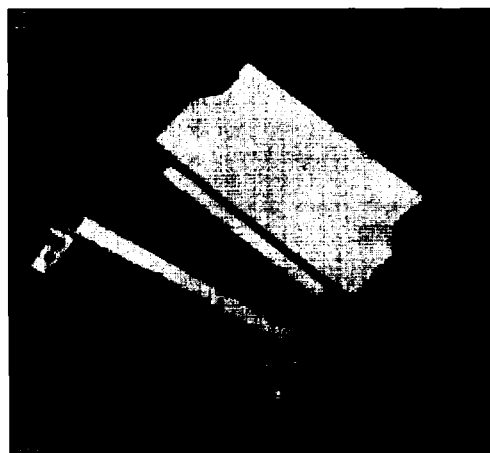


Input/Output

P50 Series



- Standard product supports 28 AWG discrete wire cable
- Solid metal cover with integrated snap-on locking mechanism
- Fully EMI shielded
- 20 to 100 position product
- Right angle cable exit for 20 and 50 position available - contact factory
- Finished cable assemblies to customer specifications available through Cablelink

RN PAK-50[®]

How to Order Cable Mount I/O Product

P50 — XXX — DDS — TG

Number of Contacts:
20, 28, 34, 50,
60, 68, 80, 100

Plating Code:
Specify TG
Contact factory for
additional Plating
Options

DDS - Cable Mount Socket
DDP - Back Panel Cable Mount Plug

How To Order Board Mount I/O Product

P50 — XXX — DDP — SR1 — TG

Number of
Contacts:
20, 28, 34, 50, 60,
68, 80, 100

DDP = Board Mount Plug

S1 = Straight
SR1 = Right Angle

Plating Code:
Specify TG
Contact factory for
additional Plating
Options

RN PAK-50 I/O Backshell

P50 - XXX - XXX - BSK

Series

Number of Contacts:
20, 28, 34, 50, 60, 68, 80, 100

AGENCY APPROVAL:



STR - Straight exit
HOZ - Right angle exit
(Available on 20 &
50 position only)

- BSK - with straight exit exit std. backshell for 20-80 position product
- BSK1 - 20 pos. rt. angle back-shell w/cable clamp for .193" diameter
- BSK3 - 20 pos. rt. angle back-shell w/cable clamp for .217 - .228" diameter
- BSK2 - 50 pos. rt. angle exit backshell w/cable clamp for .260" diameter
- BSK4 - 50 pos. rt. angle exit backshell w/cable clamp for .283" diameter
- BSK5 - 50 pos. rt. angle exit backshell w/cable clamp for .311" diameter
- BSK1 - 100 pos. straight exit backshell without backpanel
- BSK2 - 100 pos. straight exit backshell to accommodate .039" panel thickness
- BSK3 - 100 pos. straight exit backshell to accommodate .063" panel thickness

INPUT/OUTPUT

Materials:

Insulator: Glass-filled black nylon
Contact: Phosphor Bronze

Housing:

Diecast Cover: 20 to 80 pin: Zinc
100 pin: Aluminum

(Plating: Nickel over copper)

D-shaped shell: Steel

(Plating: Nickel over copper)

Lock spring: Stainless steel

Lock screw: Steel
(Plating: Nickel over copper)

Cable clamp:

Straight out: Stainless steel

Horizontal out: Steel with Nickel plating

Performance Characteristics:

Dielectric Withstanding Voltage: 650 volts AC

Contact Resistance: 30mΩ or less

Insulation Resistance: 1000MΩ or more at 500 volts DC

Current Rating: 0.5 Ampere/contact

Flammability: UL 94 V-O

Temperature Range: -55°C to + 105°C

Plating Description:

