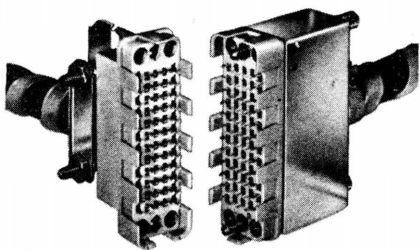
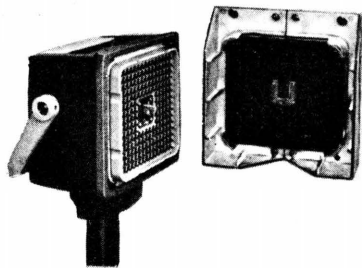


## DUALATCH\* CONNECTORS §



Typical Dualatch Connector (Miniature)



Typical Dualatch Connector (Standard)

Though they were designed primarily to meet the requirements of computers and data processing systems, DUALATCH connectors have been found ideal for use in many other types of equipment because of the distinct advantages they offer to both design and production engineers.

To the design engineer, they bring greater versatility because of their compactness, wide range of housing types, sizes and configurations. He also profits by increased confidence in their proper functioning because of the superior crimp and a contact design which provides positive wiping action.

To the production engineer, they provide a more simplified method of application. Since contacts are hermaphroditic, substantial economies are made at the outset in inventory requirements.

**DUALATCH CONTACTS:** The contacts used in all DUALATCH connectors are of crimp, snap-in, hermaphroditic design. Wiping action assures self-cleaning of the contact area, they incorporate two electrically operative arms which provide multiple contact surfaces for positive conductivity.

**DUALATCH HOUSINGS:** The housings are moulded from grey Polycarbonate, with other colors available on request. Each housing has permanently mounted, threaded bushings for mating with jack screws.

### FEATURES

#### CONTACTS

- Base material of fine grain brass, 4 numbers hard.
- Gold over nickel plating.
- Multiple areas of contact for stable electrical continuity.
- AMP's patented crimp provides high resistance to corrosion, vibration and other adverse environmental factors.
- Insulation support crimp for added strength to the termination.
- Positive wiping action between the friction fitting contacts for intimate metal to metal contact.
- Hermaphroditic design allows substantial inventory economies.
- Snap-in assembly.

#### HOUSINGS

- Insertion and extraction of contacts which makes possible use as semi-permanent programming device.
- 70% less engagement/disengagement forces than conventional type connectors.
- Positive polarization of housings to prevent mismatching.
- Numerical coding front and rear for quick circuit identification.
- Maximum density of circuits in minimum space.
- 5 pounds minimum retention force of contacts in housing.
- Egg-crate housing construction for complete dielectric barrier between circuits on modular connectors.

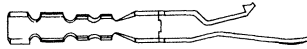
### TYPICAL ELECTRICAL/MECHANICAL CHARACTERISTICS

**CONTACT CURRENT RATING:** 3 amperes, #24 wire. **VOLTAGE RATING:** 1,000 A.C., R.M.S. **RESISTANCE:** less than 10 milliohms through each connection under a current load of 50 milliamperes. **CONTACT LIFE:** tested for 2,000 cycles without wear-through of plating or loss in electrical performance. **CRIMP TENSILE STRENGTH:** 10 pounds minimum, #24 wire. **DIELECTRIC STRENGTH:** tested at 1,000 volts for 1 minute, no failures. **VIBRATION:** method 204, Condition B of MIL Standard 202B; no discontinuity or open circuits. **SHOCK:** method 202 of MIL Standard 202B; no open circuits.

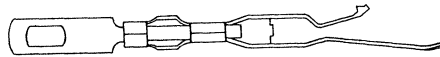
# MINIATURE DUALATCH CONTACTS CRIMP TYPE

## PERFORMANCE SPECIFICATIONS

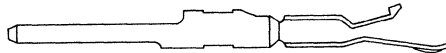
Current Rating . . . . . 3 amperes, #24 wire	Durability . . . . . 2,000 cycles
Voltage Rating . . . . . 1,000 A.C., R.M.S.	Insertion-Removal Force, per contact . 0.2 lbs.
Resistance . . . . . 4 milliohms at 50 milliamperes	Capacitance . . . . . . . . . . 1 mmf.
Crimp Tensile Strength . . . . . 10 lbs. min., #24 wire	Contact Retention in cavity . . . . . 5 lbs.



