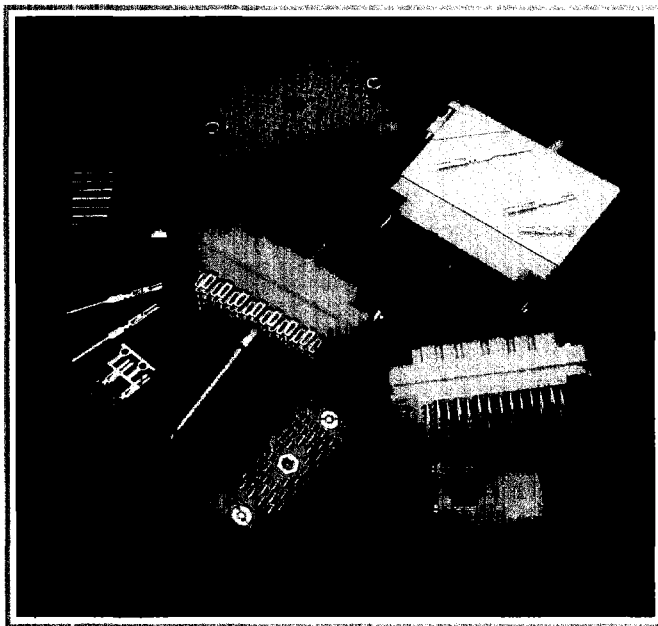


RACK & PANEL CONNECTOR



FEATURES

- UL Recognized
- .150 (3.81) Contact Spacing x .130 (3.30) or .150 (3.81) Row Spacing with Staggered Grid
- Plug and Receptacle in 20, 38, 56, 90 or 120 Contact Sizes
- Edacon Hermaphroditic Contact Mating Design
- Contact Termination Options include Crimp, P.C. Tail, Wire Hole and Wire Wrap
- Mating and Unmating Simplified with use of Actuating Screws
- Optional Covers with Side or Top Entry Cable Clamp in Plastic or Metal Material Available for all Connector Sizes
- Versatile Metal Cover Design permits Assembly or Disassembly After Cabling is Complete plus Cable Entry Style Flexibility
- Actuating Screws, Locknuts, Polarizing Hardware, Covers and Contacts Suitable for either Plug or Receptacle
- Polarizing Hardware Adjustable for 288 Mating Combinations
- Tools Available for Contact Installation, Removal and Crimping and Polarizing Changes

SPECIFICATIONS

- ◆ Insulator Material: Diallyl Phthalate or Thermoplastic Polyester, UL 94V-0, Colour: Green, or Polycarbonate, Colour: Grey
- ◆ Contact Material: Phosphor Bronze Alloy CA-510
- ◆ Contact Plating: Gold over Nickel for Entire Contact
- ◆ Cover Material: Polycarbonate, Colour: Green, or Die-Cast Zinc, Finished with Grey Enamel Paint
- ◆ Current Rating: 8.5 Amperes
- ◆ Contact Resistance: 10 Milliohms Maximum
- ◆ Dielectric Withstanding Voltage: 2000 V AC rms at Sea Level
- ◆ Insulation Resistance: 5000 Megohms Minimum
- ◆ Operating Temperature: -65 to +125 Degrees C
- ◆ Insertion and Withdrawal Force: 2 to 16 oz (0.56 to 4.45 N) per Contact Position

516 SERIES ORDERING CODE

Example Part Number 516 - 038 - 500 - 2 1 2

Series _____
 Total Number of Contacts _____
 Contact Code _____
 Style and Material _____
 Cover Code _____
 Hardware Code _____

Series 516

Total Number of Contacts

020, 038, 056, 090 or 120

Contact Code ^{1,2}	Description & Tail Size	Tail Length "G"
000	No Contacts Assembled	—
500	Wire Hole .110 x .024 (2.79 x 0.61)	.245 (6.22)
501	Taper Tail	.245 (6.22)
520	P.C. Tail .025 x .024 (0.64 x 0.61)	.215 (5.46)
540	Wire Wrap .050 x .024 (1.27 x 0.61)	.600 (15.24)
541	Wire Wrap .026 x .024 (0.66 x 0.61)	.620 (15.75)
542	Wire Wrap .050 x .024 (1.27 x 0.61)	.790 (20.07)

