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General Information



1.0 Scope

This assembly manual is made for users of ITT Cannon connectors to provide information and practical instructions concerning connector design, construction and wiring operations. ITT Cannon's miniature circular connector series KPT, KPSE and KPTC conform to meet the performance specification to MIL-DTL-26482 and VG95328 with a positive three point bayonet coupling, five-keyway polarization and high insert arrangement contact density.

The purpose of this manual is to describe the assembling procedures of these connectors and contacts to facilitate the connection with various cables. It also gives an overview to the handling of relevant tools.

For detailed specifications of each series see specific catalogues

To download specific connector drawings or 3D models by inserting connector description (e.g. KPSE6E20-16SW-DZ) into the search field on the website: www.ittcannon.com

2 Connector Type

2.0 Shell Style Plug



Plug straight
KPSE06 / KPTC6



Plug straight shielded
KPSE6-DZ / KPTC6-DZ



Plug 90°
KPSE08 / KPTC8

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2.1 Shell Style Receptacle



Wall mounting
KPSE00 / KPTC0



Cable connecting
KPSE01 / KPTC1



Jam nut
KPSE07 / KPTC7



Box mounting
KPSE02 / KPTC2



DZ-Adapter
KPSE07 / KPTC7



Thru Bulkhead
KTB

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3 Contacts and Assembly Tools

3.0 Crimp Contacts

KPSE / VG95328					
Contact size	Termination		Contact type	Contact order reference	
	AWG	mm ²		KPSE version	VG95328 version
20	-	0,08 – 0,20	Socket	031-8704-205	-
			Pin	430-8561-032	-
	24 – 18	0,20 – 0,75	Socket	031-8704-203*	031-8704-203
			Pin	430-8560-006*	430-8560-006
16	20 – 14	0,5 – 2,0	Socket	031-8704-000*	031-8704-000
			Pin	430-8560-004*	430-8560-004
12	14 – 12	2,0	Socket	031-8704-012*	-
			Pin	430-8560-016*	-
			Grounding Pin	430-8560-020	-

*Standard

KPTC					For shell size 8 and contact layout 12 – 14 only	
Contact size	Termination		Contact order reference		Contact order reference	
	AWG	mm ²			Gold plating	Silver plating
20	28 – 24	0,08 – 0,20	Pin	430-8588-029	-	-
20	24 – 18	0,20 – 0,75	Socket	031-8704-508*	031-8704-509	031-8704-506
			Pin	430-8560-404*	430-8560-411	430-8560-410
20	-	0,5 – 1,0	Socket	430-8588-031*	-	-
			Pin	430-8588-030*	-	-
16	20 – 14	0,5 – 2,0	Socket	031-8704-502*	-	-
			Pin	430-8560-406*	-	-

*Standard

KPT14A4		
Contact size	Contact order reference	
Coaxial	Socket	DM 53742-5001
	Pin	DM 53740-5001

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3.1 Crimping Tools Description



Introduction

This hand crimp tool fully meets the requirements of specification MIL- C- 22520. The tool produces an eight- indent crimp termination of excellent quality. Using the correct turret with the tool and adjusting the selector knob as indicated on the turret to one of the eight different crimp depths, a large variety of MS and other contacts can be terminated. The standard tool M 22520/1-01 terminates wire sizes AWG 12-26 with contacts size 12, 16 and 20.

A table on the turret shows the crimp depths which have to be adjusted for each combination of contact and wire size. A cycle control mechanism ensures that the complete crimp operation has been fully completed. Over- or undercrimping can be avoided by choosing the right selector position.

Dimensions

22mm x 60mm x 22mm (closed, without locator)

Weight

Approx. 800g (without turret)

Crimp Locator

Crimp Locators guide and centralize the contact and place the contact in the correct crimp position. They are mounted to the crimp tool using an Allen wrench size 9/64" A/F. Different turrets are available for different ITT Cannon connector series. The other references are contained in the applicable catalogues or assembly instructions.

Testing

The hand crimp tool M 22520/1-01 can be tested with the gauge M 22520/3-1. The tool is set into selector position "4". The handles are then fully closed. Insert the crimp gauge into the tool. The "GO" side of the gauge must pass freely between the indenter tips, whereas the "NO-GO" side must not pass.