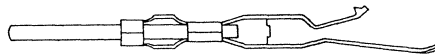
Wire Range	Ins. Dia. Range	Material	Plating	Catalog Number	Tooling	
					Hand	Extraction and Insertion
28-40	.040-.060	Brass	*Std. Gold/Nickel	66121-2	90071	91003-1
			Tin	66121-3		
			**Comm. Gold/Nickel	66121-5		
			*Std. Gold/Nickel	66061-2		
26-24	.040-.060	Brass	Tin	66061-3	90071 90039	91003-1
			**Comm. Gold/Nickel	66061-5		
24-20	.048-.071	Brass	*Std. Gold/Nickel	66134-2	90071	91003-1
			Tin	66134-3		
			**Comm. Gold/Nickel	66134-5		
			*Std. Gold/Nickel	66138-2		
18	.060-.080	Brass	Tin	66138-3	90100	91003-1
			**Comm. Gold/Nickel	66138-5		



**Solder Tab Contact**



**One-Piece Post Contact ††**



**Wrap-Type Post Contact**

### CONTACT VARIATIONS

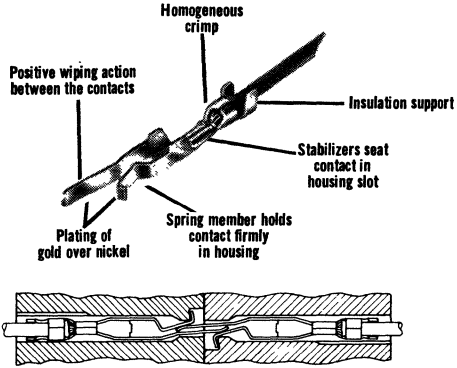
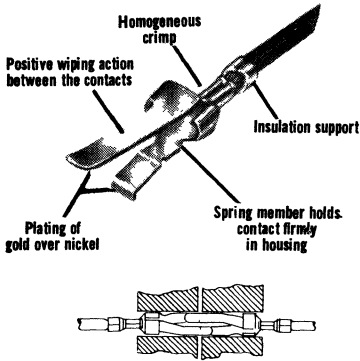
Catalog Number	Contact Plating	Description	Tab	
			Material	Plating
582467-1	*Std. Gold/Nickel	With Solder Tab	Brass	Gold/Nickel
582468-1	*Std. Gold/Nickel	With Wrap Type Tab		
582468-5	**Comm. Gold/Nickel	.540 Long		
582468-2	*Std. Gold/Nickel	With Wrap Type Tab	Phos. Bronze	Tin
582468-6	**Comm. Gold/Nickel	.640 Long		
582468-3	*Std. Gold/Nickel	With Wrap Type Tab		
582468-7	**Comm. Gold/Nickel	.790 Long		
582468-4	*Std. Gold/Nickel	With Wrap Type Tab		
582468-8	**Comm. Gold/Nickel	1.040 Long		

\*Std. Gold — .00003 Gold over nickel.  
 \*\*Comm. Gold — .00002 Gold in critical areas, gold flash in other areas. All gold over nickel.

**CONTACT CONFIGURATIONS**

**STANDARD TYPE**

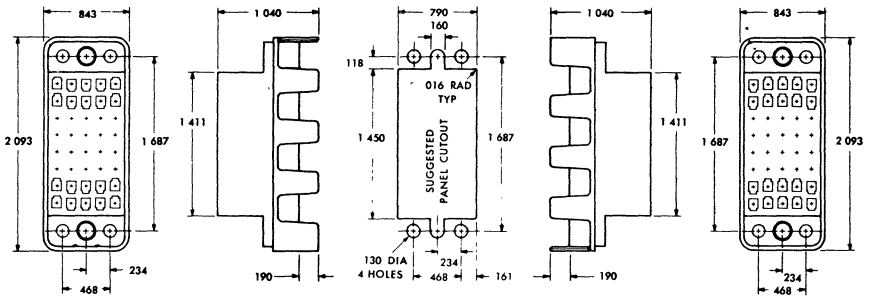
**MINIATURE TYPE**



\*For use with 200 Position Cable Connector only.

