



### DAD Series Size 22 "Open Entry" or PosiBand® "Closed Entry" Contact Design

Connector Saver



DAD series connectors are suitable for use in any applications requiring high performance characteristic. The high density DAD series is available in six standard connector variants of 15, 26, 44, 62, 78 and 104 contacts.

DAD series connectors utilize precision machined contacts for strength and durability. The female contact features a rugged open entry design. Female PosiBand closed entry contacts can be chosen for even higher reliability, see page 1 for details.

DAD series connectors can be mated to a connector which would normally experience high

numbers of mating cycles. The DAD connector can be easily replaced, "saving" a connector which is not easily replaced.

Connectors are available in standard density versions, see page 71.



For RoHS options  
see page 77.

## TECHNICAL CHARACTERISTICS

### MATERIALS AND FINISHES:

- Insulator:** Polyester glass-filled per ASTM D5927, UL 94V-0.
- Contacts:** Precision machined copper alloy.
- Contact Plating:** 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.

Low magnetic versions are available, contact Technical Sales.

### MECHANICAL CHARACTERISTICS:

- Fixed Contacts:** Size 22 contacts - male 0.030 inch [0.76 mm] mating diameter. Female Contact: open entry or PosiBand closed entry design, see page 1 for details.
- Connector Saver:** Male to female.
- Contact Retention:** 9 lbs. [40 N].
- Shells:** Male shells may be dimpled for EMI/ESD ground paths.
- Polarization:** Trapezoidally shaped shells.

- Mechanical Operations:** 500 operations, minimum, per IEC 60512-5 for open entry.  
1000 operations, minimum, per IEC 60512-5 for closed entry.

### ELECTRICAL CHARACTERISTICS:

#### 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, 65 contacts energized.
  - 5.0 amperes, 104 contacts energized.

See temperature rise curves on page 2 for details.

- Initial Contact Resistance:** 0.010 ohms, maximum for open entry  
0.005 ohms, maximum for closed entry
- Proof Voltage:** 1,000 V r.m.s.
- Insulator Resistance:** 5 G ohms.
- Clearance and Creepage Distance:** 0.042 inch [1.06 mm], minimum.
- Working Voltage:** 300 V r.m.s.

### CLIMATIC CHARACTERISTICS:

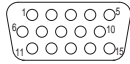
- Temperature Range:** -55°C to +125°C.