NOTE: DO NOT CRIMP GAUGE!



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3.2 Crimp Tools



Hand crimp tool M22520/1-01
Order no.: 995-0001-585



Pneumatic crimp tool WA27F-CE
Order no. 121586-5067

Bench mount BM-2A
for pneumatic crimp tool
Order no. 121586-5068



Foot pedal WA10A
for pneumatic crimp tool
Order no. 121586-5069



Locator M22520/1-02
for hand crimp tool and pneumatic crimp tool
Order no. 995-0001-736



Gauge M22520-3-1
for hand crimp tool and pneumatic crimp tool
Order no. 995-0001-684

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3.3 Insertion Tools

To insert crimped contacts into the insulator insertion tools are required.



Insertion tool CIT



Insertion pliers CIT-F80

KPSE		
Description	Name	Order No.
insertion tool for contact size # 20	MS24256-A20	995-0001-950
insertion tool for contact size # 16	MS24256-A16	995-0001-951
insertion tool for contact size # 12	MS24256-A12	995-0001-913
KPTC		
Description	Name	Order No.
insertion tool for contact size # 20	CITG-20A	121086-3104
insertion pliers for contact size # 20	CIT-KPTC-20	121086-3101
insertion tool for contact size # 16	CIT-16	121086-3008
insertion pliers for contact size # 16	CIT-F80-16	121086-0097
insertion TIP for insertion tool # 20	CITG-20A-TIP	121086-3105
insertion TIP for insertion tool # 16	CIT-16-TIP	317-1153-000

ATTENTION:

A proper contact installation is only ensured if the required insertion tools are used.

3.4 Extraction Tools

In case a contact has to be exchanged the following extraction tools are to be used:

KPSE			
Description	Name	Order-No.	Extraction-TIP
extraction tool for contact size # 20	MS24256-R20	995-0001-965	317-7130-000
extraction tool for contact size # 16	MS24256-R16	995-0001-964	317-7129-000
extraction tool for contact size # 12	MS24256-R12	995-0001-966	317-7131-000
extraction tool for coax contacts (KPT14A4)	CET-C6B	070064-0000	121586-0046
KPTC			
Description	Name	Order-No.	Extraction-TIP
extraction tool for contact size # 20	CET-KPTC-20	121086-3212	317-8668-000
extraction tool for contact size # 16	CET-KPTC-16	121086-3277	317-8649-025



Extraction tool KPSE



Extraction tool for coax contacts



Extraction tool KPTC

ATTENTION:

A proper removal of contacts is only ensured if the required extraction tools are used.

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3.5 Pipe Wrench

Soft Jaw Adjustable Pliers

order No.: 550014-1644

for tightening the endbell housing.

4 Preparation and Crimping Instructions
4.0 Dimensions for Single Conductor and Wire Stripping

In order to assure proper function according to connector specification, especially concerning water tightness, the diameter of the wire insulation must correlate with the following data:

KPSE		
Contact size	Insulation dimensions waterproof Ø mm	
	min	max
20	1,3	2,1
16	1,8	2,7
12	2,5	3,4

KPTC		
Contact size	Insulation dimensions waterproof Ø mm	
	min	max
20	1,4	2,15
16	1,6	2,7

Use of heat shrink tube:

If wires with a smaller insulation diameter are used their diameter has to be increased by using a shrink tube to correspond with the diameter in the grommet sealing area.

The proper sealing between shrink tube and wire insulation must be assured by the user.

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4.1 Wire Stripping Length and Selector Proposal

ATTENTION:

Do not twist conductors used with crimp contacts. Do not touch stripped areas of conductors before crimping if possible. The insulation of the wires must not be damaged.