**HOUSINGS FOR MINIATURE CONTACTS**

**40 POSITION MINIATURE**



**HARDWARE**

Description	Part Number	Material
2-piece shield	200532-1	Anodized aluminum
2-piece shield	200532-2	Cadmium plated steel
1-piece jackscrews—long for use with 2-piece shield	582360-3	Stainless steel
strain relief clamp	201182-1	Cadmium plated steel
1-piece jackscrews—short for use with strain relief clamp or no hardware	582463-1	Stainless steel
Spring Clips	201925-1—Locking spring	Nickel plated steel
	201926-1—Locking latch	Stainless steel
1-piece shield 180° for use with spring clip only	201173-2	Cadmium plated steel
1-piece shield 90° for use with spring clip only	201470-2	Cadmium plated steel

**HARDWARE**

Description	Male	Female	Material
Fixed jackscrews**	200874-1	200875-1	Stainless steel
	200874-2	200875-2	Cadmium plated steel
Turnable jackscrews**	200871-1	200867-1	Stainless steel
	200871-2	200867-2	Cadmium plated steel

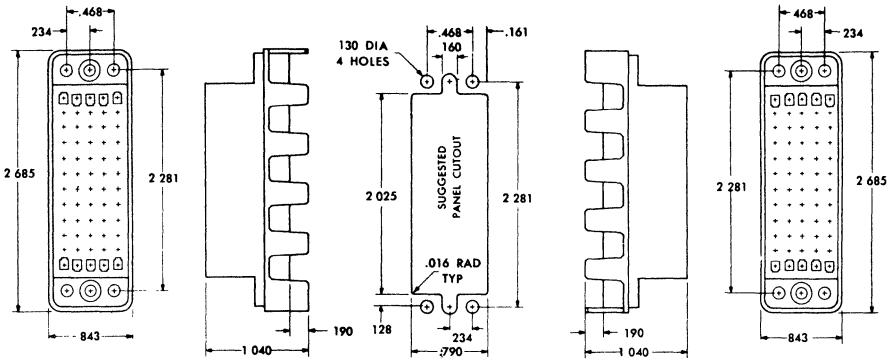
- \* -1 Block with insert bushing for use with 1-piece jackscrews.
- \*\* -2 Block without insert bushing for use with Spring Clips, 2-piece jackscrews or special applications.
- \*\*\* Other colors can be supplied for special applications.

**MATING HOUSING BLOCKS‡**

Part Number	Material	Color
*582458-1 & 582459-1	Polycarbonate	Grey***
**582458-2 & 582459-2		

‡Male and Female Dualatch blocks have identical configurations. However, the cavity numbering is reversed to allow circuit identification when the blocks are mated.

**60 POSITION MINIATURE**



**HARDWARE**

Description	Part Number	Material
2-piece shield	200517-1	Anodized aluminum
2-piece shield	200517-2	Cadmium plated steel
1-piece jackscrews—long for use with 2-piece shield	582360-3	Stainless steel
strain relief clamp	201224-1	Cadmium plated steel
1-piece jackscrews—short for use with strain relief clamp or no hardware	582463-1	Stainless steel
Spring Clips	201925-1—Locking spring	Nickel plated steel
	201926-1—Locking latch	Stainless steel
1-piece shield 180° for use with spring clip only	201165-2	Cadmium plated steel
1-piece shield 90° for use with spring clip only	201469-2	Cadmium plated steel

