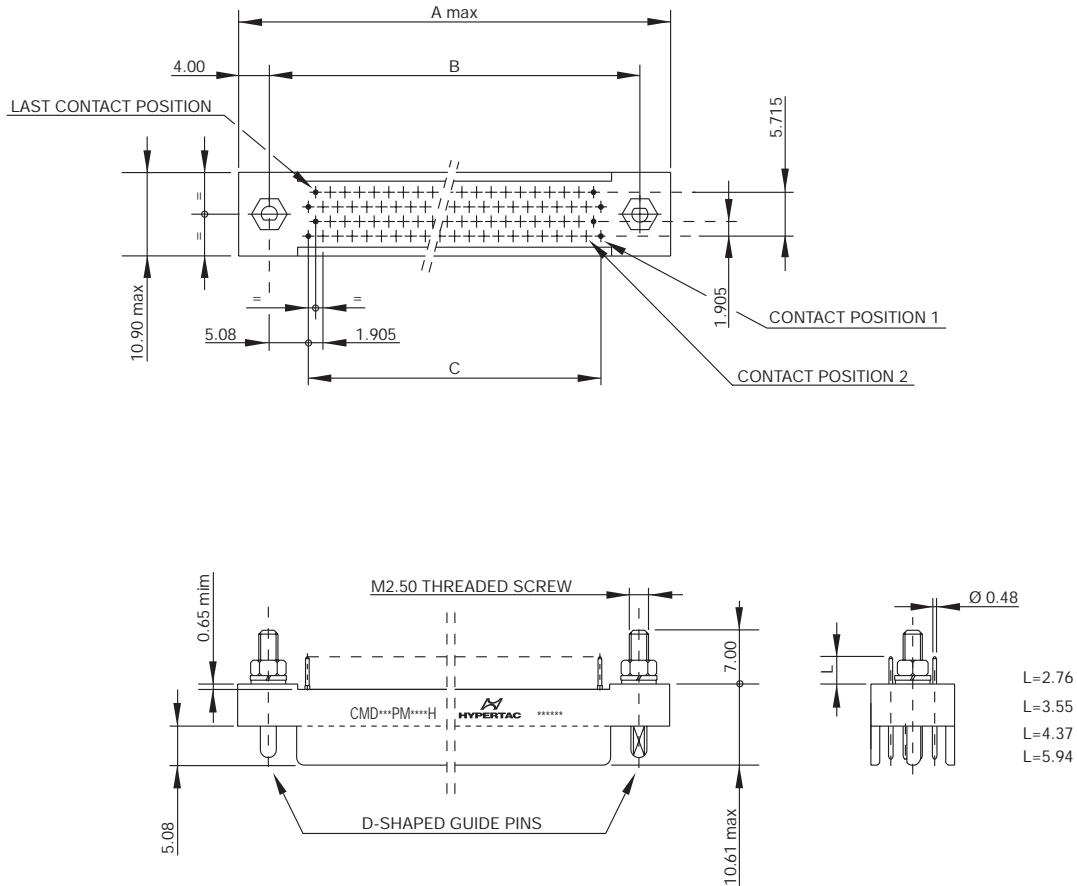


Mounting pattern, daughterboard application, (recommended PCB hole configuration).

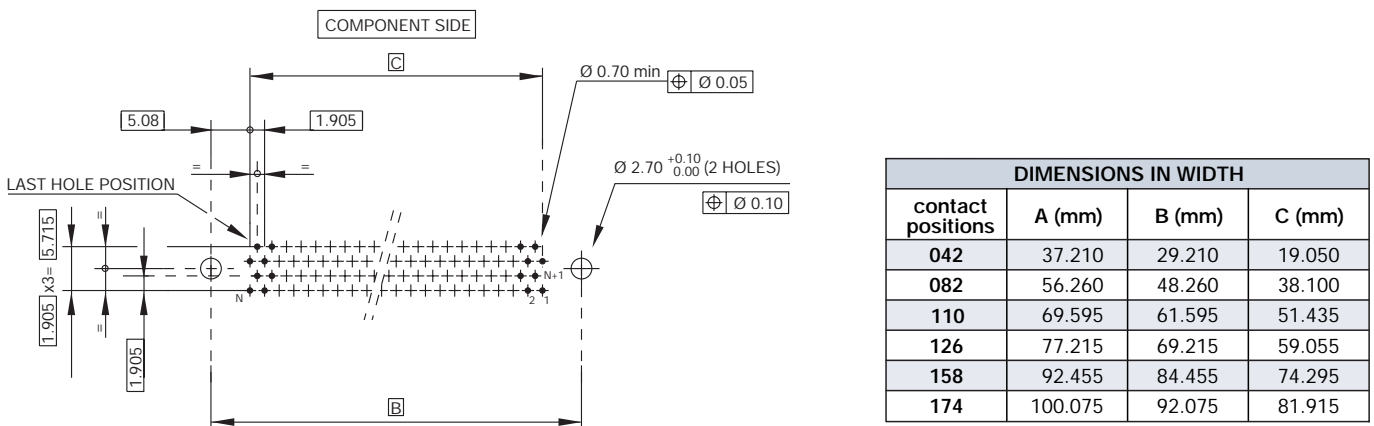
DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
042	37.210	29.210	19.050
082	56.260	48.260	38.100
110	69.595	61.595	51.435
126	77.215	69.215	59.055
158	92.455	84.455	74.295
174	100.075	92.075	81.915

Dimensions are in mm

Plug connector 42 to 174 contacts, dip solder, straight through, termination style

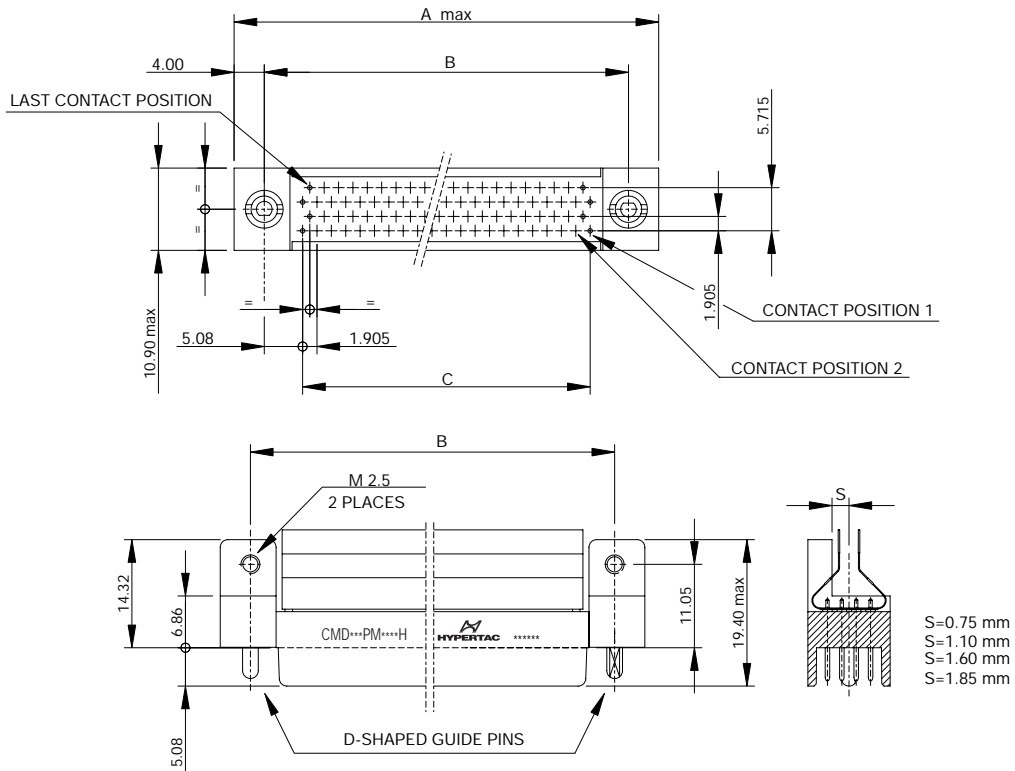


Plug connector: 42, 82, 110, 126, 158, 174, pin contact positions, 1.905 mm spacing, dip solder (straight) termination style.

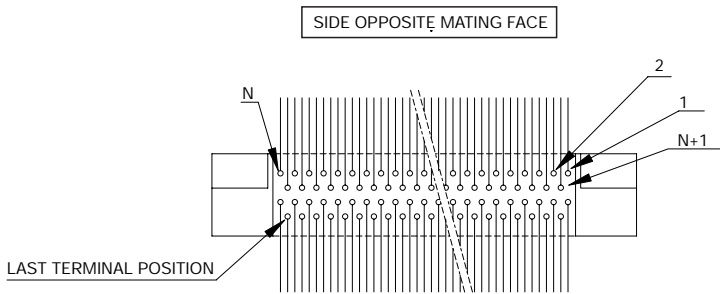


Mounting pattern, in parallel arrangement board-to-board connection, (recommended PCB hole configuration).

