



1 - CHARACTERISTICS

Mechanical

	Material	Finish
Shells	Aluminum alloy to QQ-A-591	Alodine 1200 passivation to MIL-C-5541 Classe 1
Inserts	Thermoset, Thermoplastic, Metal	
Seals and Grommets	Fluorinated silicone to MIL-R-25988	
Contacts	Copper alloy to QQ-B-626	Gold (plated to MIL-G-45204) over nickel (to QQ-N-290)

- Endurance: 500 matings
Insertion and extraction forces, max:
 - shell size 1: 120 N (27 lbs)
 - shell size 2: 267 N (60 lbs)
 - shell size 3: 467 N (105 lbs)
- Vibration:
 - 8 hours in each axis
 - Random vibration at 16,4 g from 50 to 2000 Hz (MIL-STD-1344 A method 2005-1).
- Dynamic shock:
 - 3 impacts of 50 g in all axis, duration 11 µs (half-wave) to MIL-STD-202 method 213

Electrical

- Dielectric withstanding voltage

	Mated	Unmated
Sea level	1500 Vrms	1500 Vrms
15 000 m	500 Vrms	500 Vrms

- Insulation resistance: $\geq 5000 \text{ M}\Omega$

- Current ratings, continuous:

Contact gauge	Wire gauge	Current (A)	Voltage drop max (mV)*
22	22	5	40
	24	3	30
	26	2	25
20	20	7.5	55
	22	5	40
	24	3	30
16	16	13	50
12	12	23	45

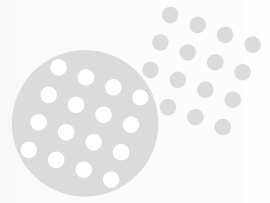
* measured over a conductor length of 150 mm

- Triaxial contact size 8
bandwidth: 0-20 MHz
- Voltage rating:
500 Vac Max - 125 Vac at 21000 m
- Voltage drop:
Inner and middle contact $\leq 55 \text{ mV}$ under 1 A
outer contact $\leq 5 \text{ mV}$ under 12 A

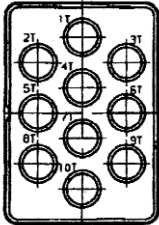
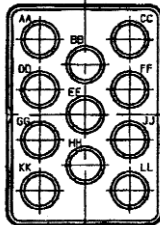
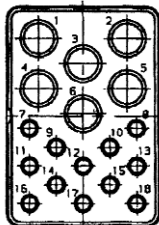
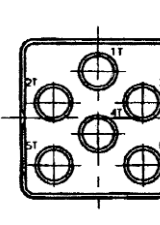
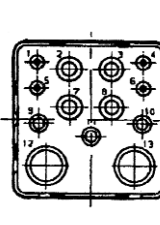
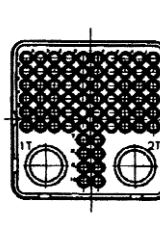
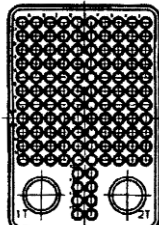
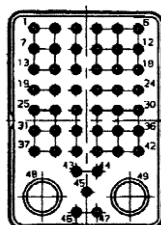
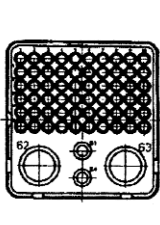
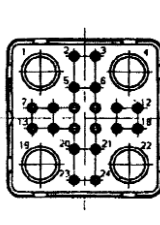
Environmental

- Temperature rating:
- 65° C to +125° C for both classes, sealed and unsealed
- Fluid resistance:
Hydraulic to MIL-H-5606
Lubricating to MIL-L-23699
Isopropyl alcohol
- Resistance to salt spray: 48 hours
(MIL-STD-202 method 101 or MIL-STD-1344 method 1001)

for Quadrax and ELIO™ 8



2 - INSERT ARRANGEMENTS

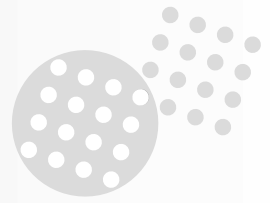
STANDARD INSERTS	     					
	I-Q10	I-Q11	I-C12Q6	II-Q6	II-11Q2	II-68Q2
PLEASE CONSULT US	   					
	I-118Q2	I-47Q2	II-62Q2	II-20Q4		