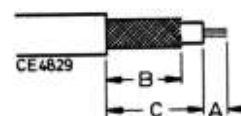
KPSE							
Contact size	Termination		Stripping length mm	Wire size		Colour code locator	Selector proposal*
	AWG	mm ²		AWG	mm ²		
20	-	0,08 – 0,20	5,0	26	0,12	red	3
				---	0,14		3
20	24 – 18	0,20 – 0,75	5,0	24	0,2	red	2
				22	0,32		3
				---	0,4		3
				20	0,5		4
				18	0,75		5
16	20 – 14	0,5 – 2,0	6,5	20	0,5	blue	4
				18	0,75		5
				---	1,0		5
				16	---		6
				---	1,5		6
12	14 – 12	2,0	6,5	14	2,0	yellow	7
				---	---		8
				12	---		8

KPTC							
Contact size	Termination		Stripping length mm	Wire size		Colour code locator	Selector proposal*
	AWG	mm ²		AWG	mm ²		
20	28 – 24	0,08 – 0,20	5,0**	28	0,08	red	2
				26	---		2
				24	0,20		4
20	24 – 18	0,20 – 0,75	6,5	24	0,2	red	2
				22	0,32		3
				---	0,4		3
				20	0,5		4
				18	0,75		5
20	-	0,5 – 1,0	6,5	---	0,5	red	1
				---	0,75		3
				---	1,0		4
16	20 – 14	0,5 – 2,0	6,5	20	0,5	blue	4
				18	0,75		5
				---	1,0		5
				16	---		6
				---	1,5		6
16	20 – 14	0,5 – 2,0	6,5	14	2,0	blue	7
				---	---		7

*Selector settings for best crimp result depend on specific wire type.

**With wires up to 1,2mm insulation diameter part of the wire insulation is inside the crimp sleeve for better support. This is not valid for larger insulation diameters. For these wires the stripping length is 6,5mm.

Wire stripping length in mm for coax cable (solder version) Layout 14A4			
Order references	Dimensions	Dimensions	Dimensions
Contact	A	B	C
DM 53742-5001	1,98	6,35	7,92
DM 53740-5001			



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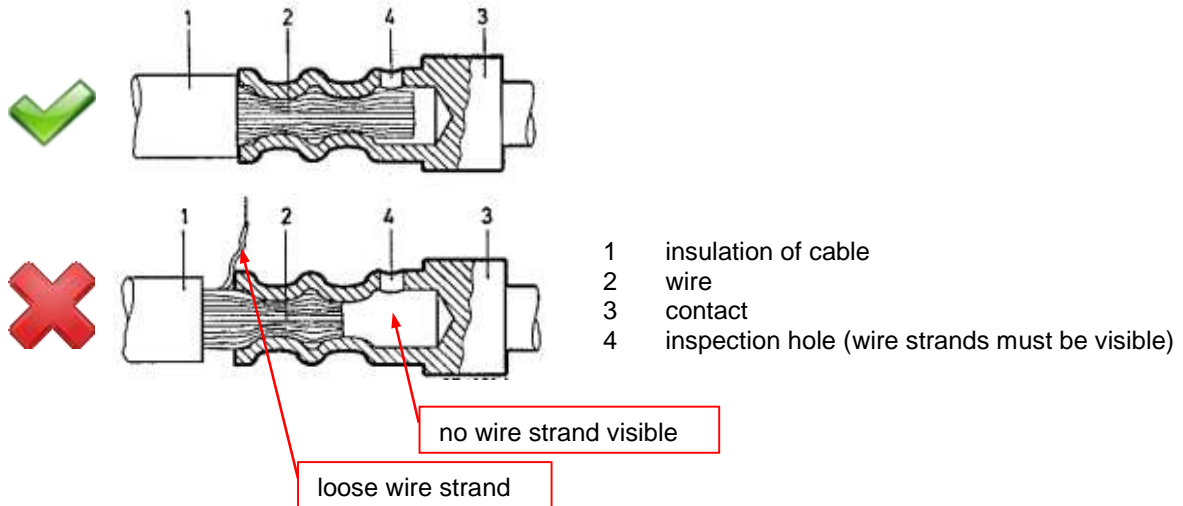
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4.2 Instructions for the Crimping Process of Machined Contacts

- 1.) strip wires to lengths, for stripping details see 4.1.
- 2.) open hand tool and insert the contact in the crimp locator
- 3.) position the stripped cable into the contact crimp pot
- 4.) close hand tool to end position
- 5.) open hand tool and extract the contact, check the contact visually
- 6.) minimum crimp tensile requirements see DIN EN 60352-2-2006

- there shall be no loose strands out of the crimp section
- the contact must be crimped straight to the cable
- deformed contacts must not be used. In this case exchange defect contact.
- during the preparation, strands must not be injured or cut



4.3 Wire Hole Fillers

Where contacts are not used, the cavities are to be closed by wire hole filler.