Plug connector 42 to 174 contacts, surface mount termination style

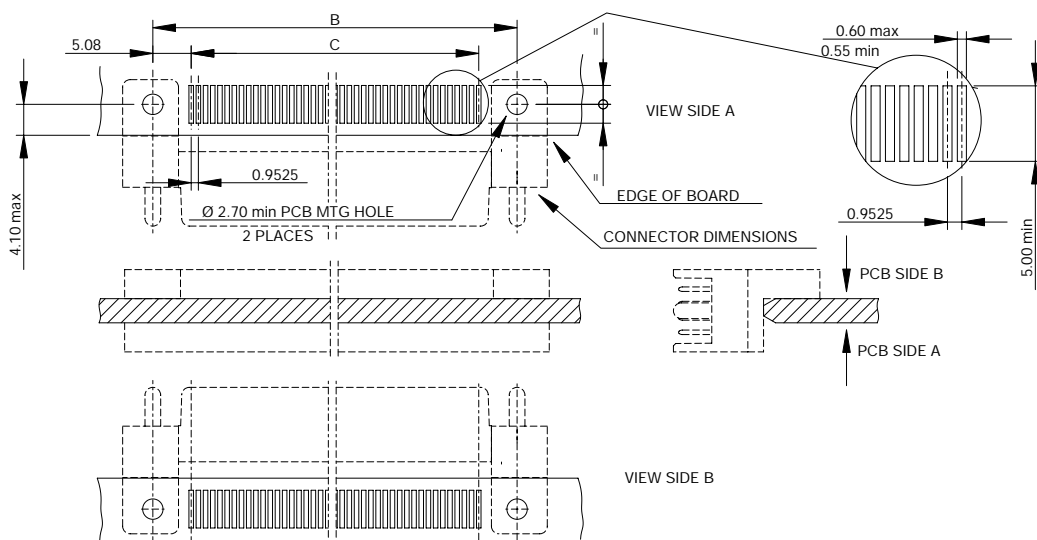


Plug connector: 42, 82, 110, 126, 158, 174, pin contact positions, 1.905 mm spacing, board package thickness from 1.00 to 4.20 mm.



Contact pattern numbering.

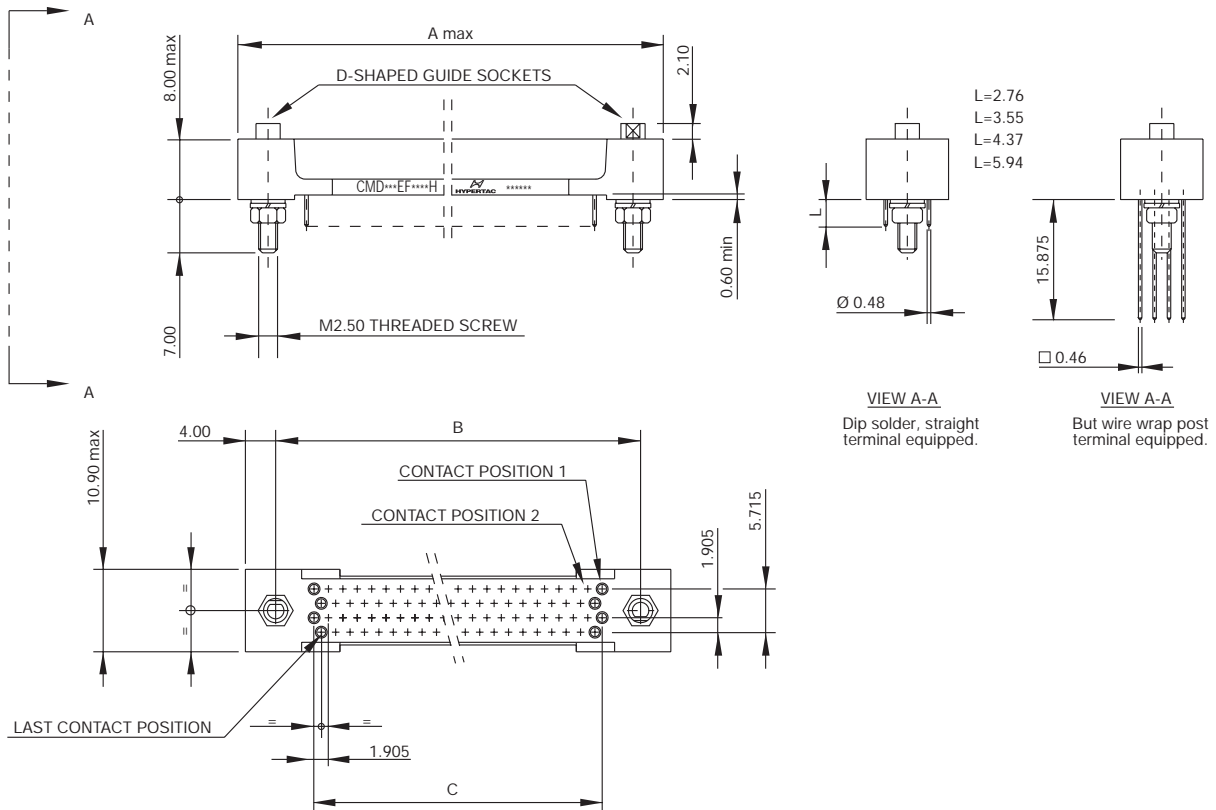
DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
042	37.210	29.210	19.050
082	56.260	48.260	38.100
110	69.595	61.595	51.435
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158	92.455	84.455	74.295
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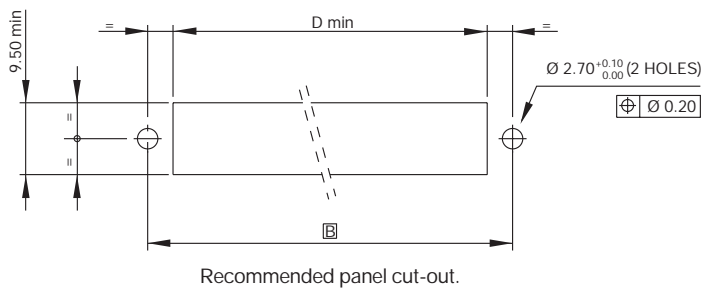
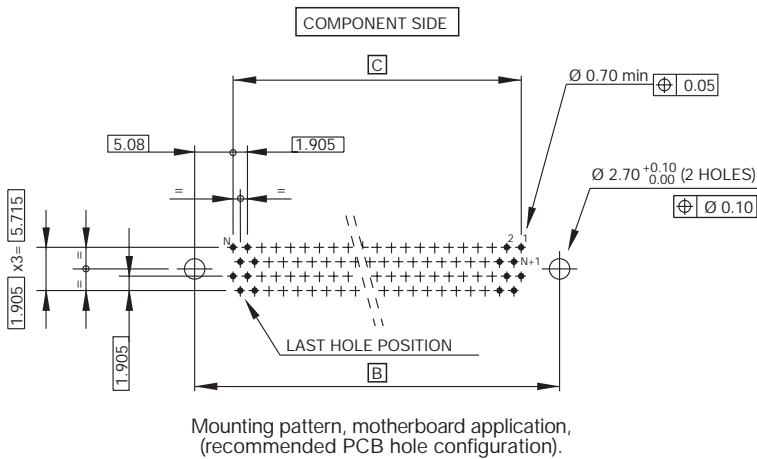
Mounting pattern, daughterboard application.

