

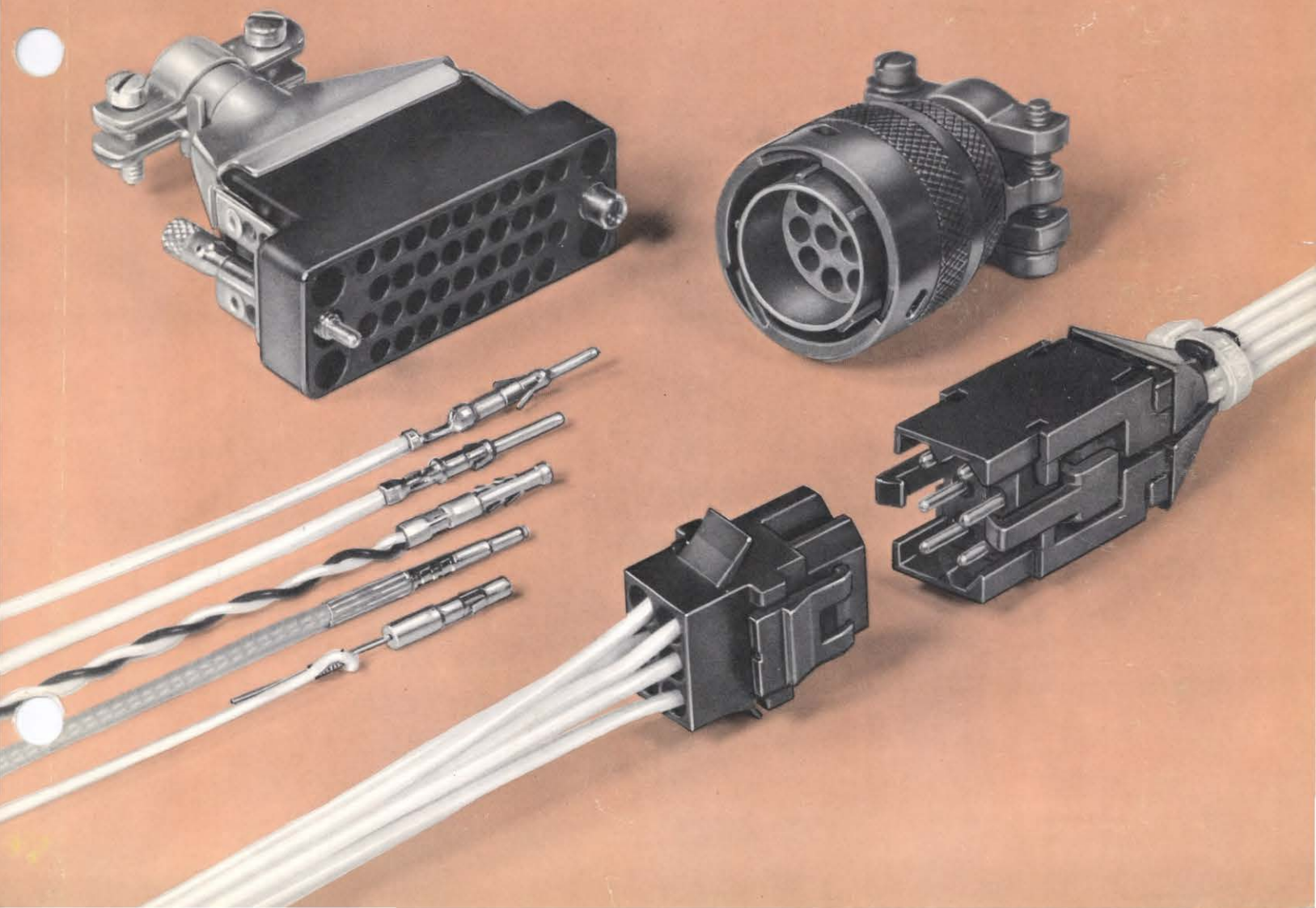


# BURNDY

## TRIM TRIO™

### Connector Family

Rectangular, QIKMATE™ & Round Connectors  
Power & Coax Contacts



Burndy Trim Trio is a unique family of connectors that offers more flexibility, versatility and design options than any other connector system. The Trim Trio system is made up of one common family of .0625" diameter contacts. They're available in high reliability machined gold plate, strip formed tin or gold plate, submin coax or twisted pair. Any of the contacts can be used interchangeably in Trim Trio connectors: rectangular, Qikmate self-mounting or round. Contacts can be used as input or output in any plug or receptacle for unparalleled versatility. Complete installation tooling—from hand tools to automatic presses—lets you match production requirements precisely.

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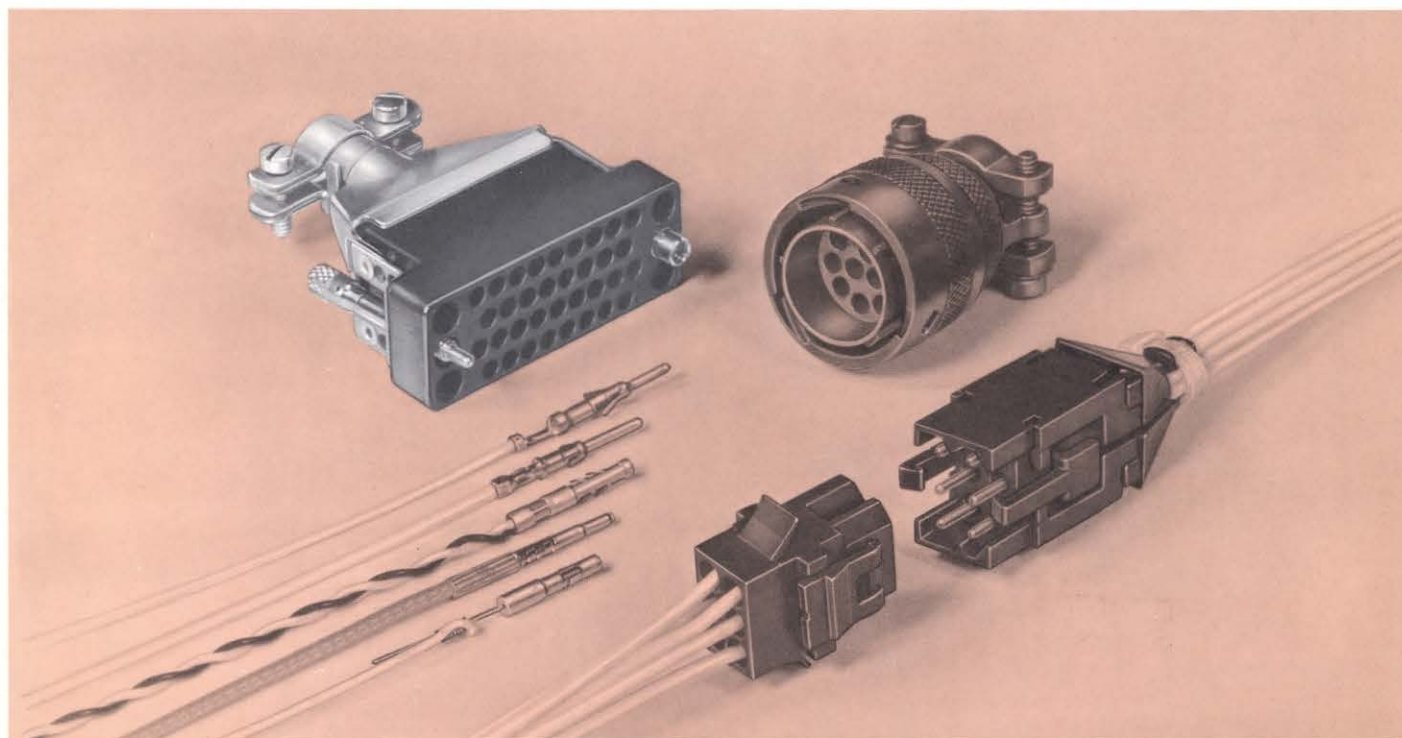
Dimensions, tolerances and other specifications which may be shown in this Catalog are subject to change. Current information is available on request.



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# Rectangular Connectors



**Trim Trio rectangular connectors are available in a 14 to 75 place block family and in larger 104 and 152 position blocks.**

**14-75 Place Blocks:** These blocks are made of glass-filled phenolic or diallyl. The hardware is pre-assembled to the blocks, eliminating assembly time and the possibility of missing parts. Hoods are of a unique design which permits contacts to be inserted or extracted without dismantling hoods. An illustrated ordering chart, pages 8-9, gives the catalog numbers for pre-assembled block configurations.

**104 and 152 Place Blocks:** The 104 place block is molded of diallyl; the 152 of glass filled phenolic. Both have a center jackscrew for easy connection and disconnection while maintaining positive engagement.

## Performance Characteristics

Operating Temperature	-55° to +125°C
Insulation Resistance (min.)	5000 megohms
Test Potential (1 min. duration)	2000 VAC, 60 HZ
Contact Retention in Panel (min.)	25 lbs. (machined contacts) 15 lbs. (formed contacts) after 10 insertions and withdrawals
Shock	Per MIL-STD-202, method 207
Materials:	
MS-M blocks	Glass-filled phenolic per MIL-M-14F, type MFH
MSD-M blocks	Diallyl Phthalate per MIL-M-19833
Guide Pins and sockets	without accessories — Brass ASTM B1. 6; with accessories — Stainless Steel #303
Keyed jacks and Rotating jacks	Stainless Steel #303



## Suitcase Hood and Block Assemblies

The suitcase hood, factory pre-assembled, opens easily for contact insertion, inspection, or changes, and snaps shut. Assemblies can include finger turnable jack screws, quick disconnects, pin protection skirts, guide pins and sockets. See pages 8-9 for these variations.

### Material

**Hood, Cable Clamp Bar, Hinge**

**Block:** Aluminum per QQ-A-250.

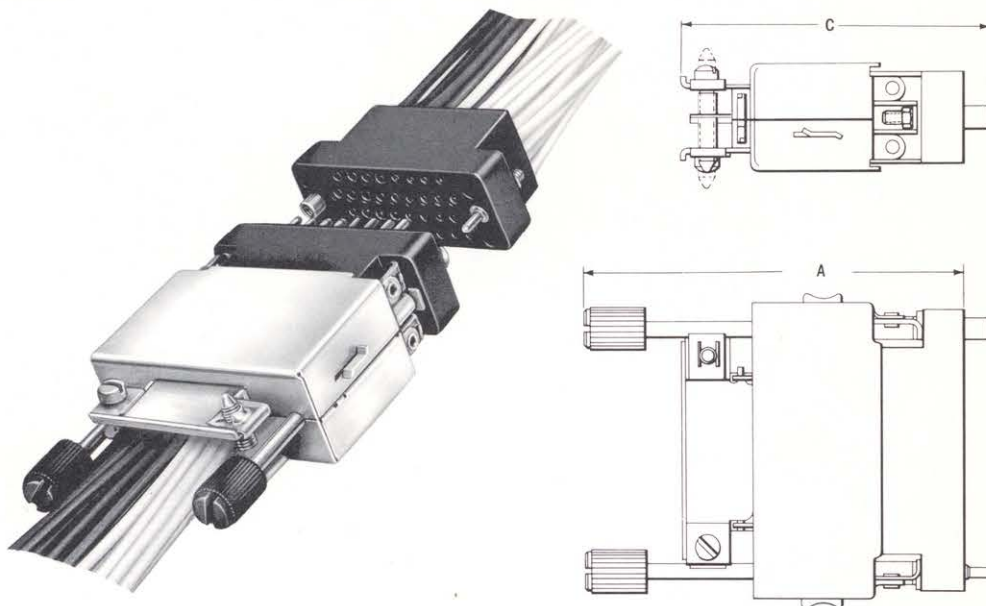
**Finish:** Gold chromate per MIL-C-5541

**Latch:** Copper alloy per ASTM B-122, Alloy 3 or per QQ-C-585 Comp. 5.

**Jack screw:** Carbon steel A1S1B113 per QQ-S-633.

**Finish:** Cadmium per QQ-P-416, Type 1, Class 3.

**Jack screw Knob:** Nylon per MIL-P-20693, Type 3.



## Suitcase Hood and Assemblies

	Body Size	Dimensions in Inches
		MS-M, MSD-M
<p>"A" Dimension</p> <p>Block with rotating jackscrews and suitcase hood</p>	14	3.33
	20	
	26	
	34	
	42	
	50	
	75*	
<p>"C" Dimension</p> <p>Block with guide pins, sockets and suitcase hood</p>	14	2.56
	20	
	26	
	34	
	42	
	50	
	75*	

\*May be used on plug only.

## Clamshell Hood and Block Assemblies

The clamshell hood, used either with jackscrews or guide pins, allows contacts to be snapped into and removed from the connector without removing the hood. It may be used in conjunction with a quick disconnect or pin protection skirts. See pages 8-9 for these variations.

The hood clamp is designed to accommodate a full complement of #20 AWG wires maximum per MIL-W-16878 (.081 diameter maximum over insulation with or without outer nylon jacket). Clamp will close down to a minimum wire accommodation of 50% capacity.

**Material:**

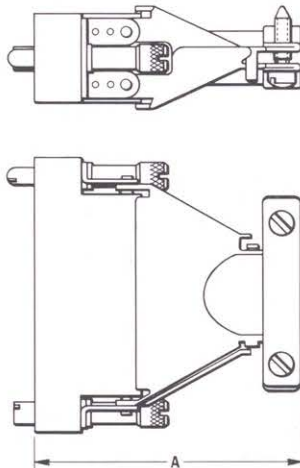
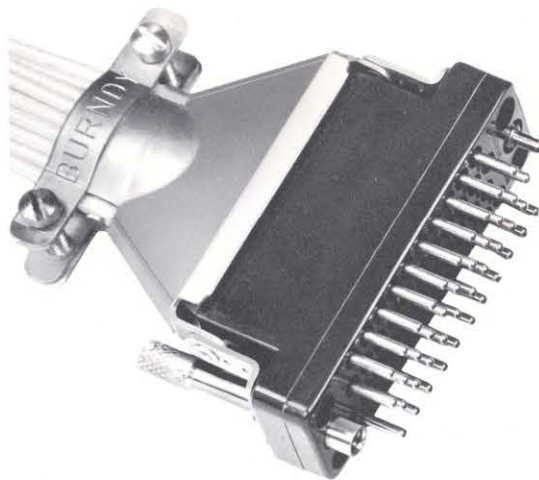
**Hood:** aluminum alloy

**Jackscrews:** stainless steel

**Jack socket:** stainless steel

**Finish:**

**Hood:** gold chromate per MIL-C-5541

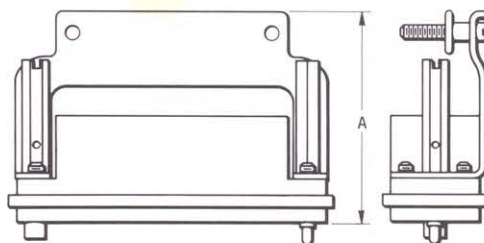


Clamshell Hood and Block Assemblies

Body Size	"A" Dimensions in Inches
	MS-M, MSD-M
14	1.92
20	
26	
34	2.24
42	
50	
75	

## Cable Clamp and Block Assemblies

The cable clamp is designed for use with all MS-M type miniature rectangular HYFEN connectors and can be fitted to either the plug or receptacle. It may be used with either guide pins or rotating jack screws. The cable clamp affords strain relief and permits easy access to contacts. The conductor restraining screws of the cable clamp are rubber sleeved to prevent damage to the conductor insulation. It can be used with pin protection skirts. See pages 8-9 for these variations.



