Size 22 Contacts
Machined Compliant Press-Fit

Three Performance Levels For Best Cost / Performance Ratio

U.L. Recognized
File #E49351

Telecommunication
U.L. File #140980

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.

POSITRONIC INDUSTRIES RoHS Compliant per EU Directive 2002/95/EC

For RoHS options see page 70.

PCDD COMPLIANT PRESS-D CONNECTOR TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator:	Glass filled polyester per MIL-M-24519, U.L. 94V-0, blue color.
Contacts:	Precision machined copper alloy.
Contact Plating:	Professional performance - Gold flash over nickel plate. Other finishes available upon request.
Shells:	Steel or brass with tin plate; zinc plate with chromate seal, stainless steel passivated. Other materials and finishes available upon request.
Mounting Spacers and Brackets:	Copper alloy or steel with zinc plate and chromate seal or tin plate; stainless steel, passivated.
Jackscrew System:	Brass or steel with zinc plate and chromate seal or clear zinc plate or tin plate; stainless steel, passivated.
Vibration Lock Systems:	Lock tabs, nickel plated steel.

Non-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.

ELECTRICAL CHARACTERISTICS OF CONNECTOR:

Contact Current Rating:	5 amperes, nominal for open entry. 10 amperes for closed entry. Tested per U.L. 1977, six contacts energized. *See temperature rise curve on page 2 for details.*
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.
Insulator 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.

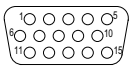
CLIMATIC CHARACTERISTICS:

Temperature Range:	-55°C to +125°C.

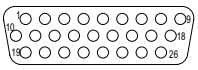
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

PCDD CONTACT VARIANTS

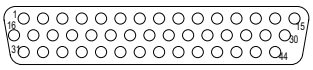
FACE VIEW OF MALE AND REAR VIEW OF FEMALE



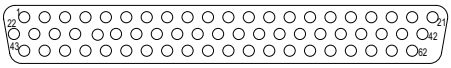
PCDD 15



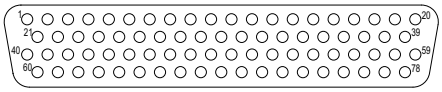
PCDD 26



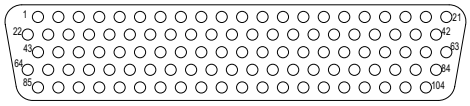
PCDD 44



PCDD 62

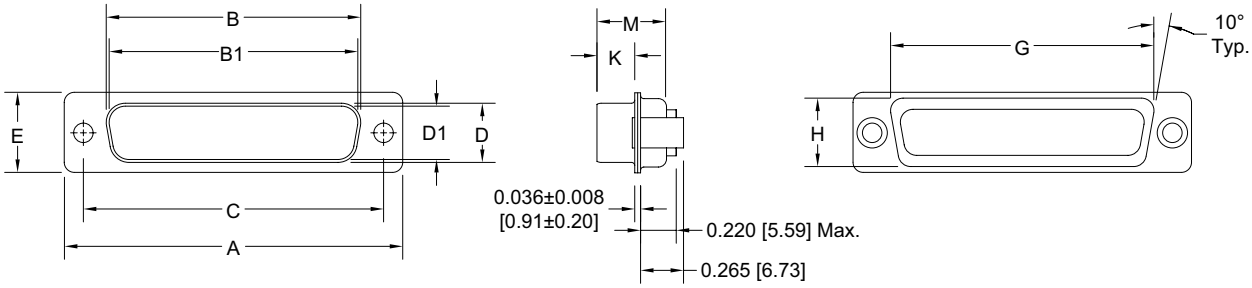


PCDD 78



PCDD 104

STANDARD SHELL ASSEMBLY

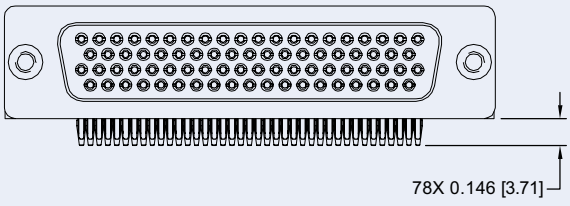


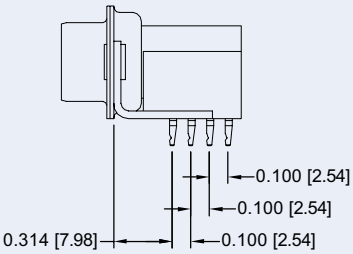
CONNECTOR VARIANT SIZES	A ±0.015 [0.38]	B ±0.005 [0.13]	B1 ±0.005 [0.13]	C ±0.005 [0.13]	D ±0.005 [0.13]	D1 ±0.005 [0.13]	E ±0.015 [0.38]	G ±0.010 [0.25]	H ±0.010 [0.25]	K ±0.005 [0.13]	M ±0.010 [0.25]
PCDD 15 M	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
PCDD 15 F PCDD 15 S	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 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 PCDD 26 S	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 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 PCDD 44 S	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 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 PCDD 62 S	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 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 PCDD 78 S	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 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 PCDD 104 S	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]