Dimensions are in mm

Receptacle connector 42 to 174 contacts

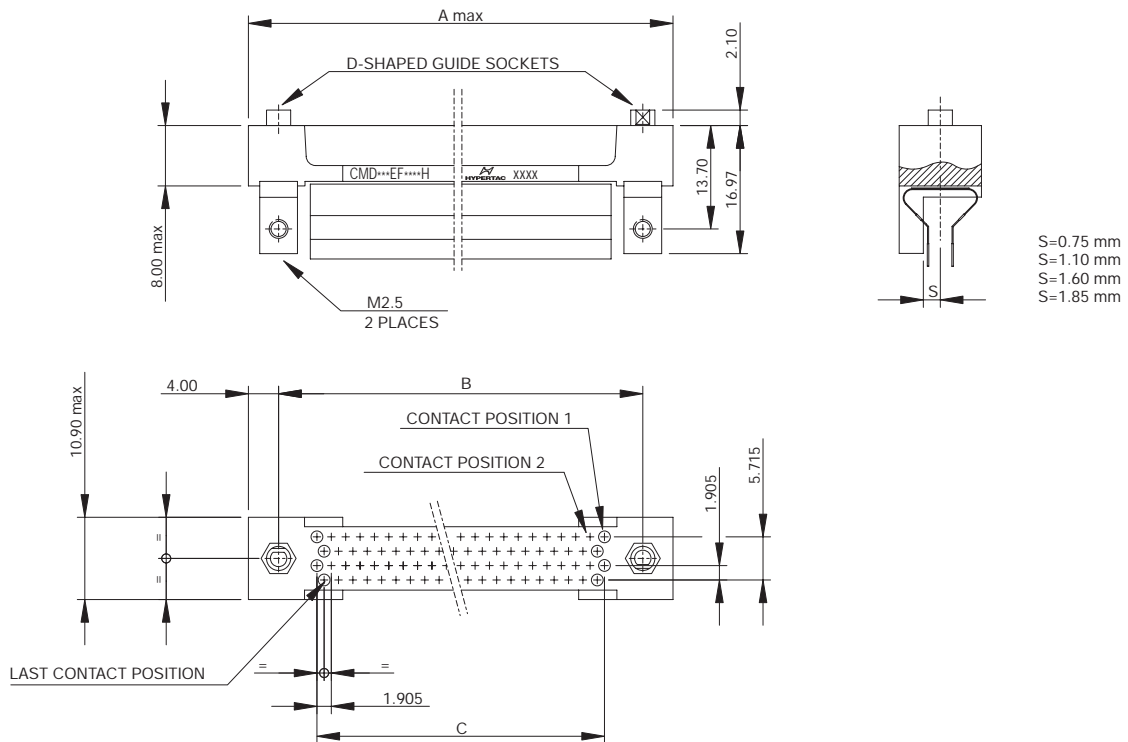


Receptacle connector: 42,82,110,126,158,174, socket contact positions, 1.905 mm spacing, dip solder (straight) and wire wrap post termination style.

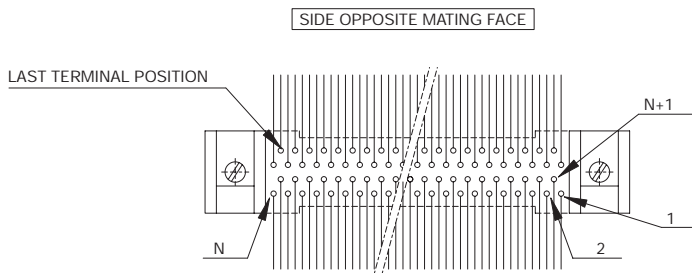


DIMENSIONS IN WIDTH				
contact positions	A (mm)	B (mm)	C (mm)	D (mm)
042	37.210	29.210	19.050	22.50
082	56.260	48.260	38.100	41.60
110	69.595	61.595	51.435	54.90
126	77.215	69.215	59.055	62.50
158	92.455	84.455	74.295	77.90
174	100.075	92.075	81.915	85.40

Receptacle connector 42 to 174 contacts, surface mount tail termination style

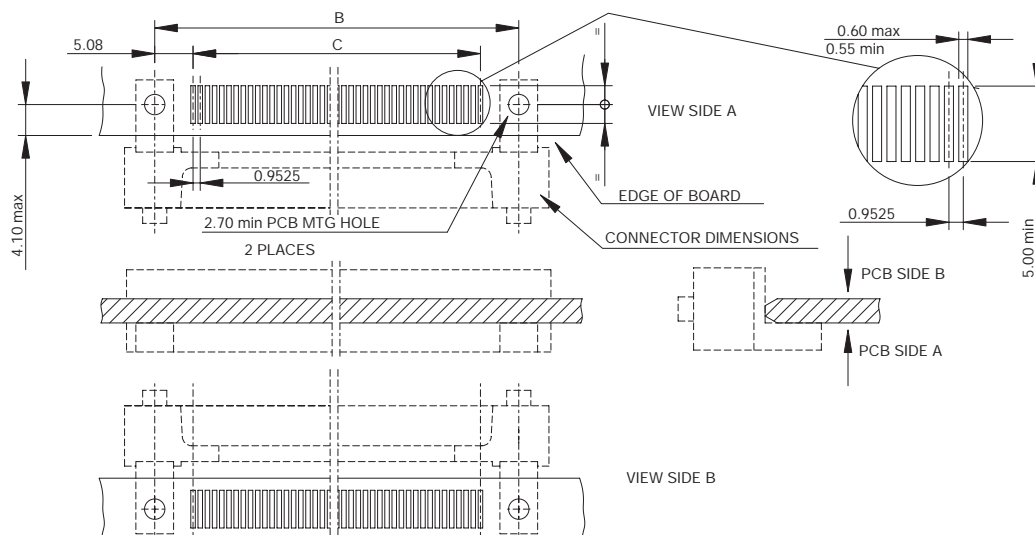


Receptacle connector: 42,82,110,126,158,174, socket contact positions, 1.905 mm spacing, board package thickness from 1.00 to 4.20 mm.



DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
042	37.210	29.210	19.050
082	56.260	48.260	38.100
110	69.595	61.595	51.435
126	77.215	69.215	59.055
158	92.455	84.455	74.295
174	100.075	92.075	81.915

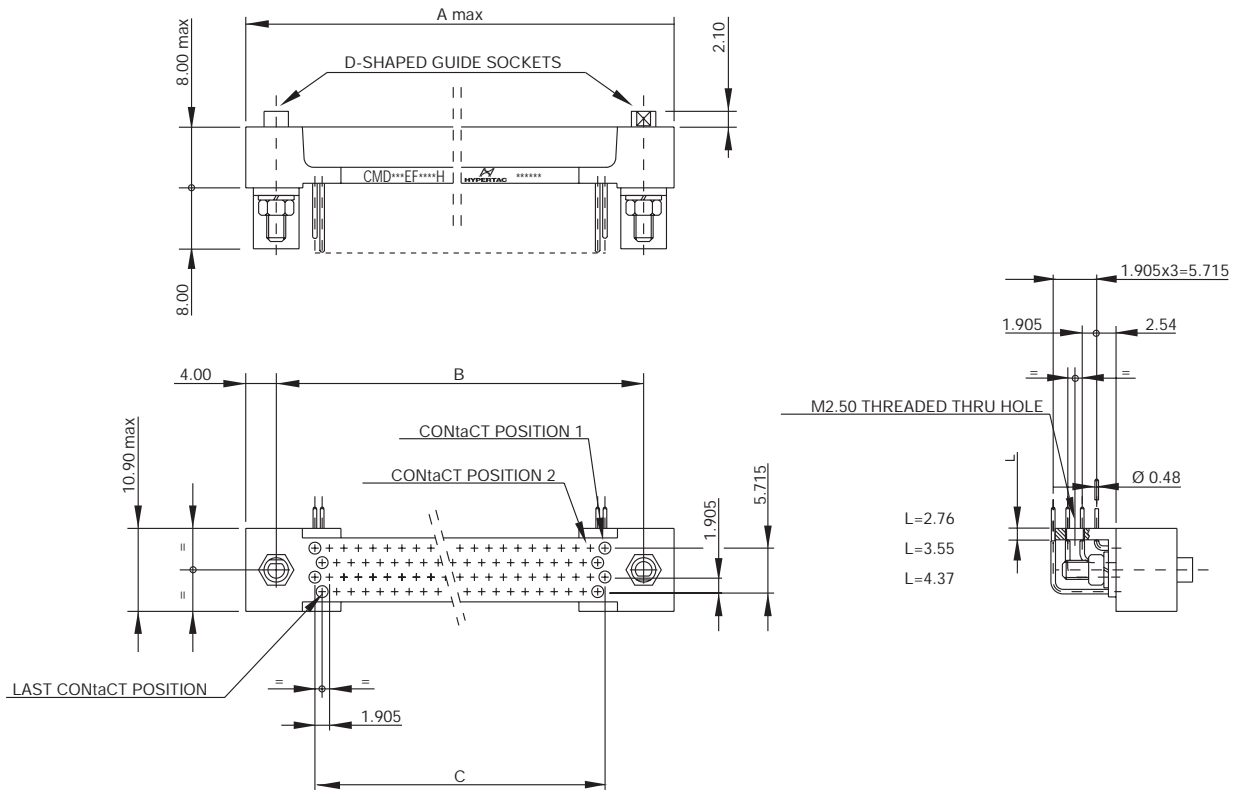
Contact pattern numbering.



