



NSX - BPX Series

Arinc 600

RADIAL 
The next connexion

	Page
NSX - ARINC	
Introduction	4-4 to 4-5
Application	4-6
Product overview	4-7
Characteristics:	
Technical characteristics	4-8
Electrical	4-8
Mechanical & Environmental	4-8
Materials	4-8
Masses	4-9
How to order	4-10
Contact arrangement	4-11 to 4-22
Insert combination code	4-23 to 4-29
Modification code	4-30 to 4-32
Polarization code	4-33
Polarization code table	4-34 to 4-35
Contacts:	
Signal, power and ground contacts crimps termination	4-36 to 4-38
Chromel contacts - crimp termination	4-39
Alumel contacts - crimp termination	4-40
Coaxial contacts	4-41 to 4-51
Concentric twinax contacts	4-52
Quadrx contacts	4-53
NSX E/N/H/C - rear removable contacts	4-54
How to order NSX F/G	4-55
NSX F/G Contacts	4-56 to 4-59
Dimensions	4-60 to 4-71
Panel cut out	4-72 to 4-73
Tools	4-74 to 4-75
Accessories	4-76 to 4-82

NSX - SINGLE SHELL

Introduction	4-83
Material	4-83
How to order	4-84
Installation	4-85 to 4-86
Dimensions	4-87 to 4-88
Tables	4-89
Panel cut out	4-90

NSX - EMI/RFI

Introduction	4-91
Material	4-91
Characteristics	4-91
Dimensions	4-92 to 4-95

NSX - T CAS

Introduction	4-96
C4 insert material	4-96
How to order	4-97 to 4-98
Coaxial contacts	4-98 to 4-99
Wave guide	4-99
Characteristics	4-99
How to order	4-99
Dimensions	4-100

BPX

Introduction	4-101
Characteristics:	
Electrical	4-101
Mechanical & Environmental	4-102
Materials	4-102
How to order	4-103
Insert combination code	4-104
Contact	4-104
Accessories	4-104 to 4-107
Dimensions	4-108 to 4-113
Panel cut out	4-114 to 4-115

INTRODUCTION

MULTICONTACT CONNECTORS NSX – ARINC 600 / BPX

NSX series (defined by ARINC 00 specification) and BPX series (defined by Boeing S280W551 specification) are multipin rack and panel connectors used to connect high performance aeronautical equipments.

These two series manufactured by **RADIAL** show the following characteristics:

- High contact density (up to 800 contacts).
- Numerous contact arrangements.
- Numerous shell polarization possibilities which give maximum security when mating the equipment in the rack.
- Low mating forces.
- Separation of power and signal contacts.
- EMI/RFI shielding provided by shell to shell conductivity.
- Wide range of contact types and sizes.

RADIAL has a lot of costumers approval for her NSX series. Among them are the airframe manufacturers and equipments manufacturers.

MULTICONTACT CONNECTORS NSX – ARINC 600

RADIAL NSX series offers the following versions:

Connectors for **rear removable** contacts:

- **NSX N**: plug and receptacle connectors. Non environmental version, inserts without grommet and compound, plugs without groove and O-ring.
- **NSX C**: plug and receptacle connectors. Non environmental version, inserts with grommet but without compound, plugs without groove and O-ring.
- **NSX E**: plug and receptacle connectors. Environmental version, inserts with grommet and compound, plugs with groove and O-ring.
- **NSX H**: plug connector only. Environmental version, inserts with grommet and compound, plugs without groove and O-ring.

Connectors for **front removable** contacts:

- **NSX F**: receptacle connectors only. Front release, front removable signal contacts only. Non environmental version, inserts without grommet and compound.
- **NSX G**: identical to NSX F but with front release front removable signal, power, coax, triax and quadrax contacts.

EMI/RFI shielding connectors: shell to shell conductivity.

RADIAL offers a wide range of inserts which can be fitted with signal contacts only or with signal, power, coaxial, triaxial, and quadrax contacts.

The range of contacts offered allows **RADIAL** to satisfy any of its costumers needs:

Sealing boots, sealing plugs, dust caps conductive or non conductive and cavity reducers.

Standard tools: crimping tools, locators, dies, insertion/extraction tools.

Signal contact: size 22-crimp, solder tail and wire wrap post.

Power contact: size 20-16-12-8-crimp and solder tail (except size 1).

Coaxial contact: size 16-8-5-1-crimp and solder tail.

Concentric or parallel twinax contact: size 8-crimp and solder tail

Fiber optic contact: size 16 and 12.

Thermocouple contact: size 22 and 20-crimp.

Quadrax contact: size 8 crimp and solder tail.

Items in this catalog are covered by French and foreign Patents and/or Patents pending.

SHELL

RADIALl NSX series offers three metallic shell sizes fitted with polarization hardware offering 216 polarizing possibilities.

Plug shell is fitted with inserts for signal (size 22) pin contacts, coax, triax, and quadrax power socket contacts.

Receptacle shell is fitted with inserts for signal socket contacts, coax, triax and quadrax power and pin contacts.

The shell flange has bosses on each side and at both ends to locate the connector on the mounting panel. However standard mounting is rear panel mount. Shell size 1 can be mounted on a front panel or laterally by using the 3 threaded inserts on both side of connector. The O-ring on the plug shell (environmental) allows the connector pair to be sealed once mated.



INSERTS

Environmental inserts have a wire sealing grommet on the rear face and compound between insert and shell.

The different kind of inserts available are:

- Insert for rear release rear removable contacts (colored blue on the terminating face).
- Insert for front release front removable contacts (colored red on their mating face).
- Insert for front release rear removable contacts (colored yellow on their mating face).



CONTACTS

The contacts are removable from the insert using an appropriate extraction tool. Tools are available for front and rear release inserts.

Inserts use contact retention system (clips) which assures the contact retention requirements of ARINC 600 to be met. The retention system allows contacts to be removed from the insert using an extraction tool.

Signal and power contacts are low insertion force contacts.

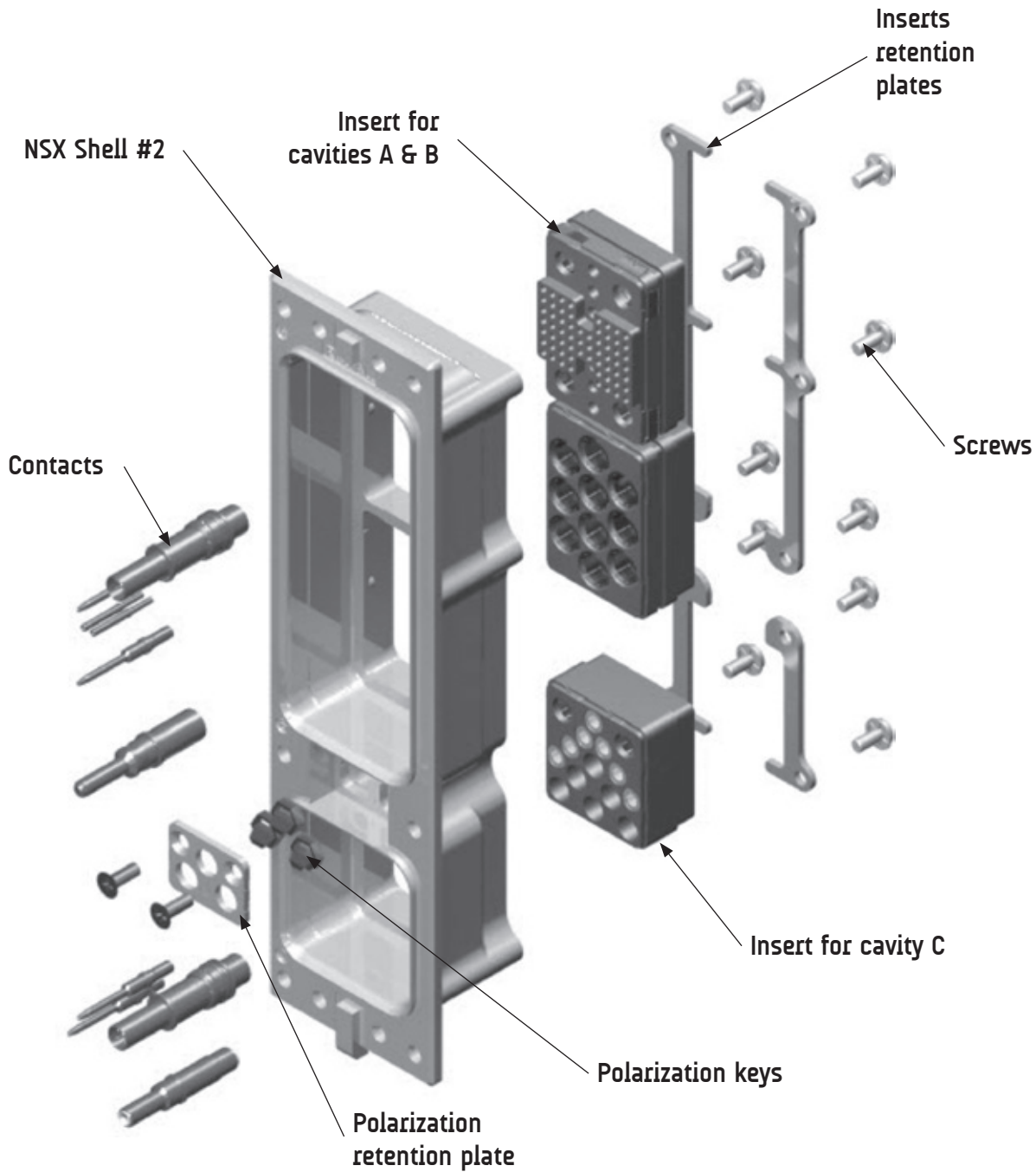


APPLICATION

These connectors are mostly used to connect high performance aeronautical equipment. Most of the NSX connectors are used in the main avionic bay on commercial airplanes. Electronic functions are found in an LRU (Line Replaceable Unit). Refer to Arinc 600 document for more information.



Detailed view of the various parts of the NSX connector series.



CHARACTERISTICS

TECHNICAL CHARACTERISTICS

Description	Material	Plating
Shell	Aluminum alloy	Chromatation or nickel
Inserts	Thermosetting or thermoplastic	/
Metallic inserts	Aluminum alloy	Nickel
O-ring & grommet	Fluorosilicone	/
Contacts	Copper alloy	Gold over nickel
Retention clip	Copper alloy	/
Insert retention plate	Aluminum alloy	Blue anodized or nickel
Polarization posts and keys retention plate	Aluminum alloy	Chromatation or nickel
Screws washers and clinch-nuts	Stainless steel	/
	Steel	Cadmium yellow chromate
Polarization posts and keys	Zinc alloy	Nickel

ELECTRICAL CHARACTERISTICS

Contact size	Wire				Max current (A)
	AWG	Cross section (mm²)	Outside Dia. mm (inches)		
			min.	max.	
22	22	0.38	0.66 (.026)	1.4 (.055)	5
	24	0.21			3
	26	0.14			2
20	20	0.60	1 (.040)	1.8 (.071)	7.5
	22	0.38			5
	24	0.21			3
16	16	1.34	1.7 (0.66)	2.6 (.102)	13
	18	0.93			10
	20	0.60			7.5
12	12	3.18	2.4 (.094)	3.4 (.134)	23
	14	1.91			17
	16	1.34			13
8	8	9	4.65 (.183)	6.48 (.255)	46
	10	5			33

MECHANICAL & ENVIRONMENTAL

- **Temperature range:** - 65°C/+125°C
- **Temperature life:** 1000 hours at 125 °C.
- **Salt spray:** MIL-STD-1344 method 1001.1 test condition B (48 hours).
- **Moisture resistance:** MIL-STD-1344 method 1002.1 test condition II (10 times 24 hours).
- **Sealing:** environment resistant to running water (environmental version only).
- **Fluid resistance:** resistance to MIL-STD-1344 method 1016 (fluids a, e, i).
- **Durability:** 500 mating and unmating cycles.
- **Random vibration:** conforming to MIL-STD-1344 method 2005.1 test condition 5 letter E. (16,4g from 50 to 2000 Hz, 8 hours per direction).
- **Shock:** 50g 11 ms half sine.MIL-STD-1344 method 2004.1 3 impacts per direction.
- **Malting force:** connector size 1 ± 27 pounds (120 N) max,
connector size 2 ± 60 pounds (267 N) max,
connector size 3 ± 105 pounds (467 N) max.

- Contact retention force

Contact size	22	20	16	12	8	Coax triax quadrax
Retention force min (ounces)	12	20	25	30	25	25

COAX CONTACTS ELECTRICAL CHARACTERISTICS

- Nominal impedance: 50Ω.
- DWV: 1500 VAC - IR at 25 °C = 5000 MΩ.
- V.S.W.R.: Size 5 → 1.3 from DC to 1500 MHz and insertion loss = 0.3 dB, Size 1 → 1.3 from DC to 5000 MHz

MASS g (oz)

SHELLS

Includes screws, washers, insert retention plate and polarization hardware.

Plug			Receptacle		
Size 1	Size 2	Size 3	Size 1	Size 2	Size 3
110 (3.88)	130 (4.59)	220 (7.76)	130 (4.59)	140 (4.94)	245 (8.64)

INSERTS

Contact arrangement designation	For plug shell		For receptacle shell	
	E type	N type.	E type	Nor f type
5C2	15.75 (0.56)	12.75 (0.45)	10.25 (0.36)	7.25 (0.26)
40	13.75 (0.49)	11.25 (0.40)	/	8.00 (0.25)
60	18.50 (0.65)	15.25 (0.54)	12.50 (0.44)	9.25 (0.33)
30T2	18.50 (0.65)	/	/	9.50 (0.34)
150	41.50 (1.46)	34.50 (1.22)	27.75 (0.98)	20.50 (0.72)
121	46.75 (1.65)	/	/	24.00 (0.85)
120T2	41.00 (1.45)	34.00 (1.20)	/	/
71C1/1C71	29.50 (1.04)	25.75 (0.91)	18.00 (0.63)	14.00 (0.49)
60	/	50.25 (1.77)	/	26.50 (0.93)
10T10	/	/	/	/
C4	/	29.50 (1.04)	/	19.80 (0.70)
C2	/	27.50 (0.97)	/	13.50 (0.48)
100	30.50 (1.08)	25.50 (0.90)	21 (0.74)	15.00 (0.53)
85	33.50 (1.18)	/	/	/
34	42.00 (1.48)	35.25 (1.24)	/	19.00 (0.67)
13C2	40.50 (1.43)	33.75 (1.19)	24.50 (0.86)	18.00 (0.63)
6T6	/	/	/	/

CONTACTS

Contact size	Pin	Socket
22	0.12 (4 10 ⁻³)	0.15 (5.3 10 ⁻³)
20	0.22 (7.8 10 ⁻³)	0.40 (14.1 10 ⁻³)
16	0.72 (25.4 10 ⁻³)	0.75 (26.5 10 ⁻³)
12	1.50 (53.0 10 ⁻³)	1.50 (53.0 10 ⁻³)
8	619270: 5 (0.18) 619270: 6.5 (0.23)	

HOW TO ORDER

NSX E/N/H/C – CONNECTORS FOR REAR REMOVABLE CONTACTS

NSX	N	3	P	301	X	00	01
-----	---	---	---	-----	---	----	----

Series

Class

N: Non environmental

E: Environmental, with grommets and compound, plug with O-ring

H: Environmental, plug without O-ring

C: Non environmental, with grommets

Shell size

1: Size 1

2: Size 2

3: Size 3

Shell style chromatisation

R: Chromatisation plated receptacle (alodine)

P: Chromatisation plated plug (alodine)

F: Nickel plated receptable

B: Nickel plated plug

M: Nickel plated plug fitted with grounding spring fingers (see pages 4-91 to 4-95)

S: Chromatisation plated receptacle (RoHs)

T: Chromatisation plated plug (RoHs)

Insert combination code

See combination code (pages 4-23 to 4-29) and contacts arrangements (pages 4-11 to 4-22)

Contact termination ⁽¹⁾

X: Without contacts

S: Crimp contacts

Modification code

See pages 4-30 to 4-32

Polarization code ⁽²⁾

See pages 4-33 to 4-34

Impossible part numbers:

NSXH-F

NSXH-R

NOTES:

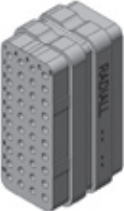
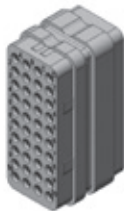
(1) 1) If you need to use reduced crimp barrel contacts, use code X and order signal and power contacts separately. Coax, twinax or power size 5 or 8, coax size 1 must always be ordered separately.

(2) Without polarization code, the connector is delivered with polarization hardware unassembled. Polarization code 00, the connector is delivered without polarizing hardware. Polarization code from 01 to 216, the connector is delivered with the polarization hardware assembled as defined by code.

REMARK: dust caps conductive on receptacle and non conductive on plug are included in the delivery.

NSX SHELL CONTACT ARRANGEMENT

NSX - BPX series

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
60	1-A/B	 60x#22 RR/RR	 60x#22 RR/RR	 60x#22 FR/FR	N/A ⁽¹⁾	 60x#22 RR/RR	 60x#22 RR/RR
30T2	1-A/B	 28x#22 RR/RR 2x#8G RR/RR	 28x#22 RR/RR 2x#8G RR/RR	 28x#22 RR/RR 2x#8G RR/RR	 28x#22 FR/FR 2x#8G FR/FR	 28x#22 RR/RR 2x#8G RR/RR	 28x#22 RR/RR 2x#8G RR/RR
4C	1-A/B	 4x#5G RR/RR	Not available ⁽²⁾	N/A	 4x#5G FR/FR	 4x#5G RR/RR	Not available
40	1-C	 40x#22 RR/RR	 40x#22 RR/RR	 40x#22 RR/RR	N/A	 40x#22 RR/RR	 40x#22 RR/RR
12F12	1-C	 12x#16 RR/RR LUXCIS	 12x#16 RR/RR LUXCIS	N/A	N/A	 12x#16 RR/RR LUXCIS	 12x#16 RR/RR LUXCIS

NOTES:

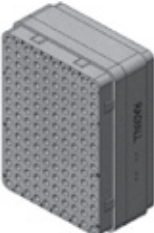
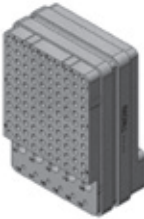
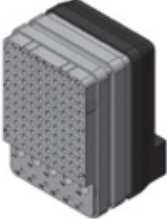
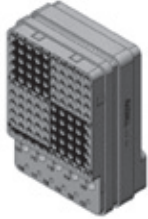
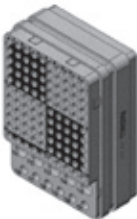
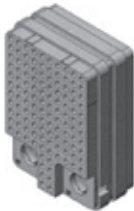
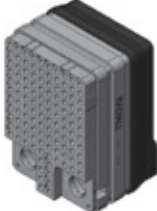
(1) N/A means not applicable

(2) Not available meaning upon request please contact Radiall

www.radiall.com

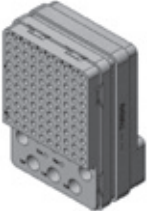
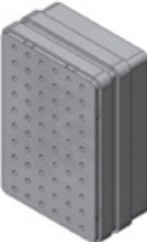
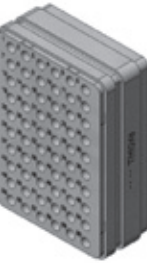
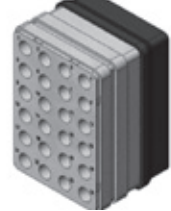
RADIALL
The next connection

NSX SHELL CONTACT ARRANGEMENT

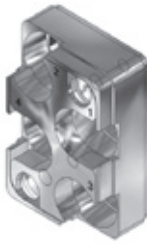
Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
4	1-C	 4x#12 FR/RR	 4x#12 FR/RR	N/A	Not available	 4x#12 FR/RR	 4x#12 FR/RR
5C2	1-C	 2x#5 RR/RR 1x#12 RR/RR 2x#16 RR/RR	 2x#5 RR/RR 1x#12 RR/RR 2x#16 RR/RR	N/A	 2x#5 FR/FR 1x#12 FR/FR 2x#16 FR/FR	 2x#5 RR/RR 1x#12 RR/RR 2x#16 RR/RR	 2x#5 RR/RR 1x#12 RR/RR 2x#16 RR/RR
150	2/3-A/B	 150x#22 RR/RR	 150x#22 RR/RR	 150x#22 RR/RR	N/A	 150x#22 RR/RR	 150x#22 RR/RR
121	2/3-A/B	 110x#22 RR/RR 6x#20 RR/RR 5x#16 RR/RR	 110x#22 RR/RR 6x#20 RR/RR 5x#16 RR/RR	 110x#22 RR/RR 6x#20 RR/RR 5x#16 RR/RR	 110x#22 FR/FR 6x#20 FR/FR 5x#16 FR/FR	 110x#22 RR/RR 6x#20 RR/RR 5x#16 RR/RR	 110x#22 RR/RR 6x#20 RR/RR 5x#16 RR/RR
120T2	2/3-A/B	 118x#22 RR/RR 2x#8 RR/RR	 118x#22 RR/RR 2x#8 RR/RR	 118x#22 RR/RR 2x#8 RR/RR	 118x#22 FR/FR 2x#8 FR/RR	 118x#22 RR/RR 2x#8 RR/RR	 118x#22 RR/RR 2x#8 RR/RR

NSX SHELL CONTACT ARRANGEMENT

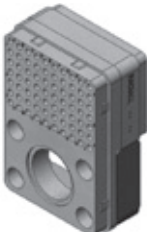
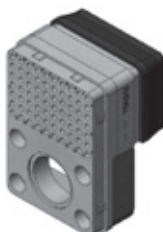
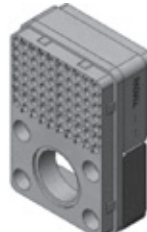
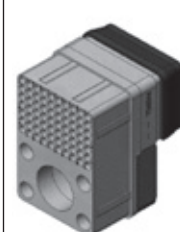
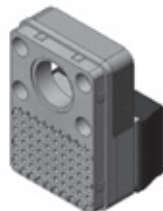
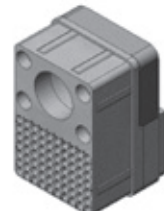
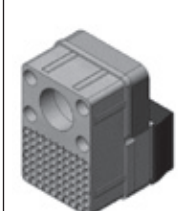
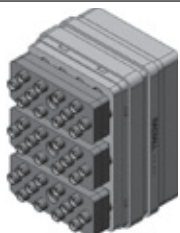
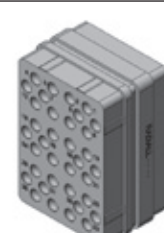
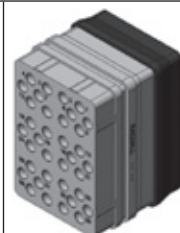
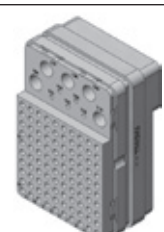
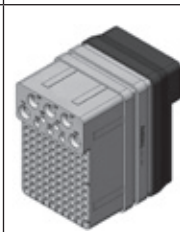
NSX - BPX series

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
110	2/3-A/B	 100x#22 RR/RR 5x#20 RR/RR 5x#12 RR/RR	Not available	Not available	 100x#22 FR/FR 5x#20 FR/FR 5x#12 FR/FR	 100x#22 RR/RR 5x#20 RR/RR 5x#12 RR/RR	 100x#22 RR/RR 5x#20 RR/RR 5x#12 RR/RR
60A	2/3-A/B	 60x#20 RR/RR	 60x#20 RR/RR	N/A	 60x#20 FR/FR	 60x#20 RR/RR	 60x#20 RR/RR
35	2/3-A/B	 35x#16 RR/RR	 35x#16 RR/RR	N/A	 35x#16 FR/FR	 35x#16 RR/RR	 35x#16 RR/RR
24	2/3-A/B	 24x#12 RR/RR	 24x#12 RR/RR	N/A	 24x#12 FR/FR	 24x#12 RR/RR	 24x#12 RR/RR
10T10	2/3-A/B	 10x#8G FR/RR	 10x#8G FR/RR	N/A	 10x#8G FR/FR	 10x#8G FR/RR	 10x#8G FR/RR

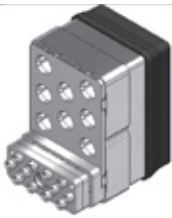
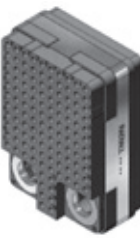
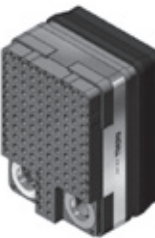
NSX SHELL CONTACT ARRANGEMENT

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
C5	2/3-A/B	 5x#SPLG RR/RR	N/A	N/A	N/A	 5x#SPLG RR/RR	N/A
C4	2/3-A/B	 4x#1G FR/RR	N/A	N/A	 4x#1G FR/RR	 4x#1G FR/RR	N/A
73C3	2/3-A/B	 70x#22 RR/RR 3x#SPLG RR/RR	Not available	Not available	Not available	 70x#22 RR/RR 3x#SPLG RR/RR	Not available
C2	2/3-A/B	 2x#1G FR/RR	N/A	N/A	N/A	 2x#1G FR/RR	N/A
2C	2/3-A/B	 2x#1G FR/RR	N/A	N/A	N/A	 2x#1G FR/RR	N/A

NSX SHELL CONTACT ARRANGEMENT

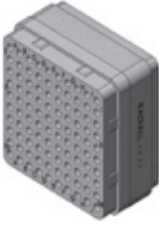
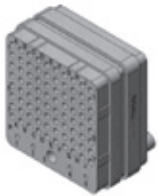
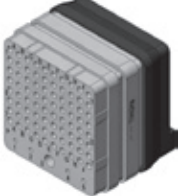
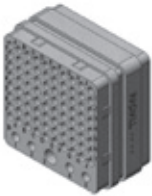
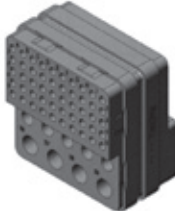
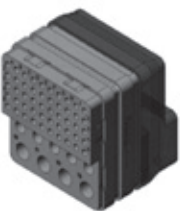
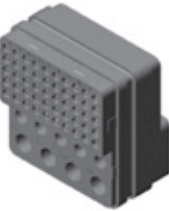
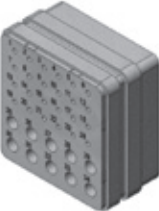
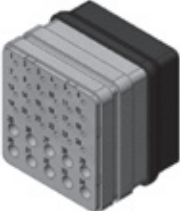
Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
71C1	2/3-A/B	 70x#22 RR/RR 1x#1 FR/RR	 70x#22 RR/RR 1x#1 FR/RR	 70x#22 RR/RR 1x#1 FR/RR	N/A	 70x#22 RR/RR 1x#1 FR/RR	 70x#22 RR/RR 1x#1 FR/RR
1C71	2/3-A/B	 70x#22 RR/RR 1x#1 FR/RR	 70x#22 RR/RR 1x#1 FR/RR	 70x#22 RR/RR 1x#1 FR/RR	N/A	 70x#22 RR/RR 1x#1 FR/RR	 70x#22 RR/RR 1x#1 FR/RR
36F36	2/3-A/B	 36x#16 RR/RR LUXCIS	 36x#16 RR/RR LUXCIS	N/A	N/A	 36x#16 RR/RR LUXCIS	 36x#16 RR/RR LUXCIS
20F1208	2/3-A/B	 12x#16 RR/RR LUXCIS 8x#8G RR/RR	 12x#16 RR/RR LUXCIS 8x#8G RR/RR	N/A	 12x#16 RR/RR LUXCIS 8x#8G FR/FR	 12x#16 RR/RR LUXCIS 8x#8G RR/RR	 12x#16 RR/RR LUXCIS 8x#8G RR/RR
110R	2/3-A/B	 100x#22 RR/RR 5#20 RR/RR 5#12 RR/RR	 100x#22 RR/RR 5#20 RR/RR 5#12 RR/RR	N/A	 100x#22 FR/FR 5#20 FR/FR 5#12 FR/FR	 100x#22 RR/RR 5#20 RR/RR 5#12 RR/RR	 100x#22 RR/RR 5#20 RR/RR 5#12 RR/RR