Contact Layouts

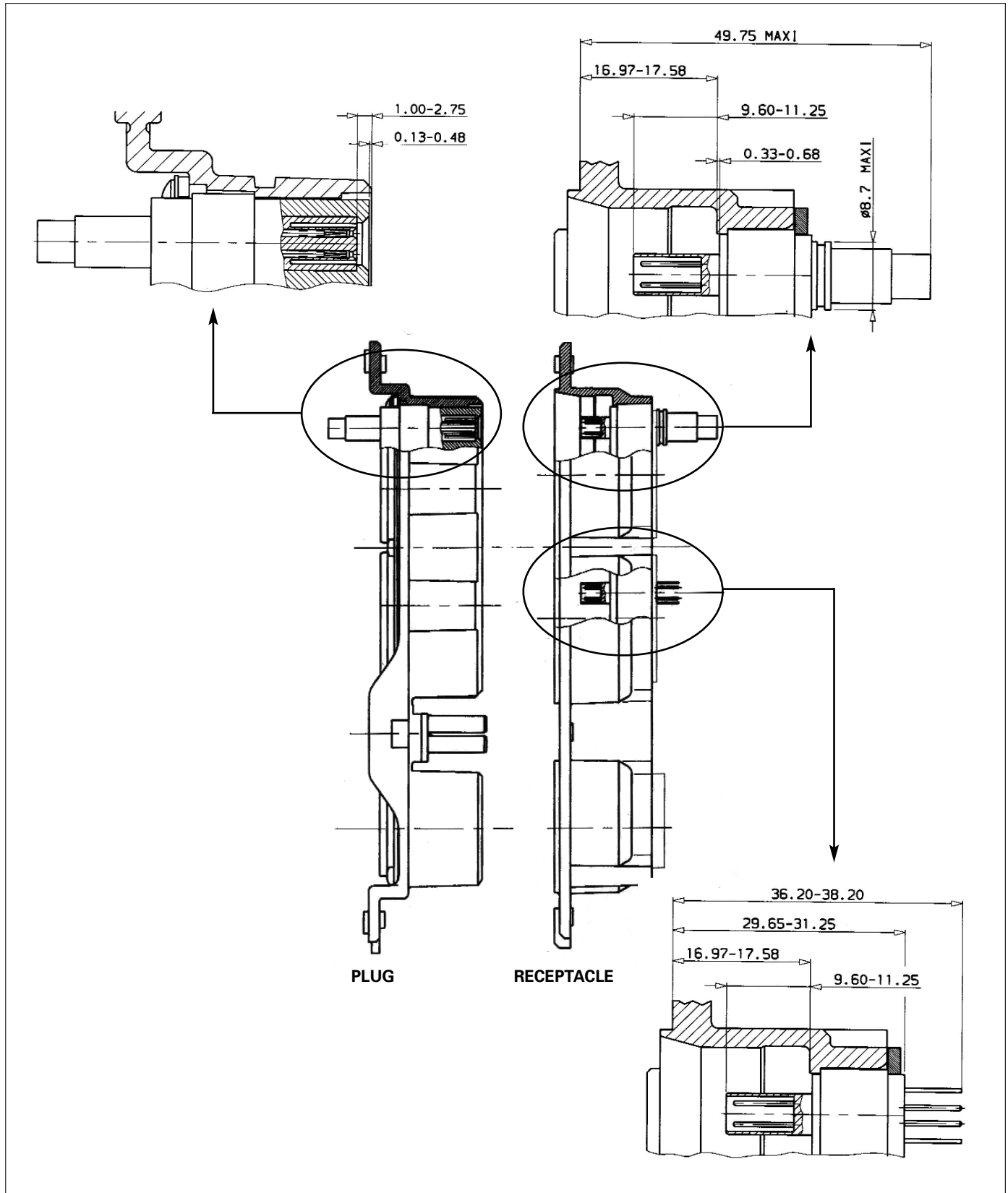
	Insert name	ARINC 600 cavity	Receptacle	Plug	Number of cavities				# 8 "Quadrax" type
			contact release	contact release	# 22	# 20	# 16	# 12	
STANDARD INSERTS	I-Q11	A,B,D,E	Front/Rear	Rear					11*
	I-C12Q6	A,B,D,E	Rear	Rear				12*	6*
	II-68Q2	C,F	Front	Rear	68				2*
	II-Q6	C,F	Front/Rear	Rear					6*
	II-11Q2	C,F	Rear	Rear		4	3	4	2*
	I-Q10	A,B,D,E	Front/Rear	Rear					10*
PLEASE CONSULT US	I-47Q2	A,B,D,E	Rear	Rear		47			2*
	I-118Q2	A,B,D,E	Rear	Rear	118				2*
	II-62Q2**	C,F	Rear	Rear	60		2		2*
	II-20Q4	C,F	Rear	Rear		20			4*