KPSE		
size	part no.	colour
20	225-1012-000	red
16	225-1011-000	blue
12	225-1010-000	yellow
Coaxial 14A4	225-1018-000	yellow
KPTC		
size	part no.	colour
20	225-1012-000	red
16	225-1011-000	blue



Assembly hint: Non used contact cavities have to be closed by an unwired contact, while the relevant wire hole filler has to be inserted into the empty cavity of the grommet. Wire hole fillers are colored coded!

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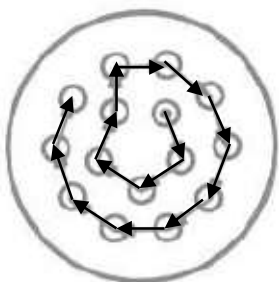
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5 Soldering of contacts KPT

5.0 Soldering Process

Connectors of this series are delivered with pre – installed contacts and solder pots aligned. Pull wire through rear accessories such as ferrule, endbell and cable clamp. Make sure that the wires are inserted through the correct cavity of the grommet. Use Isopropyl alcohol for easier wire insertion through the grommet. Finally, solder conductors to the contacts by use of correct solder tin as well as solder flux. Preferably soldering is started at center contacts and proceeded as shown on the picture 1 below.



picture 1



Make sure that soldering is performed as quickly as possible in order to prevent any excessive heat on the insulator to avoid insulator damage.

Soldering Process for contacts size 20, 16 and 12:

Soldering device: e.g. Weller WS51, bit 3mm diameter

Temp. of soldering iron: 350 °C

Procedure: The soldering iron touches the solder contact approximately at half of the height of the solder cup and is wetted with some solder for better transmission of heat. After a short time of preheating, a certain amount of solder is melted at the upper end of the solder cup. Heat is applied until the solder has flown into the cup and has wetted the surface. Afterwards the wire is inserted.

5.1 Assembly Accessories

After soldering wires, the grommet has to be pushed over the wires in an axial direction until it is flush mounted with the insulator. The ferrule is then moved over the grommet and both parts are fastened and tightened by the endbell. Use Isopropyl alcohol for easier assembly of wire, grommet, insulator and ferrule.

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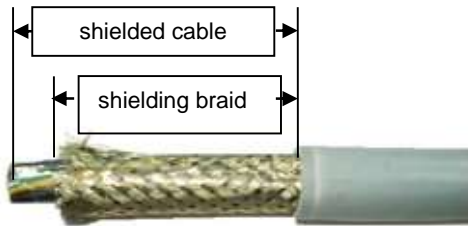
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6 Assembly of Contacts

6.0 Preparation of Shielded System Cable



- The stripping length of the shielded cable has to be determined in line with the com. size/length. The outer cable jacket should end close to the endbell. The stripping of cable must be carried out with right stripping unit. Thereby the shielding braid must not be damaged.



- Fold back braid over jacketed and remove the protective foil if necessary.
- Fix the shielding braid with a tape for easier assembly.
- Strip the wire insulation of the conductors.
- Stripping lengths see 4.1.
- Crimp the contacts, see 4.2.

6.1 Overview, Configuration and Preparation for Contact Installation

1. Pull crimped contact through all accessories, such as ferrule, endbell and cable clamp or others.
 2. Fix the plug in the assembly adapter and mate with each other.
- Optionally an empty mating half shell is utilized to fix the connector in an appropriate manner.



Slide all rear parts on the cable **before** assembling contacts into barrel and insulator. Pay attention to the correct order and mounting direction of all parts, as pictured.

Hint: Use a tie wrap for fixing all parts on the mounting area of the cable.

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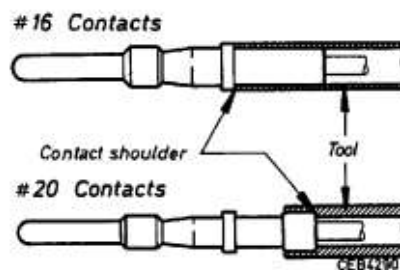
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The second option is, you slide all parts over the cable before you crimp the contacts, see illustration below.