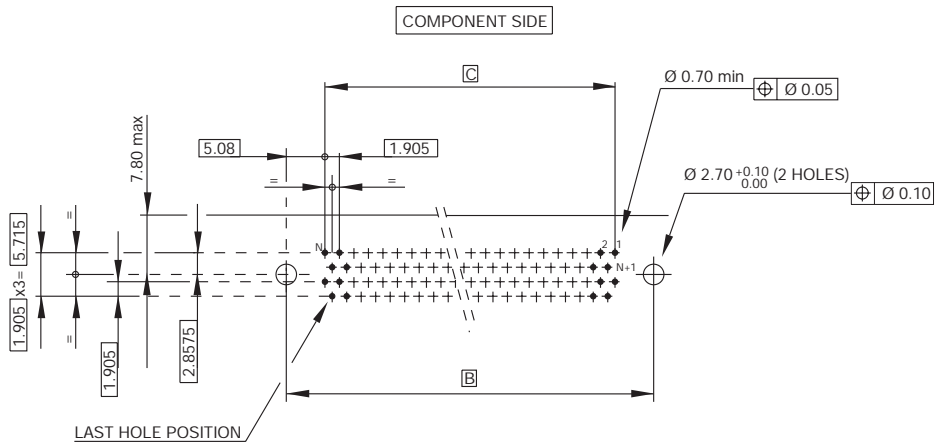
Mounting pattern, daughterboard application.

Dimensions are in mm

Receptacle connector 42 to 174 contacts, dip solder, right angle, termination style



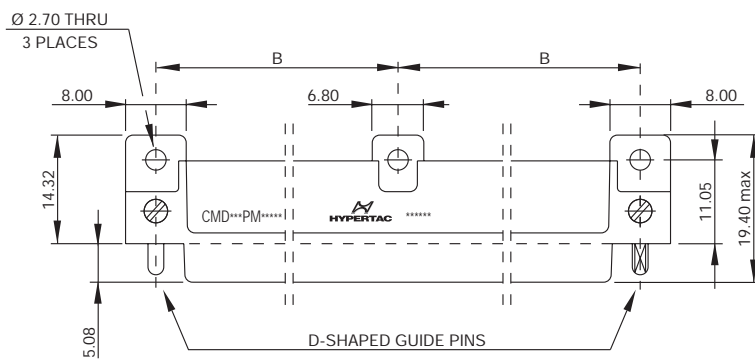
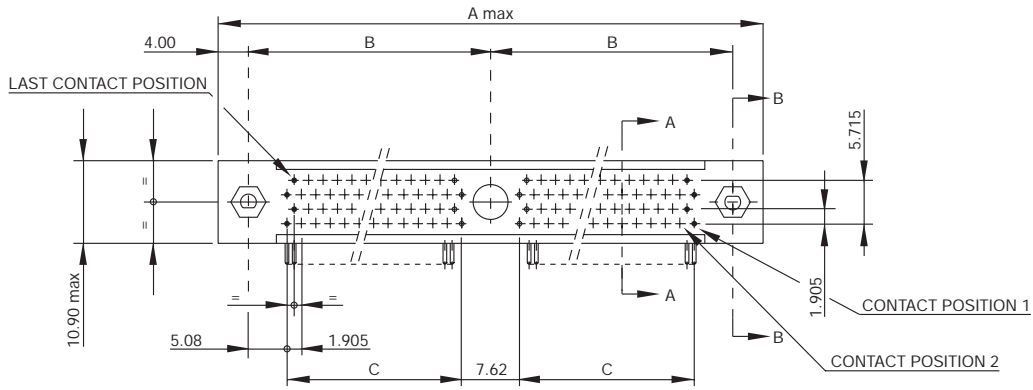
Receptacle connector: 42, 82, 110, 126, 158, 174, socket contact positions, 1.905 mm spacing, dip solder (right angle) termination style.



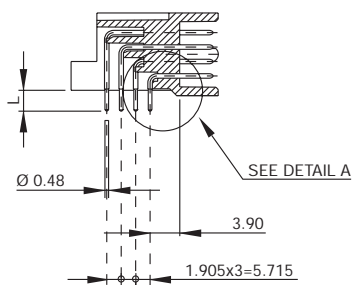
Mounting pattern, extender board and in line board-to-board applications, (recommended PCB hole configuration).

DIMENSIONS IN WIDTH				
contact positions	A (mm)	B (mm)	C (mm)	D (mm)
042	37.210	29.210	19.050	22.50
082	56.260	48.260	38.100	41.60
110	69.595	61.595	51.435	54.90
126	77.215	69.215	59.055	62.50
158	92.455	84.455	74.295	77.90
174	100.075	92.075	81.915	85.40

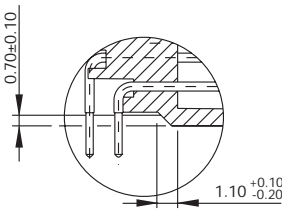
Plug connector: 220, 236 and 316 contacts, dip solder, right angle, termination style



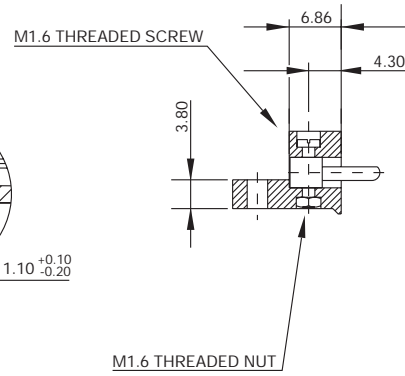
L=2.76
L=3.55
L=4.37



SECTION A-A

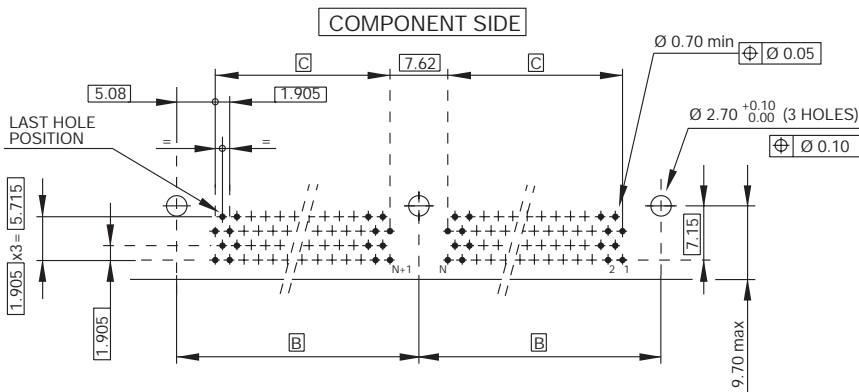


DETAIL A



SECTION B-B

Plug connector: 220, 236, 316 pin contact positions, 1.905 mm spacing, dip solder (right angle) termination style.

