

DATA BUS CONTACT SOLUTIONS

QUADRAX CONTACTS CONCENTRIC TWINAX CONTACTS

Radiall is recognized in the Aerospace industry for its global offering of interconnect solutions. It now includes a wide range of QUADRAX and TWINAX contacts for a variety of Data Bus Applications.

Radiall Data Bus contacts can be used in a variety of connectors, including ARINC 600, ARINC 404, EN3545, EN2997, MIL-C-81659B, MIL-C-38999, MIL-C-83527, NAS1599, JN1123 or Radiall EPX series.

Designed according to the latest ARINC600 Ethernet specification, Quadrax contacts have 4 center contacts (TX+, TX-, RX+ & RX-) and a grounding shield.

Common to Mil-STD-1553, ARINC 629 and ARINC 664 applications, our concentric Twinax contacts consist of three concentric conductors.

QUADRAX

- **Contacts**

Radiall developed a range of size 8 crimp and PC tails contacts:

| Connector Series | Gender | Part number | Type |
|--|--------|-------------|---|
| ARINC 600 ARINC 404 EN 3545 EN 2997 NAS 1599 | Socket | 620075010 | Rear Release/Rear Removable Crimp version - Draka Fileca cable F4703-3 (100Ω) |
| | Pin | 620175010 | |
| ARINC600 | Pin | 620176008 | Front Release/Front Removable PC tail version |

- **Crimping tools**

| | Crimping tool | Die or Positioner |
|----------------|---------------|-------------------|
| Inner contacts | M22520/2-01 | M22520/2-37 |
| Outer contacts | M22520/5-01 | M22520/5-45 |

- **Extraction tool**

M81969/28.03 (Radiall P/N: 282549001).

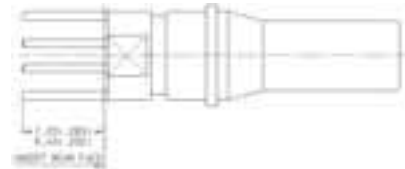
- **Inserts**

Since Quadrax contacts have to be oriented, specific ARINC600 inserts are required.

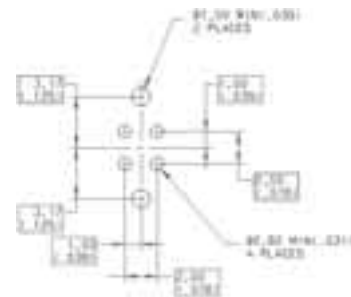


Size 2 ARINC 600, with 2 x 11Q11 and 1 x 24T4 inserts Quadrax and Twinax contacts

PC tail Quadrax contact



Printed Circuit Board drill pattern for PC tail Quadrax contact



Australian Representatives - **ROJONE, PTY LTD.**

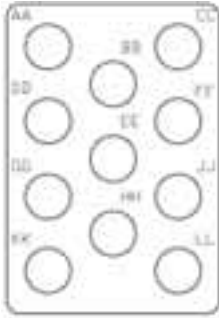
Tel: 02 9829 1555 E: sales@rojone.com.au www.rojone.com.au

ISO 9001 APPROVED



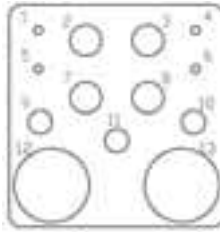
www.radiall.com

11Q11 insert (1)



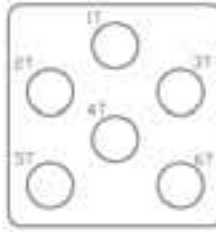
11 Quadrax contacts

11Q2 insert (2)



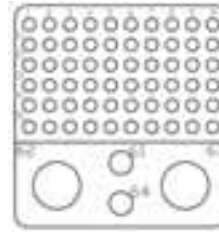
2 Quadrax contacts
4x #12 contacts
3x #16 contacts
4x #20 contacts

6Q6 insert (1)



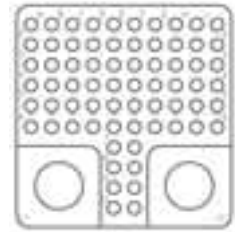
6 Quadrax contacts

62Q2 insert (2)



2 Quadrax contacts
2x #16 contacts
60x #22 contacts

68Q2 insert (2)



2 Quadrax contacts
68x #22 contacts

(1) Receptacle inserts: front mating face shown - Grounding continuity on all cavities
(2) Receptacle inserts: front mating face shown - Grounding continuity on size 8 cavities

CONCENTRIC TWINAX CONTACTS

These contacts may be used in standard inserts (size 5, 8, 9 or 12), or in the specific inserts designed for the quadrax contacts.