NSX SHELL CONTACT ARRANGEMENT

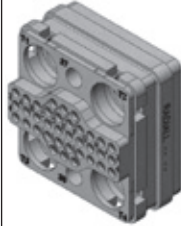
Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
20Q8F12	2/3-A/B	 12 Luxcis #16 RR/RR 8 #8G RR/RR	 12 Luxcis #16 RR/RR 8 #8G RR/RR	N/A	 12 Luxcis #16 FR/FR 8 #8G FR/FR	 12 Luxcis #16 RR/RR 8 #8G RR/RR	 12 Luxcis #16 RR/RR 8 #8G RR/RR
Q11	2/3-A/B	 11x#8G RR/RR	 11x#8G RR/RR	N/A	 11x#8G FR/FR	 11x#8G RR/RR	 11x#8G RR/RR
68Q4	2/3-A/B	 62x#22 RR/RR 6x#16 RR/RR 4x#8G RR/RR	 62x#22 RR/RR 6x#16 RR/RR 4x#8G RR/RR	Not available	Not available	 62x#22 RR/RR 6x#16 RR/RR 4x#8G RR/RR	 62x#22 RR/RR 6x#16 RR/RR 4x#8G RR/RR
118Q2	2/3-A/B	 118x#22 RR/RR 2x#8G RR/RR	 118x#22 RR/RR 2x#8G RR/RR	 118x#22 RR/RR 2x#8G RR/RR	 118x#22 FR/FR 2x#8G FR/FR	 118x#22 RR/RR 2x#8G RR/RR	 118x#22 RR/RR 2x#8G RR/RR
18T18	2/3-A/B	 18x#10G RR/RR	 18x#10G RR/RR	N/A	 18x#10G FR/FR	 18x#10G RR/RR	 18x#10G RR/RR

NSX SHELL CONTACT ARRANGEMENT

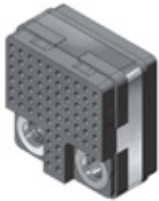
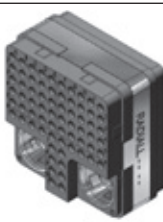
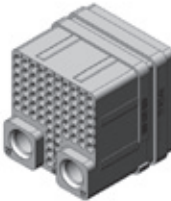
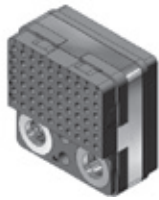
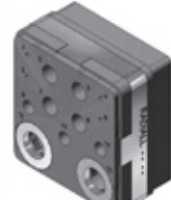
NSX - BPX series

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
100	2/3-C	 100x#22 RR/RR	 100x#22 RR/RR	 100x#22 RR/RR	N/A	 100x#22 RR/RR	 100x#22 RR/RR
85	2/3-C	 80x#22 RR/RR 4x#20 RR/RR 1x#16 RR/RR	 80x#22 RR/RR 4x#20 RR/RR 1x#16 RR/RR	 80x#22 RR/RR 4x#20 RR/RR 1x#16 RR/RR	 80x#22 FR/FR 4x#20 FR/FR 1x#16 FR/FR	 80x#22 RR/RR 4x#20 RR/RR 1x#16 RR/RR	 80x#22 RR/RR 4x#20 RR/RR 1x#16 RR/RR
84	2/3-C	Not available	Not available	Not available	Not available	 80x#22 RR/RR 4x#20 RR/RR	 80x#22 RR/RR 4x#20 RR/RR
59	2/3-C	 50x#22 RR/RR 5x#16 RR/RR 4x#12 RR/RR	 50x#22 RR/RR 5x#16 RR/RR 4x#12 RR/RR	 50x#22 RR/RR 5x#16 RR/RR 4x#12 RR/RR	 50x#22 FR/FR 5x#16 FR/FR 4x#12 FR/FR	 50x#22 RR/RR 5x#16 RR/RR 4x#12 RR/RR	 50x#22 RR/RR 5x#16 RR/RR 4x#12 RR/RR
34	2/3-C	 24x#20 RR/RR 10x#16 RR/RR	 24x#20 RR/RR 10x#16 RR/RR	N/A	 24x#20 FR/FR 10x#16 FR/RR	 24x#20 RR/RR 10x#16 RR/RR	 24x#20 RR/RR 10x#16 RR/RR

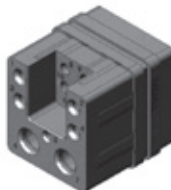
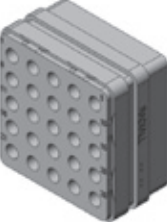
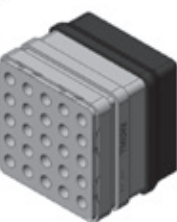
NSX SHELL CONTACT ARRANGEMENT

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
6T6	2/3-C	 6x#8G FR/RR	 6x#8G FR/RR	N/A	 6x#8G FR/FR	 6x#8G FR/RR	 6x#8G FR/RR
42T4	2/3-C	Not available	Not available	 36x#22 FR/FR 2x#16 RR/RR 4x#8G FR/FR	Not available	 36x#22 FR/FR 2x#16 RR/RR 4x#8G FR/FR	Not available
24T4	2/3-C	 20x#20 RR/RR 4x#8G RR/RR	 20x#20 RR/RR 4x#8G RR/RR	N/A	Not available	 20x#20 RR/RR 4x#8G RR/RR	 20x#20 RR/RR 4x#8G RR/RR
Q6	2/3-C	 6x#8G RR/RR	 6x#8G RR/RR	N/A	 6x#8G FR/FR	 6x#8G RR/RR	 6x#8G RR/RR
20Q4	2/3-C	 20x#20 RR/RR 4x#8G RR/RR	 20x#20 RR/RR 4x#8G RR/RR	N/A	 20x#20 FR/FR 4x#8G FR/FR	 20x#20 RR/RR 4x#8G RR/RR	 20x#20 RR/RR 4x#8G RR/RR

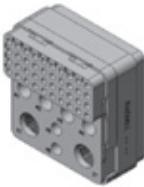
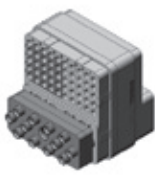
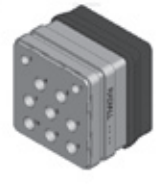
NSX SHELL CONTACT ARRANGEMENT

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
68Q2	2/3-C	 68x#22 RR/RR 2x#8G RR/RR	 68x#22 RR/RR 2x#8G RR/RR	Not available	 68x#22 FR/FR 2x#8G FR/FR	 68x#22 RR/RR 2x#8G RR/RR	 68x#22 RR/RR 2x#8G RR/RR
62Q2	2/3-C	 60x#22 RR/RR 2x#16 RR/RR 2x#8G RR/RR	 60x#22 RR/RR 2x#16 RR/RR 2x#8G RR/RR	Not available	 60x#22 FR/FR 2x#16 FR/FR 2x#8G FR/FR	 60x#22 RR/RR 2x#16 RR/RR 2x#8G RR/RR	 60x#22 RR/RR 2x#16 RR/RR 2x#8G RR/RR
17F12Q2	2/3-C	 12x#16 RR/RR LUXCIS 3x#16 RR/RR 2x#8G RR/RR	 12x#16 RR/RR LUXCIS 3x#16 RR/RR 2x#8G RR/RR	N/A	 12x#16 RR/RR LUXCIS 3x#16 FR/FR 2x#8G FR/FR	 12x#16 RR/RR LUXCIS 3x#16 RR/RR 2x#8G RR/RR	 12x#16 RR/RR LUXCIS 3x#16 RR/RR 2x#8G RR/RR
11Q2	2/3-C	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	N/A	 4x#20 FR/FR 3x#16 FR/FR 4x#12 FR/FR 2x#8G FR/FR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR
11WQ2	2/3-C	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	N/A	 4x#20 FR/FR 3x#16 FR/FR 4x#12 FR/FR 2x#8G FR/FR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR

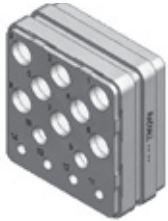
NSX SHELL CONTACT ARRANGEMENT

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
13C2	2/3-C	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#5 RR/RR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#5 RR/RR	N/A	 4x#20 FR/FR 3x#16 FR/FR 4x#12 FR/FR 2x#5 FR/FR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#5 RR/RR	 4x#20 RR/RR 3x#16 RR/RR 4x#12 RR/RR 2x#5 RR/RR
12F5C2	2/3-C	 1x#16 RR/RR 5x#16 RR/RR LUXCIS 4x#12 RR/RR 2x#5 RR/RR	 1x#16 RR/RR 5x#16 RR/RR LUXCIS 4x#12 RR/RR 2x#5 RR/RR	N/A	Not available	 1x#16 RR/RR 5x#16 RR/RR LUXCIS 4x#12 RR/RR 2x#5 RR/RR	 1x#16 RR/RR 5x#16 RR/RR LUXCIS 4x#12 RR/RR 2x#5 RR/RR
6P6	2/3-C	 6x#8 FR/RR	 6x#8 FR/RR	N/A	Not available	 6x#8 FR/RR	 6x#8 FR/RR
25	2/3-C	 25x#16 RR/RR	 25x#16 RR/RR	N/A	Not available	 25x#16 RR/RR	 25x#16 RR/RR
15T6Q2	2/3-C	 7x#16 RR/RR 6x#10 RR/RR 2x#8G RR/RR	Not available	N/A	 7x#16 FR/FR 6x#10 FR/FR 2x#8G FR/FR	 7x#16 RR/RR 6x#10 RR/RR 2x#8G RR/RR	Not available

NSX SHELL CONTACT ARRANGEMENT

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
13T13	2/3-C	 13x#10 RR/RR	 13x#10 RR/RR	N/A	Not available	 13x#10 RR/RR	 13x#10 RR/RR
24F24	2/3-C	 24x#16 RR/RR LUXCIS	Not available	N/A	N/A	 24x#16 RR/RR LUXCIS	N/A
46Q2	2/3-C	 40x#22 RR/RR 2x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	Not available	Not available	 40x#22 FR/FR 2x#16 FR/FR 4x#12 FR/FR 2x#8G FR/FR	 40x#22 RR/RR 2x#16 RR/RR 4x#12 RR/RR 2x#8G RR/RR	Not available
62F12	2/3-C	Not available	Not available	 50x#22 FR/FR 12x#16 RR/RR LUXCIS	N/A	 50x#22 FR/FR 12x#16 RR/RR LUXCIS	 50x#22 FR/FR 12x#16 RR/RR LUXCIS
10	2/3-C	 2x#16 RR/RR 8x#12 RR/RR	 2x#16 RR/RR 8x#12 RR/RR	N/A	 2x#16 FR/FR 8x#12 FR/FR	 2x#16 RR/RR 8x#12 RR/RR	 2x#16 RR/RR 8x#12 RR/RR

NSX SHELL CONTACT ARRANGEMENT

Insert name	Shell size cavity	Equipment side receptacle shell				Avionic side plug shell	
		Version N	Version E	Version F	Version G	Version N	Version E
14	2/3-C	N/A	N/A	N/A	 4x#20 FR/FR 2x#16 FR/FR 8x#12 FR/FR	 4x#20 FR/FR 2x#16 FR/FR 8x#12 FR/FR	N/A
20T2	2/3-C	 10x#20 RR/RR 8x#12 RR/RR 2x#8 RR/RR	N/A	N/A	N/A	 10x#20 RR/RR 8x#12 RR/RR 2x#8 RR/RR	N/A
20Q2	2/3-C	 28x#22 RR/RR 2x#8 RR/RR	 28x#22 RR/RR 2x#8 RR/RR	N/A	 28x#22 FR/FR 2x#8 FR/FR	 28x#22 RR/RR 2x#8 RR/RR	 28x#22 RR/RR 2x#8 RR/RR
28Q2	2/3-C	 28x#22 RR/RR 2x#8 RR/RR	 28x#22 RR/RR 2x#8 RR/RR	 28x#22 RR/RR 2x#8 RR/RR	 28x#22 FR/FR 2x#8 FR/FR	 28x#22 RR/RR 2x#8 RR/RR	 28x#22 RR/RR 2x#8 RR/RR

NOTES:

- RR/RR: rear release/rear removable
- FR/FR: front release/front removable
- FR/RR: front release/rear removable
- G : following a size of contact means cavity grounded to the shell
- Luxcis contacts are always rear release/rear removable

NSX E/N/H/C – SIGNAL POWER AND GROUND CONTACTS – CRIMP

See pages 4-36 to 4-39 - Contact retention force

NSH E/N/H/C – COAXIAL, TRIAXIAL AND QUADRAx CONTACTS

See pages 4-40 to 4-52

www.radiall.com

FOR SHELL SIZE 1

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
101	60	60	5C2
102	60	60	BLANK
103	BLANK	60	5C2
104	60	BLANK	5C2
105	BLANK	BLANK	5C2
106	60	BLANK	BLANK
107	30T2	30T2	40
108	60	60	40
109	BLANK	60	BLANK

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
110	60	60	4
111	BLANK	30T2	40
112	60	4C	5C2
113	60	4C	40
114	60	BLANK	40
115	BLANK	BLANK	BLANK
116	4C	60	40
117	BLANK	BLANK	40

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
118	60	30T2	5C2
119	30T2	BLANK	5C2
120	60	30T2	40
121	4C	4C	40
122	30T2	60	5C2
123	60	60	12F12
124	4C	BLANK	12F12
125	BLANK	BLANK	12F12

FOR SHELL SIZE 2

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
201	150	150	13C2
202	71C1	150	13C2
203	71C1	71C1	13C2
204	wave guide	150	13C2
205	150	71C1	13C2
206	150	150	100
207	71C1	150	100
208	150	71C1	100
209	71C1	71C1	100
210	wave guide	71C1	100
211	150	150	BLANK
212	71C1	71C1	BLANK
213	71C1	wave guide	13C2
214	wave guide	71C1	13C2
215	150	73C3	13C2
216	C2	1C7L	85
217	150	C5	13C2
218	150	wave guide	13C2
219	150	2C	13C2
220	71C1	C2	85
221	1C7L	71C1	13C2
222	BLANK	150	13C2
223	BLANK	BLANK	13C2
224	150	BLANK	13C2
225	150	71C1	BLANK
226	150	150	85
227	150	150	34
228	C4	150	13C2
229	120T2	120T2	100

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
230	121	121	6T6
231	121	10T10	6T6
232	120T2	60A	6P6
233	120T2	150	100
234	60A	60A	13C2
235	150	C4	34
236	C4	C4	34
237	150	120T2	100
238	BLANK	60A	6P6
239	120T2	120T2	6T6
240	120T2	10T10	13C2
241	150	150	6T6
242	150	10T10	13C2
243	150	BLANK	100
244	150	BLANK	BLANK
245	71C1	71C1	85
246	71C1	BLANK	BLANK
247	BLANK	150	85
248	BLANK	150	100
249	BLANK	150	BLANK
250	BLANK	71C1	BLANK
251	BLANK	BLANK	100
252	BLANK	wave guide	100
253	C2	150	13C2
254	C2	1C7L	100
255	C2	1C7L	13C2
256	C2	71C1	13C2
257	C2	C2	13C2
258	-	-	-

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
259	C4	C4	85
260	wave guide	150	85
261	wave guide	150	100
262	150	60A	34
263	24	24	6T6
264	BLANK	24	100
265	24	150	13C2
266	121	121	85
267	24	24	6P6
268	60A	121	59
269	10T10	150	13C2
270	150	150	59
271	C4	120T2	13C2
272	150	150	24T4
273	150	C2	13C2
274	C2	71C1	85
275	121	60A	34
276	121	BLANK	100
277	1C7L	150	13C2
278	71C1	1C7L	13C2
279	150	121	13C2
280	120T2	121	34
281	150	121	34
282	C4	BLANK	13C2
283	150	60A	13C2
284	120T2	120T2	13C2
285	24	60A	100
286	60A	60A	34
287	BLANK	60A	100

INSERT COMBINATION CODE

FOR SHELL SIZE 2

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
288	BLANK	121	BLANK
289	BLANK	BLANK	85
290	150	121	100
291	121	150	100
292	121	121	BLANK
293	10T10	10T10	85
294	121	121	13C2
295	Q11	Q11	85
296	121	60A	6P6
297	120T2	60A	BLANK
298	121	60A	BLANK
299	BLANK	BLANK	59
501	24	60A	59
502	121	Q11	Q6
503	150	BLANK	11Q2
504	150	BLANK	34
505	Q11	BLANK	34
506	150	150	11Q2
507	150	150	68Q2
508	24	24	100
509	150	Q11	13C2
510	121	121	100
511	24	150	100
512	Q11	Q11	62Q2
513	Q11	Q11	34
514	BLANK	60A	34
515	BLANK	BLANK	BLANK
516	121	121	34
517	BLANK	120T2	13C2
518	Q11	BLANK	62Q2
519	Q11	Q11	68Q2
520	150	121	24T4
521	Q11	150	62Q2
522	20F12T8	120T2	13C2
523	10T10	10T10	59
524	120T2	120T2	11Q2
525	24	120T2	6T6
526	10T10	10T10	100
527	120T2	120T2	85
528	150	150	11WQ2

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
529	35	35	62Q2
530	24	BLANK	85
531	10T10	24	59
532	20F12T8	121	34
533	120T2	C4	24T4
534	BLANK	Q11	85
535	150	35	24T4
536	BLANK	150	24T4
537	118Q2	118Q2	24T4
538	150	120T2	13C2
539	Q11	Q11	BLANK
540	120T2	C4	13C2
541	1C71	Q11	13C2
542	121	C4	Q6
543	120T2	Q11	13C2
544	120T2	120T2	24T4
545	C4	Q11	85
546	121	60A	100
547	BLANK	150	20Q4
548	150	35	20Q4
549	24	10T10	13C2
550	10T10	10T10	24T4
551	121	118Q2	24T4
552	150	Q11	11Q2
553	10T10	121	100
554	BLANK	118Q2	13C2
555	BLANK	71C1	13C2
556	BLANK	BLANK	62Q2
557	BLANK	Q11	62Q2
558	BLANK	Q11	BLANK
559	150	150	20Q4
560	150	Q11	85
561	150	120T2	85
562	121	BLANK	BLANK
563	24	24	34
564	BLANK	BLANK	34
565	150	24	34
566	150	121	BLANK
567	150	118Q2	BLANK
568	150	121	6T6

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
569	118Q2	118Q2	BLANK
570	Q11	150	11Q2
571	150	118Q2	13C2
572	150	C4	13C2
573	150	24	13C2
574	150	121	59
575	60A	150	34
576	150	150	Q6
577	1C71	118Q2	12F5C2
578	150	121	20Q4
579	C4	118Q2	85
580	150	BLANK	59
581	118Q2	118Q2	20Q4
582	BLANK	71C1	11Q2
583	150	10T10	59
584	121	121	59
585	20F12Q8	BLANK	11Q2
586	150	Q11	34
587	150	118Q2	85
588	Q11	Q11	11Q2
589	Q11	10T10	11Q2
590	BLANK	Q11	Q6
591	20F12T8	150	100
592	BLANK	BLANK	11Q2
593	20F12Q8	121	BLANK
594			
595	Q11	10T10	85
596	BLANK	118Q2	11WQ2
597	150	121	Q6
598	20F12Q8	118Q2	13C2
599	C4	24	100
801	C4	Q11	59
802	BLANK	120T2	24T4
803	Q11	20F12Q8	11Q2
804	Q11	20F12Q8	17F12Q2
805	10T10	150	85
806	C4	60A	59
807	Q11	150	85
808	150	35	6P6
809	C4	C4	59

FOR SHELL SIZE 2

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
810	Q11	Q11	13C2
811	150	150	12F5C2
812	60A	C2	13C2
813	BLANK	Q11	13C2
814	120T2	150	13C2
815	60A	35	24T4
816	10T10	120T2	13C2
817	20F12Q8	Q11	62Q2
818	60A	C2	24T4
819	60A	24	34
820	Q11	121	BLANK
821	10T10	10T10	13C2
822	Q11	35	100
823	20F12T8	118Q2	13C2
824	20F12Q8	BLANK	BLANK
825	20F12T8	BLANK	BLANK
826	150	20F12Q8	34
827	Q11	150	59
828	150	BLANK	85
829	120T2	BLANK	85

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
830	118Q2	120T2	BLANK
831	120T2	120T2	BLANK
832	Q11	121	100
833	150	150	17F12Q2
834	110R	150	17F12Q2
835	121	121	11Q2
836	121	121	6P6
837	Q11	150	6P6
838	Q11	BLANK	68Q2
839	60A	BLANK	34
840	150	110	11Q2
841	150	110	34
842	71C1	118Q2	12F5C2
843	110	110	BLANK
844	150	121	62F12
845	150	20F12Q8	13C2
846	C4	150	62F12
847	C4	150	11Q2
848	24	150	6Q6
849	150	150	10

Code	Insert combination on shell		
	Cavity A	Cavity B	Cavity C
850	150	110	13C2
851	36F36	150	85
852	150	121	11Q2
853	118Q2	150	11Q2
854	20F12Q8	118Q2	59
855	20F12Q8	Q11	100
856	BLANK	110	13C2
857	BLANK	36F36	BLANK
858	118Q2	118Q2	11Q2
859	150	36F36	13C2
860	150	118Q2	11Q2
861	118Q2	118Q2	59
862	150	118Q2	62Q2
863	Q11	Q11	17F12Q2
864	150	Q11	46Q2
865	118Q2	150	13C2
866	121	110	13C2
867	C4	C2	BLANK
868	150	118Q2	24T4

INSERT COMBINATION CODE

FOR SHELL SIZE 3

Code	Insert combination on shell					
	Cavity A	Cavity B	Cavity C	Cavity D	Cavity E	Cavity F
301	150	150	13C2	150	150	13C2
302	150	150	100	150	150	13C2
303	150	150	13C2	150	150	100
304	150	150	100	150	150	100
305	150	150	BLANK	150	150	BLANK
306	150	71C1	13C2	150	71C1	13C2
307	71C1	71C1	13C2	71C1	71C1	13C2
308	C2	C2	13C2	C2	150	100
309	150	150	13C2	150	71C1	100
310	C4	C4	13C2	BLANK	150	100
311	150	150	85	150	150	85
312	BLANK	BLANK	13C2	BLANK	BLANK	13C2
313	BLANK	BLANK	13C2	BLANK	BLANK	100
314	BLANK	BLANK	13C2	BLANK	150	100
315	150	150	13C2	150	150	BLANK
316	24	BLANK	13C2	150	150	BLANK
317	120T2	150	34	120T2	150	34
318	121	121	6T6	121	121	6T6
319	121	120T2	6T6	121	120T2	6T6
320	150	60A	100	150	60A	100
321	150	150	100	150	BLANK	BLANK
322	150	150	100	150	150	34
323	150	150	100	71C1	71C1	100
324	150	150	100	C2	BLANK	BLANK
325	150	150	13C2	C2	C2	13C2
326	150	71C1	100	150	150	100
327	150	71C1	100	150	150	13C2
328	C2	C2	13C2	150	150	13C2
329	C2	C2	13C2	C4	150	100
330	C4	C4	13C2	BLANK	BLANK	BLANK
331	71C1	150	100	150	150	100
332	C4	C4	13C2	C4	C4	85
333	71C1	71C1	100	71C1	71C1	100
334	71C1	71C1	BLANK	71C1	71C1	BLANK
335	71C1	C4	100	71C1	C4	100
336	BLANK	150	13C2	BLANK	150	13C2
337	BLANK	BLANK	100	BLANK	BLANK	13C2
338	C2	150	100	150	150	100
339	C2	C2	100	C2	C2	100
340	C2	C2	13C2	C2	C2	13C2
341	C4	C4	100	C4	C4	100
342	C4	C4	13C2	C4	C4	13C2

INSERT COMBINATION CODE

FOR SHELL SIZE 3

Code	Insert combination on shell					
	Cavity A	Cavity B	Cavity C	Cavity D	Cavity E	Cavity F
343	BLANK	150	100	150	150	13C2
344	24	150	13C2	24	150	13C2
345	60A	24	BLANK	60A	24	BLANK
346	150	24	100	150	150	34
347	150	150	6T6	121	10T10	13C2
348	C4	120T2	100	150	150	13C2
349	10T10	120T2	100	150	120T2	59
350	150	120T2	100	150	120T2	59
351	150	150	34	150	150	34
352	24	24	100	24	24	34
353	150	150	59	150	150	59
354	150	150	34	150	24	100
355	C4	150	13C2	BLANK	150	13C2
356	150	150	100	60A	60A	100
357	C4	C4	13C2	150	150	100
358	C4	C4	13C2	121	150	100
359	121	121	13C2	121	121	13C2
360	150	150	6T6	24	24	13C2
361	150	BLANK	13C2	150	150	BLANK
362	24	24	34	150	121	34
363	150	150	59	24	60A	59
364	60A	24	59	150	150	59
365	24	60A	100	24	60A	100
366	150	150	84	150	150	100
367	150	150	59	120T2	120T2	100
368	150	150	59	150	150	34
369	150	150	59	150	150	100
370	60A	60A	100	60A	60A	100
371	C4	C4	13C2	C2	150	100
372	150	150	BLANK	121	BLANK	13C2
373	150	150	13C2	120T2	120T2	100
374	150	150	68Q2	150	150	68Q2
375	150	150	100	150	150	68Q2
376	150	150	68Q2	150	150	BLANK
377	120T2	150	13C2	120T2	150	100
378	Q11	150	13C2	150	150	13C2
379	60A	150	34	150	150	34
380	C4	120T2	11Q2	C4	120T2	13C2
381	C4	120T2	11Q2	C4	120T2	11Q2
382	150	150	11Q2	150	150	11Q2
383	150	150	BLANK	Q11	150	85
384	Q11	150	85	150	150	BLANK

NSX - BPX series

INSERT COMBINATION CODE

FOR SHELL SIZE 3

Code	Insert combination on shell					
	Cavity A	Cavity B	Cavity C	Cavity D	Cavity E	Cavity F
385	150	150	59	150	150	6T6
386	150	150	100	150	121	6T6
387	Q11	Q11	62Q2	Q11	Q11	62Q2
388	Q11	Q11	Q6	Q11	Q11	62Q2
389	Q11	150	11Q2	150	150	68Q2
390	150	150	11Q2	BLANK	BLANK	BLANK
391	150	150	100	150	10T10	34
392	10T10	24	59	10T10	24	59
393	BLANK	BLANK	13C2	150	BLANK	BLANK
394	BLANK	BLANK	13C2	150	BLANK	13C2
395	Q11	Q11	100	Q11	Q11	100
396	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
397	Q11	Q11	11Q2	Q11	150	11Q2
398	150	120T2	85	150	120T2	85
399	121	BLANK	6T6	60A	BLANK	13C2
601	60A	60A	13C2	60A	60A	13C2
602	Q11	150	11Q2	150	150	11Q2
603	24	BLANK	13C2	BLANK	BLANK	13C2
604	150	150	BLANK	150	150	100
605	150	Q11	11Q2	150	Q11	68Q2
607	24	24	13C2	24	24	100
608	24	24	13C2	24	24	68Q2
609	150	150	34	150	120T2	13C2
610	150	150	34	150	Q11	13C2
611	BLANK	150	13C2	BLANK	150	100
612	10T10	150	68Q2	150	150	13C2
613	Q11	150	68Q2	150	150	13C2
614	150	150	100	BLANK	BLANK	BLANK
615	150	150	100	150	150	59
616	150	150	13C2	60A	120T2	34
617	60A	120T2	13C2	60A	120T2	13C2
618	150	150	Q6	150	150	Q6
619	Q11	Q11	11Q2	150	150	100
620	24	24	34	24	BLANK	34
621	150	150	34	150	60A	34
622	120T2	150	100	120T2	150	100
623	C4	C4	34	C4	C4	BLANK
624	150	150	13C2	60A	60A	34
625	150	150	13C2	150	150	6T6
626	C4	C4	13C2	120T2	150	100
627	C4	120T2	BLANK	C4	120T2	11Q2
628	150	150	11Q2	150	150	6T6

