# Positronic



# Industries



www.connectpositronic.com



### **ABOUT US**

Founded in 1966, Positronic Industries is a vertically integrated manufacturer of high quality interconnect products. Positronic has earned the worldwide reputation as a service oriented, quick-reaction, top quality connector supplier. We are committed to maintaining this reputation by continuous implementation of our **Complete Capability** concept.

### COMPLETE CAPABILITY

#### **Design & Development**

- Designs new connectors and modifies existing connectors to meet industry requirements
- · Continuously conducts marketing studies to identify industry needs for new products
- Ongoing interest in unique connector designs

#### **Tooling**

- Tooling support for all manufacturing areas within company
- Provides 80% of new tooling, punch press dies, molds, jigs and fixtures used at Positronic factory locations worldwide

### Machining

- · Automatic screw machines produce finely crafted contacts and hardware for connector bodies
- Trained technicians operate machines from Tornos, Bechler and Brown & Sharpe

#### Molding

- · Molds all plastic connector components such as insulators, hoods, angle brackets and more
- Overmold capability available

### Plating

- · Applies gold and other metal finishes to connector components to any required thickness
- Plating conforms to all military specifications

### **Quality Assurance Lab**

- Quality assurance system certified to ISO 9001
- Maintains aggressive TQM program
- Able to test to IEC, EIA, UL, MIL-DTL-24308, MIL-DTL-28748, MIL-C-39029 and MIL-C-85049 requirements

### **Finished Stock Inventory**

- Each main factory location maintains a large inventory of connector components and accessories
- Same day shipments available on many standard connector products
- Stocking agreements available for qualified customers

#### Worldwide Sales & Service

- Responsive attitude toward customer needs
- Fully trained sales staff located worldwide



Machining



Molding



Finished Stock Inventory

Products described within this catalog may be protected by one or more of the following US. patents:

#4,721,472 #4,900,261 #5,255,580 #5,329,697 #6,260,268 #6,835,079

Patented in Canada, 1992 Other Patents Pending

Unless otherwise specified, dimensional tolerances are:

- 1] ±0.001 inches [0.03 mm] for male contact mating diameters.
- 2]  $\pm 0.003$  inches [0.08 mm] for contact termination diameters.
- 3]  $\pm 0.005$  inches [0.13 mm] for all other diameters.
- 4]  $\pm 0.015$  inches [0.38 mm] for all other dimensions.
- 5] ±0.0015 inches [0.038 mm] for all press-fit contact terminations.

Positronic Industries believes the data contained herein to be reliable. Since the technical information is given free of charge, the User employs such information at his own discretion and risk. Positronic Industries assumes no responsibility for results obtained or damages incurred from use of such information in whole or in part.

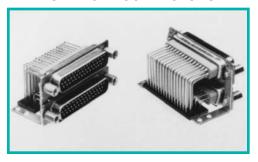
# This catalog should be accompanied by copies of Positronic's Special Application Subminiature-D Connector Catalogs. Contact Technical Sales or your District Manager for copies of these catalogs as follows:

### INDUSTRIAL AND MILITARY APPLICATION SUBMINIATURE-D CONNECTORS





**DUAL-PORT CONNECTORS** 



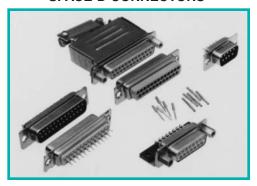
**ENVIRONMENTAL-D CONNECTORS** 



**COMBO-D CONNECTORS** 



SPACE-D CONNECTORS



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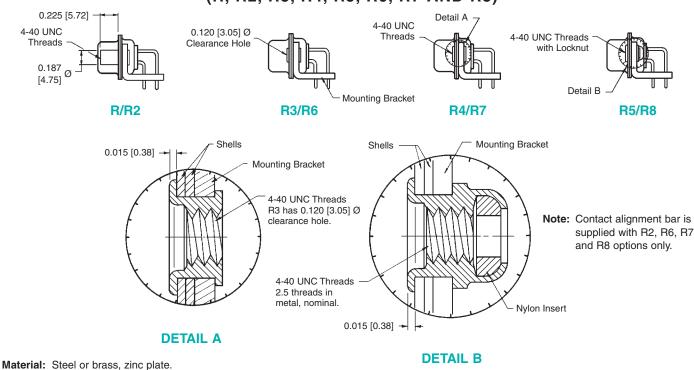


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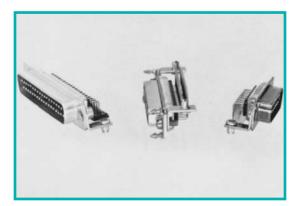
### RIVETED ON 90° MOUNTING BRACKETS AND PUSH-ON FASTENERS

Sub-D Accessories

### RIVETED ON 90° MOUNTING BRACKETS (R, R2, R3, R4, R5, R6, R7 AND R8)

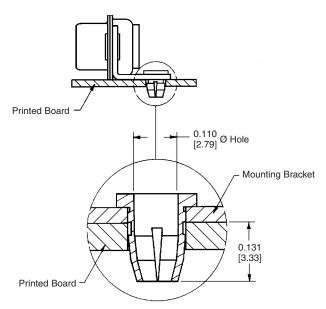


### PUSH-ON FASTENER FOR RIVETED ON 90° MOUNTING BRACKETS (N)



MD37M5R8N0X (shown left) MD25F5R4NV3X MD15M5R4N00 (shown center) (shown right)

SAMPLE #	PRINTED BOARD HOLE Ø	INSERTION FORCE (LBS.)	RETENTION FORCE (LBS.)
1	0.120 [3.05]	7-1/4	5-3/4
2	0.123 [3.12]	5-3/4	5-1/2
3	0.125 [3.18]	2-3/4	2-1/2
4	0.128 [3.25]	1-3/4	2-1/4
5	0.126 [3.20] PLATED	1-3/4	2-1/4



Printed board mounting hole to be 0.123 [3.12]  $\varnothing$  ±0.003 for use with push-on fastener.

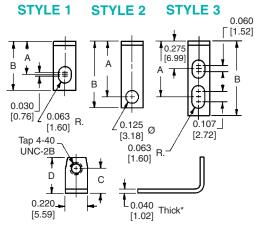
Material: Beryllium copper, tin plate.

### 90° METAL MOUNTING BRACKETS



### 90° METAL MOUNTING BRACKET (B AND B3)

PART NO.	STYLE	Α	В	С	D	SIZE	MD	ED	FD	CBD	HDC	DD	ODD
4535-1-0	2	<u>0.491</u> [12.47]	<u>0.608</u> [15.44]	0.246 [6.25]	<u>0.358</u> [9.09]	9 - 37	4		4				
4535-2-0	1	<u>0.324</u> [8.23]	<u>0.484</u> [12.29]	<u>0.244</u> [6.20]	<u>0.358</u> [9.09]	9 - 37	5		5	5, 55, 57	5		
4535-3-0	1	<u>0.380</u> [9.65]	<u>0.594</u> [15.09]	<u>0.303</u> [7.70]	<u>0.417</u> [10.59]	50	5		5	5, 55, 57	5		
4535-4-0	2	<u>0.547</u> [13.89]	<u>0.664</u> [16.87]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	50	4		4				
4535-5-0	3	<u>0.554</u> [14.07]	<u>0.739</u> [18.77]	<u>0.244</u> [6.20]	<u>0.358</u> [9.09]	9-37 15 - 62	59		59			4	5
4535-6-0	3	<u>0.604</u> [15.34]	<u>0.800</u> [20.32]	<u>0.303</u> [7.70]	<u>0.417</u> [10.59]	50 78	59		59			4	5
4535-8-0	2	<u>0.405</u> [10.29]	<u>0.522</u> [13.26]	0.246 [6.25]	<u>0.358</u> [9.09]	9 - 37		42, 44, 52	42	7, 75, 77	42		
4535-9-0	2	<u>0.455</u> [11.56]	<u>0.572</u> [14.53]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	50		42, 44, 52	42	7, 75, 77	42		
4535-32-0	2	<u>0.399</u> [10.13]	<u>0.516</u> [13.11]	0.246 [6.25]	<u>0.358</u> [9.09]	15 - 62							4
4535-33-0	2	<u>0.399</u> [10.13]	<u>0.516</u> [13.11]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	78							4
4535-62-0	2	<u>0.614</u> [15.60]	<u>0.731</u> [18.57]	0.334 [8.48]	<u>0.445</u> [11.30]	104						4	5
NOTE: Sold only as part of a connector assembly.													



\*0.062 [1.57] thick for Size 104 DD & ODD Series.

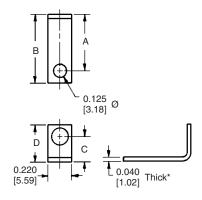
**Material:** Brass, zinc plate with chromate seal, or tin plate.