TG = 10 μinch (.254 μm) minimum

Gold on contact area

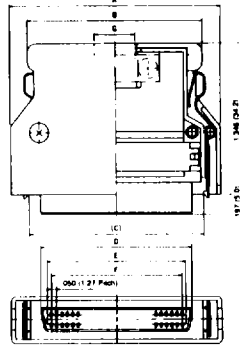
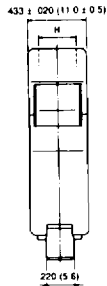
80 μinch (2.03 μm) minimum

Tin on terminal area

Underplate of 80 μinch (2.03 μm) minimum nickel

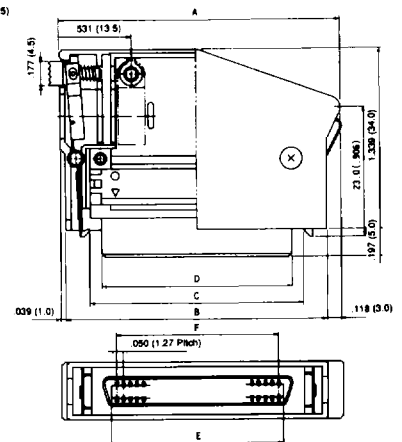
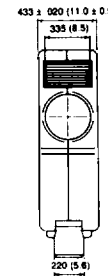
SOCKET WITH COVER

Straight



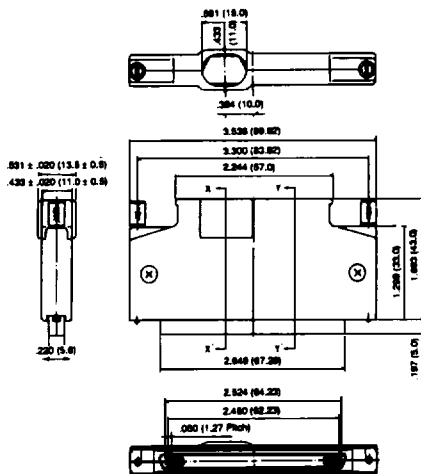
No. of Contacts	A	B	C	D	E	F	G	H
20	1.181 (30.00)	0.878 (22.30)	0.839 (21.31)	0.649 (16.48)	0.529 (13.43)	0.450 (11.43)	0.264 (6.70)	0.264 (6.70)
28	1.381 (35.08)	1.078 (27.38)	1.039 (26.39)	0.849 (21.56)	0.729 (18.51)	0.650 (16.51)	0.295 (7.50)	0.295 (7.50)
34	1.531 (38.89)	1.228 (31.19)	1.189 (30.20)	0.999 (25.37)	0.879 (22.32)	0.800 (20.32)	0.343 (8.70)	0.343 (8.70)
50	1.931 (49.05)	1.628 (41.35)	1.591 (40.41)	1.399 (35.53)	1.279 (32.48)	1.200 (30.48)	0.394 (10.00)	0.335 (8.50)
60	2.181 (55.40)	1.878 (47.70)	1.839 (46.71)	1.649 (41.88)	1.529 (38.83)	1.450 (36.83)	0.433 (11.00)	0.335 (8.50)
68	2.381 (60.48)	2.078 (52.78)	2.039 (51.79)	1.849 (46.96)	1.729 (43.91)	1.650 (41.91)	0.472 (12.00)	0.335 (8.50)
80	2.681 (68.10)	2.378 (60.40)	2.339 (59.41)	2.149 (54.58)	2.029 (51.53)	1.950 (49.53)	0.512 (13.00)	0.335 (8.50)

Right Angle



No. of Contacts	A	B	C	D	E	F
20	1.339 (34.00)	1.181 (30.00)	0.839 (21.31)	0.649 (16.48)	0.529 (13.44)	0.450 (11.43)
50	2.089 (53.06)	1.931 (49.05)	1.589 (40.36)	1.399 (35.53)	1.279 (32.49)	1.200 (30.48)

