



Solder

Crimp

- General purpose
- Closed-entry socket contacts
- Solder termination

KPT connectors are a series of general - purpose, environment - resistant, miniature circular connectors, qualified for use in industrial applications calling for quick - disconnect connectors with fixed contacts for solder termination. These miniature circular connectors are grouped into two series ranging from general purpose solder pot connectors . . . to high performance, crimp connectors . . . to connectors with high contact density. This broad range provides the most complete family of 26482 connectors available today. The versatility of these connectors is proven by the fulfillment of requirements ranging from general purpose to space environmental.

In addition to the two basic series, connectors for special applications are also available. They include RFI filtering versions (with loss pass internal filter pin contacts), hermetic connectors for high pressure watertight requirements, and twist - on pull - off couplers for MIL-C-26482 plugs. This series is intermateable and intermountable with all MIL-C-26482 connectors, whether solder or crimp type and is available with many materials, finishers and configurations.

How to Order - KPT - Solder Contact Connectors

SERIES PREFIX

- KPT - ITT Cannon prefix
- MS - MIL-C-26482 prefix

SHELL STYLE

- Cannon Designation
- 00 - wall mounting receptacle
- 01 - cable connecting plug
- 02 - box mounting receptacle (Class E only)
- * 03 - wall mounting receptacle without grommet, ferrule and endbell
- * 04 - cable connecting plug without grommet, ferrule and endbell
- * 05 - straight plug without grommet, ferrule, and endbell
- 06 - straight plug
- 07 - jam nut receptacle (available in hermetic version also)
- 08 - 90° angle plug
- B - thru-bulkhead receptacle (Class E only)

* Consult factory for details

SHELL STYLE (cont'd)

- MS Designation
- 3110 - wall mounting receptacle
- 3111 - cable connecting plug
- 3112 - box mounting receptacle (Class E only)
- 3114 - jam nut receptacle
- 3116 - straight plug
- 3119 - thru-bulkhead receptacle (Class E only)

SERIES PREFIX

SHELL STYLE

CLASS

SHELL SIZE

CONTACT ARRANGEMENT

CONTACT STYLE

ALTERNATE INSERT POSITION

MODIFICATION CODE

CLASS

- A - general duty (not MS approved)
- B - general duty with strain relief without grommet & ferrules (may be used for potting when strain relief is desired) (not MS approved)
- E - grommet seal except on 02 and 3112 (MS specification)
- F - grommet seal with strain relief (MS specification)
- J - water tight gland seal with strain relief for jacketed cable (MS specification)
- P - potted (MS specification)

SHELL SIZE

- 8, 10, 12, 14, 16, 18, 20, 22, and 24

MS 3110 E 22-36 P Y
KPT 00 E 22-36 P Y **

CONTACT ARRANGEMENT

See contact arrangement page 149.

CONTACT STYLE

P - pin; S - socket

ALTERNATE INSERT POSITION

W, X, Y and Z. (Omit for normal.)

MODIFICATION CODE

- Omit first (0) of shell style indication when using modifications code.
- 07 - clear chromate over cadmium
- 16 - twist-pull lanyard release coupler (applied cable to plug only).
- 23 - grounding springs fingers (applicable to plug only)

How to Order - KPTB Thru-Bulkhead Receptacle Connectors

- General Purpose
- Double ended pin and socket contacts
- Contains KPT socket insert
- Nonremovable contacts

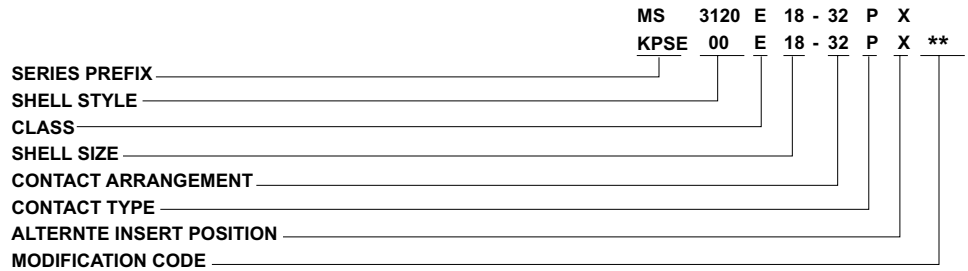
KPT connectors are a series of general - purpose, miniature circular connectors, qualified for use in military applications. They are also widely used in industrial applications. The KPTB in a thru-bulkhead version with double faced pin and socket insert construction allowing mating from both ends. They contain KPT socket inserts with feed-thru (pin/socket) non-removable contacts.

