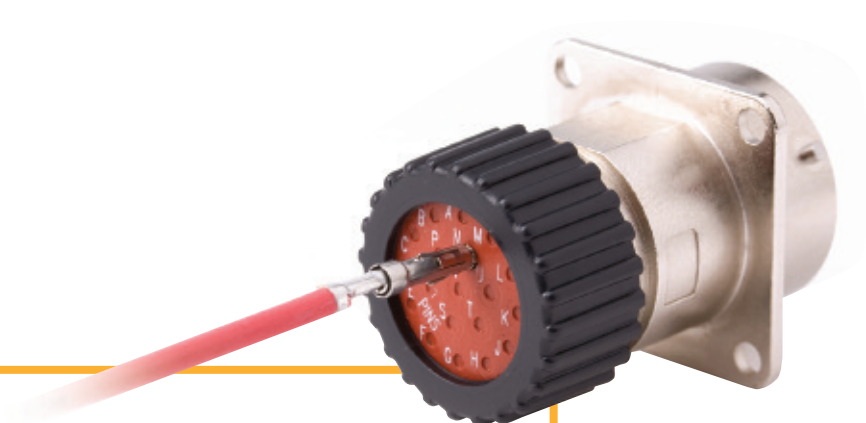




ITT

Interconnect Solutions

Cannon Trident T2P Contact



Engineered for life

Features & Benefits

ITT introduces a new design and enhanced version of the well known T2P stamped and formed contact system. New contact features lead to significantly improved performance while the contacts remain fully intermateable and interchangeable to all connectors using T2P contacts. Existing Trident crimp tooling and all extraction tools fully support the new design. To achieve the best performance in terms of contact fit and alignment, we recommend updating all crimp tooling for the AWG 16-18 contacts.

Along with all Trident products (Ringlock, Neptune, Neptune Metal, Slimline, Snap Together and Multiway) the new contact is used in APD 6/7 way connectors and it is also an interesting choice for other connector solutions.

Trident T2P, Comparison New and Old Contact: Alignment in Cavity, Play of Contact Tip

- new contact, play of contact tip
- old contact, play of contact tip
- catch range of socket contact
- new contact, extreme positions of contact tip
- ▲ old contact, extreme positions of contact tip

Optimized alignment thru:

- 3 prongs
- optimized body shape

Contact clip with three prongs and optimized body shape
 ► excellent contact alignment leading to secure connector mating

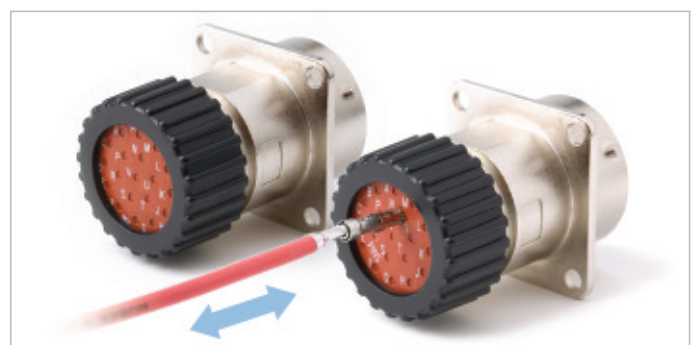


Tin & gold plated versions in standard & high conductivity materials
 ► up to 200 mating cycles
 ► up to 16A current rating

Clip made of stainless steel material
 ► reduced insertion forces for ease of assembly
 ► higher retention forces for even higher reliability



Material choice and improved design with three prongs
 ► smooth and easy disassembly with extraction tool