100 PIN SOCKET WITH COVER



X-X' Cross Section

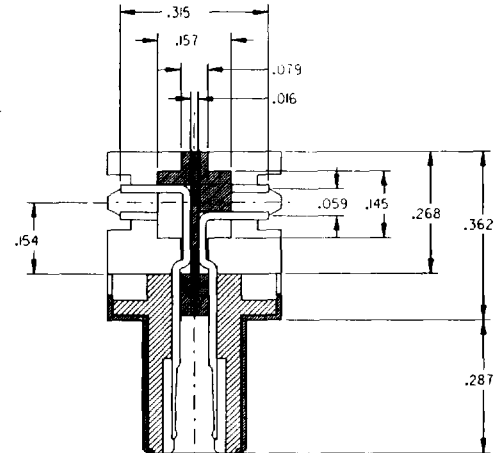
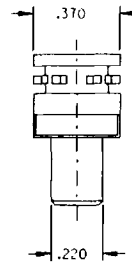
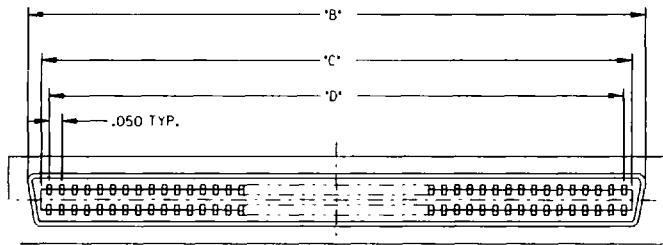
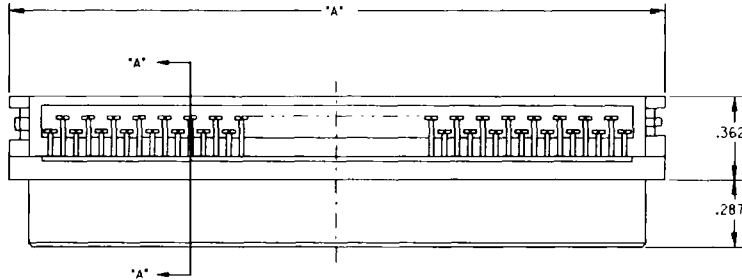
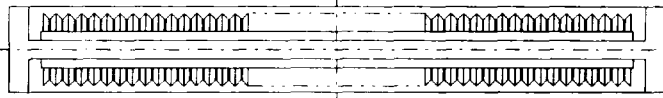


Y-Y' Cross Section



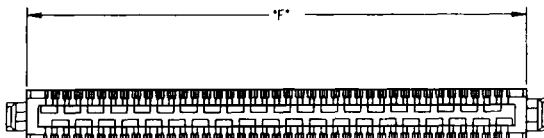
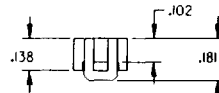
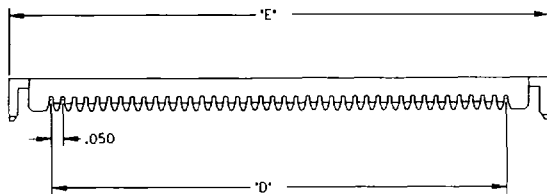
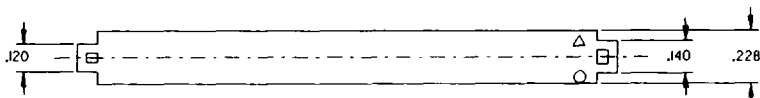
SOCKET

Connector Body



SECTION "A-A"