**Note:** Contact alignment bar is supplied with B3 option only.

### 90° METAL MOUNTING BRACKET USED WITH R, R2, R3, R4, R5, R6, R7, AND R8 RIVETED-ON BRACKET ASSEMBLIES

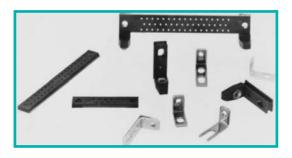
PART NO.	Α	В	С	D	SIZE	MD	FD	CBD	HDC	ED	DD	ODD
4535-1-1	<u>0.506</u> [12.85]	<u>0.623</u> [15.82]	0.246 [6.25]	<u>0.358</u> [9.09]	9 - 37	4	4					
4535-2-1	0.339 [8.61]	<u>0.456</u> [11.58]	0.246 [6.25]	<u>0.358</u> [9.09]	9 - 37	5	5	5, 55, 57	5			
4535-3-1	<u>0.395</u> [10.03]	<u>0.512</u> [13.00]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	50	5	5	5, 55, 57	5			
4535-4-1	<u>0.562</u> [14.27]	<u>0.679</u> [17.25]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	50	4	4					
4535-5-1	<u>0.601</u> [15.27]	<u>0.718</u> [18.24]	0.246 [6.25]	<u>0.358</u> [9.09]	9 - 37	59	59		59			
4535-6-1	<u>0.657</u> [16.69]	<u>0.774</u> [19.66]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	50	59	59		59			
4535-8-1	<u>0.420</u> [10.67]	0.537 [13.64]	0.246 [6.25]	<u>0.358</u> [9.09]	9 - 37		42	7, 75, 77	42	42, 44, 52		
4535-9-1	<u>0.470</u> [11.94]	<u>0.587</u> [14.91]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	50		42	7, 75, 77	42	42, 44, 52		
4535-32-1	<u>0.414</u> [10.52]	0.531 [13.49]	0.246 [6.25]	<u>0.358</u> [9.09]	15 - 62							4
4535-33-1	<u>0.414</u> [10.52]	0.531 [13.49]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	78							4
4535-34-1	<u>0.528</u> [13.41]	0.645 [16.38]	0.246 [6.25]	<u>0.358</u> [9.09]	15 - 62						4	5
4535-35-1	<u>0.573</u> [14.55]	0.690 [17.53]	<u>0.303</u> [7.70]	<u>0.414</u> [10.52]	78						4	5
4535-62-1	<u>0.614</u> [15.60]	0.731 [18.57]	<u>0.334</u> [8.48]	0.445 [11.30]	104						4	5
		NOTE:	Sold or	nly as pa	art of a	onne	ector	assem	bly.			

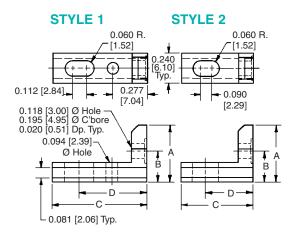
**Note:** Contact alignment bar is supplied with R2, R6, R7 and R8 options only.



\*0.062 [1.57] thick for Size 104 DD & ODD Series.

Material: Brass, zinc plate with chromate seal, or tin plate.



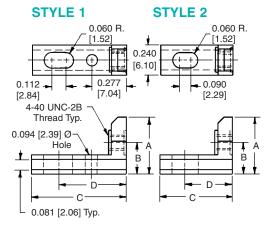


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PART NO.	STYLE	Α	В	С	D	SIZE	DD	FD	MD	ODD	CBD	ED	HDC
4544-6-0	1	0.450 [11.43]	<u>0.244</u> [6.20]	<u>0.740</u> [18.80]	<u>0.544</u> [13.82]	9 - 37		4, 59	4, 59	_			
		[11.40]	[0.20]	[10.00]	[10.02]	15 - 62	4			5			
4544-7-0	1	0.565	0.303	0.790	0.606	50		4, 59	4, 59				
404470	'	[14.35]	[7.70]	[20.07]	[15.39]	78	4			5			
4544-8-0	2	<u>0.450</u> [11.43]	<u>0.244</u> [6.20]	<u>0.580</u> [14.73]	<u>0.384</u> [9.75]	9 - 37		42, 5	5		5, 55, 57 7, 75, 77	42, 52	42, 5
4544-9-0	2	<u>0.565</u> [14.35]	0.303 [7.70]	<u>0.620</u> [15.75]	<u>0.440</u> [11.18]	50		42, 5	5		5, 55, 57 7, 75, 77		42, 5
	NOTE: Sold only as part of a connector assembly.												

Material: Nylon, black.

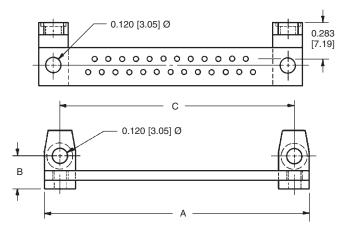
### 90° PLASTIC MOUNTING BRACKET WITH THREADED INSERT (B9 AND B10\*)



PART NO.	STYLE	Α	В	С	D	SIZE	DD	FD	MD	ODD	CBD	ED	HDC
4544-6-1	1	<u>0.450</u> [11.43]	<u>0.244</u> [6.20]	<u>0.740</u> [18.80]	<u>0.544</u> [13.82]	9 - 37 15 - 62	4	4, 59	4, 59	5			
4544-7-1	1	<u>0.565</u> [14.35]	<u>0.303</u> [7.70]	<u>0.790</u> [20.07]	<u>0.606</u> [15.39]	50 78	4	4, 59	4, 59	5			
4544-8-1	2	<u>0.450</u> [11.43]	<u>0.244</u> [6.20]	0.580 [14.73]	<u>0.384</u> [9.75]	9 - 37		42, 5	5		<u>5, 55, 57</u> 7, 75, 77		42, 5
4544-9-1         2         0.565 [14.35]         0.303 [7.70]         0.620 [15.75]         0.440 [11.18]         50         42, 5         5         5, 55, 57 7, 75, 77 52         42, 7 7, 75, 77 52													
	NOTE: Sold only as part of a connector assembly.												

Material: Nylon, black.

### 90° PLASTIC MOUNTING BRACKET WITH CROSS BAR SUPPLIED WITH STANDARD DENSITY MIL-DTL-24308/23 AND /24 CONNECTORS



PART NO.	Α	В	C
4544-11-1	1.218	<u>0.247</u>	<u>0.980</u>
	[30.94]	[6.27]	[24.89]
4544-11-2	1.546	<u>0.247</u>	1.312
	[39.27]	[6.27]	[33.32]
4544-11-3	2.093	0.247	1.852
	[53.16]	[6.27]	[47.04]
4544-11-4	2.734	0.247	<u>2.500</u>
	[69.44]	[6.27]	[63.50]
4544-12-1	<u>2.645</u>	<u>0.303</u>	<u>2.406</u>
	[67.18]	[7.70]	[61.11]

NOTE: Sold only as part of a connector assembly. Material: Nylon, black.

May be supplied on special order with the MD and HD printed board mount connectors.

<sup>\*</sup>Cross bar supplied with B8 option.

<sup>\*</sup>Cross bar supplied with B10 option.

### CAPTIVE ALIGNMENT BARS AND THREADED POST

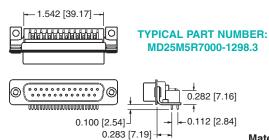


### CAPTIVE ALIGNMENT BARS FOR ROBOTIC "PICK AND PLACE" APPLICATIONS

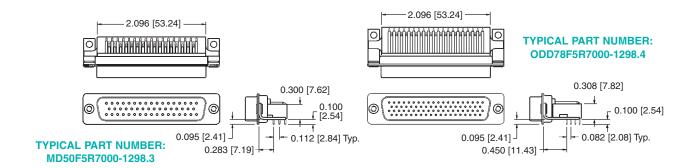
For MD-series connectors, add the suffix "-1298.3" to the end of the part number.

For ODD-series connectors, add the suffix "-1298.4" to the end of the part number.

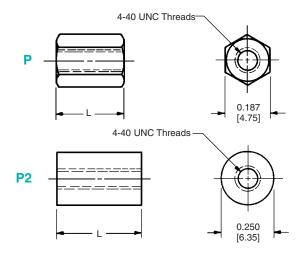
Contact Technical Sales for minimum order quantities and production lead times.



Material: Polyphenylenesulfide.



### THREADED POST (P AND P2)



CONNECTOR SERIES	L
MD, ED, FD HDC, ODD	<u>0.225</u> [5.72]
CBD, CBM	<u>0.250</u> [6.35]
DD	<u>0.375</u> [9.53]
SD	<u>0.437</u> [11.10]

Material: P - Brass, zinc plate with chromate seal. P2 - Nylon.

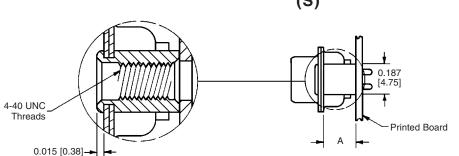
ODD crimp connector supplied with 0.375 [9.53] length spacer.



### **SWAGED SPACERS, LOCKNUTS, AND SWAGED SPACERS** WITH PUSH-ON FASTENERS

Sub-D Accessories



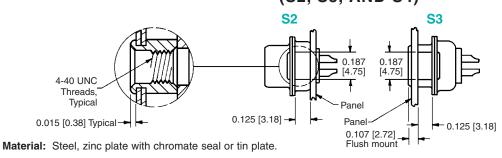


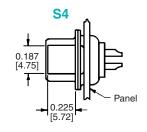
CONNECTOR SERIES	A
MD, ED, HDC, FD, ODD, DFD	<u>0.225</u> [5.72]
CBD, CBM	<u>0.250</u> [6.35]
SD	<u>0.437</u> [11.10]
DD	<u>0.375</u> [9.53]
PCD	<u>0.265</u> [6.73]

Material: Steel or brass, zinc plate with chromate seal or tin plate.

ODD crimp connector supplied with 0.375 [9.53] length spacer.

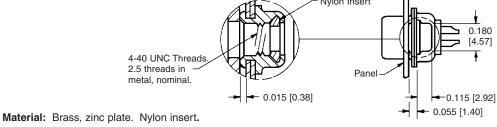
### **SWAGED SPACERS** (S2, S3, AND S4)



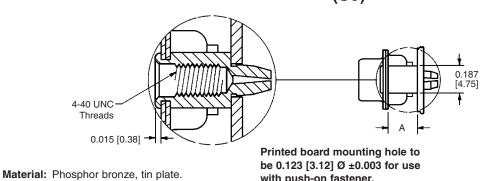


### SWAGED LOCKNUT

**(S5)** Nylon Insert



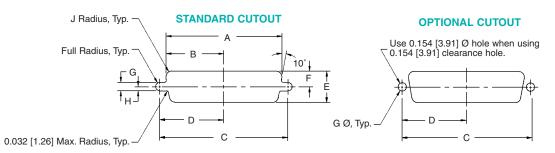
### SWAGED SPACER WITH PUSH-ON FASTENER



with push-on fastener.

