



1.0 KEY FEATURES

- The KW01 miniature metal circular electrical connectors are precision engineered, multi-pin, compact and highly-robust circular push-pull connectors used in various industries where space and cost are especially critical.
- The KW01.EGG Female Solder Panel-Mount mates with the Male Solder Plug ([KW01.FGG](#)) for enclosure or housing connections.
- Its unparalleled push-pull, self-latching mechanism allows for positive engagement giving an audible sound and clicking feel leading to a quick and secure engagement and disengagement from its mating part without having bulky, weight and space-consuming clips and bayonets.
- Connectors are designed to have their metal shells make contact with one another first during mating before pins and sockets allowing grounding and electrostatic discharge (ESD) protection. Pins are also recessed and scoop-proof preventing bent pins and allowing a blind mate.
- Gold-plated copper alloy contacts, corrosion resistant finishing allow these rugged, high-performance and light weight connectors to demonstrate high reliability in harsh and extreme environments conditions.
- Connectors are 0° keyed (polarization).
- Metal shells with conductive plating allow for low Grounding and Bonding resistance and 360° screening for EMI/EMC shielding.
- Designed to pass DO-160F aerospace qualification testing.
- Polyphenylene Sulfide (PPS) engineering thermoplastic used for the insulator is chemical-resistant, heat-resistant and is inherently flame retardant with a UL94 V-0 flammability rating. It has excellent dielectric characteristics and is inert to steam (no moisture absorption), strong bases, fuels and acids.
- Download Engineering Drawing for more technical information and assembly instructions.

Download Engineering Drawing for EGG ([0B](#), [1B](#), [2B](#))

Download 3D Parasolid for EGG ([0B](#), [1B](#), [2B](#))

[Download Datasheet as PDF](#)

[Download 3D PDF](#)

2.0 TECHNICAL SPECIFICATIONS**MECHANICAL AND ENVIRONMENTAL**

Characteristics	Value
Operating Temperature Range	- 50° C, +125° C
Mating Cycles	5000 cycles MIN
Ingress Protection Rating	IP50
Humidity	up to 95% at 60° C
Vibration	10-2000 Hz, 15 g
Shock	100 g, 6 ms
Salt spray corrosion test	> 144h

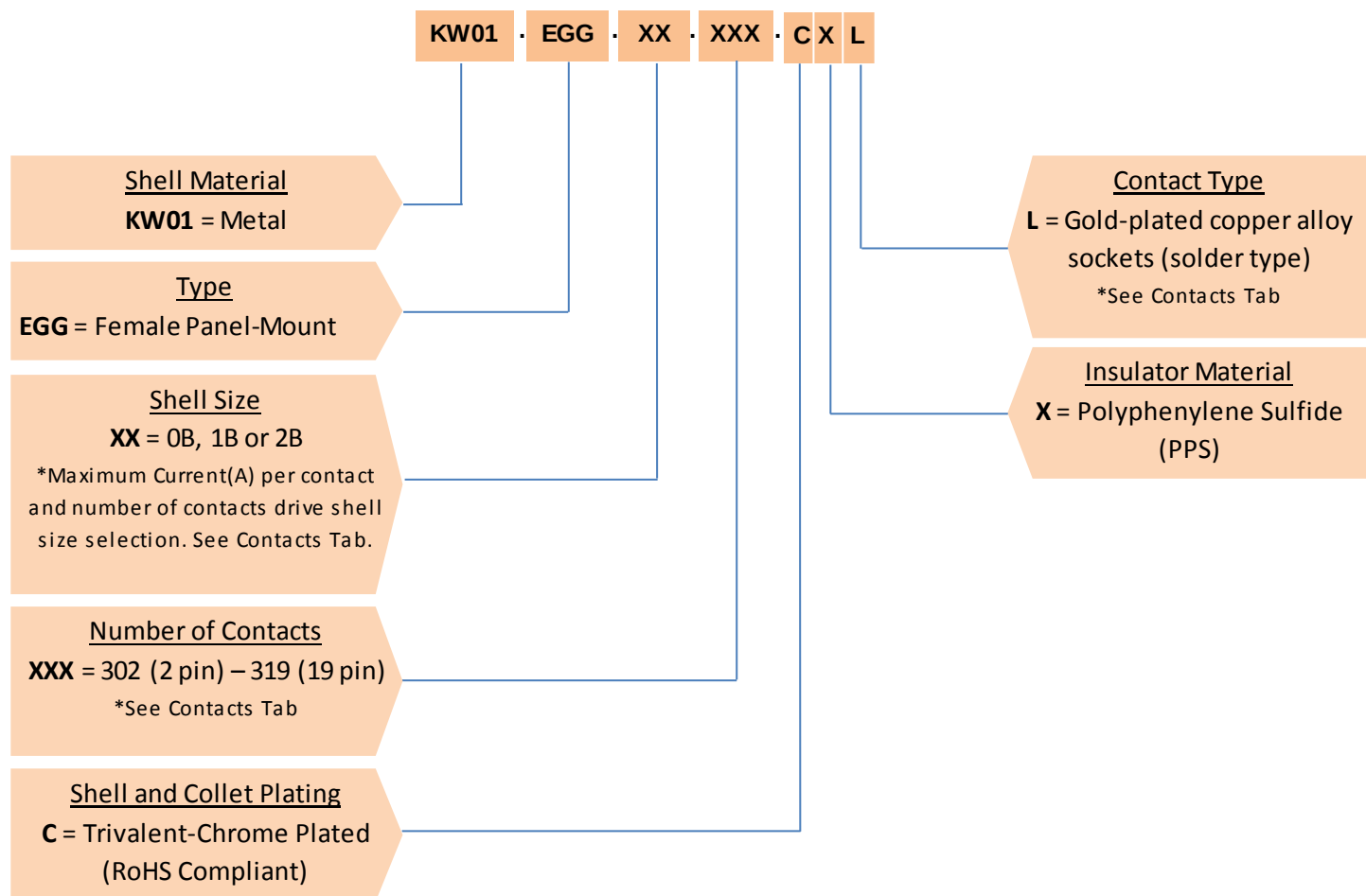
Shell Size	Max Weight (lbs)*
0B	0.015
1B	0.025
2B	0.035