* grounded cavities: contact to shell conductivity < 10 mΩ

** not intermariable with II-62Q2 insert from ARINC 600 sup 14 specification



3 - DIMENSIONS WITH QUADRAX CONTACTS

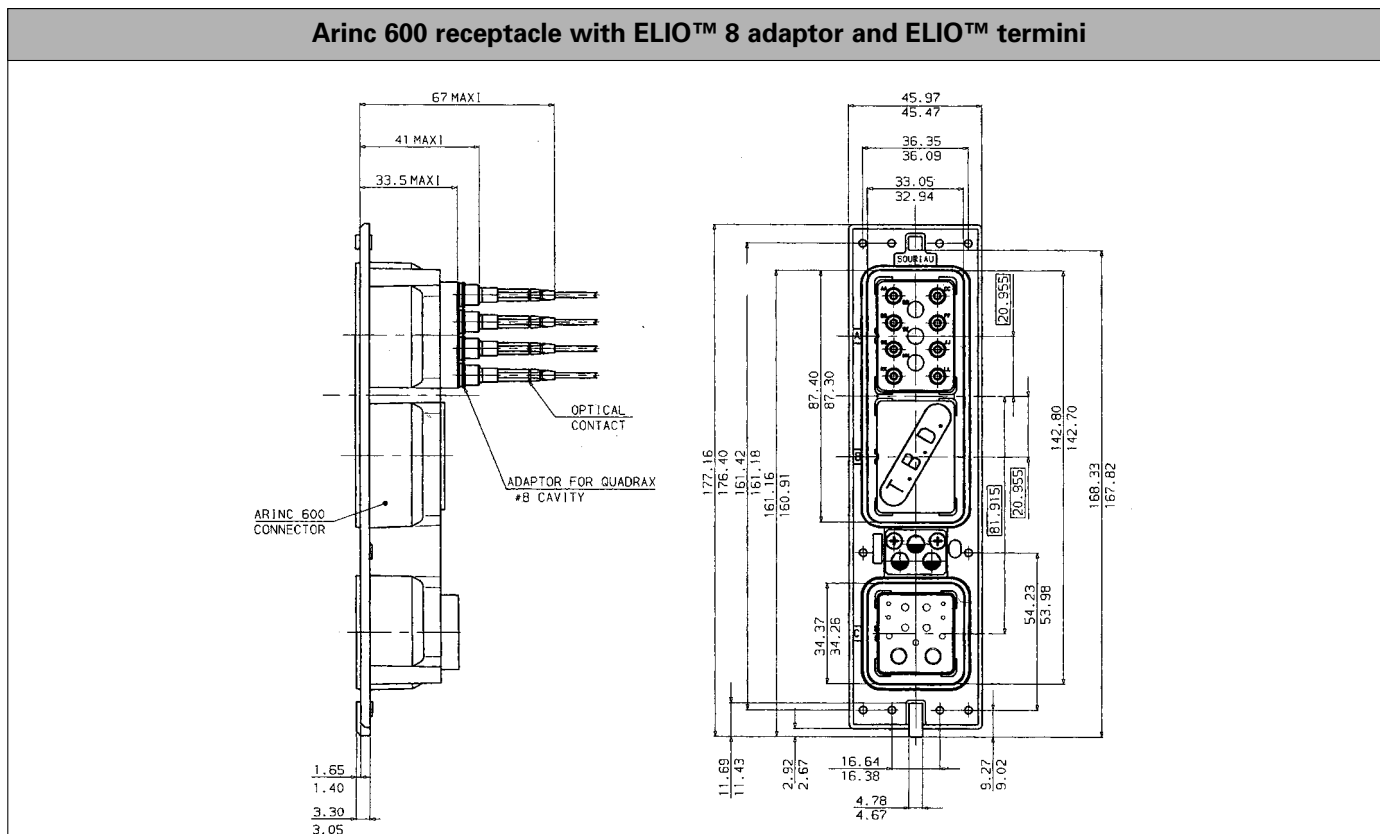