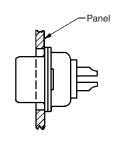
CONNECTOR SERIES	Α
DFD, FD MD, ED, HDC, ODD	<u>0.225</u> [5.72]
CBD, CBM	<u>0.250</u> [6.35]
SD	<u>0.437</u> [11.10]
DD	<u>0.375</u> [9.53]

### **PANEL CUTOUTS**

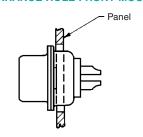


CONNECTOR	MOUNTING	Α	В	С	D	Е	F	G	Н	J	K
SIZE	MOUNTING	±0.005	±0.005	±0.005	±0.005	±0.005	±0.005	±0.002	±0.002	±0.002	±0.002
9 CLEARANCE	FRONT	<u>0.874</u> [22.20]	<u>0.437</u> [11.10]	<u>0.984</u> [24.99]	<u>0.492</u> [12.50]	<u>0.513</u> [13.03]	0.257 [6.53]	0.120 [3.05]	0.060 [1.52]	0.083 [2.11]	1.609 [40.87]
HOLE	REAR	<u>0.806</u> [20.47]	<u>0.403</u> [10.24]	<u>0.984</u> [24.99]	<u>0.492</u> [12.50]	<u>0.449</u> [11.40]	0.225 [5.72]	<u>0.120</u> [3.05]	0.060 [1.52]	<u>0.132</u> [3.35]	1.609 [40.87]
9	FRONT	<u>0.906</u> [23.01]	<u>0.453</u> [11.51]	<u>0.984</u> [24.99]	<u>0.492</u> [12.50]	<u>0.545</u> [13.84]	0.273 [6.93]	0.088 [2.24]	<u>0.044</u> [1.12]	0.083 [2.11]	
FLOAT MOUNT	REAR	0.838 [21.29]	<u>0.419</u> [10.64]	0.984 [24.99]	<u>0.492</u> [12.50]	<u>0.481</u> [12.22]	0.241 [6.12]	0.088 [2.24]	<u>0.044</u> [1.12]	0.132 [3.35]	
15	FRONT	1.202 [30.53]	0.601 [15.27]	1.312 [33.32]	0.656 [16.66]	0.513 [13.03]	0.257 [6.53]	0.120 [3.05]	0.060 [1.52]	0.083 [2.11]	1.937 [49.20]
CLEARANCE HOLE	REAR	1.134 [28.80]	0.567 [14.40]	1.312 [33.32]	0.656 [16.66]	<u>0.449</u> [11.40]	0.225 [5.72]	0.120 [3.05]	0.060 [1.52]	0.132 [3.35]	1.937 [49.20]
15	FRONT	1.234 [31.34]	0.617 [15.67]	1.312 [33.32]	0.656 [16.66]	0.545 [13.84]	0.273 [6.93]	0.088 [2.24]	0.044 [1.12]	0.083 [2.11]	
FLOAT MOUNT	REAR	1.166 [29.62]	0.583 [14.81]	1.312 [33.32]	0.656 [16.66]	0.481 [12.22]	0.241 [6.12]	0.088 [2.24]	0.044 [1.12]	0.132 [3.35]	
25	FRONT	1.743 [44.27]	0.872 [22.15]	1.852 [47.04]	0.926 [23.52]	0.513 [13.03]	0.257 [6.53]	0.120 [3.05]	0.060 [1.52]	0.083 [2.11]	<u>2.477</u> [62.92]
CLEARANCE HOLE	REAR	1.674 [42.52]	0.837 [21.26]	1.852 [47.04]	0.926 [23.52]	0.449 [11.40]	0.225 [5.72]	0.120 [3.05]	0.060 [1.52]	0.132 [3.35]	2.477 [62.92]
25 FLOAT	FRONT	1.775 [45.09]	0.888 [22.56]	1.852 [47.04]	0.926 [23.52]	0.545 [13.84]	0.273 [6.93]	0.088 [2.24]	0.044 [1,12]	0.083 [2.11]	
MOUNT	REAR	1.706 [43.33]	<u>0.853</u> [21.67]	1.852 [47.04]	0.926 [23.52]	<u>0.481</u> [12.22]	0.241 [6.12]	0.088 [2.24]	<u>0.044</u> [1.12]	0.132 [3.35]	
29	FRONT	1.425 [36.20]	<u>0.713</u> [18.11]	1.534 [38.96]	<u>0.767</u> [19.48]	<u>0.623</u> [15.82]	0.312 [7.92]	0.120 [3.05]	0.060 [1,52]	0.083 [2.11]	2.159 [54.84]
CLEARANCE HOLE	REAR	<u>1.356</u> [34.44]	<u>0.678</u> [17.22]	1.534 [38.96]	<u>0.767</u> [19.48]	<u>0.555</u> [14.10]	0.278 [7.06]	0.120 [3.05]	<u>0.060</u> [1.52]	0.132 [3.35]	2.159 [54.84]
29 FLOAT	FRONT	1.457 [37.01]	<u>0.729</u> [18.52]	1.534 [38.96]	<u>0.767</u> [19.48]	<u>0.655</u> [16.64]	<u>0.328</u> [8.33]	0.088 [2.24]	<u>0.044</u> [1.12]	0.083 [2.11]	
MOUNT	REAR	1.388 [35.26]	<u>0.694</u> [17.63]	1.534 [38.96]	<u>0.767</u> [19.48]	<u>0.587</u> [14.91]	0.294 [7.47]	0.088 [2.24]	<u>0.044</u> [1.12]	0.132 [3.35]	
37 CLEARANCE	FRONT	2.391 [60.73]	1.196 [30.38]	2.500 [63.50]	1.250 [31.75]	<u>0.513</u> [13.03]	0.257 [6.53]	0.120 [3.05]	<u>0.060</u> [1.52]	0.083 [2.11]	3.125 [79.38]
HOLE	REAR	2.326 [59.08]	1.163 [29.54]	2.500 [63.50]	1.250 [31.75]	<u>0.449</u> [11.40]	0.225 [5.72]	0.120 [3.05]	0.060 [1.52]	0.132 [3.35]	3.125 [79.38]
37 FLOAT	FRONT	2.423 [61.54]	1.212 [30.78]	2.500 [63.50]	1.250 [31.75]	<u>0.545</u> [13.84]	0.273 [6.93]	0.088 [2.24]	<u>0.044</u> [1.12]	0.083 [2.11]	
MOUNT	REAR	2.354 [59.79]	1.177 [29.90]	2.500 [63.50]	1.250 [31.75]	<u>0.481</u> [12.22]	0.241 [6.12]	0.088 [2.24]	<u>0.044</u> [1.12]	0.132 [3.35]	
50 CLEARANCE	FRONT	2.297 [58.34]	1.149 [29.18]	<u>2.406</u> [61.11]	1.203 [30.56]	<u>0.623</u> [15.82]	0.312 [7.92]	0.120 [3.05]	0.060 [1.52]	0.083 [2.11]	3.031 [76.99]
HOLE	REAR	2.218 [56.34]	1.109 [28.17]	2.406 [61.11]	1.203 [30.56]	<u>0.555</u> [14.10]	0.278 [7.06]	0.120 [3.05]	0.060 [1.52]	0.132 [3.35]	3.031 [76.99]
50 FLOAT	FRONT	2.329 [59.16]	1.165 [29.59]	<u>2.406</u> [61.11]	1.203 [30.56]	<u>0.655</u> [16.64]	<u>0.328</u> [8.33]	<u>0.088</u> [2.24]	<u>0.044</u> [1.12]	0.083 [2.11]	
MOUNT	REAR	2.250 [57.15]	1.125 [28.58]	<u>2.406</u> [61.11]	1.203 [30.56]	<u>0.587</u> [14.91]	<u>0.294</u> [7.47]	<u>0.088</u> [2.24]	<u>0.044</u> [1.12]	0.132 [3.35]	
104 CLEARANCE	FRONT	2.421 [61.49]	1.211 [30.76]	2.500 [63.50]	1.250 [31.75]	<u>0.685</u> [17.40]	<u>0.343</u> [8.71]	0.120 [3.05]	<u>0.060</u> [1.52]	0.083 [2.11]	3.125 [79.38]
HOLE	REAR	<u>2.343</u> [59.51]	1.172 [29.77]	2.500 [63.50]	1.250 [31.75]	<u>0.617</u> [15.67]	<u>0.309</u> [7.85]	0.120 [3.05]	<u>0.060</u> [1.52]	<u>0.132</u> [3.35]	3.125 [79.38]
104 FLOAT	FRONT	2.453 [62.31]	1.227 [31.17]	2.500 [63.50]	1.250 [31.75]	<u>0.717</u> [18.21]	<u>0.359</u> [9.12]	0.088 [2.24]	<u>0.044</u> [1.12]	<u>0.083</u> [2.11]	
MOUNT	REAR	2.375 [60.33]	1.188 [30.18]	2.500 [63.50]	1.250 [31.75]	<u>0.649</u> [16.48]	0.325 [8.26]	<u>0.088</u> [2.24]	<u>0.044</u> [1.12]	0.132 [3.35]	

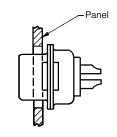
### **CLEARANCE HOLE REAR MOUNT**



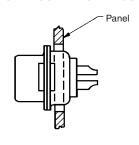
### **CLEARANCE HOLE FRONT MOUNT**



### FLOAT MOUNT REAR MOUNT



### **FLOAT MOUNT FRONT MOUNT**

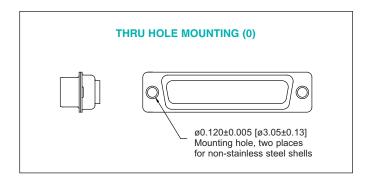


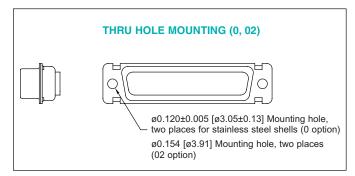


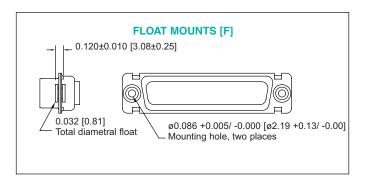
### MOUNTING OPTIONS AND FLARED SHELL

Sub-D Accessories

### **MOUNTING OPTIONS (0, 02, F)**







### **FLARED SHELLS**

Flared shells provide a more **generous misalignment** characteristics than standard D-subminiature shells.