Cable Clamp and Block Assemblies

Body Size	"A" Dimensions in Inches
	MS-M, MSD-M
14	1.58
20	1.59
26	1.77
34	1.80
42	
50	
75	



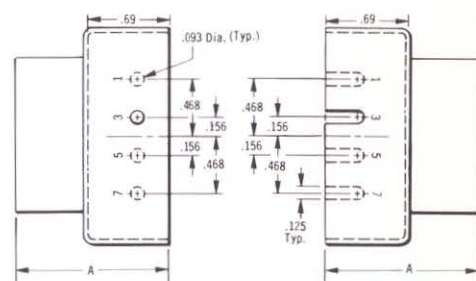
## Pin Protection Skirts and Block Assemblies

Pin protection skirt provide contacts with maximum protection from physical damage. The pin protection skirts minimize the danger of short circuiting when connector halves are not mounted.

### Material

Aluminum alloy finished with gold chromate per MIL-C-5541.

Pin protection skirts are available in any one of 4 polarizing positions. The location of the polarization pin & slot is specified in the suffix to the catalog number.



Slot No.	Suffix	Catalog Number	
		Plug with Pin	Receptacle with slot
1	S1	MS--P--S1	MS--R--S1
3	S3	MS--P--S3	MS--R--S3
5	S5	MS--P--S5	MS--R--S5
7	S7	MS--P--S7	MS--R--S7
None	S9	MS--P--S9	MS--R--S9

### Pin Protection Skirt and Block Assemblies

	Body Size	"A" Dimensions in Inches	
		Block with Guide Pin and Socket	Block with Rotating Jackscrews
		MS-M, MSD-M,	MS-M, MSD-M,
Pin Protection Skirt and Block	14	1.42	1.45
	20		
	26		
	34		
	42		
	50		
Pin Protection Skirt, Suitcase Hood and Block	75	2.76	3.65
	14		
	20		
	26		
	34		
	42		
	50		
	75		

	Body Size	"A" Dimensions in Inches	
		Block with Guide Pin and Socket	Block with Rotating Jackscrews
		MS-M, MSD-M,	MS-M, MSD-M,
Pin Protection Skirt, Clamshell Hood and Block	14	2.24	2.24
	20		
	26		
	34		
	42		
	50		
Pin Protection Skirt, Cable Clamp and Block	75	2.12	2.12
	14		
	20		
	26		
	34		
	42		
	50		
	75		

## Quick Disconnect and Block Assemblies

The Quick Disconnect latch is an effective method of positively connecting 14-50 place MS-M HYFEN plugs and receptacles.

The Quick Disconnect latch consists of a hooked spring on the plug and a retainer on the receptacle. When the plug and receptacle are mated, the spring snaps onto the retainer and locks the plug and receptacle together. The connector halves can be separated by depressing the latch springs.

**Material:** Steel C1070 per MIL-S-8143

**Finish:** Nickel plate per QQ-N-290

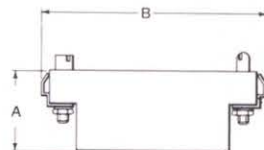


Fig. 1

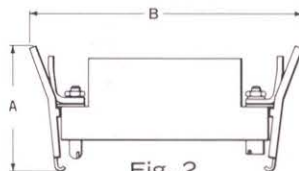


Fig. 2

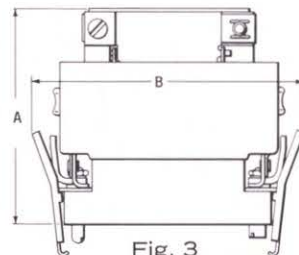


Fig. 3

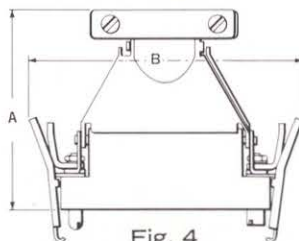


Fig. 4

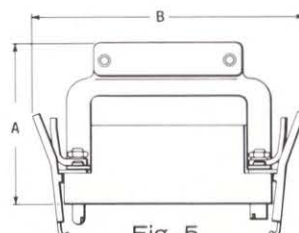


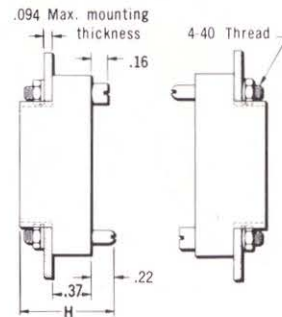
Fig. 5

Fig.	Body Size	Dimensions in Inches	
		"A" max.	"B" max.
		MS-M, MSD-M	all
Fig. 1 Quick Disconnect Latch Retainer with Block	14	.90	1.46
	20		1.77
	26		1.83
	34		2.20
	42		2.52
	50		2.81
Fig. 2 Quick Disconnect Latch Spring with Block	14	1.42	2.09
	20		2.40
	26		2.46
	34		2.84
	42		3.14
	50		3.43
Fig. 3 Quick Disconnect Latch with Suitcase Hood & Block	14	2.59	2.09
	20		2.40
	26		2.46
	34		2.84
	42		3.14
	50		3.43
Fig. 4 Quick Disconnect Latch with Clamshell Hood & Block	14	1.95	2.09
	20		2.40
	26		2.46
	34	2.27	2.84
	42		3.14
	50		3.43
Fig. 5 Quick Disconnect Latch with Cable Clamp & Block	14	1.66	2.09
	20		2.40
	26	1.83	2.46
	34	1.87	2.84
	42		3.14
	50		3.43



## 14-75 Place Blocks Type MS-M, MSD-M

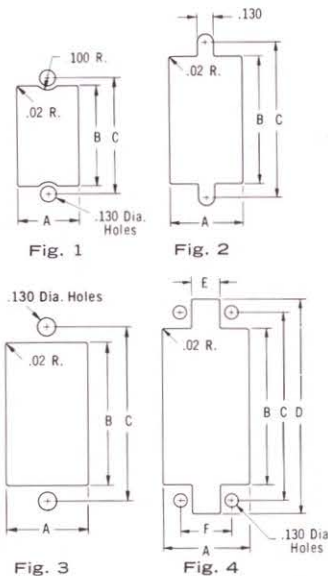
Block Size — All four block families have the same face dimensions. The number of contact positions given below must be used to complete the catalog numbers in the Ordering Chart on pages 8-9.



Block Family	Max. "H" In.	
	With Jackscrews	With Guide Pin & Socket
MS-M	1.13	1.10
MSD-M	1.13	1.10

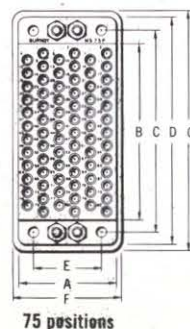
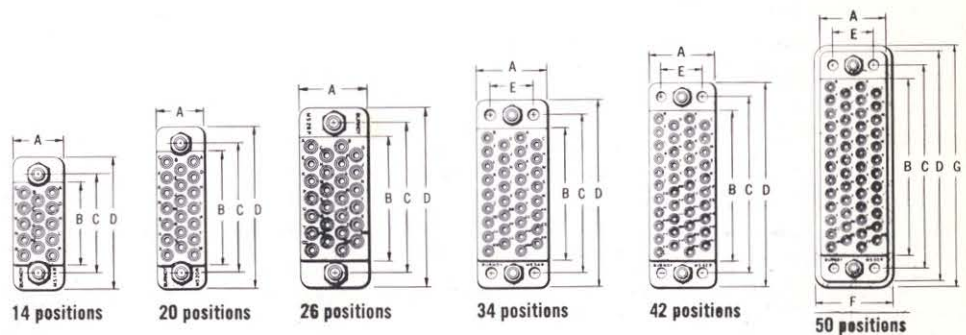
### Panel Cutouts

All four block families have the same cutout dimensions for blocks with the same number of contact positions. Alternate methods of mounting, slot or hole, are indicated in the table.

















No. of Positions	Fig. No.	Dimensions in Inches					
		A	B	C	D	E	F
14	1 or 2	.49	.82	.937	—	—	—
20	1 or 2	.49	1.13	1.250	—	—	—
26	2 or 3	.62	1.11	1.312	—	—	—
34	4	.78	1.44	1.686	1.94	.25	.468
42	4	.78	1.72	1.990	2.24	.25	.468
50	4	.78	2.03	2.281	2.53	.25	.468
75	4	1.14	2.03	2.281	2.53	.56	.764










### Plug and Receptacle Dimensions



No. of Positions	Dimensions in Inches						
	A	B	C	D	E	F	G
14	.46	.79	.937	1.25	—	—	—
20	.46	1.10	1.250	1.56	—	—	—
26	.59	1.07	1.312	1.62	—	—	—
34	.75	1.41	1.686	2.00	.468	—	—
42	.75	1.69	1.990	2.31	.468	—	—
50	.75	2.00	2.281	2.59	.468	.87	2.72
75	1.11	2.00	2.281	2.59	.764	1.23	2.72

## Ordering Chart For 14-75 Place Blocks

Each Receptacle will mate with one of three Plug configurations*		Page for Block Assy's	Catalog Numbers for all block families. Fill in Number of Positions "--": 14, 20, 26, 34, 42, 50, 75	
			Block: MS-M	MSD-M
			Contact: p30-36	p30-36
<b>Receptacle</b> assembled with guide pin & socket		7	MS--RM1	MSD--RM1
<b>Plug</b> assembled with guide pin & socket		7	MS--PM1	MSD--PM1
<b>Plug</b> assembled with guide pin & socket & clamshell hood		4	MS--PM120	MSD--PM120
<b>Plug</b> assembled with guide pin & socket & suitcase hood		3	MS--PM820	MSD--PM820
<b>Plug</b> assembled with guide pin & socket & cable clamp		4	MS--PM269	MSD--PM269
<b>Receptacle</b> assembled with guide pin & socket & quick disconnect latch retainer		6	MS--RM1C	MSD--RM1C
<b>Plug</b> assembled with guide pin & socket & quick disconnect spring		6	MS--PM1L	MSD--PM1L
<b>Plug</b> assembled with guide pin & socket, quick disconnect latch spring & clamshell hood		6	MS--PM120L	MSD--PM120L
<b>Plug</b> assembled with guide pin & socket, quick disconnect latch spring & suitcase hood		6	MS--PM820L	MSD--PM820L
<b>Plug</b> assembled with guide pin & socket, quick disconnect latch spring & cable clamp		6	MS--PM269L	MSD--PM269L
<b>Receptacle</b> assembled with guide pin & socket, pin protection skirt		5	MS--RM1S9	MSD--RM1S9
<b>Plug</b> assembled with guide pin & socket, pin protection skirt & clamshell hood		5	MS--PM120S9	MSD--PM120S9
<b>Plug</b> assembled with guide pin & socket, pin protection skirt & suitcase hood		5	MS--PM820S9	MSD--PM820S9
<b>Plug</b> assembled with guide pin & socket, pin protection skirt & cable clamp		5	MS--PM269S9	MSD--PM269S9

Each Receptacle will mate with one of three Plug configurations*	Page for Block Assy's	Catalog Numbers for all block families. Fill in Number of Positions "--": 14, 20, 26, 34, 42, 50, 75	
		Block: MS-M	MSD-M
		Contact: p30-36	p30-36
<b>Receptacle</b> assembled with keyed jacks 	7	MS--RM58	MSD--RM58
<b>Plug</b> assembled with rotating jacks 	7	MS--PM57	MSD--PM57
<b>Plug</b> assembled with rotating jacks & clamshell hood 	5	MS--PM124	MSD--PM124
<b>Plug</b> assembled with rotating jacks & suitcase hood 	3	MS--PM824	MSD--PM824
<b>Plug</b> assembled with rotating jacks & cable clamp 	4	MS--PM118	MSD--PM118
<b>Receptacle</b> assembled with keyed jacks & pin protection skirt 	5	MS--RM58S9	MSD--RM58S9
<b>Plug</b> assembled with rotating jacks, pin protection skirt & clamshell hood 	5	MS--PM124S9	MSD--PM124S9
<b>Plug</b> assembled with rotating jacks, pin protection skirt & suitcase hood 	5	MS--PM824S9	MSD--PM824S9
<b>Plug</b> assembled with rotating jacks, pin protected skirt & cable clamp 	5	MS--PM118S9	MSD--PM118S9

\*Plug and receptacle configurations may be reversed by changing the "P" in the plug catalog number to "R" and the "R" in the receptacle to "P".

## Special Purpose Hardware

Hardware	Block	Catalog Numbers of Block and Hardware Assemblies	
		MS-M	MSD-M
Guide Pin & Socket for .188 thick (max.) panel (standard .094" thick, page 3)	Plug	MS--PM61	MSD--PM61
	Receptacle	MS--RM61	MSD--RM61
Guide Socket with spring for grounding thru guide hardware	Plug	MS--PM60	MSD--PM60
	Receptacle	MS--RM60	MSD--RM60
Guide Pin with small shoulder diameter to provide added polarizing variables	Plug	MS--PM31	MSD--PM31
	Receptacle	MS--RM31	MSD--RM31

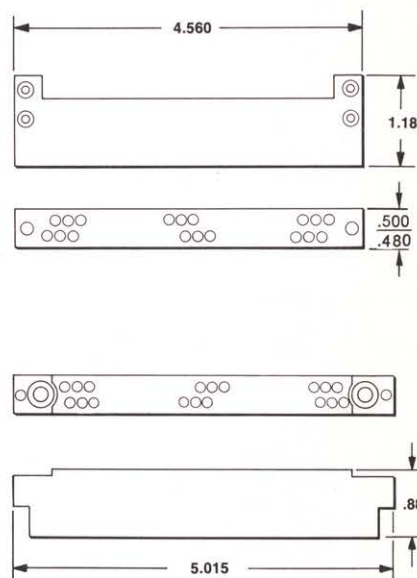
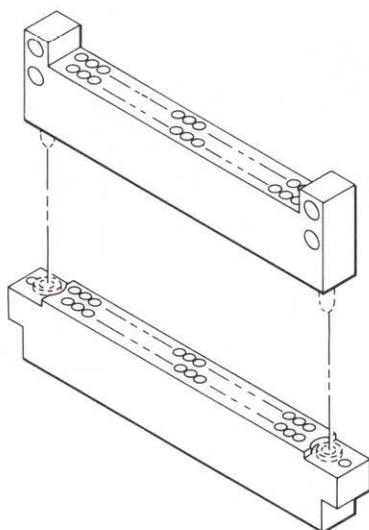


## Trim Trio 50 Position Printed Circuit Board Connector

Catalog Number MS2P50 P/R-2



Connector plug is mechanically fastened to board and mates surely and reliably with cable-hung receptacle.

