ITT

Interconnect Solutions
Cannon, VEAM, BIW

Defining innovative aviation, military, and industrial circulars since the DC-1, over 70 years ago

Engineered for life

Introduction

The miniature circular connectors series KPT and KPSE from ITT Cannon conform to meet the performance specification of MIL-C-26482 with three point bayonet coupling and five-keyway polarization. They offer general purpose solder connectors and high performance crimp connectors. The broad product range provides the most complete family of connectors that conform to Mil-C-26482 and VG95328 performance specifications.

The versatility of these connectors has been proven by their usage in general as well as in high performance environmental applications.

In addition to the basic series presented in this section, connectors for special applications are available. They include corrosion resistant types, filter connectors for electromagnetic compatibility, and non-outgassing radiation resistant versions.

All connectors conform to the above mentioned performance specifications and are fully intermateable and accept a wide range of interchangeable accessories. Thereby design modifications can be achieved more easily and at a lower cost with connectors of the KPT/KPSE series.

KPT General purpose solder contact connectors

KPT General purpose solder contact connectors

- General purpose
- Solder termination
- Closed entry socket contacts

Series KPT from ITT Cannon offers general purpose connectors used in military applications, but also widely used in industrial applications calling for a circular connector with fixed contacts for solder termination.

The KPT series conforms to meet the performance specifications of MIL-C-26482 and is intermateable with all connectors according to the above specifications. VG95328H is also intermateable with the KPT and MIL-C-26482, see page A-62

Technical Data

Material and Finishes	KPT	KPSE
Shell	Aluminum alloy, conductive olive drab chromate over cadmium finish per QQ-P-416 Contact Factor for other plating options	
Insulator	Polychloroprene	Polychloroprene
Grommet and Seal	Polychloroprene	Polychloroprene
Contacts	Copper alloy, gold plated	Copper alloy, gold plated

MECHANICAL

Shell Sizes 00 - wall mounting receptacle
01 - cable connecting plug
02 - box mounting receptacle
06 - straight plut
07 - jam nut receptacle
08 - 90˚ angle plug
B - thru-bulkhead receptacle (KPT only)

Shell Sizes KPT 8 thru 24
KPSE 10 thru 24

Polarization/Coupling: five keyway/three point bayonet

Service Classes A - general duty
B - general duty with strain relief
E - grommet seal
F - grommet seal with strain relief
J - gland nut with strain relief for jacketed cable
P - potted

Environmental Sealing	Acc. to VG95319 Part 2, Test No. 5.9.2. For styles A to E and J to W, Z1, Z2 and Z3 and gaskets style A and B only Test pressure 0,2 bar overpressure — Test duration 48 h Test temperature 25 ± 3°C — The connector shall be free of moisture See 26482 specification
Operating temperature	-55 / 125°C

Electrical Data

Number of contacts	2 thru 61	3 thru 61
Wire Size AWG	16 thru 24	12 thru 24
Contact termination	Solder	Crimp

Contact rating

Size AWG	Rated current A	Test current A	Millivolt drop mV
20	7.5	7.5	less than 55
16	13.0	13.0	less than 50
12	23.0	23.0	less than 42

Insulation resistance ⊕ 5000 MW

Service rating

Test voltage	Service class	Vrms	VDC
Sea level	1	1500	2100
	2	2300	3200
21336 m (70 000 ft)	1	375	535
	2	550	770

With scoop proof connectors operating voltages acc. to MIL-C-26482 and VG 96912 are permitted

Exception:
Service rating between the central contact and the housing of the coaxial contact