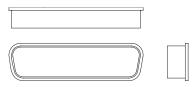


SIDE VIEWS OF FLARED SHELL FOR DD62M4R7000-1503.33 (shown left) and CBD25W3M85RF000-1503.33 (shown right)



CONTACT TECHNICAL SALES FOR PART NUMBERS AND DETAIL INFORMATION.

SUPPLIED AS STANDARD WITH ALL WD, WDD AND EVD SERIES CONNECTORS



MATERIAL: Conductive polyethylene

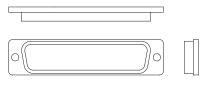
**COLOR:** Black

MATERIAL: Static dissipative ethylene vinyl acetate

COLOR: Pink

#### **COVER WITH EARS**

(FOR CONNECTORS WITH FIXED JACKSCREWS)

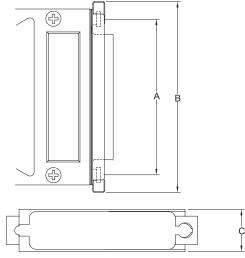


MATERIAL: Conductive polyester

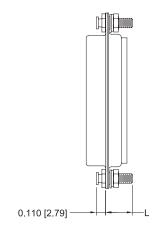
COLOR: Black

WD EVD	WDD	CONDUCTIVE REPLACEMENT PART NUMBER WITHOUT EARS	STATIC DISSIPATIVE REPLACEMENT PART NUMBER WITHOUT EARS	REPLACEMENT PART NUMBER WITH EARS
9M	15M	4931-9-0-0	4931-9-1-0	4931-9-100-0
9F	15F	4932-9-0-0	4932-9-1-0	4932-9-100-0
15M	26M	4931-15-0-0	4931-15-1-0	4931-15-100-0
15F	26F	4932-15-0-0	4932-15-1-0	4932-15-100-0
25M	44M	4931-25-0-0	4931-25-1-0	4931-25-100-0
25F	44F	4932-25-0-0	4932-25-1-0	4932-25-100-0
37M	62M	4931-37-0-0	4931-37-1-0	4931-37-100-0
37F	62F	4932-37-0-0	4932-37-1-0	4932-37-100-0
50M	78M	4931-50-0-0	4931-50-1-0	4931-50-100-0
50F	78F	4932-50-0-0	4932-50-1-0	4932-50-100-0

### **VIBRATION SLIDE LOCKS & LOCK BOLTS**



PART NUMBER	Α	В	С
4591-209-x-0	0.984 [24.99]	1.406 [35.70]	0.433 [11.00]
4591-215-x-0	1.312 [33.32]	1.732 [44.00]	0.433 [11.00]
4591-225-x-0	1.852 [47.04]	2.272 [57.70]	0.433 [11.00]
4591-237-x-0	2.500 [63.50]	2.921 [74.20]	0.433 [11.00]
4591-250-x-0	2.406 [61.11]	2.906 [73.80]	0.535 [13.60]



PART NUMBER	L	
4591-100-0-0	0.323 [8.20]	
4591-101-0-0	0.508 [12.90]	

#### KIT CONSISTS OF:

2 LOCK BOLTS, 2 WASHERS, 2 LOCK WASHERS, AND 2 HEX NUTS.



# BLIND MATING SYSTEM AND VIBRATION LOCKING SYSTEM, REAR PANEL MOUNT

Sub-D Accessories

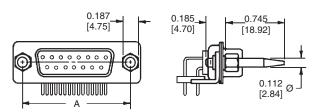
### **BLIND MATING SYSTEM**

#### PANEL MOUNTING

**Material:** Aluminum, yellow anodize standard. Black anodize available.

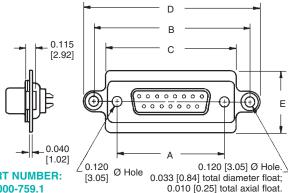


Material: Steel, zinc plate with chromate seal.



To obtain blind mating guides, add the suffix "-759.0" to the end of the part number.

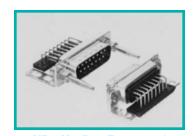
TYPICAL PART NUMBER: MD15M5R7000-759.0



TYPICAL PART NUMBER: MD15F20000-759.1

To obtain panel mounting, add the suffix"-759.1" to the end of the part number.

Contact Technical Sales for additional ordering information.



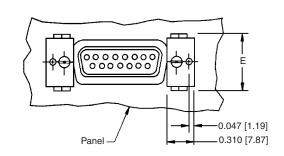
MD15M59R800Z-759.0 and MD15F5R600X shown above.

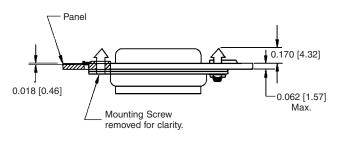
CONNECTOR SIZE	Α	В	С	D	E
SIZE 9	<u>0.984</u>	<u>1.586</u>	1.333	1.930	<u>0.677</u>
	[24.99]	[40.28]	[33.86]	[49.02]	[17.20]
SIZE 15	1.312	1.914	1.661	<u>2.258</u>	<u>0.677</u>
	[33.32]	[48.62]	[42.19]	[57.35]	[17.20]
SIZE 25	1.852	2.461	2.208	<u>2.805</u>	<u>0.677</u>
	[47.04]	[62.51]	[56.08]	[71.25]	[17.20]
SIZE 29	1.534	<u>2.143</u>	1.890	<u>2.487</u>	<u>0.789</u>
	[38.96]	[54.43]	[48.01]	[63.17]	[20.04]
SIZE 37	2.500	3.102	2.849	3.446	<u>0.677</u>
	[63.50]	[78.79]	[72.36]	[87.53]	[17.20]
SIZE 50	<u>2.406</u>	3.008	2.755	3.352	<u>0.789</u>
	[61.11]	[76.40]	[69.98]	[85.14]	[20.04]

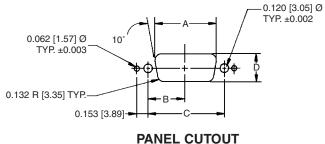


DD44M320000-759.1 and DD44F30000-759.0 shown above.

### REAR PANEL MOUNT - VIBRATION LOCKING SYSTEM (V5)





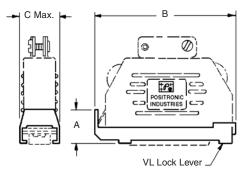


Connector PART NO. Α В С D Ε Size 0.806 0.492 0.984 0.449 0.465 9 D9/370000V50 [20.47] [12.50] [24.99] [11.40][11.81] 1.134 0.656 1.312 0.449 0.465 15 D9/370000V50 [29.80] [16.66] [33.32] [11.40] [11.81] 0.449 1.674 0.926 1.852 0.465 25 D9/370000V50 [42.52] [23.52] [47.04] [11.40] [11.81] 0.555 0.585 1.356 0.767 1.534 29 D290000V50 [34.44][19.48][38.96] [14.10][14.86]2.326 1.250 2.500 0.449 0.465 37 D9/370000V50 [59.08] [31.75] [63.50] [11.40] [11.81] 0.585 2.218 1.203 0.555 2.406 D500000V50 50 [56.34] [30.56] [61.11] [14.10] [14.86]

# VIBRATION LOCKING SYSTEM, FRONT PANEL MOUNT AND PLASTIC HOOD

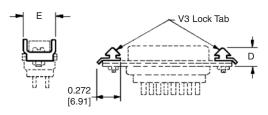


### FRONT PANEL MOUNT - VIBRATION LOCKING SYSTEM (V3 AND VL)





MD25M20JVLZ (left) and MD25F5R30V3X (right) shown above.



Material: Lock Tab - Steel or copper alloy, nickel plate.

Lock Lever - Steel, nickel plate.

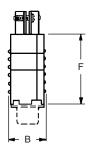
Connector Size	PART NO.	Α	В	C MAX.
9	D90000VL0	<u>0.615</u> [15.62]	<u>1.460</u> [37.08]	<u>0.600</u> [15.24]
15	D150000VL0	<u>0.615</u> [15.62]	1.770 [44.96]	<u>0.600</u> [15.24]
25	D250000VL0	<u>0.615</u> [15.62]	2.360 [59.94]	<u>0.600</u> [15.24]
29	D290000VL0	<u>0.615</u> [15.62]	<u>2.030</u> [51.56]	<u>0.715</u> [18.16]
37	D370000VL0	<u>0.615</u> [15.62]	3.020 [76.71]	<u>0.600</u> [15.24]
50	D500000VL0	<u>0.635</u> [16.13]	<u>2.900</u> [73.66]	<u>0.710</u> [18.03]

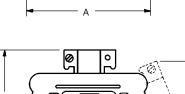
PART NO.	D	E
D9/370000V30	<u>0.270</u> [6.85]	<u>0.465</u> [11.81]
D9/370000V30	<u>0.270</u> [6.85]	<u>0.465</u> [11.81]
D9/370000V30	<u>0.270</u> [6.85]	<u>0.465</u> [11.81]
D290000V30	<u>0.270</u> [6.85]	<u>0.585</u> [14.86]
D9/370000V30	0.270 [6.85]	<u>0.465</u> [11.81]
D500000V30	0.270 [6.85]	<u>0.585</u> [14.86]



D25000JVL0 shown above.