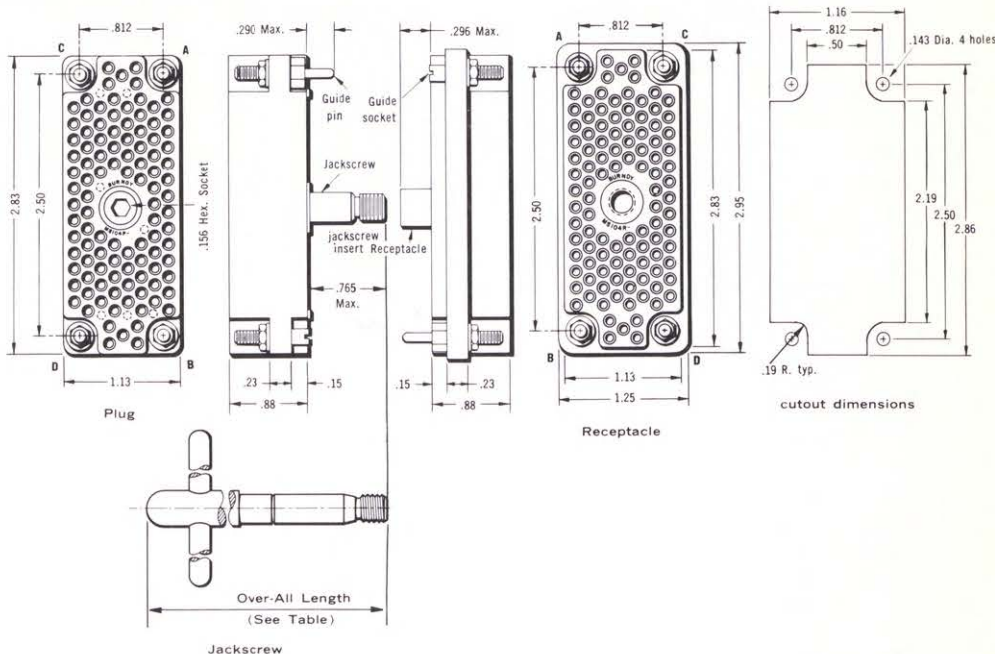


## 104 Position Block

This connector enables the user to accommodate 104 contacts in a single unit. These contacts may be any combination of subminiature coaxial contacts and #16 machined and formed contacts.

The plugs and receptacles are molded of diallyl phthalate per MIL-M-14, type SDG. The jackscrews and related hardware are machined of non-magnetic, passivated stainless steel. The molded in mounting ferrules in both the plug and receptacle are brass, cadmium plated.

## Type MSD104-M



## Performance Characteristics

**Contact rating** 13 amperes  
**Operating voltage** 750 volts AC 60 cycles  
**Operating temperature** — 55°C to +125°C

**Contact voltage drop (Max.)** 23 millivolts  
machined — 25 millivolts formed

Insulation resistance 5000 megohms minimum

Test potential (1 Min. duration)  
2000 volts AC 60 cycles

**Contact retention in panel (Min.)** 25 lbs.  
machined, 15 lbs. formed after  
10 insertions and withdrawals

**Crimp joint characteristics** machined  
meet requirements of MIL-C-22857  
— formed, MIL-T-7928

**Corrosion salt spray per MIL-STD-202  
Method 101**

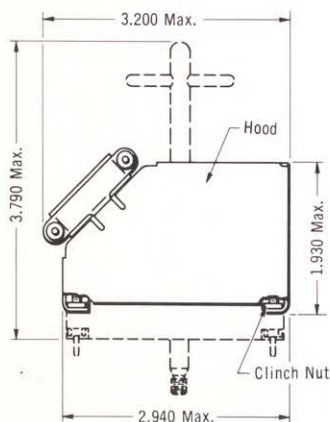
**Moisture resistance** machined per MIL-STD-202 Method 106 — formed 240 hours at 40°C, 90-95% RH

Vibration resistance per MIL-STD-202  
Method 204

Shock per MIL-STD-202 Method 207

## Type MSH104M-1

A combination hood and cable clamp assembly has been designed for the MSD104PM-410 and MSD104PM-494 connectors. Unlike the other accessories, this one is not pre-assembled by Burndy to the connector panel but must be ordered separately.



### Ordering Chart for MSD104-M

<b>MSD104PM — (Plug) Catalog Number</b>	<b>Orientation of Guide Pins</b>	<b>Type of Jackscrew</b>	<b>Overall Length of Winged Jackscrew</b>	<b>MSD104RM — (Receptacle) Catalog Number</b>
<b>MSD104PM-401</b>	None	Hex-Socket	—	<b>MSD104RM-402</b>
<b>MSD104PM-410</b>	None	Winged	4.520 max.	<b>MSD104RM-402</b>
<b>MSD104PM-415</b>	A, D	Hex-Socket	—	<b>MSD104RM-416</b>
<b>MSD104PM-487</b>	A, B, C, D	Winged	3.020 max.	<b>MSD104RM-489</b>
<b>MSD104PM-488</b>	A, B, C, D	Winged	3.520 max.	<b>MSD104RM-489</b>
<b>MSD104PM-494</b>	A, B, C, D	Winged	4.520 max.	<b>MSD104RM-489</b>

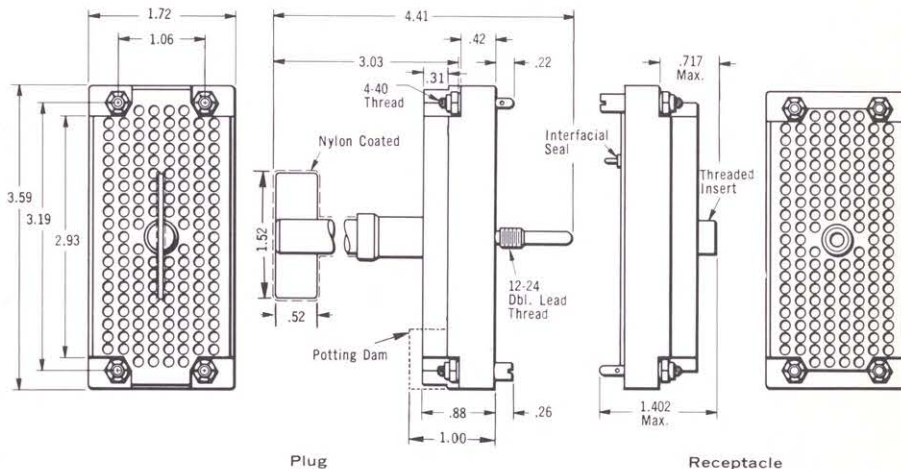
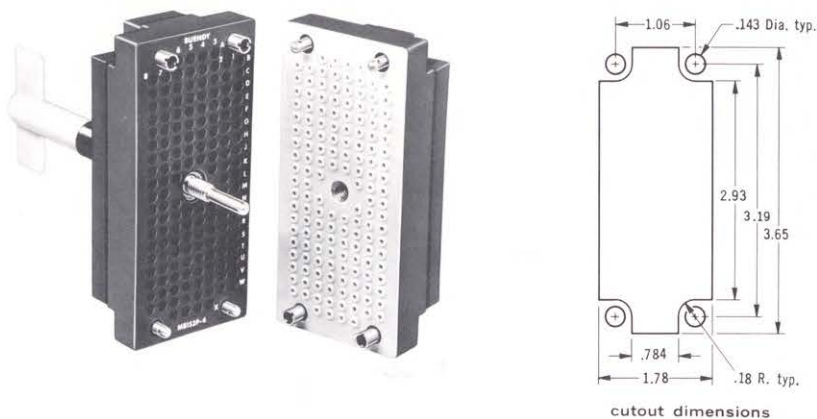
## 152 Position Block

This connector enables the user to accommodate 152 contacts in a single unit. The plug will accept any combination of the No. 16 machined or formed sockets and the RCDX-2 subminiature coaxial female contact assemblies. The receptacle will accept any combination of the No. 16 machined or formed pins and the RMDX-2 subminiature coaxial male contact assemblies.

In addition, the MB152-4 connector will mate with existing equivalent crimp and solder-type connectors.

Plugs and receptacles are molded of glass-filled phenolic (MIL-M-14F, Type MFH). Nonreversible pin and socket polarizing guides and jackscrews prevent misalignment and mismatching. A center jackscrew provides ease of connection and disconnection while maintaining positive engagement through severe environmental stresses. Jackscrew hardware and guide pins and sockets are machined of passivated stainless steel.

Optional accessories, which must be ordered separately, include a nylon potting dam (catalog number MB152P-2P2) for the plug and a silicone rubber interfacial seal (catalog number MB152P-2P5) for the receptacle. The interfacial seal can not be used with subminiature coaxial contacts.



## Performance Characteristics

**Contact rating 13 amperes**

**Operating voltage** 750 volts AC 60 cycles

**Operating temperature**  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

**Contact voltage drop (Max)** 23 millivolts  
machined; 25 millivolts formed

**Insulation resistance** 5000 megohms minimum

**Test potential (1 minute duration)**  
2000 volts AC 60 cycles

**Contact retention in panel 25 lbs.**  
machined, 15 lbs. formed after 10  
insertions and withdrawals

**Crimp joint characteristics** machined meet requirements of MIL-C-22857; formed, of MIL-T-7928

**Corrosion salt spray per MIL-STD-202,  
method 101**

**Moisture resistance** withstands 750 volts AC for 5 minutes

**Vibration resistance** per MIL-STD-202,  
Method 204

**Shock** per MIL-STD-202, Method 207

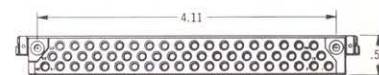
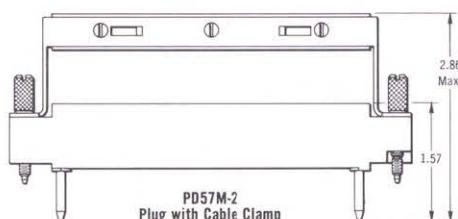
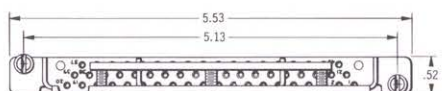
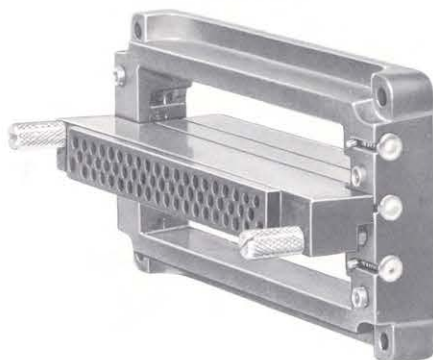


## PD57 Modular Connector

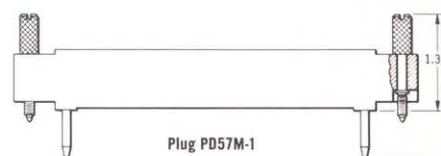
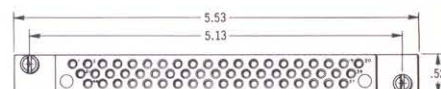
The PD57 combines the convenience and flexibility of the modular concept with the reliability and ease of crimp-type snap-locked contacts. The PD modular line consists of glass filled molded inserts with gold plated contacts in a high impact strength, die-cast anodized aluminum frame. The frames are available in 3, 5, 8, or 12 insert models. All frames accept inserts from either front or rear of the mounting panel.

There are four different inserts that can be arranged within a frame to suit your particular cable requirements. The PD57, for sub-miniature coaxial contacts and #16 machined and formed contacts, .062 diameter, is described below. Details on the other three inserts are in catalog RP70. These inserts are the PD35 which accepts 35 power contacts, .040 diameter; the PD10X which accommodates 10 standard coaxial contacts; and the PD21MX which has 21 positions for miniature coaxial contacts.

The PD57 is made of high dielectric strength glass-filled phenolic per MIL-M-14 type MFH. It has a tin plated beryllium copper clip on the receptacle that grounds it to the frame. Polarizing guide pins engage before the contact and jackscrews on both ends fasten the plug to the frame. Commoning busses, this page, are available for two, three and six commoning positions.



Receptacle PD57F-1

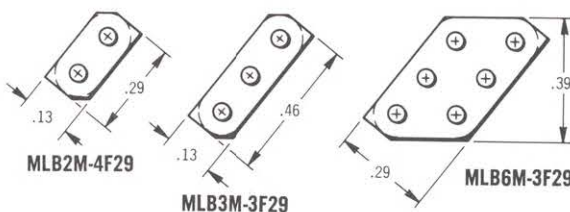


### Performance Characteristics

**Contact Rating:** 13 amperes  
**Operating Voltage:** 750 volts AC 60 cycles  
**Operating Temperature:** -55°C to +125°C  
**Contact Voltage Drop (max.):** 23 millivolts (machined) 25 millivolts (formed)  
**Insulation Resistance (min.):** 5000 megohms  
**Test Potential (1 min. duration):** 2000 volts AC 60 cycles  
**Contact retention in panel (min.):** 25 lbs. (machined) 15 lbs. (formed) after 10 insertions and withdrawals

**Contact Mating Forces:** 102 lbs.  
**Crimp Joint Characteristics:** Machined meet requirements of MIL-C-22857, formed of MIL-T-7928  
**Corrosion:** salt spray per MIL-STD-202 method 101  
**Moisture Resistance:** Machined per MIL-STD-202 method 106 Formed, 240 hrs. at 40°C 90-95% R.H.  
**Vibration Resistance:** per MIL-STD-202 method 204  
**Shock:** per MIL-STD-202, method 207  
**Durability:** 500 cycles of mating & unmating

### Commoning Buss



### Material

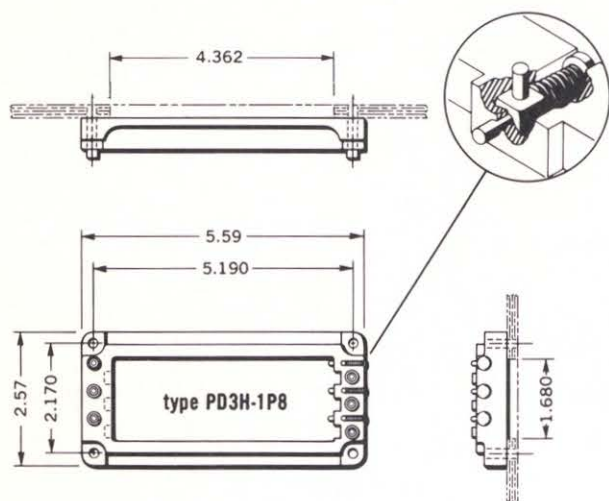
**Buss:** Copper ASTM152

**Pin:** Phosphor Bronze

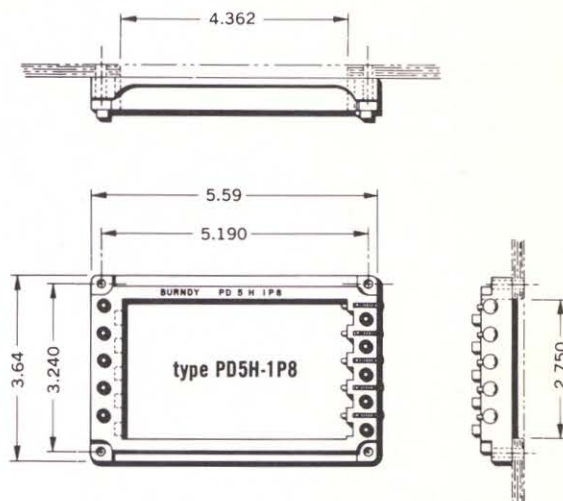
Installation is done by crimping wires in sockets, inserting sockets into panel, and inserting buss into sockets which require commoning.

## Frames for Modular Connector Type PD

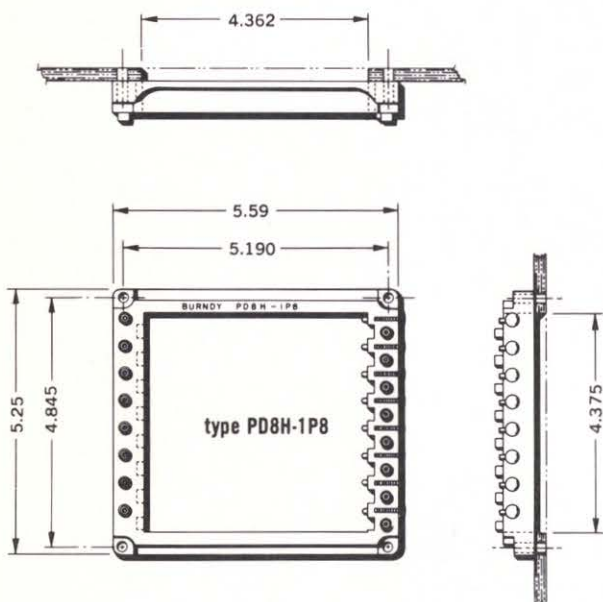
Die-cast anodized aluminium alloy frames allow receptacles to be inserted from either front or rear of mounting panel. Locking plungers hold each receptacle insert in place, and permit its ready removal. Design has withstood tests for high impact shock up to 2000 foot lbs. (detail in circle shows spring loaded locking plunger in place). Frames are available for 3, 5, 8, or 12 inserts.