For MIL-STD-1553B data bus applications:

| Connector Series | Socket Contact P/N | Pin Contact P/N | Comments | Contact Size | Cable Type |
|--------------------------------|--------------------|------------------------------|--|--------------|---|
| EPX (BACC65) / EPXB | 617090010 | 617190010 | Non environmental contacts | 12 | EUROCOPTER ECS0700 DRAKA FILECA F2703-72 |
| | 617050* | 617150* | / | | |
| MIL-C-81659B ARINC 404 | 616095001 | 616195001 | For non environmental inserts: 32C2, 33C4, 40C1, 36C7, 36T7 | 5 | MIL-C-17/176-00002 |
| | 616095009 | 616195009 | For environmental inserts: 32C2, 33C4, 40C1 | | |
| | | 616195012 | For environmental inserts: 36C7, 36T7 | | |
| | 616095005 | 616195005 | For non environmental inserts: 32C2, 33C4, 40C1, 36C7, 36T7 | 9 | PANAVIA 6421 |
| | 616096003 | 616196003 | For non environmental inserts: C8, 32C4 | | |
| | 616096004 | 616196004 | For non environmental inserts: 32C4, 30C4 | | |
| | 616096006 | For environmental insert: C8 | | | |
| ARINC 600 | 619069001 | 619169001 | / | 8 | MIL-C-17/176-00002 |
| MIL-C-83527A EN 3682 | 618060* | 618160* | / | | EN3375-004 & -005 |
| | 618061* | 618161* | / | | MIL-C-17/176-00002 EN3375-003 |
| | 618062* | 618162* | / | | MIL-C-17/176-00002 EN 3375-003,-004,-005 |
| | 618072 | 618172 | / | | EUROCOPTER ECS0700 DRAKA FILECA F2703-72 |
| JN 1123 | 626061 | 626161 | / | 12 | MIL-C-17/176-00002 |
| MIL-C-38999 Series I,III,IV | 670050 | 670150 | For 11-1, 17-2, 17-98, 9-3, 19-4, 19-18, 21-5, 21-26, 25-8, 25-20 inserts | 8 | MIL-C-17/176-00002 EN 3375-003 |
| MIL-C-38999 Series II | 670060001 | 670160001 | / | 12 | EUROCOPTER ECS0700 DRAKA FILECA F2703-72 |

For ARINC629 data bus applications:

| Connector Series | Socket Contact P/N | Pin Contact P/N | Comments | Contact Size | Cable Type |
|------------------|--------------------|-----------------|--------------------------------|--------------|-------------------|
| ARINC 600 | 619166 | 619065 | Front release / rear removable | 8 | BOEING S280W502-1 |
| | | 619165 | Rear release/rear removable | | |

(*) For environmental contacts, add the suffix 001 at the end of the 6-digit P/N

For further information, please contact your nearest Radiall representative:

RADIALL (France) +33 1 49 35 35 35
RADIALL S.F. (Finland) +358 9 34 89 657
RADIALL G.m.b.H. (Germany) +49 6 074 910 70
RADIALL Elettronica S.R.L. (Italy) +39 02 48 85 121
RADIALL B.V. (Netherlands) +31 33 253 40 09
RADIALL A.B. (Sweden) +46 8 444 34 10
RADIALL Ltd (U.K.) +44 20 8991 7700
RADIALL JERRIK INC. (USA) +1 480 730 5700
RADIALL do Brasil (Brasil) +55 21 558 05 76
SHANGHAI RADIALL Ltd (China) +86 21 66 52 37 88
NIHON RADIALL KK (Japan) +81 3 3866 2390
RADIALL Electronics Ltd (Asia) +852 29 59 38 33
RADIALL PROTECTRON (India) +91 80 83 95 271

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