Discrete Wire Lid

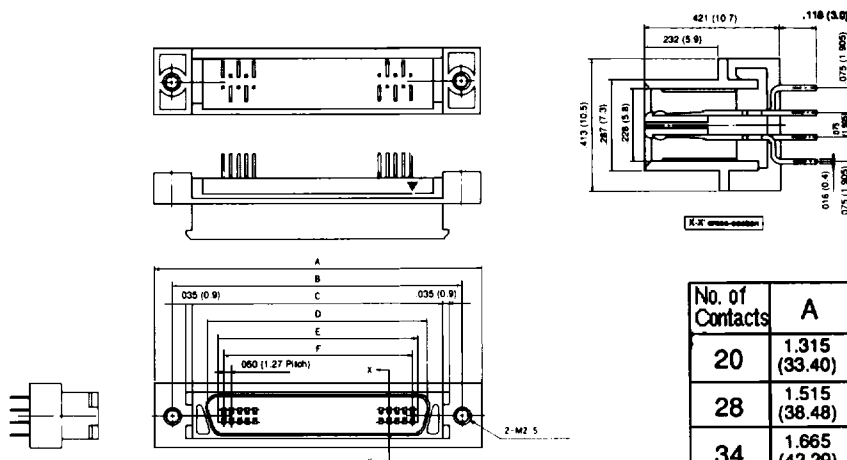


No. of Contacts	A	B	C	D	E	F
20	.817 (20.75)	.649 (16.48)	.529 (13.43)	.450 (11.43)	.817 (20.75)	.642 (16.31)
28	1.017 (25.83)	.849 (21.56)	.729 (18.52)	.650 (16.51)	1.017 (25.83)	.842 (21.39)
34	1.167 (29.64)	.999 (25.37)	.879 (22.33)	.800 (20.32)	1.167 (29.64)	.992 (25.20)
50	1.567 (39.80)	1.399 (35.53)	1.279 (32.49)	1.200 (30.48)	1.567 (39.80)	1.392 (35.36)
60	1.817 (46.15)	1.649 (41.88)	1.529 (38.83)	1.450 (36.83)	1.817 (46.15)	1.642 (41.71)
68	2.017 (51.23)	1.849 (46.96)	1.729 (43.92)	1.650 (41.91)	2.017 (51.23)	1.842 (46.79)
80	2.317 (58.85)	2.149 (54.58)	2.029 (51.54)	1.950 (49.53)	2.317 (58.85)	2.142 (54.41)
100	2.817 (71.55)	2.649 (67.28)	2.529 (64.24)	2.450 (60.03)	2.817 (71.55)	2.642 (67.10)

