

Interconnect Technologies & Solutions

For over 90 years, ITT has been developing innovative solutions for harsh environment applications. We have a proven track record of demonstrating our expertise and commitment to the industrial industry, offering the broadest portfolio of interconnect products.

Our interconnect range include sealed circulars, plastic and metal shell bayonet coupling circulars, miniature metal shell circulars, PC board header connectors and sensor and direct device connectors. ITT is also a systems supplier, providing value-added module and harness assemblies.

In addition to our CA Bayonet series, we also offer these connectivity solutions:

Environmentally Sealed

Harsh Environments



Cannon MIL-DTL-38999

High density contact arrangements, corrosion-resistant shells, rear release crimp snap-in contacts, operates under severe high temperature vibration testing.

Cannon KPT / KPSE

Environmentally sealed miniature circular connectors available in two versions: KPT (solder contact) and KPSE (high performance crimp contact). Intermateable and intermountable with all MIL-C-26482 connectors and is available with many materials, finishes and configurations.



Cannon Trident

Versatile range of electrical connectors based on a standard contact design. Options include; industrial grade, harsh environment and shielded circulars.

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Mechanical Features

Ambient temperature

Standard insulator material
–55°/125°C (– 67/257°F)

FKM insulator material*
–30°/200°C (– 22/392°F)

Safety provisions**

IP 67 acc. to DIN 40 050
(1 bar pressure after 12 hrs.)

Vibration test

200 m/s² at 10 to 2000 Hz

Mating cycles

500 min.

Separating force per contact.

The corresponding separating force has to be measured according to VG95319, part 2, test no. 5.7. using the required test gage.

Contact size metric	AWG	Separating force min. N	Gage
10	–	0,3	G 0,99
15S/15	16S/16	1,0	G 1,56
25	12	1,5	G 2,36
60/100	8	3,0	G 3,58
160	4	4,0	G 5,69
500	0	8,5	G 9,04

Gage

(see also VG 95234, Part 1)



Gage	Contact diameter d +0,01	L –1
G 0,99	0,99	7
G 1,56	1,56	9
G 2,36	2,36	12
G 3,58	3,58	13
G 5,69	5,69	13
G 9,04	9,04	13

Coupling torque

The allowable coupling torques have to be tested under full bundle conditions of the connectors to VG95319, part 2, test no. 5.8.2.

Shell size	Allowable coupling torque closing and opening Nm max.	Opening Nm min.
10SL	1,7	0,15
12S	2,5	0,23
14S	3,6	0,35
16S/16	5,5	0,46
18	8	0,58
20	9	0,7
22	11	0,8
24	14	0,8
28	17	0,92
32	19	1,03
36	23	1,03

Contact retention

The contact retention has to be tested according to VG95319, part 2, test no. 5.4. Test force direction = Mating direction.

Contact size	AWG	Test force N
10	–	30
15S/15	16S/16	35
25	12	55
60/100	8	80
160	4	90
500	0	95

Materials

Shell

Standard finish
Aluminum alloy
Olive drab chromate coating over cadmium plating

Alternative finish

Zinc cobalt (see page 9 – Modification)

Insulator

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