



Size 22 Contacts
Machined Compliant Press-Fit

Three Performance
Levels For Best Cost /
Performance Ratio

UL & CUL Recognized Telecommunication
File #E49351 UL File #E140980



PCDD series connectors are quality connectors with compliant terminations. The low press-in force required to install the contacts into the board eliminates printed board pressure-warp and twisting stresses which can result in expensive repair or replacement of printed boards and back panels.

Six standard connector variants are offered in arrangements of 15, 26, 44, 62, 72, and 104 contacts. PCDD connectors are mateable and compatible with all D-subminiature connectors conforming to dimensional requirements of MIL-DTL-24308.

PCDD COMPLIANT PRESS-D CONNECTOR TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator:	Glass filled polyester per ASTM D5927, UL 94V-0, blue color.
Contacts:	Precision machined copper alloy.
Contact Plating:	Professional performance - Gold flash over nickel plate. Other finishes available upon request.
Interfacial Seal:	Fluorosilicone rubber per MIL-R-25988.
Shells:	Steel with tin plate; zinc plate, stainless steel passivated. Other materials and finishes available upon request.
Mounting Spacers and Brackets:	Copper alloy or steel with zinc plate or tin plate; stainless steel, passivated.
Jackscrew System:	Brass or steel with zinc plate or clear zinc plate or tin plate; stainless steel, passivated.
Vibration Lock Systems:	Lock tabs, nickel plated steel.

Low magnetic versions are available, contact Technical Sales.

MECHANICAL CHARACTERISTICS:

Contacts Solid Metal Construction:	Size 22 contact, male - 0.030 inch [0.76 mm] mating diameter. Female contact - rugged open entry design or PosiBand closed entry design, see page 1 for details.
Contact Retention In Insulator:	5 lbs. [21 N] minimum.
Connector Polarization:	Trapezoidal shaped shells and polarized jackscrews.
Locking System:	Jackscrews and vibration locking systems.
Mechanical Operations:	500 operations per IEC 60512-5 for open entry contacts. 1,000 operations per IEC 60512-5 for PosiBand closed entry contacts.

CLIMATIC CHARACTERISTICS:

Temperature Range:	-55°C to +125°C.
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ELECTRICAL CHARACTERISTICS OF CONNECTOR:

Contact Current Rating:	
Open Entry Contacts:	5 amperes nominal
Closed Entry Contacts, tested per UL 1977:	
12 amperes, 2 contacts energized.	
10 amperes, 6 contacts energized.	
7.5 amperes, 26 contacts energized.	
6.5 amperes, 62 contacts energized.	
5.0 amperes, 104 contacts energized.	
<i>See temperature rise curves on page 2 for details.</i>	
Initial Contact Resistance:	0.010 ohms maximum per IEC 60512-2, Test 2a for open entry. 0.005 ohms maximum for closed entry.
Proof Voltage:	1000 V r.m.s.
Insulation Resistance:	5 G ohms.
Clearance and Creepage Distance [minimum]:	0.042 inch [1.02 mm].
Working Voltage:	300 V.

ELECTRICAL CHARACTERISTICS OF COMPLIANT CONNECTION TO PLATED-THROUGH-HOLE OF PRINTED BOARD:

Initial Contact Resistance of Connection:	Less than 0.001 ohms per IEC 60512-2, Test 2a.
Change in Contact Resistance of Connection after Mechanical, Electrical or Climatic Conditioning:	Less than 0.001 ohms increase per IEC 60512-2, Test 2a.
Gas-tight Connections Test:	Less than 0.001 ohms increase in contact resistance after 1 hour per EIA 364, TP36, Method One.