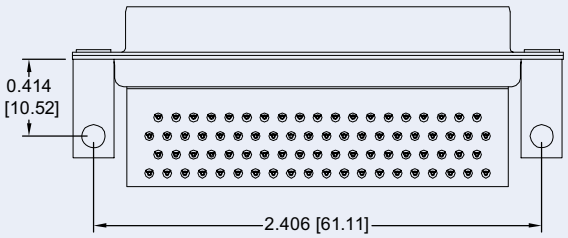
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

NEW!

RIGHT ANGLE (90°) COMPLIANT PRESS-FIT CONNECTOR
CODE 62







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

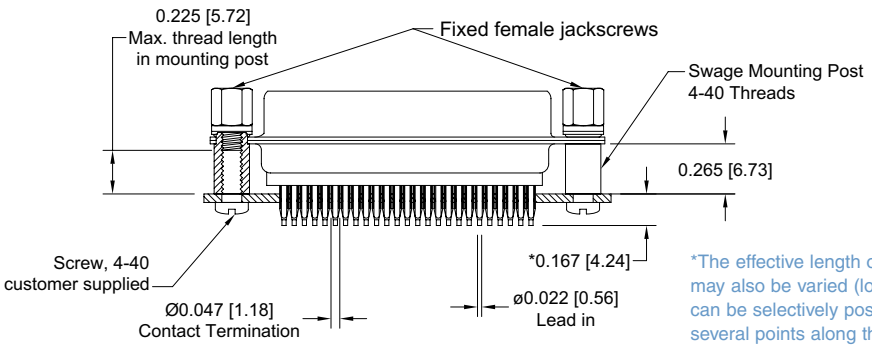
Note: Currently available in 78 female variants only, contact Technical Sales for availability of other variants.

Typical Part Number:
PCDD78S62R7000

SUGGESTED PRINTED BOARD HOLE SIZES:

For right angle (90°) printed board contact hole pattern, see page 69.

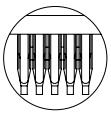
STRAIGHT COMPLIANT PRESS-FIT CONNECTOR
CODE 98



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

*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.

Typical Part Number:
PCDD44F98S0T20



Detail of
Omega contacts

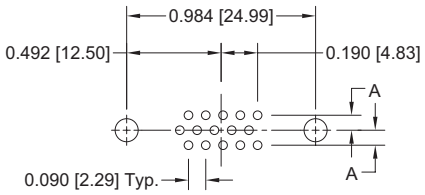
SUGGESTED PRINTED BOARD HOLE SIZES:

For right angle (90°) printed board contact hole pattern, see page 69.

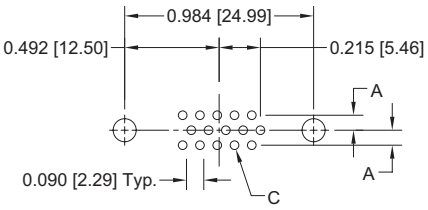
RIGHT ANGLE (90°) AND STRAIGHT COMPLIANT PRESS-FIT PRINTED BOARD CONTACT HOLE PATTERN