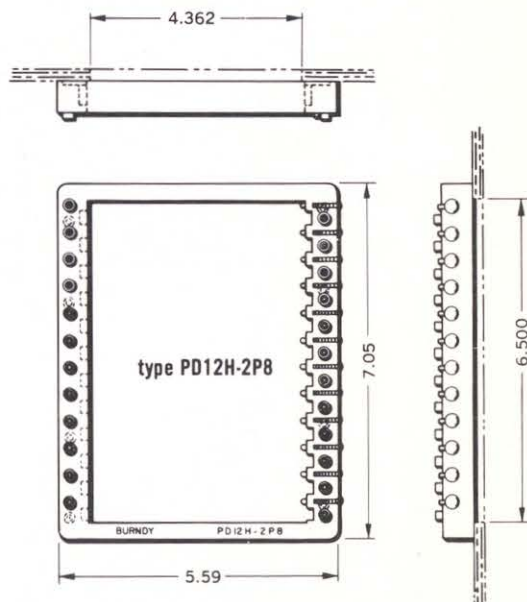
PD3H-1P8 for three inserts mounts with four no. 8 screws on 5.19" x 2.17" centers. Panel cutout dimensions are 4.36" x 1.68".



PD5H-1P8 for five inserts mounts with four no. 8 screws on 5.19" x 3.24" centers. Panel cutout dimensions are 4.36" x 2.75".



PD8H-1P8 for eight inserts mounts with four no. 8 screws on 5.19" x 4.84" centers. Panel cutout dimensions are 4.36" x 4.38".

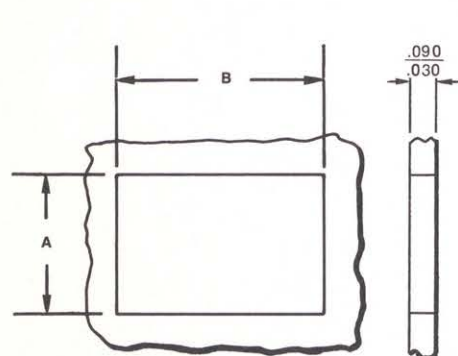
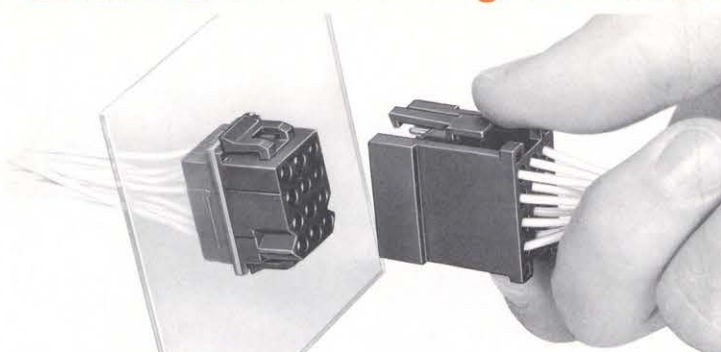


PD12H-2P8 for twelve inserts mounts with eight no. 8 screws. Panel cutout dimensions are 4.36" x 6.50".

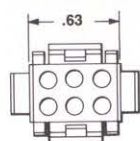


## QIKMATE Self-Mounting Connector

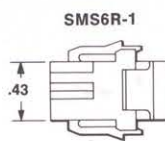
Available in 6, 12, 24 and 36 contact positions. Receptacles snap-lock into panel cutouts and plugs quick-connect and quick-disconnect with positive retention locks. Plugs also feature pin-protection skirts and positive polarization. Qikmate plugs are available with accessory strain-relief hoods.



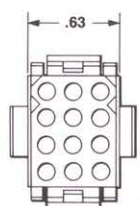
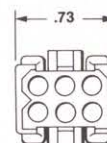
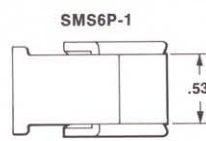
PANEL CUTOUT DIMENSIONS		
RECEPTACLE CONNECTOR CATALOG NUMBER	DIM. A	DIM. B
SMS6R-1	.655	.650
SMS12R-1	.655	1.050
SMS24R-1	.855	1.450
SMS36R-1	1.050	1.855



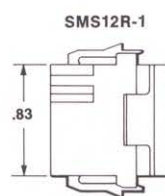
SMS6R-1



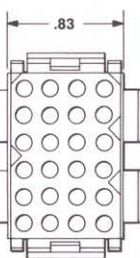
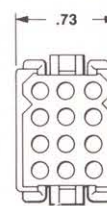
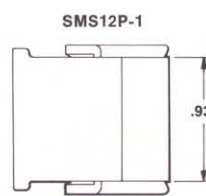
SMS6P-1



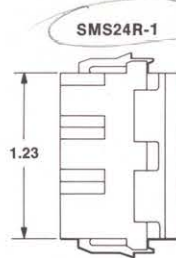
SMS12R-1



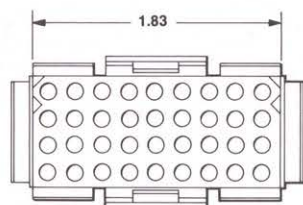
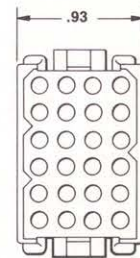
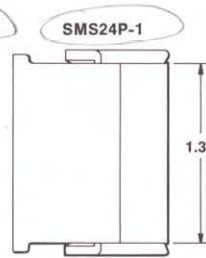
SMS12P-1



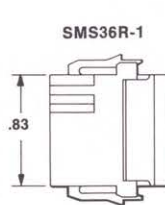
SMS24R-1



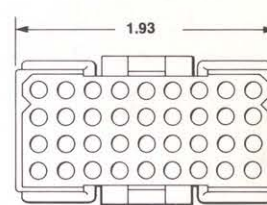
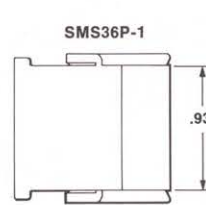
SMS24P-1



SMS36R-1



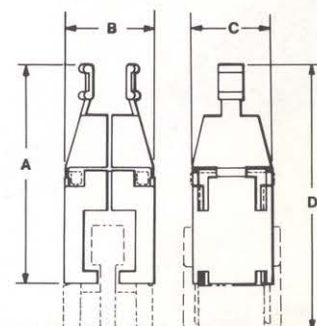
SMS36P-1



## QIKMATE Strain Relief Hoods



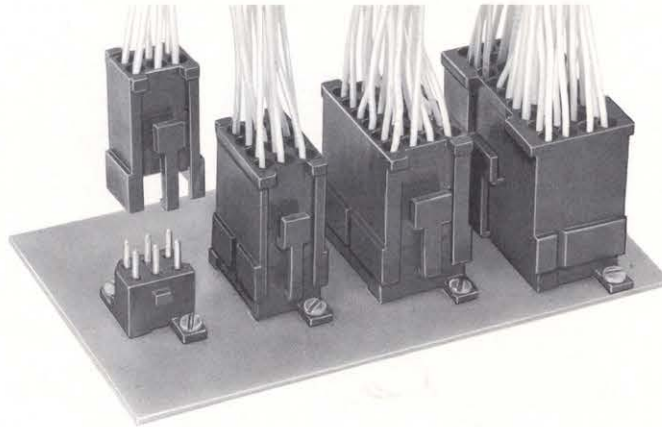
Qikmate Contact Position	Catalog No.	Wire Bundle	Recommended UNIRAP Cable Tie	Dimensions in Inches			
				A	B	C	D
6	SMS6H-1	.090-.325	TF4	1.804 1.764 1.754	.760	.63	2.205
12	SMS12H-1	.120-.400	TF5	1.754 1.714 1.969	.775	1.02	2.165
24	SMS24H-1	.180-.500	TF5	1.929 2.256 2.216	.960	1.43	2.370
36	SMS36H-1	.275-.625	TF5		1.960	1.03	2.657



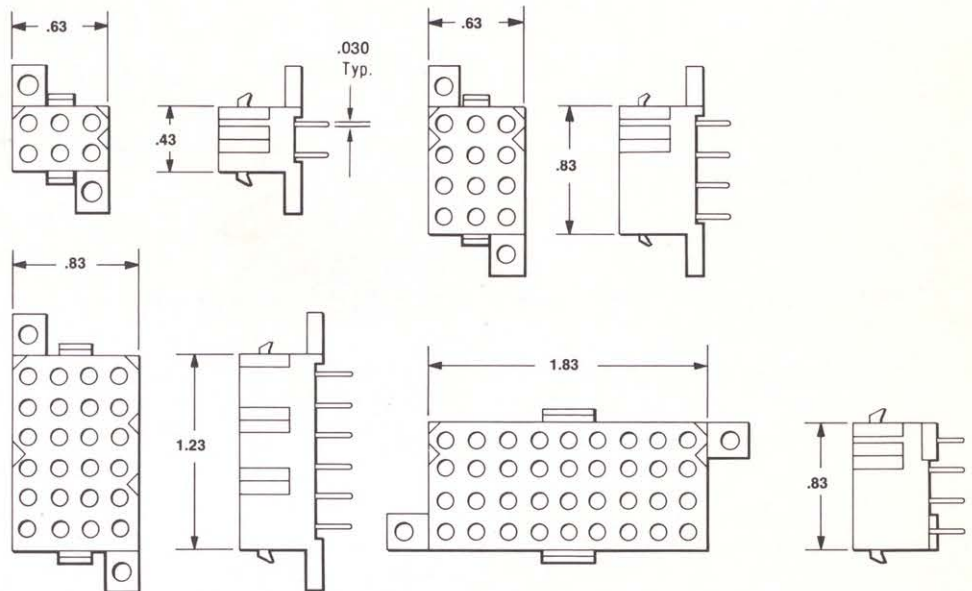


## QIKMATE Boardmount Connectors

Receptacle blocks are available with or without mounting flanges for auxiliary hardware (mechanically fastened to PC board and then wave or dip soldered.) Plug connectors are standard Qikmate type. Qikmate Boardmount connectors feature positive, quick connect/quick disconnect latches and error free polarization. Housings are supplied pre-assembled with either pin or socket contact.



Available in, 6, 12, 18, 24, and 36 positions.



### QIKMATE EXTRACTION TOOL RX16 D11

For use with all Trim Trio contacts. Must be used with Qikmate rectangular connectors.



### How to order

Qikmate Rectangular connector \_\_\_\_\_ SMS \_\_\_\_\_ R/RE \_\_\_\_\_

Contact Positions \_\_\_\_\_

Receptacle \_\_\_\_\_

R-Without mounting flange \_\_\_\_\_

RE-With mounting flange \_\_\_\_\_

Variation \_\_\_\_\_

3-Supplied with socket contacts \_\_\_\_\_

4-Supplied with pin contacts \_\_\_\_\_

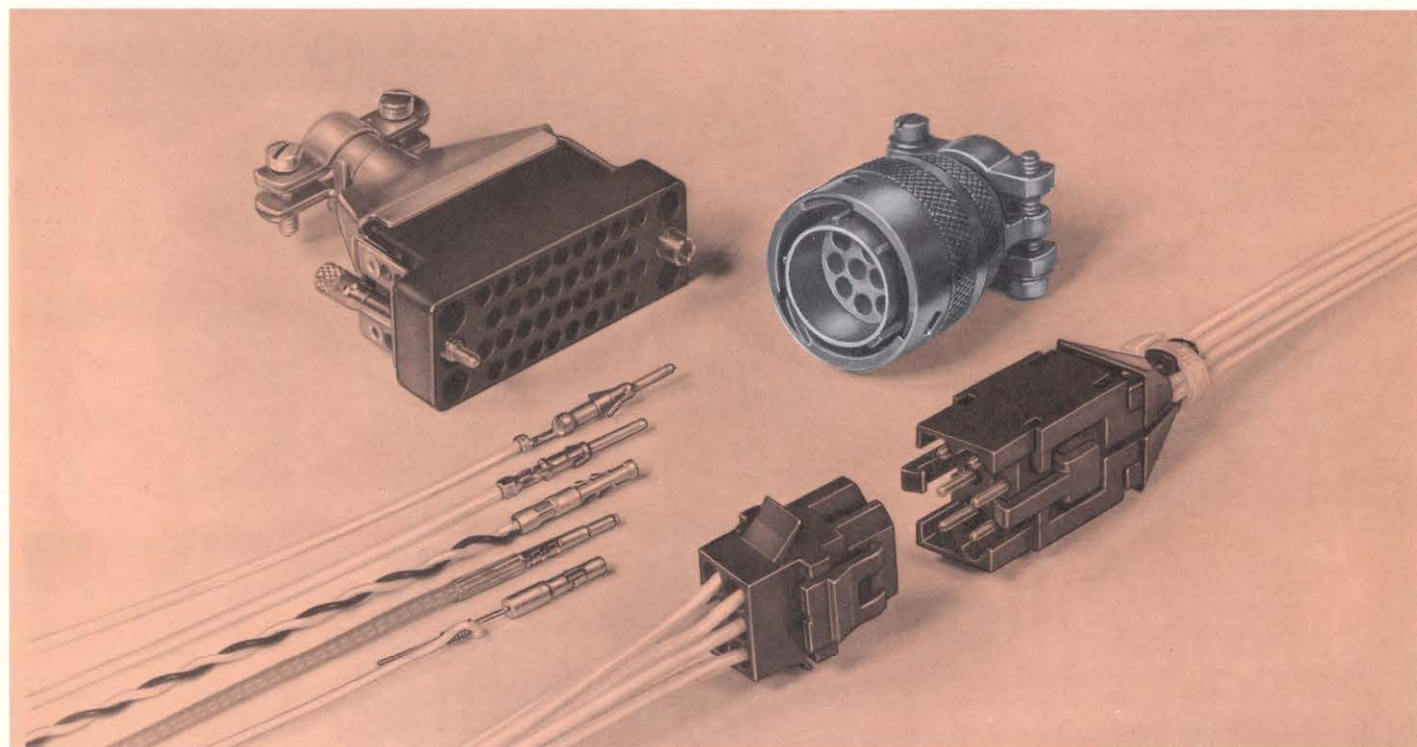
Contact Plating \_\_\_\_\_

(See table)

#### Contact Plating Table

D27	.000005 min. gold over .00020 min. silver
D29	.000030 min. gold over .00020 min. silver
TK2	Tin Plated

# Round Connectors



Trim Trio Round connectors are available in a full range of sizes, styles and termination to fit every application. Sizes range from 4 to 48 contact positions. 9 shell styles are available with 4 terminations including general duty, strain relief, potting boot and 90° elbow.