### PLASTIC HOOD (J AND L)





C POSITRONIC INDUSTRIES

### Material:

**Hood -** Glass-filled nylon, 94V-0.

**Cable Clamps -** Steel, nickel plate.

\* = Specify code "J" in step 6 of ordering information for top opening hood or code "L" for side opening hood.

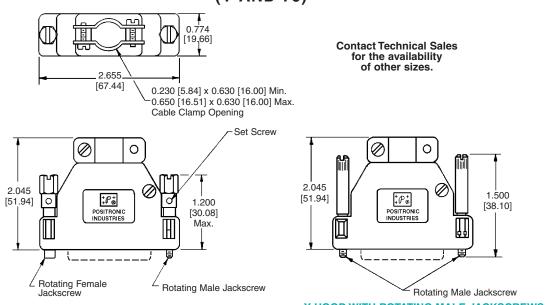
PART NO.	Α	В	С	D	Е	F	CABLE C	PENING
PART NO.	4	ь	C		-		MINIMUM	MAXIMUM
D9000*00	<u>1.262</u>	<u>0.536</u>	<u>1.130</u>	<u>1.520</u>	1.030	<u>0.864</u>	<u>0.145</u>	<u>0.280</u>
	[32.05]	[13.61]	[28.70]	[38.61]	[26.16]	[21.95]	[3.43] Ø	[7.11] Ø
D15000*00	<u>1.551</u>	<u>0.649</u>	<u>1.414</u>	1.900	<u>1.240</u>	1.022	0.160	<u>0.275</u>
	[39.40]	[16.48]	[35.92]	[48.26]	[31.50]	[25.96]	[4.06] Ø	[6.99] Ø
D25000*00	<u>2.129</u>	<u>0.603</u>	<u>1.533</u>	<u>2.492</u>	<u>1.380</u>	1.186	<u>0.110</u>	0.275
	[54.08]	[15.31]	[38.94]	[63.30]	[35.10]	[30.12]	[2.79] Ø	[6.99] Ø
D29000*00	<u>1.801</u>	<u>0.697</u>	1.537	<u>2.164</u>	1.390	1.196	<u>0.110</u>	0.280
	[45.75]	[17.70]	[39.04]	[54.97]	[35.31]	[30.38]	[2.79] Ø	[7.11] Ø
D37000*00	<u>2.786</u>	<u>0.650</u>	1.844	<u>3.118</u>	1.690	1.502	0.230 X 0.630	0.350 X 0.630
	[70.76]	[16.51]	[46.84]	[79.20]	[42.93]	[38.15]	[5.84] X [16.00]	[8.89] X [16.00]
D50000*00	<u>2.688</u>	<u>0.745</u>	1.839	3.015	1.690	1.504	0.230 X 0.630	0.430 X 0.630
	[68.28]	[18.92]	[46.71]	[76.58]	[42.93]	[38.23]	[5.84] X [16.00]	[10.92] X [16.00]



# PLASTIC HOODS AND COMPOSITE HOODS WITH ROTATING JACKSCREW SYSTEMS

Sub-D Accessories

### SIZE 50 PLASTIC HOOD WITH ROTATING JACKSCREWS (Y AND Y6)



Y6 HOOD WITH ROTATING POLARIZED JACKSCREWS

Y HOOD WITH ROTATING MALE JACKSCREWS

Material: Hood - Composite, conductive volume resistivity [1.0 ohm-cm max.].

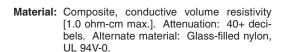
Attenuation - 40+ decibels.

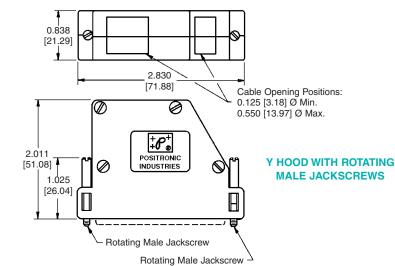
Alternate material - Glass-filled nylon, UL 94V-0.

Jackscrews - Steel, zinc plated.

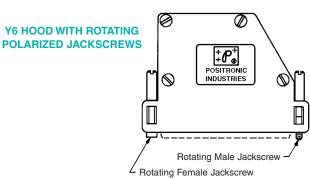
Cable Clamps - Steel, nickel plated.

### SIZE 104 COMPOSITE HOOD WITH ROTATING JACKSCREWS (Y AND Y6)





**CABLE OPENING INSERT TREE** 

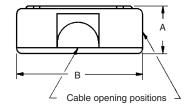


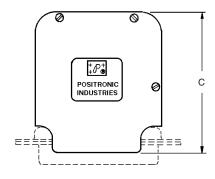
### PLASTIC HOOD (W)



D9000W00 (left) and D25000W00 (right) shown above.

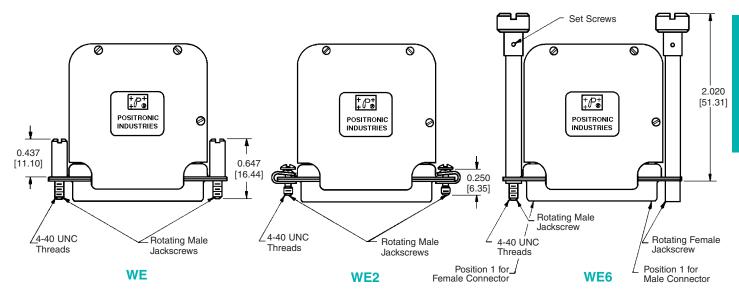
PART NO.	АВ		С	CABLE OPENING		
PART NO.				MIN.	MAX.	
D9000W00	<u>0.630</u>	<u>0.770</u>	1.800	0.093	0.093	
	[16.00]	[19.56]	[45.72]	[2.36]R.	[2.36]R.	
D15000W00	<u>0.630</u>	1.100	1.800	0.125	<u>0.156</u>	
	[16.00]	[27.94]	[45.72]	[3.18] <sup>R</sup> .	[3.96] <sup>R</sup> .	
D25000W00	<u>0.630</u>	1.622	1.800	<u>0.125</u>	<u>0.250</u> R.	
	[16.00]	[41.20]	[45.72]	[3.18]R.	[6.35]	





Material: Polypropylene 94V-0.

### PLASTIC HOOD WITH JACKSCREW SYSTEM (WE, WE2, AND WE6)



Material: Steel, zinc plate.

Material: Screw - Steel, zinc plate with chromate seal.

**U-Clip -** Spring steel, zinc plate with chromate steel.

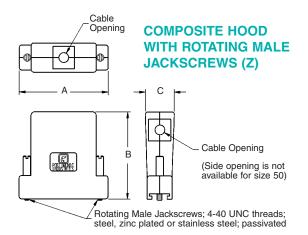
Material: Steel, zinc plate.

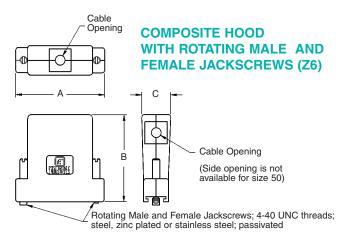


# EXTENDED HEIGHT, ROBUST COMPOSITE HOODS WITH BOTH TOP AND SIDE CABLE OPENINGS FOR LARGE DIAMETER SHIELDED AND HEAVY POWER CONTACTS

Sub-D Accessories

### EMI/RFI COMPOSITE HOODS (Z, Z4, Z6, AND Z7)



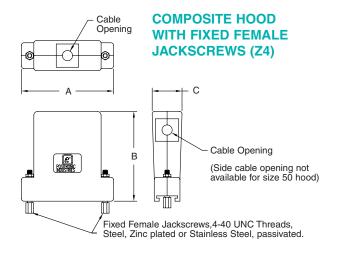


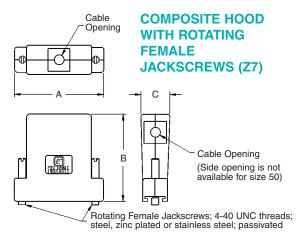
DART NO		A B		CABLE OPENING		
PART NO.	A   B		С	MIN.	MAX.	
D9000Z00 D9000Z400 D9000Z600 D9000Z700	1.387 [35.23]	1.935 [49.15]	<u>0.735</u> [18.67]	0.100 [2.54]	0.400 [10.16] X 0.570 [14.48]	
D15000Z00 D15000Z400 D15000Z600 D15000Z700	1.715 [43.56]	1.935 [49.15]	<u>0.735</u> [18.67]	<u>0.100</u> [2.54]	0.400 [10.16] X 0.570 [14.48]	
D25000Z00 D25000Z400 D25000Z600 D25000Z700	<u>2.254</u> [57.25]	<u>2.200</u> [55.88]	<u>0.735</u> [18.67]	0.100 [2.54]	0.550 [13.97] X 0.570 [14.48]	
D37000Z00 D37000Z400 D37000Z600 D37000Z700	2.903 [73.74]	2.200 [55.88]	<u>0.735</u> [18.67]	0.100 [2.54]	0.550 [13.97] X 0.570 [14.48]	
D50000Z00 D50000Z400 D50000Z600 D50000Z700	2.809 [71.35]	2.700 [68.58]	0.900 [22.86]	0.100 [2.54]	Ø <u>0.630</u> [16.00]	

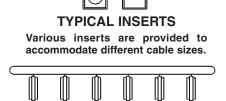
Material: Composite, conductive volume resistivity

[1.0 ohm-cm max.], UL94V-0. Attenuation: 40+ decibels.

Alternate Material: Glass filled nylon, UL94V-0.