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

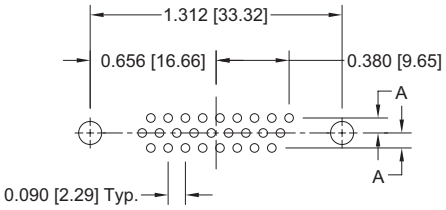
PCDD15 MALE



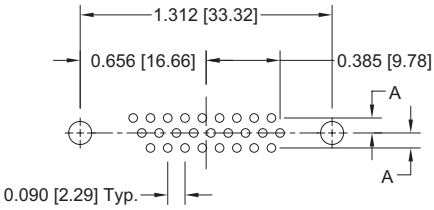
PCDD15 FEMALE



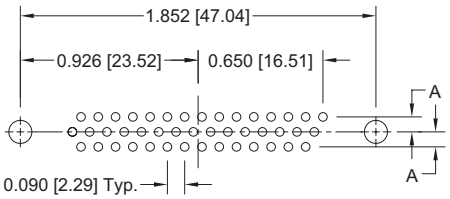
PCDD26 MALE



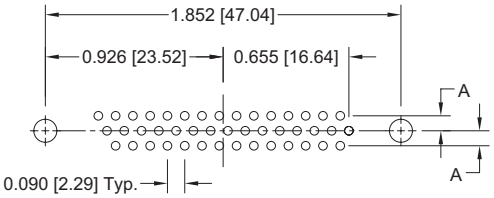
PCDD26 FEMALE



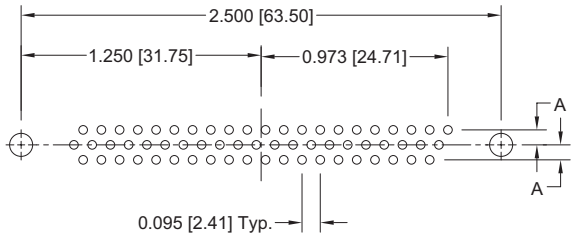
PCDD44 MALE



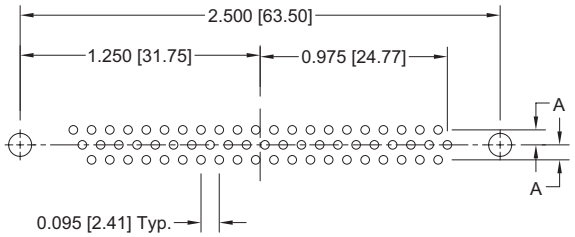
PCDD44 FEMALE



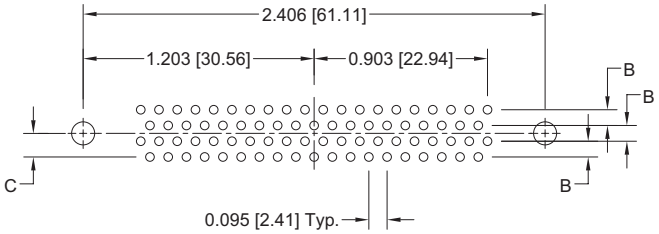
PCDD62 MALE



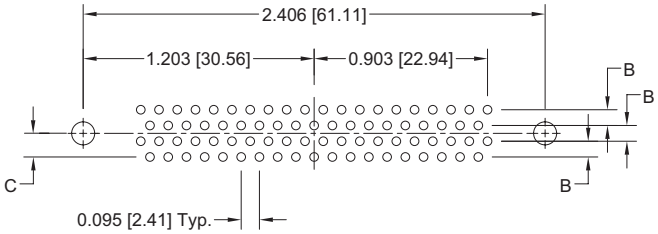
PCDD62 FEMALE



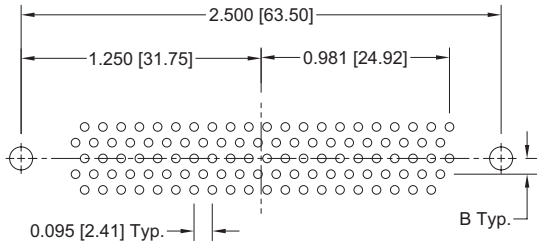
PCDD78 MALE



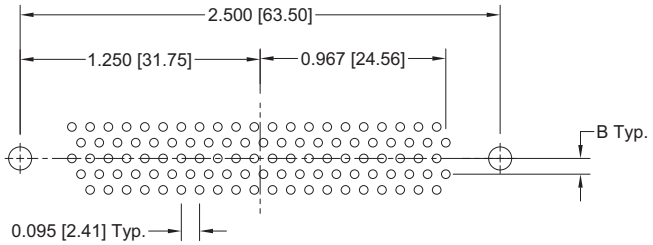
PCDD78 FEMALE



PCDD104 MALE



PCDD104 FEMALE



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]

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 82.
For press-fit connector installation tools, see page 83.

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

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
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°) PCB mount, compliant press-fit
98 - Straight PCB 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 6 - HOODS

0 - None.

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 8 - Shell Options

0 - Zinc plated, with chromate seal.
*[3] S - Stainless steel, passivated.
X - Tin plated.
Z - Tin plated and dimpled (male connectors only).

STEP 9 - ENVIRONMENTAL COMPLIANCE OPTIONS

/AA - Compliant per EU Directive 2002/95/EC (RoHS)

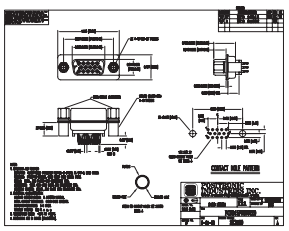
NOTE: If compliance to environmental legislation is not required, this step will not be used. Example: PCDD15M98S0T20

STEP 10 - SPECIAL OPTIONS

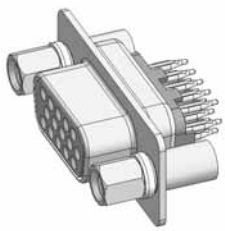
-14 - 0.000030 [0.76µ] gold over nickel.
-15 - 0.000050 [1.27µ] gold over nickel.

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

NOTE: Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-dimensional IGES, STEP, or SOLIDWORKS file.



SK Drawing



3-dimensional model

*[1] Available in 78 female variant only, contact Technical Sales for availability of other variants.

*[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.

*[3] For press-fit connector installation tools, contact Technical Sales.

For press-fit connector installation tools, see Application Tools section, page 83.