6.2 Insertion of Contacts

1. Use correct insertion tool, see 3.3. Pre insert the contact into the insulator. Place wired contact into insertion tool. Contact, wire and insertion tool have to be axial to each other. The insertion tool has to butt against the connector shoulder, see picture below.
2. Push the contact into the insulator (contact cavity) by applying slow, continuous pressure until it snaps into its position. Hold tool vertically to insulator surface during the operation and axial with the contact.
3. Remove the insertion tool cautiously.
4. Do not install damaged or bent contacts. If a contact is damaged during insertion it has to be removed. Install a new contact. If the insulator or grommet is damaged it must be replaced.
5. Check connector on the mating side to ensure all contacts are on the same level.



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- Plug on and fix the connector for assembly.
- Use an assembly adapter or an empty shell / housing for that purpose.



- Moisten the contacts with Isopropyl alcohol for easier contact insertion.



- Pre-insert the contacts in the insulator.
- Contact insertion is preferably started in the center of the insulator.

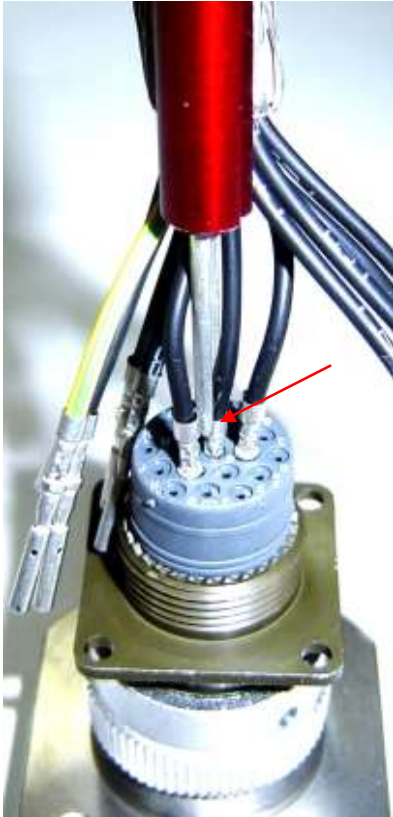
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- Place wired contact into insertion tool in a way that contact, wire and insertion tool are axial to each other. Use the correct insertion tool (see 3.3).

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- Insert contacts by applying slow, continuous pressure, until it snaps into its position.
- Do not install damaged or bent contacts! If a contact is damaged during the insertion this contact has to be removed. A new contact has to be installed.

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- After insertion operation remove the insertion tool cautiously.
- Avoid any movement of the tool during the insertion process which is not axial to the contact / insulator.
- The illustration shows fully assembled contacts.

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- After insertion of the contacts, check the connector on the mating side to ensure that all contacts are on the same level.
- If a contact has not snapped into its proper position it must be removed from the insulator and again inserted with the tool.

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7 Assembly Instruction for Banding adapter



- Slide the end-bell onto the housing.



- To tighten the end-bell with the applicable torque, the connector must be mounted on a torque measuring device.
- An empty mating connector housing can be used to adapt for mounting.
- Tighten the end-bell and the clamping nut with the open-end wrench for end-bells. Observe the permissible tightening torque (see table below).
- During tightening, make sure that the cable is not twisted.



- Remove the insulating tape from the cable and braided shield.
- Unbraid the shielding and comb it evenly over the end-bell.



- Insert the metal band in the tool and pull it over the end-bell. Then fix the metal band in place using the banding tool according to the manufacturer's specifications*.



- Cut shielding to length as shown. Scissors or side cutters can be used for this purpose.

* Shield banding tools are a standard market offering and available through a number of sources. Among others you can buy tools and bands from experienced manufacturers as e.g. DMC (Daniels) or Band-IT.

