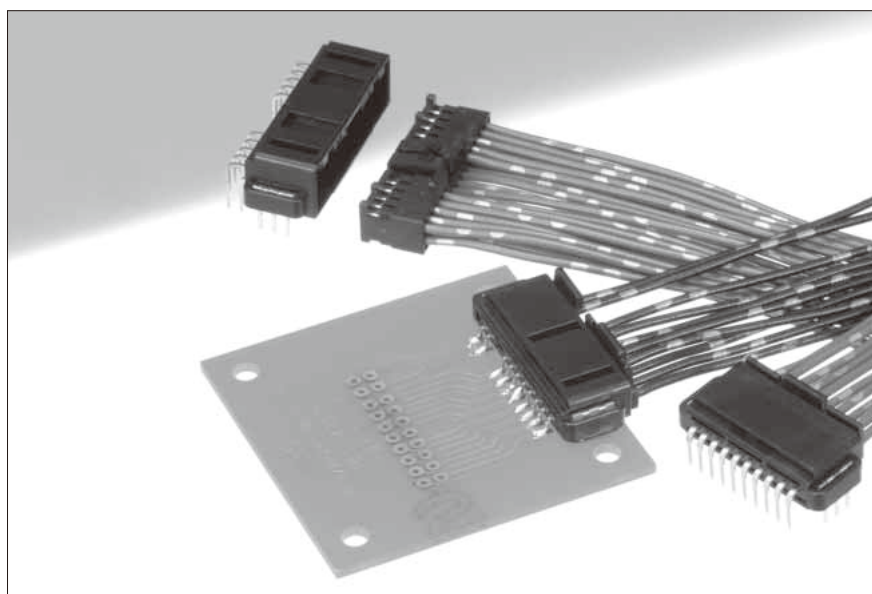


# GT8E Series

— High contact pressure Wire-to-Board connectors —



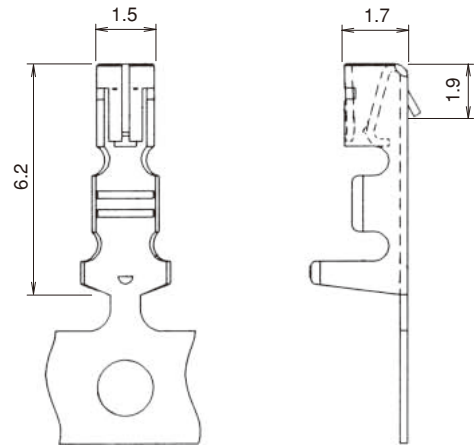
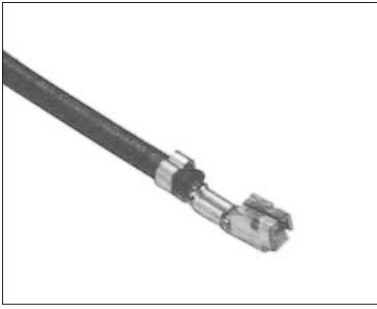
## ■ Features

- Use of a formed dimple construction at the contact point, serves to prevent oxidation of the contact portion.
- Design prevents misinsertion
- Stress resisting design
- SMT type pin header with pin-in-hole type metal fittings improves PCB retention. High PCB retention force.

## ■ Applications

Internal connectors for in-vehicle and industrial equipment.

