



Positronic Industries
connectpositronic.com

GROUNDING PLATES DESIGNED FOR AIRCRAFT APPLICATIONS

Standard
Density
Rectangular



Positronic Industries' grounding plates were designed especially for aircraft applications where shielded cable must be grounded to the aircraft frame. The ground wires of the shielded cable are piggy-backed out of the cable with ferrules and are crimped to Size 16 female contacts. The female contacts are loaded into standard 14 or 34 contact connector housings. These connectors can then be mated to the grounding plate which is fastened to the aircraft frame.

Grounding plates have Size 16 precision-machined male contacts which are swaged and soldered onto the metal plate.

The metal plates (angled and plane) have fixed female jackscrews that accept the rotating jackscrews, which are an integral part of the mating female connector. Long rotating jackscrews extend beyond the edge of the cable adapter of the 14-contact female connector which permits easy coupling to the grounding plate.

Other contact variants are available for grounding plate applications. Contact Technical Sales for information on the availability of other grounding plates offered by Positronic Industries.

GROUNDING PLATES TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator:	Glass-filled DAP per MIL-M-14, Type SDG-F. Grey or black in color.
Grounding Plates:	Copper alloy with tin plate.
Contacts:	Copper alloy with 0.000010 inch [0.25 microns] gold over nickel plate.
Jackscrew System:	Stainless steel, passivated.
Strain Reliefs:	Steel with zinc plate and chromate seal or aluminum with yellow anodize.

MECHANICAL CHARACTERISTICS:

Removable Female Contacts:	Insert contact to rear face of insulator, release from front face of insulator. "Closed Entry" design for highest reliability.
----------------------------	--

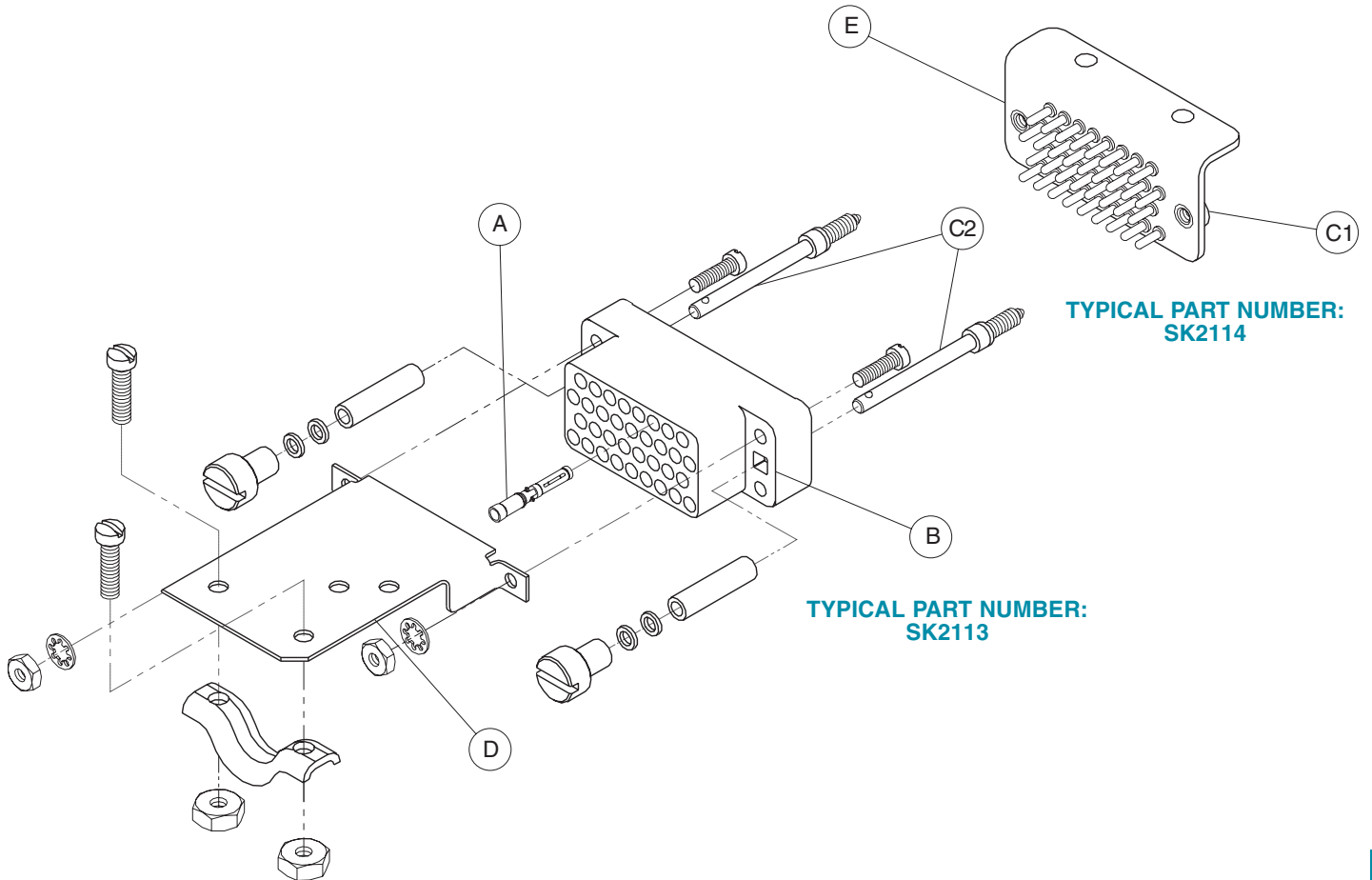
Contact Retention in Insulator:	20 lbs. (89N) after 10 cycles of contact insertion/extraction.
Female Contact Termination:	Crimp wires, Sizes 20 AWG [0.5 mm ²] through 24 AWG [0.25 mm ²].
Jackscrews:	6-32 UNC threads.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating:	13 amperes nominal.
Insulation Resistance:	5 G ohms.
Working Voltage:	500 VAC (rms).
Working Temperature:	-65°C to 150°C.