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- Fully assembled connector

Permissible torque for tightening the end-bell according to VG95234:

Shell size	ENDBELL/BACKSHELL	CLAMPING NUT
	Max. tightening torque	Max. tightening torque
10SL	3,0 Nm	3,0 Nm
14S	5,0 Nm	5,0 Nm
16S	7,0 Nm	7,0 Nm
16	7,0 Nm	7,0 Nm
18	8,0 Nm	8,0 Nm
20	9,0 Nm	9,0 Nm
22	11,0 Nm	11,0 Nm
24	13,0 Nm	13,0 Nm
28	17,0 Nm	15,0 Nm
32	18,0 Nm	17,0 Nm
36	24,0 Nm	19,0 Nm

Thread	Torque for screws at the flanges
M3	1,2±0,2 Nm
M4	1,4±0,2 Nm
M5	2,0±0,2 Nm

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8 Assembly Instruction of a Connector with DZ Adapter



- Move end-bell to the shell. Tighten the end-bell (finger-tight).
- Make sure that teeth are sliding into each other.



- Tighten the end-bell with an open-end wrench. Note the permitted torque of the end-bell, see page 18.
- While tightening the end-bell, take care that the cable is secured against twisting.
- HINT: use the mounting adapter or flange shell.



- Disentangle the shielding braid on the end-bell.
- Arrange it evenly round over the end-bell.



- Fix the shielding braid with binding wire.

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- Cut the shielding braid according to picture, use a scissors or wire cutter.



- Move the clamping nut on the end-bell.
- Screw the clamping nut (finger tight) to the end-bell.



- Tighten the clamping nut with a pipe wrench. Note the permitted torque of the clamping nut, see page 18.
- While tightening the clamping nut, take care that the cable is secured against twisting.
- HINT: use the mounting adapter or flange shell.



- Fully assembled connectors (Heat shrink boot has to be mounted).

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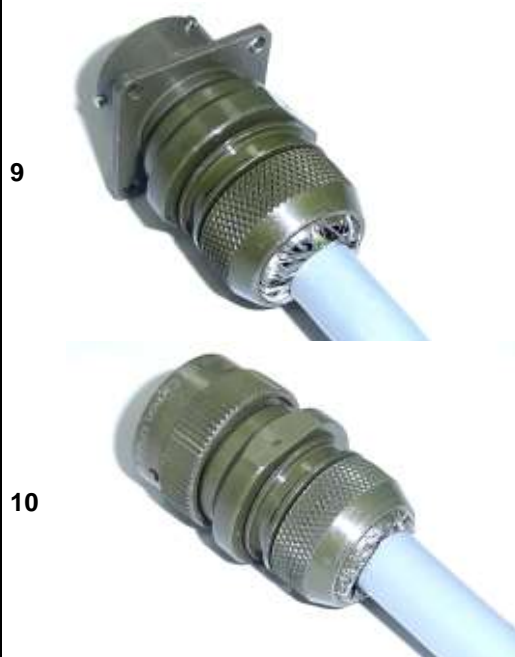
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Shell size	ENDBELL/BACKSHELL	GLAND NUT
	Tightening torque Permissible tolerances $\pm 5\%$	Tightening torque Permissible tolerances $\pm 5\%$
8	4,0 Nm	4,0 Nm
10	6,0 Nm	6,0 Nm
12	8,0 Nm	8,0 Nm
14	10,0 Nm	10,0 Nm
16	10,0 Nm	10,0 Nm
18	13,0 Nm	13,0 Nm
20	13,0 Nm	13,0 Nm
22	13,0 Nm	13,0 Nm
24	13,0 Nm	13,0 Nm

Table1



- To finalize the assembly process a heat shrink boot has to be mounted to the connector endbell and the cable jacketed.
- Heat shrinkable boots have to be purchased separately according VG 95343-3.

Shell size	Jam Nut / recommended tightening torque for single hole mounting styles D, E, F, S and T $\pm 5\%$
	8
10	11,2 Nm
12	14 Nm
14	14 Nm
16	21 Nm
18	21 Nm
20	21 Nm
22	28 Nm
24	28 Nm

Table2

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Thread	Torque for screws at the flanges
	Max. admissible torque
M3	1,2±0,2 Nm
M4	1,4±0,2 Nm
M5	2,0±0,2 Nm

9 Removal of Contacts

1. All accessories are removed in reversed direction (see assembly instruction).
2. Use the correct extraction tool as described in 3.4.

9.0 Removal of Contacts for KPTC

Place tool from the mating side parallel to its axis over the socket or pin contact. Apply smooth and continuous pressure towards the rear end of the connector to push contact out of the insulator. The operation is terminated as soon as the shoulder of the tool butts against the front of the insulator. Pull tool carefully out of the connector.