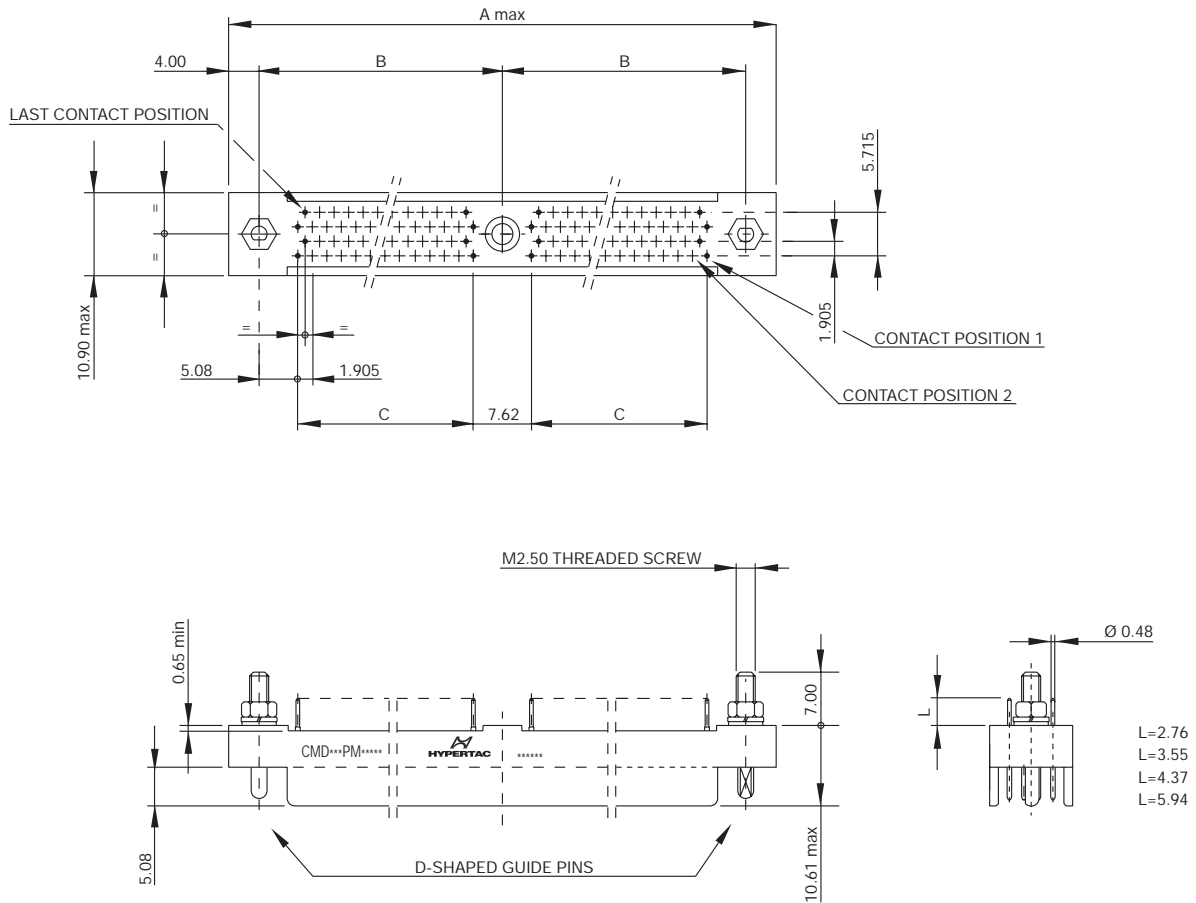


Mounting pattern, daughterboard application, (recommended PCB hole configuration).

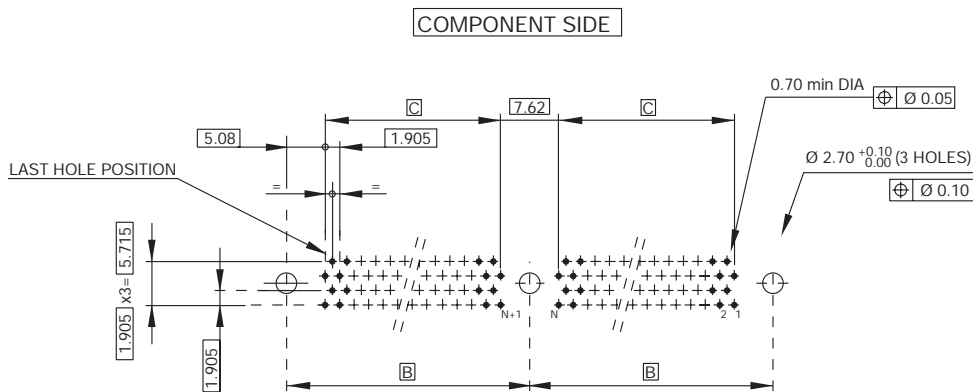
DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
220	128.650	60.325	51.435
236	136.270	64.135	55.245
316	174.370	83.185	74.295

Dimensions are in mm

Plug connector: 220, 236 and 316 contacts, dip solder, straight through, termination style



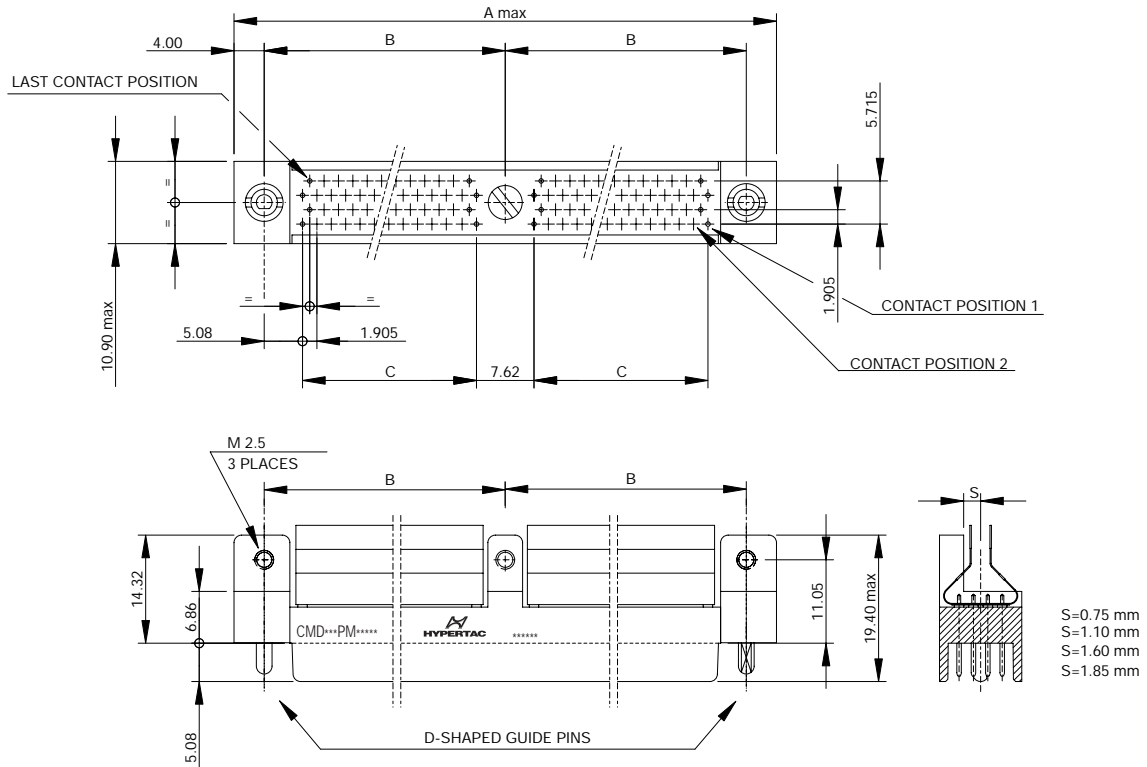
Plug connector: 220, 236, 316 pin contact positions, 1.905 mm spacing, dip solder (straight) termination style.



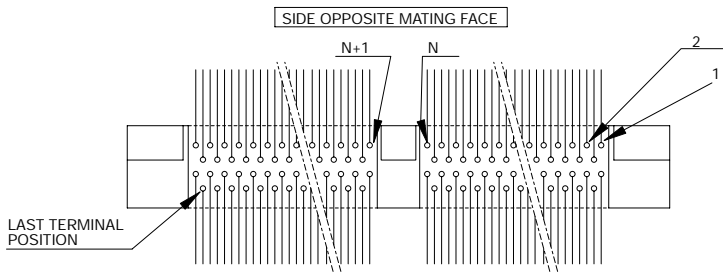
Mounting pattern, in parallel arrangement board-to-board connection, (recommended PCB hole configuration).

DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
220	128.650	60.325	51.435
236	136.270	64.135	55.245
316	174.370	83.185	74.295

Plug connector: 220, 236 and 316 contacts, surface mount tail termination style

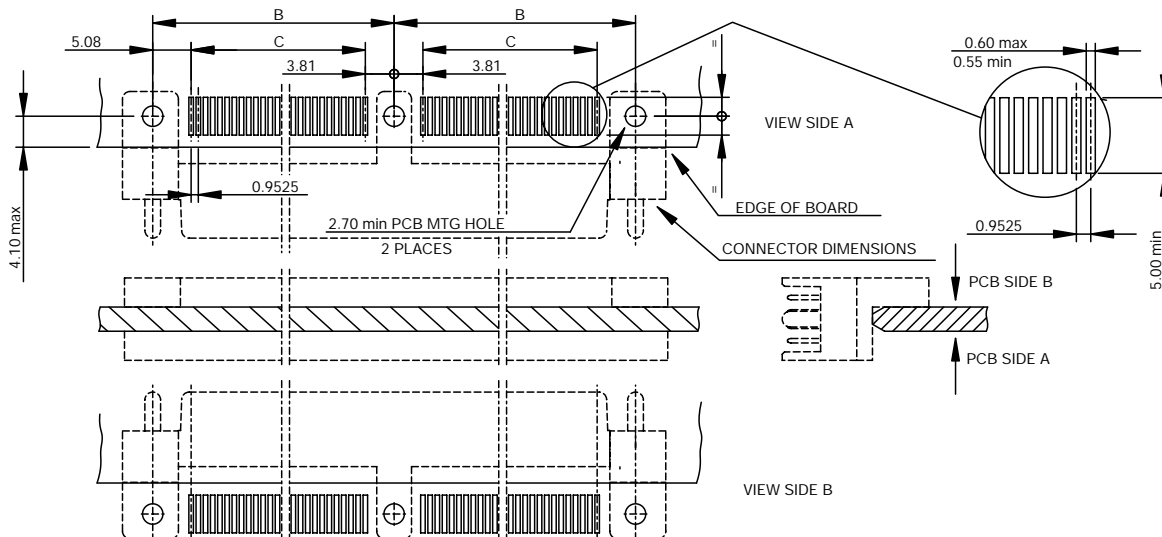


Plug connector: 220, 236, 316 pin contact positions, 1.905 mm spacing, board package thickness from 1.00 to 4.20 mm.