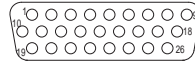
## DAD SERIES SIZE 22 CONTACT CONNECTOR SAVER

### CONTACT VARIANTS

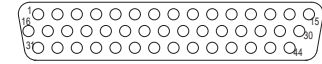
FACE VIEW OF MALE OR USE MIRROR IMAGE FOR FEMALE



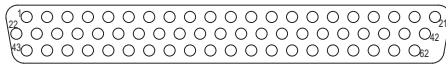
DAD 15



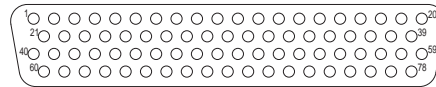
DAD 26



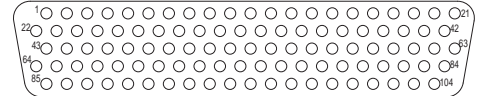
DAD 44



DAD 62



DAD 78

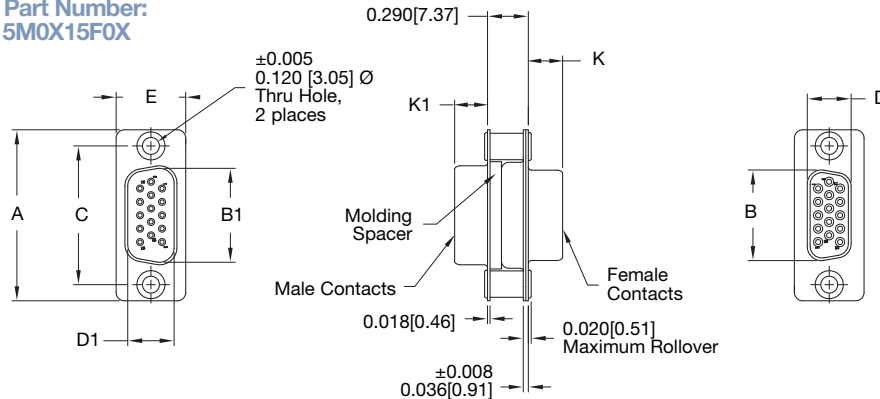


DAD 104

### STANDARD SHELL ASSEMBLY DIMENSIONS

#### SIZE 22 CONTACTS

Typical Part Number:  
DAD15M0X15FOX



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]	K ±0.005 [0.13]	K1 ±0.005 [0.13]
15 M	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]		0.233 [5.92]
15 F	1.213 [30.81]	0.643 [16.33]		0.984 [24.99]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	
15 S									
26 M	1.541 [39.14]		0.994 [25.25]	1.312 [33.32]		0.329 [8.36]	0.494 [12.55]		0.233 [5.92]
26 F	1.541 [39.14]	0.971 [24.66]		1.312 [33.32]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	
26 S									
44 M	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]		0.230 [5.84]
44 F	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	
44 S									
62 M	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]		0.230 [5.84]
62 F	2.729 [69.32]	2.159 [54.84]		2.500 [63.50]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	
62 S									
78 M	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]		0.230 [5.84]
78 F	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	0.243 [6.17]	
78 S									
104 M	2.729 [69.32]		2.212 [56.18]	2.500 [63.50]		0.503 [12.78]	0.668 [16.97]		0.230 [5.84]
104 F	2.729 [69.32]	2.189 [55.60]		2.500 [63.50]	0.485 [12.32]		0.668 [16.97]	0.243 [6.17]	
104 S									



### ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 Through 9

STEP	1	2	3	4	5	6	7	8	9	10	11
EXAMPLE	DAD	15	M	S	X	15	F	S	X	/AA	-14

#### STEP 1 - BASIC SERIES

DAD series

#### STEP 2 - CONNECTOR VARIANT

15, 26, 44, 62, 78, 104

#### STEP 3 - 1<sup>ST</sup> CONNECTOR GENDER

M - Male

#### \*2 STEP 4 - 1<sup>ST</sup> CONNECTOR MATING STYLE

- 0 - Swaged spacer 0.120 [3.05µ] mounting hole
- S - Swaged spacer 4-40 UNC-2B threads
- \*3 E - Rotating male and female jackscrews (Select 0 in Step 8)
- \*3 E6 - Rotating male and female polarized jackscrew (Select 0 in Step 8)
- \*3 T - Fixed male and female jackscrews (Select 0 in Step 8)
- \*3 T6 - Fixed male and female polarized jackscrew (Select 0 in Step 8)

#### STEP 5 - 1<sup>ST</sup> CONNECTOR SHELL OPTION

- 0 - Zinc plated, with chromate seal.
- \*5 S - Stainless steel, passivated.
- X - Tin plated.
- Z - Tin plated and dimpled (male connectors only).

\*1 Male option available only on connector variant 78.

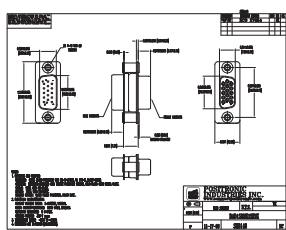
\*2 Connector mating style for both connectors must be the same if 0 or S is used. If E, E6, T or T6 is used in either Step 4 or 8 the other step must be 0.

\*3 For hardware information, see page 73.

\*4 Connector variant for both connectors must be the same as in Step 2.

\*5 For stainless steel dimpled male versions contact Technical Sales.

**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.



2-D Drawing



3-D Model

#### STEP 11 - 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 10 - 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: DAD15MSX15FSX

#### STEP 9 - 2<sup>ND</sup> CONNECTOR SHELL OPTION

- 0 - Zinc plated, with chromate seal.
- \*5 S - Stainless steel, passivated.
- X - Tin plated.
- Z - Tin plated and dimpled (male connectors only).

#### \*\*STEP 8 - 2<sup>ND</sup> CONNECTOR MATING STYLE

- 0 - Swaged spacer 0.120 [3.05µ] mounting hole
- S - Swaged spacer 4-40 UNC-2B threads
- \*3 E - Rotating male and female jackscrews (Select 0 in Step 4)
- \*3 E6 - Rotating male and female polarized jackscrew (Select 0 in Step 4)
- \*3 T - Fixed male and female jackscrews (Select 0 in Step 4)
- \*3 T6 - Fixed male and female polarized jackscrew (Select 0 in Step 4)

#### STEP 7 - 2<sup>ND</sup> CONNECTOR GENDER

- \*1 M - Male
- F - Female - Professional Level - open entry contacts
- S - Female - Industrial Level - PosiBand closed entry contacts

Military plating options available.

#### \*4 STEP 6 - 2<sup>ND</sup> CONNECTOR VARIANT

15, 26, 44, 62, 78, 104