

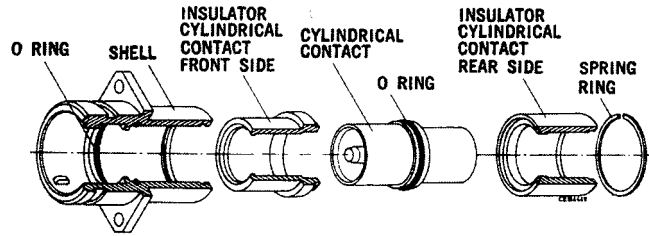
These connectors are used to transmit very high current at low voltage, as for example in the electrical equipment of military land and sea-borne vehicles and in industrial facilities. The connectors meet the mating dimensions, mechanical features and rear panel installation requirements of VG 95234. Ultraflexible, shielded weld cables are terminated to the connectors.

These high power connectors feature one contact in a two-piece rigid insulator. The aluminum shell has a chromate finish over cadmium. The operating temperature ranges from -55°C to $+125^{\circ}\text{C}$ (-67°F to $+257^{\circ}\text{F}$). The contacts of copper or copper alloy with hard silver finish are designed for crimping or termination to solid copper conductors with threaded bolts. The mechanical durability is a minimum of 500 mating cycles. The crimp contacts accept wires per DIN 46438 (25-240 sq. mm).

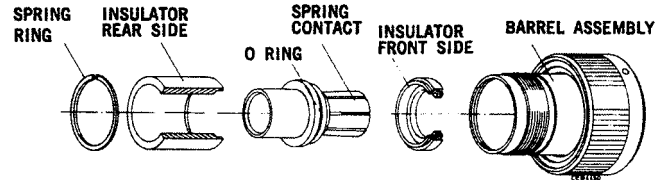
Contact retention is achieved by the two-piece insulator which is fixed to the shell with a snap-in ring. This allows unlimited exchange of the crimp contacts. The bayonet coupling assures fast coupling and uncoupling. Color-coded snap-in points indicate positive mating. Plugs and receptacles are waterproof in mated condition up to 1 bar (35 feet of water).

Connector Design – CGE

Receptacle CGE2... B-04



Plug CGE6... B-03



Circular Connectors

How To Order – CGE

SERIES

CGE – ITT Cannon Prefix

SHELL STYLE

- 0 – Wall mounting receptacle with mounting flange
- 1 – Cable connecting plug
- 2 – Box mounting receptacle with mounting flange
- 6 – Straight plug
- 8 – 90° angle plug

CLASS

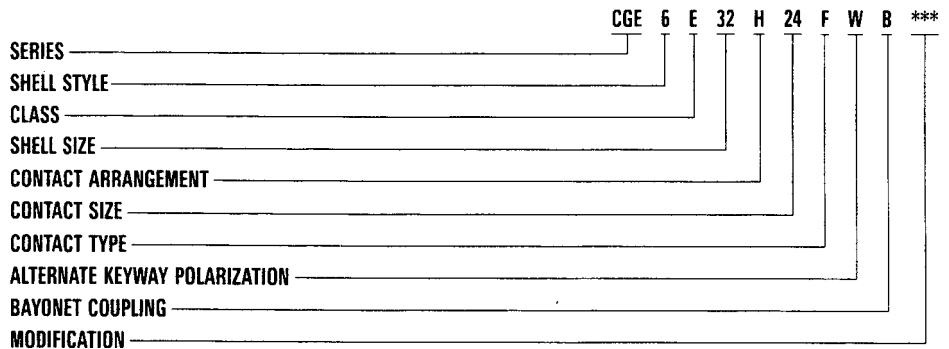
E – Environmental, class JP 07, according to DIN 40050

SHELL SIZE

16 – 18 – 22 – 28 – 32

CONTACT ARRANGEMENT

- 16H2 – Shell size 16, 1 contact H2
- 18H5 – Shell size 18, 1 contact H5
- 22H9 – Shell size 22, 1 contact H9
- 28H15 – Shell size 28, 1 contact H15
- 32H24 – Shell size 32, 1 contact H24



