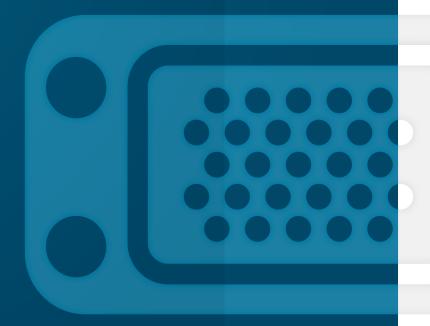


MULTIPIN

EPX™ SERIES

Product Catalog





SIMPLIFICATION IS OUR INNOVATION

SIMPLIFICATION is our INNOVATION

Radiall is a community of dedicated individuals with a shared purpose: simplify life for all those who innovate. Our manufacturing expertise allows us to deliver lighter and smaller products that simplify implementation and drive performance. We recognize that simplification starts with us, but proves its true benefits when it reaches you.



Contents
Introduction 1-3
Disconnect applications
Rack and panel applications
CHARACTERISTICS
Disconnect connector technical characteristics
Rack & panel connector technical characteristics
Technical characteristics for inserts & contacts
INSERTS
Insert selection table
How to order EPX® inserts
EPX® insert arrangements
CONTACTS
Signal & power crimp contacts
Oversized and reduced crimp barrel contacts
Coaxial crimp contacts
Twinax and triax crimp contacts
Quadrax & BMA crimp contacts
LuxCis® fiber optic contacts
Signal PC tail contacts
Quadrax size 8 PC tail contacts
Filler plugs
Sealing plugs
DISCONNECT APPLICATION
EPXA1 product overview
EPXB1 product overview
How to order EPXA1 and EPXB1 shell
How to order EPXA1 and EPXB1 assembly kit
Polarization code for EPXA1 and B1
Contact termination for EPXB1
EPXA1 shell dimensions
EPXA1 shell weights
EPXB1 shell dimensions
EPXB1 shell weights
EPXA1 & EPXB1 spare parts and accessories
EPXB2 connectors
EPXB2 product overview
EPXB2 range overview
EPXB2 latest innovations
How to order EPXB2 shell
How to order EPXB2 assembly kit
EPXB2 polarization code



Contents	
DISCONNECT APPLICATION (CONTINUED)	
Contacts termination for receptacles	
EPXB2 aluminium shell dimensions	1-42 to 1-43
EPXB2 composite shell dimensions	
EPXB2 weights	
EPXB2 accessories	
EPXB2 spare parts	
Disconnect tools	
RACK & PANEL APPLICATION	
EPX rack and panel for LRM - product overview	
How to order EPXB1, B2, B3 & B4 shell for LRM	
How to order EPXB1, B2, B3 & B4 assembly kit for LRM	
EPXB shell mounting	
EPXB polarization code	
Contacts termination for EPXB1, EPXB2, EPXB3 and EPXB4 plugs	
EPXB panel cut-out coding	
EPXB1 shell dimensions and panel cut-outs	
EPXB2 shell dimensions and panel cut-outs	
EPXB3 shell dimensions and panel cut-outs	
EPXB4 shell dimensions and panel cut-outs	
Rack & panel accessories	
Rack & panel tools	
EPXB2 for LRU product overview	
How to order EPXB2 shell for LRU	
How to order EPXB2 assembly kit for LRU	
EPX® galley product overview	
How to order EPX [®] galley equipment connector	
Dimensions and panel cut out	
Multi-gang EPX [®] connectors	

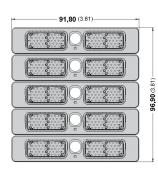
Introduction

Radiall is recognized in the Aerospace and Defense industries for offering one of the broadest innovative product portfolios for connector interconnect solutions. The benefit of our experience with ARINC connectors permits Radiall to provide customers with a strong and global solution.

The EPX[®] series offers a wide range of solutions based on two insert sizes with a large variety of shells and contacts. This product range provides an excellent trade-off between the number of available contacts and the space used. The EPX[®] series is completely modular and expandable.

EPX[®] connectors are standardized by the EN4644 European standard.

- A high density solution compared to circular connectors:
- Slim shell design with high contact density
- Stackable shells do not require additional space for locking and unlocking the connectors



EPXB:

5 shells #2 with 2*48 Cts

- --> Total Cts: 480
- --> Total surface: 96.90 * 91.80 = 8895.42 mm² Gives 18.53 mm²/contact

A **cost saving** and **user-friendly** solution:

- Inserts can be wired in the workshop and later installed in the shells
- A common panel cut-out simplifies the connector installation
- Inserts can be easily installed and removed from the shell
- Inserts and shells are keyed to prevent mis-mating
- Standard Mil spec tools for contact crimping and contact insertion/extraction
- Field replaceable sub-assemblies
- Vibration resistant self-locking threads

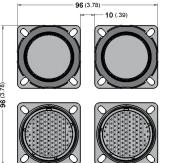
A **modular concept** with a large variety of options:

- Shell can accommodate a wide variety of inserts for signal, power, coax, data bus, fiber optic and high frequency BMA contacts
- Optional ground blocks (to meet the FAA HIRF requirements)
- Pin and socket inserts can be installed in either plug or receptacle shells (pin contacts are always fitted in the pin insert)

Radiall

EPX[®] a **versatile solution** available in two different versions:

- Aluminium
- Composite



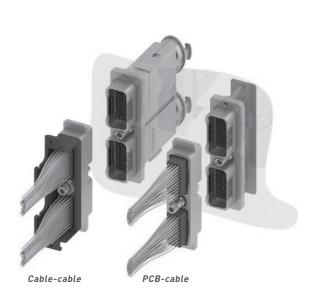
38999:

4 shells #23 with 100 Cts

- --> Total Cts: 400
- --> Total surface: 96.00 * 96.00 = 9216 mm² Gives 23.04 mm²/contact

Disconnect Applications

EPX[®] SERIE



Specially designed for panel integration on EWIS applications, EPX[®] disconnect connectors cover cable-to-cable and PCB-to-cable links in major commercial and business jet aircrafts.

The connector can be easily identified by the locking device located directly on the connector (quarter turn device for A1 and B1 and central screws for EPXB2). This disconnect solution offers secure mating while answering OEM's most stringent requirements, and provides:

- 1- Modularity with three shell sizes: EPXA1, EPXB1 and EPXB2 - available as lightweight shells and compatible with several options such as ground block functionality. EPX® connectors also feature a large variety of inserts and a unique range of contacts covering any technology. EPX® connectors answer all connecting needs with the use of a limited number of components.
- 2- Space savings with the combination of a slim shell design and high density inserts. In addition, EPX[®] disconnect stackable shells do not require additional space to lock and unlock the connectors.
- 3- Time savings and cost effectiveness with modular parts that enable pre-wiring. Connectors are easy to assemble as the receptacle can be pre-installed. Inserts will be wired in the shop and plugged later, which saves integration time.



EPXA1



EPXB1

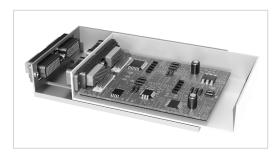


EPXB2



Rack and Panel Applications

In response to the need of system miniaturization and new equipment design, Radiall offers EPX[®] connector solutions for Line Replaceable Unit (LRU) and Line Replaceable Module (LRM). Discover more about these blind mate connectors:



EPXB2 for LRU

Largely used in distributed architecture, small Line Replaceable Units in an aircraft need compact, lightweight and cost effective connectors.

EPXB2 connectors equipped with centering guide will combine high density, low efforts and lightweight features. Discover the whole range of EPXB inserts offering from signal to power or quadrax contacts (available in straight or right angle PC tails and crimp contacts).



EPX Rack & Panel for LRM

Today, equipment manufacturers look for more cost effective and easy to maintain solutions such as Line Replaceable Module (LRM). As a result, Radiall has developed a new generation of Rack & Panel connectors. EPX[®] Rack & Panel connectors feature a modular, lightweight and high density shell that can be used on standalone PCB architecture.

EPX[®] rack and panel connectors are the perfect solution when equipment needs to combine compactness, weight savings and very high density. They offer:

- A modular range: from size 1 to size 4 using the complete range of EPX® inserts.
- Low mating force contacts from EPX[®] range that can reach very high density.
- A comprehensive range of contacts: right angle or straight PC tails for signal, coax, quadrax, or power contacts.

Disconnect Connector Technical Characteristics

ELECTRICAL CHARACTERISTICS EMI shielding effectiveness EN2591-213

Frequency (MHz)	Leakage attenuation (dB)
100	65
200 & 300	63
400	62
500 & 600	60

- Shell to shell conductivity < 2.5 m Ω , operating voltage: 400 Vrms or 500 Vdc at sea level, according to EN2591-205
- Voltage stability (ground block): Maximum variation 4mV according to SAE AS 81714 (MIL-T-81714)

- Lightning strike:

- 5kA 1600V for EPX[®] connectors in aluminium version
- 3kA 1600V for EPX® connectors in composite version

MECHANICAL CHARACTERISTICS Mating/unmating

Shell type	Material	Mating/Unmating
EPXA1 / EPXB1 / EPXB2	Aluminium	100 cycles
EPXB1 / EPXB2	Composite	100 cycles

Vibration & shock

		Vibration	Shock
Shell type	Material	For 8 hrs on each of the 3 axis/ interruption <1µs EN2591-403 EIA 364-28	3 shocks on each axis EN2591-402 EIA 364-27
EPXA1 / EPXB1	Aluminium		Shock amplitude 50g /duration
EPXB1 / EPXB2	Composite	Acceleration 27.8g	11ms
EPXB2	Aluminium	(test condition 6 letter G)	Shock amplitude 300g /duration 3ms
Disconnect EPX® with Quadrax contacts	/	Acceleration 16.9g (test condition 5 letter E)	Shock amplitude 50g /duration 11ms

ENVIRONMENTAL CHARACTERISTICS

- **Temperature range:** according to EIA364-32 and EN2591-305
 - For EPXB2 aluminium, EPXB1 and EPXA1 shells: -65°C/+175°C (-85°F/+347°F)
 - For EPXB2 composite shell: -65°C/+125°C (-85°F/+257°F)
- Temperature life: 1000 hours at maximum temperature
- Salt spray: 96 hours (nickel-plated aluminium and composite) EN2591-307 EIA 364-26 test condition A
- Humidity: 10 days with temperature variation from -10°C to +65°C EIA 364-31 Method 4, test condition B
- Altitude immersion: EN2591-314 EIA 364-03:
 - EPXB insert: 3 cycles at 50,000 feet
 - EPXB Bulkhead class insert: 3 cycles at 55,000 feet
- **Air Leakage for EPXB2 Bulkhead receptacle:** Level from EN3645; test according EN2591-312 method B: 4.4x10⁻³ cm³/s (= 16x10⁻⁶ m³/h)



EPX® SERIES

Rack & Panel Connector Technical Characteristics

ELECTRICAL CHARACTERISTICS EMI shielding effectiveness EN2591-213

Frequency (MHz)	Leakage attenuation (dB)
100	65
200 & 300	63
400	62
500 & 600	60

- Shell to shell conductivity: < 2.5 m $\Omega,$ operating voltage: 400 Vrms or 500 Vdc at sea level, according to EN2591-205
- Lightning strike: 5kA 1600V

MECHANICAL CHARACTERISTICS Mating/unmating

Shell type	Material	Mating/Unmating
EPXB1 / EPXB2 / EPXB3 / EPXB4	Aluminium	500 cycles

The minimum mating forces are described in the EN4644 standard and depend on the connector size and insert arrangement. Consult Radiall for more information.

Vibration & shock

		Vibration	Shock
Shell type	Material	For 8 hrs on each of the 3 axis/ interruption <1µs EN2591-403 EIA 364-28	3 shocks on each axis EN2591-402 EIA 364-27
EPXB1 / EPXB2 / EPXB3 / EPXB4	Aluminium	Acceleration 16.9g (test condition 5 letter E)	Shock amplitude 50g /duration 11ms

ENVIRONMENTAL CHARACTERISTICS

Go online for data sheets & assembly instructions.

- **Temperature range:** -65°C/+125°C (-85°F/+257°F)
- Temperature life: 1000 hours at maximum temperature
- Salt spray: 96 hours EN2591-307 EIA 364-26 test condition A
- Humidity: 10 days with temperature variation from -10°C to +65°C EIA 364-31 Method 4, test condition B
- Altitude immersion: 3 cycles at 50,000 feet EN2591-314 EIA 364-03



Technical Characteristics for Inserts & Contacts

ELECTRICAL CHARACTERISTICS

Electrical characteristics conform to SAE AS 39029 (MIL-C-39029 type A) Contacts conform to EN3155-076 and EN3155-077

CONTACTS

Contact size	Wire size	Max current Amps
	AWG22	5
22	AWG24	3
	AWG26	2
	AWG20	7.5
20	AWG22	5
	AWG24	3
	AWG16	13
16	AWG18	10
	AWG20	7.5
	AWG12	23
12	AWG14	17
	AWG16	13
8	AWG8	46
	AWG8	46 ¹
5	AWG12	23
	AWG16	13

NOTES:

(1) Size contact 5 are not part of SAE AS 39029 (MIL-C-39029 type A)

GROUND BLOCK CONTACT (617221050)

	Contact with wire size	Max current Amps
Contact to contact	Contact + AWG20	7.5
Contact to mounting surface	Contact + AWG20	7.5

DIELECTRIC WITHSTANDING VOLTAGE EN2591-207 EIA 364-20 with leakage current < $1m\Omega$

Level	Environmental insert voltage (VRMS)	Non-environmental insert voltage (VRMS)
Sea level	1500	1500
50,000 feet	800	600
70,000 feet	800	300

INSULATION RESISTANCE EN2591-206 EIA 364-21

Temperature	Insulation resistance
Ambient temperature	> 5000 MΩ
175°C (+347°F)	> 200 MΩ



Technical Characteristics for inserts and contacts

RETENTION CHARACTERISTICS

Retention forces indicated below are valid for terminated contacts (as per EN2591-409 and EIA364-29)

Contact size	Retention force	Max displacement
Ground block	88N (20 lbs)	0.30mm (.012 in.)
22	53.4N (12 lbs)	0.38mm (.015 in.)
20	89N (20 lbs)	0.38mm (.015 in.)
16	111.2N (25 lbs)	0.38mm (.015 in.)
12	133.45N (30 lbs)	0.38mm (.015 in.)
8	133.45N (30 lbs)	0.38mm (.015 in.)
5	133.45N (30 lbs)	0.38mm (.015 in.)