Operating voltage

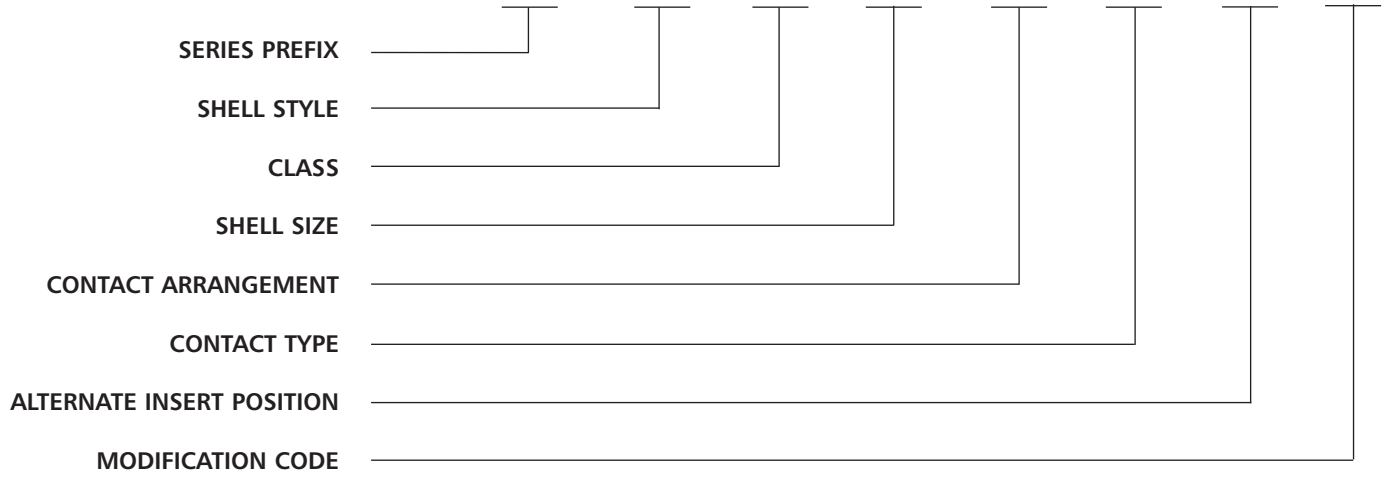
Service class	VG 95328	MIL-C-26482
1	140 VDC/100 VAC	850 VDC/600 VAC
2	165 VDC/115 VAC	1400 VDC/1000 VAC

Operating voltage and connector usage: Connectors are equipment which must not be separated or mated when under load conditions. When the connectors will be operated with line voltage, please consult factory.

KPT General purpose solder contact connectors

How to order

MS	3112	E	22	-	55	P	W	•
KPT	02	E	22	-	55	P	W	•



SERIES PREFIX
KPT -ITT Cannon prefix
KPTR -ITT Cannon RoHS prefix (U.S. version)
MS-MIL-DTL 26482 prefix

SHELL STYLE
ITT Cannon designation
00 -wall mounting receptacle
01 -cable connecting receptacle
02 -box mounting receptacle (class E only)
06 -straight plug
07 -jam nut receptacle
08 -90° angle plug
B - thru bulkhead receptacle, see page A-49

MS DESIGNATION
3110 - Wall mounting receptacle
3111 - Cable connecting receptacle
3112 - Box mounting receptacle (Class E only)
3114 - Jam nut receptacle
3116 - Straight plug

CLASS
A -general duty (not MS approved)
B -general duty with strain relief (not MS approved) without grommet and ferrule
E -with a grommet seal, not for 02 and 3112 (MS specification)
F -grommet seal with strain relief (MS specification)
J -watertight gland seal with strain relief (MS specification) for jacketed cable (U.S. version)
P -for potting (MS specification U.S. version)
PG - PG adapter (not available for shell #8)
ME - Metric adapter (not available for shell #8)

SHELL SIZES
8, 10, 12, 14, 16, 18, 20, 22, and 24

CONTACT ARRANGEMENTS
see page A-41

CONTACT TYPE
P -Pin S -Socket

ALTERNATE INSERT POSITION
W, X, and Z (omit for normal), see page A-42

MODIFICATION CODE
A34 - Electroless nickel hardware, RoHS compliant (European version)
A71 - Electroless nickel hardware (U.S. version RoHS compliant after 11/1/07))
A206 - Black zinc cobalt hardware (U.S. version, RoHS compliant)
A232 - Black zinc cobalt hardware (European version, RoHS compliant)
A233 - Green zinc cobalt hardware (European version)
A408 - Extended Life Contact - Gold over Nickel
DN - Shrink boot adapter for shell styles 00, 01, 06 and 07 (Class E only)
DZ - Endbell for shielding braids and shrink boots. (Class E only)
07 - Clear chromate over cadmium hardware (U.S. version)
16 - Lanyard release (applicable to plug only) (U.S. version)
23 - Ground springs (applicable to plug only)
F42 - connectors without endbell and related components

P9 = PG9 for shell #10	M12 = M12x1,5 for shell #10
P11 = PG11 for shell #12	M16 = M16x1,5 for shell #12
P13 = PG13,5 for shell #14	M20 = M20x1,5 for shell #14
P16 = PG16 for shell #16	M25 = M25x1,5 for shell #16
P21 = PG21 for shell #18	M25 = M25x1,5 for shell #18
P21 = PG21 for shell #20	M25 = M25x1,5 for shell #20
P21 = PG21 for shell #22	M32 = M32x1,5 for shell #22
P29 = PG29 for shell #24	M32 = M32x1,5 for shell #24

Consult factory for other modifications. **Omit first digit (0) of shell style indication when using a modification code.**