Dimensions in millimeters

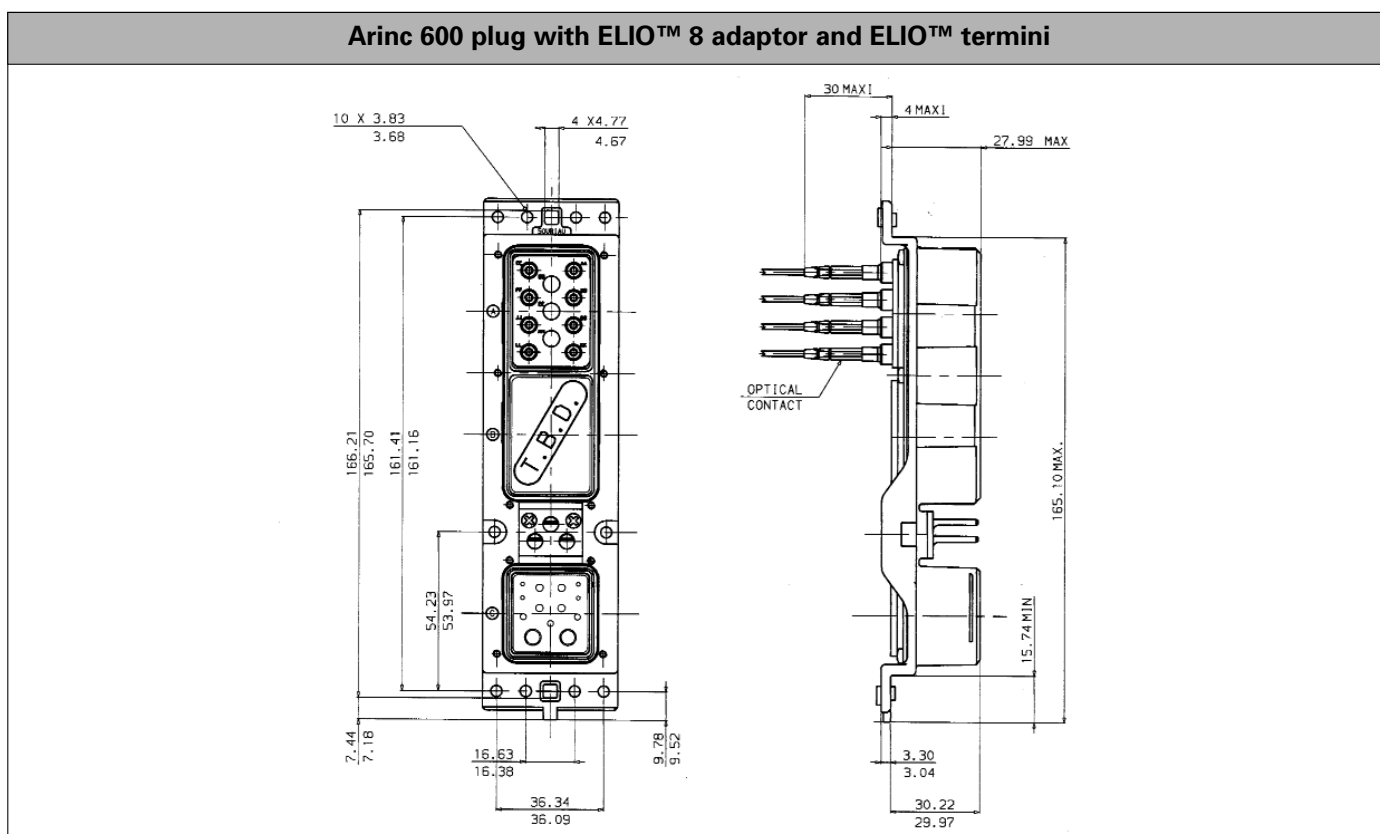
for Quadrax and ELIO™ 8



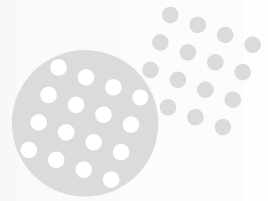
4 - DIMENSIONS WITH ELIO™ 8 ADAPTOR AND ELIO™ TERMINI