INSERT COMBINATION CODE

FOR SHELL SIZE 3

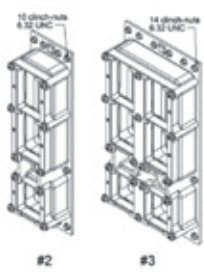
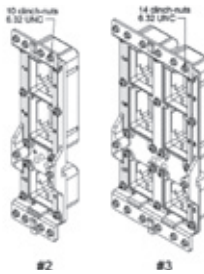
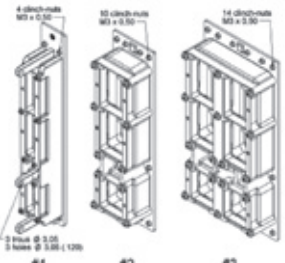
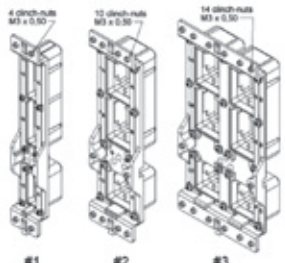
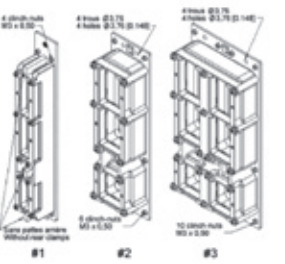
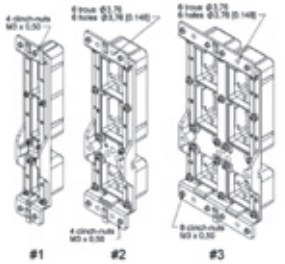
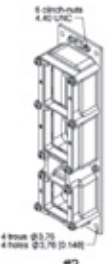
Code	Insert combination on shell					
	Cavity A	Cavity B	Cavity C	Cavity D	Cavity E	Cavity F
629	C4	120T2	17F12Q2	C4	120T2	11Q2
630	C4	C4	BLANK	C4	C4	34
631	BLANK	150	13C2	BLANK	Q11	BLANK
632	BLANK	150	13C2	150	150	68Q2
633	150	150	100	Q11	Q11	11Q2
634	150	120T2	34	150	120T2	34
635	Q11	121	11Q2	Q11	121	11Q2
636	150	150	11Q2	150	150	100
637	BLANK	150	11Q2	150	150	68Q2
638	Q11	150	62Q2	Q11	150	62Q2
639	Q11	121	13C2	Q11	121	13C2
640	150	Q11	34	10T10	Q11	34
641	150	150	BLANK	150	150	13C2
642	121	60A	59	121	60A	13C2
643	Q11	Q11	Q6	Q11	Q11	Q6
644	150	Q11	34	Q11	Q11	34
645	150	150	11Q2	150	150	BLANK
646	150	BLANK	13C2	150	BLANK	BLANK
647	C4	120T2	17F12Q2	C4	120T2	13C2
648	BLANK	BLANK	17F12Q2	BLANK	BLANK	BLANK
649	150	150	15T6Q2	150	150	15T6Q2
650	10T10	120T2	59	10T10	120T2	59
651	Q11	118Q2	59	Q11	118Q2	59
652	121	121	34	121	121	34
653	C4	C4	13C2	C4	150	100
654	C4	150	62F12	C4	150	11Q2
655	36F36	150	11Q2	150	150	68Q2
656	71C1	71C1	85	71C1	71C1	85
657	Q11	Q11	34	120T2	150	13C2
658	10T10	10T10	100	10T10	120T2	34
659	150	68Q4	34	24	36F36	6P6
660	C4	BLANK	BLANK	150	BLANK	13C2
661	Q11	Q11	85	Q11	Q11	85
662	BLANK	BLANK	13C2	150	150	100
663	10T10	10T10	100	120T2	10T10	34
664	Q11	Q11	100	118Q2	Q11	34
665	10T10	10T10	34	120T2	150	34
666	10T10	10T10	6T6	120T2	150	34

NSX - BPX series

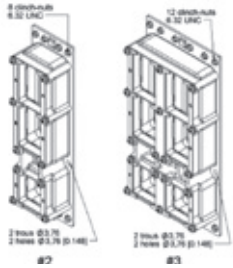
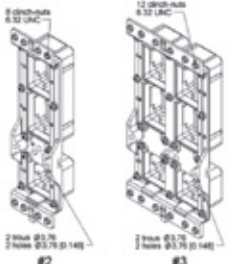
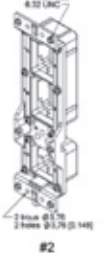
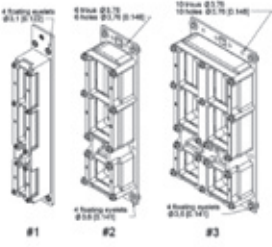
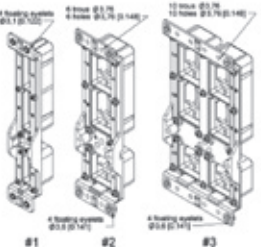
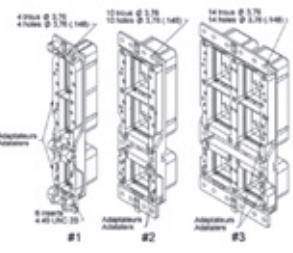
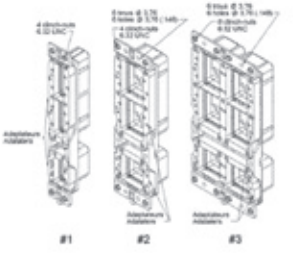
MODIFICATION CODE

CODE	Receptacle shell	Plug shell
00		
01		
02		
03		
04		
08		

MODIFICATION CODE

CODE	Receptacle shell		Plug shell	
09		6-32 UNC All holes Shell sizes 2 and 3 only		6-32 UNC All holes Shell sizes 2 and 3 only
10		M3 x 0.50 All holes Shell size 1 receptacle is without threaded inserts		M3 x 0.50 All holes Shell size 1 plug is without threaded inserts
11		M3 x 0.50 Shell size 1: Q _y = 4 Shell size 2: Q _y = 6 Shell size 3: Q _y = 10 Size 1 receptacle is without threaded inserts		M3 x 0.50 Shell size 1: Q _y = 4 Shell size 2: Q _y = 4 Shell size 3: Q _y = 8 Shell size 1 plug is without threaded inserts
12		4-40 UNC 6 holes (4 close to the bosses and 2 at the polarization system level) Available for shell size 2 only		4-40 UNC 6 holes (4 in to the corner and 2 at the polarization system level) Available for shell size 2 only
13		4-40 UNC All holes Available for shell size 1 only	--	--

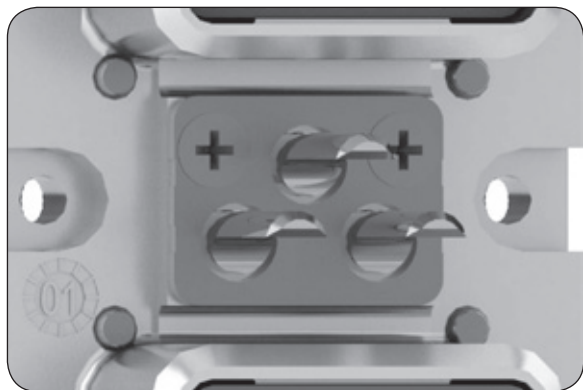
MODIFICATION CODE

CODE	Receptacle shell		Plug shell	
15		Shell size 2: Q_y = 8 6-32 UNC & Q_y = 2 holes Ø3.76 (.148) Shell size 3: Q_y = 12 6-32 UNC & Q_y = 2 holes Ø3.76 (.148)		Shell size 2: Q_y = 8 6-32 UNC & Q_y = 2 holes Ø3.76 (.148) Shell size 3: Q_y = 12 6-32 UNC & Q_y = 2 holes Ø3.76 (.148)
16	--	--		6-32 UNC Q_y = 6 Available for shell size 2 only
23		Shell size 1: Q_y = 4 floating eyelets Ø 3.1 (.122) Shell size 2: Q_y = 6 Ø 3.76 (.148) + 4 floating eyelets Ø3.1 (.122) Shell size 3: Q_y = 10 Ø 3.76 (.148) + 4 floating eyelets Ø3.1 (.122)		Shell size 1: Ø 3.1 (.122) Shell size 2 and 3: Ø 3.6 (.141) 4 floating eyelets
30		Shell without boss Available for shell size 2 only M3 x 0.50 Q_y = 10	--	--
60	--	--		Shell size 1: Q_y = 4 holes Ø3.76 (.148) & Q_y = 6 4-40 UNC 2B Shell size 2: Q_y = 10 holes Ø3.76 (.148) Shell size 3: Q_y = 14 holes Ø3.76 (.148)
61	--	--		Shell size 1: Q_y = 4 6-32 UNC Shell size 2: Q_y = 6 holes Ø3.76 (.148) & Q_y = 4 6-32 UNC Shell size 3: Q_y = 6 holes Ø3.76 (.148) & Q_y = 8 6-32 UNC

POLARIZATION CODE

POSITION OF POLARIZATION KEYS AND POSTS

Connectors are shown front side, with "RADIAL" upward



POSTS



KEYS

POSITION CODING

Dark area represents the polarizing post

Clear portion represents the key hole



1



2



3



4



5



6

POLARIZATION CODE TABLE

Code number	Receptacle shell			Plug shell		
	Left key	Center key	Right key	Left post	Center post	Right post
00	-	-	-	-	-	-
01	4	4	4	1	1	1
02	4	4	3	2	1	1
03	4	4	2	3	1	1
04	4	4	1	4	1	1
05	4	4	6	5	1	1
06	4	4	5	6	1	1
07	5	4	4	1	1	6
08	5	4	3	2	1	6
09	5	4	2	3	1	6
10	5	4	1	4	1	6
11	5	4	6	5	1	6
12	5	4	5	6	1	6
13	6	4	4	1	1	5
14	6	4	3	2	1	5
15	6	4	2	3	1	5
16	6	4	1	4	1	5
17	6	4	6	6	1	5
18	6	4	5	5	1	5
19	1	4	4	1	1	4
20	1	4	3	2	1	4
21	1	4	2	3	1	4
22	1	4	1	4	1	4
23	1	4	6	5	1	4
24	1	4	5	6	1	4
25	2	4	4	1	1	3
26	2	4	3	2	1	3
27	2	4	2	3	1	3
28	2	4	1	4	1	3
29	2	4	6	5	1	3
30	2	4	5	6	1	3
31	3	4	4	1	1	2
32	3	4	3	2	1	2
33	3	4	2	3	1	2
34	3	4	1	4	1	2
35	3	4	6	5	1	2
36	3	4	5	6	1	2
37	4	3	4	1	2	1
38	4	3	3	2	2	1
39	4	3	2	3	2	1
40	4	3	1	4	2	1
41	4	3	6	5	2	1
42	4	3	5	6	2	1
43	5	3	4	1	2	6
44	5	3	3	2	2	6
45	5	3	2	3	2	6
46	5	3	1	4	2	6
47	5	3	6	5	2	6
48	5	3	5	6	2	6
49	6	3	4	1	2	5

Code number	Receptacle shell			Plug shell		
	Left key	Center key	Right key	Left post	Center post	Right post
50	6	3	3	2	2	5
51	6	3	2	3	2	5
52	6	3	1	4	2	5
53	6	3	6	5	2	5
54	6	3	5	6	2	5
55	1	3	4	1	2	4
56	1	3	3	2	2	4
57	1	3	2	3	2	4
58	1	3	1	4	2	4
59	1	3	6	5	2	4
60	1	3	5	6	2	4
61	2	3	4	1	2	3
62	2	3	3	2	2	3
63	2	3	2	3	2	3
64	2	3	1	4	2	3
65	2	3	6	5	2	3
66	2	3	5	6	2	3
67	3	3	4	1	2	2
68	3	3	3	2	2	2
69	3	3	2	3	2	2
70	3	3	1	4	2	2
71	3	3	6	5	2	2
72	3	3	5	6	2	2
73	4	2	4	1	3	1
74	4	2	3	2	3	1
75	4	2	2	3	3	1
76	4	2	1	4	3	1
77	4	2	6	5	3	1
78	4	2	5	6	3	1
79	5	2	4	1	3	6
80	5	2	3	2	3	6
81	5	2	2	3	3	6
82	5	2	1	4	3	6
83	5	2	6	5	3	6
84	5	2	5	6	3	6
85	6	2	4	1	3	5
86	6	2	3	2	3	5
87	6	2	2	3	3	5
88	6	2	1	4	3	5
89	6	2	6	5	3	5
90	6	2	5	6	3	5
91	1	2	4	1	3	4
92	1	2	3	2	3	4
93	1	2	2	3	3	4
94	1	2	1	4	3	4
95	1	2	6	5	3	4
96	1	2	5	6	3	4
97	2	2	4	1	3	3
98	2	2	3	2	3	3
99	2	2	2	3	3	3

POLARIZATION CODE TABLE

NSX - BPX series

Code number	Receptacle shell			Plug shell		
	Left key	Center key	Right key	Left post	Center post	Right post
100	2	2	1	4	3	3
101	2	2	6	5	3	3
102	2	2	5	6	3	3
103	3	2	4	1	3	2
104	3	2	3	2	3	2
105	3	2	2	3	3	2
106	3	2	1	4	3	2
107	3	2	6	5	3	2
108	3	2	5	6	3	2
109	4	1	4	1	4	1
110	4	1	3	2	4	1
111	4	1	2	3	4	1
112	4	1	1	4	4	1
113	4	1	6	5	4	1
114	4	1	5	6	4	1
115	5	1	4	1	4	6
116	5	1	3	2	4	6
117	5	1	2	3	4	6
118	5	1	1	4	4	6
119	5	1	6	5	4	6
120	5	1	5	6	4	6
121	6	1	4	1	4	5
122	6	1	3	2	4	5
123	6	1	2	3	4	5
124	6	1	1	4	4	5
125	6	1	6	5	4	5
126	6	1	5	6	4	5
127	1	1	4	1	4	4
128	1	1	3	2	4	4
129	1	1	2	3	4	4
130	1	1	1	4	4	4
131	1	1	6	5	4	4
132	1	1	5	6	4	4
133	2	1	4	1	4	3
134	2	1	3	2	4	3
135	2	1	2	3	4	3
136	2	1	1	4	4	3
137	2	1	6	5	4	3
138	2	1	5	6	4	3
139	3	1	4	1	4	2
140	3	1	3	2	4	2
141	3	1	2	3	4	2
142	3	1	1	4	4	2
143	3	1	6	5	4	2
144	3	1	5	6	4	2
145	4	6	4	1	5	1
146	4	6	3	2	5	1
147	4	6	2	3	5	1
148	4	6	1	4	5	1
149	4	6	6	5	5	1
150	4	6	5	6	5	1
151	5	6	4	1	5	6
152	5	6	3	2	5	6
153	5	6	2	3	5	6
154	5	6	1	4	5	6
155	5	6	6	5	5	6
156	5	6	5	6	5	6
157	6	6	4	1	5	5
158	6	6	3	2	5	5

Code number	Receptacle shell			Plug shell		
	Left key	Center key	Right key	Left post	Center post	Right post
159	6	6	2	3	5	5
160	6	6	1	4	5	5
161	6	6	6	5	5	5
162	6	6	5	6	5	5
163	1	6	4	1	5	4
164	1	6	3	2	5	4
165	1	6	2	3	5	4
166	1	6	1	4	5	4
167	1	6	6	5	5	4
168	1	6	5	6	5	4
169	2	6	4	1	5	3
170	2	6	3	2	5	3
171	2	6	2	3	5	3
172	2	6	1	4	5	3
173	2	6	6	5	5	3
174	2	6	5	6	5	3
175	3	6	4	1	5	2
176	3	6	3	2	5	2
177	3	6	2	3	5	2
178	3	6	1	4	5	2
179	3	6	6	5	5	2
180	3	6	5	6	5	2
181	4	5	4	1	6	1
182	4	5	3	2	6	1
183	4	5	2	3	6	1
184	4	5	1	4	6	1
185	4	5	6	5	6	1
186	4	5	5	6	6	1
187	5	5	4	1	6	6
188	5	5	3	2	6	6
189	5	5	2	3	6	6
190	5	5	1	4	6	6
191	5	5	6	5	6	6
192	5	5	5	6	6	6
193	6	5	4	1	6	5
194	6	5	3	2	6	5
195	6	5	2	3	6	5
196	6	5	1	4	6	5
197	6	5	6	5	6	5
198	6	5	5	6	6	5
199	1	5	4	1	6	4
200	1	5	3	2	6	4
201	1	5	2	3	6	4
202	1	5	1	4	6	4
203	1	5	6	5	6	4
204	1	5	5	6	6	4
205	2	5	4	1	6	3
206	2	5	3	2	6	3
207	2	5	2	3	6	3
208	2	5	1	4	6	3
209	2	5	6	5	6	3
210	2	5	5	6	6	3
211	3	5	4	1	6	2
212	3	5	3	2	6	2
213	3	5	2	3	6	2
214	3	5	1	4	6	2
215	3	5	6	5	6	2
216	3	5	5	6	6	2

CONTACTS

SIGNAL, POWER AND GROUND CONTACTS CRIMP TERMINATION

Ins.Ext Tool (metallic)	Radiall P/N	282885		282886	282546	
	Mil Spec P/N	M81969/1.01		M81969/1.02	M81969/1.03	
Ins.Ext Tool (plastic)	Radiall P/N	282549028		282549029	282515	-
	Mil spec P/N	M81969/14.01		M81969/14.02	M81969/14.03	-
Positioner	Radiall P/N	282970		282971	282972	
	Mil spec P/N	M22520/2.23		M22520/2.08	M22520/1.02	
Crimping Tool	Radiall P/N	282281		282281	282291	
	Mil spec P/N	M22520/2.01		M22520/2.01	M22520/1.01	
Contact	Socket	620300  (1) Orange (2) Yellow	620301 	620310  (1) Orange (2) Red	620330  (1) Orange (2) Blue	620331 
	Pin	620200  (1) Orange (2) Green	620201 	620210  (1) Orange (2) Red	620230  (1) Orange (2) Blue	620231 
Wire	Selector	4-3-3	5-4	5-6-7	6-5-4	5-4-3-2
	Striping length ± .020 mm (inch)	3.5 (.138)		4 (.157)	6 (.236)	
	Wire outside diameter mm (inch)	1.4 (.055)	1.2 (.047)	1.8 (.071)	2.6 (.102)	1.97 (.077)
	Cross section (mm ²)	0.38-0.21-0.14	0.093-0.055	0.21-0.38-0.60	1.34-0.93-0.60	0.93-0.60-0.38-0.21
	Wire size (AWG)	22-24-26	28-30	20-22-24	16-18-20	18-20-22-24
Contact arrangement		See contact arrangement page 4-11 to 4-22				
Contact size		22	22 reduced crimp barrel	20	16	16 reduced crimp barrel

SIGNAL, POWER AND GROUND CONTACTS CRIMP TERMINATION

Ins.Ext Tool (metallic)	Radiall P/N	282547		-
	Mil spec P/N	M81969/28.02		M81/969/19.02
Ins.Ext Tool (plastic)	Radiall P/N	282549004		-
	Mil spec P/N	M81969/14.04		-
Positioner	Radiall P/N	282972		282579
	Mil spec P/N	M22520/1.02		M22520/1.11
Crimping Tool	Radiall P/N	282291		
	Mil spec P/N	M22520/1.01		
Contact	Socket	620340  (1) Orange (2) Yellow	620341  (1) Orange	-
	Pin	620240  (1) Orange (2) Yellow	620241  (1) Orange	619240 (front release rear removable contact)  (1) Orange (2) Yellow
Wire	Selector	8-7-6	2-3-4-5	8-7-6
	Striping length ± .020 mm (inch)	6 (.236)		
	Wire outside diameter mm (inch)	3.4 (.134)	2.4 (.094)	3.4 (.134)
	Cross section (mm²)	3.18-1.91-1.34	0.93-0.60-0.38-0.21	3.18-1.91-1.34
	Wire size (AWG)	12-14-16	18-20-22-24	12-14-16
Contact arrangement		See contact arrangement page 4-11 to 4-22		
Contact size		12	12 reduced crimp barrel	12

Please note Radiall recommends plastics extraction tool for environmental cavities 22-20-16 and 12 (the metallic extraction tool leads to damage risk of triple silicon web).

CONTACTS

SIGNAL, POWER AND GROUND CONTACTS CRIMP TERMINATION

Ext Tool (metallic)	Radiall P/N	socket: 282549001 pin: 282549012	282549012	282540001	282548	
	Mil spec P/N	socket: M81969/28.03 pin: M81969/19.03	M81969/19.03	M81969/28.03	M81969/28.01	
Positioner	Radiall P/N			282588	282557	
	Mil spec P/N	M22520/23.09		-	-	
Die	Radiall P/N	-				
	Mil spec P/N	M22520/23.02				
Crimping Tool	Radiall P/N				282296	
	Mil spec P/N	M22520/23.01		M22520/23.01		
Contact	Socket	619370  (1) Orange (2) Brown	-	619371  (1) Orange (2) Black	616361	616366
	Pin	619270 (front release rear removable contact)  (1) Orange (2) Brown	619271 (front release rear removable contact)  (1) Orange (2) Black	-	616261	616266
Wire	Selector	-			1-1	8-5
	Striping length ± .020 mm (inch)	11.5 (.453)		-	8.0 (.315)	
	Wire outside diameter mm (inch)	5.7 (.224)		-	3.4 (.134)	5.7 (.234)
	Cross section (mm²)	9-5		-	3.18-1.91	9-5
	Wire size (AWG)	8-10		-	12-14	8-10
Contact arrangement		See contact arrangement page 4-11 to 4-22				
Contact size		8	8 ground		5	

CHROMEL CONTACTS – CRIMP TERMINATION

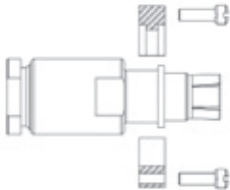
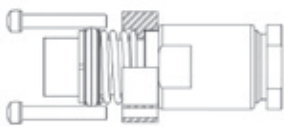
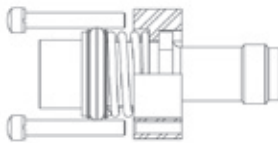
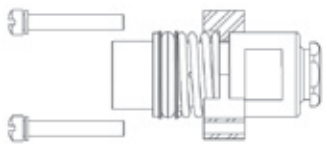
Ins.Ext Tool	Radiall P/N	282885	282886
	Mil spec P/N	M81969/1.01	M81969/1.02
Positioner	Radiall P/N	282970	282971
	Mil spec P/N	M22520/2.23	M22520/2.08
Crimping Tool	Radiall P/N	282281	
	Mil spec P/N	M22520/2.01	
Contact	Socket	620380  (1) Orange (2) Green (3) Yellow	620390  (1) Orange (2) Red (3) Yellow
	Pin	620280  (1) Orange (2) Green (3) Yellow	620290  (1) Orange (2) Red (3) Yellow
Wire	Selector	4-3-3	7-6-5
	Striping length ± .020 mm (inch)	3.5 (.138)	4 (.157)
	Wire outside diameter mm (inch)	1.4 (.055)	1.8 (.071)
	Cross section (mm ²)	0.38-0.21-0.14	0.60-0.38-0.21
	Wire size (AWG)	22-24-26	20-22-24
Contact arrangement		See contact arrangement page 4-11 to 4-22	
Contact size		22	20

CONTACTS

ALUMEL CONTACTS – CRIMP TERMINATION

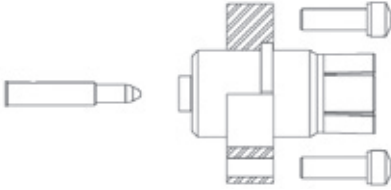
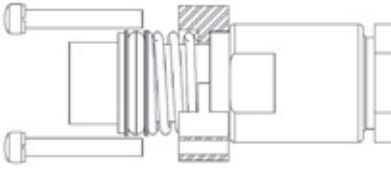
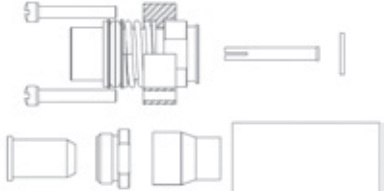
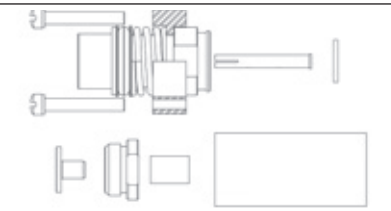
Ins.Ext Tool	Radiall P/N	282885	282886
	Mil spec P/N	M81969/1.01	M81969/1.02
Positioner	Radiall P/N	282970	282971
	Mil spec P/N	M22520/2.23	M22520/2.08
Crimping Tool	Radiall P/N	282281	
	Mil spec P/N	M22520/2.01	
Contact	Socket	620381  (1) Orange (2) Green (3) Black	620391  (1) Orange (2) Red (3) Black
	Pin	620281  (1) Orange (2) Green (3) Black	620291  (1) Orange (2) Red (3) Black
Wire	Selector	4-3-3	7-6-5
	Striping length ± .020 mm (inch)	3.5 (.138)	4 (.157)
	Wire outside diameter mm (inch)	1.4 (.055)	1.8 (.071)
	Cross section (mm ²)	0.38-0.21-0.14	0.60-0.38-0.21
	Wire size (AWG)	22-24-26	20-22-24
Contact arrangement		See contact arrangement page 4-11 to 4-22	
Contact size		22	20

SIZE 1 COAXIAL CONTACTS

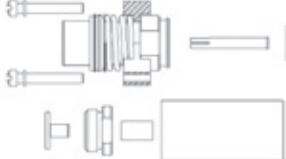
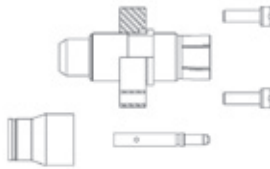
Wire	Type	Part number	Contact	Contact arrangements
RG 214 RG 393	Pin	620001		71C1-1C7I-C2
	Socket	620101		
		620101001	Identical to 620101 without O-ring	
Not applicable TNC termination	Socket	620101003		71C1-1C7I-C2
		620101004	Identical to 620101003 without O-ring	
RG 223 RG 142	Pin	620003		71C1-1C7I-C2
	Socket	620103		

CONTACTS

SIZE 1 COAXIAL CONTACTS

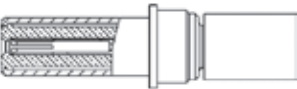
Wire	Type	Part number	Contact	Contact arrangements
RG 402 UT .141	Pin	620005		71C1-1C7I-C2
NSA 935 358	Socket	620107		71C1-1C7I-C2
		620107001	Identical to 620107 without O-ring	
ASNE 0406 WD and FILECA 1 703/94	Socket	620108		71C1-1C7I-C2
		620108001	Identical to 620108 without O-ring	
RG 400 RG 142	Socket	620109		71C1-1C7I-C2
		620109001	Identical to 620109 without O-ring	

SIZE 1 COAXIAL CONTACTS

Wire	Type	Part number	Contact	Contact arrangements
RG 142	Pin	620011		71C1-1C71-C2
Not applicable SMA termination	Pin	620044		71C1-1C71-C2
ASNE0691WM	Socket	620101011		71C1-1C71-C2
ASNE0692WN	Socket	620101012		71C1-1C71-C2
ASNE0692WN	Pin	620005		71C1-1C71-C2
RD316	Pin	620043001		71C1-1C71-C2

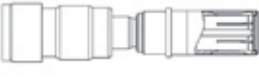
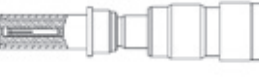
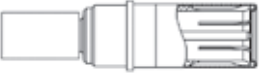
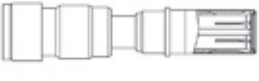
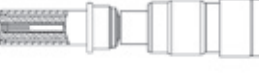
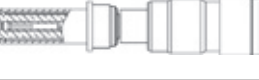
CONTACTS

SIZE 8 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
RG142 RG400 RG412 RG223 RG55U ASNE0293XF	Socket	619051		For all size 8 cavities	282549001 (M81969/28.03)
	Socket	619051001 environmental			
	Pin	619151			
	Pin	619151001 environmental			

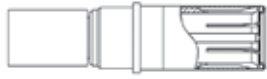
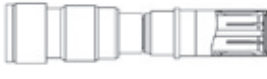


SIZE 8 COAXIAL CONTACTS

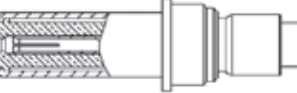
Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
RG316-KX22 -RG179 ASNE0639XY	Socket	619054		for all size 8 cavities	282549001 (M81969/28.03)
		619054001 environmental			
	Pin	619154		for all size 8 cavities	-
		619154001 environmental			
Gore GSC-03-8174 8-00	Socket	619053		for all size 8 cavities	282549001 (M81969/28.03)
		619053001 environmental			
	Pin	619153		for all size 8 cavities	-
		619153001 environmental			
RG180 RG195	Socket	619052		for all size 8 cavities	282549001 (M81969/28.03)
		619052001 environmental			
	Pin	619152		for all size 8 cavities	-
		619152001 environmental			

CONTACTS

SIZE 8 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
ASNE0690WL	Socket	619054002		for all size 8 cavities	282549001 (M81969/28.03)
	Pin	619050			-
		619050001 environmental			-
RG58 RG141	Socket	619150			-
		619150001 environmental			-
	Pin	619055			-
		619055001 environmental			-
RG178 KX21 ASNE0633WG	Socket	619155		for all size 8 cavities	-
		619155001 environmental			

SIZE 8 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
RG316	Socket	619056		For all size 8 cavities	-
		619056001 environmental			
	Pin	619156			-
		619156001 environmental			-



NSX - BPX series

CONTACTS

SIZE 5 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
RG 58 RG 141	Pin	620120*		for all size 5 cavities	282946 (M81969/28.01)
	Socket	620020*			
RG 142 RG 223 RG 400	Pin	620121*			282946 (M81969/28.01)
	Socket	620021*			
ASNE0639XY RG 179 RG 316 KX 22	Pin	620122*			282946 (M81969/28.01)
	Socket	620022*			

*Add 001 to these P/N to order for environmental contacts.