* Includes weight of bend relief

ELECTRICAL

Insulation Resistance	>5000MΩ
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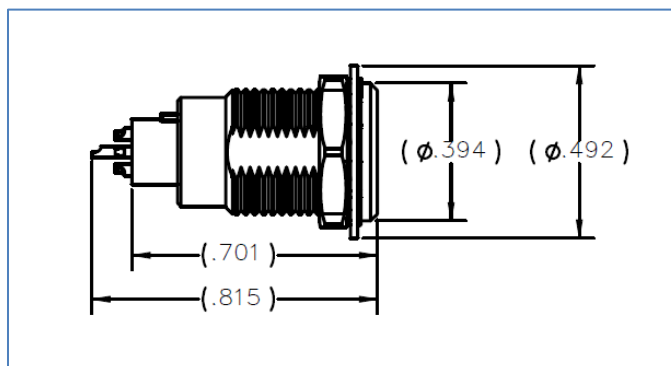
3.0 PART NUMBER



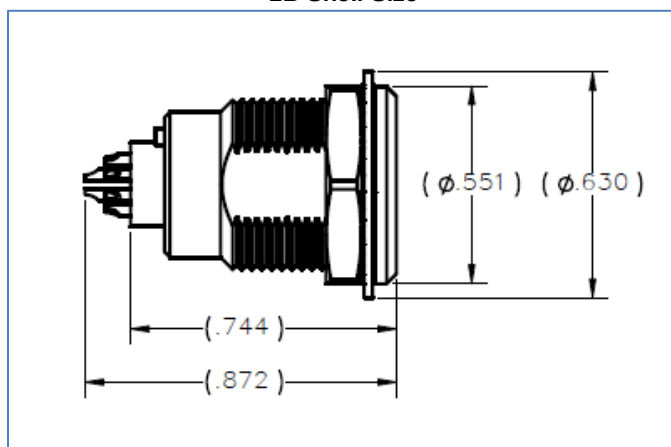
4.0 ENVELOPE



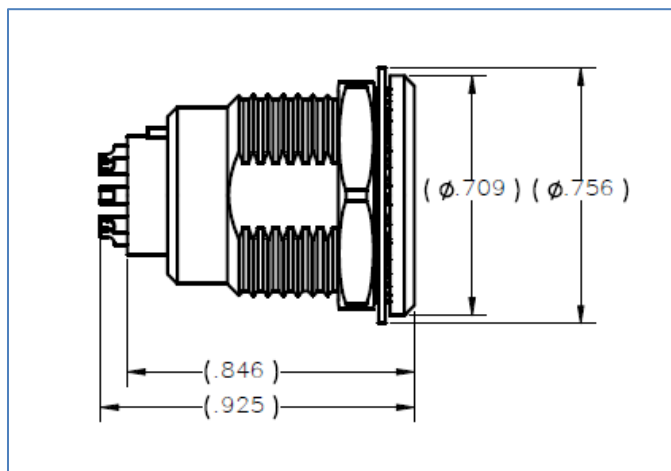
0B Shell Size



1B Shell Size

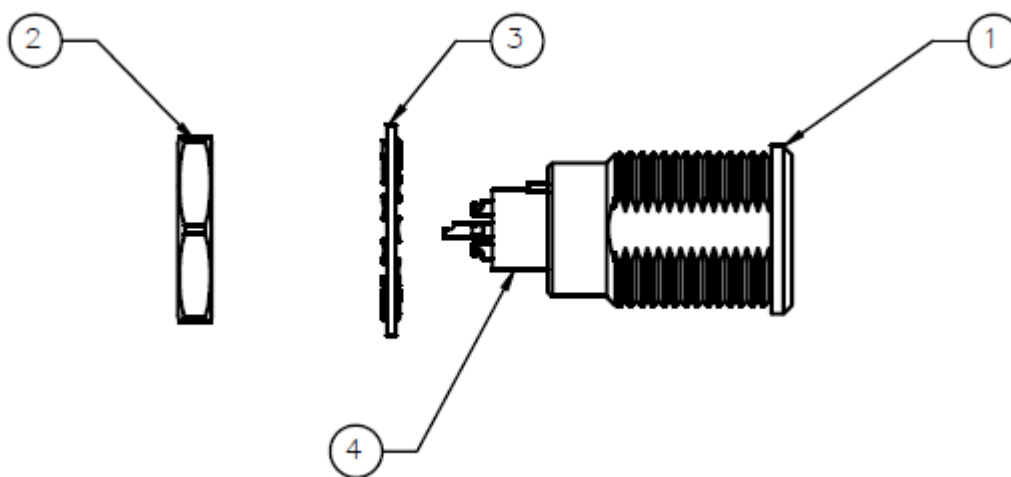


2B Shell Size



5.0 MATERIALS

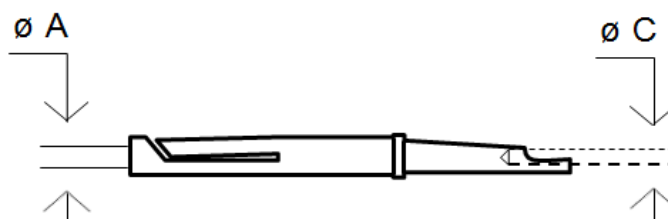
Exploded View



(0B Shell Shown)

Item No.	Description	Material
1	CONNECTOR SHELL	CHROME-PLATED BRASS
2	MOUNTING NUT	NICKEL-PLATED BRASS
3	LOCK WASHER	NICKEL-PLATED BRASS
4	INSULATOR, FEMALE SOCKETS	POLYPHENYLENE SULFIDE (PPS) WITH GOLD-PLATED COPPER ALLOY SOCKETS

6.0 CONTACTS



0B Shell Size			Contact		Conductor (Wire)	
Number of Contacts	Contact Resistance (m Ω)	Max Current (Amps)	ϕA (inches)	ϕC (inches)	Solid	Stranded
					Max Wire Gauge (AWG)	
2 Sockets (KW01.EGG.0B.302)	2.5	10	0.0354	0.0315	22	22
3 Sockets (KW01.EGG.0B.303)	2.5	8	0.0354	0.0315	22	22
4 Sockets (KW01.EGG.0B.304)	4	7	0.0276	0.0315	22	22
5 Sockets (KW01.EGG.0B.305)	4	6.5	0.0276	0.0315	22	22
6 Sockets (KW01.EGG.0B.306)	4	2.5	0.0197	0.0177	28	28
7 Sockets (KW01.EGG.0B.307)	4	2.5	0.0197	0.0177	28	28

1B Shell Size			Contact		Conductor (Wire)	