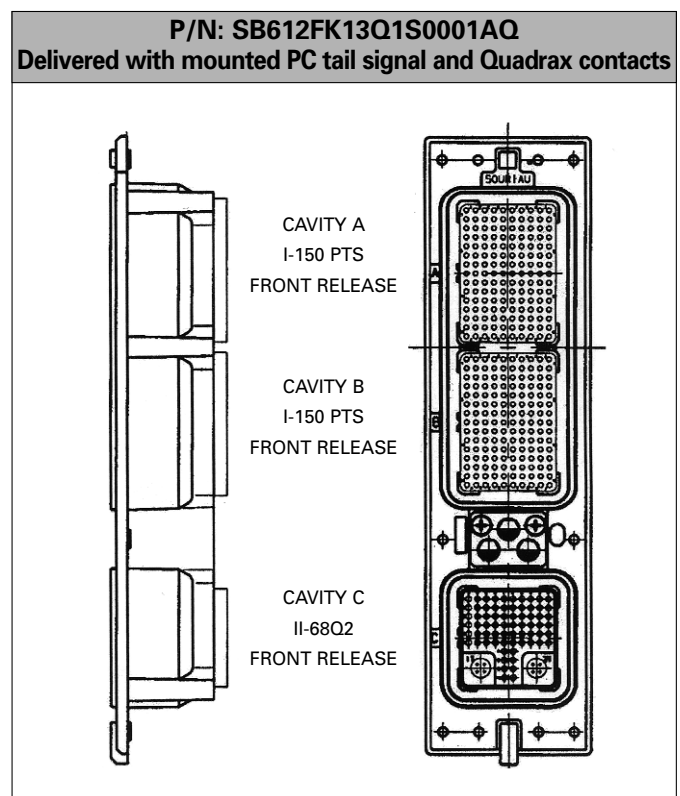
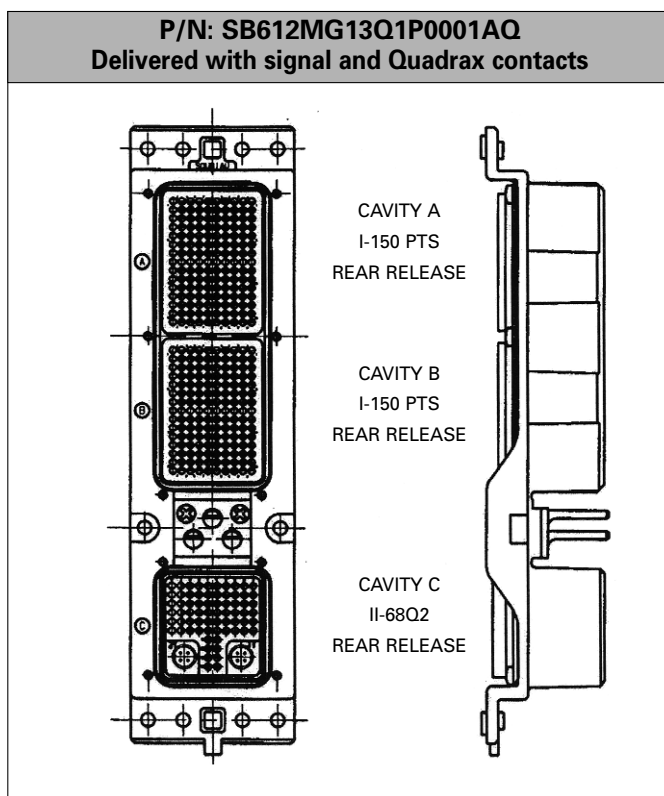
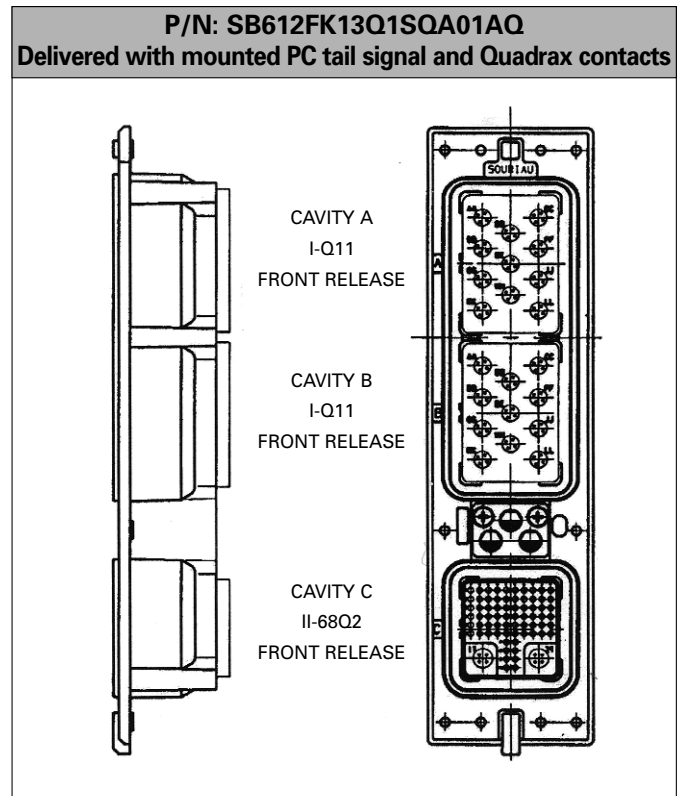
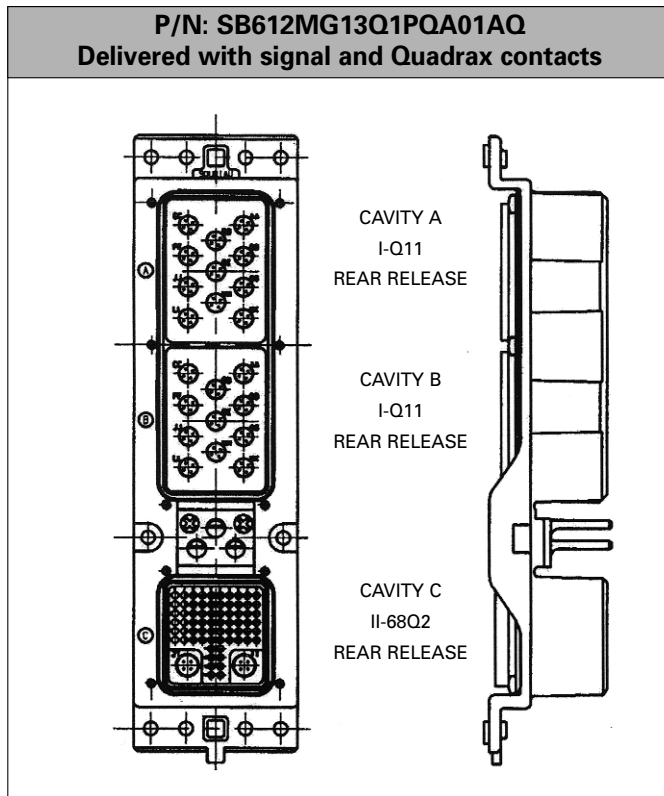
Arinc 600 Range



for Quadrax and ELIO™ 8



5 - ORDERING INFORMATION



To get the part number of any other arrangement, please consult us



1 - CHARACTERISTICS

- Standard ARINC 600 shell
- Compatible with ELIO™ contact termini
- Rackable connector - 500 mating / unmating cycles
- Environmental performance as per EN 2591 and MIL-STD-1344
- Temperature range: -65° C, +150° C