SIZE 5 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
ASNE 0633WG RG 178 KX 21	Pin	620123*		for all size 5 cavities	282946 (M81969/28.01)
	Socket	620023*			
RG 180 RG 195	Pin	620124*			282946 (M81969/28.01)
	Socket	620024*			
RD 316	Pin	620129*			282946 (M81969/28.01)
	Socket	620029*			

*Add 001 to these P/N to order for environmental contacts.

CONTACTS

SIZE 5 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
ADAMS- RUSSEL FC 11Z (per S280W503-1)	Pin	620182001		for all size 5 cavities	282946 (M81969/28.01)
	Socket	620082001			
ADAMS- RUSSEL FC 14Z (per S280W503-2)	Pin	620183001			282946 (M81969/28.01)
	Socket	620083001			
SMA Termination	Pin	620134			282946 (M81969/28.01)
ASNE0690WL	Pin	620184			282946 (M81969/28.01)
ASNE0690WL	Pin	620084			282946 (M81969/28.01)

SIZE 16 COAXIAL CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
KX22 RG 316 RG 179 ASNE0639XY ASNE0632WK ASNE0752WS	Pin	618150		for all size 16 cavities	282892
	Socket	618050			
RG 178 KX 21 ASNE0633WG	Pin	618154			282892
	Socket	618054			

SIZE 5 CONCENTRIC TWINAX CONTACTS

Wire	Type	Part number	For insert	Ins/Ext Tool
MIL C 17/17600002	Pin	616195001*	for all size 5 cavities	282946 (M81969/28.01)
	Socket	616095001*		

* 616195001 contact environmental version is 616195009

616095001 contact environmental version is 616095009

SIZE 10 TWINAX CONTACTS

Wire	Type	Part number	For insert	Ins/Ext Tool
EN 3375-006 ASNE 0290XM	Pin	620167001	15T6Q2	(M81969/14-05)
	Socket	620067001		

CONTACTS

SIZE 8 CONCENTRIC TWINAX CONTACTS

Wire	Type	Part number	Contact	For insert	Ins/Ext Tool
Tensolite (S280W502-1)	Pin	619165		for all size 8 cavities	282549001 (M81969/28.03)
		619165002 (1)			
	Socket	619065			282549001 (M81969/28.03) for ins. 282549012 (M81969/28.03) for ext.
	Pin	619166**			
MIL C 17/17600002	Pin	619169001			282549001 (M81969/28.03)
	Socket	619069001			
		619069002 environmental			

NOTE:

(1) Contact delivered with a 619960 alignment boot.

Some of the above mentioned contacts can be fitted with sealing boots (see available sealing boots on page 4-82).

Pin contacts can be fitted with a 619960 alignment boot to reduce the play at the top of the pin contacts (see page 4-82)

SIZE 8 QUADRAX CONTACTS

Wire	Type	Part number (non environmental)	Part number (environmental)	Ins/Ext Tool
ABS1503KD24 (110 Ω)	Pin	620175010	620175011	282549001 (M81969/28.03 or M81969/14.06)
	Socket	620075010	620075011	
THERMAX 956S-4T200 GORE RCN8422 (110 Ω)	Pin	620179002	620179001	
	Socket	620079002	620079001	
TENSOLITE NF24Q100 (100 Ω)	Pin	620175050	620175051	
	Socket	620075050	620075051	
GORE RCN8487-1 (110 Ω)	Pin	620175021	620175020	
	Socket	620075021	620075020	

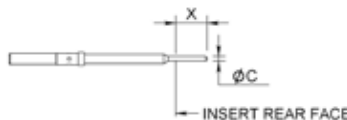
Please note quadrax contact are used when you have Q in insert name refer to pages 4-11 to 4-22.

CONTACTS

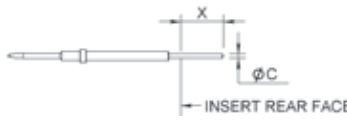
NSX E/N/H/C – REAR REMOVABLE CONTACTS

REAR REMOVABLE PC TAIL CONTACTS

SIZE 22 SOCKET CONTACTS

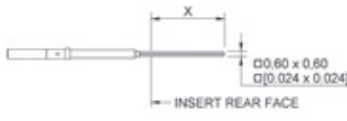
Part number	Contact termination	Dimension X mm (inch)	C dia. mm (inch)	Ins/Ext Tool	Figure
620 305	YA	5.20 (.205) 4.20 (.165)	0.635 (.025)	282890	
620305005	ZA				

NSX E/N/H/C – REAR REMOVABLE CONTACTS

Part number	Contact termination	Dimension X mm (inch)	C dia. mm (inch)	Ins/Ext Tool	Figure
620 202	Y	7.30 (.288) 6.30 (.250)	0.635 (.025)	282890	
620202005	Z				

REAR REMOVABLE WIRE WRAP CONTACTS

SIZE 22 SOCKET CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool	Figure
620302	K	7.70 (.303) 6.30 (.248)	282890	
620303	V	10.70 (.421) 9.30 (.366)		
620308	W	12.30 (.484) 13.70 (.540)		

NSX F/G – CONNECTORS FOR FRONT REMOVABLE CONTACTS

NSX	F	3	R	301	Y	00	01
-----	---	---	---	-----	---	----	----

Series _____

Class ⁽²⁾ _____**F:** Receptacle connectors, non environmental.

For this version, the size 22 contacts cavities only are for front release front removable contacts. Signal contacts defined by termination code are delivered installed.

Power contacts (size 20, 16, 12) are delivered with crimp termination. Coaxial twinax, and quadrax contacts are to be ordered separately.

G: Receptacle connectors, non environmental.

For this version, signal (size 22), power (size 20, 16, 12), size 5 coaxial and size 8 coaxial or triaxial contact cavities are for front removable contacts. Size 1 coaxial contacts remain front release/rear removable. Signal and power contacts are delivered installed. Coaxial, twinax and quadrax contacts are to be ordered separately.

Shell size _____

1: 3 small cavities**2:** 3 large cavities**3:** 6 large cavities

Shell style _____

R: Alodine 1200 plated receptacle**F:** Nickel plated receptable**S:** Chromatation plated receptacle (RoHs)**T:** Chromatation plated plug (RoHs)Insert combination code ⁽¹⁾ _____

Contact termination _____

Without contacts**X:** Without contacts**Wire wrap****K:** Wire wrap contact, 1 level (1 = .272)**V:** Wire wrap contact, 2 levels (1 = .390)**W:** Wire wrap contact, 3 levels (1 = .524)**L:** Wire wrap contact, 4 levels (1 = .660)**PC tail contacts**

RoHs	Gold	Pre-tinned	Length
RA	YA	ZA	.150
R	Y	Z	.250
RB	YB	ZB	.375
RC	YC	ZC	.500

Modification code

See pages 4-30 to 4-32 _____

Polarization code ⁽³⁾

See pages 4-33 to 4-34 _____

NOTES: (1) Insert combination codes on pages 4-23 to 4-29 and contact arrangements on pages X to X.

(2) For F class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB applied to size 22 only other sizes are crimp version.

For G class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB,R,RA,RB,RC applied to all contact sizes except size 1. If you need to use reduced crimp barrel contacts, use code X and order signal and power contacts separately. Coax, twinax or power size 5 or 8, coax 1 contacts must always be ordered separately.

(3) Without termination code, the connector is delivered polarization hardware unassembled.

Polarization code 00, the connector is delivered without polarizing hardware.

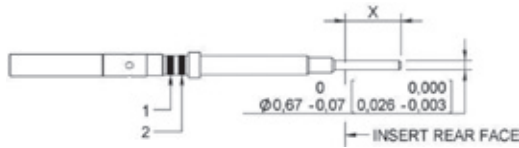
Polarization code from 01 to 216, the connector is delivered with the polarization hardware assembled as defined by the code.

REMARK: dust caps conductive on receptacle are included in the delivery.

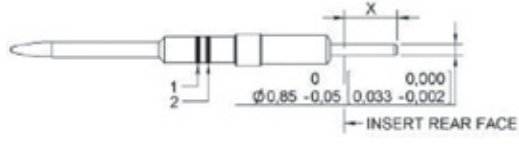
CONTACTS

NSX F/G – FRONT REMOVABLE PC TAIL

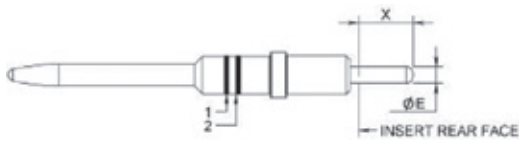
SIZE 22 SOCKET CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool	Color band 1	Color band 2	Figure			
620360	YA	4.60/3.80 (.181/.150)	282500	orange	green				
620360005	ZA								
620360500	RA								
620361	Y	7.20/6.40 (.283/.252)							
620361005	Z								
620361500	R								
620362	YB	10.30/9.50 (.406/.374)							
620362005	ZB								
620362500	RB								
620363	YC	13.60/12.80 (.535/.504)							
620363005	ZC								
620363500	RC								

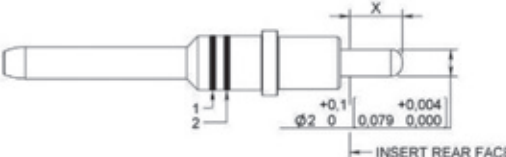
SIZE 20 PIN CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool	Color band 1	Color band 2	E dia mm (inch)	Figure					
620214018	YA	4.60/3.80 (.181/.150)	282503	orange	red	0.85/0.80 (.033/.031)						
620214019	ZA											
620214518	RA											
620214010	Y	7.20/6.40 (.283/.252)	282503	orange	red							
620214013	Z											
620214510	R											
620214003	YB	10.30/9.50 (.406/.374)	282503	orange	red							
620214008	ZB											
620214503	RB											
620214021	YC	13.60/12.80 (.535/.504)										
620214022	ZC											
620214521	RC											

SIZE 16 PIN CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool	Color band 1	Color band 2	E dia mm (inch)	Figure
620234018	YA	4.60/3.80 (.181/.150)	282504	orange	red	1.32/1.22 (.052/.048)	
620234019	ZA						
620234518	RA						
620234004	Y	7.20/6.40 (.283/.252)	282504	orange	red		
620234017	Z						
620234504	R						
620234003	YB	10.30/9.50 (.406/.374)	282504	orange	red		
620234008	ZB						
620234503	RB						
620234021	YC						
620234022	ZC						
620234521	RC						

SIZE 12 PIN CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool	Color band 1	Color band 2	Figure
620244018	YA	4.60/3.80 (.181/.150)	282549005	orange	yellow	
620244019	ZA					
620244518	RA					
620244005	Y	7.20/6.40 (.283/.252)	282549005	orange	Yellow	
620244016	Z					
620244505	R					
620244003	YB	10.30/9.50 (.406/.374)	282549005	orange	yellow	
620244008	ZB					
620244503	RB					
620244021	YC					
620244022	ZC					
620244521	RC					

SIZE 22 SOCKET FRONT REMOVABLE WIRE WRAP CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool	Color band 1	Color band 2	Figure
620350	K	6.9/0.4 (.256/.287)	282500	orange	green	
620351	V	9.9/0.4 (.374/.405)				
620352	W	13.3/0.4 (.508/.540)				
620353	L	16.8/0.4 (.645/.677)				

SIZE 16 PIN COAX CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool
618155001	YA	3.8/4.6 (.150/.181)	282504
618155002	Y	6.4/7.2 (.252/.283)	
618155011	YB	9.5/10.3 (.374/.405)	

CONTACTS**NSX F/G – FRONT REMOVABLE PC TAIL****SIZE 12 PIN COAX CONTACTS**

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool
618149017	YA	3.8/4.6 (.150/.181)	282549005
618149016	Y	6.4/7.2 (.252/.283)	
618149018	YB	9.5/10.3 (.374/.405)	
618149012	YC	12.8/13.6 (.503/.535)	
618149013	ZC	12.8/14.1 (.503/.558)	

SIZE 8 PIN COAX CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool
619140009	YA	12.40/12.20 (.488/.480)	282549009
619140014	ZA		
619140509	RA		
619140010	Y	15.05/14.85 (.592/.584)	
619140013	Z		
619140510	R		
619140007	YB	18.15/17.95 (.715/.706)	
619140008	ZB		
619140507	RB		
619140011	YC	21.45/21.25 (.844/.836)	
619140012	ZC		
619140511	RC		

SIZE 5 PIN COAX CONTACTS

Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool
620133009	YA	4.60/3.80 (.181/.150)	282549006
620133509	RA		
620133006	Y	7.20/6.40 (.283/.252)	
620133007	Z		
620133506	R		
620133003	YB	10.30/9.50 (.406/.374)	
620133001	ZB		
620133503	RB		
620133010	YC	13.60/12.80 (.535/.504)	
620133510	RC		

SIZE 8 PIN TRIAX PC TAIL FRONT RELEASE VERSION

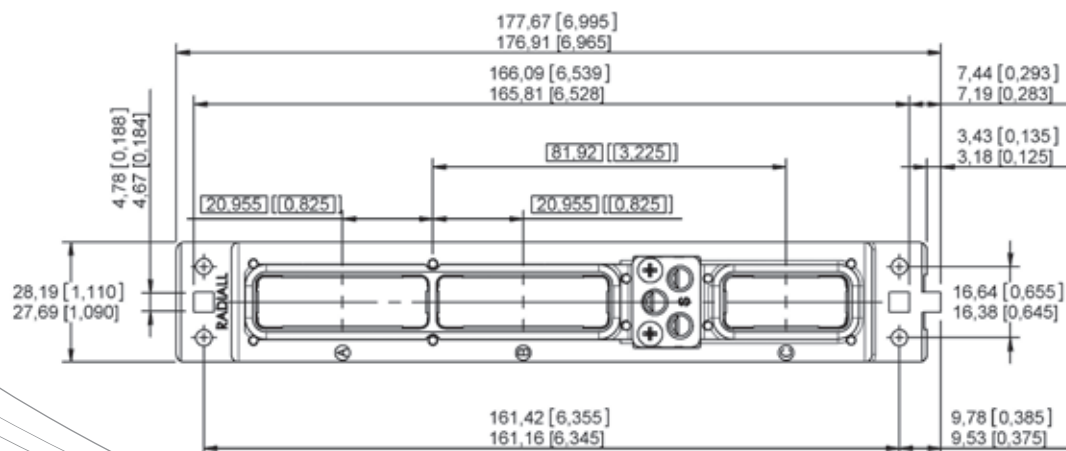
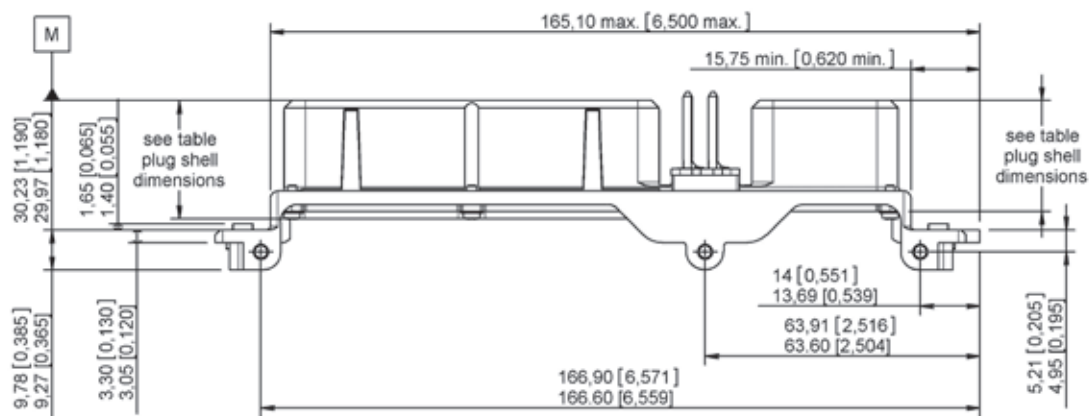
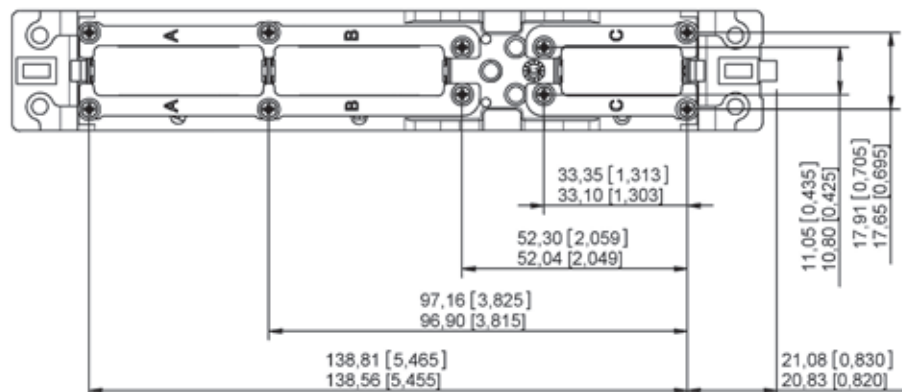
Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool
619162014	YA	4.60/3.80 (.181/.150)	282549009
619162015	ZA		
619162514	RA		
619162011	Y	7.20/6.40 (.283/.252)	
619162012	Z		
619162511	R		
619162016	YB	10.30/9.50 (.406/.374)	
619162017	ZB		
619162516	RB		
619162009	YC	13.60/12.80 (.535/.504)	
619162010	ZC		
619162509	RC		

SIZE 8 PIN QUADRAx CONTACTS

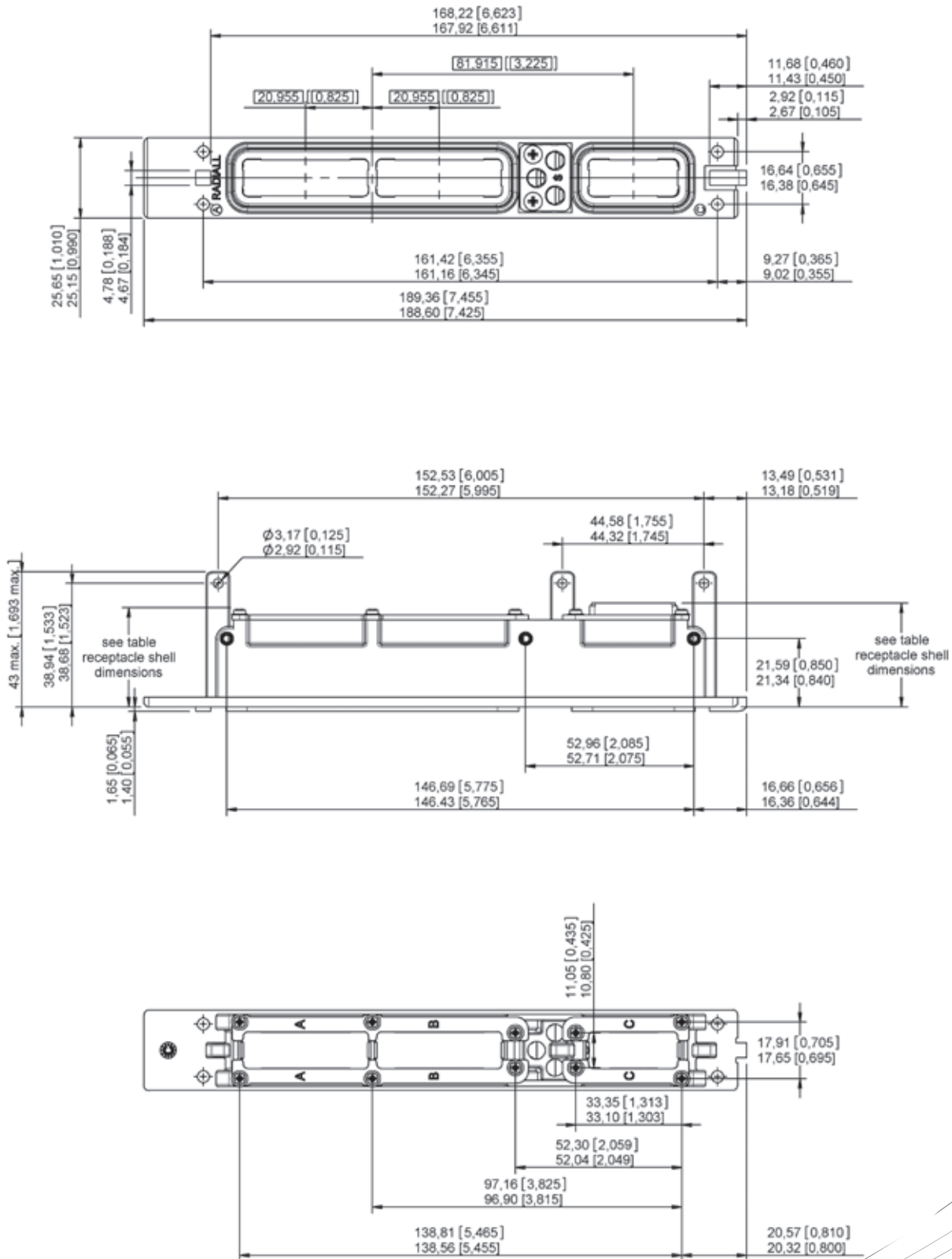
Part number	Contact termination	Dimension X mm (inch)	Ins/Ext Tool
620176009	YA	4.60/3.80 (.181/.150)	282549009
620176016	ZA		
620176509	RA		
620176008	Y	7.20/6.40 (.283/.252)	
620176010	Z		
620176508	R		
620176011	YB	10.30/9.50 (.406/.374)	
620176012	ZB		
620176511	RB		
620176013	YC	13.60/12.80 (.535/.504)	
620176014	ZC		
620176513	RC		