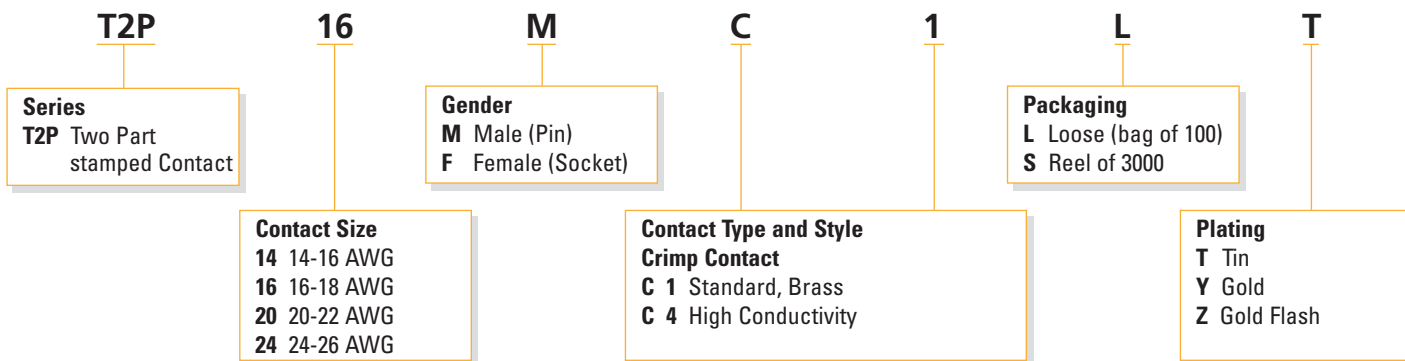


Stainless steel clip with improved design
 ► greatly improved capability to replace contacts without the loss of sealing

Ordering information - T2P contacts



Overview of available versions – nomenclature:



e.g. T2P20MC1LT = AWG 20-22, pin, standard (13 A), packed in bags of 100 pcs, tin plating

Part number details – standard contacts:

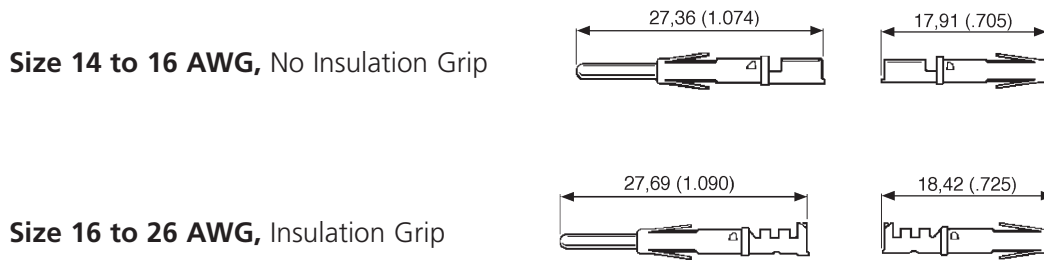
Wire Range mm ²	Wire Size	Contact	Part Number Pack (100)			Part Number Reeled (3000)			Insulation Diameter	Strip Length
			Tin Plating	Gold Flash	1 µm (40 µin.) Gold Plating	Tin Plating	Gold Flash	1 µm (40 µin.) Gold Plating		
0,08-0,25	26-24 AWG	Pin	192990-0020	192990-0080	192900-0448	192990-2510	192990-2650	192900-0406	0,89 (.035)-1,58 (.062)	3,95 (.155)±0,25(.009)
0,08-0,25	26-24 AWG	Socket	192990-0030	192990-0090	192900-0452	192990-2550	192990-2690	192900-0410	0,89 (.035)-1,58 (.062)	3,95 (.155)±0,25(.009)
0,30-0,50	22-20 AWG	Pin	192990-0040	192922-1460	192900-0447	192990-2500	192990-2640	192900-0405	1,17 (.046)-2,08 (.081)	3,95 (.155)±0,25(.009)
0,30-0,50	22-20 AWG	Socket	192990-0050	192922-1470	192900-0451	192990-2540	192990-2680	192900-0409	1,17 (.046)-2,08 (.081)	3,95 (.155)±0,25(.009)
0,75-1,50	18-16 AWG	Pin	192990-0060	192990-0100	192900-0446	192990-2490	192990-2630	192900-0404	2,00 (.078)-3,00 (.118)	3,95 (.155)±0,25(.009)
0,75-1,50	18-16 AWG	Socket	192990-0070	192990-0110	192900-0450	192990-2530	192990-2670	192900-0408	2,00 (.078)-3,00 (.118)	3,95 (.155)±0,25(.009)
1,50-2,50	16-14 AWG	Pin	192990-1240	192990-1220	192900-0445	192990-2480	192990-2620	192900-0403	Without insulation support	5,60 (.220)±0,25(.009)
1,50-2,50	16-14 AWG	Socket	192990-1250	192990-1230	192900-0449	192990-2520	192990-2660	192900-0407	Without insulation support	5,60 (.220)±0,25(.009)

Part number details – high conductivity contacts:


Wire Range mm ²	Wire Size	Contact	Part Number		Insulation Diameter	Strip Length
			Pack (100)	Reeled (3000)		
0,08-0,25	26-24 AWG	Pin	192900-0122	192900-0120	0,89 (.035)-1,58 (.062)	3,95 (.155)±0,25 (.009)
0,08-0,25	26-24 AWG	Socket	192900-0123	192900-0121	0,89 (.035)-1,58 (.062)	3,95 (.155)±0,25 (.009)
0,25-0,50	22-20 AWG	Pin	192900-0126	192900-0124	1,17 (.046)-2,08 (.081)	3,95 (.155)±0,25 (.009)
0,25-0,50	22-20 AWG	Socket	192900-0127	192900-0125	1,17 (.046)-2,08 (.081)	3,95 (.155)±0,25 (.009)
0,75-1,50	18-16 AWG	Pin	192900-0002	192900-0000	2,00 (.078)-3,00 (.118)	3,95 (.155)±0,25 (.009)
0,75-1,50	18-16 AWG	Socket	192900-0003	192900-0001	2,00 (.078)-3,00 (.118)	3,95 (.155)±0,25 (.009)
1,50-2,50	16-14 AWG	Pin	192900-0005	192900-0004	Without insulation support	5,60 (.220)±0,25 (.009)
1,50-2,50	16-14 AWG	Socket	192900-0007	192900-0006	Without insulation support	5,60 (.220)±0,25 (.009)



Contact dimensions:



Full range of customer tooling is available

	Tool	Contact cross section	Part number	Part number
	<p>Ratcheted hand tool Single action hand tool, factory calibrated to support all available crimp sizes. Ideal for low volume applications. For detailed crimp specification CAS25047E consult factory.</p>	<p>14-16 AWG 16-18 AWG 20-26 AWG</p>	<p>112108-0013 121586-5237 121586-5236</p>	
	<p>Contact extraction tool Simple hand tool readily removes contacts during assembly or if replacement of contacts is required.</p>	<p>All sizes</p>	<p>192922-1450</p>	
	<p>Mini applicator Interchangeable modules that fit into many standard crimping machines. For detailed crimp specification CAS25046E consult factory.</p>	<p>14-16 AWG 16-18 AWG 20-26 AWG</p>	<p>Schäfer Consult factory 121586-5141 121586-5142</p>	<p>Mecal Consult factory 121586-5217 Consult factory</p>
	<p>Adjustment fixture Support tool to verify correct crimp setting of mini applicator tooling. The crimped contact is inserted in the guage to check the crimp result. For detailed crimp specification CAS25046E consult factory.</p>		<p>317-8675-133</p>	

Technical overview

ITT has been manufacturing Trident contacts for decades. These contacts have enjoyed a rich history in many Industrial and Transportation applications. Now, ITT ICS expands its contact innovation by enhancing the historical design and providing superior performance with our new, T2P contact system.

The T2P (two piece) contact system represents an innovative stamped and formed contact created for use in the Trident product range including the APD 6 / 7 way connectors. Noting its extensive benefits, the T2P also represents an excellent choice for higher density solutions in other product ranges.

Performance specifications, materials & finishes

	Standard	High conductivity
Body material	Brass	Copper Alloy
Retention spring material	Stainless Steel	Stainless Steel
Contact retention force (min)	67N	67N
Current rating*	13 A	16 A
Contact resistance (initial)	5mOhm	5mOhm
Mechanical endurance (max.)**	200 mating cycles	200 mating cycles
Wire sizes	AWG 14 - 26	AWG 14 - 26
Plating options	Tin, gold flash, gold	Tin, gold flash, gold

* this data is for individual contacts in isolation, when more contacts are used a derating factor must be applied. Due to the multiplicity of connector layouts and cables usable each case needs to be considered individually

** depending on plating used

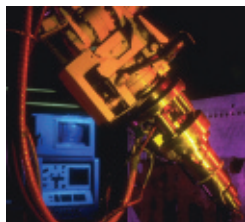
Applications

Industrial:

- wire to board (PCB) connections
- test equipment
- coin operated machines
- industrial electronics
- robotic systems
- manufacturing equipment
- outdoor electronics
- communication equipment
- ... others

Transportation:

- cabin applications
- cabin & fire wall
- lighting
- cooling & heating systems
- ... others in trucks / busses / Off-road, agricultural and construction vehicles





ITT

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