- Insert retention: 400N (90 lbs) EN2591-410 EIA 364-35

- Maximum insert displacement in the shell cavity: 0.30mm (.012 in.)



Insert Selection Table

INSERTS

Insert name should be used when ordering EPX® insert Insert code should be used when ordering EPX® assembly kit Inserts available in Bulkhead class are identified with the following logo:



			Contact Size & Type ⁽¹⁾										
<u> </u>	Insert	Insert	22*	20*	15 or 16*	16	16	12*	8	8	5	5	Total
Series	name	code	Signal	Power	Power or coax	LuxCis® fiber optic	Power in fiber optic cavity	Power or coax	Power	Quadrax or twinax	Coax or triax	Power	contacts
	00	0											0
	1C1	Α									1		1
	1P1	В										1	1
_	04	С			2			2					4
EPXA	09	D		3	6								9
	14	E		14									14
	14M	F	8	3	3								14
	17	G	12	5									17
	20	Н	20										20
	00	0											0
	C3	Α									3		3
	рз	В										3	3
	3Q3	С								3			3
	06	D						6					6
	10Q2	Е		8						2			10
	12F6	F				6	6						12
	101 F12C	G				12							12
	13C1	Н		6	4			2			1		13
	13P1	J		6	4			2				1	13
	14	к			14								14
EPXB	17	L		14				3					17
Ξ	20C1	М		19							1		20
	20P1	Ν		19								1	20
	22	Р		16	6								22
	22V	Q		16	6								22
	25P1	R	24						1				25
	25Q1	s	24							1			25
	28	т	22		6								28
	30	u		30									30
	34	W	18	16									34
	40	Х	40										40
	48	Y	48										48

NOTE: (1) Only contacts marked with an asterisk (*) are included with EPX® insert kit. All other contacts must be ordered separately (coax, twinax, quadrax and fiber optic contacts)



SIMPLIFICATION IS OUR INNOVATION

How to order I	EPX [®] inserts								
Only crimp con	tacts can be o	delivered	d with inse	ert					
	EPX	В	E	40	Р	В		S	
Series prefix —									
Insert size ⁽¹⁾ — A: Insert for EPX B: Insert for EPX		YB3 or E	PXB4						
Class ⁽²⁾ E: Environmenta N: Non-environm H: Non-environm T: Non-environm B: Bulkhead inse	nental (no rear nental with a r nental with an i	ear grom interfacia	met, availa l seal, avail	ible for pin i lable for pin	insert only	(recomme	endedi	for PC	C tail contacts)
Insert name — Refer to table on	page 1-10 for	insert arr	rangement	S					
Insert type — P: Pin S: Socket									
Insert keying ⁽³⁾ A: Keying A B: Keying B									
Contact Without code: in S: Signal and pov Inserts 00, 1C1, 1	wer contacts a	re deliver	red with ins						
ENVIRONME	NTAL INSE	RT	BU	JLKHEAI	D INSERI			INSE	ERT KEYING
Pin in Interfacial seal	Rear	nmet		Bulkh	aread grommet				Keying A
Rear So grommet	ocket insert								Keying B
(3) For EPXA1, EPXB1	serts can be instal 5 are only available	led in either e in E class. 34 shells, us	plug or recep Insert 00 is or se only insert	otacle shell nly available ir keyed A	N class				

Radiall

RACK & PANEL APPLICATION

SIMPLIFICATION IS OUR INNOVATION

EPXA Insert Arrangements

		AI	
Insert name 00	Insert name 1C1	Insert name 1P1	Insert name 04
Insert code 0	Insert code A	Insert code B	Insert code C
Blank insert ⁽¹⁾	1 x size 5 coax contacts	1 x size 5 power contacts	2 x size 15 or 16 contacts 2 x size 12 contacts
	4 7 0 0 5 1 11 0 8 14 12	4 3 1 8 7 5 9 14 13 11	3 1 7 4 12 8 17 13
Insert name 09 Insert code D	Insert name 14 Insert code E	Insert name 14M Insert code F	Insert name 17 Insert code G
3 x size 20 contacts	14 x size 20 contacts	8 x size 22 contacts	12 x size 22 contacts
6 x size 15 or 16 contacts		3 x size 20 contacts	5 x size 20 contacts
		3 x size 15 or 16 contacts	
A 5 1 A B B C 5 1 C			
Insert name 20			
Insert code H			
20 x size 22 contacts			

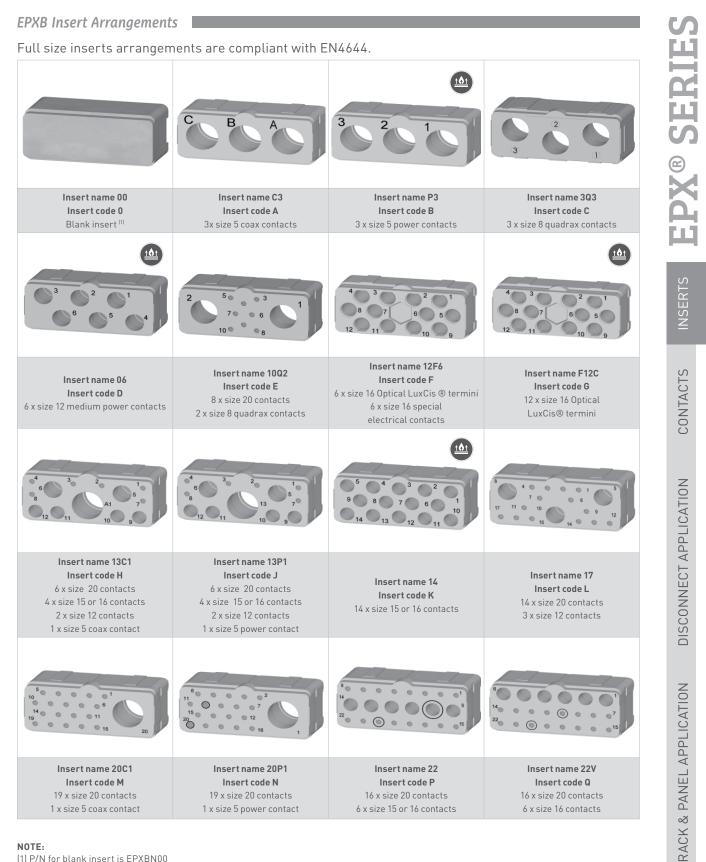
WEIGHTS

Average weight per class and type for EPXA inserts without contacts.

	Insert type				
Insert Class	Pin	Socket			
Е	4.10 g (0.14 oz)	5.30 g (0.19 oz)			
Ν	2.60 g (0.09 oz)	4.00 g (0.14 oz)			
Н	3.90 g (0.14 oz)	N/A			
Т	2.80 g (0.10 oz)	N/A			

NOTE: (1) P/N for blank insert is EPXAN00

RACK & PANEL APPLICATION



Radiall

NOTE: (1) P/N for blank insert is EPXBN00

EPXB Insert Arrangements **EPX® SERIE** Full size inserts arrangements are compliant with EN4644. <u>t 🁌 t</u> <u>t 🁌 t</u> 25 E Insert name 25P1 Insert name 25Q1 Insert name 28 Insert name 30 Insert code U Insert code R Insert code S Insert code T 24 x size 22 contacts 24 x size 22 contacts 22 x size 22 contacts 30 x size 20 contacts 1 x size 8 quadrax contact 6 x size 15 or 16 contacts 1 x size 8 power contact <u>t**ô**t</u>` 0 10 10 0 0 E)1 Insert name 34 Insert name 40 Insert name 48 Insert code W Insert code X Insert code Y 18 x size 22 contacts 40 x size 22 contacts 48 x size 22 contacts 16 x size 20 contacts

WEIGHTS

Average weight per class and type for EPXB inserts without contacts.

	Inser	t type
Insert Class	Pin	Socket
Е	7.90 g (0.28 oz)	10.00 g (0.35 oz)
Ν	5.20 g (0.18 oz)	7.60 g (0.27 oz)
Н	7.70 g (0.27 oz)	N/A
Т	5.50 g (0.19 oz)	N/A
В	8.50 g (0.30 oz)	N/A

INSERTS

CONTACTS

DISCONNECT APPLICATION



t 🗘 1

CONTACTS

EPX® series offers a wide range of contacts compliant with EN3155 and SAE AS 39029. The available contacts cover aerospace applications for terminating to both cables and printed circuit boards.

- Signal and power contacts
- High frequency with coax, twinax and triax contacts
- Ethernet links with Quadrax contacts
- Optical links with LuxCis® contacts

Discover our brand new range of signal & power contacts with selective gold plating.

Features and benefits:

- Significant reduction of cost of ownership
- Reduced dependence on gold rate fluctuation
- No change in the contact crimping or soldering process

Specifications:

- Same contact design as full plated version
- Contact interface gold plated with 1.27µm
- For crimp version, no changes are required for the crimping process
- For PC tail version, the use of selective plated contacts has no impact on PCB design
- Product qualification is available upon request

Cor	ntact size	Wire size	Туре	Part number full plated	Part number selectively plated	Crimping tool	Positioner	Selector	Ins / ext tool	Material of tool
22		22 24	Pin	617200	617200100	282281 M22520/2-01	282970 M22520/2-23	4	282522 (M81969/14-01)	Plastic
		26	Socket	617300	617300100	MZZ3Z0/Z-01	MZZJZU/Z-Z3	3	(14-01)	
20		20 22	Pin	617221	617221100	282281 M22520/2_01	282971	7	282522001	Plastic
		24	Socket	617320	617320100	M22520/2-01	M22520/2-08	5	(M81969/39-01)	i tustic
		16	Pin	617240	617240100			6		
	18 20		Socket	617340	617340100	282291 M22520/1-01	282972 M22520/1-02	5	282515 (M81969/14-03)	Plastic
	for		Pin	617221050	N/A	282281	282581015	_	282886	
16	ground block	20	Socket	N/A	N/A	M225520/2-01	M22520/2-11	7	M81969/1-02	
	for optical/ elec- trical cavity	ptical/ 18 Pin	Pin	617235003 ⁽¹⁾	N/A	282291 M22520/1-01	282581013	6 5	282515 (M81969/14-03)	Plastic
						MZZ5ZU/1-01		4	(19181969/14-03)	
		12	Pin	617250 617250100			8			
12		14	Socket	617350	617350100	282291 n M22520/1-01	282972 M22520/1-02	7	282549004 (M81969/14-04)	Plastic
		16	SUCKET	017000	01/000100			6		
			Pin	617291002 ^[2&3]	N/A	R282600000 M22520/				
8		8	Socket	617391002 ^(2&3)	N/A	23-01 + Die set R282650000 M22520/23-02	282588	N/A	282549001	Metal
			Pin	617280 ^[2&4]	N/A	R282600000	282557020			
5	5	8	Socket	cket 617390 ^(2&4) !		M22520/ 23-01 + Die set R282650000 M22520/23-02	282557021	N/A	282946 (M81969/28-01)	Metal
		12	Pin	617260001 ^[2&4]	N/A	202/12	282586003	6		
		16	Socket	617370001 ^[2&4]	N/A	282613	282586005	4		

CONTACT SELECTION TABLE

NOTES:

(1) Electrical contacts for optical inserts are always pin contacts (hermaphrodite)

[2] In order to make these contacts environmental, it is necessary to add a sealing boot. Please contact us for additional information

(3) These power contacts can be used in power inserts only (25P1)

[4] These power contacts can be used in power inserts only (P3, 13P1 and 20P1)



Oversized & Reduced Crimp Barrel Contacts

Co	ontact size	Wire size	Type	Part number fully plated	Crimping tool	Positioner	Selector	Ins / ext tool	Material of tool
	reduced crimp	28	Pin	617201	282281	282970	5	_	
	barrel	30	Socket	617301	M22520/2-01	M22520/2-23	4		Plastic
22	22 oversize crimp barrel	20	Pin	617200200			5	282522 (M81969/14-01)	
		22	Socket	617300200	282281 M22520/2-01	282970 M22520/2-23	4	(1101707/14-01)	
	barret	24	Socket	61/300200	1412232072=01	MZZJZ0/Z=ZJ	3		
	reduced crimp barrel	22	Pin	617224001	282281 M22520/2-01		4		
		24	C . I . I	(4500,000)			282971 M22520/2-08	3	
0.0	barret	26	Socket	617324001	1412232072=01	MZZJZ0/Z=00	3	282522001 (M81969/39-01)	Plastic
20		18	Pin	617221200	282281 M22520/2-01		5		
	oversize crimp barrel	20		(4500000		282971 M22520/2-08	5		
	barret	22	Socket	617320200		MZZJZ0/Z=00	4		
		20	Pin	617241			5	_	
	reduced crimp barrel	22	Socket	617341		282972 M22520/1-02	5		
	barret	24	Socket	61/341	14122320/1-01	MZZJZ0/ I=02	4		
	reduced crimp	20					5		
16	barrel for optical	22	Pin	617235002 ⁽¹⁾	282291 M22520/1-01	282581013	5	282515 (M81969/14-03)	Plastic
	electrical cavity	24			1*122320/1=01		4		
		14	Pin	617240200	282291 M22520/1-01		6		
	oversize crimp barrel	16	C . I . I	(450 (0000		282972 M22520/1-02	5		
	barrel	18	Socket	617340200	1*122320/1=01	IVIZZJZU/ 1-UZ	5		