DIMENSIONS

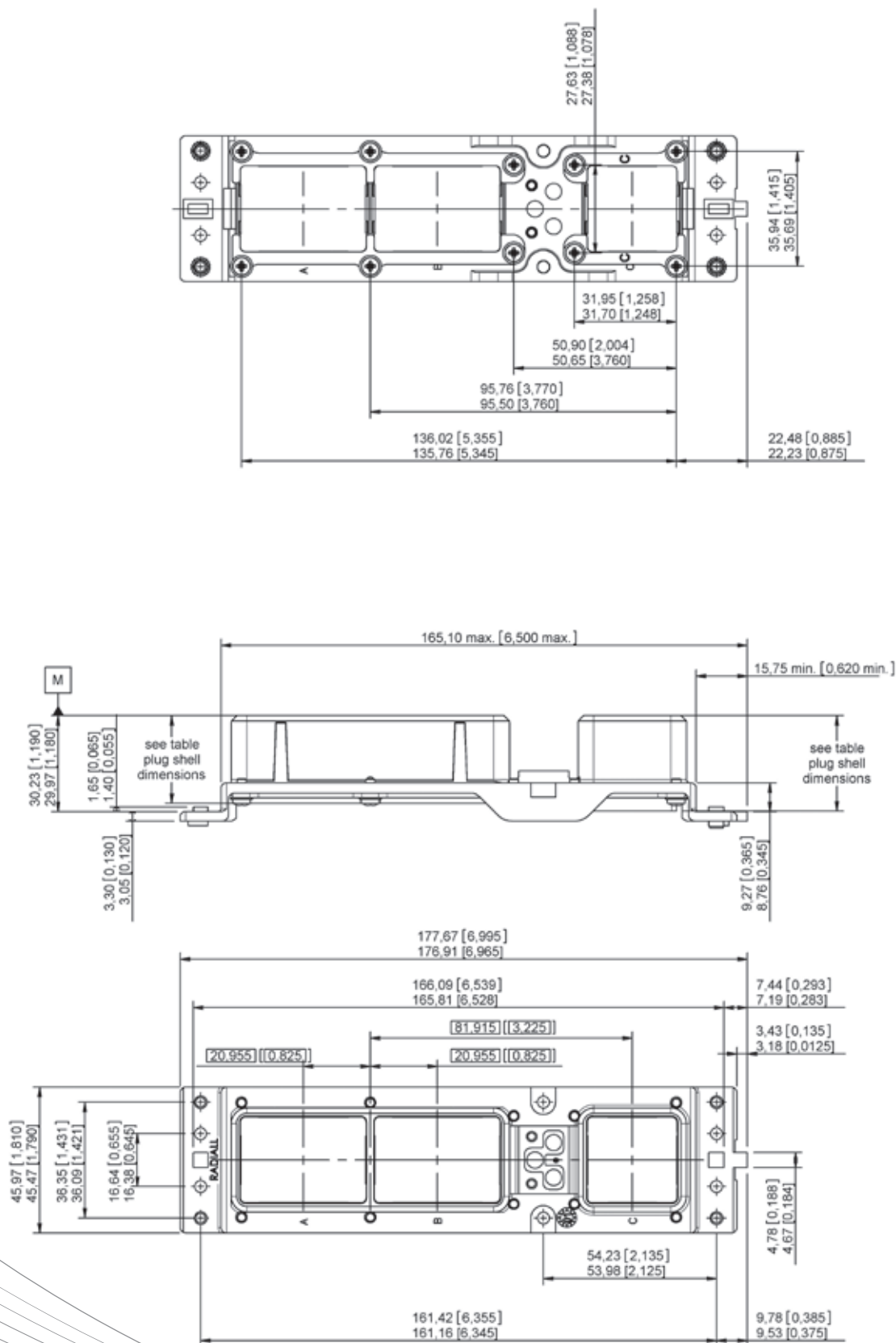
NON ENVIRONMENTAL SIZE 1 PLUG SHELL DIMENSIONS



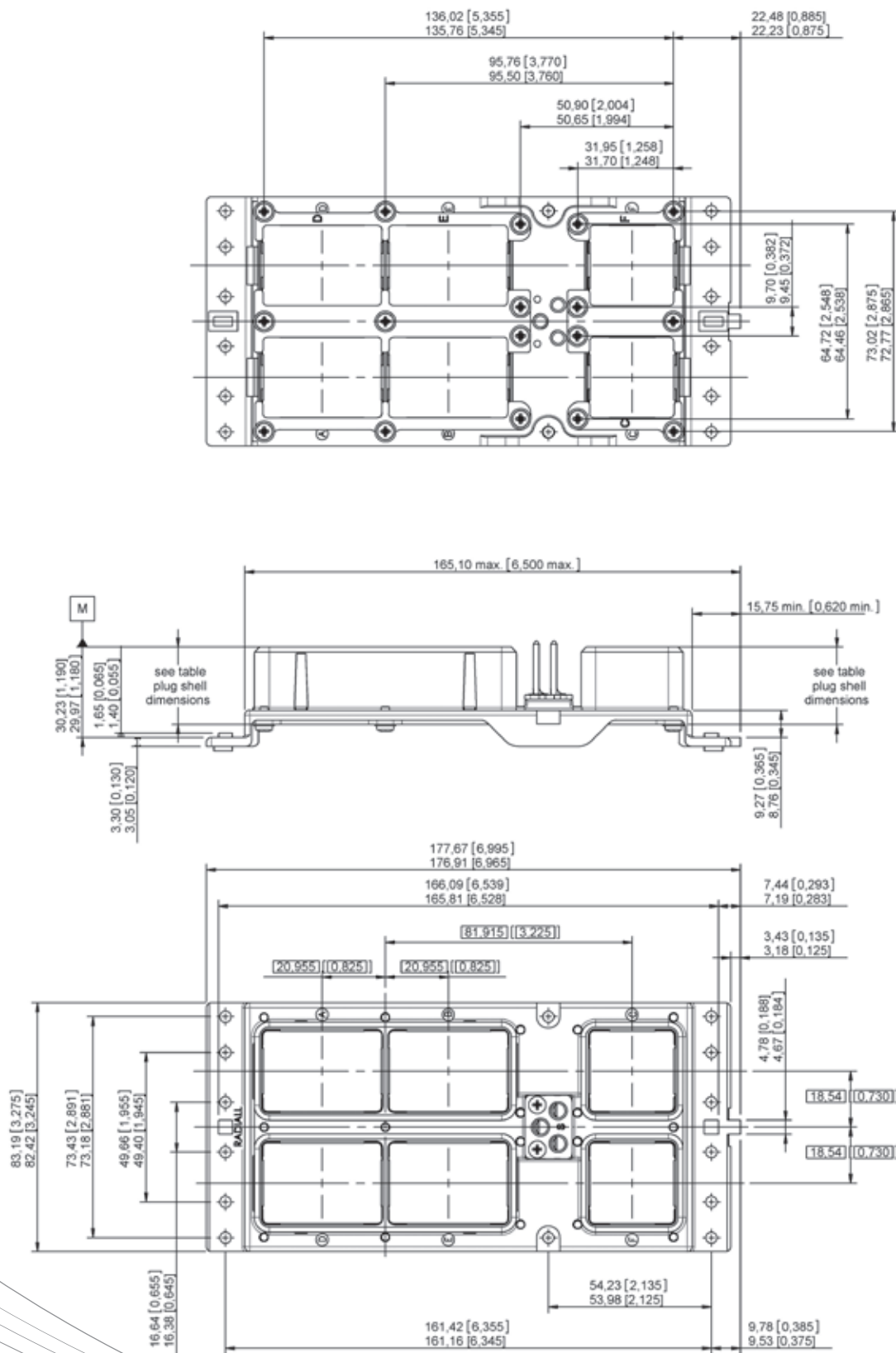
NON ENVIRONMENTAL SIZE 1 RECEPTACLE SHELL DIMENSIONS



NON ENVIRONMENTAL SIZE 2 PLUG SHELL DIMENSIONS



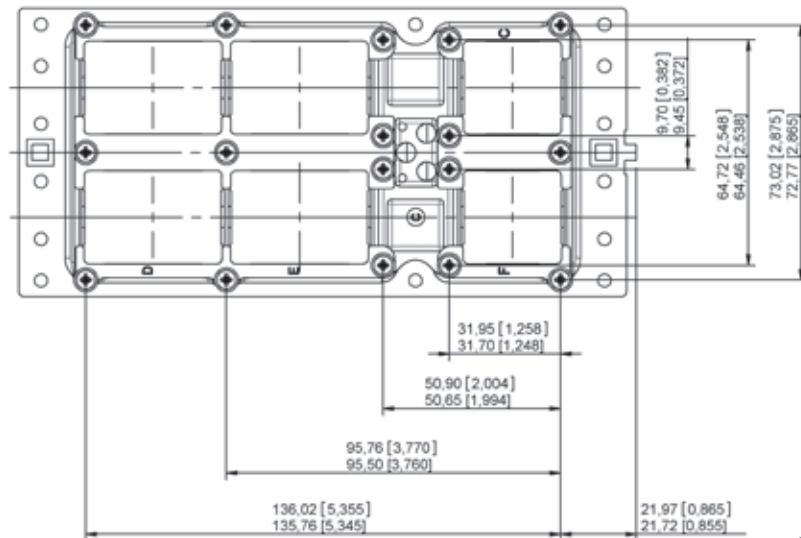
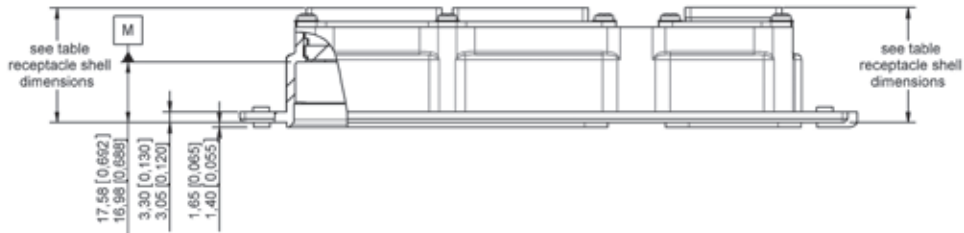
NON ENVIRONMENTAL SIZE 3 PLUG SHELL DIMENSIONS



Technical drawing of the front view of the 1200x600 mm oven. The drawing shows a rectangular unit with four square oven compartments arranged in a 2x2 grid. The top-left compartment is labeled '1200x600'. The unit features a control panel on the right side with four buttons and a digital display. Dimensions are provided in millimeters and inches for the overall unit, individual compartments, and internal spacing.

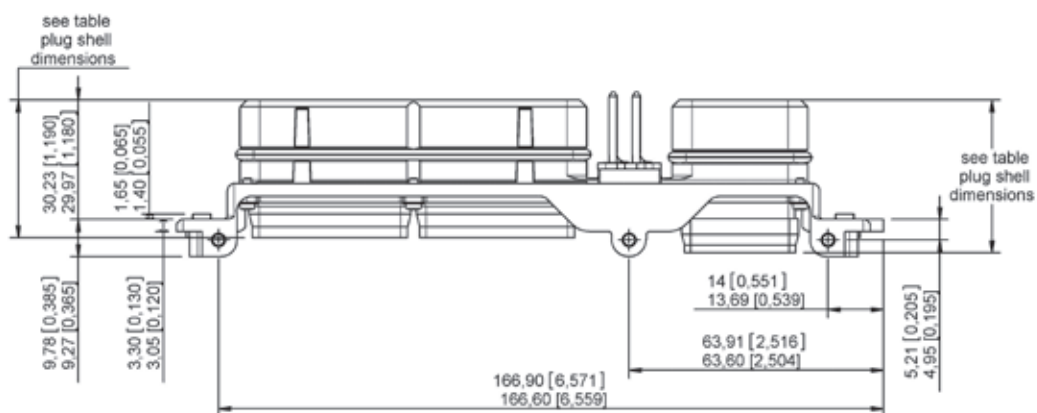
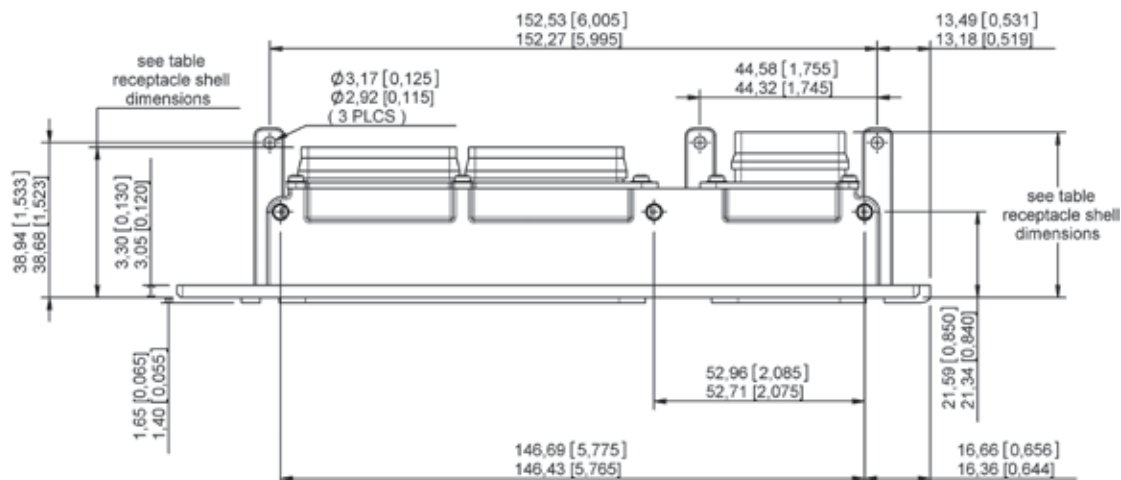
Dimensions (mm [inches]):

- Overall width: 161.42 [6.350]
- Overall height: 83.19 [3.275]
- Top panel width: 81.915 [3.225]
- Top panel height: 11.68 [0.460]
- Top panel depth: 11.53 [0.450]
- Top panel thickness: 2.92 [0.115]
- Top panel depth: 2.67 [0.105]
- Top panel depth: 4.78 [0.188]
- Top panel depth: 4.67 [0.184]
- Top panel depth: 18.542 [0.730]
- Top panel depth: 18.542 [0.730]
- Top panel depth: 54.23 [2.135]
- Top panel depth: 53.98 [2.125]
- Top panel depth: 168.22 [6.623]
- Top panel depth: 167.92 [6.611]
- Top panel depth: 177.16 [6.975]
- Top panel depth: 176.40 [6.945]
- Top panel depth: 20.955 [0.825]
- Top panel depth: 20.955 [0.825]
- Top panel depth: 49.40 [1.945]
- Top panel depth: 49.66 [1.955]
- Top panel depth: 73.43 [2.891]
- Top panel depth: 73.18 [2.881]
- Top panel depth: 82.42 [3.245]
- Top panel depth: 83.19 [3.275]

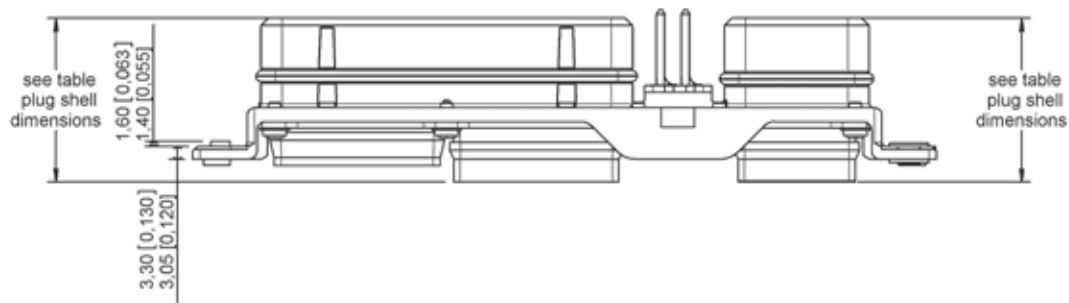
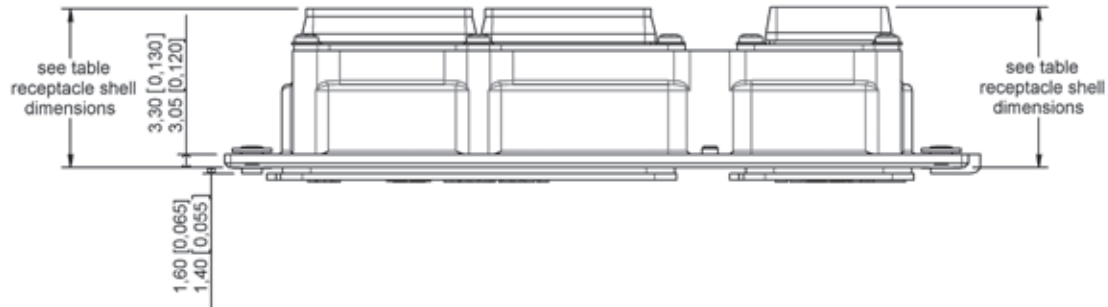


DIMENSIONS

ENVIRONMENTAL SIZE 1 PLUG AND RECEPTACLE DIMENSIONS



ENVIRONMENTAL SIZE 2 & 3 PLUG AND RECEPTACLE DIMENSIONS



DIMENSIONS

PLUG SHELL DIMENSIONS

Shell size	Cavity	Contact arrangement	Contact size	Class N mm (inch) max	Classe E,H,C mm (inch) max
1	A, B	60	22	28 (1.102)	35.5 (1.398)
		30T2	22	28 (1.102)	35.5 (1.398)
			8		36.8 (1.449)
		4C	5	30.5 (1.200)	-
	C	5C2	16	30.5 (1.200)	39.3 (1.547)
			12		
			5		
		40	22	28 (1.102)	35.5 (1.398)
4	12	30.5 (1.200)	39.3 (1.547)		
2, 3	A, B, D, E	150	22	28 (1.102)	35.5 (1.398)
		121	22	28 (1.102)	35.5 (1.398)
			20	30.5 (1.200)	39.3 (1.547)
			16		
		120T2	22	28 (1.102)	35.5 (1.398)
			8		36.8 (1.449)
		118Q2	22	28 (1.102)	35.5 (1.398)
			8	28 (1.102)	36.8 (1.449)
		73C3	22	28 (1.102)	35.5 (1.398)
			coax		-
		71C1	22	28 (1.102)	35.5 (1.398)
			1		-
		1C71	22	28 (1.102)	35.5 (1.398)
			1		-
		60	20	30.5 (1.200)	39.3 (1.547)
		24	12	30.5 (1.200)	39.3 (1.547)
		10T10	8	30.5 (1.200)	39.3 (1.547)
		Q11	8	30.5 (1.200)	39.3 (1.547)
		C2	1	28 (1.102)	-
		2C	1	28 (1.102)	-
		C4	1	28 (1.102)	-
		35	16	30.5 (1.200)	39.3 (1.547)
		110	22	28 (1.102)	-
			20	30.5 (1.200)	
			12		
		36F36	16 LuxCis	30.5 (1.200)	39 (1.535)
		20F12Q8	8	30.5 (1.200)	39 (1.535)
			16 LuxCis		
		20F12T8	8	30.5 (1.200)	39 (1.535)
			16 LuxCis		

PLUG SHELL DIMENSIONS

Shell size	Cavity	Contact arrangement	Contact size	Class N mm (inch) max	Classe E.H.C mm (inch) max
2, 3	C, F	100	22	28 (1.102)	35.5 (1.398)
		85	22	28 (1.102)	35.5 (1.398)
			20		39.3 (1.547)
			16		
		34	20	30.5 (1.200)	39.3 (1.547)
			16		
		20T4	20	30.5 (1.200)	39.3 (1.547)
			8		
		20Q4	20	30.5 (1.200)	39.3 (1.547)
			8		
		13C2	20	30.5 (1.200)	39.3 (1.547)
			16		
			12		
			5		
		6T6	8	30.5 (1.200)	39.3 (1.547)
		Q6	8	30.5 (1.200)	39.3 (1.547)
		62Q2	22	28 (1.102)	36.8 (1.449)
			16		
			8		
		68Q2	22	28 (1.102)	35.5 (1.398)
			8		36.8 (1.449)
		11Q2	20	30.5 (1.200)	39.3 (1.547)
			16		
			12		
			8		
		11WQ2	20	30.5 (1.200)	39.3 (1.547)
			16		
			12		
			8		
		6P6	8	30.5 (1.200)	39.3 (1.547)
		59	22	28 (1.102)	35.5 (1.398)
			16	30.5 (1.200)	39.3 (1.547)
			12		
		12F5C2	16 LuxCis	30.5 (1.200)	39 (1.535)
			16		
			5		
		17F12Q2	16 LuxCis	30.5 (1.200)	39 (1.535)
			16		
			12		
			5		

DIMENSIONS

RECEPTACLE SHELL DIMENSIONS

Shell size	Cavity	Contact arrangement	Contact size	Class N mm (inch) max	Class E, C mm (inch) max	Class F mm (inch) max	Classe G mm (inch) max
1	A, B	60	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
		30T2	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
			8		40.5 (1.594)		
		4C	5	33.45 (1.317)	-	-	30.93/29.84 (1.218/1.175)
	C	5C2	16	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			12				
			5				
		40	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
4	12	33.45 (1.317)	43 (1.693)	-	-		
2, 3	A, B, D, E	150	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
		121	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
			20	33.45 (1.317)	43 (1.693)	33.45 (1.317)	
			16				
		120T2	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
			8	31 (1.220)	40.5 (1.594)	30.93/29.84 (1.218/1.175)	-
		118Q2	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
			8	31 (1.220)	40.5 (1.594)	30.93/29.84 (1.218/1.175)	-
		73C3	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
			coax		-		
		71C1	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
			1		-		
		1C71	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
			1		-		
		60	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		24	12	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		10T10	8	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		Q11	8	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		C2	1	31 (1.220)	-	-	-
		2C	1	31 (1.220)	-	-	-
		C4	1	31 (1.220)	-	-	-
		35	16	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		110	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
				33.45 (1.317)	43 (1.693)	33.45 (1.317)	

RECEPTACLE SHELL DIMENSIONS

Shell size	Cavity	Contact arrangement	Contact size	Class N mm (inch) max	Class E, C mm (inch) max	Class F mm (inch) max	Classe G mm (inch) max
2, 3	A, B, D, E	36F36	16 LuxCis	35.5 (1.398)	44 (1.732)	-	-
		20F12Q8	16 LuxCis	35.5 (1.398)	44 (1.732)	-	30.93/29.84 (1.218/1.175)
			8				
		20F12T8	16 LuxCis	35.5 (1.398)	44 (1.732)	-	30.93/29.84 (1.218/1.175)
			8				
	C, F	100	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	-
		85	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
			20		40.5 (1.595)		
			16				
		34	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			16				
		20T4	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			8				
		20Q4	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			8				
		13C2	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			16				
			12				
			5				
		6T6	8	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		Q6	8	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
		62Q2	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
			16		40.5 (1.595)		
			8				
		68Q2	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
			8		40.5 (1.595)		
		11Q2	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			16				
			12				
			8				
		11WQ2	20	33.45 (1.317)	43 (1.693)	-	30.93/29.84 (1.218/1.175)
			16				
			12				
			8				
		6P6	8	33.45 (1.317)	43 (1.693)	-	-
		59	22	31 (1.220)	38.9 (1.531)	30.93/29.84 (1.218/1.175)	30.93/29.84 (1.218/1.175)
			16	33.45 (1.317)	43 (1.693)	33.45 (1.317)	
			12				
		12F5C2	16 LuxCis	35.5 (1.398)	44 (1.732)	-	-
			16				
			5				
		17F12Q2	16 LuxCis	35.5 (1.398)	44 (1.732)	-	30.93/29.84 (1.218/1.175)
			16				
			12				
			5				

CLASS F: size 22 contacts are front release, front removable.

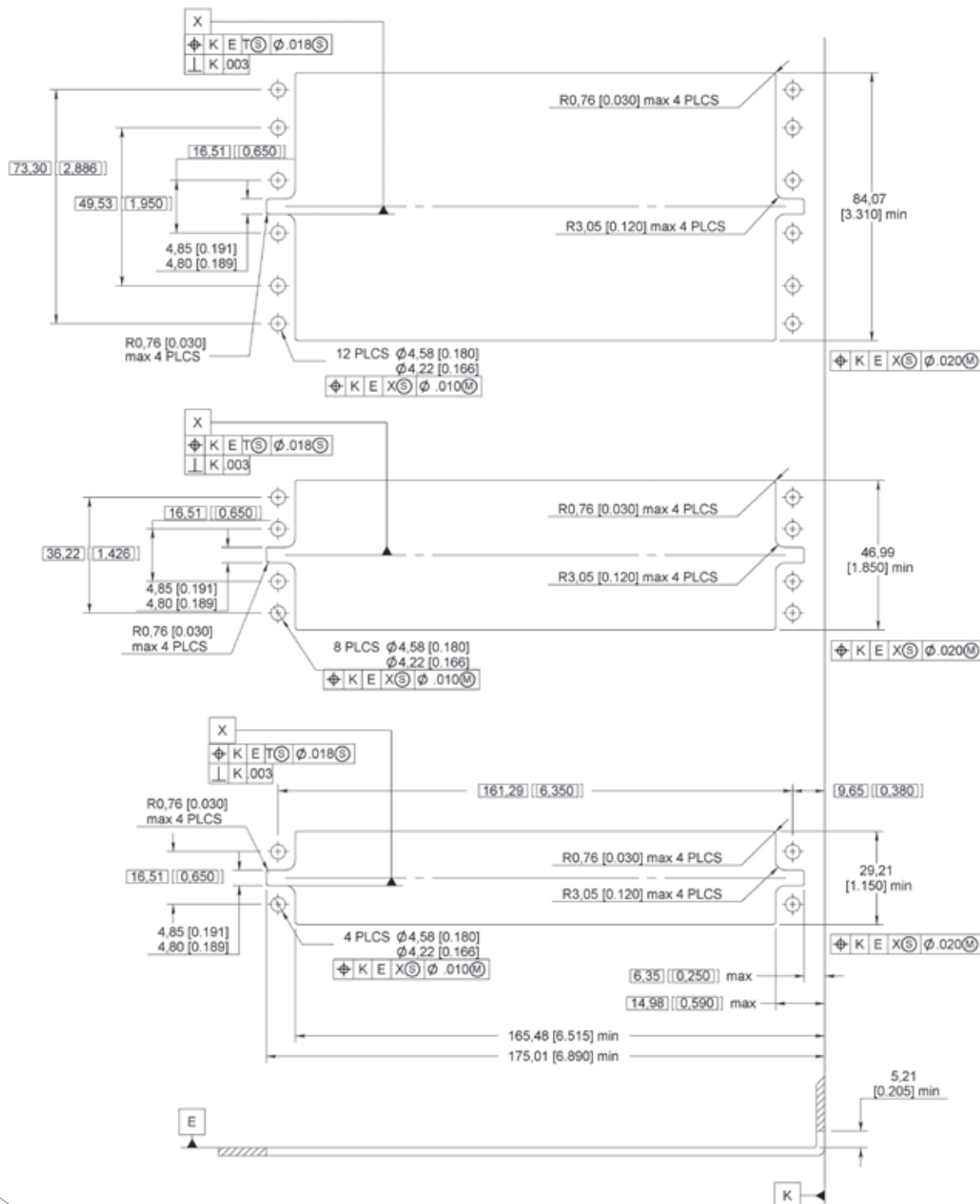
Other sizes are rear release, rear removable.

CLASS G: all contacts are front release,
front removable.

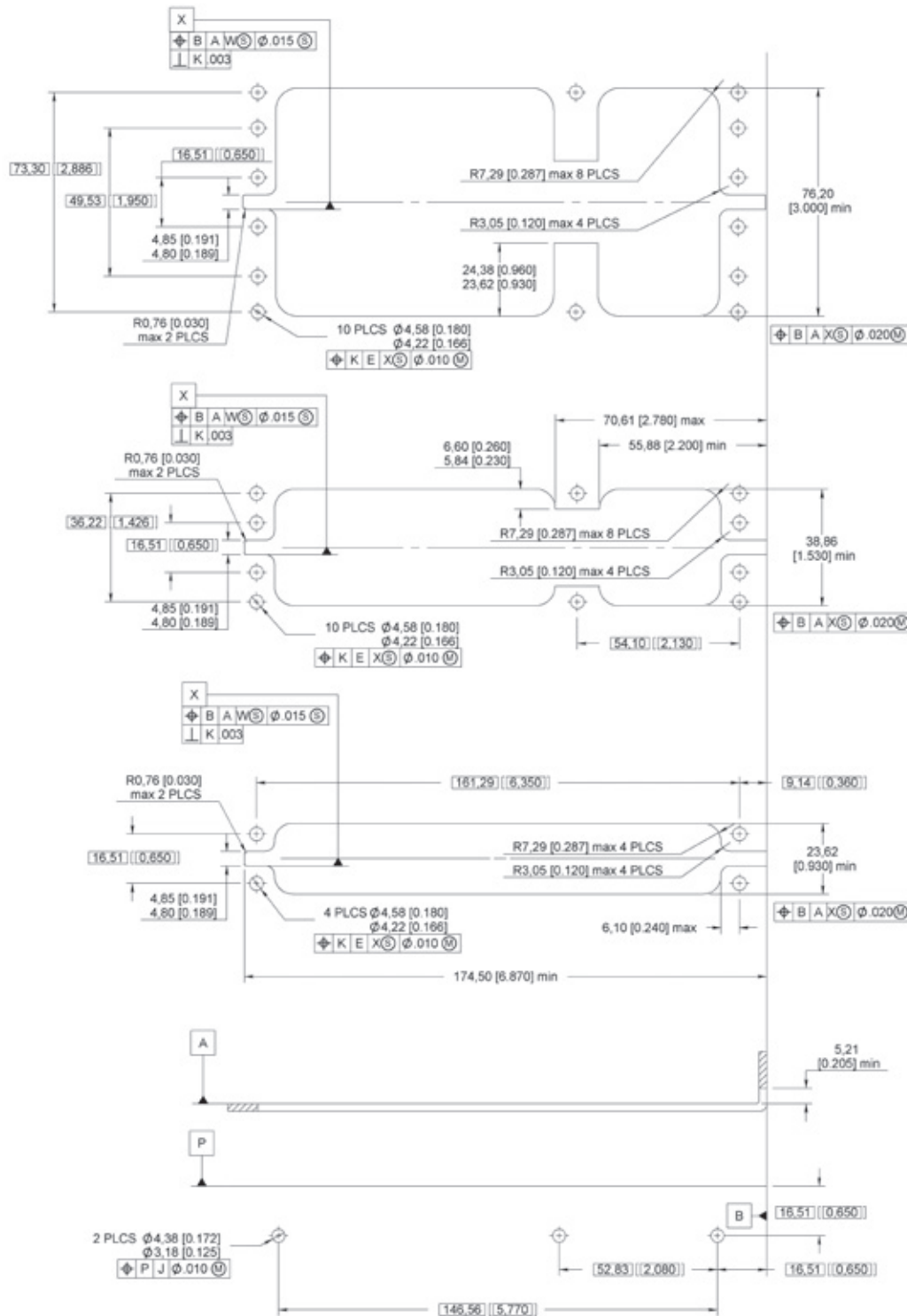
www.radiall.com

PANEL CUT OUT

PANEL CUT OUT FOR PLUG SIZE 1, 2 AND 3



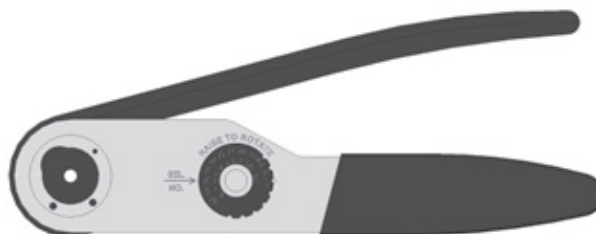
PANEL CUT OUT FOR RECEPTACLE SIZE 1, 2 AND 3



TOOLS

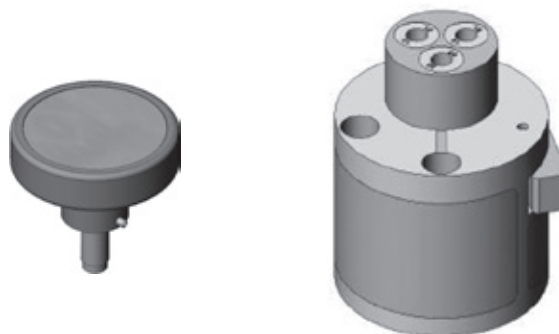
CRIMPING TOOLS

Part number	Crimping tools
282291	M22520/1.01
282281	M22520/2.01
282292	M22520/4.01
282293	M22520/5.01
/	M22520/23.01
/	M22520/31.01