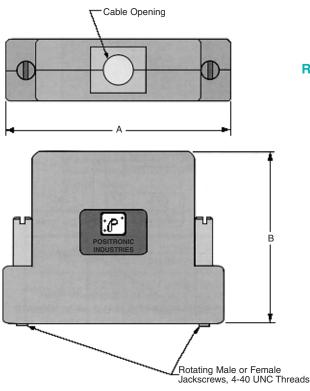






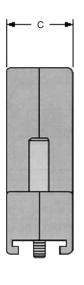


### EMI/RFI METAL HOOD (M) FOR SPACE APPLICATION SUBMINIATURE-D CONNECTORS



PART NUMBER	Α	В	С	CABLE OPENING, MAX.		
D9000*00	1.397	<u>1.750</u>	<u>0.630</u>	Ø 0.375		
	[35.48]	[44.45]	[16.00]	[9.53]		
D15000*00	1.725	1.750	<u>0.630</u>	Ø 0.375		
	[43.82]	[44.45]	[16.00]	[9.53]		
D25000*00	<u>2.265</u>	<u>1.750</u>	<u>0.630</u>	Ø <u>0.450</u>		
	[57.53]	[44.45]	[16.00]	[11.43]		
D37000*0	<u>2.913</u>	1.750	<u>0.630</u>	Ø <u>0.450</u>		
	[73.99]	[44.45]	[16.00]	[11.43]		
D50000*00	<u>2.819</u> [71.60]	1.750 [44.45]	<u>0.740</u> [18.80]	Ø <sup>0.550</sup> [13.97]		
D104000*00	<u>2.913</u>	<u>1.750</u>	<u>0.803</u>	Ø <u>0.625</u>		
	[73.99]	[44.45]	[20.40]	[15.88]		
(*) - DESIGNATES HOOD ACCESSORIES OPTION						

### ALUMINUM HOOD WITH ROTATING MALE OR FEMALE JACKSCREWS



TYPICAL PART NUMBER: (FOR HOOD ASSEMBLY) D25000M00



TYPICAL PART NUMBER: (FOR CABLE ENTRY INSERT) 4595 - \*\*\* - \*\*\* - \*\*

Contact Technical Sales for part number completion based upon customer requirements.

Material: Hood - Aluminum per QQ-A-225, yellow chromate conversion per MIL-C-5541 or black anodize per MIL-A-8625 optional.

Hardware - Non-magnetic stainless steel per QQ-S-763, passivated per QQ-P-35, or brass per QQ-B-626 with 0.000050 [1.27μ] gold plate over copper per MIL-G-45204 optional.

HOOD ACCESSORIES PART NUMBERS								
HARDWARE OPTIONS	YELLOW CHROMATE CONVERSION HOOD WITH STAINLESS STEEL HARDWARE	YELLOW CHROMATE CONVERSION HOOD WITH COPPER ALLOY HARDWARE	BLACK ANODIZED HOOD WITH STAINLESS STEEL HARDWARE	BLACK ANODIZED HOOD WITH COPPER ALLOY HARDWARE				
MALE ROTATING JACKSCREWS	D*000M00	D*000MG00	D*000MB00	D*000MC00				
FEMALE ROTATING JACKSCREWS	D*000M700	D*000M7G00	D*000M7B00	D*000M7C00				
ONE (1) MALE ROTATING JACKSCREW AND ONE (1) FEMALE ROTATING JACKSCREW	D*000M600	D*000M6G00	D*000M6B00	D*000M6C00				
	( * ) - DESIGNATES CONNECTOR SIZE							



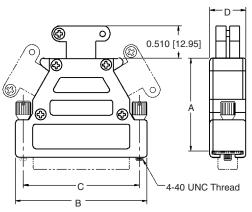
Positronic's EMI/RFI shielding G-Series metal hoods are made of die cast zinc in order to maximize shielding performance as well as ruggedness. The interior space is well-proportioned to allow ample room for conductors. Cable retention in the hood is maintained with zinc die-cast cable clamps, and there is a central grounding post inside the hood. Various cable exit options are offered and unused cable openings are EMI/RFI protected by using the included metal plugs. For greater shielding performance as well as greater cable retention, a crimp fer-

rule system is available; see page 18 of this catalog.

These EMI/RFI shielding hoods are offered with rotating jackscrews or vibration locking systems. The G-Series EMI/RFI shielding hoods can be supplied for D-Subminiature connector shell sizes 1 - 6 which meet the dimensional requirements of M24308, IEC 807-2, and IEC 807-3.

The EMI/RFI hoods and adapters shown on pages 15 - 17 of this catalog are manufactured by *Inotec*. Positronic serves as the North American distributor of these hoods and adapters.

### EMI/RFI METAL HOOD WITH ROTATING JACKSCREWS (GE)

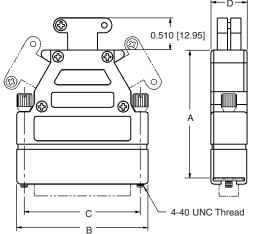


#### CABLE CLAMP OPENINGS

**Shell Sizes 1 - 4:** 0.118 [3.0], Min. 0.472 [12.0], Max.

**Shell Size 5 - 6:** 0.197 [5.0], Min. 0.551 [14.0], Max.

See page 18 of this catalog for optional Crimp Ferrule System.



PART NUMBER (SHELL SIZE)	А	В	С	D	OPTIONS
D9000GE0	1.496	1.220	<u>0.984</u>	<u>0.583</u>	1 Top
(Shell Size 1)	[38.00]	[31.00]	[25.00]	[14.81]	(Not Pictured)
D15000GE0	1.673	1.547	1.311	<u>0.583</u>	1 Top, 1 Side*
(Shell Size 2)	[42.50]	[39.30]	[33.30]	[14.81]	(Not Pictured)
D25000GE0	1.673	<u>2.094</u>	1.850	<u>0.583</u>	1 Top,
(Shell Size 3)	[42.50]	[53.20]	[47.00]	[14.81]	2 Side**
D37000GE0	1.673	<u>2.736</u>	2.500	<u>0.583</u>	1 Top,
(Shell Size 4)	[42.50]	[69.50]	[63.50]	[14.81]	2 Side**
D50000GE0	1.673	<u>2.638</u>	<u>2.406</u>	<u>0.701</u>	1 Top,
(Shell Size 5)	[42.50]	[67.00]	[61.10]	[17.80]	2 Side**
D104000GE0	1.657	2.835	2.500	<u>0.764</u>	1 Top, 2 Side**
(Shell Size 6)	[42.09]	[72.01]	[63.50]	[19.40]	

Material	: Z	linc,	die	cast.
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PART NUMBER (SHELL SIZE)	Α	В	С	D	CABLE EXIT OPTIONS
D9000GE0-1023.5	1.988	1.220	<u>0.984</u>	<u>0.583</u>	1 Side
(Shell Size 1)	[50.50]	[31.00]	[25.00]	[14.81]	(Not Pictured)
D15000GE0-1023.5	2.165	1.547	1.311	<u>0.583</u>	1 Side
(Shell Size 2)	[55.00]	[39.30]	[33.30]	[14.81]	(Not Pictured)
D25000GE0-1023.5	2.165	2.094	1.850	<u>0.583</u>	1 Top,
(Shell Size 3)	[55.00]	[53.20]	[47.00]	[14.81]	2 Side**
D37000GE0-1023.5	2.165	2.736	2.500	<u>0.583</u>	1 Top,
(Shell Size 4)	[55.00]	[69.50]	[63.50]	[14.81]	2 Side**
<b>D50000GE0-1023.5</b> (Shell Size 5)	<u>2.244</u>	2.638	2.406	<u>0.701</u>	1 Top,
	[57.00]	[67.00]	[61.10]	[17.80]	2 Side**

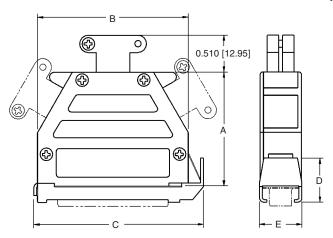
(\*) **NOTE:** These hoods are supplied with one (1) cable clamp set and one (1) opening plug. (\*\*) **NOTE:** These hoods are supplied with one (1) cable clamp set and two (2) opening plugs.

#### **FEATURES:**

- Gripping shoulders enable trouble-free extraction of the connector assembly even with tightly packed aligned hoods.
- Rotating jackscrews offer the most secure mechanical locking of the connector system.
- Standard height hoods for use with Connector Shell Sizes 1 and 2 are available with a top or side cable exit option. Contact Technical Sales for details.
- Hoods for use with Connector Shell Sizes 3 5 are designed with three (3) cable entries and can permit the looping through of cables. Cable entries not used are sealed with supplied metal plugs to maintain EMI/RFI shielding qualities.
- Two (2) height options are available, one being a low profile option as shown on the left side
  of this page. An increased height option (as shown on the right side of this page) is offered
  for use with power conductors and coaxial cable, such as might be used with the Positronic
  CBD/CBM Series Connectors.



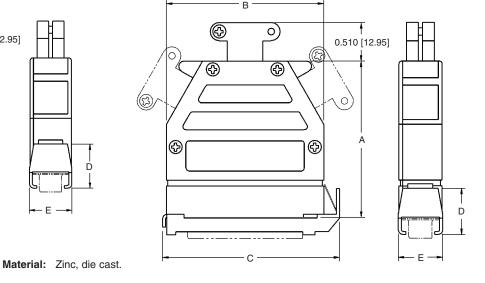
### EMI/RFI METAL HOOD WITH VIBRATION LOCK SYSTEM (GVL)



#### **CABLE CLAMP OPENINGS**

**Shell Sizes 1 - 4:** 0.118 [3.0], Min. • 0.472 [12.0], Max.

**Shell Size 5:** 0.197 [5.0], Min. • 0.551 [14.0] Max.

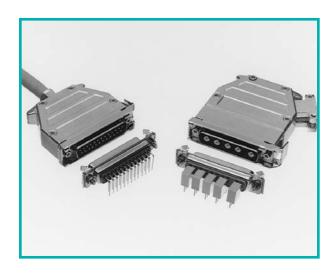


See page 18 of this catalog for optional Crimp Ferrule System.