DISCONNECT APPLICATION

RACK & PANEL APPLICATION

Coaxial Crimp Contacts

Contact size	Cable type	Туре	Environmental part number	Non-environmental part number	Ins/ext tool	Material of tool
	RG188	Pin	617	130		
	FILECAF1709/6 F1709/8 RG174-RG179-RG316 ASNE0639XY 75 Ohms	Socket	617	030		
	RG178	Pin	617	131		
15-16	RG178	Socket	617	031		
	GORE/AXON P812817	Pin	617	132	282512	Metal
	FILECA F1703-134 FILOTEX SP132868	Socket	617	032	(M81969/14-03)	
	RG178 DT	Pin	617	133		
	KG178 DT	Socket	617	033		
	UT.047	Pin	617	135		
	01.047	Socket	617	035		
12	UT.085-RG405	Pin	617	160	282549004	Plastic
ΙZ	01.085-R6405	Socket	617	060	(M81969/14-04)	i tastic
	RG58-RG141	Pin	617101001	617101		
	R050-R0141	Socket	617001001	617001		
	RG142 - RG400	Pin	617102001	617102		
	K0142 - K0400	Socket	617002001	617002		
	RG174-RG316-RG188-	Pin	617103001	617103		
5	RG178DS NEXAN 10036442 75 Ohms	Socket	617003001	617003	282946 (M81969/28-01)	Metal
	RG178-RG196	Pin	617104001	617104		
	KU1/8-KU196	Socket	617004001	617004		
	RG180	Pin	617105001	617105		
	PAN6422XZ ANSE063WGH 96 Ohms	Socket	617005001	617005		

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EPX® SERIES

INTACTS

INSERTS

DISCONNECT APPLICATION

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Twinax & Triax Crimp Contacts

Contact size	Cable type	Туре	Environmental part number	Non-environmental part number	Ins/ext tool	Material of tool
	ECS0700	Pin	61719	90010		
12 Triax	EC30700	Socket	61709	90010	282549004	Plastic
IZ IIIdX	M17/176-00002	Pin	61719	90012	(M81969/14-04)	
	M17/178-00002	Socket	61709	90012		
8 Triax	TENSOLITE	Pin	617165021	617165020		
	24463/9P025X-2 100 Ohms	Socket	617065021	617065020	282549001	Metal
	WHITMOR W2675-1575	Pin	617165	617165001		
		Socket	617065	617065001		
	ABS0386WF24 & TYCO 1726A1424A	Pin	617165011	620165010		Metal
8 Twinax		Socket	617065011	620065010	282549001	
	PAN6421ZA002	Pin	617150001	617150		Metal
5 Triax	77 Ohms M17/176-00002 EN3375-003 Raychem 106113 77 Ohms	Socket	617050001	617050	282946 (M81969/28-01)	
	TENSOLITE 24473/03159X	Pin	617152001	617152		
	124 Ohms	Socket	617052001	617052		

INSERTS EPX® SERIES

ONTACTS

DISCONNECT APPLICATION



Quadrax & BMA Crimp Contacts

QUADRAX CONTACTS



The Quadrax contact offer is compliant to Arinc 600 and EN3155-072 and EN3155-073 standards.

Environmental Quadrax

Contact size	Cable type	Туре	Environmental part number	Extraction tool in metal
	Ethernet cable	Pin	617175011	
	ABS0972 & ABS1503	Socket	617075011	
	TENSOLITE NF24Q100	Pin	617175051	
0		Socket	617075051	0005 (0004
8	TENSOLITE NF26Q100/	Pin	617175053	282549001
	JSF Y18	Socket	617075053	
		Pin	617175041	
	TENSOLITE NF22Q100	Socket	617075041	

Non-environmental Quadrax

Contact size	Cable type	Туре	Non-enviromnmental part number	Compatible sealing boot part number	Extraction tool in metal		
	Ethernet cable	Pin	617175012				
	ABS0972 & ABS1503	Socket	620075010	(4500000	282549001		
	TENSOLITE NF24Q100	Pin	617175052	617939003			
		Socket	620075050				
8	TENSOLITE NF26Q100/	Pin	617175054	(15000005			
	JSF Y18	Socket	620075021	617939005			
	TENSOLITE NF22Q100	Pin	617175040	617939003			
		Socket	620075040	01/939003			

BMA CONTACTS



Extraction tool **282549001** is used for size 8 BMA contacts. Environmental BMA contacts are all provided with sealing boots.

Contact size	Cable type	Connector Type	Environmental part number	Non-environmental part number	Frequency range	Max VSWR	Insertion loss
	SHF5 - SHF5M ⁽¹⁾	Pin	617171011	617171010	DC-18 GHz	1.35	0.13 dB at max frequency (18 GHz)
	RG142	Pin	617171021	617171020	DC-12.4 GHz	1.35	0.11 dB at max frequency (12.4 GHz)
8	SHF2.4M ^{III} /UT.085/ Harbour SS405/ Times Tflex405	Pin	617171031	617171030	DC-18 GHz	1.35	0.13 dB at max frequency (18 GHz)
	SHF5 - SHF5M ^[1]	Socket	617071011	617071010	DC-18 GHz	1.35	0.13 dB at max frequency (18 GHz)
	RG142	Socket	617071021	617071020	DC-12.4 GHz	1.35	0.11 dB at max frequency (12.4 GHz)
	SHF3 ⁽¹⁾	Socket	617071041	617071040	DC-18 GHz	1.35	0.13 dB at max frequency (18 GHz)

NOTES:

(1) The BMA contacts which can accommodate SHF cables require a termination by Radiall

Go online for data sheets & assembly instructions.



LuxCis[®] Fiber Optic Contacts

The LuxCis[®] product range is a proven, flexible Fiber Optic interconnect solution offering high speed communication in aerospace and other harsh environments.

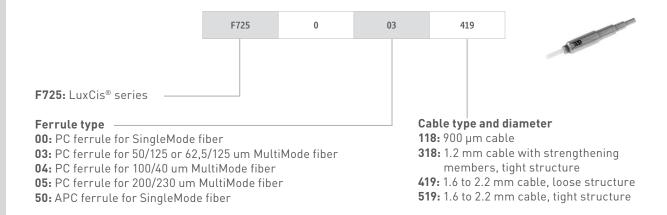
OPTICAL PERFORMANCE

	MultiMode (PC) 850 / 1300 nm	SingleMode (UPC) 1310 / 1550 nm
Insertion Loss (IL) Mean (IEC 61300-3-4 Method B)	0.1 dB	0.15 dB
Return Loss (RL) (IEC 61300-3-6)	> 20 dB	> 50 dB

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

	Standard	Performance	
Thermal cycling	SAE AS 13441 method 1003.1	-55°C/+125°C (cable dependant)	
Temperature endurance	TIA/EIA 455-4	1000 h at 125°C (cable dependant)	
Vibration	TIA/EIA 455-11	27 Grms	
Shock	TIA/EIA 455-14	50 G, 11 ms	
Durability	TIA / EIA 364-09	500 cycles ⁽¹⁾	
Maintenance	SAE AS 13441 method 2002.1	10 cycles	
Cable retention 1.8 mm diameter 900 µm diameter	SAE AS 13441 method 2009.1	68 N 7 N	
Humidity	TIA / EIA 455-5	10 cycles / 24 h 90% RH -25°C / +65°C	

LUXCIS® CONTACT PART NUMBERING SYSTEM



The sealing plug F718 211 200 is specifically designed to fill the unused LuxCis® Arinc 801 cavities.

NOTES:

 Mating cycles are dependant on connector series Radiall can support you with your cable and harness assemblies Please contact your sales representative



Signal PC tail Contacts

Selection table for straight PC tail contacts

Contact termination designations are a combination of 2 letters:

- The first letter characterizes the contact plating R = Pure-tin (RoHS); Z = Tin lead; Y = Gold
- The second letter characterizes the length of the PC tail: A to D

The exact lengths can be found on the assembly kit sections

Contact termination	Contact type	Size 22	Size 20	Size 16	Size 12	Size 8	Size 5
RA	Pin	617205510	617222514	617242510	617259505	617291501	617289506
KA	Socket	617305500	617322505	617342510	617359505	617391501	617389506
YA	Pin	617205010	617222014	617242010	617259005	617291001	617289006
Ϋ́Α	Socket	617305	617322005	617342010	617359005	617391001	617389006
7.4	Pin	617205710	617222714	617242710	617259705	617291701	617289706
ZA	Socket	617305700	617322705	617342710	617359705	617391701	617389706
RB	Pin	617205501	617222512	617242508	617259506	617291503	617289504
КВ	Socket	617305501	617322506	617342511	617359506	617391503	617389504
YB	Pin	617205001	617222012	617242008	617259006	617291003	617289004
ĭВ	Socket	617305001	617322006	617342011	617359006	617391003	617389004
ZB	Pin	617205701	617222712	617242708	617259706	617291703	617289704
ZB	Socket	617305701	617322706	617342711	617359706	617391703	617389704
RC	Pin	617205515	617222513	617242517	617259503	617291504	617289503
RC	Socket	617305508	617322507	617342513	617359503	617391504	617389503
YC	Pin	617205015	617222013	617242017	617259003	617291004	617289003
fC	Socket	617305008	617322007	617342013	617359003	617391004	617389003
ZC	Pin	617205715	617222713	617242717	617259703	617291704	617289703
20	Socket	617305708	617322707	617342713	617359703	617391704	617389703
RD	Pin	617205509	617222510	617242509	617259507	617291505	617289507
KD	Socket	617305502	617322509	617342515	617359507	617391505	617389507
YD	Pin	617205009	617222010	617242009	617259007	617291005	617289007
U	Socket	617305002	617322009	617342015	617359007	617391005	617389007
ZD	Pin	617205709	617222710	617242709	617259707	617291705	617289707
۷LD	Socket	617305702	617322709	617342715	617359707	617391705	617389707
Ins/ex	t. tool	282522 M81969/14-01	282522001 M81969/39-01	282515 M81969/14-03	282549004 M81969/14-04	282549001 M81969/28-03	282946 M81969/28-01

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INSERTS

Quadrax Size 8 Pc Tail Contacts

Selection table for straight PC tail contacts.

Contact termination designations are a combination of 2 letters:

- The first letter characterizes the contact plating
- R = Pure-tin (RoHS); Z = Tin lead; Y = Gold
- the second letter characterizes the length: A to D. The exact dimensions of the lengths can be found on the assembly kit sections



Contact termination	Contact type	Part number
RA	Pin	617177512
	Socket	617077512
YA	Pin	617177012
	Socket	617077012
ZA	Pin	617177712
ZA	Socket	617077712
RB	Pin	617177501
RD	Socket	617077502
YB	Pin	617177001
ID	Socket	617077002
ZB	Pin	617177701
ZD	Socket	617077702
RC	Pin	617177508
RU	Socket	617077508
YC	Pin	617177008
10	Socket	617077008
ZC	Pin	617177708
20	Socket	617077708
RD	Pin	617177513
КD	Socket	617077513
YD	Pin	617177013
Ϋ́́́́́	Socket	617077013
ZD	Pin	617177713
ΔU	Socket	617077713
Ext. too	l	282549001





RACK & PANEL APPLICATION

EPX® SERIES

INSERTS

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Filler Plugs

Size	Contact cavity version	Ins/ext	Color	Part Number	Drawing							
22			Black	620920	← []]							
20	For pin & socket		White	610941	← []							
16 for electrical cavity				Blue	620922	← []						
16 for optical cavity			Green	F718211200								
12						Yellow	620923	←				
0	Pin		Nicke	Nickel	619953	← []						
8	Socket									NICKEL	619950	←
5	Pin				White	617930	<					
U	Socket			mile	617931	<						

Filler plugs are dedicated to non-environmental insert cavities.

Sealing Plugs

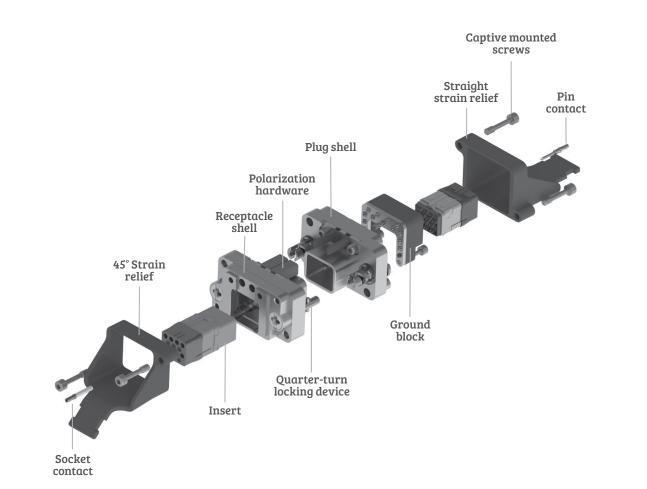
Sealing plugs are dedicated to environmental insert cavities.