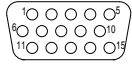
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PROFESSIONAL / INDUSTRIAL / MILITARY QUALITY
COMPLIANT PRESS-FIT
HIGH DENSITY D-SUBMINIATURE

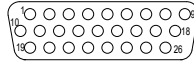
D-Sub

CONTACT VARIANTS

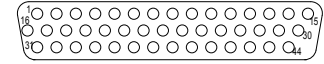
FACE VIEW OF MALE AND REAR VIEW OF FEMALE



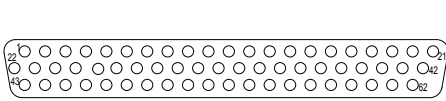
PCDD 15



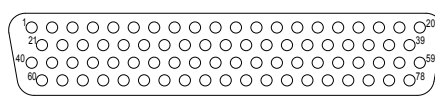
PCDD 26



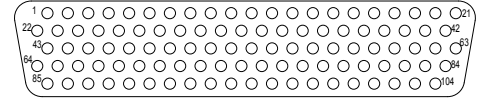
PCDD 44



PCDD 62

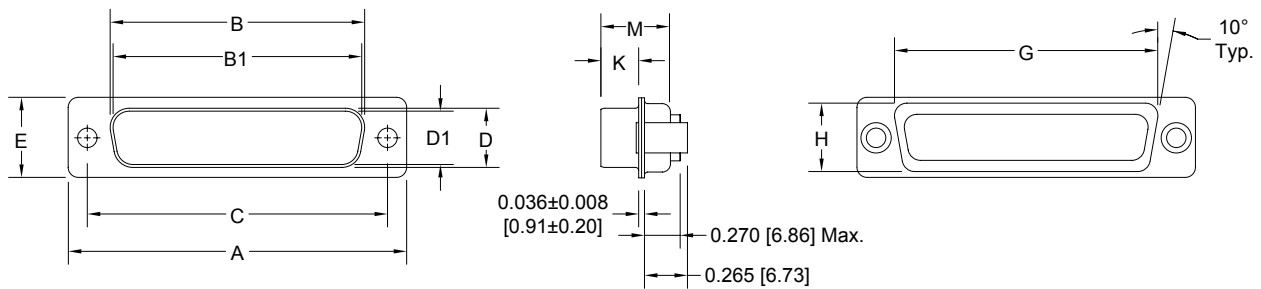


PCDD 78



PCDD 104

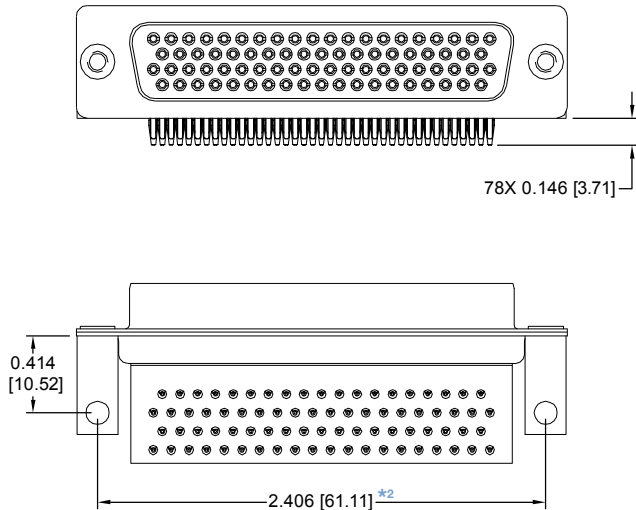
STANDARD SHELL ASSEMBLY



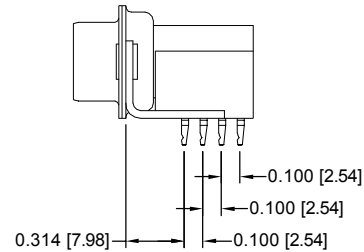
CONNECTOR VARIANT SIZES	A ± 0.015 [0.38]	B ± 0.005 [0.13]	B1 ± 0.005 [0.13]	C ± 0.005 [0.13]	D ± 0.005 [0.13]	D1 ± 0.005 [0.13]	E ± 0.015 [0.38]	G ± 0.010 [0.25]	H ± 0.010 [0.25]	K ± 0.005 [0.13]	M ± 0.015 [0.25]
PCDD 15 M	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
PCDD 15 F	1.213 [30.81]	0.643 [16.33]		0.984 [24.99]	0.311 [7.90]		0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
PCDD 15 S											
PCDD 26 M	1.541 [39.14]		0.994 [25.25]	1.312 [33.32]		0.329 [8.36]	0.494 [12.55]	1.083 [27.51]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
PCDD 26 F	1.541 [39.14]	0.971 [24.66]		1.312 [33.32]	0.311 [7.90]		0.494 [12.55]	1.083 [27.51]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
PCDD 26 S											
PCDD 44 M	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
PCDD 44 F	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
PCDD 44 S											
PCDD 62 M	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
PCDD 62 F	2.729 [69.32]	2.159 [54.84]		2.500 [63.50]	0.311 [7.90]		0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
PCDD 62 S											
PCDD 78 M	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.230 [5.84]	0.426 [10.82]
PCDD 78 F	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.243 [6.17]	0.429 [10.90]
PCDD 78 S											
PCDD 104 M	2.729 [69.32]		2.212 [56.18]	2.500 [63.50]		0.503 [12.78]	0.668 [16.97]	2.302 [58.47]	0.596 [15.14]	0.230 [5.84]	0.426 [10.82]
PCDD 104 F	2.729 [69.32]	2.189 [55.60]		2.500 [63.50]	0.485 [12.32]		0.668 [16.97]	2.302 [58.47]	0.596 [15.14]	0.243 [6.17]	0.429 [10.90]
PCDD 104 S											

