

Kona

8.5mm Pitch High Reliability Power Connector

60A continuous Current rating with rugged fully shrouded contacts

Specify high current and high quality for maximum power in extreme conditions. With 8.5mm pitch and individually shrouded connections, you can achieve up to 60A and 3000V per contact. The tough resilient housings protect the connections from physical knocks and damage.

Vibration and shock resilience are built into the design, with 6-finger Beryllium Copper alloy contacts for electrical continuity and good spring force properties. Connectors are available in 2, 3 or 4 pin counts, in a compact single-row configuration. Male PCB connectors are throughboard with additional board fixings for strain relief. Female and male cable housings are supplied with thumbscrews fitted. Cable contacts are ready for 8AWG cables to be soldered before assembly to the housing.

Features and Benefits

60A per contact on 8.5mm pitch	High levels of current and power straight to the PCB
Shock and Vibration resistant	Rugged and practical for extreme environments
Full gold plating, 250 mating cycles	Resists wear from continued use, or durable in mate-and-forget operations
Individually shrouded contacts on both male and female connectors	Protects against physical damage and avoids accidental touching of contacts
Stainless Steel Mate-before-Lock thumbscrews	Assures reliability with a strong and robust connection, easy and fast to secure, no tooling required
6 finger Beryllium Copper contact design	Maintains electrical continuity under heavy vibration
Low outgassing properties	Meets NASA and ESA outgassing requirements for vacuum or space use
Operates at extreme temperatures up to -65°C to +150°C	Can be used in a wide variety of extreme environments

Key Applications

Aviation	Power control systems, in-flight infotainment and in-cabin services, navigation and flight systems
Motorsport & Electric Vehicles	Battery control and monitoring systems, ERS control and supply, auxiliary system power, cabin systems
Space	Satellites & CubeSats, communications, launch systems, power supplies
Defense & Security	UAVs, rugged vehicle electronics, remote robotics drives, servo controls
High-end Industrial	Power units and power control systems, robotics drives and servo controls, mining or oil & gas power systems



Assembled female cable connector, 4 contact



Male throughboard connector, 2 contact



Close-up on thumbscrews fitted to cable connectors

Product Features

8.5mm pitch for up to 3,000V rating without flashover

Single row with 2, 3 or 4 contacts

Fully and individually shrouded contacts

Stainless steel Thumbscrews for easy fixing – mate-before-lock, no tooling required

6-finger Beryllium Copper contacts

Polarized housing shape

Contact no. 1 indicator

4.5mm throughboard terminations on male PCB connector

Side rib to assist handling during unmating

Power contacts removable with tooling

Specifications

Electrical		Mechanical		Physical	
Current Rating	60A max per contact	Number of Mating Cycles	250	Housing	Glass filled PPS, UL94V-0
Voltage Rating	1,500V AC/DC	Temperature Range	-65°C to +150°C	Contacts	Copper alloy, Gold plating
Maximum Voltage	3,000V AC	Shock	100G	Screw-locks	Stainless steel, M3 Thread
Contact Resistance	2mΩ max	Vibration	20G	Recommended Wire	8AWG Silicone Rubber UL rated
Insulation Resistance	10GΩ at 1,000V DC				

How to Order

Cable Housings

KA1 - X01 XX 98 XX

GENDER

201	Female
301	Male

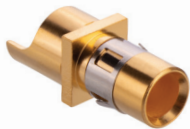
NUMBER OF CONTACTS

02, 03, 04

FIXINGS

F1	Floating Thumbscrew (Female)
F2	Reverse Fix Panel Mount (Female)
M1	Panel Mount (Male)
M3	Internal Threaded Fixing (Male)
M5	Reverse Fix Floating Thumbscrew (Male)

Cable Contact, Accessory & Tooling



KA1-0400005
Female 8AWG
Solder Contact



KA1-1410005
Male 8AWG
Solder Contact



KA1-4240000
Slotted Board/Panel
Mount Nut



ZA1-9040000
Contact
Removal Tool



ZA1-9020000
Slotted
Screwdriver

PCB Connectors

KA1 - MV1 XX 05 MX

GENDER

MV1 Male Vertical, 4.5mm Throughboard

NUMBER OF CONTACTS

02, 03, 04

FIXINGS

M1	5mm Board Mount
M2	Reverse Fix Floating Screw, Hex Socket

How to Order

Cable Assemblies – Single Ended

KA1 – X SV X – X – XXXX AL XX

GENDER	
F	Female
M	Male

FIXING	
1	Floating Thumbscrew (Female) or Panel Mount (Male)
2	Reverse Fix Panel Mount (Female)
3	Internal Threaded Fixing (Male)
5	Reverse Fix Floating Thumbscrew (Male)

CABLE END STRIPPING	
BLANK	Blunt cut end
XX	XXmm stripped (05 to 99mm)

CABLE LENGTH	
XXXX	XXXXmm (0100 to 9999mm)

NUMBER OF CONTACTS	
02, 03, 04	

Cable Assemblies – Double Ended

KA1 – X SVA X – X – XXXX A – X VA X

GENDER - FIRST END	
F	Female
M	Male

FIXING - FIRST END	
1	Floating Thumbscrew (Female) or Panel Mount (Male)
2	Reverse Fix Panel Mount (Female)
3	Internal Threaded Fixing (Male)
5	Reverse Fix Floating Thumbscrew (Male)

FIXING - SECOND END	
1	Floating Thumbscrew (Female) or Panel Mount (Male)
2	Reverse Fix Panel Mount (Female)
3	Internal Threaded Fixing (Male)
5	Reverse Fix Floating Thumbscrew (Male)

GENDER - SECOND END	
F	Female
M	Male

NUMBER OF CONTACTS	
02, 03, 04	

CABLE LENGTH	
XXXX	XXXXmm (0100 to 9999mm)

Note: Female-to-Male cables should be specified with the Male as the first end.

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