CONTACT SIZE

- H2 – 3 AWG
- H5 – 0 AWG
- H9 – 000 AWG
- H15 – 250 MCM
- H24 – 400 MCM

CONTACT TYPE

- F – Spring contact
- Z – Cylindrical contact

ALTERNATE KEYWAY POLARIZATION

- Standard – 180°
- W – 120°

BAYONET COUPLING

B – Bayonet coupling

MODIFICATIONS

- 05 – Through holes in flange
- 03 – Adapter for heat shrink boots, metric size crimp contact
- 04 – Rear panel mounting, four threaded holes, metric size crimp contact
- 04-05 – Same as 04, however with four through holes
- 14 – Shielded version, metric size crimp contact
- 16 – Thread bolt termination, front panel mounting, O-ring for sealing between wall and receptacle (only for style CGE2EB)

Performance and Material Specifications – CGE

MECHANICAL

Admissible ambient temperature	-55°C to +125°C
Class	JP 07 according to DIN 40050 Test pressure: 1 bar overpressure Test duration 12 hours
Vibration	200 m/s ² for 10 to 2000 Hz
Mechanical durability	500 mating cycles

COUPLING TORQUE

(IN WIRED CONDITION ACC. TO VG 95319 Part 2, Test No. 5.8.2.)

Shell Size	max. closing/opening torque		min. opening torque	
	Nm	ozm	Nm	ozm
16	5,5	19.78	0,5	1.80
18	8,0	28.78	0,6	2.16
22	11,0	39.57	0,8	2.88
28	17,0	61.15	0,9	3.24
32	19,0	68.34	1,0	3.60

3,597 = (0z & 0zm)

CONTACT RETENTION

(ACC. TO VG 95319, PART 2. TEST NO. 5.4.)

Contact Size	Metric Wire Size (mm ²)	American Wire Size (AWG) or (MCM)	Test Force	
			(N min.)	(Oz. min.)
H2	25	3 AWG	100	359.70
H5	50	0 AWG	120	431.64
H9	95	000 AWG	140	503.58
H15	150	250 AWG	160	575.52
H24	240	400 AWG	200	719.4

ELECTRICAL DATA

CONTACT RATING

(amps) at 125°C ambient temperature:

Shell size	16	18	22	28	32
Contact size	H2	H5	H9	H15	H24
Max. current rating (amps) at 125°C ambient temperature	250	300	500	650	1000
Max. short-time load approx. 0,5 - 1 sec. (amps.)	750	1000	2000	3000	5000

AIR AND CREEPAGE PATHS

Air path	.118 (3.00) min.
Creepage path	.197 (5.00) min.

CONTACT RESISTANCE

Contact size	H2	H5	H9	H15	H24
Contact resistance (mOhm max.)	0,6	0,3	0,15	0,1	0,07

INSULATOR RESISTANCE

min. 5000 MOhm

MATERIALS AND FINISHES

Shell	Aluminum alloy
Finish	Olive chromate over cadmium
Insulator	PTFE
Contact	Copper and copper alloy
Finish	Hard silver
O-Rings	Viton

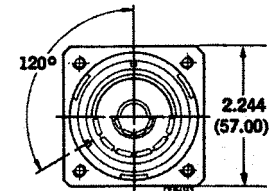
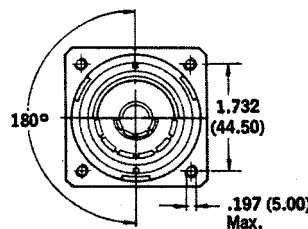
Alternate Keyway Positions – CGE

To avoid mismatching of identical connectors, the keyway of the CGE connectors is available in two different positions:

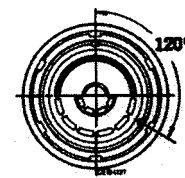
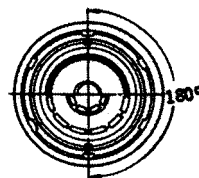
Standard Keyway position = 180°

Keyway position W = 120°

Keyway position of receptacles and cable connecting plugs.



Keyway position of straight and 90° angle plugs.



Circular Connectors