RIGHT ANGLE (90°) COMPLIANT PRESS-FIT TERMINATION
CODE 62*1

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.



Typical Part Number:
PCDD78S62R7000



For right angle (90°) compliant press-fit contacts, specify code 62 in step 4 of ordering information.

NOTE:

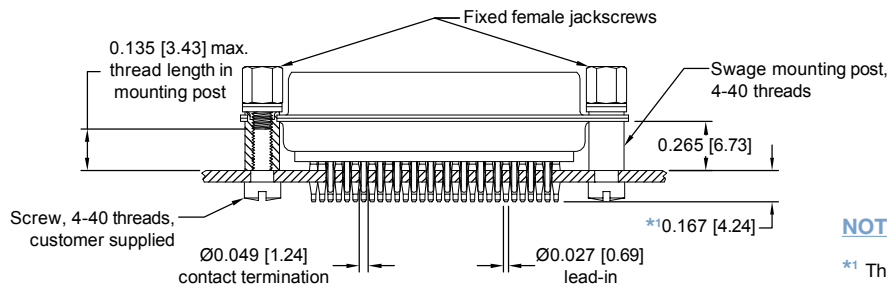
- *1 Currently available in 78 female variants only, contact Technical Sales for availability of other variants.
- *2 Dimension applies for metal angle brackets only. Consult Accessories D-subminiature Catalog for dimension when plastic brackets are used.

SUGGESTED PRINTED BOARD HOLE SIZES:

For right angle (90°) printed board contact hole pattern, see page 60.

STRAIGHT COMPLIANT PRESS-FIT TERMINATION
CODE 98

Positronic recommends the practice of using mounting hardware to secure connector to printed circuit board.

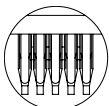


Typical Part Number:
PCDD44F98S0T20

For straight compliant press-fit contacts, specify code 98 in step 4 of ordering information.

NOTE:

- *1 The effective length of the compliant section may also be varied (longer or shorter) and can be selectively positioned and centered at several points along the contact termination length, permitting high or low profile mounting of the connector on printed boards.



Detail of
 Omega contacts

SUGGESTED PRINTED BOARD HOLE SIZES:

For right angle (90°) printed board contact hole pattern, see page 60.



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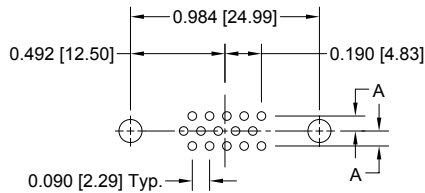
PROFESSIONAL / INDUSTRIAL / MILITARY QUALITY
COMPLIANT PRESS-FIT
HIGH DENSITY D-SUBMINIATURE

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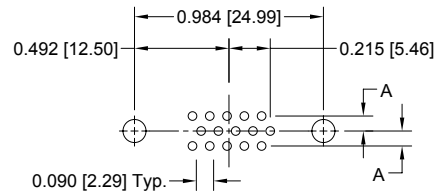
**RIGHT ANGLE (90°) AND STRAIGHT COMPLIANT PRESS-FIT
PRINTED BOARD CONTACT HOLE PATTERN**

MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROW.