Style and Material ³	Style	Insulator Material
1	Plug	Green Diallyl Phthalate
2	Receptacle	Green Diallyl Phthalate
3	Plug	Grey Polycarbonate
4	Receptacle	Grey Polycarbonate
5	Plug	Green Polyester
6	Receptacle	Green Polyester

Cover Code ^{4,5,6,7}	Description
0	No Cover Assembled
1	Plastic Cover, Top Entry Standard Clamp
2	Plastic Cover, Side Entry Standard Clamp
3	Plastic Cover, Top Entry Large Clamp
4	Plastic Cover, Side Entry Large Clamp
5	Metal Cover, Side Entry
6	Metal Cover, Top Entry

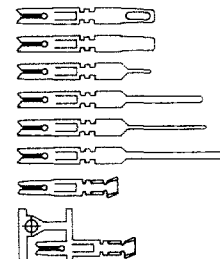
Hardware Code ⁸	Description
0	No Hardware Assembled
1	Actuating Screw and Polarizing Hardware
2	Locknut and Polarizing Hardware
5	Actuating Screw with No Polarizing Hardware
6	Locknut with No Polarizing Hardware

Ordering Code Notes

- 1) Crimp contacts are also available for the 516 series connectors. Contacts may be ordered separately for pre-wired or select position assembly.

Part Number	Description
516-290-500	Wire Hole
516-290-501	Taper Tail
516-290-520	P.C. Tail
516-290-540	Wire Wrap
516-290-541	Wire Wrap
516-290-542	Wire Wrap
516-290-590	Crimp - Loose
516-290-591	Crimp - 1800 Contacts per reel

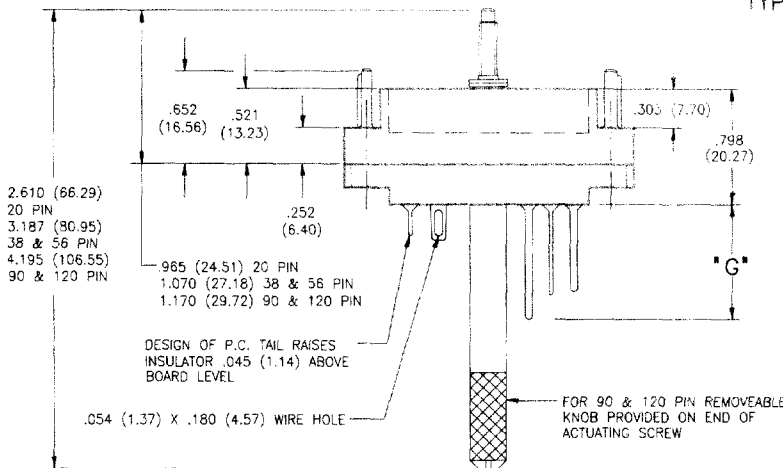
Silhouette



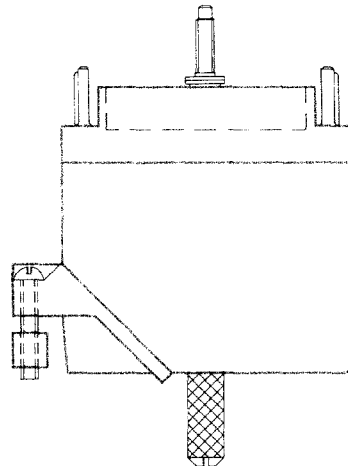
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RACK & PANEL CONNECTOR