INPUT/OUTPUT

PLUG

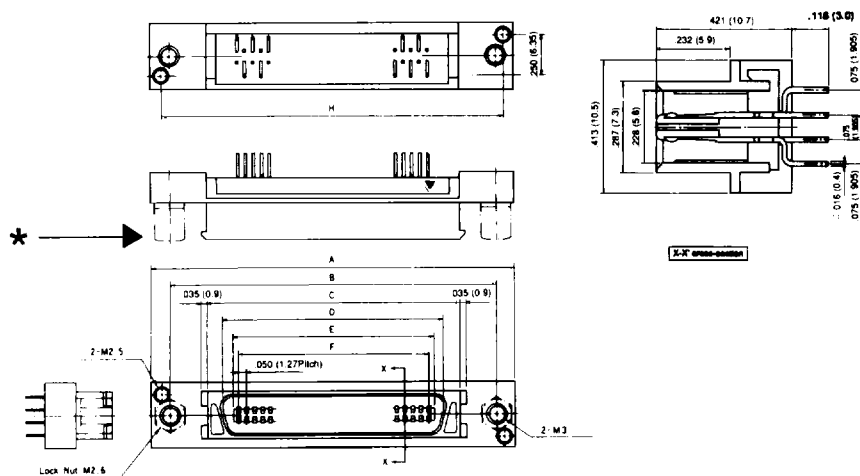
Straight



*G Panel cutout dimension

No. of Contacts	A	B	C	D	E	F	G
20	1.315 (33.40)	1.079 (27.41)	0.850 (21.59)	0.659 (16.74)	0.517 (13.13)	0.450 (11.43)	0.961 (24.41)
28	1.515 (38.48)	1.279 (32.49)	1.050 (26.67)	0.859 (21.82)	0.717 (18.21)	0.650 (16.51)	1.161 (29.49)
34	1.665 (42.29)	1.429 (36.30)	1.200 (30.48)	1.009 (25.63)	0.867 (22.02)	0.800 (20.32)	1.311 (33.30)
50	2.065 (52.45)	1.829 (46.46)	1.600 (40.64)	1.409 (35.79)	1.267 (32.18)	1.200 (30.48)	1.711 (43.46)
60	2.315 (58.80)	2.079 (52.81)	1.850 (46.99)	1.659 (42.14)	1.517 (38.53)	1.450 (36.83)	1.961 (49.81)
68	2.515 (63.88)	2.279 (57.89)	2.050 (52.07)	1.859 (47.22)	1.717 (43.61)	1.650 (41.91)	2.161 (54.89)
80	2.815 (71.50)	2.579 (65.51)	2.350 (59.69)	2.159 (54.84)	2.017 (51.23)	1.950 (49.53)	2.461 (62.51)

100 Pin Straight



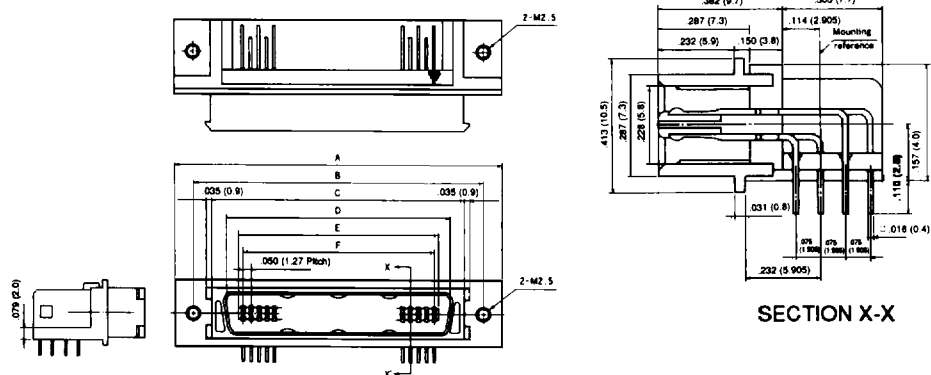
*G Panel cutout dimension

No. of Contacts	A	B	C	D	E	F	G	H
100	3.536 (89.82)	3.300 (83.82)	2.850 (72.39)	2.659 (67.54)	2.517 (63.93)	2.450 (62.23)	2.961 (75.21)	3.400 (86.36)

MOUNTING AREA INSET (SEE PAGE 115).