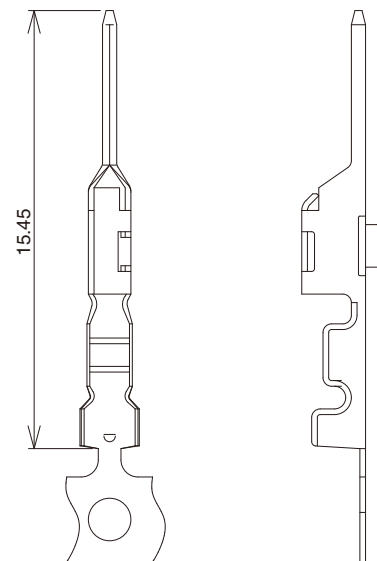
## Terminal for female connector



Part No.	HRS No.	Material	Plating	Conductor Size (AWG)	Outer Diameter	Packaging	RoHS
GT8E-2022SCF	758-0033-4 00	Phosphor bronze	Tin plated	20 to 22 AWG	φ1.3 to 1.5	10,000 pcs/reel	YES
GT8E-2022SCF(01)	758-0033-4 01		Gold plated				
GT8B-2428SCF	758-0055-7 00		Tin plated	24 to 28 AWG	φ0.9 to 1.1	100 pcs/pack	
GT8B-2428SCF(01)	758-0055-7 01		Gold plated				
GT8E-2022SC *Note1	758-0101-2 00		Tin plated	20 to 22 AWG	φ1.3 to 1.5	100 pcs/pack	

Note 1 : Small quantities for use with hand tooling are sold in packs.

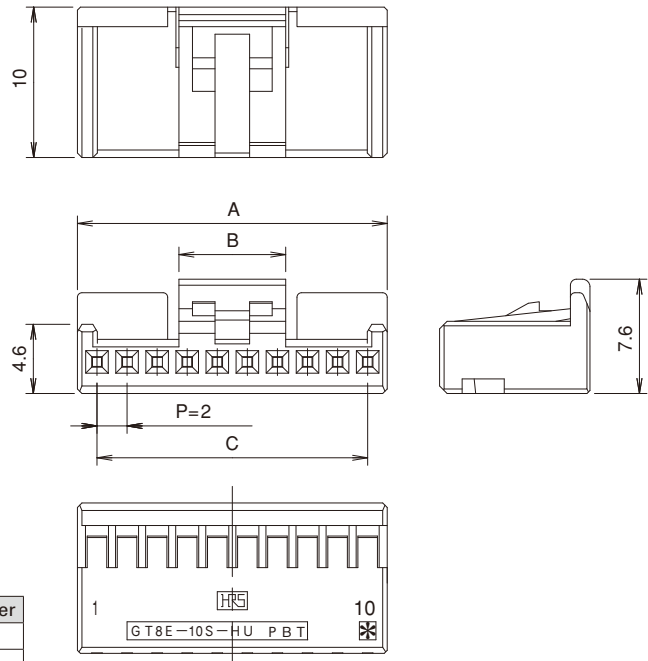
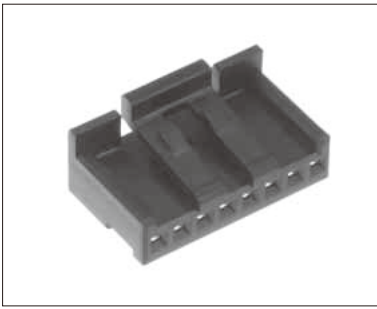
## Terminal for M connector



Part No.	HRS No	Material	Plating	Conductor Size (AWG)	Outer Diameter	Packaging	RoHS
GT8E-2022PCF	758-0039-0 00	Brass	Tin plating	20 to 22 AWG	φ1.3 to 1.5	10,000 pcs/reel	YES
GT8EF-2022PCF	758-0111-6 00		Gold plated			8,000 pcs/reel	
GT8E-2428PCF	758-0067-6 00		Tin plating	24 to 28 AWG	φ0.9 to 1.1	10,000 pcs/reel	
GT8EF-2428PCF	758-0106-6 00		Gold plated			8,000 pcs/reel	