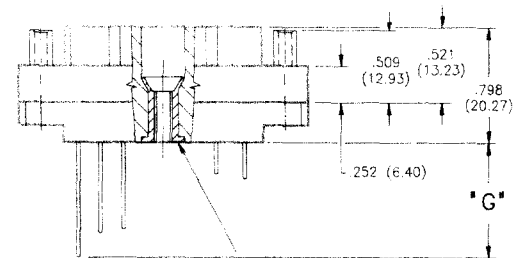
TYPICAL PLUG WITH ACTUATING SCREW
AND POLARIZING GUIDE PINS



TYPICAL PLUG WITH
ACTUATING SCREW,
POLARIZING GUIDE PINS
AND COVER

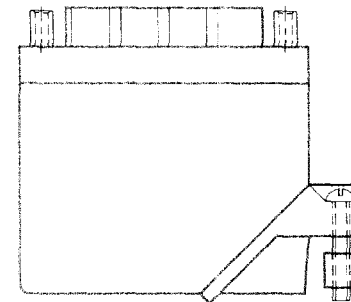


TYPICAL RECEPTACLE WITH LOCKNUT AND
POLARIZING SOCKETS



#2-56 UNC THREAD FOR 20 PIN
#5-40 UNC DOUBLE START THREAD FOR 38 & 56 PIN
#10-24 UNC DOUBLE START THREAD FOR 90 & 120 PIN

TYPICAL RECEPTACLE WITH LOCKNUT,
POLARIZING SOCKETS AND COVER



NOTE: PLASTIC POLARIZING GUIDE PINS AND SOCKETS (AVAILABLE SOON)
WILL BE COLOUR CODED TO VISUALLY ASSIST CONNECTOR MATING.
POLARIZATION CHANGES WILL ALSO BE SIMPLIFIED AS THEY WILL SNAP
FIRMLY INTO POSITION AND CAN BE REPLACED USING NEEDLENOSE PLIERS.

ORDERING CODE NOTES (Continued)

- 2) For contact installation, removal and crimping tools, refer to page 112.
- 3) Grey polycarbonate insulator material is not available for the 120 pin size connector.
- 4) The 20 pin connector cover will not accept the length of the wire wrap contacts.
- 5) Plastic covers with large clamps are only available for the 38 and 56 pin size connectors.
- 6) Metal covers with side entry may be converted to top entry by removing side plate and changing clamp orientation.
- 7) Covers may be ordered separately. Refer to page 101.
- 8) Insulator design prevents improper mating of individual plug and receptacle. Polarizing hardware enables specific plug and receptacle mating combinations.

CRIMP CHARACTERISTICS

- Contacts and Crimp Tools Accommodate from 28 AWG to 18 AWG, Solid or Stranded Conductor Diameters from .012 (0.30) to .049 (1.25) and an Insulation Diameter up to .074 (1.88)
- Multiple Smaller Gauge Wires may be Crimped Together
- Crimp Resistance from 0.5 Milliohms (18 AWG) to 1.5 Milliohms (28AWG)

POLARIZING CODES

- Polarizing Hardware Changes allow 288 Mating Combinations
- Standard Code Supplied for Plugs PG1G1, for Receptacles RS1S1. Connectors with Special Polarizing Codes Available upon Request
- Example Polarizing Code:

P G 4 S 2

Type of Connector

P - Plug, R - Receptacle

Large Diameter Hardware

G - Guide Pin (at Contact Position "A" End)

H - Guide Pin (at Last Contact Position End)

S - Socket (at Contact Position "A" End)

T - Socket (at Last Contact Position End)

Position of Large Diameter Keyway - 1 through 6

Small Diameter Hardware (Opposite End from Large Diameter)

G - Guide Pin, S - Socket

Position of Small Diameter Keyway - 1 through 6

This Example Mates with Code RS4G2

- Crimp Tensile Strength for Wire Sizes

18 AWG - 40 lbs (178 N)

20 AWG - 25 lbs (111 N)

22 AWG - 15 lbs (67 N)

24 AWG - 10 lbs (44 N)

26 AWG - 5 lbs (22 N)

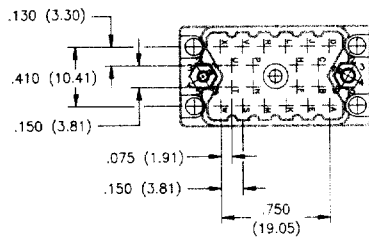
28 AWG - 3 lbs (13 N)