**HARDWARE**

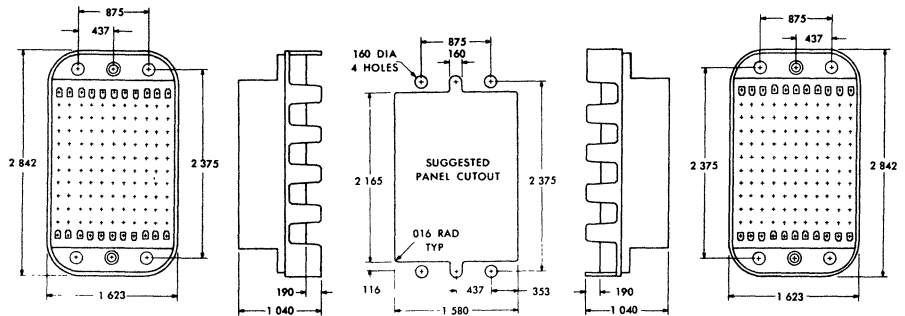
Description	Male	Female	Material
Fixed jackscrews**	200874-1	200875-1	Stainless steel
	200874-2	200875-2	Cadmium plated steel
Turnable jackscrews**	200871-1	200867-1	Stainless steel
	200871-2	200867-2	Cadmium plated steel

**MATING HOUSING BLOCKS‡**

Part Number	Material	Color
*582271-1 & 582272-1	Polycarbonate	Grey***
**582271-2 & 582272-2		

‡Male and Female Dualatch blocks have identical configurations. However, the cavity numbering is reversed to allow circuit identification when the blocks are mated.

**132 POSITION MINIATURE**



**HARDWARE**

Description	Part Number	Material
2-piece shield	201131-1	Cadmium plated aluminum
1-piece jackscrews—long for use with 2-Piece Shield	582360-3	Stainless steel
Strain relief clamp	201221-1	Cadmium plated steel
1-piece jackscrews—short for use with strain relief clamp or no hardware	582463-1	Stainless steel
Spring Clips	202251-1—Locking Spring	Stainless steel
	202252-2—Locking Latch	Nickel plated Steel

## HARDWARE

Description	Male	Female	Material
Fixed jackscrews**	200874-1	200875-1	Stainless steel
	200874-2	200875-2	Cadmium plated steel
Turnable jackscrews**	200871-1	200867-1	Stainless steel
	200871-2	200867-2	Cadmium plated steel

\* -1 Block with insert bushing for use with 1-piece jackscrews.

\*\* -2 Block without insert bushing for use with Spring Clips, 2-piece jackscrews or special applications.

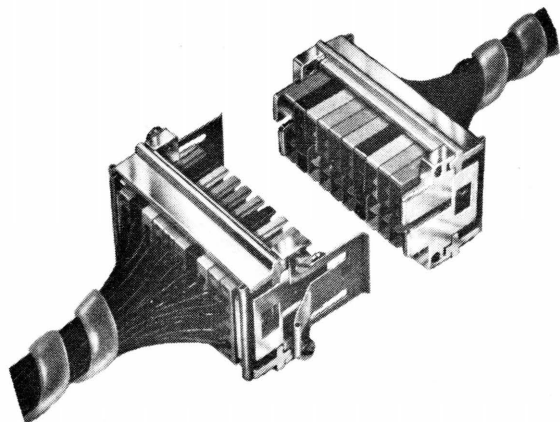
\*\*\* Other colors can be supplied for special applications.

## MATING HOUSING BLOCKS†

Part Number	Material	Color
*582435-1 & 582436-1	Polycarbonate	Grey***
**582435-2 & 582436-2		

†Male and Female Dualatch blocks have identical configurations. However, the cavity numbering is reversed to allow circuit identification when the blocks are mated.

## 4 POSITION MODULAR MINIATURE

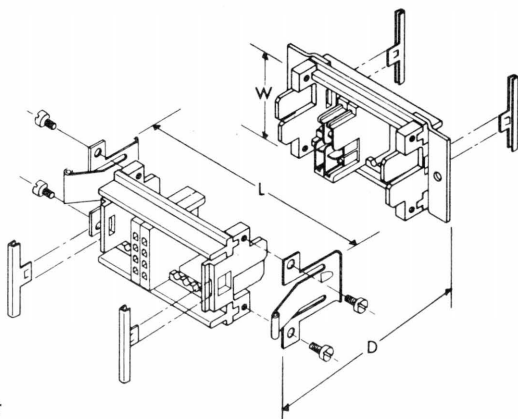


## TYPICAL 10 MODULE ASSEMBLY

L = 2.208"

D (MATED) = 1.700"

W = 1.430"