## Performance Characteristics

Operating Temperature  
Insulation Resistance  
Test Potential — Dielectric  
Withstanding Voltage  
Contact Retention

Corrosion

Vibration Resistance  
Shock  
Durability

—55°C to +125°C  
5000 megohms

2000 VAC, 60 HZ for X minutes?  
25 lbs. (machined)  
15 lbs. (formed)

Salt spray per MIL-STD-202, method 101

per MIL-STD-202, method 204  
per MIL-STD-202, method 207  
500 Cycles



## How to Order

**TRIM-TRIO BANTAM SHELL STYLE**

Wall Mounting flange receptacle 0  
Cable connecting receptacle 1  
Box mounting flange receptacle 2  
Straight plug 6  
Jam nut rear mounting receptacle 4  
Jam nut rear mounting receptacle without accessory back 3  
Box mounting large flange receptacle for rear panel mounting 7  
Wall mounting large flange receptacle for rear panel mounting 8  
Straight Plug-Grounding 9

**Termination Class**

Adaptor for use with conduit and/or MS3057 cable clamp A  
No termination B  
Wire strain relief clamp F  
90° elbow with strain relief clamp L  
Jacketed cable J  
Jacketed cable-strain relief JF  
Potting boot P

**Shell size**

**Insert arrangement**

**Contact (pin or socket)**

**Insert polarization**

**Finish**

G 0 A 16 19 P N H\*

MIL-C-26482  
Equivalent  
(Reference)

**SHELL CONFIGURATIONS**  
MS 3120

MS 3121  
MS 3122  
MS 3126  
MS 3124

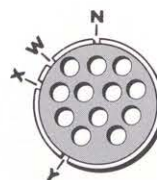
MS 3127  
MS 3128



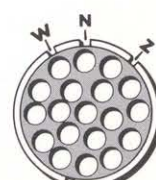
10-4



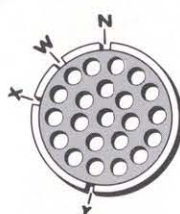
12-88



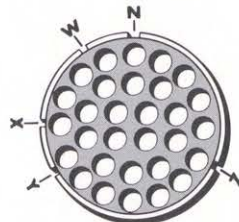
14-92



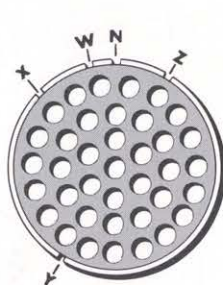
16-19



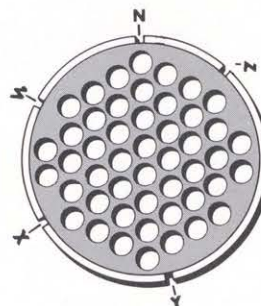
18-22



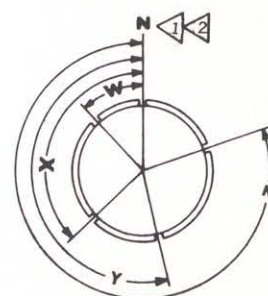
20-30



22-38



24-48



### ALTERNATE KEYWAY POSITIONS

1 Typical mating face of pin insert shown. (Socket insert opposite). "N" Normal position 0°. Polarization letters show master key position with respect to contact hole identification characters.

2 Unless otherwise specified, "N" keyway is standard position on all keyways. Angles given are counter clockwise from "N" position, (socket insert opposite).

### \*FINISH

H — Cadmium plate with olive drab chromate conversion coating as specified in MIL-C-26482

E — Cadmium plate with clear chromate conversion coating.

SHELL SIZE	ARRANG. NO.	INSERT CATALOG NO.	INSERT POSITION IN SHELL			
			W	X	Y	Z
10	4	G10-4 P/S	45°	—	—	—
12	88	G12-88 P/S	26°	—	—	—
14	92	G14-92 P/S	49°	71°	145°	—
16	19	G16-19 P/S	30°	165°	—	315°
18	22	G18-22 P/S	39°	77°	167°	—
20	30	G20-30 P/S	34°	90°	123°	259°
22	38	G22-38 P/S	15°	47°	150°	331°
24	48	G24-48 P/S	60°	120°	189°	315°



## Round Connectors

### Shell Size 10 Trim Trio Round Connectors



10-4

#### TERMINATIONS AND DIMENSIONS

F strain relief clamps



P potting boot



A general duty



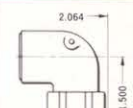
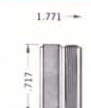
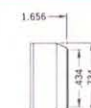
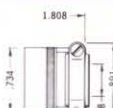
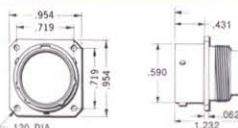
L 90° elbow



0 MS3120



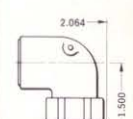
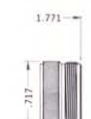
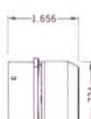
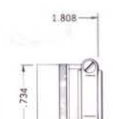
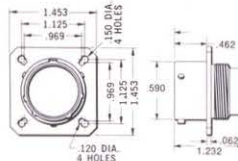
Wall mounting  
flange receptacle



8 MS3128



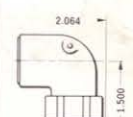
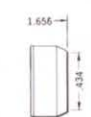
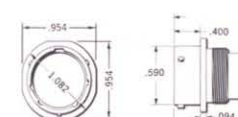
Large flange wall mounting  
receptacle for back panel  
mounting (similar to 0)



1 MS3121



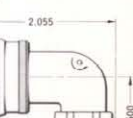
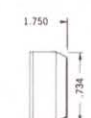
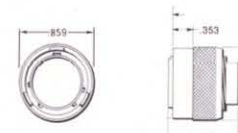
Cable connecting  
receptacle



6\* MS3126



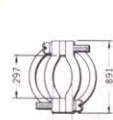
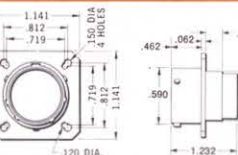
Straight plug



7 MS3127



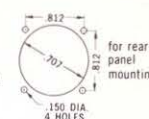
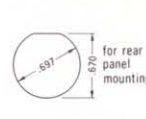
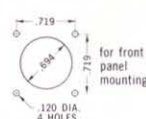
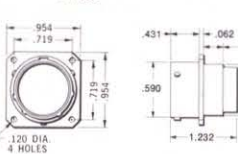
Large flange box mounting  
receptacle for back panel  
mounting (similar to 2)



2 MS3122



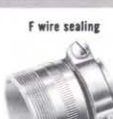
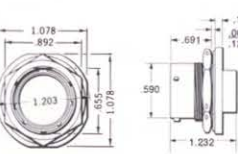
Box mounting  
flange receptacle



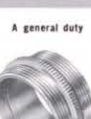
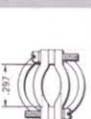
3 MS3124



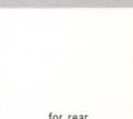
Jam nut rear  
mounting receptacle



F wire sealing



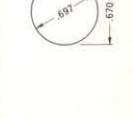
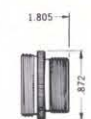
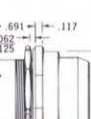
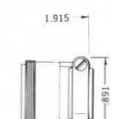
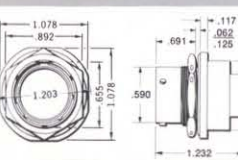
A general duty



4 MS3124



Jam nut rear  
mounting receptacle



\* Available with grounding finger — shell style 9.

## Round Connectors

### Shell Size 12 Trim Trio Round Connectors



12-88

#### TERMINATIONS AND DIMENSIONS

F strain relief clamps



P potting boot



A general duty



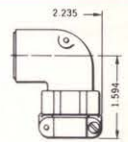
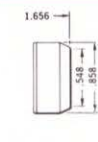
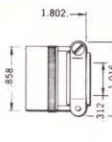
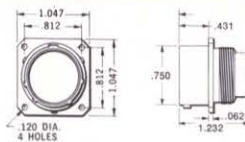
L 90° elbow



0 MS3120



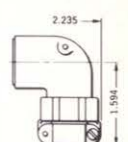
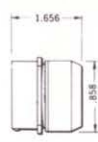
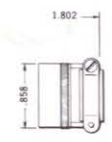
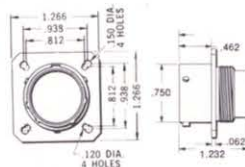
Wall mounting  
flange receptacle



8 MS3128



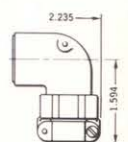
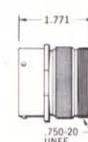
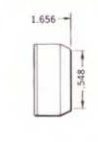
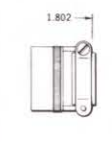
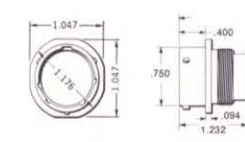
Large flange wall mounting  
receptacle for back panel  
mounting (similar to 0)



1 MS3121



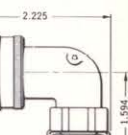
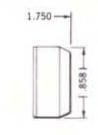
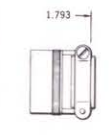
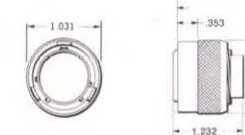
Cable connecting  
receptacle



6\* MS3126



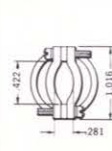
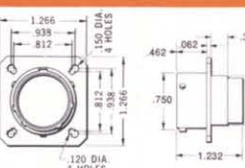
Straight plug



7 MS3127



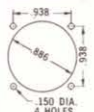
Large flange box mounting  
receptacle for back panel  
mounting (similar to 2)



for front  
panel mounting



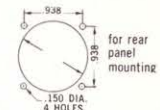
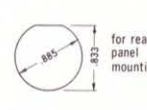
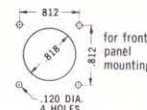
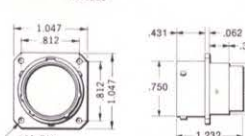
for rear  
panel mounting



2 MS3122



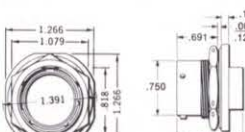
Box mounting  
flange receptacle



3 MS3123



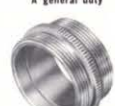
Jam nut rear  
mounting receptacle



F wire sealing



A general duty



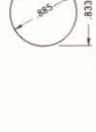
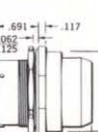
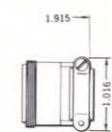
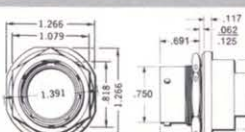
for rear  
panel mounting



4 MS3124



Jam nut rear  
mounting receptacle

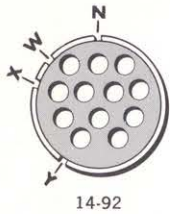


\* Available with grounding finger — shell style 9.



## Round Connectors

Shell Size  
**14**  
Trim Trio  
Round  
Connectors



### TERMINATIONS AND DIMENSIONS

F strain relief clamps



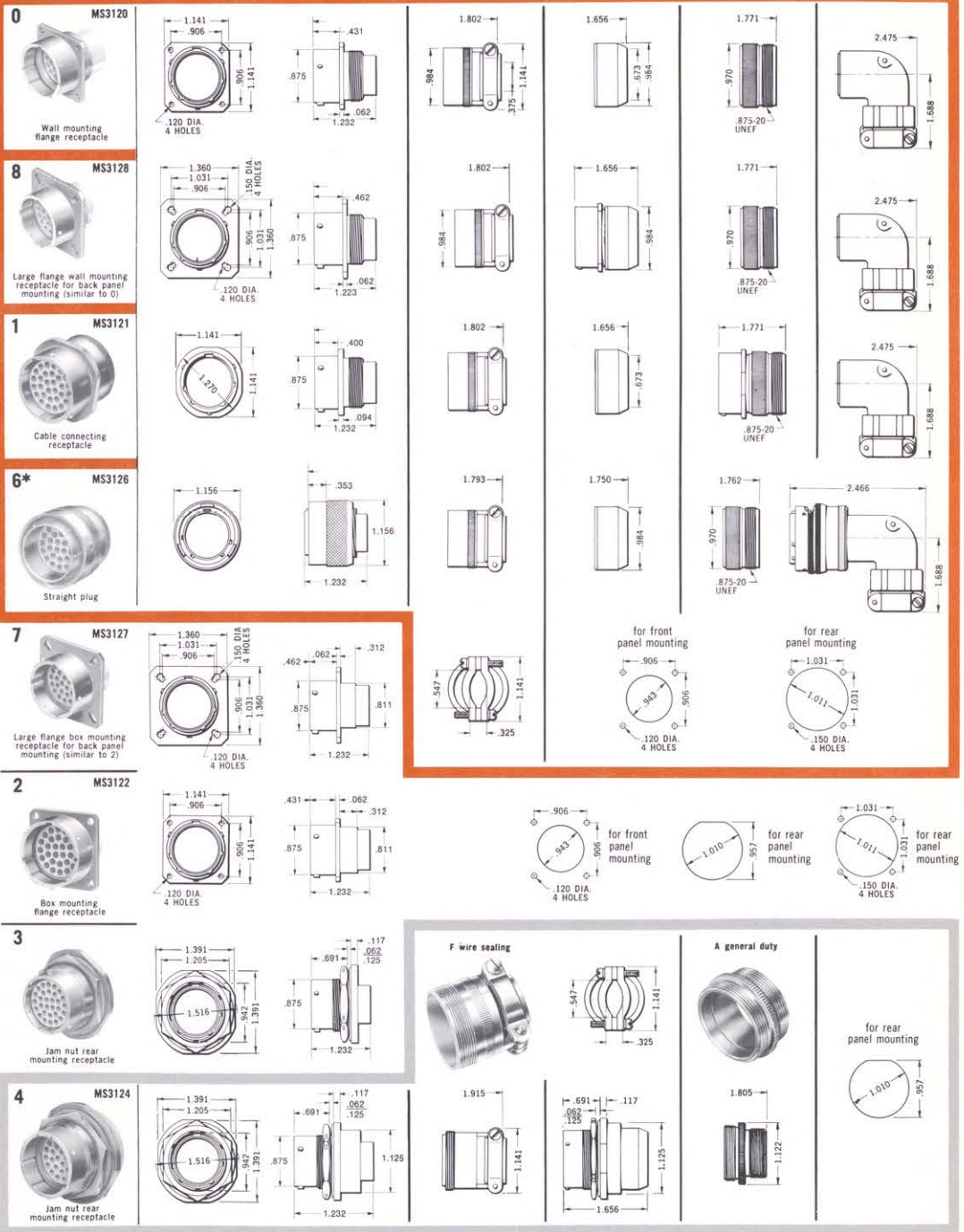
P potting boot



A general duty



L 90° elbow



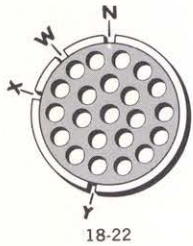
\* Available with grounding finger — shell style 9.