PART NUMBER (SHELL SIZE)	Α	В	С	D	Е	CABLE EXIT OPENING
D9000GVL0	1.575	1.260	1.460	<u>0.615</u>	<u>0.600</u>	2 Side*
(Shell Size 1)	[40.00]	[32.00]	[37.08]	[15.62]	[15.24]	
D15000GVL0	1.575	1.547	1.770	<u>0.615</u>	<u>0.600</u>	1 Top,
(Shell Size 2)	[40.00]	[39.30]	[44.96]	[15.62]	[15.24]	2 Side**
D25000GVL0	1.575	<u>2.094</u>	<u>2.360</u>	<u>0.615</u>	<u>0.600</u>	1 Top,
(Shell Size 3)	[40.00]	[53.20]	[59.94]	[15.62]	[15.24]	2 Side**
D37000GVL0	1.575	2.736	3.020	<u>0.615</u>	<u>0.600</u>	1 Top,
(Shell Size 4)	[40.00]	[69.50]	[76.71]	[15.62]	[15.24]	2 Side**
D50000GVL0	1.575	2.638	2.900	<u>0.635</u>	<u>0.710</u>	1 Top,
(Shell Size 5)	[40.00]	[67.00]	[73.66]	[16.13]	[18.03]	2 Side**

PART NUMBER (SHELL SIZE)	Α	В	С	D	E	CABLE EXIT OPENING
D9000GVL0-1023.0	<u>2.165</u>	1.260	1.460	<u>0.615</u>	<u>0.600</u>	2 Side*
(Shell Size 1)	[55.00]	[32.00]	[37.08]	[15.62]	[15.24]	
D15000GVL0-1023.0	<u>2.165</u>	1.547	1.770	<u>0.615</u>	<u>0.600</u>	1 Top,
(Shell Size 2)	[55.00]	[39.30]	[44.96]	[15.62]	[15.24]	2 Side**
D25000GVL0-1023.0	<u>2.165</u>	<u>2.094</u>	2.360	<u>0.615</u>	<u>0.600</u>	1 Top,
(Shell Size 3)	[55.00]	[53.20]	[59.94]	[15.62]	[15.24]	2 Side**
D37000GVL0-1023.0	<u>2.165</u>	<u>2.736</u>	3.020	<u>0.615</u>	<u>0.600</u>	1 Top,
(Shell Size 4)	[55.00]	[69.50]	[76.71]	[15.62]	[15.24]	2 Side**
D50000GVL0-1023.0	<u>2.165</u>	<u>2.638</u>	2.900	<u>0.635</u>	<u>0.710</u>	1 Top,
(Shell Size 5)	[55.00]	[67.00]	[73.66]	[16.13]	[18.03]	2 Side**

(\*) **NOTE:** These hoods are supplied with one (1) cable clamp set and one (1) opening plug. (\*\*) **NOTE:** These hoods are supplied with one (1) cable clamp set and two (2) opening plugs.

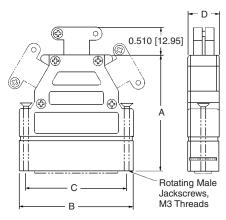


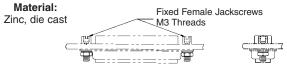
### **FEATURES:**

- Rapid locking system stays in a constantly-locked position, utilizing a blade spring. System is unlocked by simply pressing the slide latch. Locking is automatic upon coupling to the mating connector.
- Gripping shoulders enable trouble-free extraction of the connector assembly even with tightly packed aligned hoods.
- Hoods for use with Connector Shell Sizes 2 5 are designed with three (3) cable entries and can permit the looping through of cables. Cable entries not used are sealed with the supplied metal plugs to maintain EMI/RFI shielding. Hoods for use with Connector Shell Size 1 are designed with only two (2) side openings.
- Two (2) height options are available, one being a low profile option as shown on the left side of this page. An increased height option (as shown on the right side of this page) is offered for use with power conductors and coaxial cable, such as might be used with the Positronic CBD/CBM Series Connectors.



### EMI/RFI METAL HOOD (G)





To obtain the fixed female jackscrews (shown above), add the suffix "-1193.6" to the end of the part number.

Contact Technical Sales for additional ordering information.

### **CABLE CLAMP OPENINGS**

 Shell Sizes 1 - 4:
 Shell Size 5:

 0.118 [3.0], Min. • 0.472 [12.0], Max.
 0.197 [5.0], Min. • 0.551 [14.0] Max.

See page 18 of this catalog for optional Crimp Ferrule System.

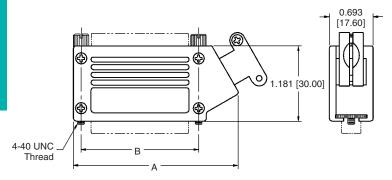
PART NUMBER (Shell Size)	Α	В	С	D	CABLE EXIT OPENINGS			
D9000G00-1023.6	1.949	1.287	<u>0.984</u>	<u>0.583</u>	1 Top			
(Shell Size 1)	[49.50]	[32.70]	[25.00]	[14.81]	(Not Pictured)			
D15000G00-1023.6	<u>2.126</u>	1.551	1.311	<u>0.583</u>	1 Side			
(Shell Size 2)	[54.00]	[39.40]	[33.30]	[14.81]	(Not Pictured)			
D25000G00-1023.6	2.126	<u>2.165</u>	1.850	<u>0.583</u>	1 Top,			
(Shell Size 3)	[54.00]	[55.00]	[47.00]	[14.81]	2 Side*			
D37000G00-1023.6	<u>2.204</u>	2.803	2.500	<u>0.583</u>	1 Top,			
(Shell Size 4)	[56.00]	[71.20]	[63.50]	[14.81]	2 Side*			
<b>D50000G00-1023.6</b> (Shell Size 5)	<u>2.204</u>	<u>2.717</u>	<u>2.406</u>	<u>0.701</u>	1 Top,			
	[56.00]	[69.01]	[61.10]	[17.80]	2 Side*			
D104000G00-1023.6	1.929	2.835	2.500	<u>0.764</u>	1 Top,			
(Shell Size 6)	[49.00]	[72.00]	[63.50]	[19.40]	2 Side*			
NOTE: The hoods	NOTE: The hoods denoted with an (*) are supplied with one (1) cable							

IOTE: The hoods denoted with an (\*) are supplied with one (1) cable clamp set and two (2) opening plugs.

### **FEATURES:**

- \* Developed for applications where the highest degree of EMI/RFI shielding protection is required.
- \* The connector is recessed into the hood so that additional EMI/RFI protection is gained.
- \* When this connector system is fully coupled, the front edge of the hood presses against the panel that houses the mating connector, offering greater shielding.
- \* Hoods for use with Connector Shell Sizes 3 5 are designed with three (3) cable entries and can permit the looping through of cables. Cable entries not used are sealed with supplied metal plugs to maintain EMI/RFI shielding qualities.
- \* Jackscrew locking system is supplied as a standard for secure mechanical coupling.

### **EMI/RFI ADAPTER (GA)**



Material: Zinc, die cast

#### **CABLE CLAMP OPENINGS**

**Shell Sizes 1 - 4:** 0.118 [3.0], Min. 0.472 [12.0], Max.

See page 18 of this catalog for optional Crimp Ferrule System.

PART NUMBER (Shell Size)	А	В
D9000GA0	<u>1.733</u>	<u>0.984</u>
(Shell Size 1)	[44.00]	[25.00]
D15000GA0	<u>2.059</u>	<u>1.311</u>
(Shell Size 2)	[52.30]	[33.30]
D25000GA0	<u>2.598</u>	<u>1.850</u>
(Shell Size 3)	[66.00]	[47.00]
D37000GA0	<u>3.248</u>	<u>2.500</u>
(Shell Size 4)	[82.50]	[63.50]

#### **FEATURES:**

- \* The "GA" Series Adapter can be used as a gender-changer which provides EMI/RFI protection.
- \* The "GA" Series Adapter allows for internal placement of a P.C. board between the connectors.
- \* The "GA" Series" Adapter can be used to adapt connectors of one interface standard to another.
- \* The "GA" Series Adapter can be used in applications where tapping into the electrical line path between connectors is necessary. A cable exit is provided for this application.
- \* If no connector is inserted into the rear side of the hood, the opening can be closed with a metal plate which can be adapted for use with LED's, mini-switches, and coaxial connectors.
- \* Jackscrew locking system is supplied as a standard for secure mechanical coupling.



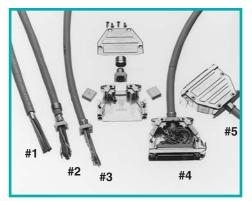
The Crimp Ferrule System optimizes the transition of the cable shield into the hood in three ways. First: It pro-

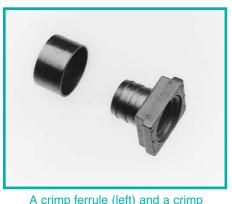
vides a low impedance connection of the cable shield to the hood which remains constant over time. Second: The system provides an EMI/RFI tight cable exit point. Third: The system provides for high mechanical retention of the cable in the hood.

Application of the Crimp Ferrule System is quite simple. Once the cable insulation and shield are cut to the correct dimensions (#1), the crimp ferrule is placed over the cable and the crimp flange is inserted between the shield and the conductors (#2). The crimp ferrule is now slid over the cable insulation into position over the crimp flange and the crimp is made using Positronic-supplied Hand Press and Die Sets (#3). This assembly is then ter-

minated to the connector and placed into the hood (#4). Finally, the cover is placed on the hood and secured using four (4) screws (#5).

To order the Positronic-supplied Hand Press, request Part Number 9520-0-0-0 or for Hand Crimp Tool, request Part Number 9521-0-0-0 from the Factory. To order Positronic supplied Die Sets, contact Technical Sales for ordering information, since Die Sets are customized based on the specific crimp flanges and crimp ferrules used.





flange (right) shown above.