Size	Contact cavity version	Ins/ext	Color	Part Number	Drawing	
22			Black	616910	< []	
20			Red	616911	< []	
16 for electrical cavity			Green	616912	← []]	
16 for optical insert	- For pin & socket	Rear/ Rear		F718211200		
12	i of pin a socket		Orange	616913	<	
8			Red	Ded	618915	←
5				Ked	616914013	< ()

The arrows show the direction which you have to insert the plug.

EPXA1 Product Overview

Detailed view of receptacle and plug with accessories for the EPXA1 connector.

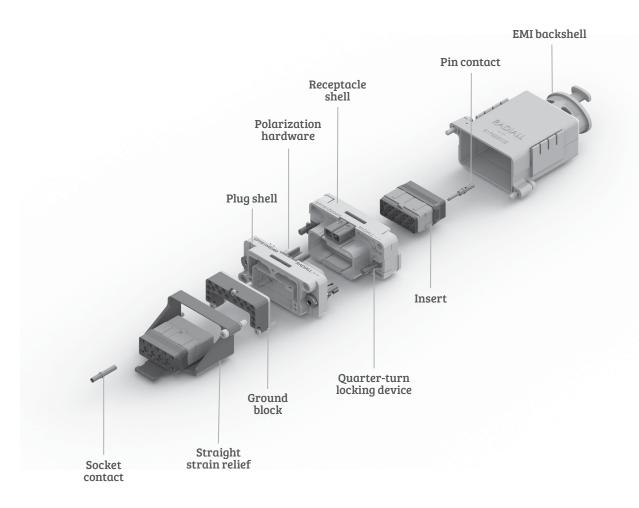


EPX® SERIE INSERTS CONTACTS



EPXB1 Product Overview

Detailed view of receptacle and plug with accessories for the EPXB1 connector.



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IN CONTACTS INSERTS EPX® SERIES

How to Order EPXA1 & EPXB1 Shell EPX B1 D R 0 4 М Series prefix Shell size A1: Single small cavity shell B1: Single large cavity shell Shell style -P: Plug R: Receptacle W: Plug with ground block Z: Receptacle with ground block Shell mounting option⁽¹⁾ B: Plug without mounting holes M: Receptacle with 2 mounting holes 6-32 UNC for rear panel⁽²⁾ Locking device 0: Quarter-turn fastener Polarization code⁽³⁾ 4: Shell delivered with polarizing hardware unassembled 5: Shell delivered with no polarizing hardware Shell class

M: Nickel-plated composite for EPXB1

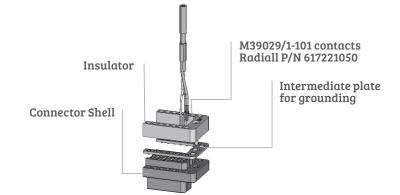
K: Nickel-plated aluminium for EPXB1 (mateable with version M composite shell)

N: Nickel-plated aluminium for EPXA1

GROUND BLOCK

Radiall provides a unique patented feature by integrating a ground block directly on the shell.

This option permits very short ground terminations



NOTES:

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Recommended locking torque: 1.6Nm (14.16 in-lbs) for metallic shell and 1.1Nm (9.73 in-lbs) max for composite shell
 Self-locking mounting holes are designed for rear panel mounting
 Please see page 1-28 on how to use the polarization device

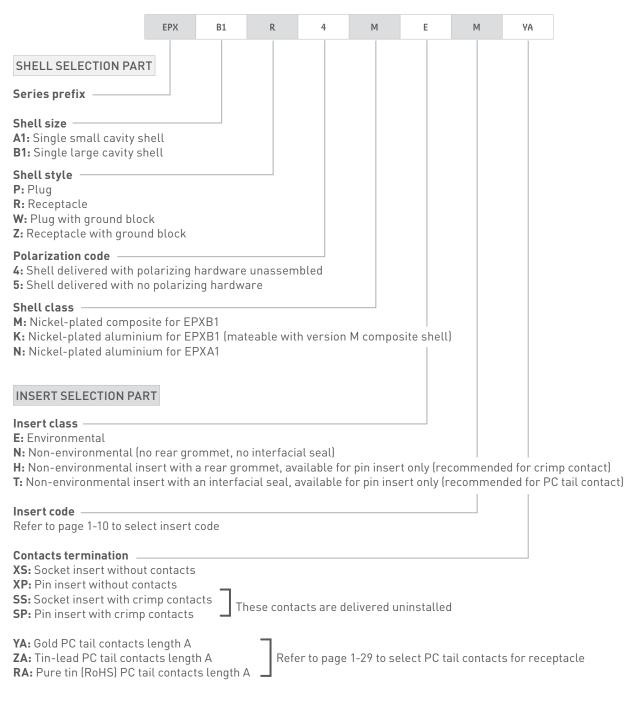


How to Order EPXA1 & EPXB1 Assembly Kit

Assembly kit is delivered fully assembled including shell with insert mounted, with or without contacts according to the selection.

Tips to help you make a selection:

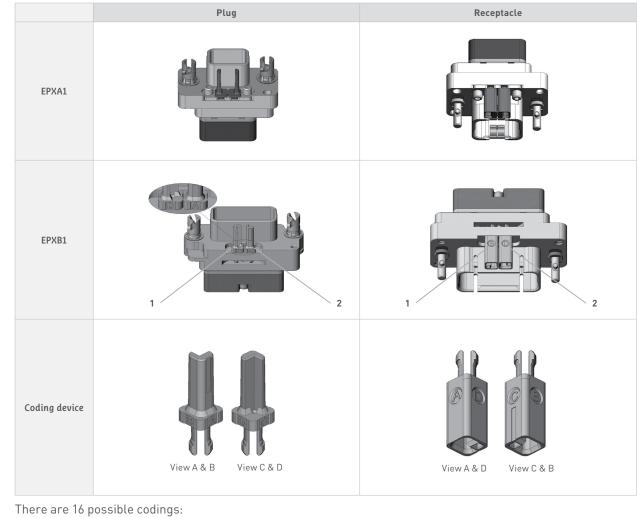
- You are free to use either pin or socket inserts in EPXA1 & EPXB1 plug or receptacles.
- Crimp contacts can be delivered with a kit, check which contacts would be included on page 1-10.
- If PC tail are selected then all cavities including signal, power and quadrax are populated. Size 5 coax cavities are not populated.
- If PC tail contacts are needed, remember that they are available as pin straight PC tail contacts in receptacles only.



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Polarization code for EPXA1 and B1

Caution: Read the polarization code from left to right, the same way the part number marking can be read on the connector.



С

A

С

В

С

С

С

D

D

А

D

В

D

С

D

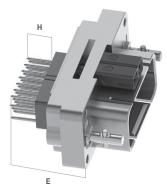
D

There are 16 possi	ble co	dings:						
Key position 1	А	А	А	А	В	В	В	В
Key position 2	А	В	С	D	Α	В	С	D

CONTACTS

Contact termination for EPXB1

Aluminium and composite shell versions.



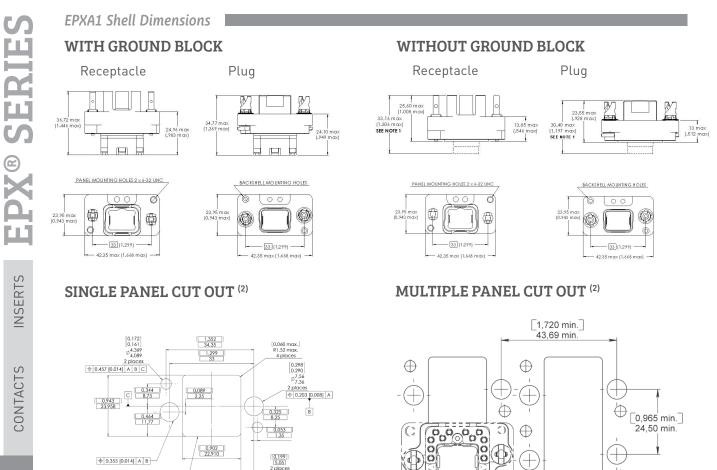
	Straight PC Tail contact termination						
Min Length E mm (inch)	Min Length H mm (inch)	Gold	Tin-lead	Pure tin (RoHS)			
16.20 (0.637) [1]	/	YA	ZA	RA			
19.40 (0.763) ^[1]	/	YB	ZB	RB			
21.25 (0.836) [1]	/	YC	ZC	RC			
25.20 (0.992)	5.40 (0.212)	YD	ZD	RD			

NOTE:

(1) These PC tail lengths are not compatible with EPXBE and EPXBH inserts







EPXA1 Shell Weights

0.508 [0.020] A B C

Weights include the shell with polarization hardware.

EPXA1	Shell style	Weight
	Р	27.0 g (0.95 oz)
CLASS N	R	33.0 g (1.16 oz)
CLASS N	W	35.0 g (1.23 oz)
	Z	41.0 g (1.45 oz)

NOTES:

(1) Maximum dimension for insert with grommets

For insert without grommet maximum dimensions will be for receptacle 25.55mm (1.006in) and for the plug 23.52mm (0.926in) (2) Rear mounting side view with key post oriented to the upper side



⊕

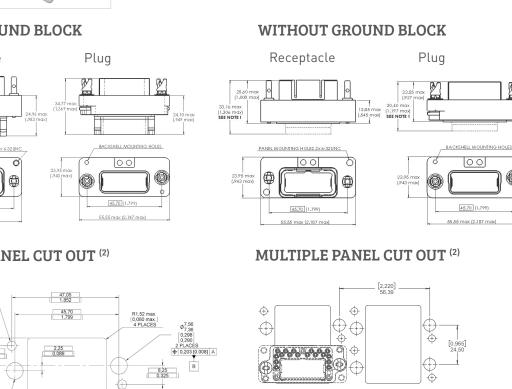
RACK & PANEL APPLICATION

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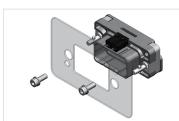


13 max (.512 max

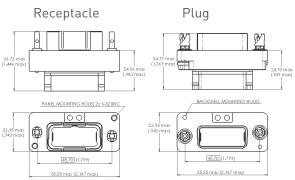
CONTACTS



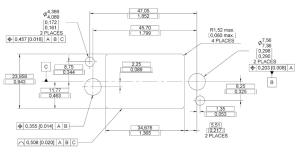
EPXB1 Shell Dimensions



WITH GROUND BLOCK



SINGLE PANEL CUT OUT (2)



EPXB1 Shell Weights

Weights include the shell with polarization hardware.

EPXB1	Shell style	Weight
	Р	27.0 g (0.95 oz)
CLASS K	R	33.0 g (1.16 oz)
ULASS N	W	37.0 g (1.31 oz)
	Z	43.0 g (1.52 oz)
	Р	25.0 g (0.88 oz)
CLASS M	R	33.0 g (1.16 oz)
	W	35.0 g (1.23 oz)
	Z	43.0 g (1.52 oz)

NOTES:

(1) Maximum dimension for insert with grommet. For insert without grommet: Insert is flush to the shell. Maximum dimension for the receptacle is 25.55 mm (1.006 in) and for the plug is 23.52 mm (0.926 in). For insert with optical contacts: the maximum dimension for the receptacle is

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38.70 mm (1.524 in) and the plug is 36.00 mm (1.418 in) (2) Rear mounting side view with polarization hardware oriented to the upper side

SIMPLIFICATION IS OUR INNOVATION

E PARTS & DUST CAPS Part number						
	EPXA Part r	umber EPXB1	Description			
	617980032	-	Polarization kit for plug connector			
	617980033	-	Polarization kit for receptacle connec			
	-	617980030	Polarization post			
	-	617980031	Polarization key			
4	617954006	617954008	Dust cap for plug shell (pink color)			
	617954007	617954009	Dust cap for receptacle shell (pink color)			
	617954044	617954034	ESD dust cap for plug shell (black color)			
	617954045	617954028	ESD dust cap for receptacle shell (black			
	617929033	-	Sealing inserts for fly away application			
	-	617929023	mateable with pin insert			
	617929032	-	Sealing inserts for fly away application			
	-	617929022	Sealing inserts for fly away applicat mateable with socket insert			



EPXA1 & EPXB1 Accessories

STRAIN RELIEFS AND EMI BACKSHELLS

	Part number		Description
	EPXA1	EPXB1	Description
	617921030	617921029	Straight strain relief (composite)
	617921032	617921031	45° strain relief (composite)
	-	617924016	Straight EMI backshell (Nickel-plated aluminium)
COP PURCH	-	617928002	Straight EMI backshell (Nickel-plated composite)
The second secon	-	617921044	Fiber Optic backshell (composite)

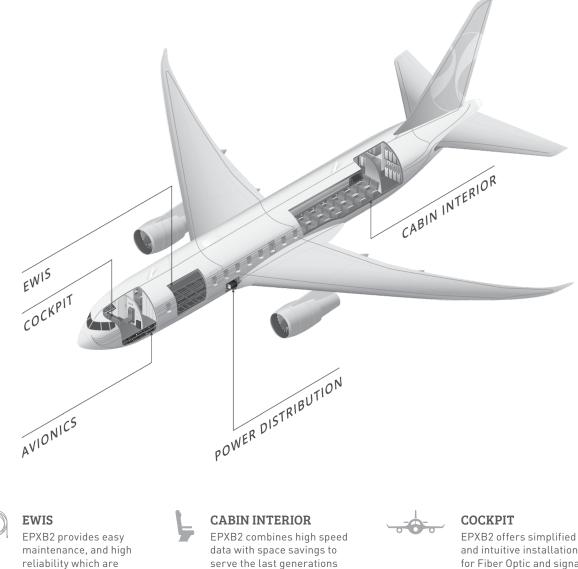
NOTE: For mounting instructions, please contact Radiall



EPXB2 Connectors

Radiall's EPXB2 disconnect connectors have been widely used in the aerospace industry for more than 10 years. Meant to be used in cable-to-cable and PCB-to-cable applications, EPXB2 connectors exceed civil aerospace market expectations in terms of high density, quick installation, and cost and weight savings.