## Round Connectors

### Shell Size 18 Trim Trio Round Connectors



#### TERMINATIONS AND DIMENSIONS

F strain relief clamps



P potting boot


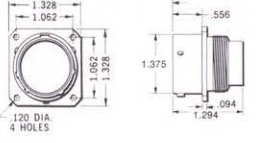
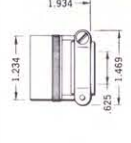
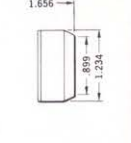
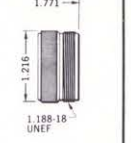
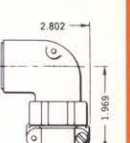

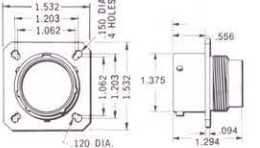
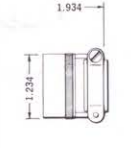
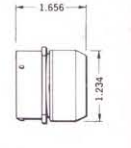
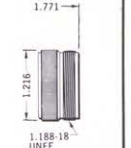
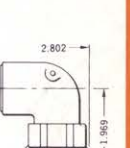

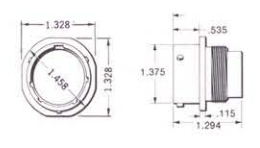
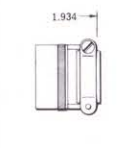
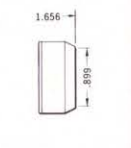
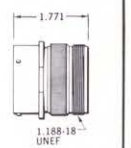
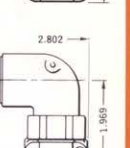

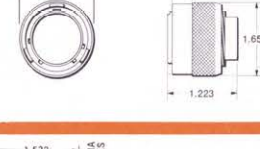
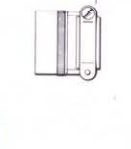
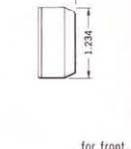
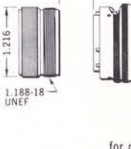
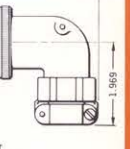

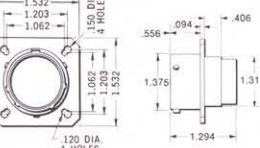
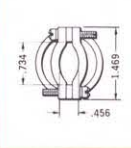
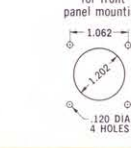
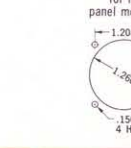
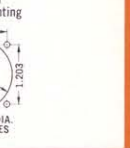

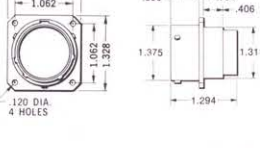
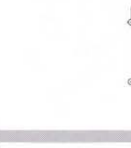
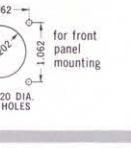
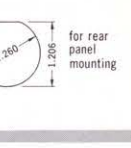


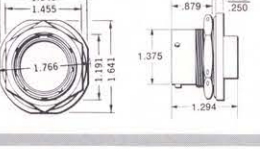



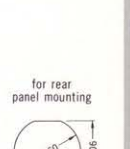

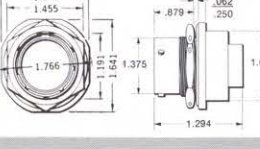
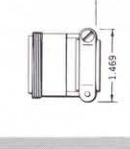
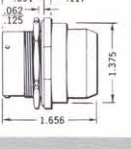
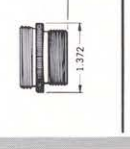
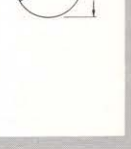


A general duty



L 90° elbow



<b>0</b> MS3120  Wall mounting flange receptacle					
<b>8</b> MS3128  Large flange wall mounting receptacle for back panel mounting (similar to 0)					
<b>1</b> MS3121  Cable connecting receptacle					
<b>6*</b> MS3126  Straight plug					
<b>7</b> MS3127  Large flange box mounting receptacle for back panel mounting (similar to 2)					
<b>2</b> MS3122  Box mounting flange receptacle					
<b>3</b>  Jam nut rear mounting receptacle					
<b>4</b> MS3124  Jam nut rear mounting receptacle					

\*Available with grounding finger — shell style 9.

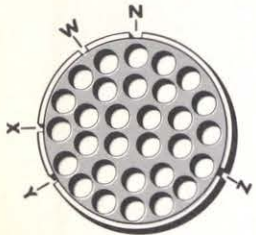


## Round Connectors

Shell Size

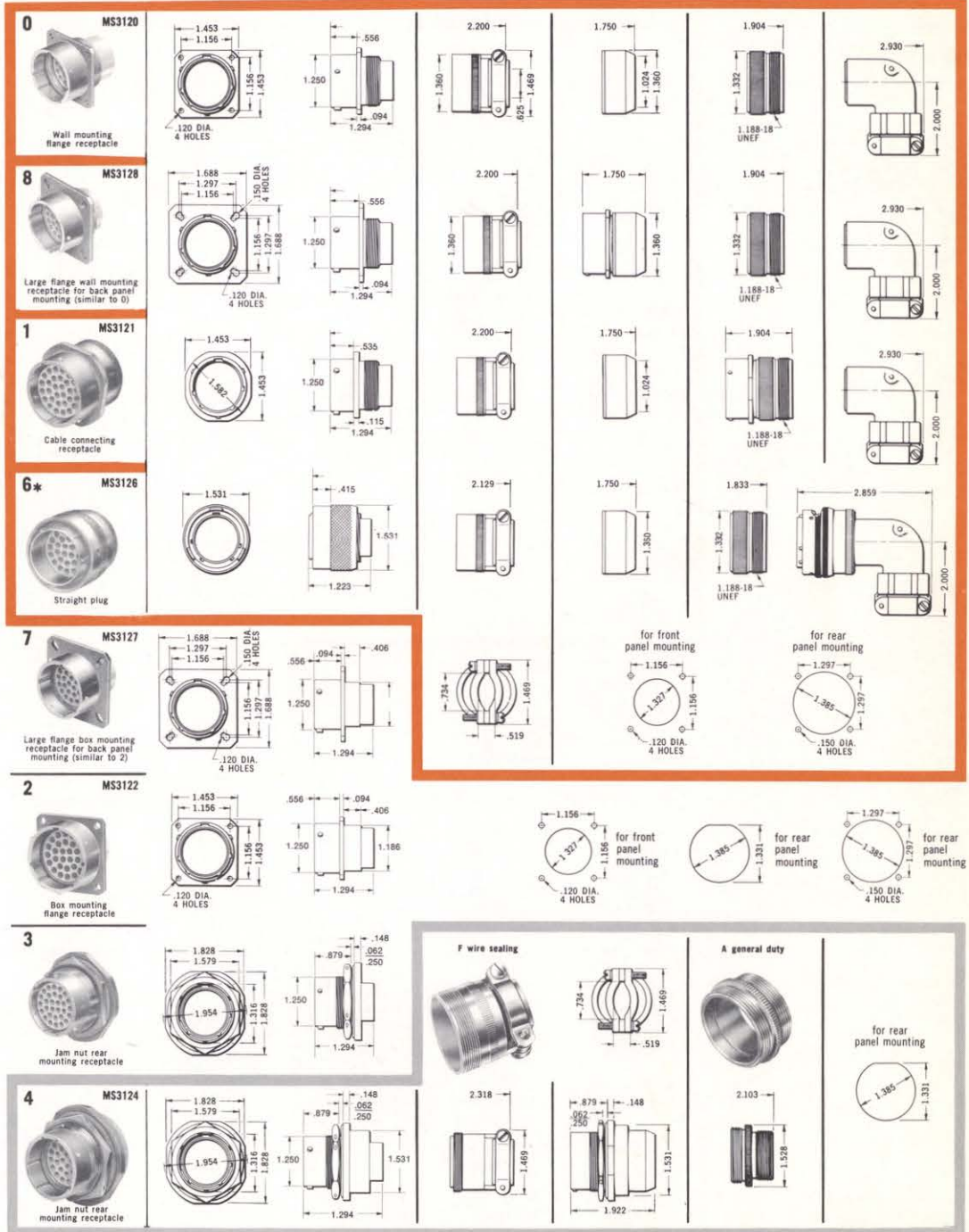
20

Trim Trio  
Round  
Connectors



20-30

### TERMINATIONS AND DIMENSIONS

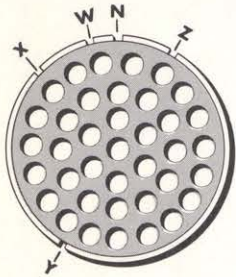


\*Available with grounding finger — shell style 9.



## Round Connectors

### Shell Size 22 Trim Trio Round Connectors



22-38

#### TERMINATIONS AND DIMENSIONS

F strain relief clamps



P potting boot



A general duty



L 90° elbow



0 MS3120



8 MS3128



1 MS3121



6\* MS3126



7 MS3127



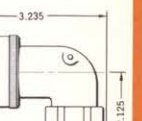
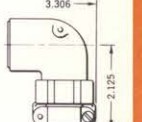
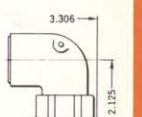
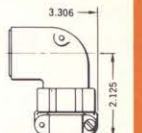
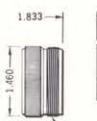
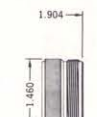
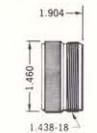
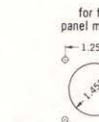
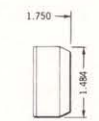
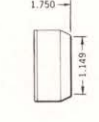
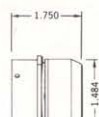
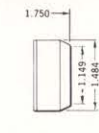
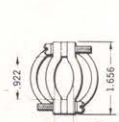
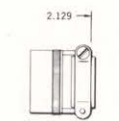
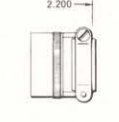
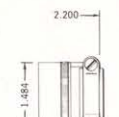
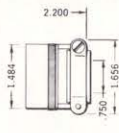
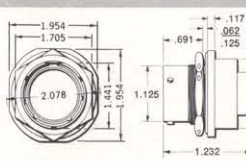
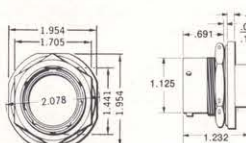
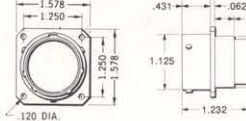
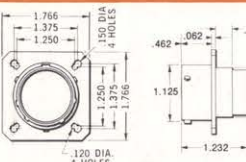
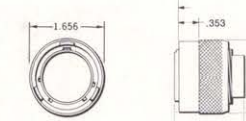
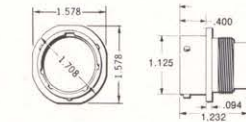
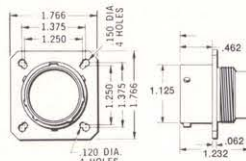
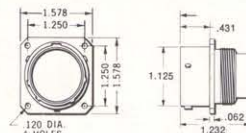
2 MS3122



3



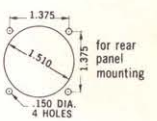
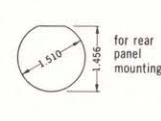
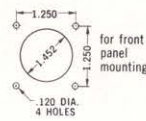
4 MS3124



for front panel mounting



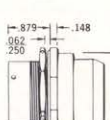
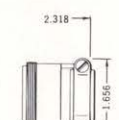
for rear panel mounting



F wire sealing



A general duty



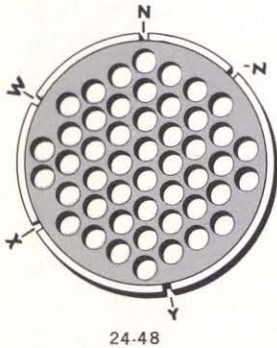
\*Available with grounding finger — shell style 9.