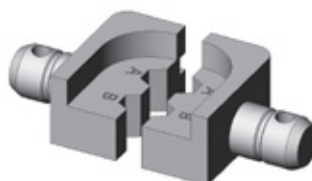
POSITIONERS

Part number	Mil spec P/N
282972	M22520/1.02
282579	M22520/1.11
282997	M22520/1.13
282971	M22520/2.08
282970	M22520/2.23
/	M22520/23.09
282550 (DANIELS K345)	/
282555 (DANIELS K370)	/
282556	/
282587	/
282588	/



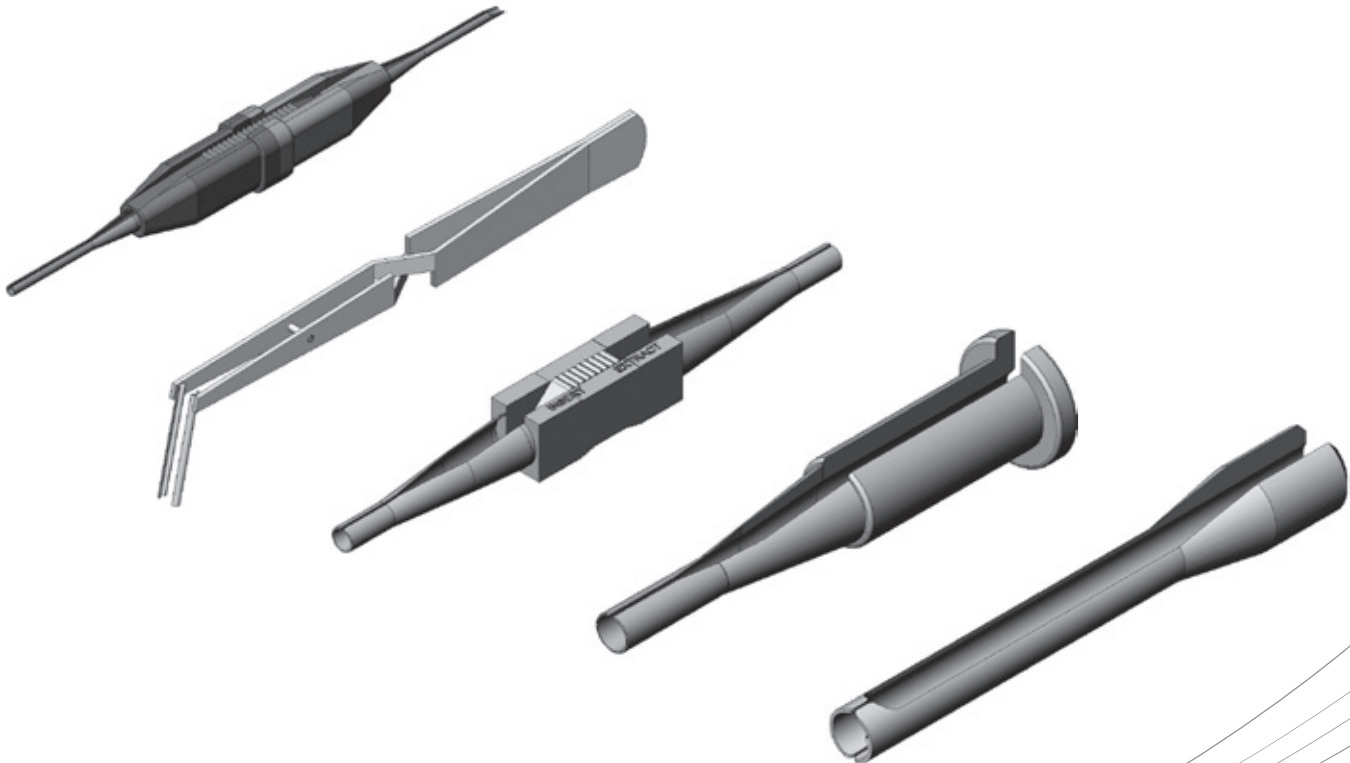
DIES

Part number	Mil spec P/N
282246	M22520/5.05
/	M22520/5.13
/	M22520/5.29
282236	M22520/5.45
282247	M22520/5.61
/	M22520/23.02
/	M22520/5.104



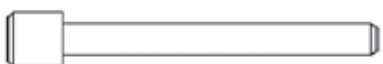
INSERTION/EXTRACTION TOOLS

Part number	Mil spec P/N	Description
282885	M81969/1.01	ins/ext tool for rear release rear removable size 22 contacts (crimp version)
282886	M81969/1.02	ins/ext tool for rear release rear removable size 20 contacts (crimp version)
282546	M81969/1.03	ins/ext tool for rear release rear removable size 16 contacts (crimp version)
282549004	M81969/14.04	extraction tool for rear release rear removable size 12 contacts
/	M81969/19.02	extraction tool for front release rear removable size 12 power contacts
/	M81969/19.03	extraction tool for front release rear removable size 8 contacts
282946	M81969/28.01	ins/ext tool for rear release rear removable size 5 coaxial contacts (metallic)
282549001	M81969/28.03	extraction tool for rear release rear removable size 8 contacts
282500	/	ins/ext tool for front release front removable size 22 contacts
282503	/	ins/ext tool for front release front removable size 20 contacts
282504	/	ins/ext tool for front release front removable size 16 contacts
282547	/	extraction tool for rear release rear removable size 12 contacts (crimp version)
282548	/	extraction tool for rear release rear removable size 5 coaxial contacts
282549005	/	ins/ext tool for front release front removable size 12 contacts
282549009	/	extraction tool for front release front removable size 8 triaxial contacts
282549011	/	insertion tool for front release front removable size 8 triaxial contacts, solder tail version
282549012	/	extraction tool for front release rear removable size 8 triaxial contacts
282890	/	ins/ext tool for rear release size 22 contacts solder tail and wire wrap terminations
282892	/	extraction tool for rear release rear removable size 16 coaxial contacts
282945	/	extraction tool for rear release rear removable size 12 coaxial contacts
282548	/	extraction tool for rear release rear removable size 5 coaxial contacts (plastic)



ACCESSORIES

FILLER PLUGS AND SEALING PLUGS

Size	Contact cavity type	Version	Ins	Ext	Color/type	Part number	Figure
22	for pin & socket	non environmental	rear	rear	black	620920	
		environmental				616910	
	for socket	non environmental	front	front	aluminium	620919	
		environmental			white	620926	
20	for pin & socket	non environmental	rear	rear	red	620921	
		environmental				616911	
16	for pin & socket	non environmental	rear	rear	blue	620922	
		environmental				616912	
12	for pin & socket	non environmental	rear	rear	yellow	620923	
		environmental				616913	
	for socket	non environmental	front	front	white	620936001	

The arrow shows the direction which you have to insert the plug.

FILLER PLUGS AND SEALING PLUGS

Size	Contact cavity type	Version	Ins	Ext	Color/type	Part number	Figure
12	for pin	non environmental	front	front	nickel	620936002	
8	for pin	non environmental	rear	rear	nickel	619953	
			front	front	nickel	619952	
	for socket	environmental	rear	rear	nickel	619950	
	for pin & socket				red	618915	
5	for pin	non environmental	rear	rear	white	620924	
	for socket					620925	
	for pin & socket	environmental	front	front	red	620937001	
			rear	rear		92505560	

The arrow shows the direction which you have to insert the plug.

ACCESSORIES

DUMMY INSERTS

When a cavity shell is not fitted with one of the inserts shown on pages X to X, the cavity shell is fitted with a dummy insert. Dummy inserts are made of aluminium alloy and are available for each cavity shell in two kind of plating: ALODINE 1200 or nickel.

Shell size	Cavity	Dummy insert P/N	Figure
1	A or B	620910 (Alodine 1200) 620913001 (nickel)	
	C	620911 (Alodine 1200) 620913002 (nickel)	
2 & 3	A or B or D or E	620912 (Alodine 1200) 620913003 (nickel)	
	C or F	620913 (Alodine 1200) 620913004 (nickel)	

DUST CAPS

Dust caps are made of thermoplastic. They are available either conductive (black color) or not (red color).

Electrical characteristics	Shell type	Shell size	Shell cavity	Part number	Figure
Conductive	Plug	1	A/B	620995003	
			C	620995004	
		2 & 3	A/B & D/E	620995007	
			C & F	620995008	
	Receptacle	1	A/B	620995011	
			C	620995012	
		2 & 3	A/B & D/E	620995015	
			C & F	620995016	

ACCESSORIES

DUST CAPS

Electrical characteristics	Shell type	Shell size	Shell cavity	Part number	Figure
Conductive	Plug	1	A/B	620995001	
			C	620995002	
			For single shell connector	620995017	
		2 & 3	A/B & D/E	620995005	
			C & F	620995006	
	Receptacle	1	A/B	620995009	
			C	620995010	
			For single shell connector	620995018	
		2 & 3	A/B & D/E	620995013	
			C & F	620995014	

CAVITY REDUCERS

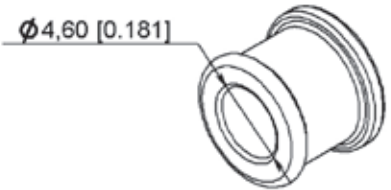
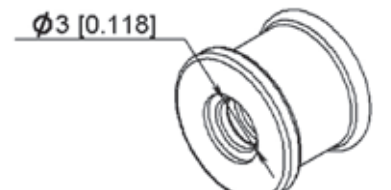
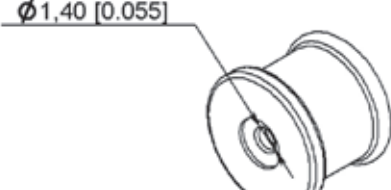
The following parts are cavity reducers which allows the use of a size 12 contact in a size 5 cavity.
These parts are made of copper alloy and are plated with gold over nickel.
Once installed, they cannot be removed.

Electrical characteristics	Part number	Figure
For pin contact	620940	
For socket contact	620941	
For pin contact front release / front removable (FR/FR) connector in version G	620942	

ACCESSORIES

SEALING BOOTS

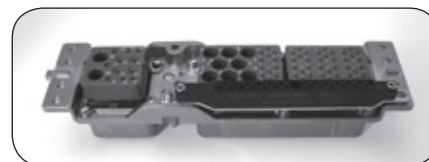
The sealing boots are designed to slide down over the back of the crimped contacts after they have been installed in the connector. The assembly provides bend support and moisture sealing to the contact / cable assembly. Sealing boots are made of fluorosilicon rubber.

Electrical characteristics	Cable outside dia. mm (inch)	Cable	Part number	Figure
5	5 (0.197)	RG 58 RG 141 RG 142 RG 223 RG 400	620939201	
	3.81 (0.150)	RG 180 RG 195	620939200	
	2.59 (0.102) & 2.01 (0.079)	RG 179 RG 316 KX 21	620914001	

GROUNDING BLOCK

Radiall provides a unique feature by integrating a ground block directly on the plug shell for sizes #2 & #3.

This option allows very short ground terminations.



ALIGNMENT BOOTS

Alignment boots are designed to reduce the play at the top of the size 8 pin contacts. Shall be used with non environmental rear release/ rear removable size 8 pin contacts.

Part number: 619960



NSX – SINGLE SHELL CONNECTOR

INTRODUCTION

NSX single shell connectors are designed to accommodate all large cavity inserts. Their characteristics are those shown on page 4-8 except for the following.



NSX series

MATERIALS

Description	Material	Plating
Shell	Aluminum alloy	Cadmium clear chromate or nickel
Insert retention plate	Aluminum alloy	Cadmium clear chromate or nickel
Polarization posts and keys retention plate	Aluminum alloy	Cadmium clear chromate or nickel
Screws washers and clinch-nuts	Stainless steel	/
	Steel	Cadmium clear chromate
Polarization posts and keys	Zinc alloy	Cadmium yellow chromate or nickel

HOW TO ORDER CONNECTOR

NSX – SINGLE SHELL CONNECTOR

NSX	N	P	150	S	00	01
-----	---	---	-----	---	----	----

Series

Class

N: Non environmental (rear removable version only)**E:** Environmental, with grommets and compound.
plug with O-ring (rear removable version only).**H:** Environmental plug without O-ring (rear removable version only)**C:** Non environmental with grommets (rear removable version only)**F:** Non environmental receptable shell } see definition page 4-55**G:** Non environmental receptacle shell }

Shell style

R: Cadmium clear chromate plated receptacle**P:** Cadmium clear chromate plated plug**F:** Nickel plated receptable**B:** Nickel plated plug**M:** Nickel plated plug fitted with grounding spring fingers (see pages 4-91 to 4-95)

Contact arrangement

See contact arrangements on pages 4-11 to 4-22

Contacts termination ⁽¹⁾**Without contacts****X:** Without contacts**S:** Crimp contacts**Wire wrap****K:** Wire wrap contact, 1 level (1 = .272)**V:** Wire wrap contact, 2 levels (1 = .390)**W:** Wire wrap contact, 3 levels (1 = .524)**PC tail contacts**

RoHS	Gold	Pre-tinned	Length
RA	YA	ZA	.150
R	Y	Z	.250
RB	YB	ZB	.375
RC	YC	ZC	.500

Modification code

00: 4 mounting holes .146/.156 dia**01:** 4 clinch nuts 4.40 UNC**03:** 4 each .122 dia mounting holes c'sunk .230 dia x 100°**04:** 4 each .122 dia mounting holes c'sunk .230 dia x 82°**05:** 4 each .137 dia mounting holes c'sunk .230 dia x 82°**23:** 4 floating eyelets .122 - .126 diaPolarization code ⁽²⁾

See pages 4-85 to 4-86

NOTES:

[1] For F class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB applied to size 22 only other sizes are crimp version. For G class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB,R,RA,RB,RC applied to all contact sizes except size 1. All classes except F&G: use X or S. If you need to use reduced crimp barrel contacts, use code X and order signal and power contacts separately. Coax, twinax or power size 5 or 8, coax 1 contacts must always be ordered separately.

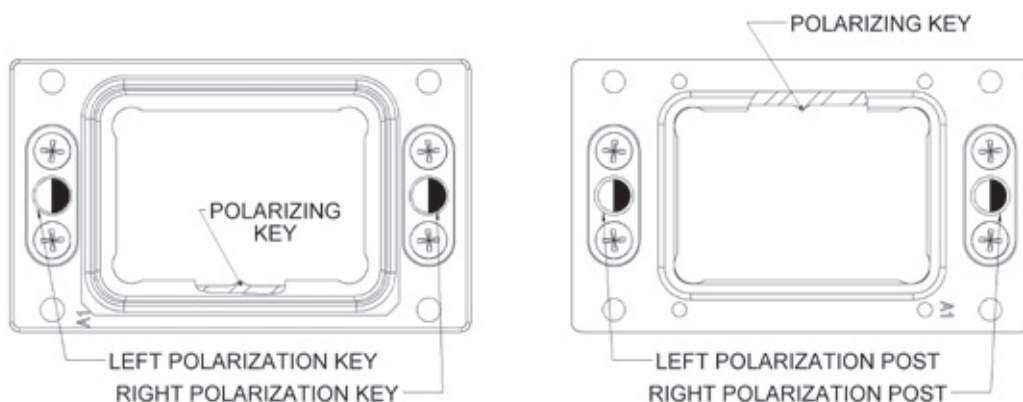
[2] Without polarization code, the connector is delivered polarization hardware unassembled.

Polarization code 00, the connector is delivered without polarization hardware.

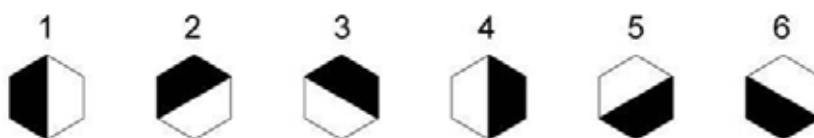
Polarization code 01 to 36, the connector is delivered with the polarization hardware assembled as defined by the code.

www.radiall.com

HORIZONTAL INSTALLATION



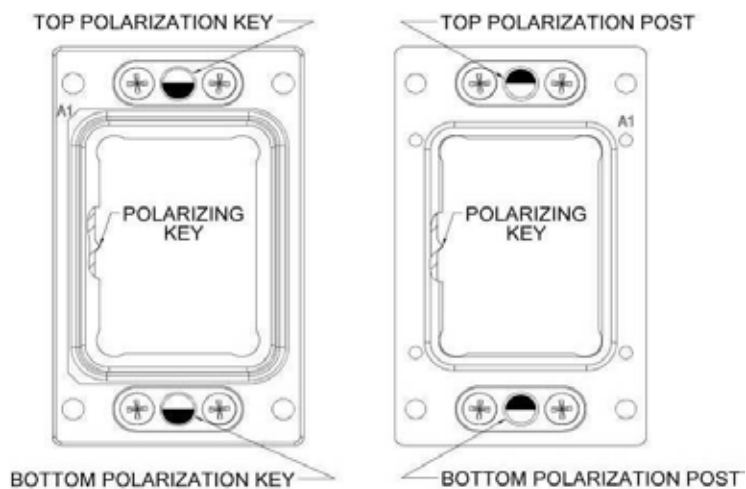
MATING FACE



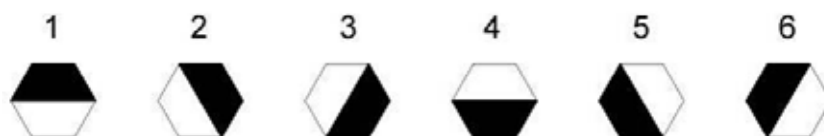
POSITION OF POST (DARK) AND KEYHOLE (LIGHT)

Position	Equipment receptacle		Rack plug	
	Left. key	Right. key	Left. post	Right. post
01	1	1	1	1
02	3	4	4	5
03	2	4	4	6
04	1	4	4	1
05	6	4	4	2
06	5	4	4	3
07	4	5	3	4
08	3	5	3	5
09	2	5	3	6
10	1	5	3	1
11	6	5	3	2
12	5	5	3	3
13	4	6	2	4
14	3	6	2	5
15	2	6	2	6
16	1	6	2	1
17	6	6	2	2
18	5	6	2	3
19	4	1	1	4
20	3	1	1	5
21	2	1	1	6
22	4	4	4	4
23	6	1	1	2
24	5	1	1	3
25	4	2	6	4
26	3	2	6	5
27	2	2	6	6
28	1	2	6	1
29	6	2	6	2
30	5	2	6	3
31	4	3	5	4
32	3	3	5	5
33	2	3	5	6
34	1	3	5	1
35	6	3	5	2
36	5	3	5	3

VERTICAL INSTALLATION



MATING FACE



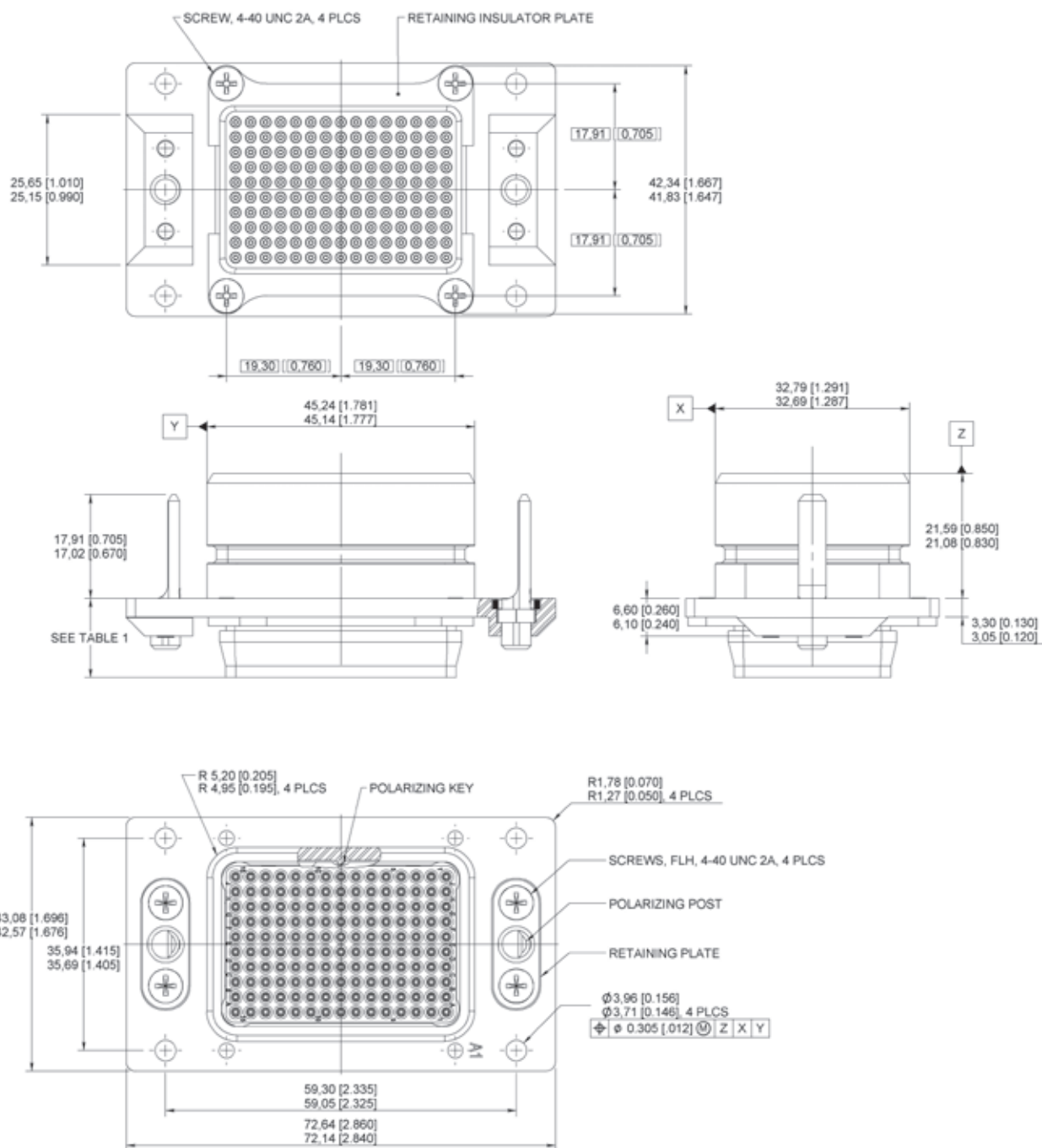
POSITION OF POST (DARK) AND KEYHOLE (LIGHT)

Position	Equipment receptacle		Rack plug	
	Left. key	Right. key	Left. post	Right. post
01	1	1	4	4
02	3	4	2	1
03	2	4	3	1
04	1	4	4	1
05	6	4	5	1
06	5	4	6	1
07	4	5	1	6
08	3	5	2	6
09	2	5	3	6
10	1	5	4	6
11	6	5	5	6
12	5	5	6	6
13	4	6	1	5
14	3	6	2	5
15	2	6	3	5
16	1	6	4	5
17	6	6	5	5
18	5	6	6	5
19	4	1	1	4
20	3	1	2	4
21	2	1	3	4
22	4	4	1	1
23	6	1	5	4
24	5	1	6	4
25	4	2	1	3
26	3	2	2	3
27	2	2	3	3
28	1	2	4	3
29	6	2	5	3
30	5	2	6	3
31	4	3	1	2
32	3	3	2	2
33	2	3	3	2
34	1	3	4	2
35	6	3	5	2
36	5	3	6	2

[illegible]

DIMENSIONS

NSX SINGLE SHELL PLUG DIMENSIONS



PLUG CONNECTOR

TABLE 1

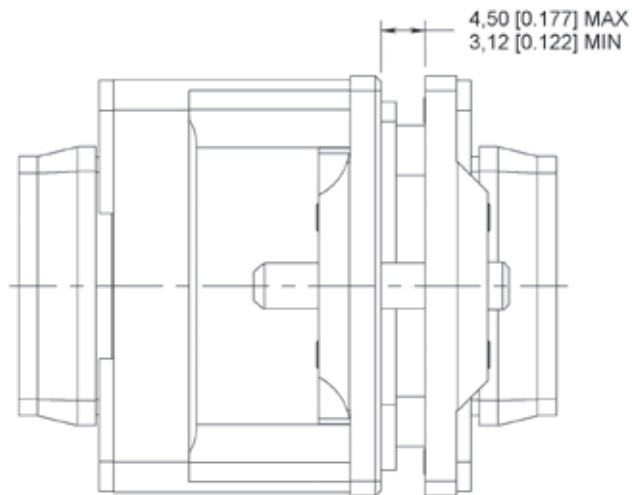
Version \ Contact arrangements mm (Inch)	150	121	120T2	71C1	60	10T10	C4	C-2C
N	6.14 max (.242 max)	8.92 max (.351 max)	6.47 max (.255 max)	6.54 max (.257 max)	8.98 max (.354 max)	8.86 max (.349 max)	7.09 max (.279 max)	3.40 max (.134 max)
E	13.50 max (.531 max)	17.69 max (.696 max)	15.22 max (.600 max)	13.90 max (.547 max)	17.33 max (.682 max)	17.61 max (.693 max)	/	/

RECEPTACLE CONNECTOR

TABLE 2

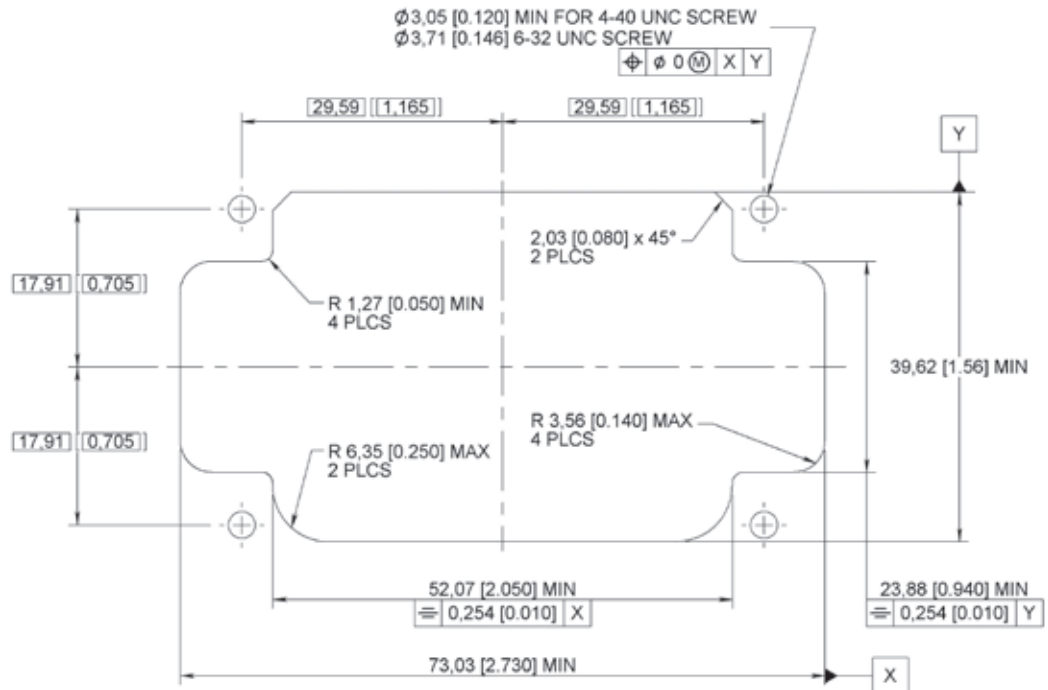
Version \ Contact arrangements mm (Inch)	150	121	120T2	71C1	60	10T10	C4	C-2C
E	37.68 max (1.483 max)	41.87 max (1.648 max)	39.40 max (1.551 max)	38.08 max (1.500 max)	41.91 max (1.650 max)	41.79 max (1.645 max)	/	/
N	30.82 max (1.213 max)	38.10 max (1.500 max)	30.65 max (1.207 max)	30.72 max (1.209 max)	33.16 max (1.306 max)	33.04 max (1.300 max)	31.27 max (1.231 max)	27.63 max (1.088 max)
F	30.66 max (1.207 max)	30.56 max (1.203 max)	30.56 max (1.203 max)	30.66 max (1.207 max)	30.56 max (1.203 max)	/	/	/

FULLY MATED CONDITION

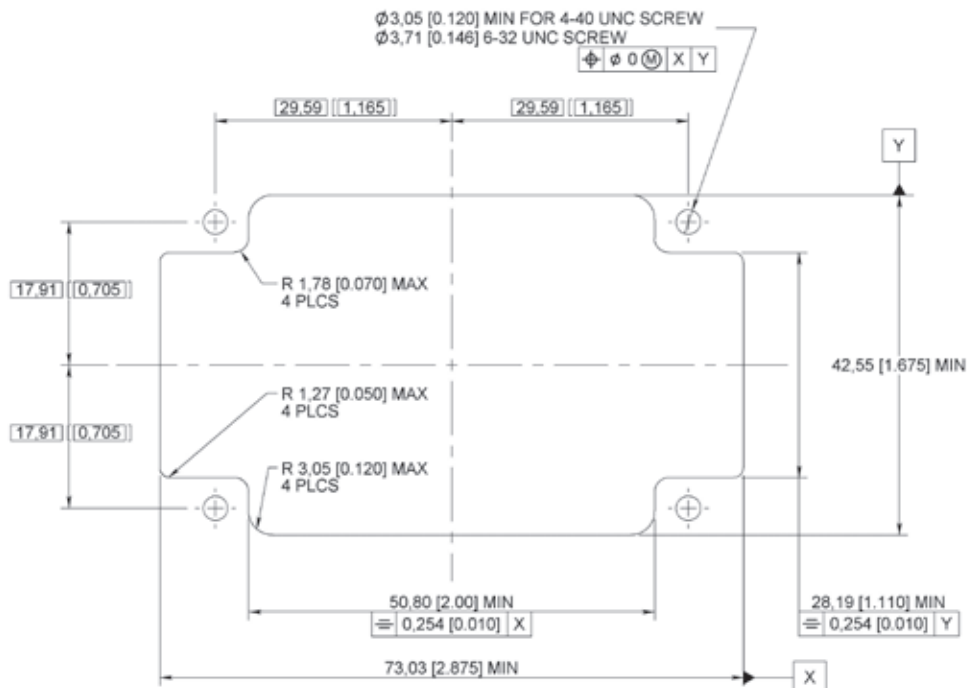


NSX SINGLE SHELL PANEL CUT OUT

RECEPTACLE PANEL CUT OUT



PLUG PANEL CUT OUT



NSX – EMI/RFI INTRODUCTION

EMI/RFI acts directly on electronics systems whether by conduction through the input or input cables or by induction (coupling).