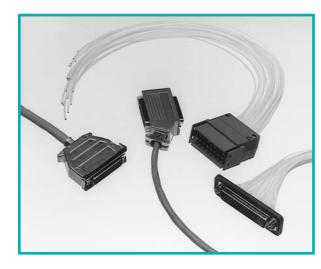
### CRIMP FERRULE/FLANGE ORDERING INFORMATION

STEP	1		2		3		4	
TYPICAL	4592	-	***	-	***	-	0	CRIMP FERRULE
PART NUMBERS	4593	-	***	-	***	-	0	CRIMP FLANGE
STEP 1 - BASIC SERIES 4592 - Crimp Ferrule 4593 - Crimp Flange								- PLATING dard plating.

STEPS 2 & 3 - DIAMETERS\*

### CABLIZED CONNECTORS

**SAVE TIME AND MONEY!** Let Positronic support your connector requirements by cablizing your connector selection. Positronic offers technical support and manufacturing capability for cablized connectors. Contact your factory direct sales representative for details!



<sup>\*\*\*</sup> Contact Technical Sales for part number completion which is determined by Customer-required cable diameters and type.



### FERRITE INDUCTOR BAR FOR **EMI/RFI NOISE SUPPRESSION AND** SAE-AS85049/48 METAL HOOD

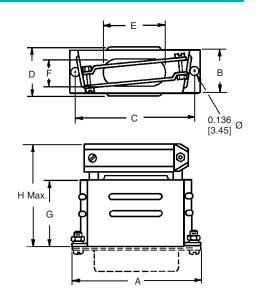
Sub-D Accessories

### **METAL HOOD (H)** SAE-AS85049/48

Material: Steel, zinc plate with chromate seal.

NOTE: Brass with gold plate finish is available for space applications. Contact Technical Sales for ordering information.

PART NO.	Α	В	С	D MAX.	E	F	G	н мах.
D15000H00	<u>1.531</u>	<u>0.492</u>	<u>1.312</u>	<u>0.578</u>	<u>0.713</u>	<u>0.312</u>	<u>0.750</u>	<u>1.219</u>
	[38.88]	[12.50]	[33.32]	[14.68]	[18.11]	[7.92]	[19.05]	[30.96]
D25000H00	2.078	<u>0.492</u>	<u>1.852</u>	<u>0.578</u>	1.000	<u>0.312</u>	1.000	<u>1.532</u>
	[52.78]	[12.50]	[47.04]	[14.68]	[25.40]	[7.92]	[25.40]	[38.91]
D37000H00	<u>2.718</u>	<u>0.492</u>	<u>2.500</u>	<u>0.578</u>	1.375	<u>0.312</u>	1.000	<u>1.532</u>
	[69.03]	[12.50]	[63.50]	[14.68]	[34.93]	[7.92]	[25.40]	[38.91]
D50000H00	<u>2.625</u>	<u>0.601</u>	<u>2.406</u>	<u>0.687</u>	<u>1.406</u>	<u>0.406</u>	<u>1.125</u>	<u>1.657</u>
	[66.68]	[15.27]	[61.11]	[17.45]	[35.71]	[10.31]	[28.58]	[42.09]



These metal hoods conform to SAE-AS85049/48. Use the following part numbers for ordering:

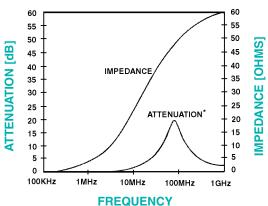
M85049/48-1-3

M85049/48-1-4

M85049/48-1-5

### FERRITE INDUCTOR BAR (F, Q) FOR EMI/RFI NOISE SUPPRESSION

### FILTERING CHARACTERISTICS

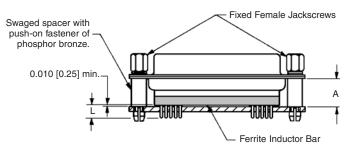


\* NO-LOAD CONDITION

SERIES | CODE NUMBER

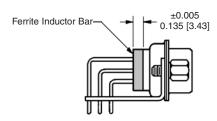
**FERRITE INDUCTOR AVAILABILITY** 

SENIES	CODE NUMBER	A	
MD	32	0.375[9.53]	0.240[6.10]
MD	4		
MD	59		
MD	6	0.375[9.53]	0.360[9.14]
ED	36	0.375[9.53]	0.101[2.57]
ED	6	0.375[9.53]	0.360[9.14]
DD	32	0.515[13.08]	0.165[4.19]
ODD	32	0.375[9.53]	0.165[4.19]
ODD	5		
HDC	32	0.375[9.53]	0.240[6.10]
HDC	36	0.375[9.53]	0.101[2.57]
HDC	6	0.375[9.53]	0.360[9.14]
		· ·	·



STRAIGHT PRINTED BOARD MOUNT CONNECTOR

Material: Nickel zinc ceramic.



### 90° PRINTED BOARD MOUNT CONNECTOR

NOTE: This bar option is available for connector sizes 9, 15, 25, and 37. Ferrite beads are used for the other sizes. Contact Technical Sales for ferrite inductor ordering information on those connectors.

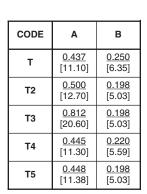
Specify Code F or Q in Step 6 of ordering information. F is for ferrite inductor and Q is for ferrite inductor with push-on fastener.

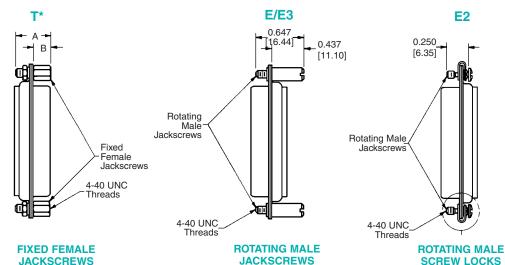
### NON-POLARIZED AND POLARIZED **JACKSCREW SYSTEMS**



**E2** 

### JACKSCREW SYSTEMS (T, T2, T3, T4, T5, E, E2, AND E3)





Material: T, T4, and T5 - Brass, zinc plate with chromate seal.

> T2 and T3 - Steel, zinc plate with chromate seal.

> Passivated stainless steel jackscrews available. Contact Technical Sales for ordering information.

Material: Steel, zinc plate.

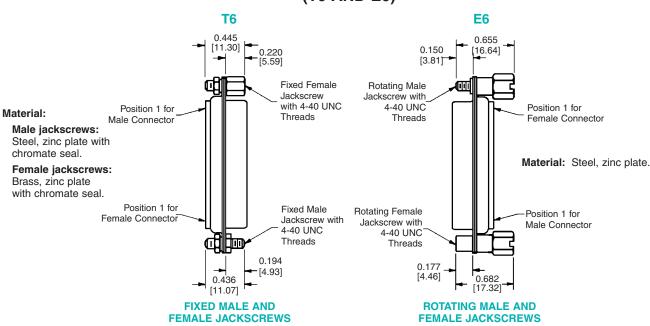
E = slotted for screw driver E3 = internal hex for 3/32 hex drives



Material: Screw - Steel, zinc plate with chromate

> U-Clip - Spring steel, zinc plate with chromate seal.

### **POLARIZED JACKSCREW SYSTEMS** (T6 AND E6)



### Positronic Products

Contact Sizes: 0, 8, 12, 16, 20 and 22

Current Ratings: To 150 amperes Terminations: Crimp, wire solder, straight solder, right angle solder, straight press-fit and right angle press-fit

Configurations: Multiple variants in a variety of package sizes Compliance: PICMG 2.11, PICMG 3.0, VITA 41



FEATURES: Hot swap capability • AC/DC operation in a single connector • Signal contacts for hardware management • Blind mating • Sequential mating • Large Surface Area Contact Mating System • Wide variety of accessories • Customer specified contact arrangements

Contact Sizes: 16, 20 and 22 Current Ratings: To 13 amperes Terminations: Crimp, wire solder, straight solder and right angle solder Configurations: Multiple variants in both standard and high densities Qualifications: MIL-DTL-28748, MIL-C-39029, CCITT V.35



FEATURES: Two performance levels available: industrial quality and military quality provide two performance to cost choices • Large Surface Area Contact Mating System • A wide variety of accessories • Broad selection of contact variants and package sizes

All Positronic connector products can be supplied as part of cable assemblies whose technical characteristics would reflect those of the connectors being used within the assembly.



FEATURES: Shorten the supply chain and reduce additional costs and delays by "cablizing" • Overmolding available • Shielded and environmentally sealed versions available • Power cables and access boxes which meet the SAE J2496 specification

Contact Sizes: 8, 20 and 22 Current Ratings: To 40 amperes nominal

Terminations: Crimp, wire solder, straight solder, right angle solder and straight press-fit Configurations: Multiple variants in both standard and high densities Qualifications: MIL-DTL-24308, Goddard Space Flight 311P, MIL-C-39029, IP65, IP67



FEATURES: Three performance levels available: professional quality, military quality and space-flight quality provide multiple performance to cost choices • Options include thermocouple contacts, filtered, environmentally sealed and dual port package including mixed density • Broad selection of accessories

Contact Sizes: 12, 16, 20 and 22 Current Ratings: To 25 amperes

nominal Terminations: Crimp, wire solder, straight solder and right angle solder

in two package sizes Qualifications: Environmental protection to IP67



FEATURES: Non-corrodible / lightweight composite construction • EMI/RFI shielded versions • Thermocouple contacts • Environmentally sealed versions • Rear insertion/ front release of removable contacts • Two level sequential mating • Overmolding available on full assemblies

Contact Sizes: 8, 12, 16, 20 and 22

Current Ratings: To 40 amperes nominal

Terminations: Feed through is standard; flying leads and board mount available upon request

Configurations: See D-Subminiature and Circular Configurations above Qualifications: Space-D32



FEATURES: Intended for use as an electrical feedthrough in high vacuum applications • Leakage rate: 1 x 10-9 mbar.l/s • Signal, power, coax and high voltage versions available • Connectors can be mounted on flange assembly per customer specification

For more information, visit www.connectpositronic.com or call your nearest Positronic sales office as given on the back of this catalog.

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#### MIDEAST, Technical Agents

Technical Agents in Israel and Turkey



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