9.1 Removal of Contacts for KPSE

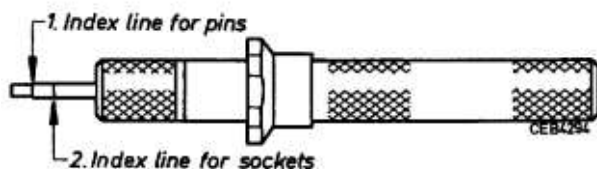
The two index lines on the sleeve of the tool are important for the extraction process, see illustration below.

The first index line indicates the extraction of pin, the second one the extraction of socket contacts. While pushing the tool into the insulator, make sure that the appropriate index line is flush with the face of the insulator.

Carefully push the tool tip over the contact until the tool tip is flush with the face of the insulator. Apply smooth and constant pressure to the tool until clip opens. Pushing the plunger forward while holding it between thumb and index finger pushes the contact out of the insulator. Remove the contact from connector by pulling at the cable.

ATTENTION:

Tool can damage insulator and contact clip when it is not used according to the instruction as described or when the tool is twisted or damaged.



Extraction tool.

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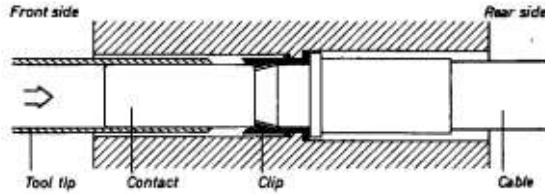


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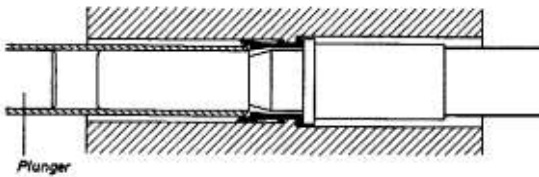
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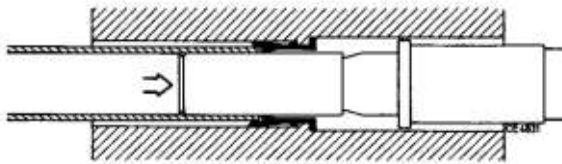
9.2 Current Design KPSE



Tip of extraction tool is inserted into contact cavity.



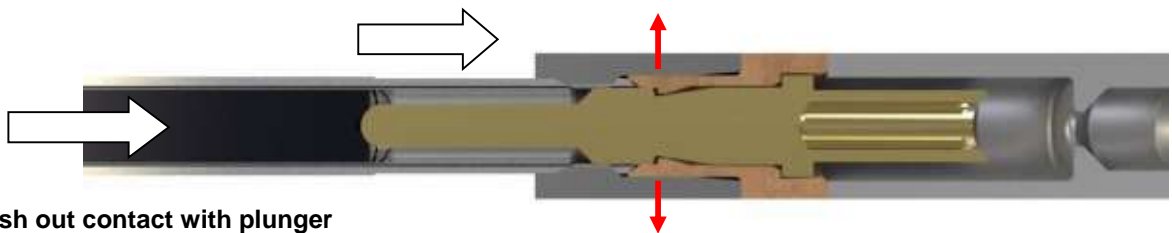
Tip of extraction tool opens retaining clip.



Plunger of extraction tool pushes contact backwards out of cavity.

9.3 New Design KPSE

Push tool to release contact to open the clip




Push out contact with plunger




Waver New Design.