## 4 POSITION MODULAR HOUSING BLOCKS†

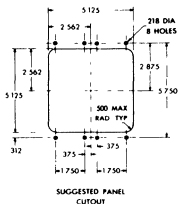
Part Number	Color
1-582396-1	Brown
1-582396-2	Red
1-582396-3	Orange
1-582396-4	Yellow
1-582396-5	Green
1-582396-6	Blue
1-582396-7	Violet
1-582396-8	Gray
1-582396-9	White
1-582396-0	Black
2-582396-1	Beige

†Block Material is Polycarbonate

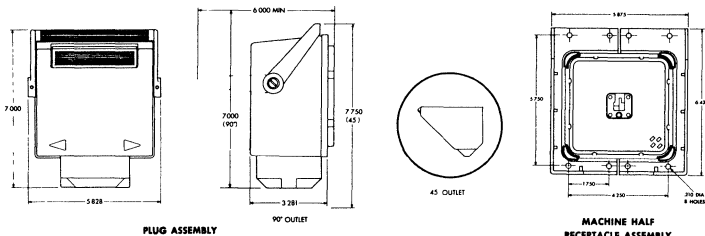
## HARDWARE (TRACK ASSEMBLY)

Part Number	Description	Material
582397-1	Modular Track	Aluminum
582399-1	Track Retaining Block	Cadmium Plated Zinc
582400-2	Retaining Clip	Nickel Plated Steel
582402-1	Spring Catch	Stainless Steel
582403-1	Mounting Bracket	Cadmium Plated Steel
7-21103-8	Screw	Stainless Steel

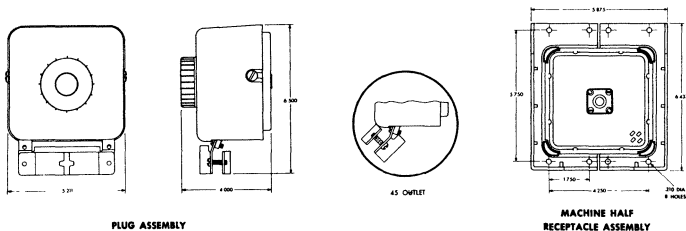
## 200 POSITION DUALATCH CABLE CONNECTOR



## HANDLE ACTUATED CAM CONNECTOR



## SCREW LATCHING CONNECTOR



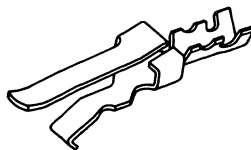
## PERFORMANCE SPECIFICATIONS

- Current rating ..... 3 amperes, #20 wire
- Voltage rating ..... 1,500 volts AC, rms.
- Individual contacts ..... 42561-4—7.5 amperes max.  
42928-4—15 amperes max.
- Resistance ..... Less than 10 milliohms through each connector
- Contact life ..... 2,000 cycles minimum without loss of contact plating
- Insulation resistance ..... Contact to contact 3.5 x 10<sup>10</sup> ohms  
Contact to shell 1.8 x 10<sup>10</sup> ohms
- Temperature rise ..... 24°C. above room ambient of 24°C. with contacts carrying 3 amps.
- Capacitance ..... 3 μf between 2 contacts
- Contact Retention in cavity ..... 8 lbs. min.

### HOUSING

Latching System	Part No.** Plug Assembly With Dust Cover	Mates With** (Machine Half) With Dust Cover	Strain Relief Clamp	Material	
				Shell	Insert
Handle actuated cam	582314-1	582316-1	90° outlet	Zinc painted grey	grey poly-carbonate
	582314-2	582316-2			
	582315-1	582316-1	45° outlet		
	582315-2	582316-2			
Screw type	582335-1	582316-1	none	grey poly-carbonate	
	582335-2	582316-2	none		
	582492-1*	582491-1*	45° or 90° outlet for 2 cables		
	582493-1*	582490-1*	45° or 90° outlet for 1 cable		
	582889-1*	582490-1*	45° or 90° outlet for 1 cable		

### FOR 200 POSITION CABLE CONNECTOR ONLY



Catalog Number	Material	Wire Range	Plating
42561-4	Comm. Brass	24/20 AWG	Gold over Nickel
42928-4	Comm. Brass	18/16 AWG	Nickel

\*Without dust covers.

\*\*Keying arrangement information available upon request.