Contact pattern numbering.

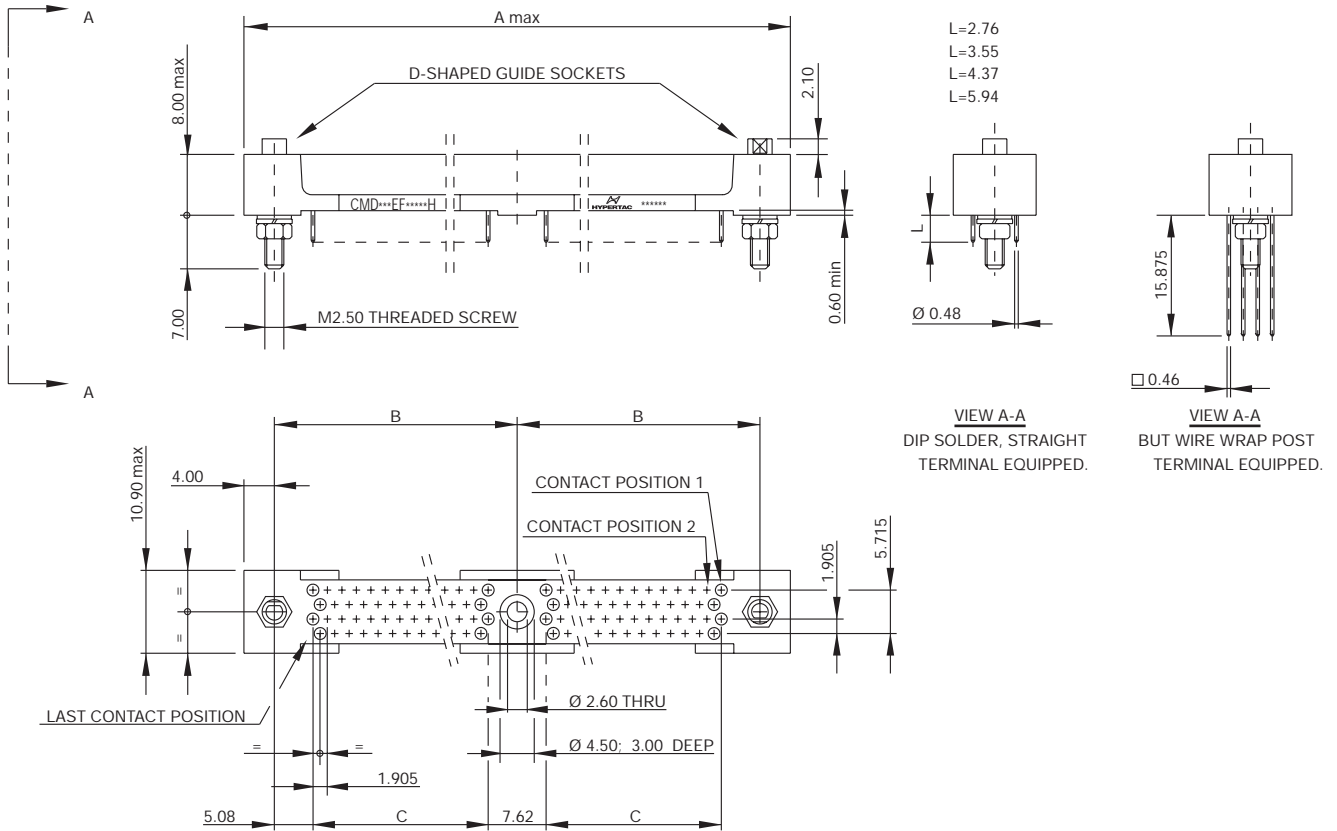
DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
220	128.650	60.325	51.435
236	136.270	64.135	55.245
316	174.370	83.185	74.295



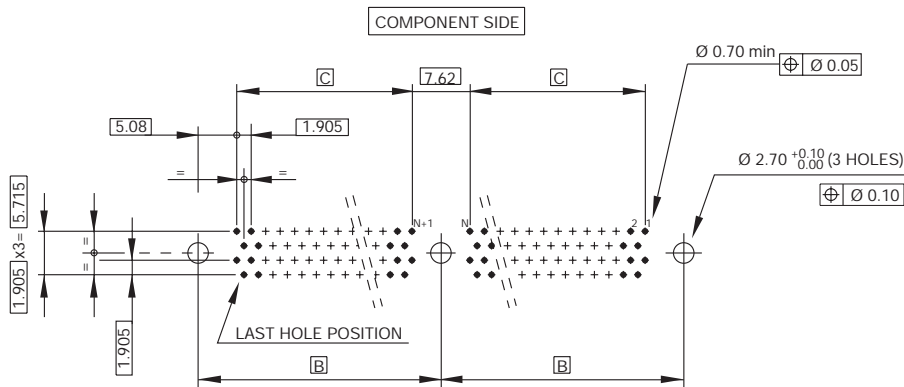
Mounting pattern, daughterboard application.

Dimensions are in mm

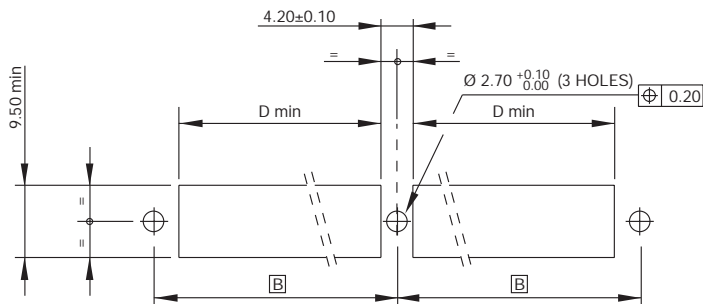
Receptacle connector 220, 236 and 316 contacts



Receptacle connector: 220, 236, 316 socket contact positions, 1.905 mm spacing, dip solder (straight) and wire wrap post termination style.



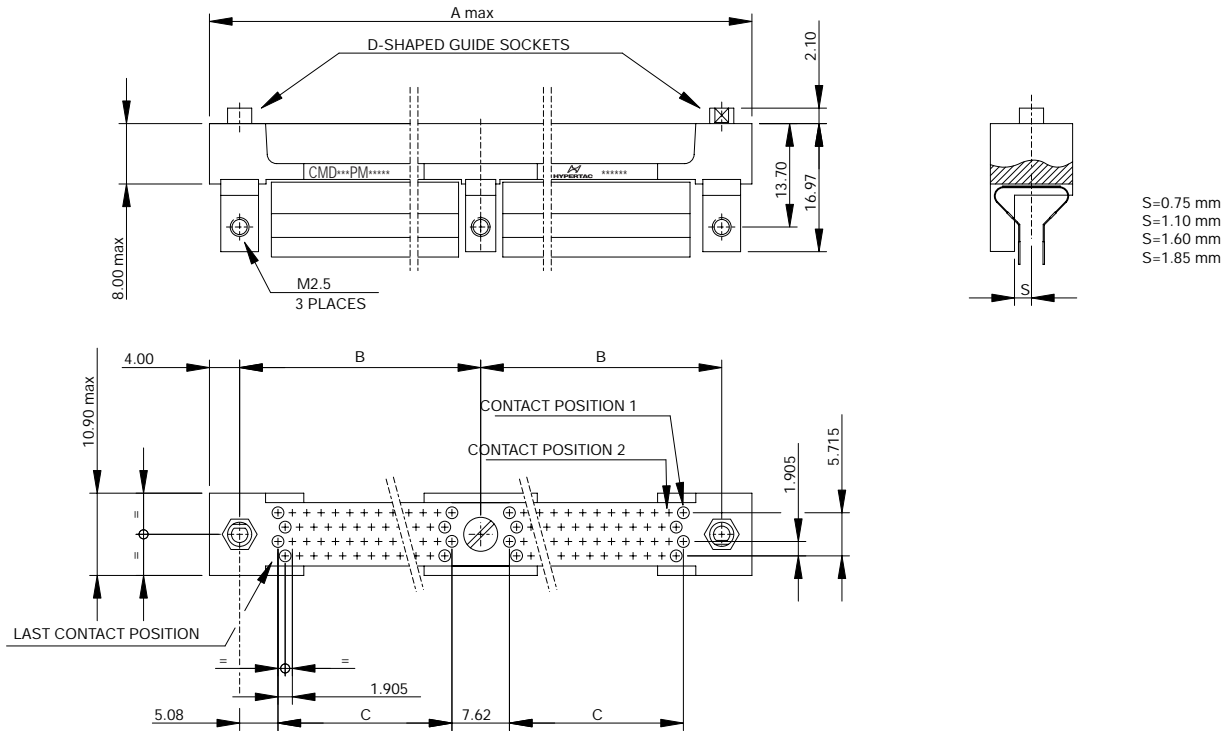
Mounting pattern, motherboard application, (recommended PWB hole configuration).