Electronics equipments are particularly vulnerable to interferences and can be disturbed or damaged by them. The serious consequences which may result, make it essential to protect such installations.

The first stage in protection is to install the equipment in a metal surround (FARADAY cage) which protect it from some of the interferences ; particularly those occurring by induction. At the connector level that means to use metallic shells so as to have a good mass conduction between the equipment box and the rack.

So as to meet these requirements **RADIAL** offers plug connectors for rack which are fitted with ground spring fingers.

Sizes 1, 2 and 3 plugs connectors fitted with ground spring fingers are available. These connectors can be mated with ARINC 600 receptacle connectors. Their technical characteristics are the same than those shown on page 4-8 except the following.

MATERIALS

Description	Material	Plating
Shell	Aluminum alloy	Electroless nickel
Ground spring fingers	Copper alloy	Electroless nickel

ELECTRICAL CHARACTERISTICS

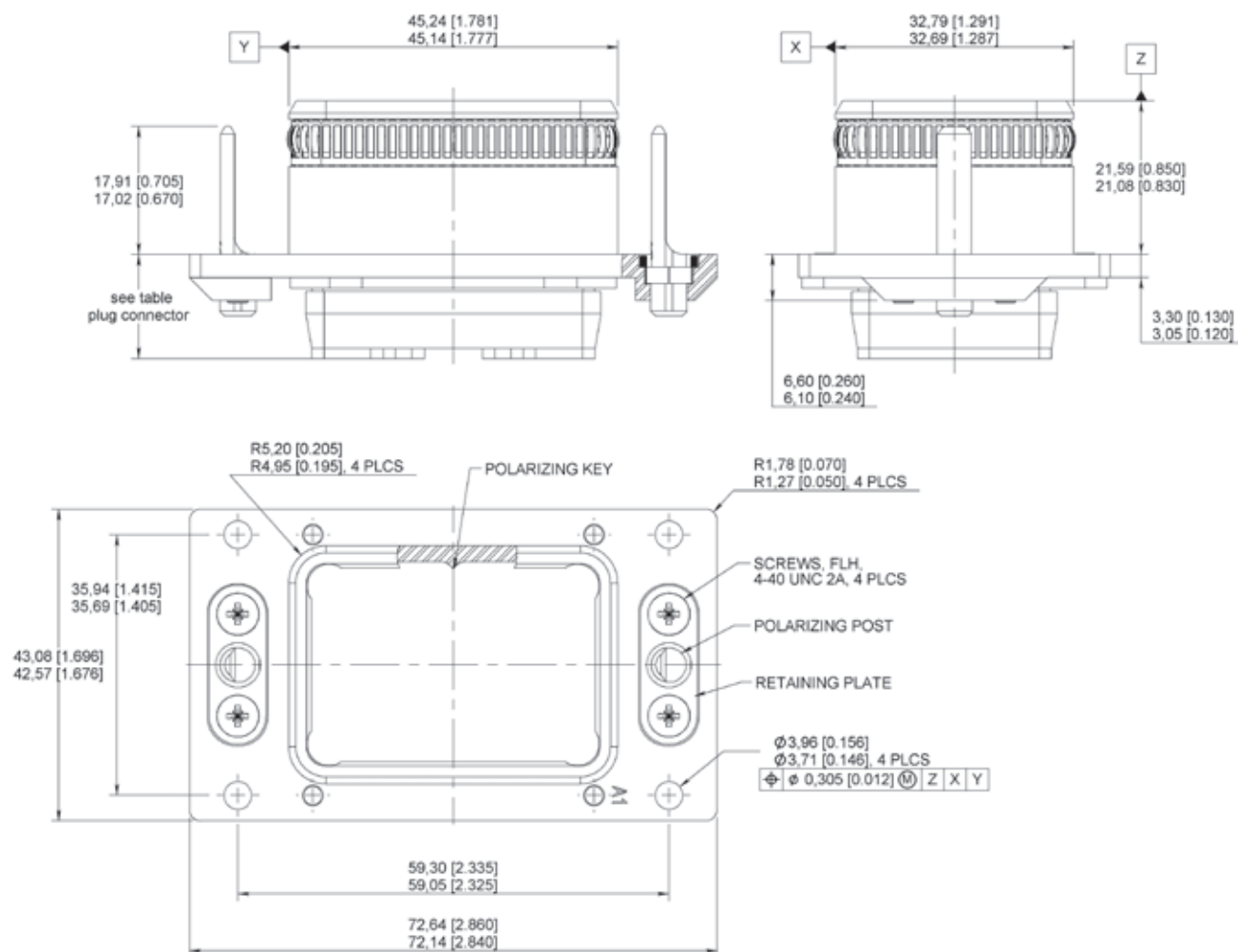
- **Shell to shell conductivity:**
(measured according to method 3007 of MIL-STD-1344A),
max warranty: 2,5 mΩ.
- **Size 8 cavity grounding:**
(measured according to method 3007 of MIL-STD-1344A),
max warranty: 10,0 mΩ.
- **EMI shielding effectiveness:**
(measured according to S280W552).
The minimum values warranty are the following: Typical values

Frequency (mhz)	Leakage attenuation (db)
100	65
200	63
300	63
400	62
800	60
1000	60

EMI/RFI NSX SINGLE SHELL PLUG DIMENSION

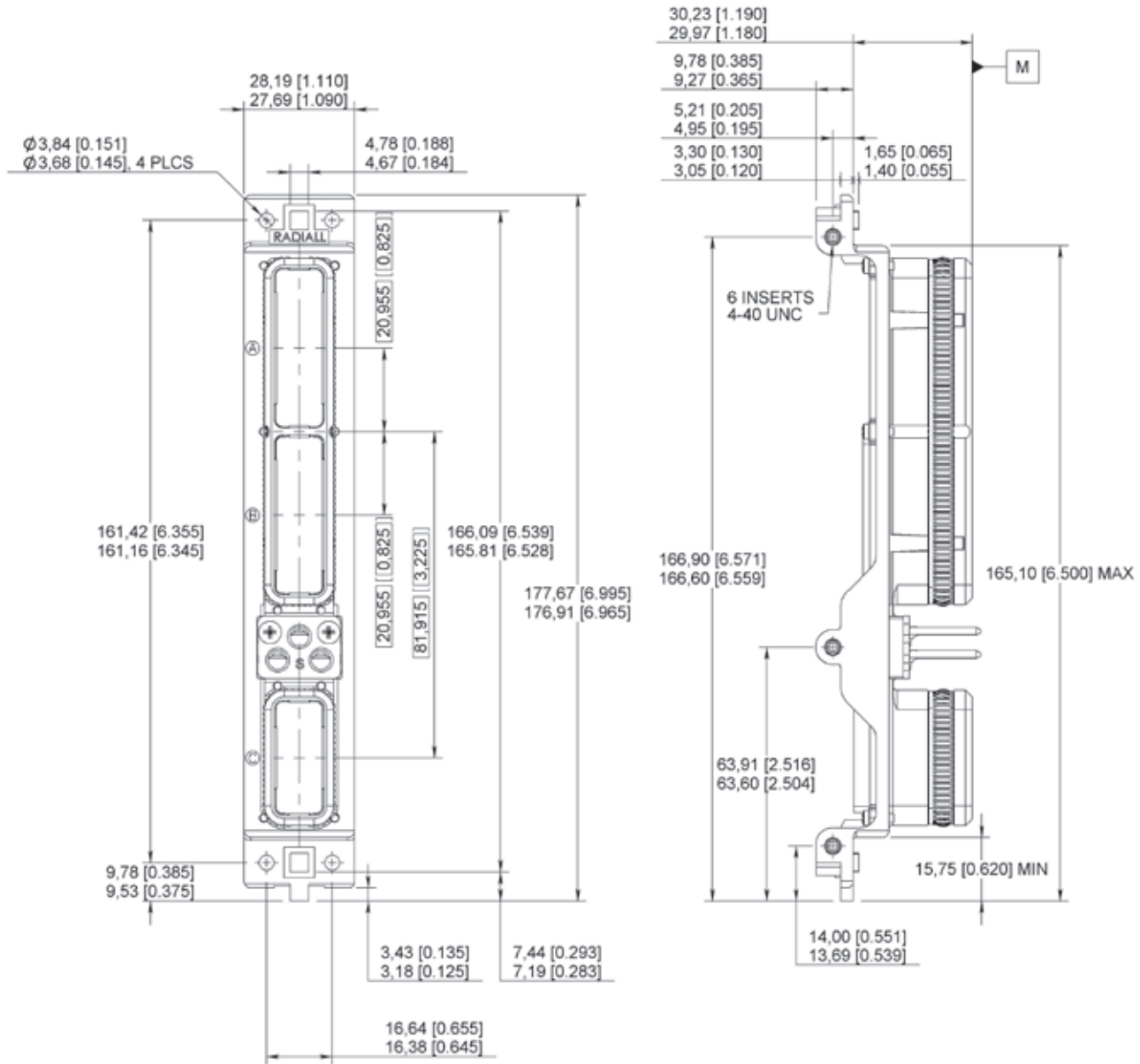
HOW TO ORDER

See page 4-84



HOW TO ORDER

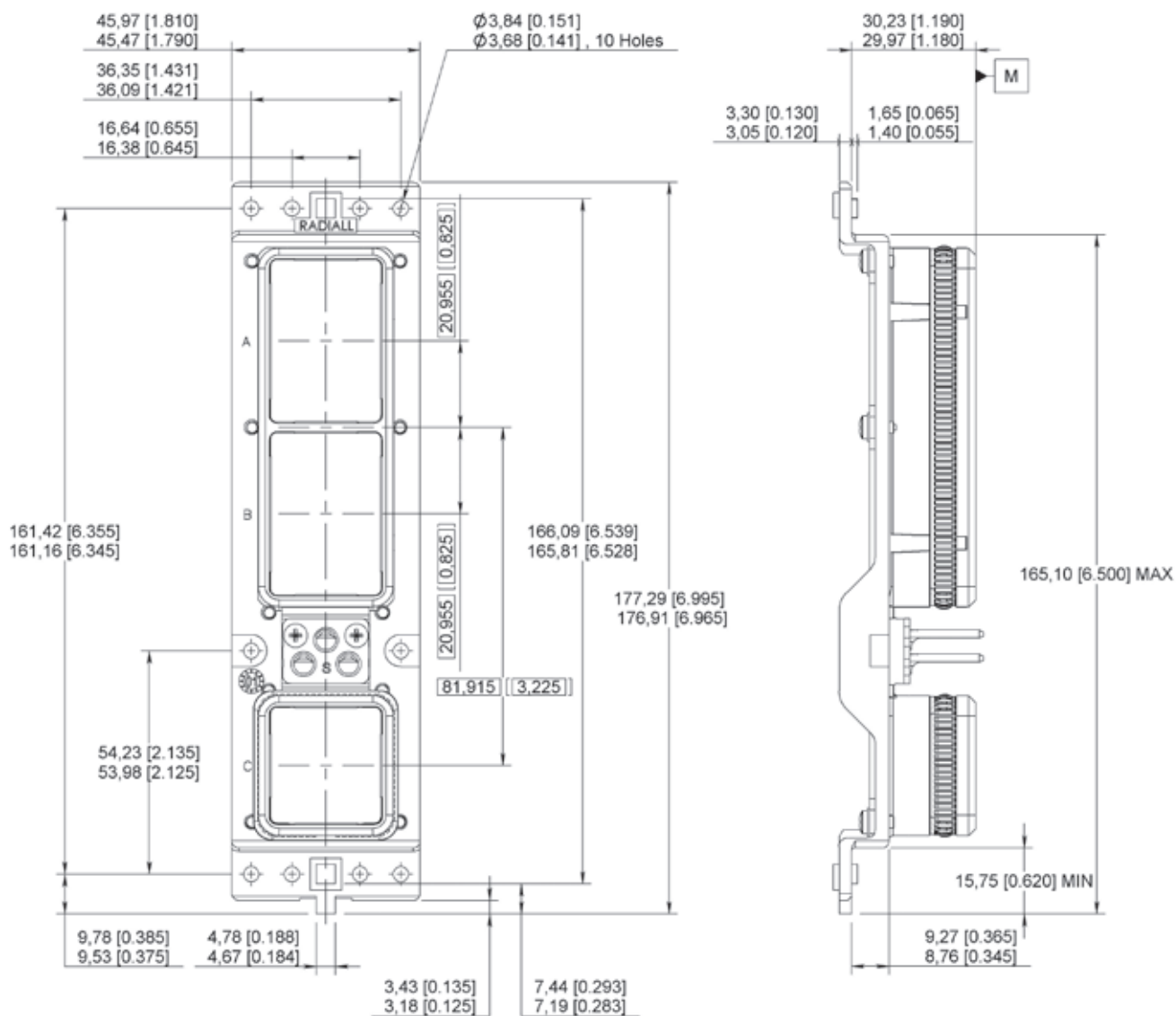
See page 4-10



EMI/RFI NSX SIZE 2 PLUG DIMENSION

HOW TO ORDER

See page 4-10



NSX – T CAS INTRODUCTION

NSX T CAS connectors are installed on equipments for use on T CAS (Traffic collision Avoiding system). These are size 3 Arinc 600 connectors, they can be environmental or non environmental with rear release rear removable contacts or front release front removable contacts for receptacle. Finish can be chromatisation or nickel. The environmental version has compound around each insert except C4 inserts. **NSX T CAS** connectors have a single insert combination code of 310:

- shell cavity A: C4 insert,
- shell cavity B: C4 insert,
- shell cavity C: 13C2 insert,
- shell cavity D: dummy insert,
- shell cavity E: 150 insert,
- shell cavity F: 100 insert.

C4 insert uses size 1 RF coaxial contacts (see pages X to X).

Connectors have technical characteristics as shown on page X except for C4 insert material and plating which is the following:

C4 INSERT MATERIAL AND PLATING

Code	Insert for plug	Insert for receptacle
Without	Mating side insert: -thermoplastic Size 1 RF coax retention plate: -stainless steel	Aluminum alloy nickel plated
N	Aluminum alloy nickel plated	Aluminum alloy nickel plated

NSX T CAS

NSX	N	3	P	310	X	00	01	-
-----	---	---	---	-----	---	----	----	---

Series

Class

N: Non environmental
E: Environmental, with grommets and compound. Plug with O-ring
H: Environmental, plug without O-ring
C: Non environmental, with grommets
F: non environmental receptacle shell ⁽³⁾
G: non environmental receptacle shell ⁽³⁾
S: RoHs chromatisation plated receptacle
T: RoHs chromatisation plated plug

Shell size

3: 6 large cavities

Shell style

R: Alodine 1200 plated receptacle
P: Alodine 1200 plated plug
F: Nickel plated receptacle
B: Nickel plated plug
M: Nickel plated plug fitted with grounding spring fingers

Insert combination code

310 only

Contacts termination ⁽¹⁾

Without contacts

X: Without contacts

S: Crimp contacts

Wire wrap

K: Wire wrap contact, 1 level (1 = .272)

V: Wire wrap contact, 2 levels (1 = .390)

W: Wire wrap contact, 3 levels (1 = .524)

PC tail contacts

RoHs	Gold	Pre-tinned	Length
RA	YA	ZA	.150
R	Y	Z	.250
RB	YB	ZB	.375
RC	YC	ZC	.500

Modification code

See pages 4-30 to 4-32

Polarization code ⁽²⁾

See pages 4-33 to 4-34

Coax contact delivery code

See pages 4-98

NOTES:

(1) For F class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB applied to size 22 only other sizes are crimp version. For G class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB,R,RA,RB,RC applied to all contact sizes except size 1. All classes except F&G: use X or S. If you need to use reduced crimp barrel contacts, use code X and order signal and power contacts separately. Coax, twinax or power size 5 or 8, coax 1 contacts must always be ordered separately.

(2) Without polarization code, the connector is delivered polarization hardware unassembled.

Polarization code 00, the connector is delivered without polarization hardware.

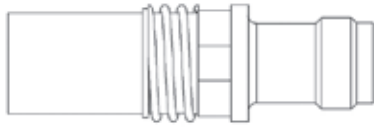
Polarization code 01 to 216, the connector is delivered with the polarization hardware assembled as defined by code.

(3) Please refer to page 4-55 for details on F & G class.

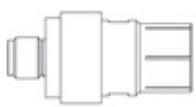
CONTACTS

Code	Connector delivery	Coaxial contact part number for plug	Coaxial contact part number for receptacle
Without	Size 1 RF coaxial contacts to be ordered separately	620117 620145 620146 620147 620148 620149	620049
N	Connector delivered with coaxial contacts	620116	

SIZE 1 RF COAXIAL CONTACTS FOR NSX T CAS CONNECTOR

Cable	Contact type	Part number	Contact
TNC TERMINATION	Socket	620116	
TNC TERMINATION	Pin	620017	
ASNE 0406WD ECS 311 201	Socket	620117	
RG 225 RG 393	Socket	620119100	
ECS 310801	Socket	620119102	
RG 214 & SURPRENANT BA 6903A	Socket	620145	
RG 142 RG 400 TIMES AA6343 ECS 3C142B ASNE 0293XF	Socket	620146	
TIMES AA5887	Socket	620147	

SIZE 1 RF COAXIAL CONTACTS FOR NSX T CAS CONNECTOR

Cable	Contact type	Part number	Contact
TIMES AA5886	Socket	620148	
TIMES AA5888 & ECS 311 601	Socket	620149	
RG 142	Pin	620046	
UT 141	Pin	620047	
UT .085	Pin	620047010	
SMA TERMINATION	Pin	620049	
ASNE0692WN- ASNE0406WD	Pin	620019105	
ASNE0692WN	Socket	620119105	

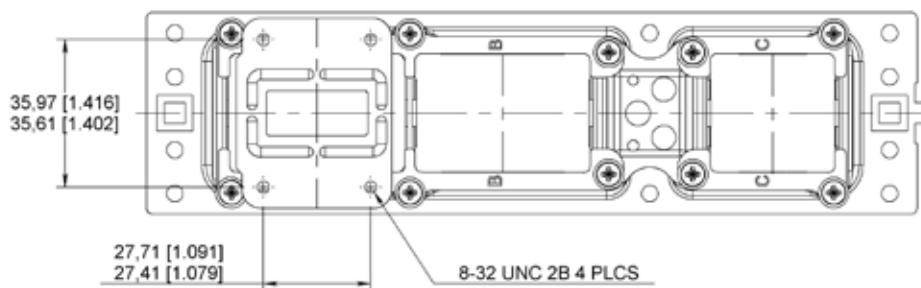
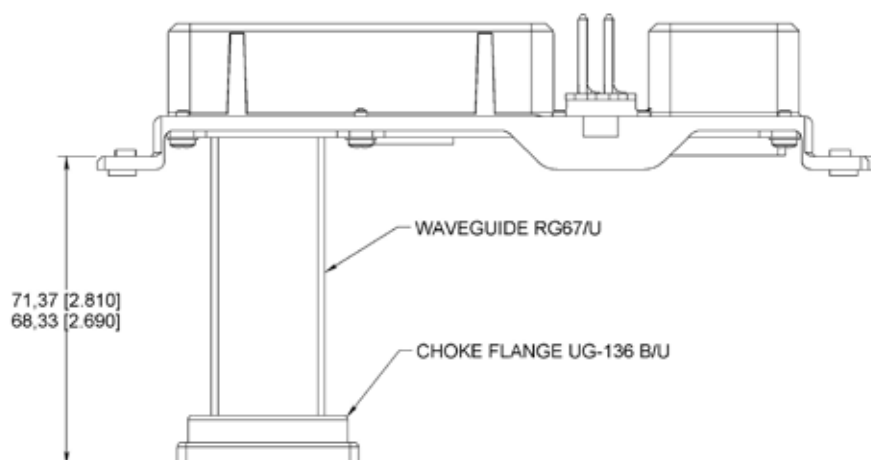
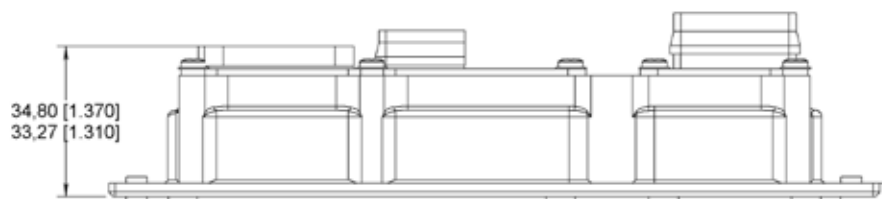
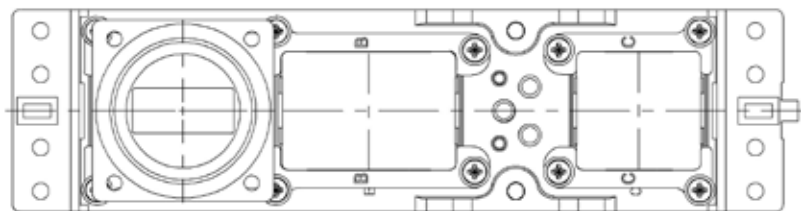
WAVE GUIDE CONNECTOR

Plug and receptable size 2 NSX connector can be fitted with a wave guide in shell cavities A and B.
These wave guides are made of aluminum alloy and chromatisation plated.

CHARACTERISTICS

- Frequency range: 9330 to 9345 MHz

DIMENSIONS



BPX series connectors are EMI shielded and modular insert concept rectangular multipin connectors fitted with NSX inserts and contacts.

BPX connectors can be differentiated from NSX connectors by their shell sizes available in three sizes (1, 2 and 3).

The **BPX** characteristics are conforming to BOEING S280W551 specification. Their specific characteristics (those which are different from NSX connectors) are the following:



ELECTRICAL CHARACTERISTICS

BPX electrical characteristics are the same as NSX connectors (see pages 4-8 to 4-9) except the following:

- Magnetic permeability: 2.0 max.

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

They are the same as for NSX connectors except the following:

- **Mating and unmating forces:**

- Shell size 1: 70 pounds (311 N) max,
- Shell size 2: 140 pounds (623 N) max,
- Shell size 3: 130 pounds ((78 N) max.

- **Humidity:** type II

(measured according to method 1002 of MIL-STD-1344A)

- **Fluid resistance:** resistance to MIL-STD-1344A method 1016 (fluids a, e, i, j).

- **Contact stability:** conforming to S280W551 requirements.

MATERIAL

Description	Material	Plating
Shell	Aluminum alloy	Electrically conductive finish over nickel
Grounding spring fingers	Copper alloy	Nickel
Insert retention plate	Aluminum alloy	Nickel
Polarization posts and keys retention plate	Aluminum alloy	Nickel
Screws, washers and clinch nuts	Stainless steel	
Polarization posts and keys	Zinc alloy	Nickel

BPX N/E/F/G CONNECTORS FOR REAR REMOVABLE CONTACTS

BPX	E	2	P	201	S	00	01
-----	---	---	---	-----	---	----	----

Series

Class

N: Connector without grommets

E: Connector with grommets

F: Connector for front removable contacts

G: Connector for front removable contacts

see definition page 4-55 and and note 1

Shell size

1: 2 cavities

2: 4 cavities

3: 5 cavities

Shell style

R: Receptacle

P: Plug

Insert combination code

See insert combination codes on page 4-104

Contacts termination ⁽²⁾

Without contacts

X: Without contacts

S: Crimp contacts

Wire wrap

K: Wire wrap contact, 1 level (1 = .272)

V: Wire wrap contact, 2 levels (1 = .390)

PC tail contacts

RoHs	Gold	Pre-tinned	Length
RA	YA	ZA	.150
R	Y	Z	.250

Modification code

00: Only see page 4-30

Polarization code ⁽³⁾

See pages 4-33 to 4-34

NOTES:

(1) For F class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB applied to size 22 only other sizes are crimp version. For G class, contact termination code, K,V,W,YA,Y, YB,YC,ZA,Z,ZB,R,RA,RB,RC applied to all contact sizes except size 1.

All classes except F&G: use X or S. If you need to use reduced crimp barrel contacts, use code X and order signal and power contacts separately. Coax, twinax or power size 5 or 8, coax 1 contacts must always be ordered separately.

(2) Define the signal contact termination code. If you need to use reduced crimp barrel contacts, use code X and order signal and power contacts separately.

(3) Without polarization code, the connector is delivered with the polarization hardware unassembled. Polarization code 00, the connector is delivered without polarization hardware. Polarization code 01 to 216, the connector is delivered with the polarization hardware as defined by the code.

INSERT COMBINATION CODE IN THE SHELL

Code	Insert combination on shell				
	A	A	A	A	A
101	10T10	34	/	/	/
102	10T10	59	/	/	/
103	150	13C2	/	/	/
201	150	100	150	6T6	/
202	121	6T6	150	6T6	/
203	10T10	100	10T10	100	/
204	121	6T6	121	6T6	/
205	110	6T6	150	6T6	/
301	10T10	4	6P6	60	4
302	10T10	30T2	6P6	60	30T2
303	120T2	4	6P6	60	4

CONTACT

BPX connectors use NSX signal, power coaxial and concentric twinax contacts (see pages 4-36 to 4-59).