Standardized by EN4644 European standard, Radiall's EPX® has been recognized as the leading rectangular modular connector and used in major commercial and business jet aircrafts. EPXB2 connectors are designed to cover any applications including:



reliability which are key characteristics of EWIS environments.



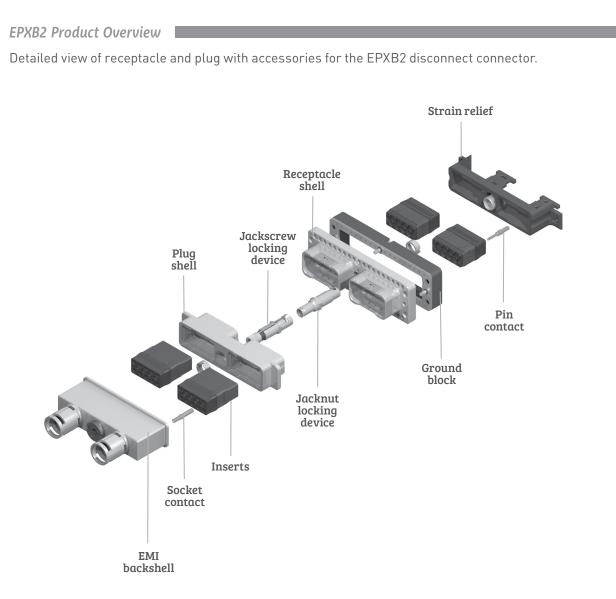
EPXB2 compactness, lightweight and robust design efficiently support avionics systems needs.

POWER DISTRIBUTION

of cabin systems.

EPXB2 stackable and segregated features make it the perfect solution for power distribution.

and intuitive installation for Fiber Optic and signal connections that are critical in cockpit design.





EPXB2 Range Overview

SHELL STYLES

δ

Classic EPXB2

Modular and flexible, EPXB2 answers all disconnect connecting needs with the use of a limited number of components. With a large variety of shells and one range of inserts, contacts and accessories, EPXB2 range is completely expandable and fits to your exact needs. You can mix and match solutions to build your connector with:

SHELL CLASSES - (ALL NICKEL PLATED)

Defining connector types (plug or receptacle) and their key features.

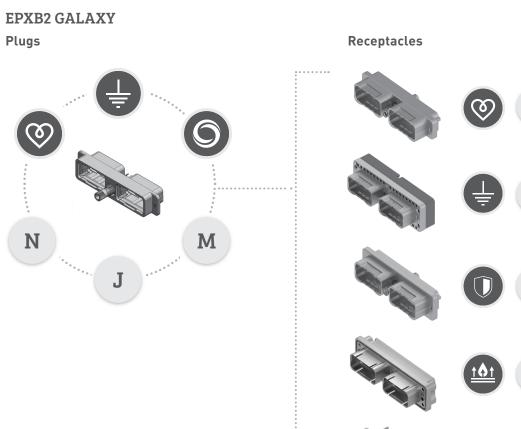
Flange



Ground Block

INSERTS

RACK & PANEL APPLICATION



Bulkhead

iepx





EPXB2 Latest Innovations

iEPX



FEATURES AND BENEFITS:

- Quick and easy to terminate
- Lightweight
- Prevents FOD
- Cable-to-cable connection
- Integrated strain relief

MIX AND MATCH:

- Fully intermateable with all EPXB2 plugs and receptacles.

and weight.

- Modular and comprehensive range: iEPX uses all contacts and inserts from EPX® range

EPX® BULKHEAD



Radiall's EPXB2 Bulkhead receptacle is a perfect solution for disconnect panel sealing applications. Combining EPX[®] proven technology with Bulkhead functionality, EPXB2 Bulkhead modular connectors provide effective panel sealing with a user friendly and cost saving approach.

Radiall expands the EPX[®] series by offering iEPX, a new weight optimized EPXB2 shell designed to be used in disconnect panel applications. With an integrated strain relief and EMI backshell to press-in, iEPX provides EMI shielding while reducing cost

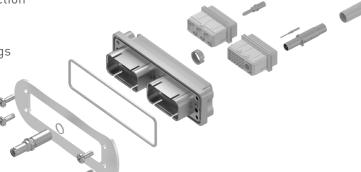
With EPXB Bulkhead pin insert range, Bulkhead receptacle provides permanent sealing between two zones with different environmental conditions.

FEATURES AND BENEFITS:

- Modular
- Competitive offer
- Optimized and mature design
- Easy and economical integration in the BOM
- PCB-to-cable or cable-to-cable connection

MIX AND MATCH:

- Fully intermateable with all EPXB2 plugs
- Uses EPX[®] broad range of accessories and contacts including signal, power, quadrax and fiber optics



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How to Order EPXB2 Shell

Series prefix Shell size B2: Two cavity shell Shell style For option compatibility, see the table below L: Receptacle with flange H: Classic receptacle Z: Receptacle with ground block R: Receptacle with orgound fingers B: Bulkhead receptacle (Bulkhead pin inserts compulsory) C: iEPX receptacle with integrated strain-relief P: Classic plug W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x Ø3.10 mm thru holes F: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes Locking & polarization device ⁽¹⁾ 1: Jackscrew 2: Jacknut 3: Without locking device Polarizing device A to F delivered unassembled 3: Polarizing device N to Z delivered unassembled		EPX	B2	Н	L	2	2	N
B2: Two cavity shell Shell style	Series prefix							
Shell style For option compatibility, see the table below L: Receptacle with flange H: Classic receptacle Z: Receptacle with ground block R: Receptacle with option inserts compulsory) C: iEPX receptacle (Bulkhead pin inserts compulsory) C: iEPX receptacle with integrated strain-relief P: Classic plug W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x 06-32 mounting holes E: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Dackscrew 2: Jacknut 3: Without locking device Polarization code ^[2] 2: Polarizing device A to F delivered unassembled								
For option compatibility, see the table below L: Receptacle with flange H: Classic receptacle Z: Receptacle with ground block R: Receptacle without ground fingers B: Bulkhead receptacle (Bulkhead pin inserts compulsory) C: iEPX receptacle with integrated strain-relief P: Classic plug W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x Ø3.10 mm thru holes F: Panel rear mounted connector with 2 x 6-32 mounting holes L: Panel rear mounted connector with 2 x 4-40 mount	B2: Two cavity shell							
L: Receptacle with flange H: Classic receptacle Z: Receptacle with ground block R: Receptacle without ground fingers B: Bulkhead receptacle (Bulkhead pin inserts compulsory) C: iEPX receptacle with integrated strain-relief P: Classic plug W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x Ø3.10 mm thru holes F: Panel rear mounted connector with 2 x 6-32 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 4 x 4-40 mounting holes L: Panel rear mounted connector with 4 x 4-40 mounting holes L: Panel rear mounted connector with	Shell style							
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Z: Receptacle with ground block R: Receptacle without ground fingers B: Bulkhead receptacle (Bulkhead pin inserts compulsory) C: iEPX receptacle with integrated strain-relief P: Classic plug W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x 03.10 mm thru holes F: Panel rear mounted connector with 2 x 6-32 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Docking & polarization device ⁽¹⁾ 1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled								
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P: Classic plug W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting	-			Inputsor	/ J			
W: Plug with ground block D: iEPX plug with integrated strain-relief Shell mounting		egi acca sci						
Shell mounting A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x Ø3.10 mm thru holes F: Panel rear mounted connector with 2 x 6-32 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes L: Jackscrew 2: Jacknut 3: Without locking device Polarization code ^[2] 2: Polarizing device A to F delivered unassembled								
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A: Panel rear mounted connector with 4 x 6-32 mounting holes B: No mounting holes D: Connector with 2 x Ø3.10 mm thru holes F: Panel rear mounted connector with 2 x 6-32 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes Locking & polarization device ⁽¹⁾ 1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled	Shell mounting							
B: No mounting holes D: Connector with 2 x Ø3.10 mm thru holes F: Panel rear mounted connector with 2 x 6-32 mounting holes L: Panel rear mounted connector with 2 x 4-40 mounting holes Locking & polarization device ⁽¹⁾ 1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled		nector wit	h 4 x 6-32 n	nounting	holes			
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L: Panel rear mounted connector with 2 x 4-40 mounting holes Locking & polarization device ⁽¹⁾ 1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled								
Locking & polarization device ⁽¹⁾ 1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled								
1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled	L: Panel rear mounted cor	inector with	h 2 x 4-40 n	nounting	noles			
1: Jackscrew 2: Jacknut 3: Without locking device Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled	Locking & polarization de	vice ⁽¹⁾						
Without locking device Polarization code ⁽²⁾ Polarizing device A to F delivered unassembled	1: Jackscrew							
Polarization code ⁽²⁾ 2: Polarizing device A to F delivered unassembled								
2: Polarizing device A to F delivered unassembled	3: Without locking device							
2: Polarizing device A to F delivered unassembled	Polarization code ⁽²⁾							
		delivered u	inassemble	d				
	3: Polarizing device N to Z	delivered u	unassemble	ed				

N: Nickel-plated aluminium

M: Nickel-plated composite

J: Nickel-plated weight optimized aluminium

AVAILABLE SHELL MOUNTING

	Shell style	A (4 x 6.32 UNC)	B (no holes)	D (2 x Ø3.10mm)	F (2 x 6.32 UNC)	L (2 x 4.40 UNC)
	L			х	х	Х
	Н		х	Х	Х	Х
	Z	х	х			
Class N	R	х				
	Р		х	Х		Х
	W	х	х			
	В	Х				
	Н					Х
Class I (usight antimized aluminium)	С					Х
Class J (weight optimized aluminium)	Р		х			
	D		х			
Class M (composito)	L			Х		х
Class M (composite)	Р		х	Х		х

NOTES:

RACK & PANEL APPLICATION

(1) Jackscrew/Jacknut can be mounted on either plug or receptacle shell. However, the standard options are:

- Jackscrew for plug shells

- Jacknut for receptacle shells (2) Please see page 1-40 for how to use the the polarization coding



How to Order EPXB2 Assembly Kit

Assembly kits are delivered fully assembled including shell with inserts mounted, with or without contacts according to the selection. When selecting your insert codes, do not forget to place them in the order you want them assembled. Locking and polarizing devices are delivered uninstalled.

Tips to help you make a selection:

- You are free to use either pin or socket inserts in EPXB plug or receptacle
- Crimp contacts can be delivered with a kit, check which contacts will be included on page 1-10
- PC tail contacts can also delivered with a kit. Remember that only straight pin PC tail contacts are available, and in receptacle only
- If PC tail contacts are selected then all cavities including signal, power and guadrax are populated. Size 5 coax cavities are not populated

All connector inserts will use the same insert class and the same contact termination. iEPX is not compatible with insert 3Q3 in environmental class.

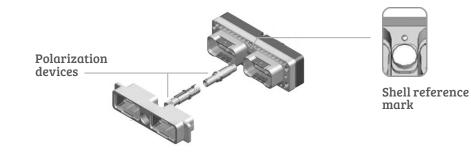
	EPX	B2	Н	В	2	N	Ν	BC	ZB
SHELL SELECTION PART									
Series prefix									
Shell size									
B2: Two cavity shell									
Shell style									
For option compatibility, see	table on p	age 1-38							
L: Receptacle with flange		0							
H: Classic receptacle									
Z: Receptacle with ground bl									
R: Receptacle without groun B: Bulkhead receptacle (Bull		incorte e	ompulsor	.a					
C: iEPX receptacle with integ			unpuisoi	y)					
P: Classic plug									
W: Plug with ground block									
D: iEPX plug with integrated	strain-rel	ief							
Shell mounting									
A: Rear panel mounted conn	ector with	4x 6-32 r	mounting	holes					
B: No mounting holes									
D: Connector with 2 x Ø3.10 r F: Rear panel mounted conn			mounting	holoc					
L: Rear panel mounted conn			9						
Polarization	cetor with	2 / 4 40	inounning	notes					
1: Jackscrew polarizing devi	ce A to F								
2: Jacknut polarizing device									
3: Without locking device									
6: Jackscrew polarizing devi									
7: Jacknut polarizing device	N to Z								
Shell class									
N: Nickel-plated aluminium M: Nickel-plated composite									
J: Nickel-plated weight optin	nized alum	ninium							
jjjjj									
INSERTS SELECTION PART									
Insert class									
B: Bulkhead insert with inter	rfacial sea	l and rea	r gromme	t, availab	le for pin	insert onl	у		
E: Environmental									
N: Non-environmental	t with a ra	orgromp	aat availa	bla far nii	n incort o	nly(rocom	mandad	 for crimp	(contact)
H: Non-environmental inser T: Non-environmental insert									
Insert code	t with fifter	100101.50		te ioi pili	moercom	ty (reconn	nenacan		
Refer to page 1-10 to select of	ode inser	t							
Contacts termination									
XS: Socket insert without co	ntacts								
XP: Pin insert without contac	cts								
ee c. 1									
SS: Socket insert with crimp		The	ese contad	ts are de:	livered ur	ninstalled			
SP: Pin insert with crimp cor		_							
YA: Gold PC tail contacts len			Refer	to pages	1- 41 to s	elect PC ta	ail contac	ts for rece	ptacle
ZA: Tin-lead PC tail contacts	s length A								
		nath A	Not a	vailable w	vith iEPX				
RA: Pure tin (RoHS) PC tail c		ngth A	_ Not a						

EPXB2 Polarization Code



As a standard, jackscrews shall be installed in plugs and jacknuts in receptacle shells, however, jackscrew/jacknut can be installed in either plugs and receptacles. The nut can be fixed with your automatic screwdriver and the tool bit we provide (P/N 282664).