## Female connector

### ● Housing (Single row type)

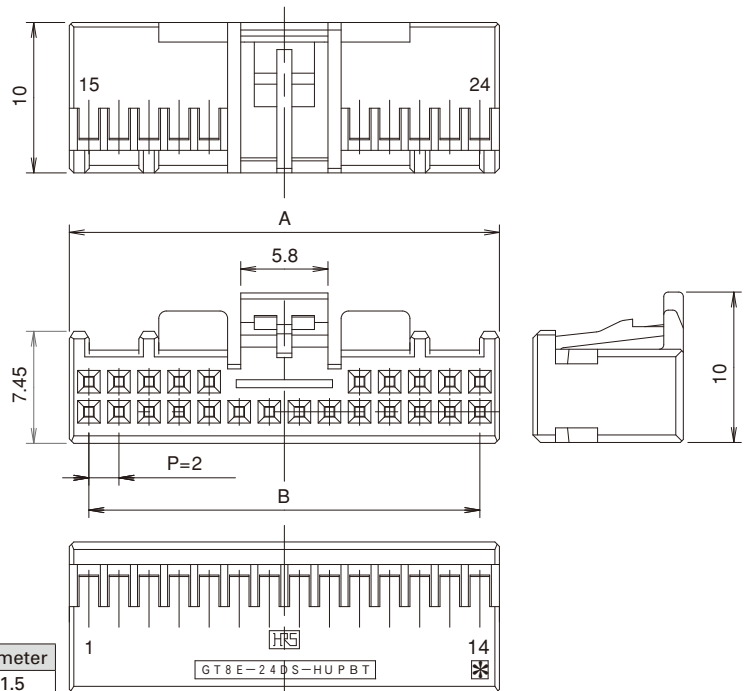
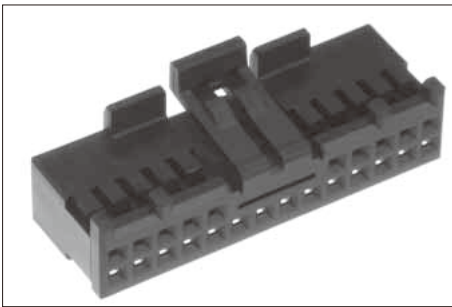


Socket	Applicable wire	Conductor Size (AWG)	Outer Diameter
GT8E- *S-HU	GT8E-2022SCF	20 to 22 AWG	φ1.3 to 1.5
	GT8B-2428SCF	24 to 28 AWG	φ0.9 to 1.1

Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	Packaging	RoHS
GT8E-3S-HU	758-0061-0	PBT	Black	3	7.9	7.9	4	1	YES
GT8E-4S-HU	758-0047-9			4	8.6	8.6	6		
GT8E-5S-HU	758-0062-2			5	12		8		
GT8E-6S-HU	758-0048-1			6	12.6	7.1	10		
GT8E-7S-HU	758-0063-5			7	15.6		12		
GT8E-8S-HU	758-0049-4			8	16.6	14			
GT8E-10S-HU	758-0050-3			10	20.6	18			

Note : Applicable terminals are GT8E-2022SCF and GT8B-2428SCF.

### ● Housing (Double row type)



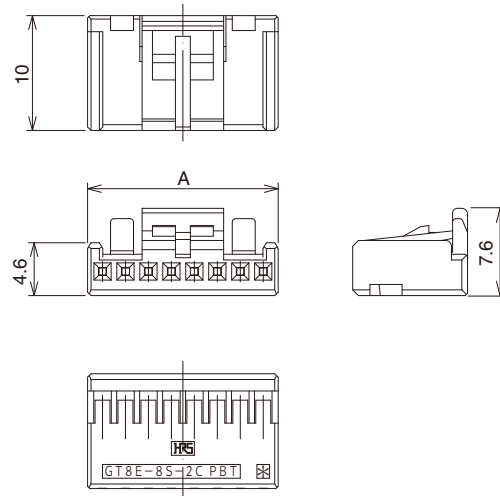
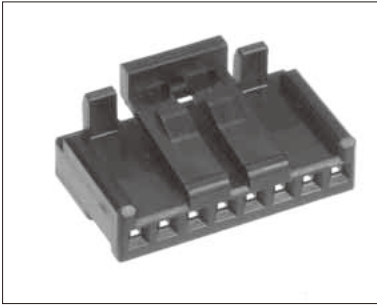
Socket	Applicable wire	Conductor Size (AWG)	Outer Diameter
GT8E- *DS-HU	GT8E-2022SCF	20 to 22 AWG	φ1.3 to 1.5
	GT8B-2428SCF	24 to 28 AWG	φ0.9 to 1.1

Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	Packaging	RoHS
GT8E-12DS-HU	758-0051-6	PBT	Black	12	16.6	14	1	YES
GT8E-16DS-HU	758-0064-8			16	21.85	18		
GT8E-20DS-HU	758-0052-9			20	24.6	22		
GT8E-24DS-HU	758-0054-4			24	28.6	26		

Note : Applicable terminals are GT8E-2022SCF and GT8B-2428SCF.

## Female connector

### ● Housing



Socket	Recommended wire	Conductor Size (AWG)	Outer Diameter
GT8E- *S-2C	GT8E-2022SCF	20 to 22 AWG	φ1.3 to 1.5
	GT8B-2428SCF	24 to 28 AWG	φ0.9 to 1.1

Part No.	HRS No.	Material	Color	No. of contacts	A dimension	Packaging	RoHS
GT8E-2S-2C	758-0030-6	PBT	Black	2	7.1	1	YES
GT8E-8S-2C	758-0029-7			8	16.6		

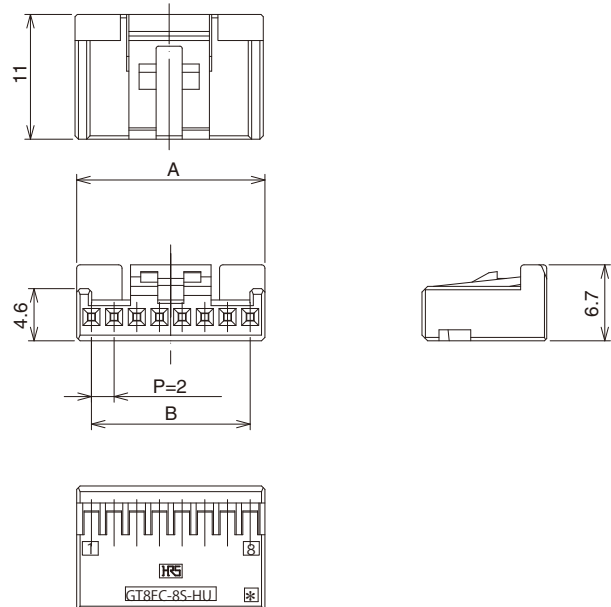
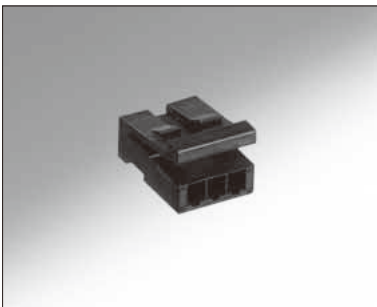
Note 1 : Applicable terminals are GT8E-2022SCF and GT8B-2428SCF.

Note 2 : GT8E-2S-2C can be mated with GT8E-2P-2H(70), GT8E-8/P-2H(70) and GT8E-2P-DS.

GT8E-8S-2C can only be mated with GT8E-8/P-2H(70).