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<p>10 Annex</p> <p>10.0 Product Safety Information</p> <p>1. MATERIAL CONTENT AND PHYSICAL FORM Electrical connectors do not usually contain hazardous materials. They contain conducting and non-conducting materials and can be divided into two groups. a) Printed circuit types and low cost audio types which employ all plastic insulators and casings. b) Rugged, Fire Barrier and High Reliability types with metal casings and either natural rubber, synthetic rubber, plastic or glass insulating materials. Contact materials vary with type of connector and also application and are usually manufactured from either: Copper, copper alloys, nickel, alumel, chromel or steel. In special applications, other alloys may be specified.</p> <p>2. FIRE CHARACTERISTICS AND ELECTRIC SHOCK HAZARD There is no fire hazard when the connector is correctly wired and used within the specified parameters. Incorrect wiring or assembly of the connector or careless use of metal tools or conductive fluids, or transit damage to any of the component parts may cause electric shock or burns. Live circuits must not be broken by separating mated connectors as this may cause arcing, ionization and burning. Heat dissipation is greater at maximum resistance in a circuit. Hot spots may occur when resistance is raised locally by damage, e.g. cracked or deformed contacts, broken strands of wire. Local overheating may also result from the use of the incorrect application tools or from poor quality soldering or slack screw terminals. Overheating may occur if the ratings in the product Data Sheet/Catalog are exceeded and can cause breakdown of insulation and hence electric shock. If heating is allowed to continue it intensifies by further increasing the local resistance through loss of temper of spring contacts, formation of oxide film on contacts and wires and leakage currents through carbonization of insulation and tracking paths. Fire can then result in the presence of combustible materials and this may release noxious fumes. Overheating may not be visually apparent. Burns may result from touching overheated components.</p> <p>3. HANDLING Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.</p> <p>4. DISPOSAL Incineration of certain materials may release noxious or even toxic fumes.</p> <p>5. APPLICATION Connectors with exposed contacts should not be selected for use on the current supply side of an electrical circuit, because an electric shock could result from touching exposed contacts on an unmated connector. Voltages in excess of 30 V ac or 42.5 V dc are potentially hazardous and care should be taken to ensure that such voltages cannot be transmitted in any way to exposed metal parts of the connector body. The connector and wiring should be checked, before making live, to have no damage to metal parts or insulators, no solder blobs, loose strands, conducting lubricants, swarf, or any other undesired conducting particles. Circuit resistance and continuity check should be made to make certain that there are no high resistance joints or spurious conducting paths. Always use the correct application tools as specified in the Data Sheet/Catalog. Do not permit untrained personnel to wire, assemble or tamper with connectors. For operation voltage please see appropriate national regulations.</p> <p>IMPORTANT GENERAL INFORMATION (i) Air and creepage paths/Operating voltage: The admissible operating voltages depend on the individual applications and the valid national and other applicable safety regulations. For this reason the air and creepage path data are only reference values. Observe reduction of air and creepage paths due to PC board and/or harnessing.</p> <p>(ii) Temperature: All information given are temperature limits. The operation temperature depends on the individual application.</p> <p>(iii) Other important information: Cannon continuously endeavors to improve their products. Therefore, Cannon products may deviate from the description, technical data and shape as shown in this assembly and wiring instruction. ITT Interconnect Solutions, a Division of ITT Corporation manufactures the highest quality products available in the marketplace; however these products are intended to be used in accordance with the specifications in this publication. Any use or application that deviates from the stated operating specifications is not recommended and may be unsafe. No information and data contained in this publication shall be construed to create any liability on the part of Cannon. Any new issue of this publication shall automatically invalidate and supersede any and all previous issues.</p>				
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10.1 Change History					
Index	Change no.	Description of change	Date		
A	5300W	3.2: Semi automatic crimp station removed 4: Tables wire sizes KPSE/ KPTC completed and corrected for standardization, paragraph revised 7: Values for jamnut torque reduced	7.10.2016		
B	5388W	In tables under items 3.0, 4.0 and 4.1 contact size 20 with terminations 0,08 – 0,20 mm ² (AWG28 – 24) and 0,5 – 1,0 mm ² added. Stripping length for KPTC contact size 20 corrected. In table 4.1, KPTC size 16, information for wire size AWG12 removed.	13.03.2017		
C	5283W	In table under items 4.1 contact size 20 (KPSE) with terminations 0,08 – 0,20 mm ² added.	19.01.2018		
D	5832W	Section 3.2 "crimp tools" reworked, wrong tool WA22-CE removed, section 9.0 "useful hints" removed.	13.12.2018		
F		Section 3.0 "crimp contacts" reworked, part-numbers for Pin contact (430-8561-032) and Socket contact (031-8704-205) added. The designation of MIL-C-26482 updated to MIL-DTL-26482	13.12.2018		
G		Section 7 process description, "Processing instructions for banding adapters" added.	15.04.2021		
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