The thru-bulkhead receptacle is provided for applications requiring the disconnection of a power source from either side of a panel. A typical connector to be used if air leakage requirements are critical.

SERIES PREFIX _____ KPTB 22 - 55 PS Y
SHELL SIZE _____
CONTACT ARRANGEMENT _____
CONTACT STYLE (pin & socket) _____
ALTERNATE INSERT POSITION _____

MIL-C-26482 PREFIX _____ MS3119 E 22 - 55 Y
CLASS _____
SHELL SIZE _____
CONTACT ARRANGEMENT _____
ALTERNATE INSERT POSITION _____

How to Order - KPSE Crimp Contact Connectors



SERIES PREFIX

- KPSE - ITT Cannon prefix
- MS - MIL-C-26482 prefix

SHELL STYLE

- ITT Cannon Number:
- 00 - wall mounting receptacle
 - 01 - cable connecting plug
 - 02 - box mounting receptacle (without wire seals)
 - * 03 - wall mounting receptacle without ferrule and endbell
 - * 04 - cable connector plug without ferrule and endbell
 - * 05 - straight plug without ferrule and endbell
 - 06 - straight plug
 - 07 - jam nut receptacle
 - 08 - 90° angle plug

* Consult factory for details

MS Designation

- 3120 - wall mounting receptacle
- 3121 - cable connecting plug
- 3122 - box mounting receptacle
- 3124 - jam nut receptacle
- 3126 - straight plug

CLASS

- A - general duty (not MS approved)
- B - general duty with strain relief without grommet & ferrules (not MS approved)
- E - grommet seal (MS specification)
- F - grommet seal with strain relief (MS specification)
- J - gland seal with strain relief for jacketed cable (not MS approved)
- P - potted (MS specification)

SHELL SIZE

- 10, 12, 14, 16, 18, 20, 22, and 24

CONTACT ARRANGEMENT

See contact arrangements page 149.

CONTACT STYLE

- P - pin
- S - socket

ALTERNATE INSERT POSITION

W, X, Y and Z. (Omit for normal.)

MODIFICATION CODE

- Omit first (0) of shell style indication when using modifications code.
- F0 - less contacts, not marked on connectors
- 07 - clear chromate over cadmium
- 16 - twist-pull lanyard release coupler (applied cable to plug only).
- 23 - grounding springs fingers (applicable to plug only)

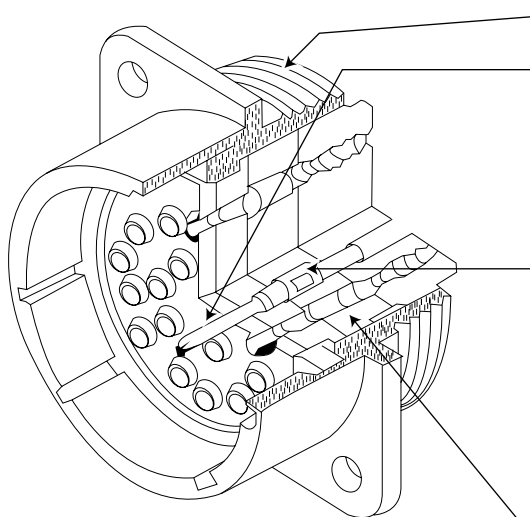
KPSE High Performance Crimp Contact Connectors

- Environment -resistant
- Voidless integrally molded insulator
- Front-release, crimp snap-in contacts
- Closed entry socket contacts
- 4 moisture seals for complete sealing
- Contact clip protected in hard dielectric
- Positive insert-to-shell mechanical retention

KPSE environment-resistant, miniature circular, quick disconnect connectors, qualified to MIL-C-26482, are designed for the exacting requirements of today's electronic industry. The KPSE features an insulator which is mechanically retained in the shell by a positive, hard plastic-to-metal lock retention augmented by a reliable adhesive bond. Complete moisture sealing is achieved by four seal; shell, peripheral, interfacial and wire seals.