## Female connector

### ● Housing (Low profile type)

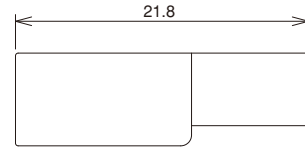
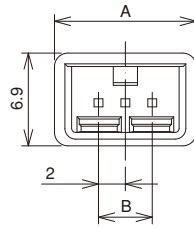
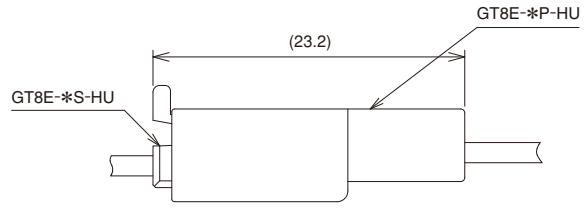
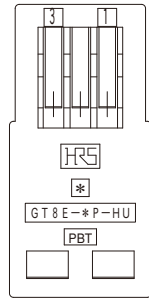


Socket	Recommended wire	Conductor Size (AWG)	Outer Diameter
GT8EC- *S-HU	GT8E-2022SCF	20 to 22 AWG	φ1.3 to 1.5
	GT8B-2428SCF	24 to 28 AWG	φ0.9 to 1.1

Part No.	HRS No.	No. of contacts	A dimension	B dimension	Packaging	RoHS
GT8EC-3S-HU	758-1017-3 00	3	7.9	4	1	YES
GT8EC-5S-HU	758-0074-1 00	5	12	8		
GT8EC-8S-HU	758-1018-6 00	8	16.6	14		
GT8EC-14S-HU	758-0224-2 00	14	28.4	26		

# In-line Connectors

## ◆ Fitting diagram



Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	Packaging	RoHS
GT8E-3P-HU	758-0084-5	PBT	Black	3	10.55	4	1	Yes
GT8E-4P-HU	758-0082-0			4		6		
GT8E-8P-HU	758-0038-8			8		14		

Note 1 : GT8E-3P-HU can only be mated with GT8E-3S-HU. GT8E-4P-HU can only be mated with GT8E-4S-HU.  
 GT8E-8P-HU can only be mated with GT8E-8S-2C.

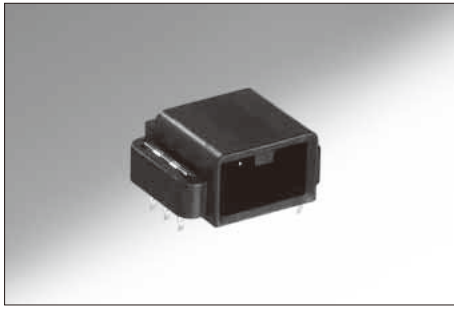
Note 2 : Applicable terminals are GT8E-2022PCF and GT8E-2428PCF.

Note 3 : GT8E-8P-HU can only be mated with GT8E-8S-HU.

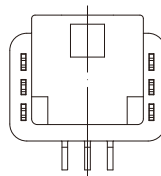
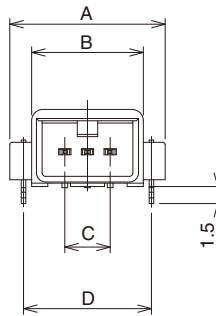
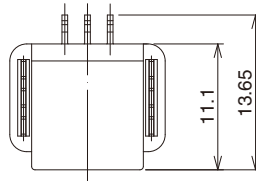
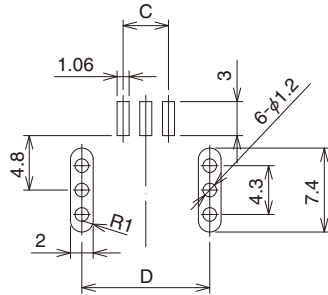
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- GT5
- GT13
- GT16
- PO5G
- GT19
- GT21
- GT26
- GT36
- GT11
- GT17
- GT32
- GT3
- GT7
- GT10
- GT18W
- GT25
- Internal connection
- GT8E
- GT9
- GT15