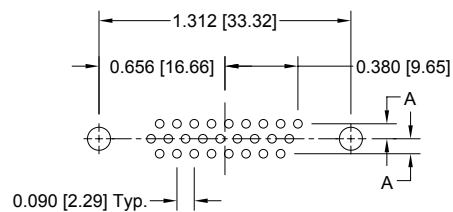
PCDD15 MALE



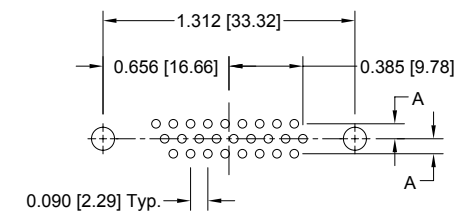
PCDD15 FEMALE



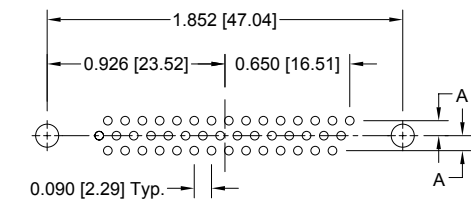
PCDD26 MALE



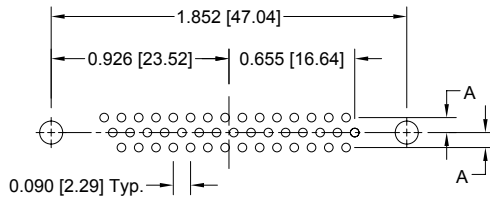
PCDD26 FEMALE



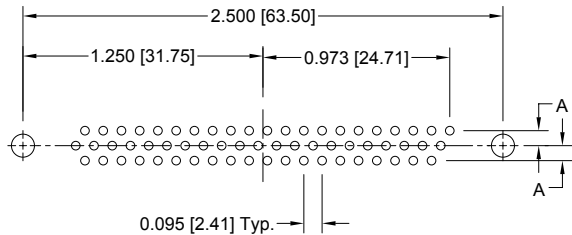
PCDD44 MALE



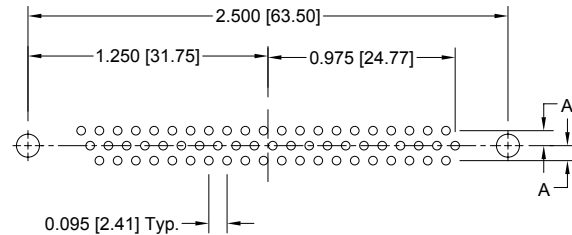
PCDD44 FEMALE



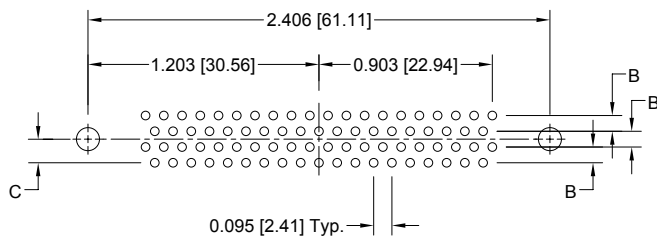
PCDD62 MALE



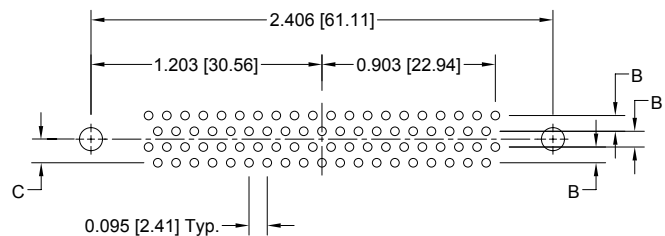
PCDD62 FEMALE



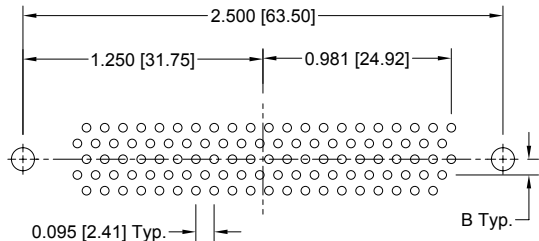
PCDD78 MALE



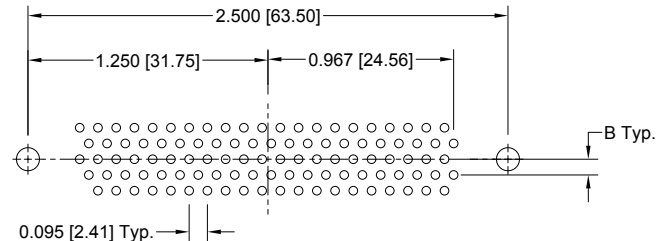
PCDD78 FEMALE



PCDD104 MALE



PCDD104 FEMALE



SUGGESTED PRINTED BOARD HOLE SIZES:

Suggest 0.120 [3.05] Ø hole for connector mounting holes.

NOTE: For suggested printed board recommended drill hole sizes, plating and finished hole sizes for compliant contact termination positions, see page 72. For compliant press-fit connector installation tools, see page 71.

**60 DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.**

CODE NUMBER	A	B	C
62	0.100 [2.54]	0.100 [2.54]	0.100 [2.54]
98	0.078 [1.98]	0.082 [2.08]	0.123 [3.12]

PCDD SERIES

ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 Through 8

STEP	1	2	3	4	5	6	7	8	9	10
EXAMPLE	PCDD	15	M	98	S	0	T2	0	/AA	-14

STEP 1 - BASIC SERIES

PCDD series

STEP 2 - CONNECTOR VARIANTS

15, 26, 44, 62, 78, 104

STEP 3 - CONNECTOR GENDER

- M - Male
- P - Male with interfacial seal
- F - Female - Professional level
open entry contacts
- S - Female - Industrial level
PosiBand closed entry contacts.

Military plating options available.

STEP 4 - CONTACT TERMINATION TYPE

- *1 62 - Right angle (90°) printed circuit board mount, compliant press-fit
- 98 - Straight printed circuit board mount, compliant press-fit

STEP 5 - MOUNTING STYLE

- B3 - Bracket, mounting, right angle (90°) metal with cross bar.