GROUNDING PLATE COMPONENT DESCRIPTION



CONNECTOR COMPONENT DESCRIPTIONS	
ITEM	COMPONENT DESCRIPTIONS
A	Female Contacts, Size 16, Crimp Terminations.
B	Female Connector Insulator.
C1	Fixed Jackscrew.
C2	Rotating Jackscrew.
D	Strain Relief provides cable support.
E	Grounding Plate.



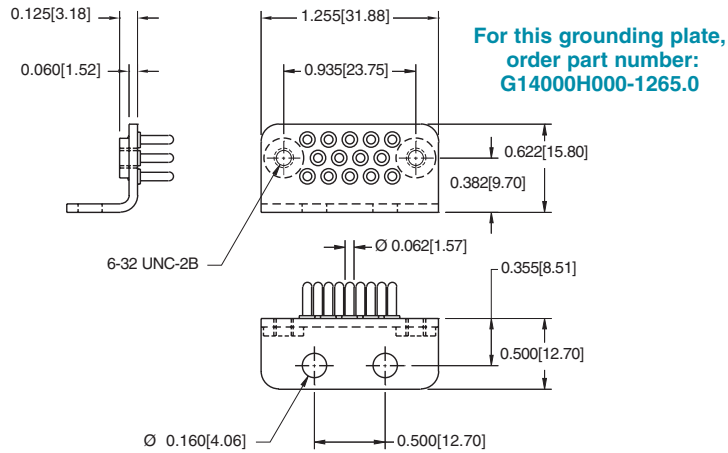
Positronic Industries
connectpositronic.com