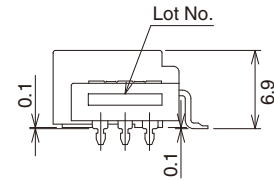
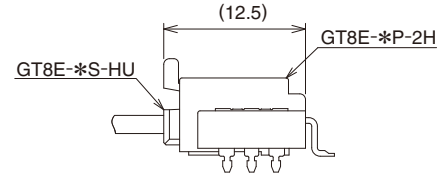
## Right angle pin header (Single-row SMT type)



### Recommended PCB pattern



### Fitting diagram



Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	D dimension	Packaging	RoHS
GT8EA-2P-2H	758-0113-1 00	PPS	Black	2	12.9	9.05	2	10.58	450 pcs/reel	YES
GT8E-3P-2H	758-0096-4 00			3	13.7	9.85	4	11.28	400 pcs/reel	
GT8E-3P-2H(01)	758-0096-4 01			4	14.4	10.55	6	11.98	450 pcs/reel	
GT8E-4P-2H	758-0079-5 00			5	17.8	13.95	8	15.38		
GT8E-5P-2H	758-1004-1 00			6	18.4	14.55	10	15.98		
GT8E-6P-2H	758-1005-4 00			7	21.4	17.55	12	18.98		
GT8E-7P-2H	(Under development)			8	22.4	18.55	14	19.98		
GT8E-8P-2H	758-1006-7 00			10	26.4	22.55	18	23.98		
GT8E-10P-2H	758-1007-0 00			14	36.4	30.55	26	31.78		
GT8E-14P-2H	758-0223-0 00									

- GT5
- GT13
- GT16
- PO5G
- GT19
- GT21
- GT26
- GT36
- GT11
- GT17
- GT32
- GT3
- GT7
- GT10
- GT18W
- GT25
- GT8E
- GT9
- GT15

GT5

GT13

GT16

PO5G

GT19

GT21

GT26

GT36

GT11

GT17

GT32

GT3

GT7

GT10

GT18W

GT25

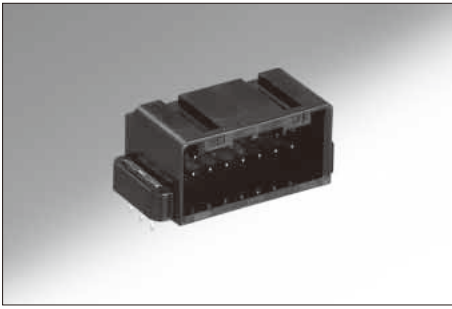
Internal connection

GT8E

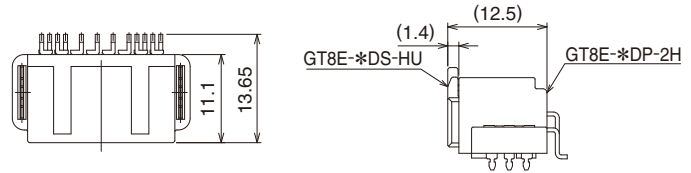
GT9

GT15

## Right angle pin header (Double-row SMT type)

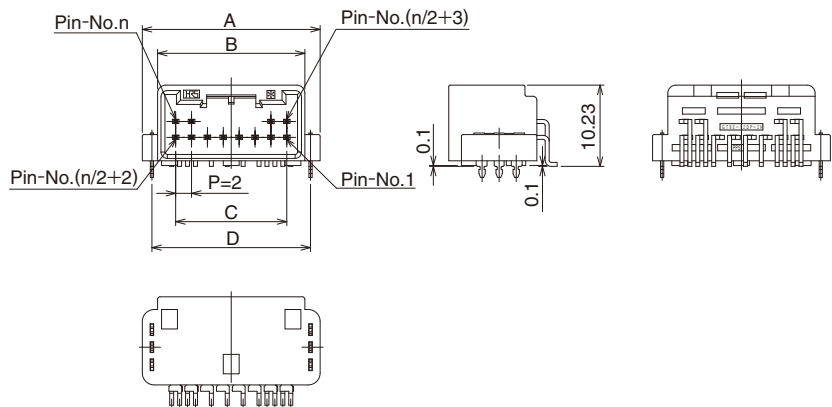
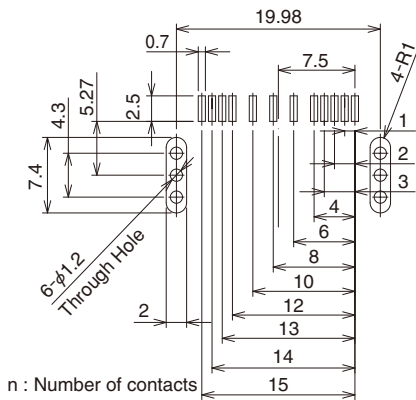