- R2 - Bracket, mounting, right angle (90°) metal, swaged to connector with 4-40 thread fixed female jackscrews with cross bar.
- R6 - Bracket, mounting, right angle (90°) metal, swaged to connector with 0.120 [3.05] ø mounting hole with cross bar.
- R7 - Bracket, mounting, right angle (90°) metal, swaged to connector with 4-40 threads with cross bar.
- R8 - Bracket, mounting, right angle (90°) metal, swaged to connector with 4-40 locknut with cross bar.
- S - Swaged mounting post 4-40 threads, 0.265 [6.73] length.

STEP 10 - SPECIAL OPTIONS

- 14 - 0.000030 [0.76µ] gold over nickel.
- 15 - 0.000050 [1.27µ] gold over nickel.

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

STEP 9 - ENVIRONMENTAL COMPLIANCE OPTIONS

/AA - RoHS Compliant

NOTE: If compliance to environmental legislation is not required, this step will not be used. Example: PCDD15M98S0T20

STEP 8 - Shell Options

- 0 - Zinc plated.
- C - Cadmium with chromate seal.
- L - Electroless nickel.
- R - Electroless nickel and dimpled (male connectors only)
- S - Stainless steel, passivated.
- X - Tin plated.
- Z - Tin plated and dimpled (male connectors only).

STEP 7 - LOCKING AND POLARIZING SYSTEMS

- 0 - None.
- *2 V3 - Lock tab.
- T6 - Fixed male and female polarized jackscrews.
- T2 - Fixed female jackscrews, 4-40 thread.

Note: These options must be ordered with connector and cannot be ordered separately.

STEP 6 - HOODS

- 0 - None.

*1 Not all variants are tooled. Please contact Technical Sales for availability.

*2 V3 locking systems are not available for connector variants 62 and 78. Jackscrews are highly recommended to minimize damage to contacts on variants with high mating forces.

For information regarding compliant press-fit installation tools, see page 71.