Crimp snap-in contacts are retained in clips that are completely encased in a tough hard dielectric wafer, thus protecting the clips tines from damage. Closed-entry socket contacts facilitate positive mating.

The KPSE series is intermateable, intermountable and interchangeable with all MIL-C-26482 connectors, whether crimp or solder type, and is available with many materials, finishes and configurations.



STANDARD MIL-C-26482 HARDWARE mates with any connector designed to MIL-C-26482.

CRIMP, SNAP-IN CONTACTS are designed to MIL-C-39029 and can be crimped with the standard M22520/1 crimp tool.

CLOSED-ENTRY SOCKET CONTACTS eliminate damage from abuse by test probes and help to correct any misaligned pins during engagement.

CONTACT INSERTION is accomplished from the rear of the connector.

When the contact is fully inserted, the clip tines snap securely behind the contact shoulder.

CONTACT EXTRACTION is accomplished with a front-inserted extraction tool. Pressing the tool plunger pushes the contact out thru the rear of the connector.

CONTACT RETAINING CLIP is completely encased in a tough plastic wafer to protect the clip from damage.

COMPLETE MOISTURE SEALING is achieved by combining four seals: shell, peripheral, interfacial and wire seals.

SHELL SEAL is effected when the plug shell pushes against the sealing ring in the receptacle when the connectors are mated.

PERIPHERAL SEAL around the edge of the pin insulator is designed so that mating the connector puts tension on the seal and greatly reduces compression set.

INTERFACIAL SEAL is achieved by the insulator faces meeting when the plug and receptacle are mated.

WIRE SEAL is accomplished by a multiple ripple design, exceeding the wire sealing requirements of MIL-C-26482.

POSITIVE INSERT-TO-SHELL MECHANICAL RETENTION with hard plastic wafer firmly locked into a groove in the shell, in addition to a strong adhesive bond between the insert and shell.

Performance and Material Specifications

STANDARD MATERIALS AND FINISHES

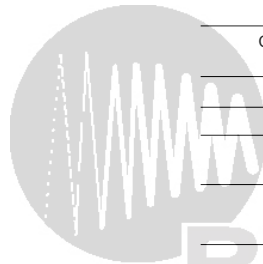
Shell	aluminum alloy, conductive olive drab chromate over cadmium finish per QQ-P-416
Insulator	polychloroprene
Grommet and Seal	polychloroprene
Contacts	Copper alloy, gold plate per MIL-G-45204 type II
Temperature Range	- 55°C to +125°C

MECHANICAL

Shell Sizes	00 - wall mounting receptacle 01 - cable connecting plug 02 - box mounting receptacle 06 - straight plug 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

ELECTRICAL

Contact Termination	solder (KPT)	crimp snap-in (KPSE)		
Number of contacts	KPT 2 thru 61	KPSE 3 thru 61		
Wire size, AWG	KPT 12 thru 24	KPSE 16 thru 24		
Wire Range Accommodations		Insulation O.D. Limits		
Contact Size	AWG Wire Size	Min. KPT	Min. KPSE	Max. KPT/KPSE
20	24, 22 and 20	.060 (1.52)	.047 (1.19)	.083 (2.11)
16	20, 18 and 16	.066 (1.68)	.066 (1.68)	.109 (2.77)
12	14 and 12	.097 (2.46)		.142 (3.61)
Contact Rating	Contact Size	Rated Amps	Test Current	Millivolt Drop
	20	7.5	7.5	less than 55
	16	22.0	13.0	less than 50
Service Rating	Test Volt	Service	AC(rms)	DC
	Sea level	1	1500	2100
		2	2300	3200
	70,000 ft.	1	375	535
		2	550	770
Maximum Operating Voltage	Sea level	1	600	850
		2	1000	1275



PEI-Genesis