

POWER CONTACTS

SIZE 8 CONTACTS

MIL-DTL-38999 SERIES III / EN3645 / EN4165

Amphenol has a large experience in power generation contact, and has developed some technologies dedicated to power in order to reduce heating, save space, as well as increasing the durability



Contact Size	AWG	Contact Part Number				Crimping Tools	Piggy Back Grommet
		Pin		Socket			
		Proprietary	Standard	Proprietary	Standard	Inner contact	
8	8	900197		900217	EN3155-066	M22520/23-01 with M22520/23-02 die set 3	900 471
		600863	EN3155-065				
		900198					
8	10	600864	EN3155-065	600865	EN3155-066	M22520/23-01 with M22520/23-02 die set 5	900 472



The contact 900198 is only compliant with 21-48 connector.

SPECIFIC RANGE OF PRODUCTS

38 999 TYPE 21-48 - 4X60 AMPS CIRCULAR POWER CONNECTOR

- The Amphenol Socapex power connector 38999 type 21-48 provides 4 size 8 power contacts in a size 21 shell in accordance with the MIL-DTL-38999 Series I standard. This arrangement was originally developed for military applications. Due to the rigidity of the cables used, the front male insulator has been reinforced to maintain a perfect alignment of contacts during mating.
- A header is placed in the backshell to guide each wire and to guarantee tightness even when cables are bent.
- Available in Mil-DTL-38999 series III standard. Available in TV-CTV (Mil-DTL-38999Series III).

Please refer to catalog E117

4X100A - CIRCULAR POWER

- This power connector from Amphenol LJT 25-1A was originally developed for military applications. Indeed, it is used in the conditioning of tanks.
- This connector has the particularity to provide 4 size 4 power contacts and 4 size 16 contacts in a size 25 shell in accordance with the MIL-C-38999 Series 1 standard.

Please refer to catalog E116



POWER CONTACTS

SPECIFIC RANGE OF PRODUCTS

LJT 23-P1 1 X 250 A - SINGLE WAY 250A POWER CIRCULAR CONNECTOR



• The Amphenol Socapex power connector LJT 23-P1 (1 x 250 A) has been developed for military applications, when high power supply is required as well as EMI RFI protection for peripheral electronic devices. LJT 23-P1 connector provides one size 2/0 power contact in a 23 shell size according to MILDTL-38999 Series I standard.

Please refer to catalog E122

LJT 25-P1 1 X 500 A - SINGLE WAY 500A POWER CIRCULAR CONNECTOR



• The Amphenol Socapex power connector LJT 25-P1 (1 x 500 A) has been developed for military applications, when high power supply is required as well as EMI RFI protection for peripheral electronic devices.

• LJT 25-P1 connector provides 1 size 4/0 power contact in a 25 shell size according to MIL-DTL-38999 Series I standard.

Please refer to dedicated leaflet

POWERSAFE CONNECTOR

• The 38999 PowerSafe connectors are designed to transmit high power with voltages over 230 V. Those connectors are directly derived from MIL-DTL-38999 III standard.

FEATURES AND BENEFITS

- User safety
- First-to-mate earth contact linked to the shell
- First-to-break pilot contact for mating and unmating without power
- Earthing continuity from receptacle to plug through grounding fingers
- 38999 III front and rear interfaces
- Same panel drilling as standard 38999 III
- Same environmental characteristics as standard 38999 III
- Crimp, removable contacts:

Contact size	Contact rating (A)	AWG cable gauges
20	7.5	20,22,24
16	13	16,18,20
12	23	12,14
6	60	6



Please refer to dedicated leaflet

POWER CONTACTS

SPECIFIC RANGE OF PRODUCTS

AMPHENOL RADSOK TECHNOLOGY

The RADSOK® High Amperage Electrical Terminal benefits the user from engineering, quality, and manufacturing viewpoints.

RADSOK® technology is based upon a stamped and formed flat grid, twisted into a hyperbolic shape to provide secure and robust contact to the mating pin's contact surface. Most Pin and Socket technologies rely upon spring (compressive) properties of the contact elements, which may weaken over time. Unlike other Pin and Socket solutions, the RADSOK® also utilizes the tensile strength properties of the flat stamped, copper alloy grid to provide high normal forces with a large socket-to-pin conductive surface area.

This design provides a correspondingly low voltage drop and low temperature rise. Other tensile design products use round wires (instead of flat bands) in the hyperbolic shape, this significantly reduces the contact surface between pin and socket.

Proven by millions of parts in the field, a RADSOK® electrical connection is economical and extremely reliable, with zero reported failures in properly designed applications. RADSOK® technology benefits can be summarized as:

- **HIGH RELIABILITY**

Unique RADSOK® design and construction technology create an electrical contact interface that exceeds typical interconnect requirements. Applications in aerospace, medical, industrial, automotive, mining, offshore, and other harsh environments depend on high reliability of the Amphenol RADSOK® technology.

- **LOW CONTACT ENGAGEMENT/SEPARATION FORCES**

The hyperbolic lamella socket contact construction distributes normal forces over a high percentage of the mating pin surface. This creates a smooth, even engagement effort. This force distribution also contributes to excellent performance in vibration applications with resistance to typical fretting corrosion.

- **LOW CONTACT RESISTANCE**

The large interface area between the socket lamella and pin surface result in very low contact resistance, enabling the RADSOK® contacts' high current ratings compared to traditional power contact designs.

- **HIGH MATING CYCLE DURABILITY**

RADSOK® contacts with typical silver plating finishes have demonstrated survival of 20,000 mating cycles. Specialized plating and contact lubricants can extend cycle life to 200,000 matings or higher. Even with continuous exposure to harsh environmental abuse (salt, sand, and high humidity), RADSOK® contacts have been tested to maintain low contact resistance beyond 10,000 mating cycles.