Tip: use the shell reference mark (located at the top of the locking cavity) to choose keying position.



		Keying	position	Availa	ble as
		Receptacle	Plug	Standard	Bulkhead
Jacknut	From A to F	A F E D C	A C D	617980029	617980066
	From N to Z		N Z Y	617980028	617980067
	Universal		\supset	617980022	N/A
Jackscrew	From A to F	A F E D C	A B C D D	617980012	N/A
	From N to Z		N Z Y	617980013	N/A
	Universal		\supset	617980023	N/A

Go online for data sheets & assembly instructions



RACK & PANEL APPLICATION

1-40

S

EPX® SERIE

Contacts Termination for Receptacles

EPXB2 COMPOSITE SHELL

Straight PC Tail contact termination							
Min Length E mm (inch)	Min Length H mm (inch)	Gold	Tin-lead	Pure tin (RoHS)			
14.20 (0.559) [1]	/	YA	ZA	RA			
17.35 (0.683) [1]	/	YB	ZB	RB			
19.20 (0.755) ^[1]	/	YC	ZC	RC			
23.10 (0.909)	5.40 (0.212)	YD	ZD	RD			

EPXB2 WEIGHT OPTIMIZED ALUMINIUM AND ALUMINIUM SHELL

Straight PC Tail contact termination							
Min Length E mm (inch)	Min Length H mm (inch)	Gold	Tin-lead	Pure tin (RoHS)			
14.55 (0.572) [1]	/	YA	ZA	RA			
17.75 (0.698) ⁽¹⁾	/	ΥB	ZB	RB			
19.55 (0.769) ^[1]	/	YC	ZC	RC			
23.50 (0.925)	5.40 (0.212)	YD	ZD	RD			



(1) These PC tail lengths are not compatible with EPXBE, EPXBH and EPXBB inserts

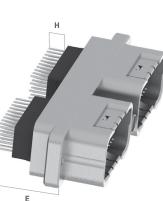
GROUND BLOCK

Radiall provides a unique patented feature by integrating a ground block directly on the shell. This option permits very short ground terminations

M39029/1-101 contacts Radiall P/N 617221050 Insulator Intermediate plate for grounding **Connector Shell**

Radiall

X[®] SERIES

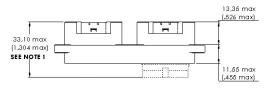


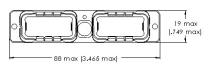




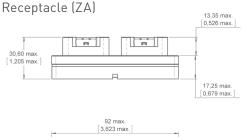
CLASS N&J Classic

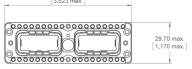
Receptacle (HL)





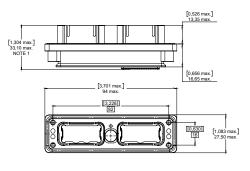
CLASS N Ground Block





Bulkhead

Receptacle (BA)

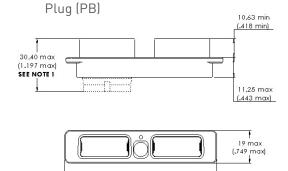


NOTES:

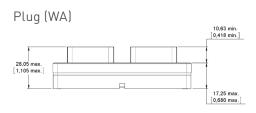
(1) For insert with grommet: maximum dimension is the one shown in the drawing

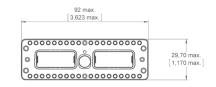
For insert without grommet: insert is flush to the shell. Maximum dimension for the receptacle is 25.55 mm (1.006 in) and for the plug is 23.52 mm (0.926 in)

For insert with optical contacts: the maximum dimension for the receptacle is 38.70 mm (1.524 in) and for the plug is 36.00 mm (1.418 in)



88 max (3.465 max)

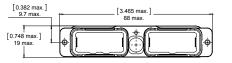




EPXB2 Aluminium Shell Dimensions

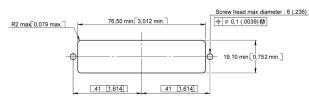
CLASS J iepx

Receptacle (CL)



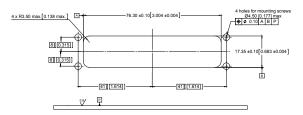
SINGLE PANEL CUT OUT Class N & J

Shell mounting code D, F and L



Class N - Bulkhead receptacle

Shell mounting code A



MULTIPLE PANEL CUT OUT Class N & J



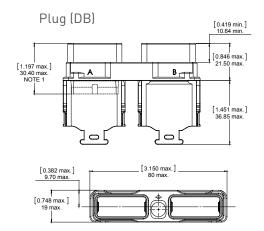
NOTES:

(1) For insert with grommet: maximum dimension is the one shown in the drawing

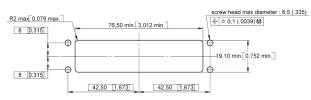
For insert without grommet: insert is flush to the shell. Maximum dimension for the receptacle is 25.55 mm (1.006 in) and for the plug is 23.52 mm (0.926 in)

For insert with optical contacts : the maximum dimension for the receptacle is 38.70 mm (1.524 in) and for the plug is 36.00 mm (1.418 in)

Radiall



Shell mounting code A



INSERTS EPX® SERIES

CONTACTS

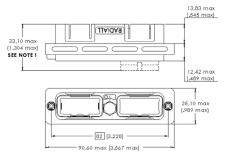
DISCONNECT APPLICATION

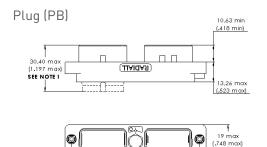
RACK & PANEL APPLICATION

EPXB2 Composite Shell Dimensions

CLASS M

Receptacle (LL)

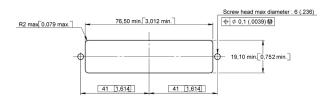




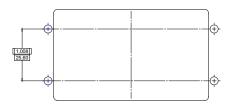
90,60 max (3.567 max)

SINGLE PANEL CUT OUT

Shell mounting code D and L



MULTIPLE PANEL CUT OUT



NOTE:

(1) For insert with grommet (EPXBE and EPXBH): maximum dimension is the one shown in the drawing

For insert without grommet (EPXBN): insert is flush to the shell. Maximum dimension for the receptacle is 25.55 mm (1.006 in) and for the plug is 23.52 mm (0.926 in)

For inserts with optical contacts: the maximum dimension for the receptacle is 38.70 mm (1.524 in) and the plug is 36.00 mm (1.418 in)



EPXB2 Weights

Weights include the shell with no polarization. If locking is needed, please add the following weights:

- Jackscrew: 9.0 g
- Jacknut: 7.8 g
- Bulkhead jacknut: 8.7 g

Class	Shell mounting	А	В	D	F	
Class	Shell style	А	В	U	F	L
	L	-	-	45 g (1.59 oz)	45 g (1.59 oz)	45 g (1.59 oz)
	Н	-	35 g (1.23 oz)	36 g (1.27 oz)	36 g (1.27 oz)	36 g (1.27 oz)
	Z	80 g (2.82 oz)	80 g (2.82 oz)	-	-	-
Class N	R	45 g (1.59 oz)	-	-	-	-
	Ρ	-	30 g (1.06 oz)	30 g (1.06 oz)	-	30 g (1.06 oz)
	W	75 g (2.65 oz)	75 g (2.65 oz)	-	-	-
	В	50 g (1.76 oz)	-	-	-	-
	Н	-	-	-	-	27 g (0.95 oz)
Class	С	-	-	-	-	35 g (1.23 oz)
Class J	Ρ	-	25 g (0.88 oz)	-	-	-
	D	-	30 g (1.06 oz)	-	-	-
Class M	L	-	-	35 g (1.23 oz)	-	35 g (1.23 oz)
	Ρ	-	24 g (0.85 oz)	25 g (0.88 oz)	-	25 g (0.88 oz)

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RACK & PANEL APPLICATION

EPXB2 Accessories		
	Part number	Description
	617922007	Straight strain relief (composite)
	617922014	Straight strain relief for Fiber Optic cable (anodized aluminium)
	617928100	Straight EMI backshell (nickel-plated composite)
o TO BY	617925052	EMI backshell for braid shield termination (nickel-plated aluminium)
OT OT TO TO	617925054	EMI backshell for screened twisted pair cables (nickel-plated aluminium)
a contraction of the second se	617925056	Backshell for large sized wire harnesses (nickel-plated aluminium) ⁽¹⁾
	617925013	EMI Backshell for iEPX connectors (aluminium)
	617922029	Fiber Optic backshell (composite)

NOTE: Not compatible with jackscrew



EPXB2 Spare Parts		
	Part number	Description
	617954101	Grounding spring (for EPXB2 aluminium only)
	617980029	Jacknut – A/B/C/D/E/F
	617980028	Jacknut – N/R/W/X/Y/Z
	617980022	Universal jacknut
61	617980066	Bulkhead Jacknut A/B/C/D/E/F
0	617980067	Bulkhead Jacknut N/R/W/X/Y/Z
	617980012	Jackscrew – A/B/C/D/E/F
	617980013	Jackscrew – N/R/W/X/Y/Z
	617980023	Universal jackscrew
	617954002	Dust cap for plug shell (pink color)
RASSIN	617954003	Dust cap for receptacle shell (pink color)
BAX U	617954004	ESD dust cap plug shell (black color)
	617954005	ESD dust cap receptacle shell (black color)
	617929023	Sealing inserts for fly away applications: mateable with pin insert
	617929022	Sealing inserts for fly away applications: mateable with socket insert

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INSERTS EPX® SERIES

CONTACTS

Disconnect Tools

EPX® SERIES

INSERTS

CONTACTS

RACK & PANEL APPLICATION

	Part number	Description	To be used with		
	Part number	Description	EPXA1	EPXB1	EPXB2
O	282664	1/4 inch hex. screwdriver bit to affix the nut of the jackscrew or the jacknut to the EPXB2 accessories			Х
	282665	Spigot wrench to affix the nut of the jackscrew or the jacknut to the EPXB2 accessories			Х
	282666	Allen wrench for 1/4 turn fasterner (3/32 inch)	Х	Х	
	282666002	Allen wrench for rear accessories (5/64 inch)		X	
	282666001	Allen wrench for jackscrew (9/64 inch)			Х
	282521002	Insert extraction tool		Х	Х
	282521004	Right angle insert extraction tool		Х	Х
	282521007	Bulkhead insert extraction tool			Х
	282521005	Insert extraction tool	Х		
	617954020	Plastic box to protect wired inserts during handling	Х	Х	Х
	F780855000	Hexagonal key 2mm (5/64inch) Flats for sleeve holder removal		х	х
and the second se	282668001	Tweezers to change polarizing posts and keys		Х	



EPX Rack and Panel for LRM - Product Overview **RACK AND PANEL** Detailed view of receptacle and plug with accessories for the EPXB3 Rack and Panel connector. EMI backshell **Receptacle shell** Polarization Strain relief hardware Crimp contacts Fixed or floating device Insert Plug shell Right angle or straight PC tail contacts

INSERTS EPX® SERIES

CONTACTS



How to Order EPXB1, B2, B3 & B4 Shell for LRM

	EPX	B3	Р	N	1	0
Series prefix						
Shell size						
B1: One cavity shell						
B2: Two cavity shell						
B3: Three cavity shell						
B4: Four cavity shell						
Shell style						
P: Plug, nickel-plated						
R: Receptacle, nickel-plated						
Shell mounting (refer to page 1-52 for o						
M: Plug, fixed connector with Ø3.90		4-40UNC	on side			
N: Plug, fixed connector with 8-32						
S: Receptacle, fixed with 4 x 8-32L						
T: Receptacle, floating with 4 x 8-3		axes) ^[1]				
5						
Polarization code						
1: Shell delivered with polarizing h	ardware una	ssembled				
i onott dott of ou min potal izing i						

Panel cut out coding

A to Z: Receptacle, refer to page 1-54 for the code selection **0 (zero):** Plug, no panel cut out coding

CONTACTS



How to Order EPXB1, EPXB2, B3 & B4 Assembly Kit for LRM

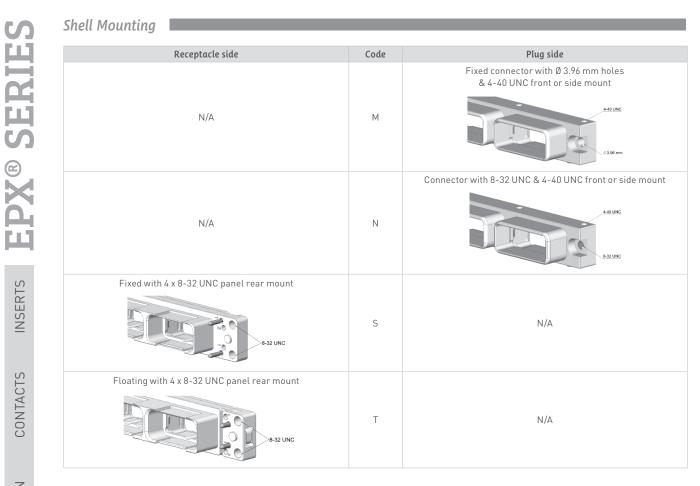
Assembly kit includes shell with inserts mounted, with or without contacts. When selecting your insert codes, do not forget to place them in the order you want them assembled. Polarization hardware are always provided unassembled with assembly kits.