Number of Contacts	Contact Resistance (m Ω)	Max Current (Amps)	ϕA (inches)	ϕC (inches)	Solid	Stranded
					Max Wire Gauge (AWG)	
2 Sockets (KW01.EGG.1B.302)	2.5	15	0.0512	0.0394	20	20
3 Sockets (KW01.EGG.1B.303)	2.5	12	0.0512	0.0394	20	20
4 Sockets (KW01.EGG.1B.304)	4	10	0.0354	0.0315	22	22
5 Sockets (KW01.EGG.1B.305)	4	9	0.0354	0.0315	22	22
6 Sockets (KW01.EGG.1B.306)	4	7	0.0276	0.0315	22	22
7 Sockets (KW01.EGG.1B.307)	4	7	0.0276	0.0315	22	22
8 Sockets (KW01.EGG.1B.308)	7.5	5	0.0276	0.0315	22	22
10 Sockets (KW01.EGG.1B.310)	7.5	2.5	0.0197	0.0177	28	28

2B Shell Size			Contact		Conductor (Wire)	
Number of Contacts	Contact Resistance (mΩ)	Max Current (Amps)	ø A (inches)	ø C (inches)	Solid	Stranded
					Max Wire Gauge (AWG)	
4 Sockets (KW01.EGG.2B.304)	4	15	0.0512	0.0394	20	20
6 Sockets (KW01.EGG.2B.306)	4	12	0.0512	0.0394	20	20
8 Sockets (KW01.EGG.2B.308)	7.5	10	0.0354	0.0315	22	22
10 Sockets (KW01.EGG.2B.310)	7.5	8	0.0354	0.0315	22	22
12 Sockets (KW01.EGG.2B.312)	7.5	7	0.0276	0.0315	22	22
14 Sockets (KW01.EGG.2B.314)	7	6.5	0.0276	0.0315	22	22
16 Sockets (KW01.EGG.2B.316)	7	6	0.0276	0.0315	22	22
19 Sockets (KW01.EGG.2B.319)	7	5	0.0276	0.0315	22	22

* The above tables should be used as guidelines only, testing is recommended for the specific application requirements.

7.0 CONNECTOR MATING