GROUNDING PLATES DESIGNED FOR AIRCRAFT APPLICATIONS

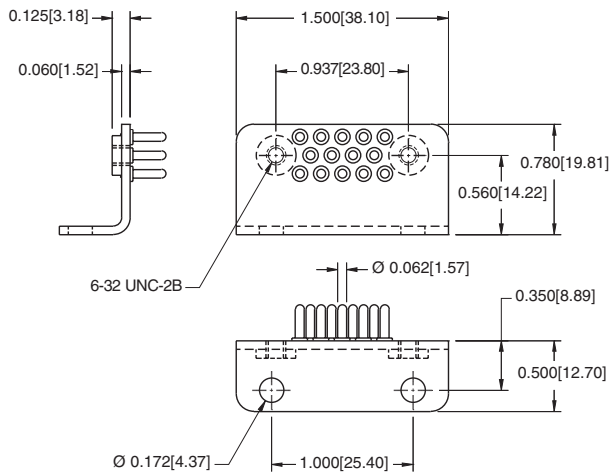
Standard
Density
Rectangular

Grounding Plate Ordering Information

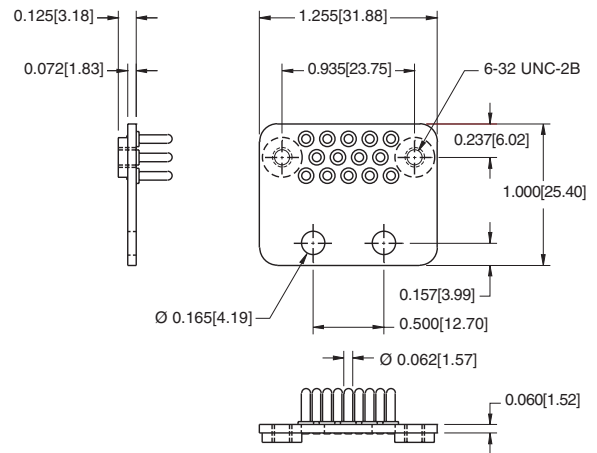
Grounding plates are offered in five (5) different configurations, as shown below. These grounding plates can be used with the connector strain relief assemblies shown to the right below. The connector strain relief assemblies are provided with an appropriate number of FC120N2 female contacts. The FC120N2 contacts feature a "Closed Entry" design and accommodate wire sizes 20 - 24 AWG (0.5 - 0.25 mm²). Reference the schematics below for dimensional information. Use the indicated part numbers below to order your grounding plate assemblies from Positronic Industries.



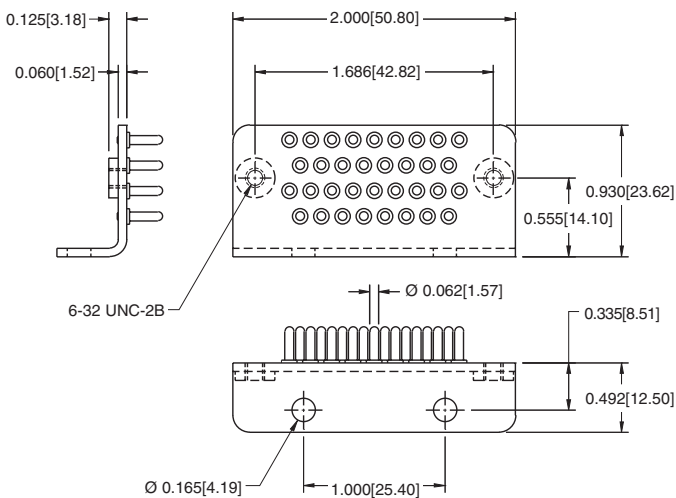
For this grounding plate, order part number: **SK2484**