## Round Connectors

Shell Size

24

Trim Trio  
Round  
Connectors

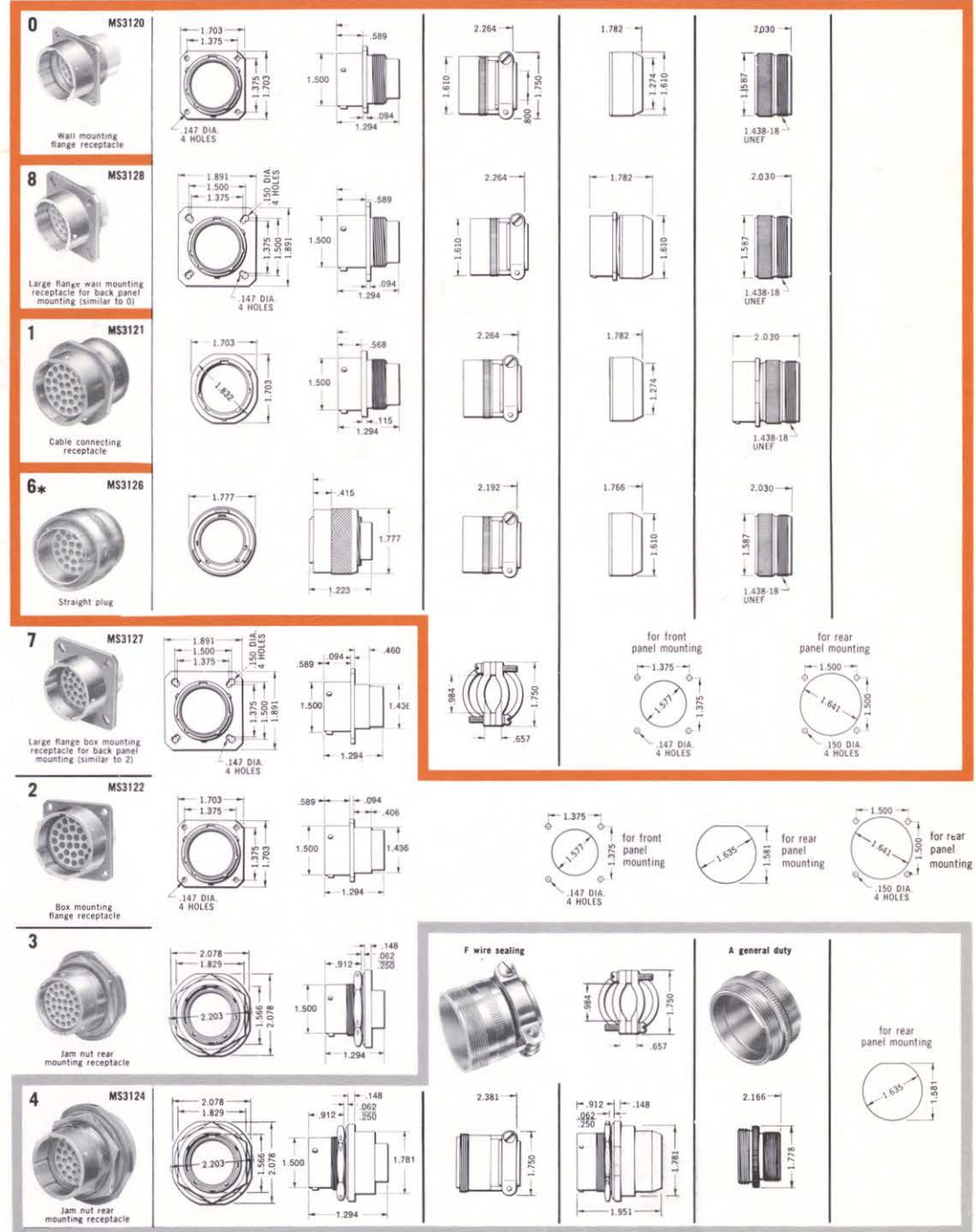


### TERMINATIONS AND DIMENSIONS

F strain relief clamps

P potting boot

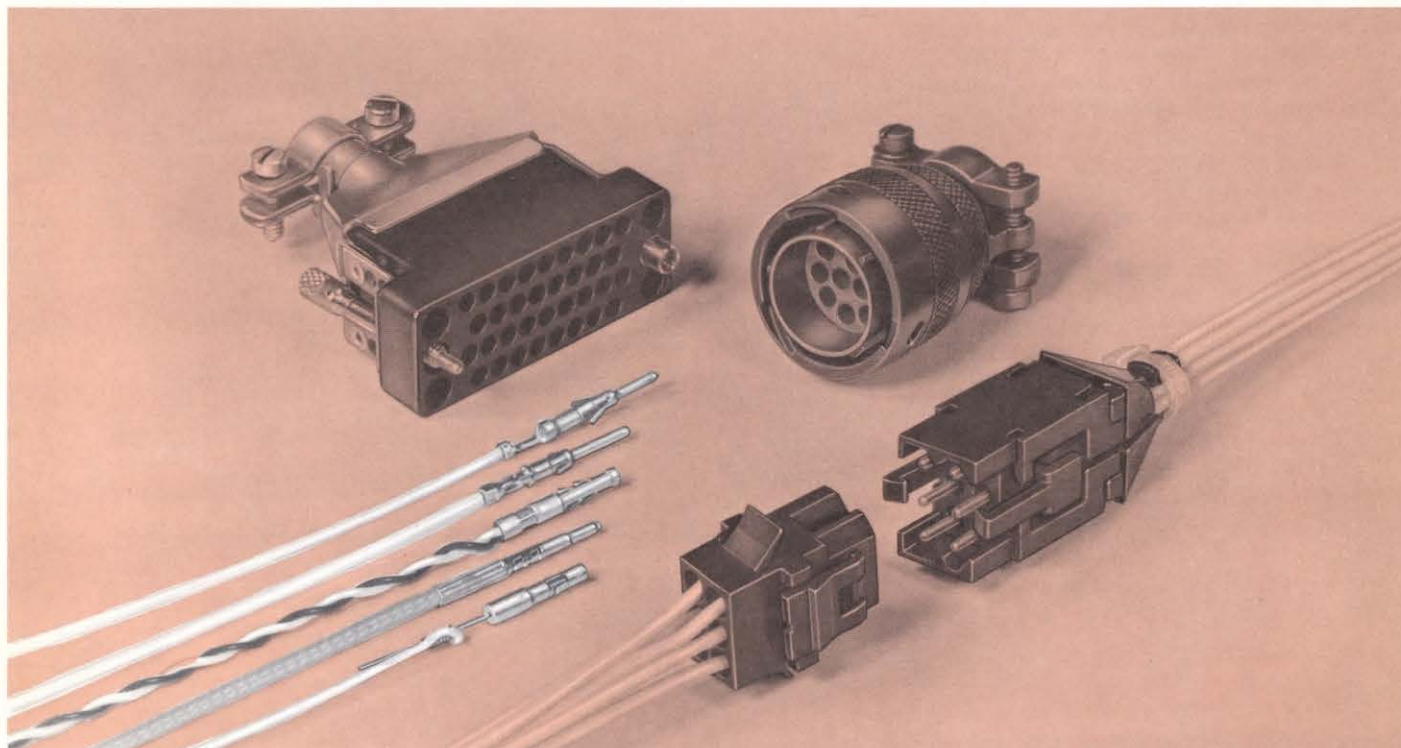
A general duty



\* Available with grounding finger — shell style 9.



# Power and Coax Contacts



Choose from any of the full line of Trim Trio contacts:

- Machined power contacts
- strip formed power contacts (gold or tin-plated)
- strip-formed one-piece contacts (tin-plated)
- submin coax or twisted pair contacts (one-piece or multi-piece)

Any Trim Trio contact can be used in any contact position in any Trim Trio rectangular, Qikmate or round connector.

Complete installation tooling from simple hand tools to automatic systems is shown on pages 37 and 38.



## No. 16 Machined Contacts, .0625 Diameter for Trim Trio Connectors

Pins and sockets are made of high conductivity copper alloy. Springs on both contacts are made of spring-temper, heat-treated, nickel-plated beryllium copper. The socket spring supplies high contact pressure to ensure low resistance contact between pin and socket. The socket contact features closed entry to prevent probe damage. Barrels on both contacts have insulation grips for vibration support. They also have a cable stop and inspection hole. Contacts are furnished gold plated. See Fig. 4 for socket with solderless wrap post.

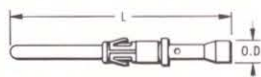


Fig. 1

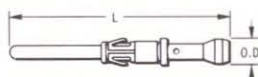


Fig. 2

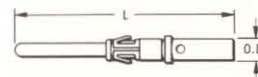


Fig. 3

### pins

Pin Dia.	Wire Size+ and Type	Cable Insulation Accom.		Contact Catalog Number*	Fig. No.	Dimensions in Inches			Installation Tools			Extraction Tool
		Max.	Min.			Cable Strip Length	L	O.D.	M8ND/Y8ND Die Set Cat. No.	M10S-1 Die Set Cat. No.	Stop Bushing	
.062	28 (7) Str. per MIL-W-16878 Type B or 30 solid per MIL-W-76 Type L.W.	.037	.031	RM28M-1	1	.187	1.02	.076	N24RT-10	S-9	SL-40	RX20-25 or RXK20-25 or RX16-11
.062	26 per MIL-W-16878 or 24 per MIL-W-16878 or MIL-W-76	.062	.035	RM24M-9	1	.188	1.02	.101				
.062	22 per MIL-W-16878 or MIL-W-5086 or 20 per MIL-W-16878	.062	.046	RM20M-13	2	.188	1.02	.116	N20RT-30	S-10		
.062	22-20 per MIL-W-16878, MIL-W-76 or MIL-W-5086	.090	.060	RM20M-12	2	.188	1.02	.116				
.062	20-16 per MIL-W-16878, MIL-W-76 or MIL-W-5086	—	—	RM16M-23	3	.281	1.02	.101	N16RT-21	S3-1	SL-39	
.062	#28-30 sol Solderless Wrap			RM20M-12G-4	4	—	1.81	.025 Sq. Post				
.062	.036 Solder Post			RM20M-12G-8	—	—	1.37	Solder Post				

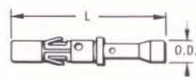


Fig. 1

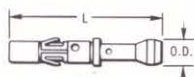


Fig. 2

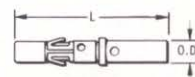


Fig. 3

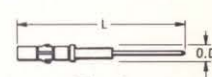


Fig. 4

### sockets

Socket (Pin Dia. Accom.)	Wire Size <sup>†</sup> and Type	Cable Insulation Accom.		Contact Catalog Number*	Fig. No.	Dimensions in Inches			Installation Tools			Extraction Tool
		Max.	Min.			Cable Strip Length	L	O.D.	M8ND/Y8ND Die Set Cat. No.	M10S-1 Die Set Cat. No.	Stop Bushing	
.062	28 (7) Str. per MIL-W-16878 Type B or 30 solid per MIL-W-76 Type L.W.	.037 .033	.031 .028	RC28M-1	1	.187	.71	.076	N24RT-10	S-9	SL-40	RX20-25 or RXK20-25 or RX16-11
.062	26 per MIL-W-16878 or 24 per MIL-W-16878 or MIL-W-76	.062	.035	RCM24M-9	1	.188	.71	.101				
.062	22 per MIL-W-16878 or MIL-W-5086 or 20 per MIL-W-16878	.062	.046	RC20M-13	2	.188	.71	.116	N20RT-30	S-10		
.062	22-20 per MIL-W-16878, MIL-W-76 or MIL-W-5086	.090	.060	RC20M-12	2	.188	.71	.116				
.062	20-16 per MIL-W-16878, MIL-W-76 or MIL-W-5086	—	—	RC16M-23	3	.281	.71	.101	N16RT-21	S3-1	SL-39	
.062	#28-30 sol Solderless Wrap			RC20M-12G4	4	—	1.50	.025 Sq. Post				
.062	.036 Dia Solder Post			RC20M-12G8	—	—	.84	Solder Post				

†Wire types other than those noted may also be accommodated by contacts above. Consult Burndy, giving wire particulars.  
\*Contacts installed by the HYPRESS YD2-1 (catalog number preceded by M-) are furnished in expendable plastic carry strips.  
Contacts installed by the BANDOMATIC (catalog number prefixed C-) are furnished on reels.

34.34/100

## No. 16 Formed Contacts, .0625 Diameter-Strip Fed for Trim Trio Connectors

Strip -feed No. 16 HYFEN contacts, .0625 diameter, are formed of sheet, copper base alloy and are gold or tin plated. The contact retaining spring forms a closed entry cup on the socket. Four size contacts accommodate No. 14 through No. 26 wire, solid or stranded. Contacts are packaged 3,000 to a reel, allowing long runs between loading on the HYFEMATIC automatic installation machine.

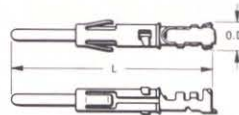
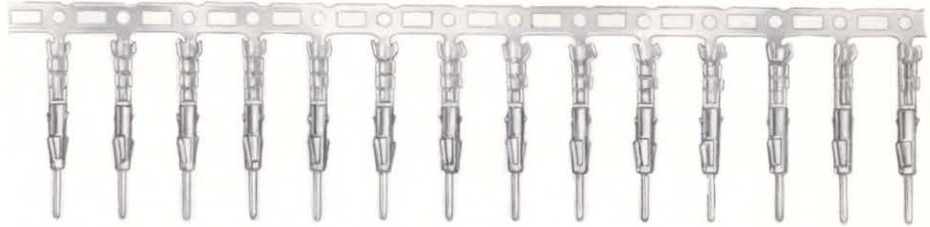


Fig. 1

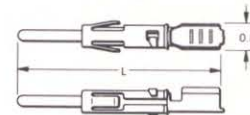


Fig. 2

### pins

Fig.	Pin Dia.	Wire Size† and Type	Cable Insulation Accom.		Contact Catalog Number		Dimensions in Inches			Installation Tools		Extraction Tool
			Max.	Min.	Gold Plated	Tin Plated	Cable Strip Length	L	O.D.	M&ND/Y&ND Die Set Cat. No.	UTM-2 Crimp Mechanism	
1	.062	26-24 AWG	.062	.035	SM24M-1	SM24M-ITK6	.156	1.05	.128	N24RT-11	CM11G1	RX20-25
1	.062	22-20 AWG	.082	.046	SM20M-1	SM20M-ITK6	.156	1.05	.139	N20RT-29	CM11G1	or RXK20-25
2	.062	18-16 AWG	.125	—	SM16M-1	SM16M-ITK6	.250	1.05	.12	N16RT-24	CM11	or RX16-11
2	.062	14 AWG	.125	—	SM14M-1	SM14M-ITK6	.250	1.05	.13	N14RT-13	CM11	

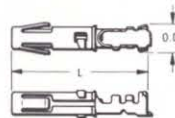


Fig. 1

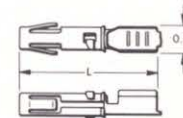


Fig. 2

### sockets

Fig.	Socket (Pin Dia. Accom.)	Wire Size† and Type	Cable Insulation Accom.		Contact Catalog Number		Dimensions in Inches			Installation Tools		Extraction Tool
			Max.	Min.	Gold Plated	Tin Plated	Cable Strip Length	L	O.D.	M&ND/Y&ND Die Set Cat. No.	UTM-2 Crimp Mechanism	
1	.062	26-24 AWG	.062	.035	SC24M-1	SM24M-ITK6	.156	.71	.128	N24RT-11	CM11G1	RX20-25
1	.062	22-20 AWG	.082	.046	SC20M-1	SC20M-ITK6	.156	.71	.139	N20RT-29	CM11G1	or RXK20-25
2	.062	18-16 AWG	.125	—	SC16M-1	SC16M-ITK6	.250	.71	.12	N16RT-24	CM11	or RX16-11
2	.062	14 AWG	.125	—	SC14M-1	SC14M-ITK6	.250	.71	.13	N14RT-13	CM11	

†Wire types other than those listed may also be accommodated by contacts above. Consult Burndy, giving wire particulars.

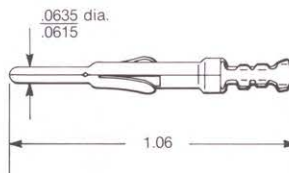
\*Contacts are furnished on a strip to be installed by the HYFEMATIC automatic installation machines.

3000 M/L. only



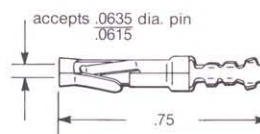
## No. 16 Strip Formed One-Piece Power Contacts

Low-cost one-piece contacts are formed of brass and available with tin or gold plate finishes. Three sizes accommodate #16 stranded through #26 solid or stranded. They are supplied 3,000 to a reel and installed with the Burndy Hyfematic installation machine.



### PINS

Wire Range	Insulation Range	Catalog Number	Plating	Installation Tools		Extraction Tools
				M8ND/Y8ND Die Set	UTM-2 Crimp Mechanism	
#24- #26 Sol & STR.	.038"-.062"	SM24M-6D27 SM24M-6D29 SM24M-6D45 SM24M-6TK6	.000005 min. gold over .00020 silver .000030 min. gold over .00020 silver .000050 min. gold over .000075 nickel Tin Plate	N24RT-11	CM11G1	
#20- #22 Sol & STR.	.046"-.082"	SM20M-6D27 SM20M-6D29 SM20M-6D45 SM20M-6TK6	.000005 min. gold over .00020 silver .000030 min. gold over .00020 silver .000050 min. gold over .000075 nickel Tin Plate	N20RT-29	CM11G1	RX16-D11
#16- #18 STR.	—	SM16M-6D27 SM16M-6D29 SM16M-6D45 SM16M-6TK6	.000005 min. gold over .00020 silver .000030 min. gold over .00020 silver .000050 min. gold over .000075 nickel Tin Plate	N16RT-24	CM11	



### SOCKETS

Wire Range	Insulation Range	Catalog Number	Plating	Installation Tools		Extraction Tools
				M8ND/Y8ND Die Set	UTM-2 Crimp Mechanism	
#24- #26 Sol & STR.	.035"-.062"	SC24M-6D27 SC24M-6D29 SC24M-6D45 SC24M-6TK6	.000005 min. gold over .00020 silver .000030 min. gold over .00020 silver .000050 min. gold over .000075 nickel Tin Plate	N24RT-11	CM11G1	
#20- #22 Sol & STR.	.046"-.082"	SC20M-6D27 SC20M-6D29 SC20M-6D45 SC20M-6TK6	.000005 min. gold over .00020 silver .000030 min. gold over .00020 silver .000050 min. gold over .000075 nickel Tin Plate	N20RT-29	CM11G1	RX16-D11
#16-#18 STR.	—	SC16M-6D27 SC16M-6D29 SC16M-6D45 SC16M-6TK6	.000005 min. gold over .00020 silver .000030 min. gold over .00020 silver .000050 min. gold over .000075 nickel Tin Plate	N16RT-24	CM11	

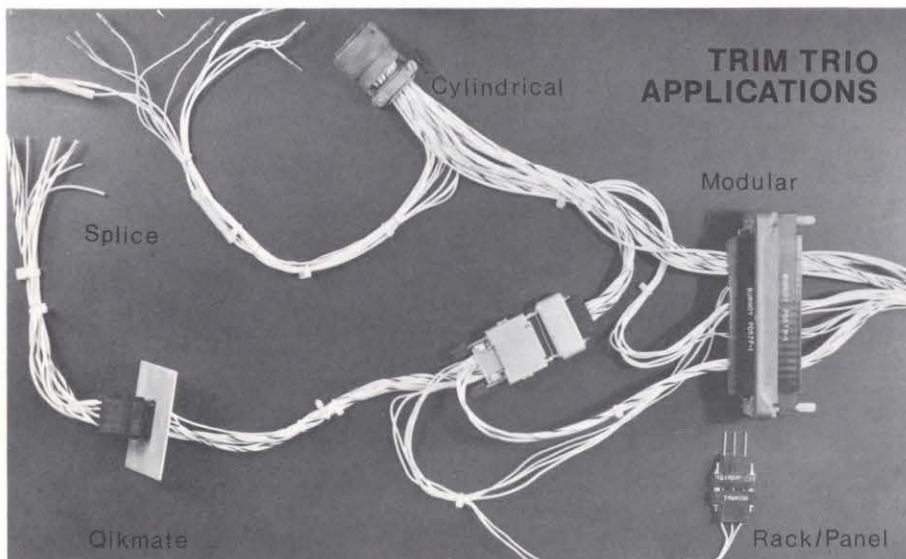




**Trim Trio one-piece contact for sub-min coax or twisted pairs**



- Improved Handling — Installation Time Reduced by 90%
- High-Reliability ● Built-In Quality Control Checks



# Trim Trio one-piece contact for sub-min coax or twisted pairs



The one piece contacts for subminiature coaxial and twisted pair applications offer Burndy's usual high-reliability plus a 90% reduction in installation time — a big cost factor. Installation time has been reduced from 2 to 3 minutes to about 20 seconds per contact.