Mechanical

- Shell: aluminum alloy to QQ-A-591
- Endurance: 500 mating / unmating operations
- Shocks: 300 g, 3 ms as per EN 2591-6402 method A and MIL-STD-1344
- Vibrations: random 50 to 2000 Hz, 3 x 8 hours, 0.2 g²/Hz, 16.4 g, as per MIL-STD-1344 A method 2005-1 and EN 2591
- Contact retention: minimum 11 daN

Environmental

- Salt spray: 48 hours
- Temperature range: -65° C, +125° C long term (1000 hours), +150° C short term (100 hours)
- Damp heat: 10 cycles of 24 hours in accordance with EN 2591-321 and MIL-STD-1344
- Fire resistant: 30 seconds fire exposure as per EN 2591-317 and MIL-STD-1344

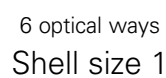
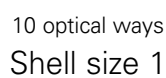
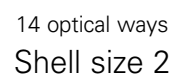
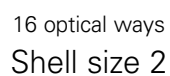
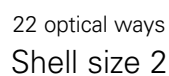
Resistance to fluids

- Hydraulic: MIL-H-5606
- Lubricating: MIL-L-23699
- Isopropyl alcohol

Optical

- Compatible with ELIO™ termini
- Typical Insertion Loss
 - Singlemode: 0.3 dB @ 1300 nm
 - Multimode: 0.2 dB @ 1300 nm
- Typical Return Loss
 - Singlemode: -30 dB @ 1300 nm
 - Multimode: -30 dB @ 1300 nm
- Maximum IL during and after climatic tests: 0.7 dB @ 1300 nm and 850 nm for multimode 62.2/125 fiber

2 - INSERTS PROPOSAL



Technical drawing of the ARINC 600 plug, showing front and side views with dimensions.

Front View Dimensions:

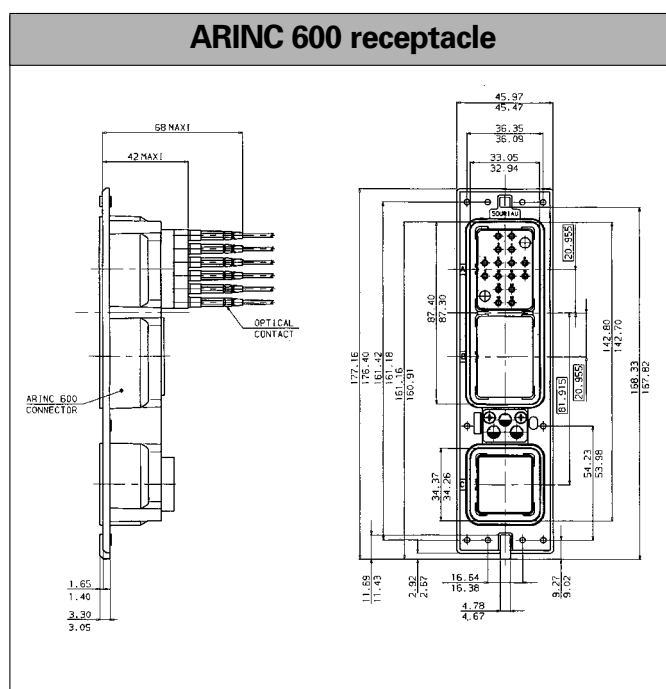
- Top: 10 X 3.83, 3.68
- Right: 4 X 4.77, 4.67
- Left: 7.44, 7.18
- Internal Left: 166.21, 165.70, 161.41, 161.16
- Internal Right: 54.23, 53.97
- Bottom: 16.53, 16.38, 36.34, 36.09, 9.79, 9.52

Side View Dimensions:

- Top: 33 MAXI
- Right: 27 SS MAX
- Internal Right: 165.10 MAX.
- Internal Left: 15.74 MIN.
- Bottom: 3.30, 3.04, 30.22, 29.97

Labels:

- OPTICAL CONTACT



24