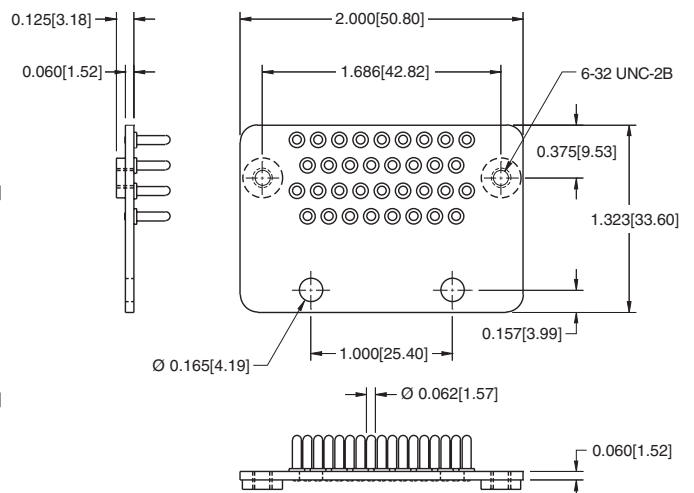
For this grounding plate, order part number: **SK2665**



GROUND PLATES



For this grounding plate, order part number: **SK2114**



For this grounding plate, order part number: **SK2664**

Standard
Density
Rectangular

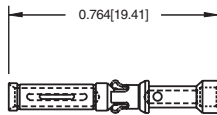
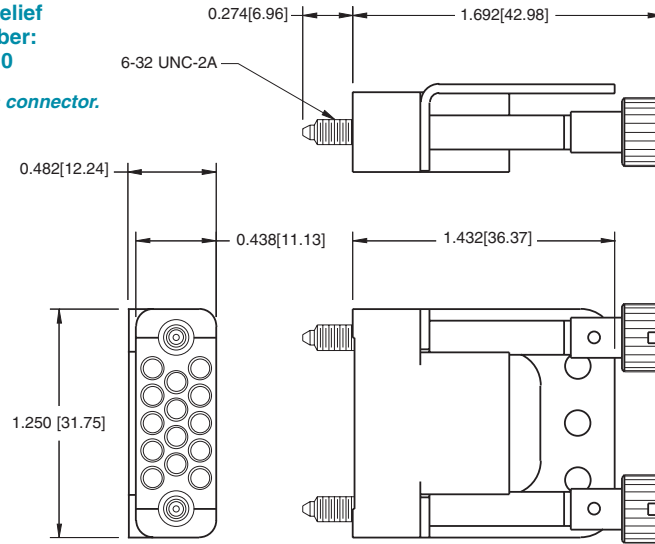
GROUNDING PLATES DESIGNED FOR AIRCRAFT APPLICATIONS



Positronic Industries
connectpositronic.com

For this connector strain relief
assembly, order part number:
GMCT14F0EX00A0-697.0

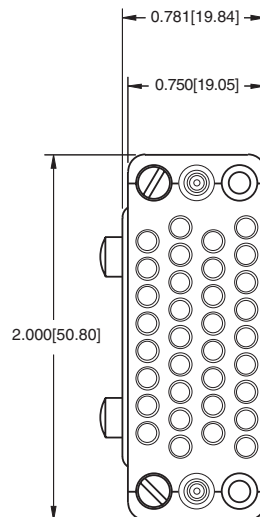
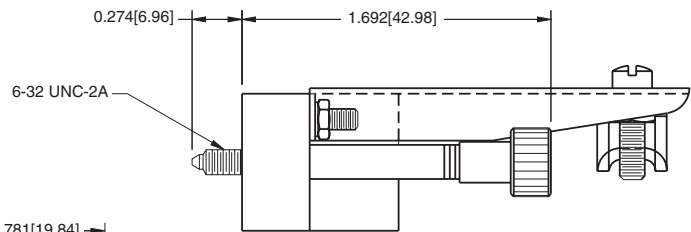
A plastic cable tie is supplied with this connector.



**FC120N2 FEMALE CONTACT
"CLOSED ENTRY" DESIGN**

(ENLARGED)

The appropriate number of contacts are supplied with the connectors. These crimp termination contacts accommodate wire sizes 20 - 24 AWG (0.5 - 0.25 mm²). Contact Technical Sales for crimp tool ordering information.



For this connector strain relief
assembly, order part number:
SK2113

GROUND PLATES