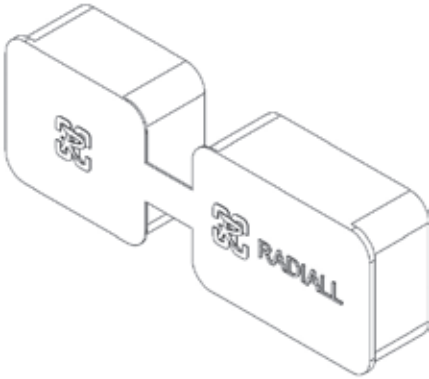
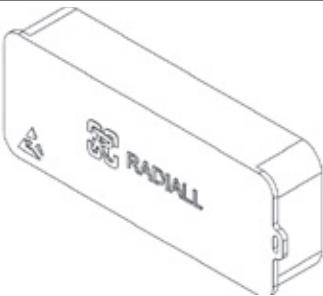
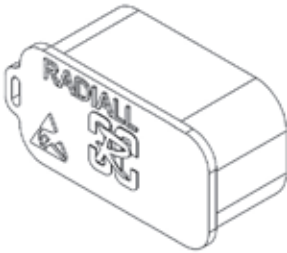
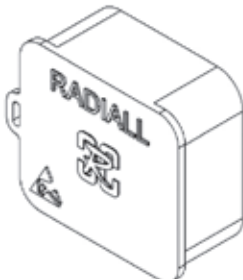
ACCESSORIES - SEALING BOOT

The sealing boots are designed to slide down over the back of crimped contacts after they have been installed in the connector. The assembly provide bend support and moisture sealing to the contact/cable assembly. For BPX connectors size, 8 coaxial and concentric twinax contacts must be fitted with the sealing boot required by S280W552 specification.

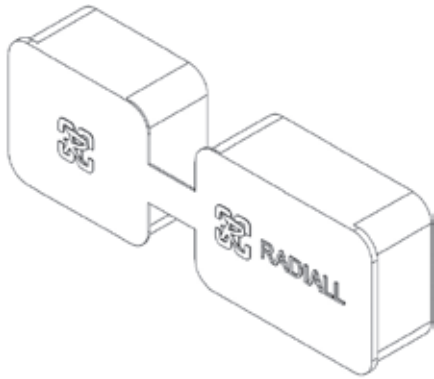
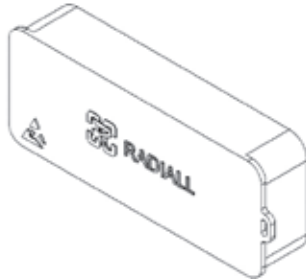
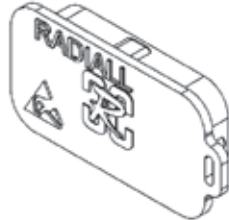
SIZE 1 RF COAXIAL CONTACTS FOR NSX T CAS CONNECTOR

Contact	Wire dia mm (inch)	Wire type	Part number	Figure
8	3.68 (0.145)	Tensolite (S280W502-1)	619960005	

Dust caps are made of thermoplastic material, they can be conductive (black color) or not (red color).

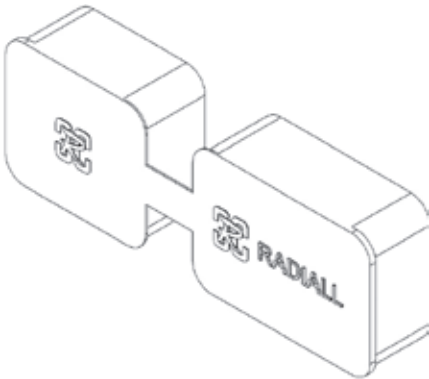
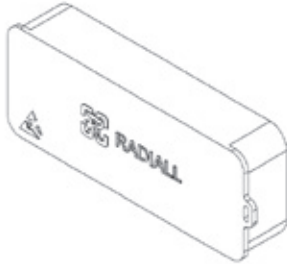
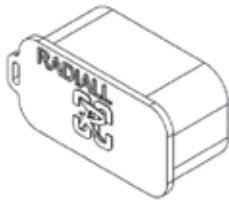
Type	Shell type	Shell size	Cavity	Part number	Figure
Conductive	Plug	1	A and B	618953002	
		2	A and B C and D		
		3	A, D	620995007	
			B, E	620995004	
			C	620995008	

ACCESSORIES - DUST CAPS

Type	Shell type	Shell size	Cavity	Part number	Figure
Conductive	Receptacle	1	A and B	618953001	
		2	A and B C and D		
		3	A, D	620995018	
			B, E	620995012	
			C	620995016	

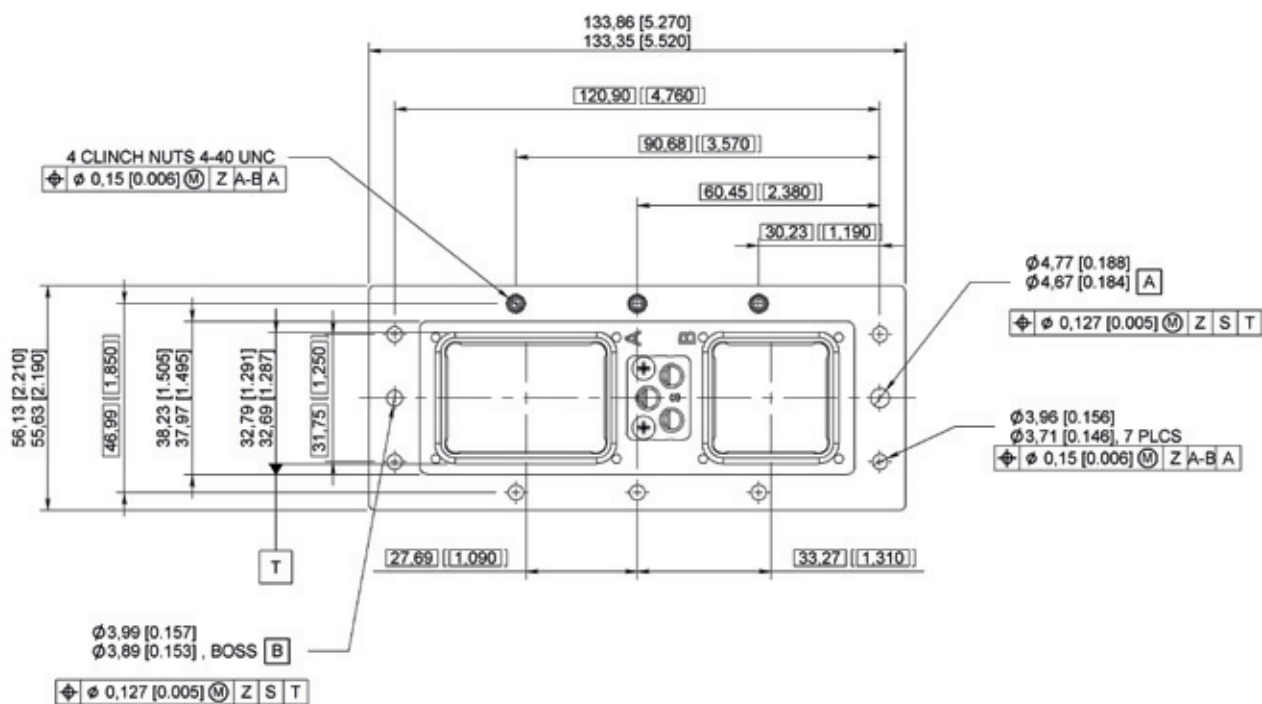
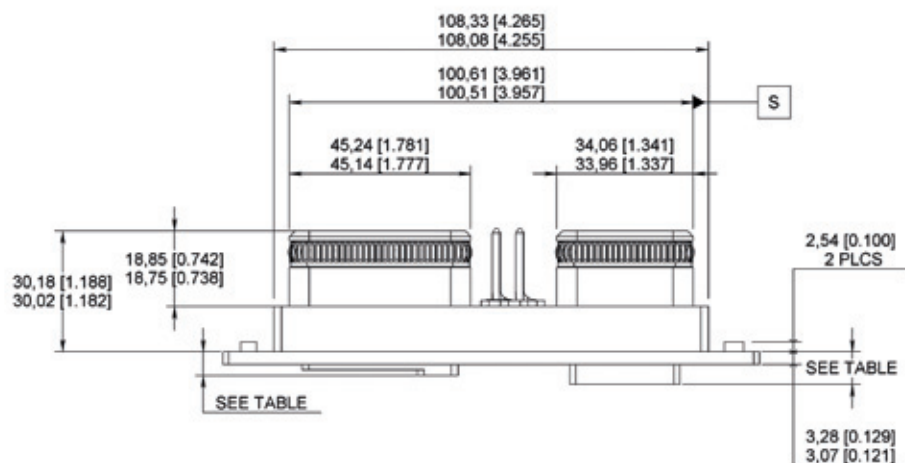
ACCESSORIES - DUST CAPS

BPX series

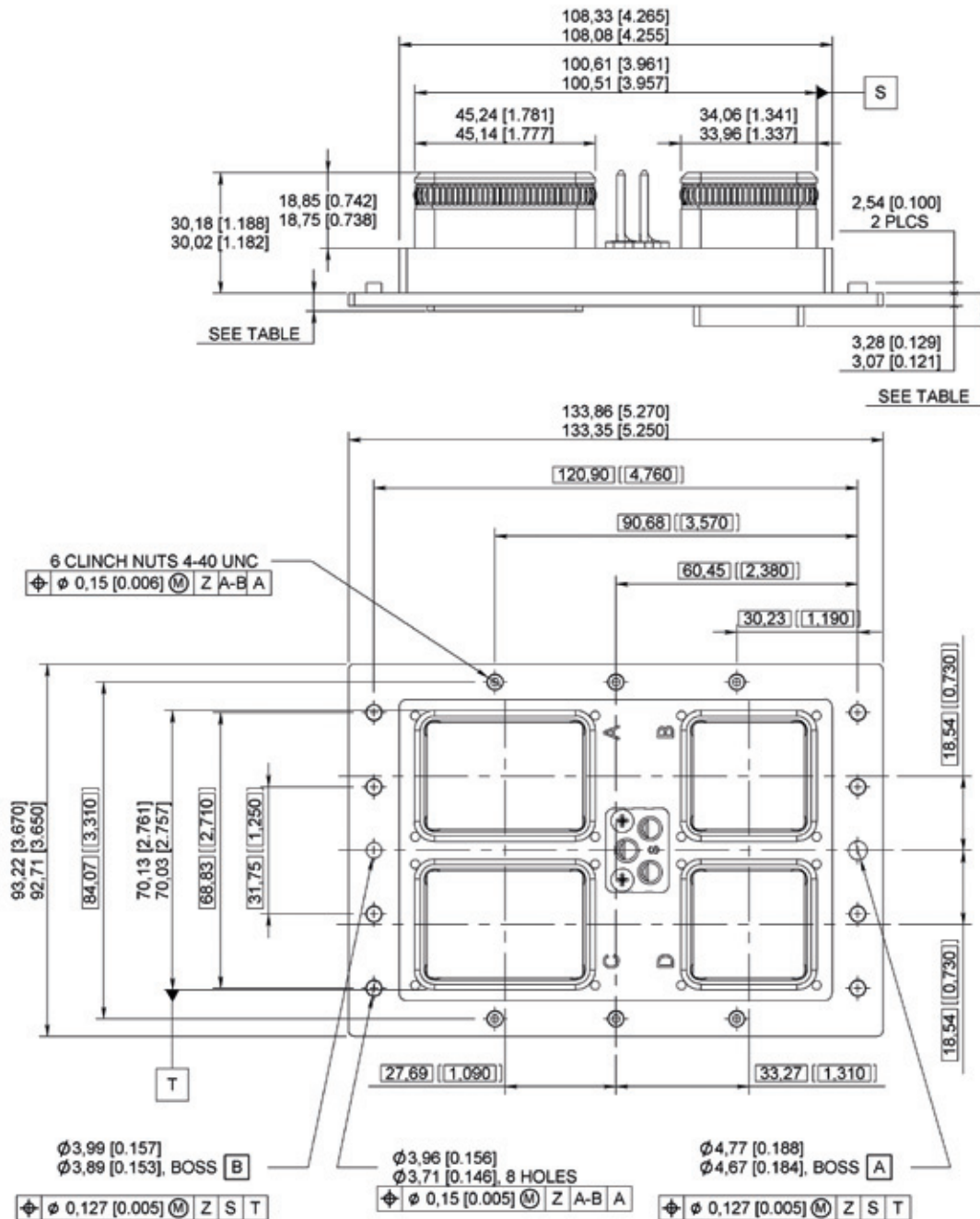
Type	Shell type	Shell size	Cavity	Part number	Figure
Non conductive	Plug	1	A and B	618953	
		2	A and B C and D		
		3	A, D	620995017	
			B, E	620995002	
			C	620995006	

DIMENSIONS

SIZE 1 PLUG DIMENSIONS

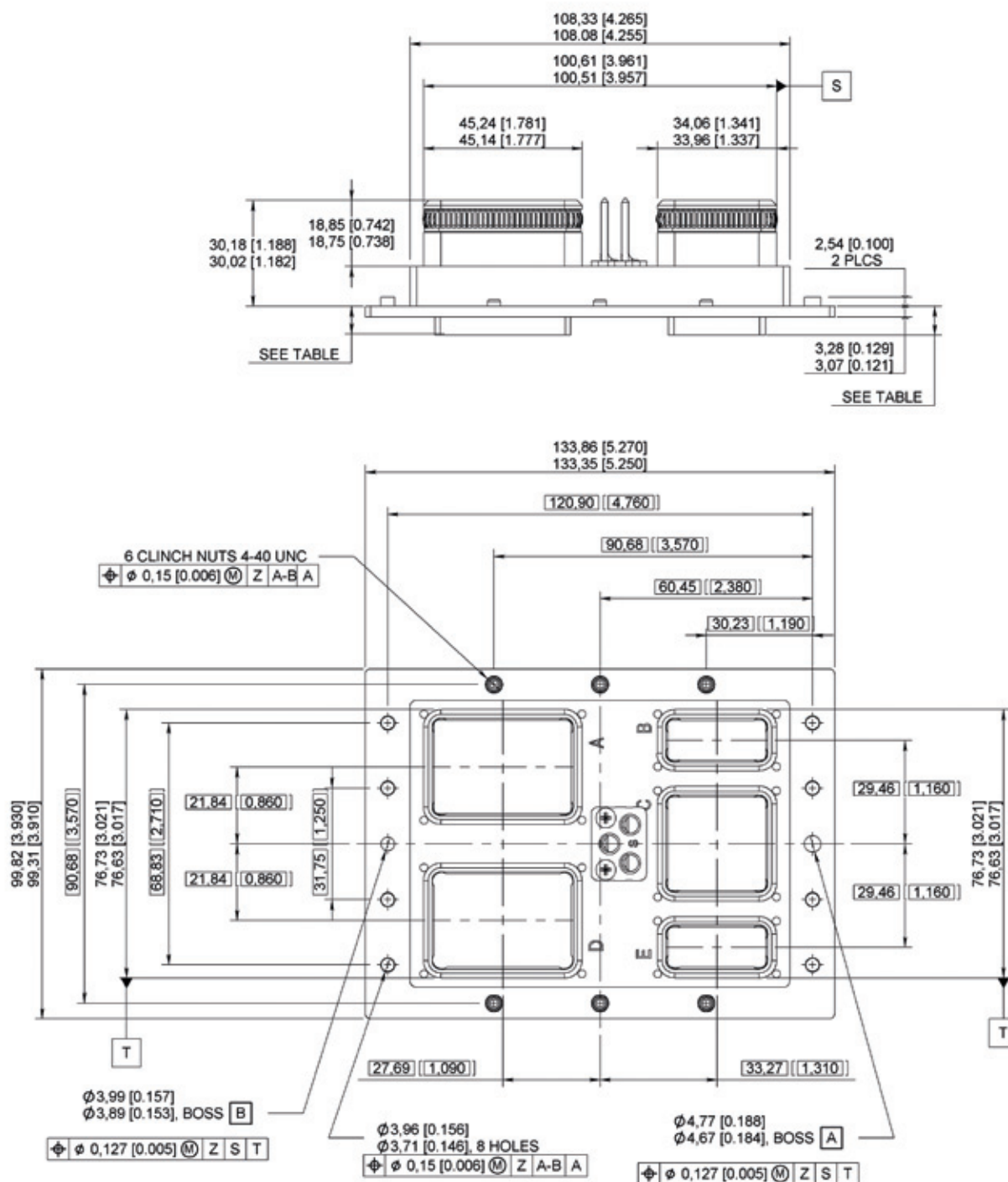


SIZE 2 PLUG DIMENSIONS

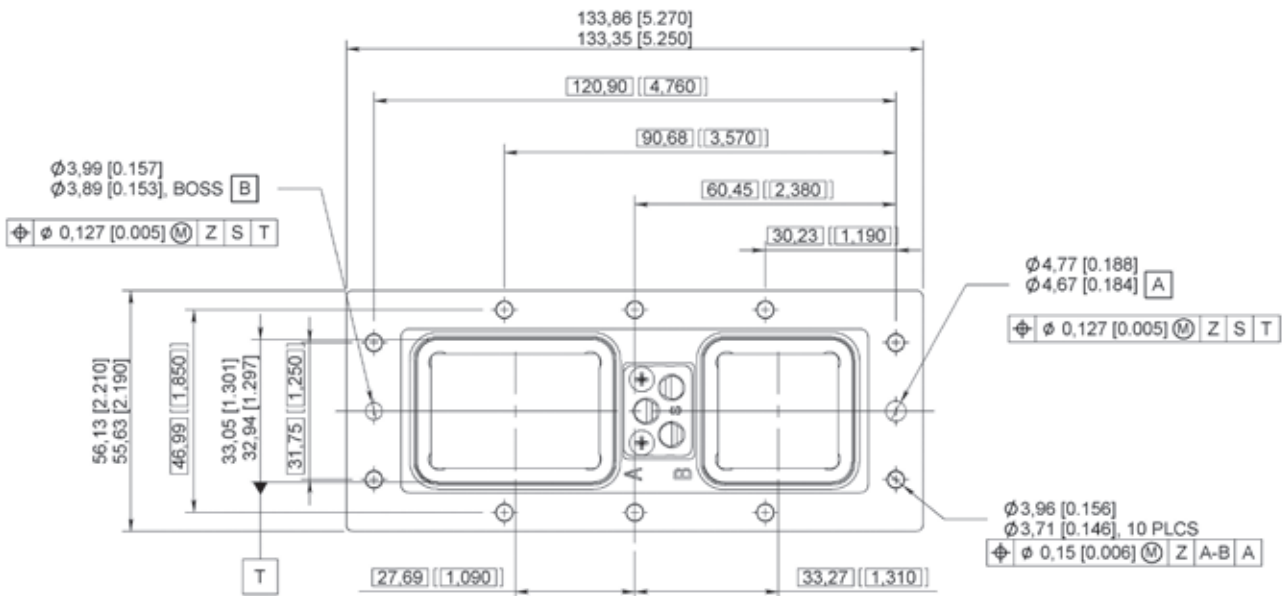
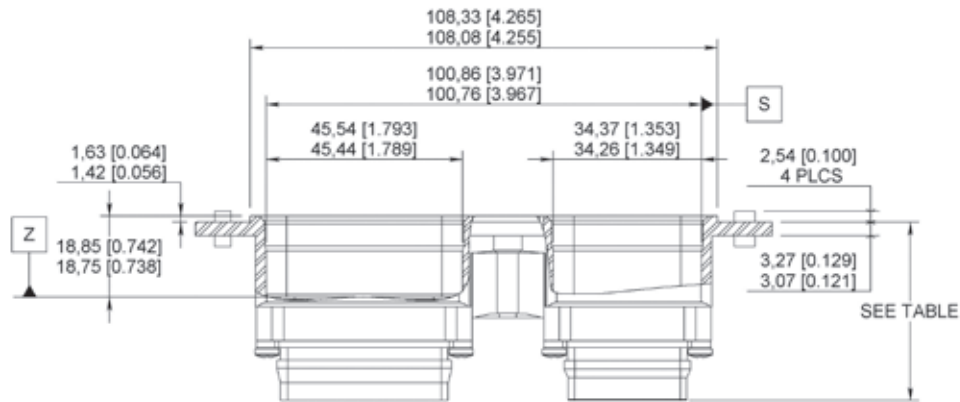


DIMENSIONS

SIZE 3 PLUG DIMENSIONS

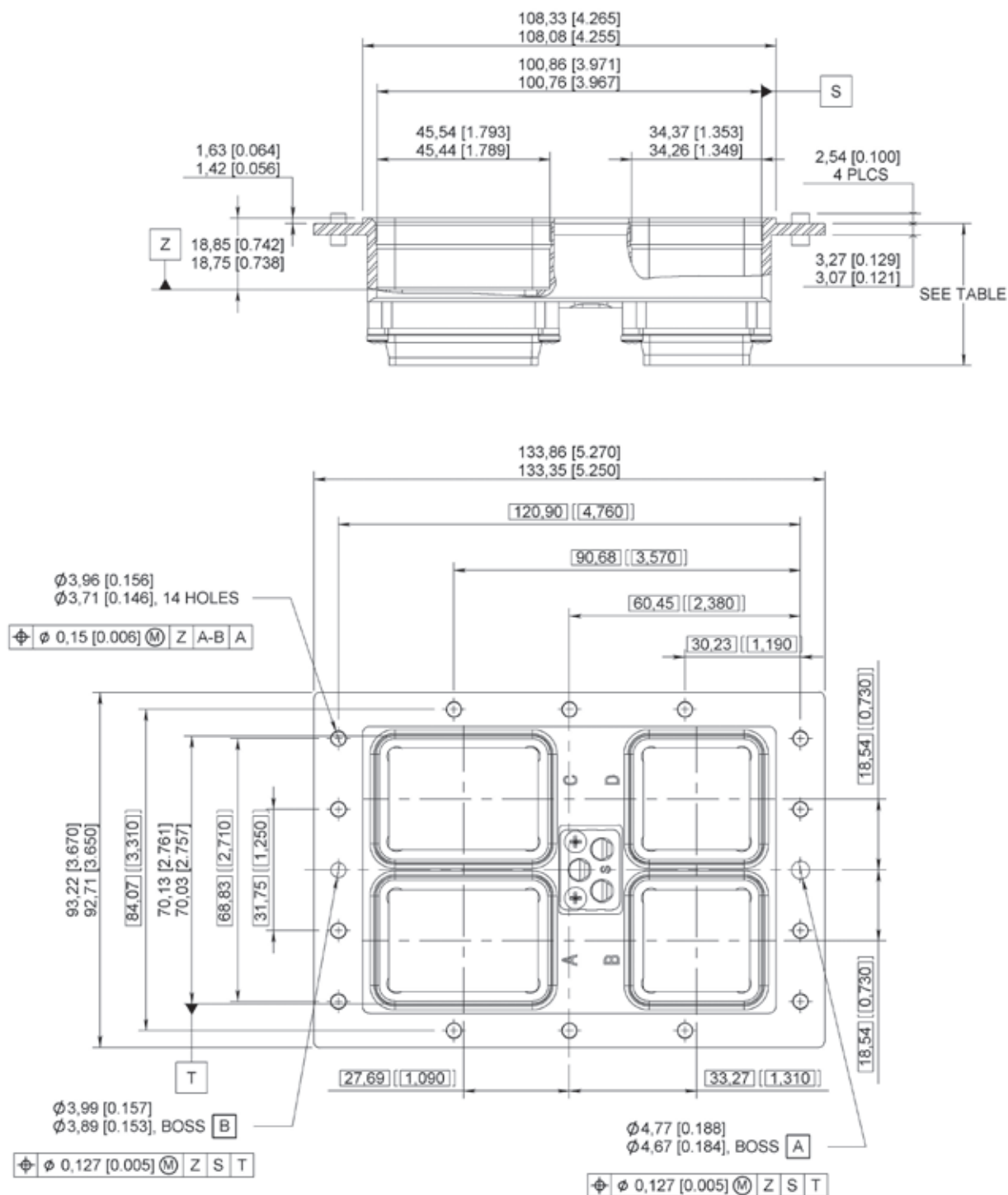


SIZE 1 RECEPTACLE DIMENSIONS

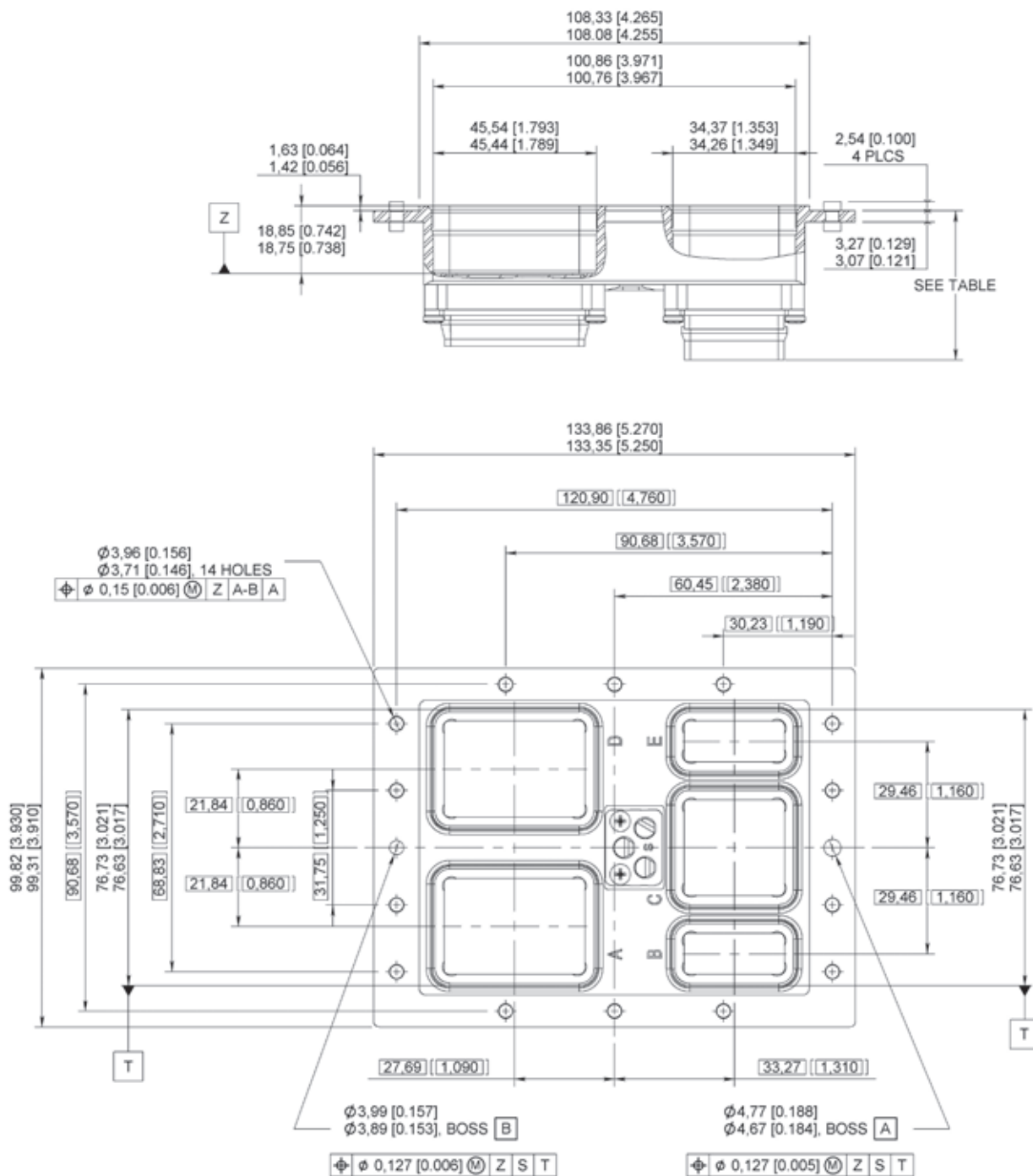


DIMENSIONS

SIZE 2 RECEPTACLE DIMENSIONS



SIZE 3 RECEPTACLE DIMENSIONS



Class \ Contact arrangements mm (Inch)	Dimensions for plug fitted with insert for size 22 contacts	Dimensions for plug fitted with insert for sizes other than 22 contacts	Dimensions for receptacle fitted with insert for size 22 contacts	Dimensions for receptacle fitted with insert for sizes over than 22 contacts
N	3.80 (.150) max	3.80 (.150) max	30.40 (1.197) max	33.30 (1.311) max
E	11.30 (.445) max	11.30 (.445) max	37.80 (1.488) max	42.10 (1.658) max
F	/	/	30.80 (1.213) max	30.80 (1.213) max



PANEL CUT OUT FOR RECEPTACLE

BPX series