### ◆Fitting diagram



### ◆Recommended PCB pattern

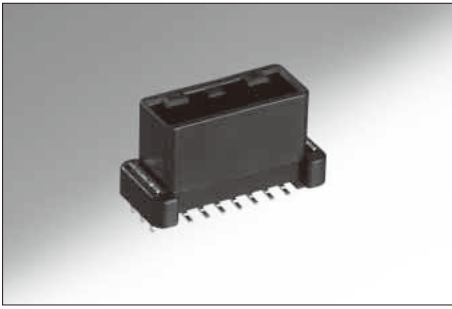
Shown : 12position(GT8E-12DP-2H)  
12, 8, 11, 7, 6, 5, 4, 3, 10, 2, 9, 1



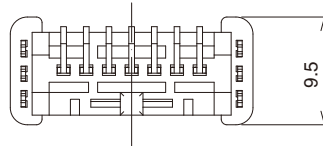
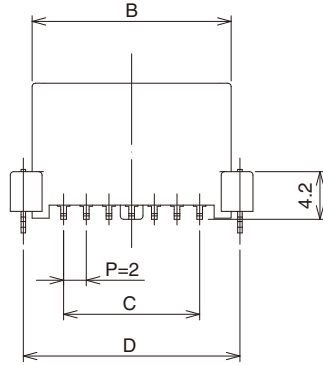
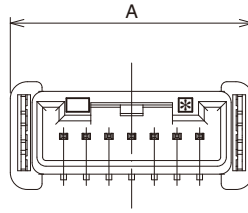
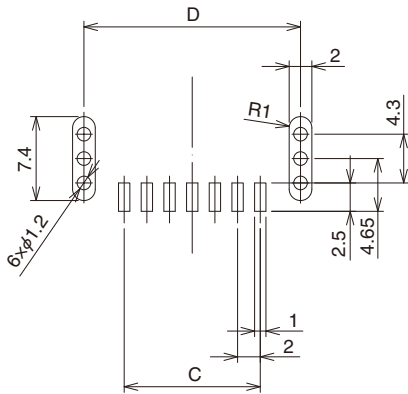
When using different position, please consult with Hirose.

Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	D dimension	Packaging	RoHS
GT8E-12DP-2H	758-1008-2 00	PPS	Black	12	22.4	18.55	14	19.98	300 pcs/reel	YES
GT8E-16DP-2H	758-1009-5 00			16	27.45	23.6	18	25.03		
GT8E-20DP-2H	(Under development)			20	30.2	26.35	22	27.78		
GT8E-24DP-2H	758-1011-7 00			24	34.2	30.35	26	31.78		

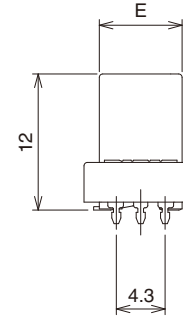
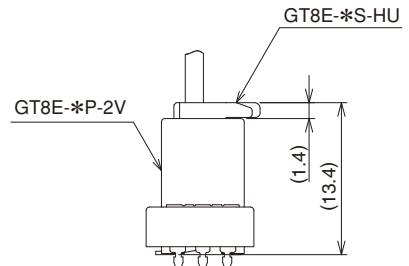
## ■ Straight pin header (Single-row SMT type)