Machined to assure maximum quality performance, the pins and sockets are fabricated of high-conductivity copper alloy, electro plated gold over silver or nickel. The contact springs are tempered heat-treated nickel plated beryllium copper. Transparent nylon insulating bushings are designed to accept and permanently retain the inner contacts. Solder plated corrosion resistant ferrules hold the braid to the outer contacts, and act as an insulation support to insure against bending and vibration stresses.

Designed to work with the Burndy Trim Trio system, the contacts are interchangeable with machined or formed power contacts in round or rectangular connectors. They may be intermated with existing multi-piece submin contacts. Gang mated in the connectors, common grounding can be achieved where it is required to terminate a cable shield at cabinet ground and continue internally with a twisted pair. This furnishes flexibility in making circuit changes while retaining protection of critical signals by use of the cabinet ground.

Used where performance requirements are acute — voltage stability, contact retention, corrosion resistance and plating retention — the one-piece contacts exceed the power, signal and shielding requirements of present and future generations of computer and communications equipments.

Quality control is inherent in the design. The transparent nylon sleeve permits visual inspection of conductor entry before a crimp is made. Another Burndy exclusive is a heat sensitive paint dot that changes color to indicate that the solder has reflowed.

## TOOLING



**MINI-CATS Reflow Soldering Machine**

## INSTALLATION

Four simple steps are all that are required to install a contact:

1. Insert the stripped coaxial wire or twisted pair.
2. Crimp the inner conductor (note the transparent sleeving) for visual inspection.
3. Slide the outer ferrule forward and crimp to the braid.
4. Apply heat to reflow the solder. (Note the BLUE dot which turns BLACK when the soldering is completed.)



## PERFORMANCE CHARACTERISTICS

<b>Operating Temperature in mated condition</b>	−55°C to +125°C −67°F to +257°F
<b>Contact Retention In Connector Body</b> Contact retention after 5 cycles of insertion and extraction.	15 lbs. Minimum
<b>Contact Voltage Drop</b> When measured on mated contacts from the wire or braid ¼" beyond the hying, one (1) ampere current.	30 MV. Maximum
<b>Contact Withdrawal Forces</b> Inner Socket using pin (.024" Dia.) Outer Socket using pin (.073" Dia.)	½ oz. Minimum ½ oz. Minimum
<b>Dielectric Withstanding Voltage</b> Applied for 1 minute between inner and outer contacts.	750 Volts AC RMS
<b>Insulation Resistance of Inner Bushings</b> Per MIL-STD-202B Method 302 Test Cond. B.	1,000 Megohms Min.
<b>Durability</b> 250 cycles mating and unmating of assembled pins and sockets.	Meets Voltage Drop requirements
<b>Crimp Requirements</b>	(Meets MIL-T-7928 for tensile and electrical tests on inner conductor)
	8 to 12 lbs. Minimum on the braid depending upon type of coax wire used.
<b>Salt Spray 48 Hours</b>	Contacts show no evidence of corrosion and pass withdrawal requirements.
<b>Shock</b> One shock of 50g. Intensity in each of three mutually perpendicular directions.	Contact shows no evidence of damage.



## Multi-Piece Subminiature Coaxial Contacts for Trim Trio Connectors

Contact kits are available for all coaxial cables shown. The inner pin and outer female body and components, RCDX60-2, RMD26L-1, RCDXB055-1 and YOC-074, are packaged in KIT RCDXK-1.

The inner socket and outer male body and components, RMDX60-2, RFD26-1, RMDXB055-3, and YOC-074, are packaged in KIT RMDXK-10.

The contacts for subminiature coaxial cable, shielded cable, and twisted pair wires consist of an inner pin/socket and an outer male/female body. The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.

Tin-plated, corrosion-resistant outer ferrules hold the outer braid to the outer contacts and act as an insulation support to ensure against bending and vibration stresses. The inner and the outer conductor are crimped individually, thereby enabling inspection of both critical crimp points.

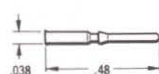


Fig. 1

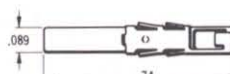


Fig. 2

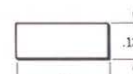


Fig. 3

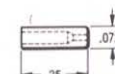


Fig. 4

### Pins

*Cable	Contact for Inner Conductor				Contact for Outer Braid						Extraction Tool
	Pin Catalog Number	Fig. No.	Crimp Tool M10S-1		Outer Female Body		HYRING		Crimp Tool M10S-1		
			Die Set	Stop Bushing	Catalog Number	Fig. No.	Catalog Number	Fig. No.	Die Set	Stop Bushing	
RG161/U RG179A/U RG187/U	RMD26L-1	1	S-23D2	SL-46-D2	RCDX60-2	2	YOC-074	3	S-22-1	SL-47-1	RX20-25 or RXK20-25 or RX16-11
RG174/U RG188/U Amphenol 21-598	RMD26L-1		S-26D2		RCDX60-2		YOC-074				
RG178A/U RG196/U	RMD26L-1		S-23D2		RCDX60-2		YOC-074 RCDXB055-1	4			

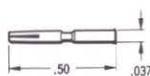


Fig. 1

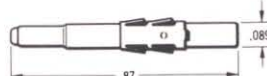


Fig. 2

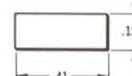


Fig. 3

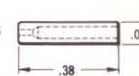


Fig. 4

### Sockets

*Cable	Contact for Inner Conductor				Contact for Outer Braid						Extraction Tool
	Socket Catalog Number	Fig. No.	Crimp Tool M10S-1		Outer Female Body		HYRING		Crimp Tool M10S-1		
			Die Set	Stop Bushing	Catalog Number	Fig. No.	Catalog Number	Fig. No.	Die Set	Stop Bushing	
RG161/U RG179A/U RG187/U	RFD26L-1	1	S-23D2	SL-46-D2	RMDX60-2	2	YOC-074	3	S-22-1	SL-47-1	RX20-25 or RXK20-25 or RX16-11
RG174/U RG188/U Amphenol 21-598	RFD26L-1		S-26D2		RMDX60-2		YOC-074				
RG178A/U RG196/U	RFD26L-1		S-23D2		RMDX60-2		YOC-074 RMDXB055-3	4			

\*Wire types other than those listed may also be accommodated by these contacts. Consult your local Burndy representative, giving particulars.

## Performance Characteristics

**Operating voltage between inner and outer contact:** 230 volts DC sea-level working voltage

**Test potential between inner and outer contact:** 500 volts AC 60 cycles for one minute

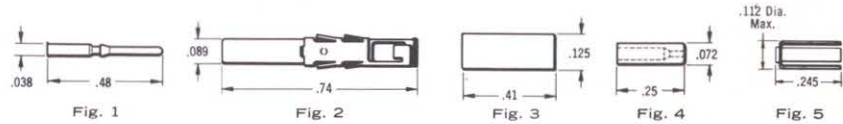
**Operating temperature:** -55°C to +125°C

**Contact retention in panel:** 15 pounds minimum

**Contact voltage drop (maximum):** 25 millivolts at 1 ampere for inner and outer contacts

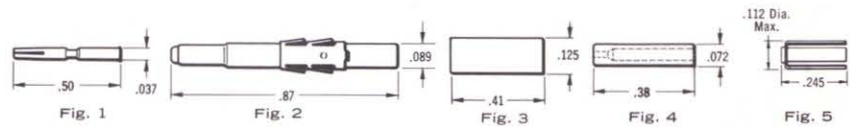


## Multi-Piece Twisted Pair Contacts for Trim Trio Connectors



### Pins

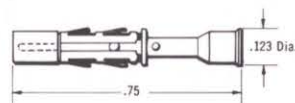
Cable	Contact for Inner Conductor				Contact for Outer Braid						Extraction Tool
	Pin Catalog Number	Fig. No.	Crimp Tool M10S-1		Outer Female		HYRING		Crimp Tool M10S-1		
			Die Set	Stop Bushing	Catalog Number	Fig. No.	Catalog Number	Fig. No.	Die Set	Stop Bushing	
2 #24 sol or str. 2 #26 str. twisted pair	RMD26L-1	1	S-26D2	SL-46-D2	RCDX60-2	2	YOC-074	3	S-22-1	SL-47-1	RX20-25 or RXK20-25
							RCDXB055-1	4			
							YORX090	5			



### Sockets

Cable	Contact for Inner Conductor				Contact for Outer Braid						Extraction Tool
	Socket Catalog Number	Fig. No.	Crimp Tool M10S-1		Outer Female Body		HYRING		Crimp Tool M10S-1		
			Die Set	Stop Bushing	Catalog Number	Fig. No.	Catalog Number	Fig. No.	Die Set	Stop Bushing	
2 #24 sol or str. 2 #26 str. twisted pair	RFD26L-1	1	S-26D2	SL-46-D2	RMDX60-2	2	YOC-074	3	S-22-1	SL-47-1	RX20-25 or RXK20-25
							RMDXB055-3	4			
							YORX090	5			

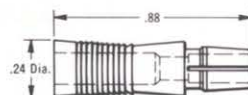
## Male Contact for Connections of Unshielded Conductors to Shielded Conductors



Pin Catalog Number	Wire Accom.	Crimp Tool M10S-1		Extraction Tool
		Die Set	Stop Bushing	
RM24L-2	One #24 solid or stranded or one #26 stranded	S-42	SL-49	RX20-25 or RXK20-25

## Quick Disconnect Cable Splice Accommodates Trim Trio Contacts:

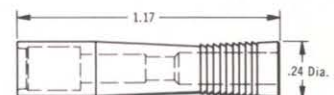
One subminiature coaxial contact or  
One no. 16 machined or formed contact



### RSCDEX-2 Plug

Closing with a positive snap this quick disconnect cable splice locks until intentionally separated. At that time a separating force of between three and eleven pounds is all that is needed.

Shell Material — Nylon



### RSMDEX-1 Receptacle

Used in conjunction with the MS-M, MSD-M, and MSB-M rectangular connectors and their contacts, this Trim Trio quick disconnect splice offers the user unlimited wiring versatility.

## Burndy Trim Trio Installation Tooling

The Trim Trio system not only offers design versatility in connectors, but production versatility in tooling as well. Choose from a broad line of tooling from simple hand tools to

automated systems. All Trim Trio tooling is specifically designed for this system to make reliable, trouble-free connections.



### Bandomatic AM2-

Crimps Trim Trio machined power contacts at speeds up to 3,000/hour depending on operator. Features small wire entry area for operator protection and no external moving parts. Air and electric powered.

**Depth:** 34"

**Width:** 17"

**Height:** 16 1/2" feet;  
27 1/2 max. tilted

**Weight:** 115 lbs.

### UTM-2 Universal Terminating Machine

For strip formed power contacts. Features high reliability crimps, low noise level and finger tip dial selector for fast easy crimp selection.

**Depth:** 16"

**Width:** 16"

**Height:** 25"

**Weight:** 215 lbs.

Available on lease



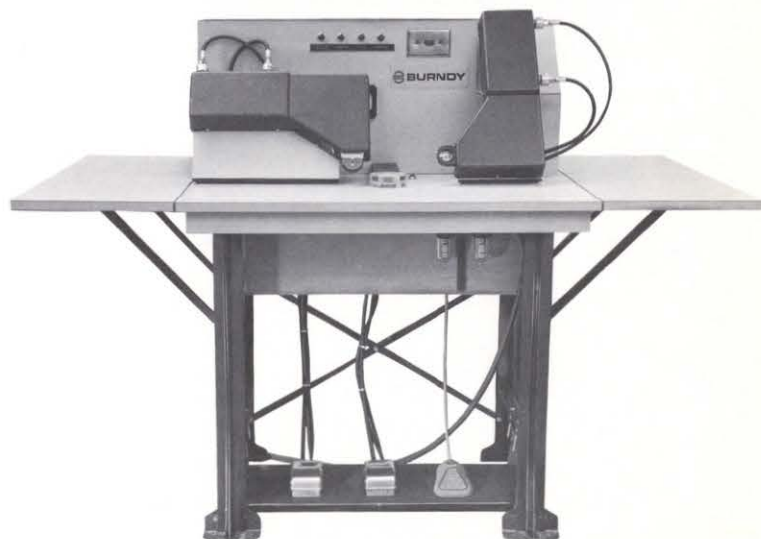
### Sub-min Coax Stripper CXS

Automatically strips submin-coax to correct lengths for installation with Trim Trio contacts. Air and electric powered.



### Cats V

Coaxial Termination System. One-bench operation for installing Trim Trio submin. coax or twisted air contacts. Crimps contacts and reflow solders. Air and electric powered.



### Mini-Cats

For shorter production runs of submin coax or twisted pair contacts. Contacts are crimped separately with M8ND hand tool and then reflow soldered with Mini-cats. Electric powered.





## Burndy Trim Trio Installation Tooling



### HYPRESS Y8ND

**Weight:** 2<sup>3</sup>/<sub>4</sub> lbs.  
**Length:** 9<sup>3</sup>/<sub>4</sub>"  
Air Line Pressure  
85-100 psi  
Portable  
Pneumatic; installs  
loose piece machined  
contacts  
Removable dies can be  
used with M8ND,  
HYTOOL  
Supplied with 6 foot  
hose  
Built-in pneumatic  
cycling control system  
insures completion of  
stroke before dies can  
be reopened



### HYTOOL M10S-1 (ratchet controlled)

**Height:** 9"  
**Width:** 2"  
**Weight:** 1.6 lbs.  
Four-indent die sets  
removable to permit in-  
stallation of a variety of  
contact sizes.  
Conforms to require-  
ments of MIL-T-22520



### HYTOOL M8ND (ratchet controlled)

**Weight:** 1<sup>3</sup>/<sub>4</sub>"  
**Length:** 10<sup>3</sup>/<sub>4</sub>"  
Removable dies can  
also be used with Y8ND  
HYPRESS



### HYPRESS YD2-1

**Width:** 7" including magazine  
**Height:** 10.9"  
**Weight:** 6 lbs. including hose  
**Air Pressure:** 85-105 psi.  
Semi-automatic; feeds strip  
mounted contacts, type "M"  
Portable hand tool or hand or  
foot operated bench mount  
tool.  
Contacts are supplied in  
disposable plastic carry  
strips.  
Built-in pneumatic cycling  
control system insures com-  
pletion of stroke before dies  
can be reopened.

## Extraction Tools

**RX20-25 Trim Trio Contacts**

**RX20-10 HYFEN Contacts**



### Stainless Steel Extraction Tip

**Length:** 4.1"

Spring loaded steel outer sleeve depresses  
contact locking spring. Inner plunger pushes  
out contact.

**RXK20-25 Trim Trio Contacts Extraction Tool Tip**

**RXK20-10 HYFEN Contacts Extraction Tool Tip**

**RXT20-4P3 Both Contacts Extraction Tool Handle**



### Stainless Steel Extraction Tip

**Length:** 5.68"

Fixed outer sleeve depresses contact locking  
spring. With tool still in contact hole, use hand  
to pull out contact.

**RX16 D11**



For use with all Trim Trio contacts. Must be  
used with Qikmate rectangular connectors.