BACK & PANEL CONNECTOR

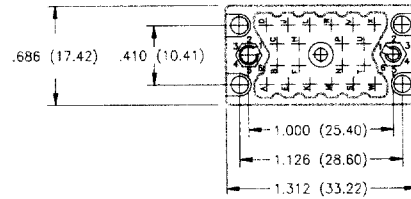
CONNECTOR MATING FACE VIEWS

DIMENSIONS INDICATED FOR EACH SIZE APPLY TO BOTH PLUG AND RECEPTACLE

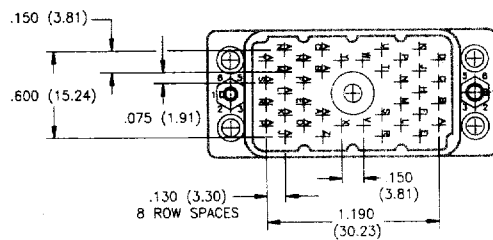
20 PIN PLUG



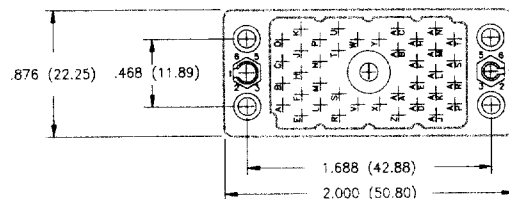
20 PIN RECEPTACLE



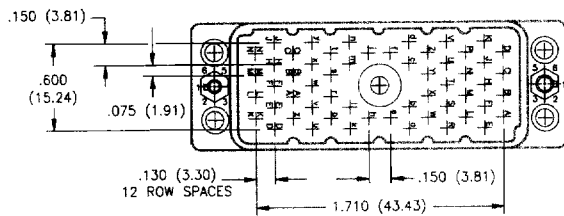
38 PIN PLUG



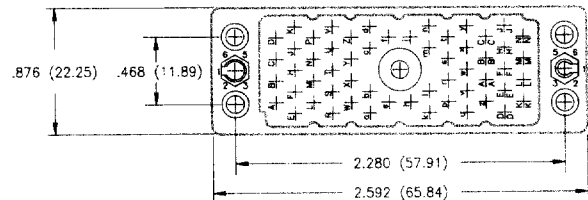
38 PIN RECEPTACLE



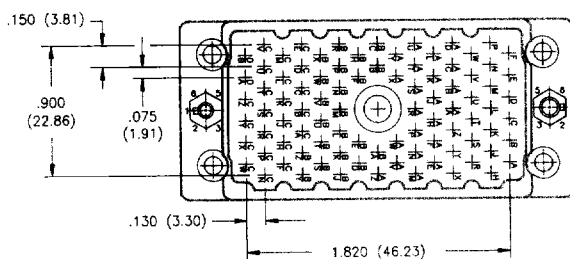
56 PIN PLUG



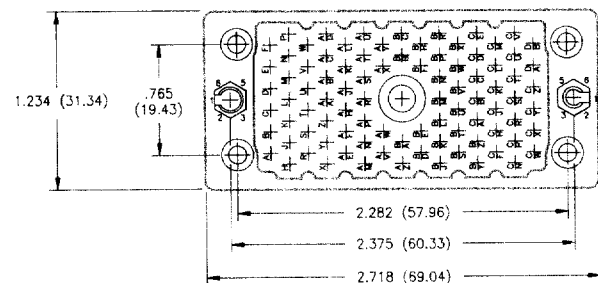
56 PIN RECEPTACLE



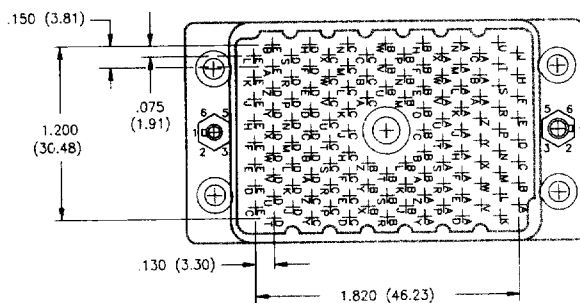
90 PIN PLUG



90 PIN RECEPTACLE



120 PIN PLUG



120 PIN RECEPTACLE