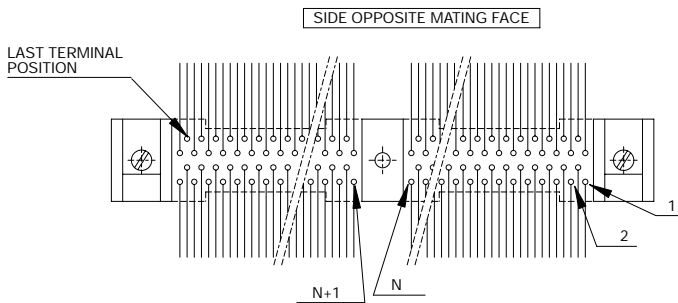
Recommended panel cut-out.

DIMENSIONS IN WIDTH				
contact positions	A (mm)	B (mm)	C (mm)	D (mm)
220	128.650	60.325	51.435	54.90
236	136.270	64.135	55.245	58.70
316	174.370	83.185	74.295	77.70

Receptacle connector 220, 236 and 316 contacts, surface mount tail termination style

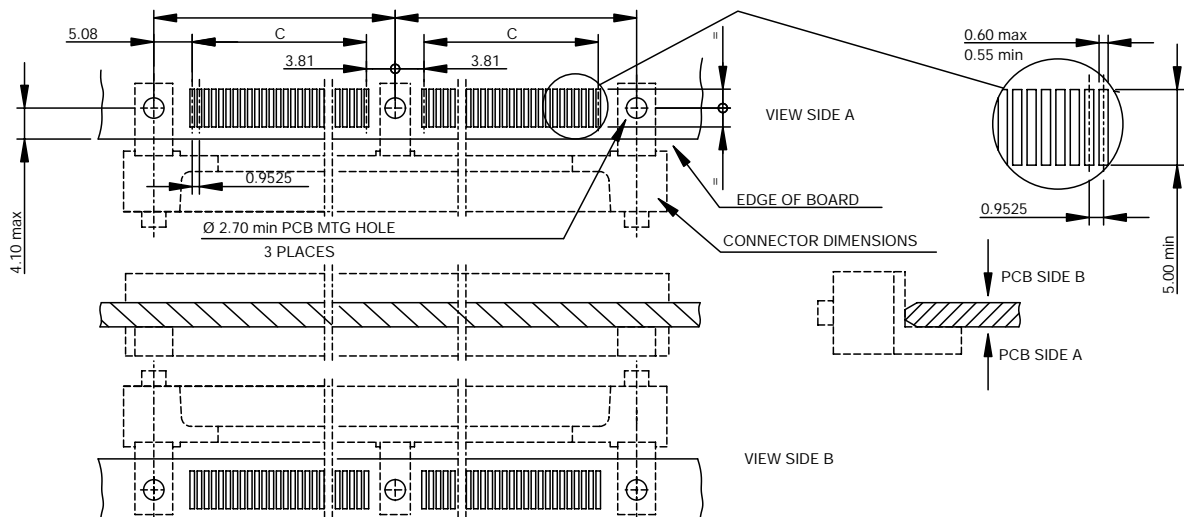


Receptacle connector: 220, 236, 316 socket contact positions, 1.905 mm spacing, board package thickness from 1.00 to 4.20 mm.



Contact pattern numbering.

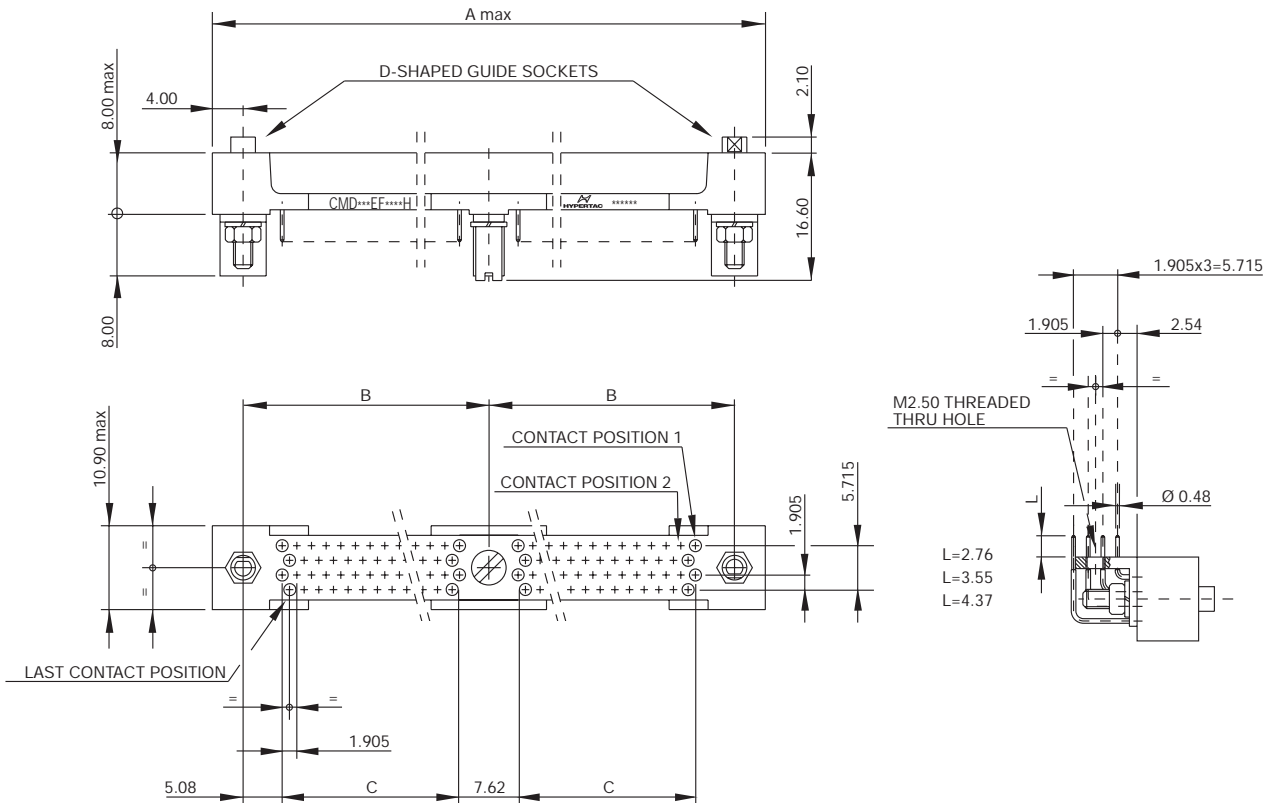
DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
220	128.650	60.325	51.435
236	136.270	64.135	55.245
316	174.370	83.185	74.295



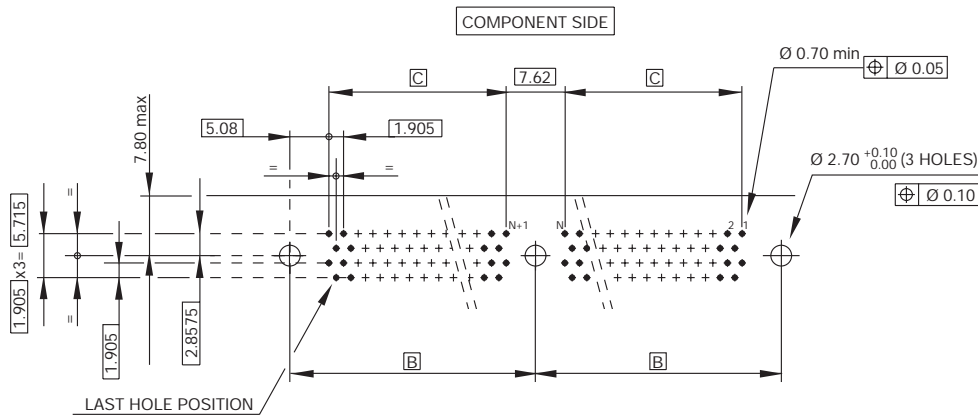
Mounting pattern, daughterboard application.