Tips to help you make a selection:

- You are free to use either pin or socket inserts in EPXB plug or receptacle
- Crimp contacts can be delivered with a kit, check which contacts will be included on page 1-10
- If PC tail contacts are selected then all cavities including signal, power and quadrax are populated (Size 5 coax cavities are not populated)
- If PC tail contacts are needed, remember that they are only available in plugs All connector inserts will use the same insert class and the same contact termination.

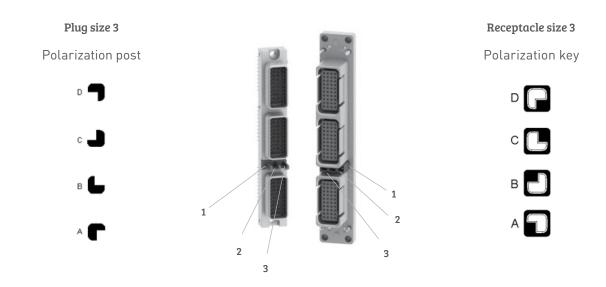
All connector inserts	witt use	line Sain	emsert	CldSS d	nu the s	anne con	llactiern	IIIIdli0i
	EPX	B4	Р	N	0	E	ABDC	YA
HELL SELECTION PART								
eries prefix								
Shell size 31: One cavity shell 32: Two cavity shell 33: Three cavity shell 34: Four cavity shell								
hell style : Plug, nickel-plated : Receptacle, nickel-plat	ed							
Shell mounting (refer to pag M: Plug, fixed connector w N: Plug, fixed connector w S: Receptacle, fixed with 4 F: Receptacle, floating wit	ith Ø3.96 ith 8-32 U x 8-32 U	mm hole JNC & 4- NC	40 UNC o		side			
Panel cut out coding to Z: For receptacle, refe (zero): For plug, no pane			the code s	selectior	1			
NSERT SELECTION PART								
nsert class E: Environmental V: Non-environmental (no I: Non-environmental inse I: Non-environmental inse	ert with a	rear gro	mmet (re	commer				
nsert code Refer to page 1-10 to selec	t insert co	ode						
Contacts termination — (S: Female insert without (P: Male insert without co SS: Female insert with crin SP: Male insert with crimp	ntacts np contac		nese conta	acts are	delivered	d uninstal	lled.	
/A: Gold PC tail contacts lo /A: Tin-lead PC tail contac {A: pure tin (RoHS) PC tail	ts length:			to page	1- 53 to s	select PC	tail contae	cts for p
NOTE: 1) This floating option is not avail	able in EPXE	34 version						

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EPXB Polarization Code

Polarization device is included in the part number and could be installed as shown below. Each shell has 3 polarization hardware which can be in four different position. The three polarization hardware can have their own position which allow a large range of codification.



Connectors are shown front side with cavity A upwards.



INSERTS

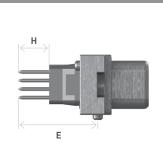
CONTACTS

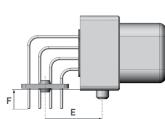


Contact Terminations for EPXB1, EPXB2, EPXB3 and EPXB4 Plugs

Straight PC Tail contact termination						
Mini Length E mm (inch)	Mini Length H mm (inch)	Gold	Tin-lead	Pure tin (RoHS)		
10.60 (0.417) [1]	/	YA	ZA	RA		
13.80 (0.543) ⁽¹⁾	/	YB	ZB	RB		
15.60 (0.614) [1]	/	YC	ZC	RC		
19.55 (0.769)	5.40 (0.212)	YD	ZD	RD		

Right Angle PC Tail contact termination						
Mini length F mm (inch)	Mini length E mm (inch)	Gold	Tin-lead	Pure tin (RoHS)		
2.20 (0.086)	12.85 (0.505) [1]	GA	LA	TA		
3.60 (0.141)	20.10 (0.791)	GB	LB	TB		
3.60 (0.141)	12.85 (0.505) [1]	GC	LC	TC		
2.20 (0.141)	20.10 (0.791)	GD	LD	TD		





NOTES:

(1) These PC tail lengths are not compatible with EPXBE and EPXBH inserts



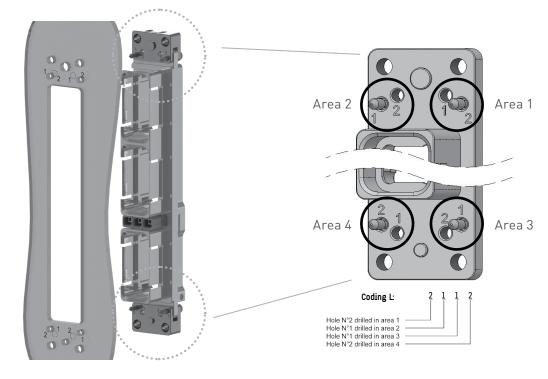
EPXB Panel Cut out Coding

When several connectors are used with the same equipment, a coding is available on the shell to correlate the correct shell with the correct panel cut-out.

On the panel cut out, four areas are coded, area 1, 2, 3 and 4 (see figure below). For each area, one of the two holes should be drilled (hole n°1 or hole n°2). Each hole on the panel cut out corresponds to the use of a coding pin on the shell.

Panel cut-out coding	Panel hole number to drill in Area 1	Panel hole number to drill in Area 2	Panel hole number to drill in Area 3	Panel hole number to drill in Area 4
A		Connector delivered with	n coding device uninstalled	
В	1	1	1	1
С	1	1	1	2
D	1	1	2	1
E	1	1	2	2
F	1	2	1	1
G	1	2	1	2
Н	1	2	2	1
J	1	2	2	2
К	2	1	1	1
L	2	1	1	2
М	2	1	2	1
Ν	2	1	2	2
Р	2	2	1	1
R	2	2	1	2
S	2	2	2	1
Т	2	2	2	2
Z		Connector delivere	d without coding pin ⁽¹⁾	

CODING PINS ARE FOR RECEPTACLE ONLY







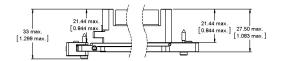
RACK & PANEL APPLICATION

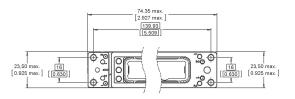
EPXB1 Shell Dimensions & Panel Cut outs

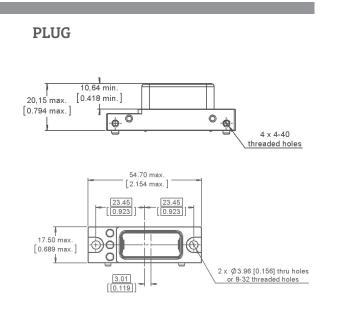
RECEPTACLE

Floating Mount

Fixed Mount

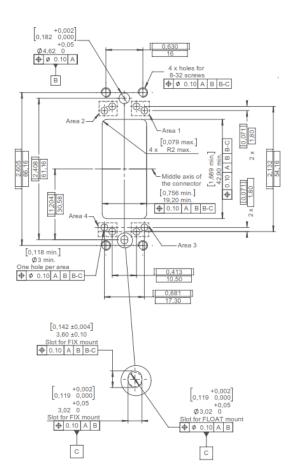






PANEL CUT OUTS

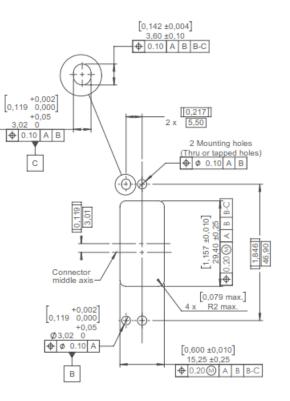
Receptacle shown from the rear side



Plug

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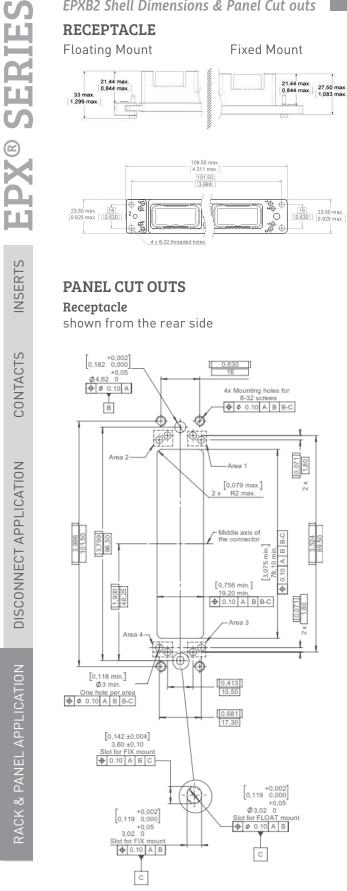
shown from the front side

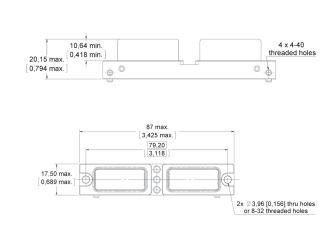


INSERTS EPX® SERIES

CONTACTS

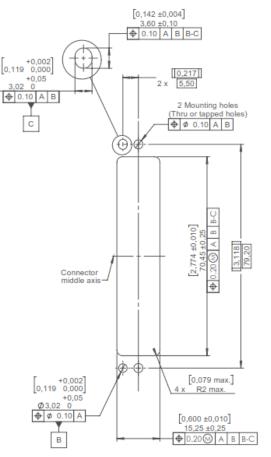
EPXB2 Shell Dimensions & Panel Cut outs





Plug shown from the front side

PLUG



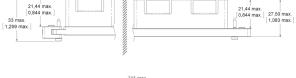


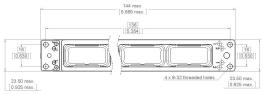
EPXB3 Shell Dimensions & Panel Cut outs

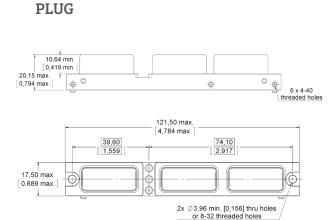
RECEPTACLE

Floating Mount



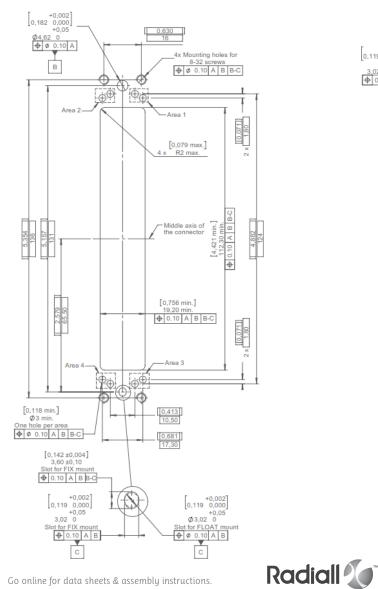




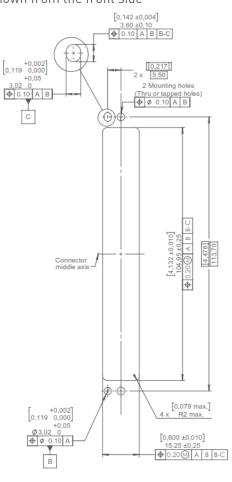


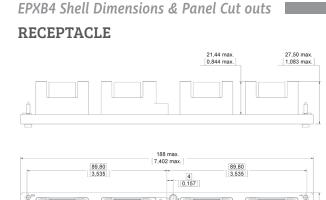
PANEL CUT OUTS

Receptacle shown from the rear side



Plug shown from the front side

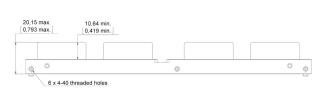


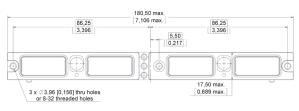


16

23,50 max. 0,925 max.