PLUG

Right Angle

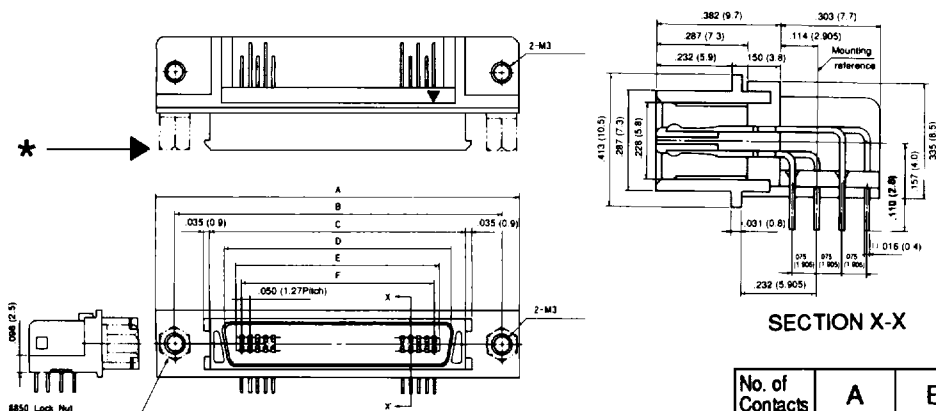


*G Panel cutout dimension

No. of Contacts	A	B	C	D	E	F	G
20	1.315 (33.40)	1.079 (27.40)	0.850 (21.60)	0.659 (16.73)	0.517 (13.13)	0.450 (11.43)	0.961 (24.40)
28	1.515 (38.48)	1.279 (32.48)	1.050 (26.68)	0.859 (21.81)	0.717 (18.21)	0.650 (16.51)	1.161 (29.48)
34	1.665 (42.29)	1.429 (36.29)	1.200 (30.49)	1.009 (25.62)	0.867 (22.02)	0.800 (20.32)	1.311 (33.29)
50	2.065 (52.44)	1.829 (46.45)	1.600 (40.65)	1.409 (35.78)	1.267 (32.18)	1.200 (30.48)	1.711 (43.45)
60	2.315 (58.80)	2.079 (52.80)	1.850 (47.00)	1.659 (42.13)	1.517 (38.53)	1.450 (36.83)	1.961 (49.80)
68	2.515 (63.88)	2.279 (57.88)	2.050 (52.08)	1.859 (47.21)	1.717 (43.61)	1.650 (41.91)	2.161 (54.88)
80	2.815 (71.50)	2.579 (65.50)	2.350 (59.70)	2.159 (54.83)	2.017 (51.23)	1.950 (49.53)	2.461 (62.50)

PLUG

100 Pin Right Angle



*G Panel cutout dimension

No. of Contacts	A	B	C	D	E	F	G
100	3.536 (89.82)	3.300 (83.82)	2.850 (72.39)	2.659 (67.54)	2.517 (63.93)	2.450 (62.23)	2.961 (75.20)

MOUNTING AREA INSET (SEE PAGE 115).