Dimensions are in mm

Receptacle connector 220, 236 and 316 contacts, dip solder, straight through, termination style



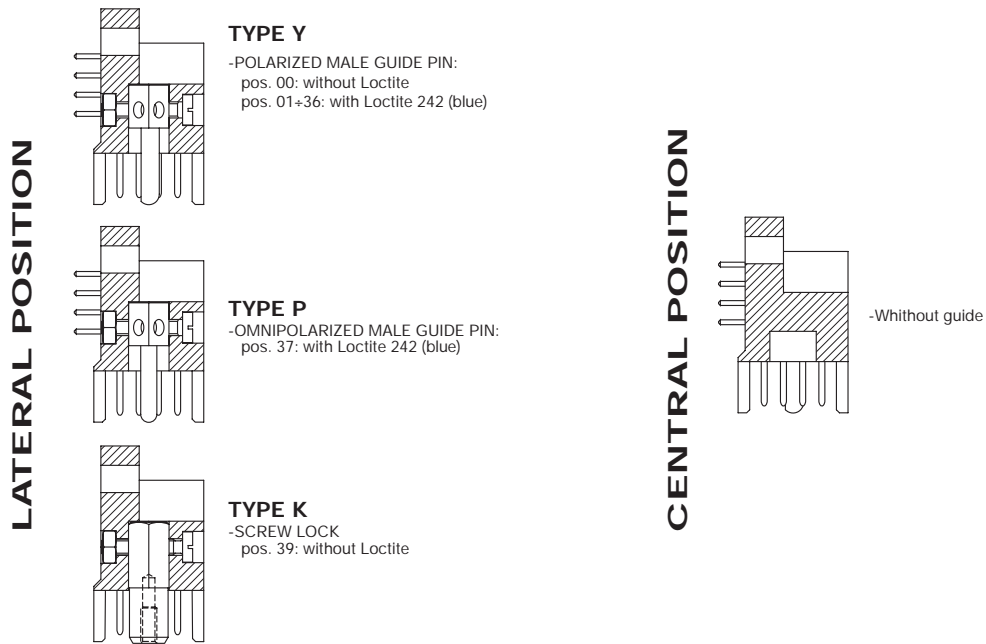
Receptacle connector: 220, 236, 316 socket contact positions, 1.905 mm spacing, dip solder (right angle) termination style.



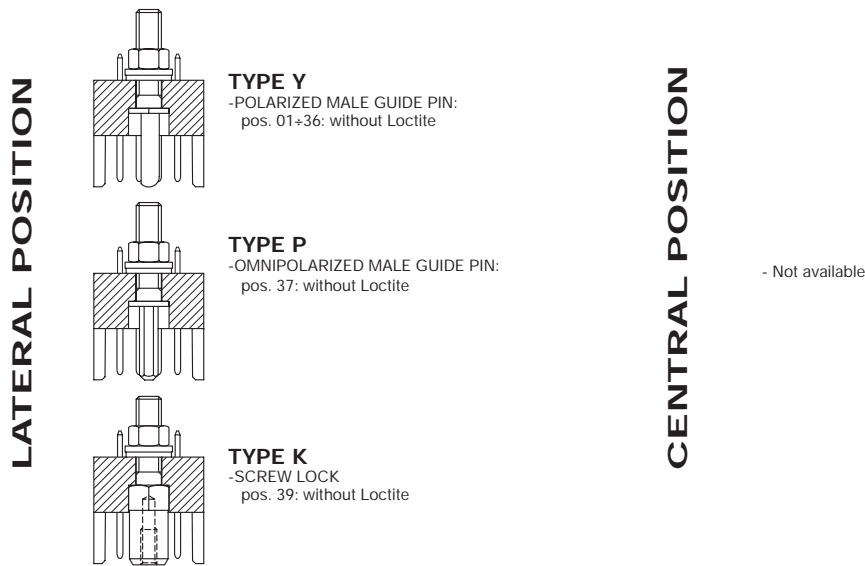
Mounting pattern, extender board and in line board-to-board applications, (recommended PCB hole configuration).

DIMENSIONS IN WIDTH			
contact positions	A (mm)	B (mm)	C (mm)
236	128.650	60.325	51.435
220	136.270	64.135	55.245
316	174.370	83.185	74.295

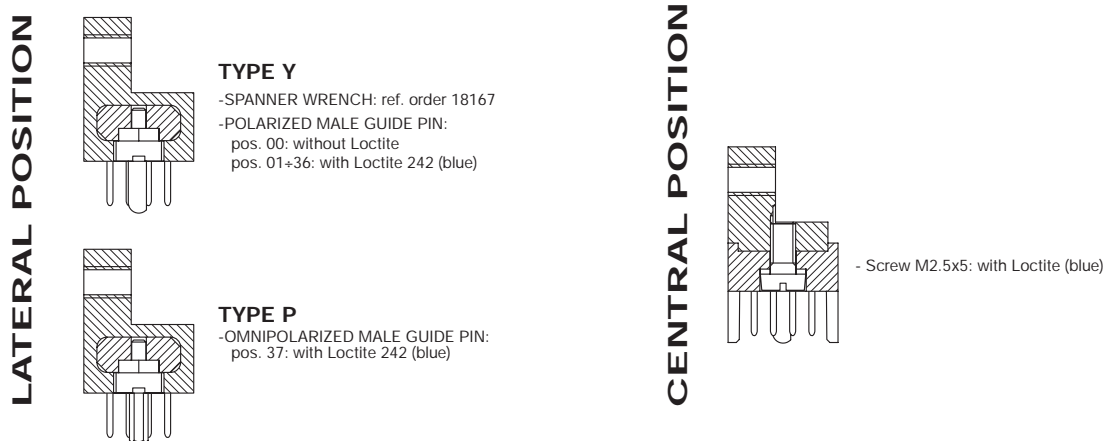
Hardware code



Hardware code for plug connector, right angle contact terminal style



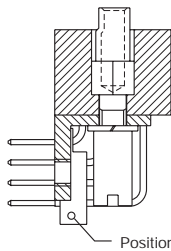
Hardware code for plug connector, straight thru contact terminal style



Hardware code for plug connector, surface mount tail contact terminal style

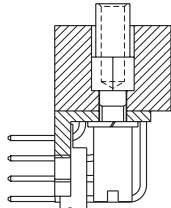
Hardware code

LATERAL POSITION



TYPE Y
-POLARIZED FEMALE GUIDE:
pos. 01+36: without Loctite

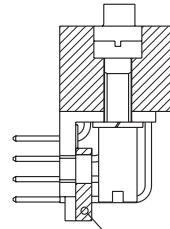
Positioner contact



TYPE P
-OMNIPOLARIZED FEMALE GUIDE:
pos. 37: without Loctite

Positioner contact

CENTRAL POSITION

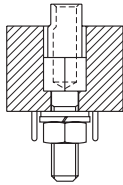


- Screw M2.5x12: without Loctite

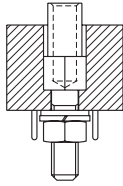
Positioner contact

Hardware code for receptacle connector, right angle contact terminal style

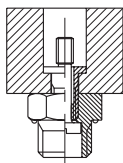
LATERAL POSITION



TYPE Y
-POLARIZED FEMALE GUIDE:
pos. 01+36: without Loctite

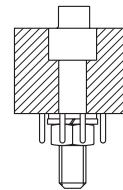


TYPE P
-OMNIPOLARIZED FEMALE GUIDE:
pos. 37: without Loctite

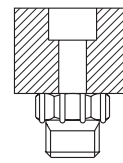


TYPE K
-SCREW LOCKING:
pos. 39: with Loctite 242 (blue)

CENTRAL POSITION



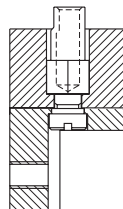
- Without guide



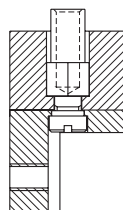
- Without guide

Hardware code for receptacle connector, straight thru and wire wrap contact terminal style

LATERAL POSITION

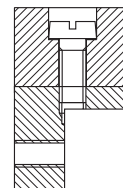


TYPE Y
-SPANNER WRENCH: ref. order 18199
-POLARIZED FEMALE GUIDE:
pos. 01+36: with Loctite 242 (blue)



TYPE P
-OMNIPOLARIZED FEMALE GUIDE:
pos. 37: with Loctite 242 (blue)

CENTRAL POSITION



- Screw M2.5x6: with Loctite 242 (blue)

Hardware code for receptacle connector, surface mount tail contact terminal style