PLUG



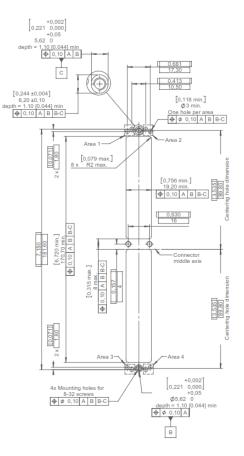


PANEL CUT OUTS

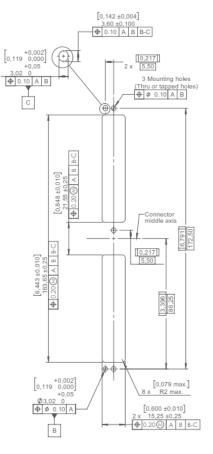
4 x 8-32 threaded holes

Receptacle

shown from the rear side



Plug shown from the front side



1-58



Rack & Panel Accessories				
	Part number	Description		
	617925073	EMI backshell for receptacle only (aluminium nickel-plated)		
	617922022	Straight strain relief for receptacle only (composite)		
	617954002	Dust cap for plug shell (pink color)		
READINAL STR	617954003	Dust cap for receptacle shell (pink color)		
	617954004	ESD dust cap plug shell (black color)		
	617954005	ESD dust cap receptacle shell (black color)		
THE WEAT	617980052	Coding Pin		
	617980030	Polarization post		
	617980031	Polarization key		

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EPX® SERIES INSERTS CONTACTS

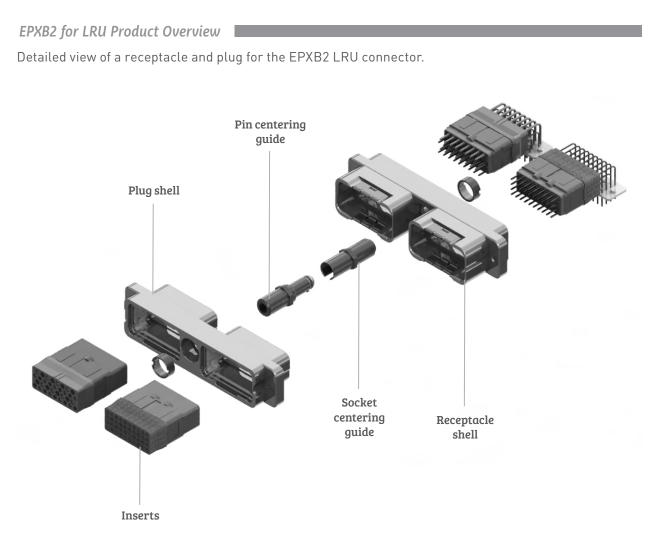
DISCONNECT APPLICATION



EPX® SERIES INSERTS CONTACTS DISCONNECT APPLICATION

Rack & Panel Tools					
	Part number	Description			
	282521002	Insert extraction tool			
	282521004	Right angle insert extraction tool			
Total Contraction of the second se	617954020	Plastic box to protect wired inserts during handling			
	F780855000	Hexagonal key 2mm (5/64inch) Flats for sleeve holder removal			







How to Order EPXB2 Shell for LRU

	-						
	EPX	B2	н	L	2	2	N
Series prefix							
Shell size							
B2: Two cavity shell							
Shell style							
For option compatibility, se	ee the table	below					
L: Receptacle with flange							
H: Classic receptacle Z: Receptacle with ground	block						
R: Receptacle without grou							
C: iEPX receptacle with int		ain-relief					
P: Classic plug							
W: Plug with ground block D: iEPX plug with integrate	d strain_ro	liof					
Shell mounting		/ / 00					
A: Panel rear mounted con B: No mounting holes	inector with	14X6-32 M	nounting r	noles			
D: Connector with 2 x Ø3.10	0 mm thru l	noles					
F: Panel rear mounted con			nounting h	oles			
L: Panel rear mounted con	nector with	n 2 x 4-40 m	nounting h	noles			
Locking & polarization de	vice ⁽¹⁾ —						
4: Pin centering guide							
5: Socket centering guide							
Polarization code							
2: Polarizing device A to F							
3: Polarizing device N to Z							
Shall class							

Shell class

N: Nickel-plated aluminium

M: Nickel-plated composite

J: Nickel-plated weight optimized aluminium

AVAILABLE SHELL MOUNTING

	Shell style	A (4 x 6.32 UNC)	B (no holes)	D (2 x Ø3.10mm)	F (2 x 6.32 UNC)	L (2 x 4.40 UNC)
	L			Х	Х	х
	Н		х	х	Х	х
Class N	Z	Х	х			
Class N	R	Х				
	Р		х	х		х
	W	Х	х			
	Н					х
Class I (usight optimized gluminium)	С					х
Class J (weight optimized aluminium)	Р		х			
	D		х			
Class M (composite)	L			Х		х
ciuss in (composite)	Р		х	Х		х

NOTES:

(1) Pin/Socket centering guides can be mounted on either plug or receptacle shells. However, the standard options are:

- Pin centering guide for plug shells

- Socket centering guide for receptacle shells



How to Order EPXB2 Assembly Kit for LRU

Assembly kits includes shell with inserts mounted, with or without contacts. When selecting your insert codes, do not forget to place them in the order you want them assembled. Locking device is delivered uninstalled.

Tips to help you make a selection:

- You are free to use either pin or socket inserts in EPXB plug or receptacle
- Crimp contacts can be delivered with a kit, check which contacts will be included on page 1-10
- PC tail contacts can also delivered with a kit. Remember that only straight pin PC tail
- contacts are available, and in receptacle only. iEPX (styles C and D) are not available with PC tails If PC tail contacts are selected then all cavities including signal, power and
- quadrax are populated. Size 5 coax cavities are not populated

All connector inserts will use the same insert class and the same contact termination. EPX is not compatible with insert 3Q3 in environmental class.

	EPX	B2	Н	В	2	N	Ν	BC	ZB
SHELL SELECTION PART									
Series prefix									
Shell size									
B2: Two cavity shell									
Shell style		1 / 0							
For option compatibly, see ta L: Receptacle with flange	ble on pag	ge 1-62							
H: Classic receptacle									
Z: Receptacle with ground bl	ock								
R: Receptacle without groun									
C: iEPX receptacle with integ P: Classic plug	rated stra	ain-relief							
W: Plug with ground block									
D: iEPX plug with integrated	strain-rel	lief							
Shell mounting									
A: Rear panel mounted conn	ector with	n 4x 6-32 m	nounting	noles					
B: No mounting holes D: Connector with 2 x Ø3.10 r	nm thru h								
F: Rear panel mounted conne			nounting	holes					
L: Rear panel mounted conne									
Polarization									
4: Pin centering guide, polar	0								
5: Socket centering guide, po			F						
8: Pin centering guide, polari 9: Socket centering guide, po			7						
Shell class	turizing u		2						
N: Nickel-plated aluminium									
M: Nickel-plated composite									
J: Nickel-plated weight optin	nized alun	ninium							
INSERTS SELECTION PART									
Insert class									
E: Environmental									
N: Non-environmental									
H: Non-environmental inser									
T: Non-environmental insert	with inter	rfacial sea	l, availab	le for pin	insert onl	y lrecomr	nended fo	or PC tail c	contactJ
Refer to page 1-10 to select c	ode incer	·+							
Contacts termination	ouc moci	L .							
XS: Socket insert without co	ntacts								
XP: Pin insert without contac	:ts								
SS: Socket insert with crimp		Thee	e contaci	e are del	ivered uni	netallad			
SP: Pin insert with crimp cor	itacts		CUIIIdU	.s are uel	vereu ulli	nstatteu			
YA: Gold PC tail contacts len	0		Refe	r to page	s 1- 41 to s	elect PC+	ail conta	cts for rec	entacle
ZA: Tin-lead PC tail contacts RA: Pure tin (RoHS) PC tail co	0	ength A			with iEPX		Carl Conta		00000

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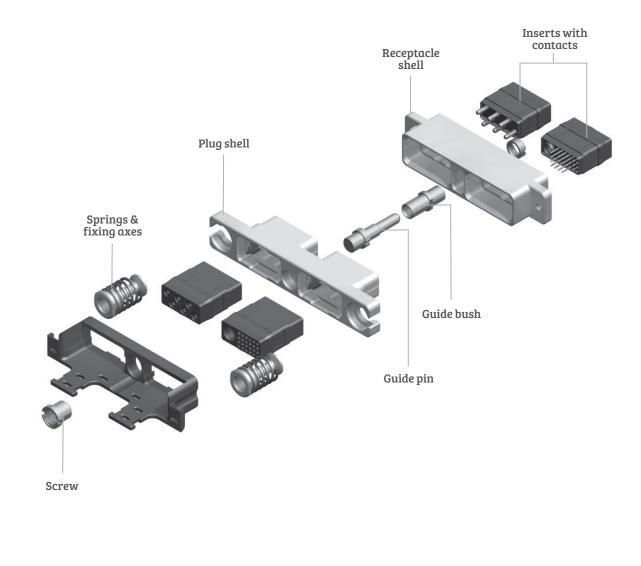
EPX[®] Galley Arinc 810 Product Overview

The EPXB2 Galley connector was specially designed for the severe conditions required by galley equipment. A floating mechanism was developed to avoid any risk of jamming and to guarantee a fully sealed connection.

The EPXB2 is used on ovens, beverage makers, refrigerators, microwave ovens and other equipment which fit within the new standardized galley layouts.

The EPXB2 connector is modular and provides extra contact density to add new contacts such as the #8 Twinax CAN data bus contact. Backshell accessories are also available.

Detailed view of receptacle and plug with accessories for the EPXB2 galley connector.





How to Order EPX[®] Galley Equipment Connector

RECEPTACLE AND PLUG ASSEMBLY KIT

Part number	Description
617610188 or 617610558	Receptacle assembled kit (*)
617610189	Plug assembled kit (*)

(*)Part numbers for assembly kits include: plug or receptacle shell, inserts, contacts, sealing plugs and dust caps.

Each item included in the kit is indicated in the table below and can also be ordered separately.

RECEPTACLE KITS

617610188

Shell with 2 self-locking threaded holes

Part number	Description	Quantity per kit
617610212	Receptacle shell	1
EPXBE25Q1PA	Insert for cavity A	1
EPXBE06PB	Insert for cavity B	1
617200	Pin crimp contacts/Size 22	15
617250	Pin crimp contacts/Size 12	6
616910	Filler plug	9
617954003	Dust cap	2

617610558		
Shell with	2 thru	holes

Part number	Description	Quantity per kit
617610419	Receptacle shell	1
EPXBE25Q1PA	Insert for cavity A	1
EPXBE06PB	Insert for cavity B	1
617200	Pin crimp contacts/Size 22	15
617250	Pin crimp contacts/Size 12	6
616910	Filler plug	9
617954003	Dust cap	2

PLUG KIT 617610189 contents

Part number	Description	Quantity per kit
617610213	Plug shell	1
EPXBE25Q1SA	Insert for cavity A	1
EPXBE06SB	Insert for cavity B	1
617300	Socket crimp contacts/Size 22	15
617350	Socket crimp contacts/Size 12	6
616910	Filler plug	9
617922007	Strain relief	1
617954002	Dust cap	2

CAN DATA BUS CONTACTS

Part number	Description
617165011	Size 8 Twinax pin contact
617065011	Size 8 Twinax pin contact

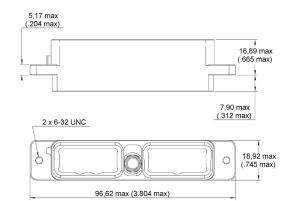
Radiall

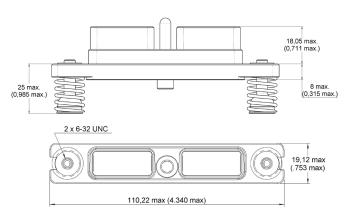
Dimensions and Panel Cut Out

EPX® GALLEY EQUIPMENT CONNECTOR PER ARINC 810

RECEPTACLE







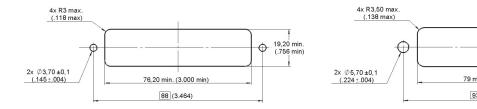
PANEL CUT OUT

RECEPTACLE

PLUG

PLUG

Rear mount



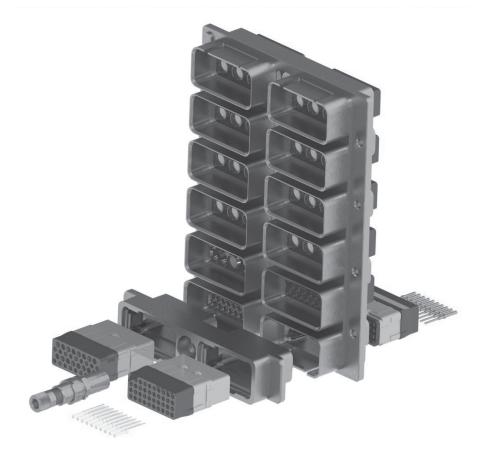
Radiall



Multi-gang EPX[®] Connectors

A whole range of multigang connectors is available for disconnect and rack and panel applications. Multigang connectors features and benefits:

- Weight saving design
- Make installation easier and quicker
- Utilize EPX® modularity and its whole range of inserts
- Take advantage of EPX[®] connectors functionalities and use EPXB2 standard plug shells with a multigang shell



Radiall

Specifications

- Several cavities for EPXB inserts: from 4 to 20 cavities
- Standard EPX strain reliefs and backshells available
- In accordance with EN4644 performance

Several options are available:

- Grounding block
- Grounding spring fingers
- Float mounting
- Spring loaded mounting



SIMPLIFICATION is our INNOVATION

We advance the design and engineering process for innovators, ground-breakers and pioneers of technology. We reduce weight, improve durability, and streamline installation to provide leading-edge connectors that drive product performance.

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	37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong			
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	25D, Phase 2, Peenya Industrial Area, Bengaluru 560 058			
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	Sawada Building 8F, Shibuya-ku, Tokyo 150-0011			

AMERICAS

USA & CANADA Radiall USA, Ir	nc. 8950 South 52nd Street, Ste. 401 Tempe, AZ 85284	+14806829400	+14806829403	infousa@radiall.com
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GLOBAL PRESENCE

 Australia · Austria · Belgium · Brazil · Czech Republic · Denmark · Estonia · Greece · Hungary · Indonesia · Israel · Korea · Latvia · Lithuania

 Malaysia · Norway · Philippines · Poland · Portugal · Russia · Singapore · Spain · Switzerland · Taiwan · Thailand · Vietnam · South Africa