RN PAK-50®

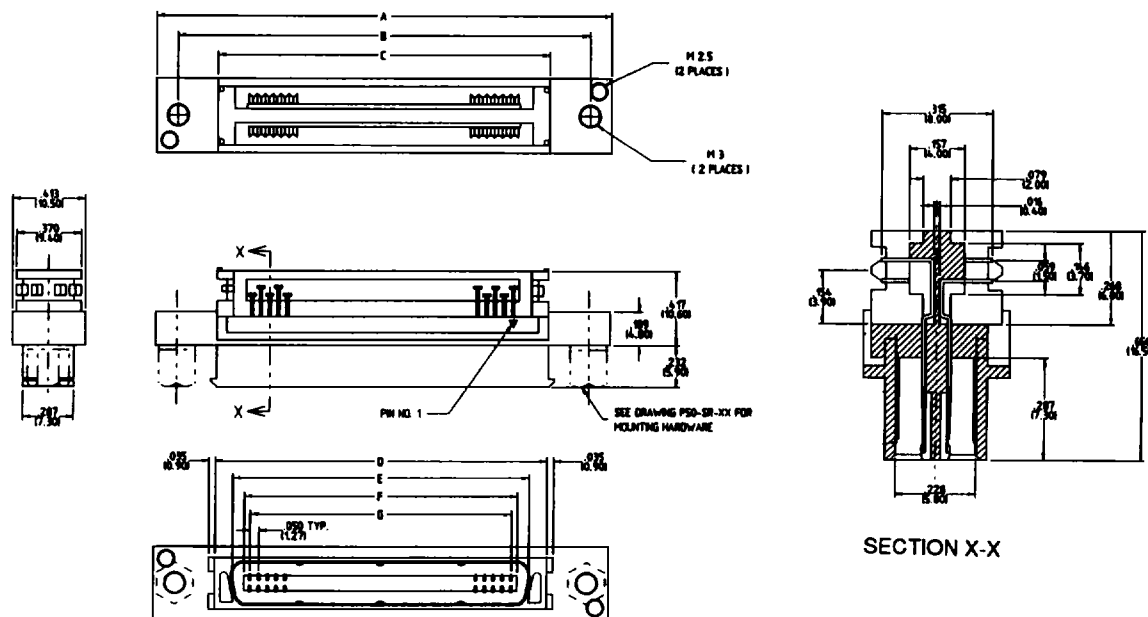


20, 50 PIN

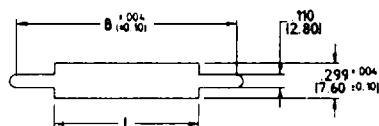


28, 34, 60, 68, 80 PIN

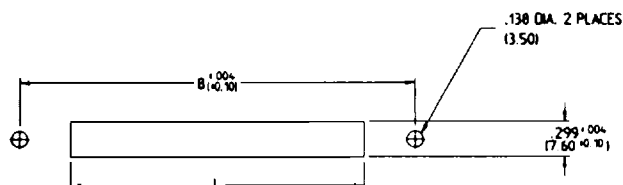
Panel Mount Cable Plug



100 PIN



20, 28, 60, 68, 80 PIN

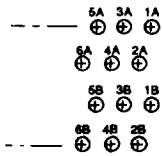


100 PIN

No. of Contacts	A	B	C	D	E	F	G	L
20	1.315 (33.40)	1.079 (27.40)	0.817 (20.75)	0.850 (21.60)	0.659 (16.73)	0.517 (13.13)	0.450 (11.43)	0.960 (24.40)
28	1.515 (38.48)	1.279 (32.48)	1.017 (25.83)	1.050 (26.68)	0.859 (21.81)	0.717 (18.21)	0.650 (16.51)	1.161 (29.48)
34	1.665 (42.29)	1.429 (36.29)	1.167 (29.64)	1.200 (30.48)	1.009 (25.62)	0.867 (22.02)	0.800 (20.32)	1.311 (33.29)
50	2.065 (52.44)	2.079 (52.80)	1.567 (39.80)	1.600 (40.65)	1.409 (35.78)	1.267 (32.18)	1.200 (30.48)	1.711 (43.45)
60	2.315 (58.80)	2.079 (52.80)	1.817 (46.15)	1.850 (47.00)	1.659 (42.13)	1.517 (38.53)	1.450 (36.83)	1.961 (49.80)
68	2.515 (63.88)	2.279 (57.88)	2.017 (51.23)	2.050 (52.08)	1.859 (47.21)	1.717 (43.61)	1.650 (41.91)	2.161 (54.88)
80	2.815 (71.50)	2.579 (65.50)	2.317 (58.85)	2.350 (59.70)	2.159 (54.83)	2.017 (51.23)	1.950 (49.53)	2.461 (62.50)
100	3.536 (89.82)	3.300 (83.82)	2.817 (71.55)	2.850 (72.40)	2.659 (67.53)	2.517 (63.93)	2.450 (62.23)	2.961 (75.20)

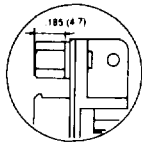
Pin Out Identification

Board Mount Plugs

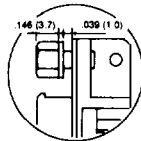


RN PAK-50

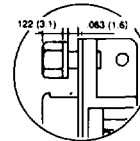
Mounting area inset



P50-SR-01
Without Panel



P50-SR-02
Mounting Panel (.039 inches)



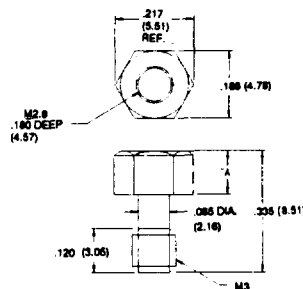
P50-SR-03
Mounting Panel (.063 inches)

How To Order Hardware Accessories (used only with 100 position product)

P50-SR-01

Series

Description	"A"
P50-SR-01	.185 (4.70)
P50-SR-02	.146 (3.71)
P50-SR-03	.122 (3.10)



JACK SCREW DETAIL

01-Jackscrew to accept thumbscrew without backpanel

02-Jackscrew to accept thumbscrew with .039" backpanel thickness

03-Jackscrew to accept thumbscrew with .063" backpanel thickness