### ◆ Recommended PCB pattern



### ◆ Fitting diagram



Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	D dimension	E dimension	Packaging	RoHS
GT8E-2P-2V	758-0202-0 00	PPS	Black	2	13	9.15	2	10.6	6.85	300 pcs/reel	YES
GT8E-4P-2V	758-0121-0 00			4	14.4	10.55	6	11.98	7.3		
GT8E-7P-2V	758-0227-0 00			7	21.4	17.55	12	19.1			
GT8E-10P-2V	758-0232-0 00			10	26.4	22.55	18	24.1			

- GT5
- GT13
- GT16
- PO5G
- GT19
- GT21
- GT26
- GT36
- GT11
- GT17
- GT32
- GT3
- GT7
- GT10
- GT18W
- GT25
- GT8E
- GT9
- GT15



GT5

GT13

GT16

PO5G

GT19

GT21

GT26

GT36

GT11

GT17

GT32

GT3

GT7

GT10

GT18W

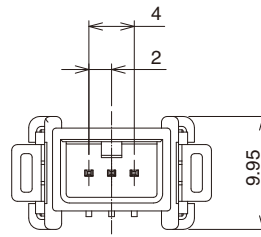
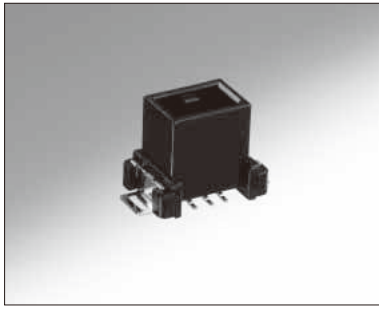
GT25

GT8E

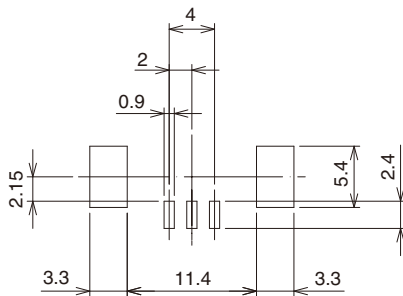
GT9

GT15

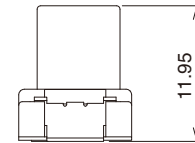
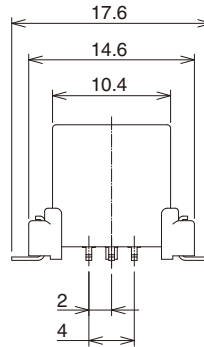
## ■ Straight pin header (Single-row, SMT with L shaped metal fittings)



### ◆ Recommended PCB pattern

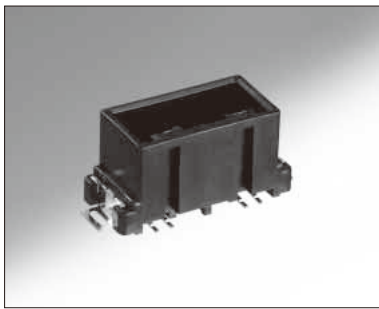


GT8EH-3P-2V

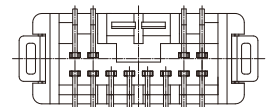
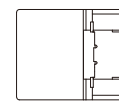
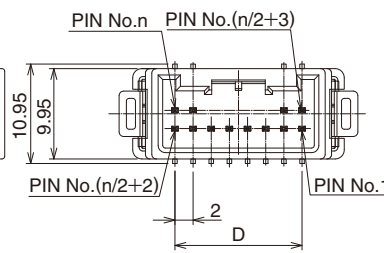


Part No.	HRS No.	Material	Color	No. of contacts	Packaging	RoHS
GT8EH-3P-2V	758-1016-0 00	PPS	Black	3	200 pcs/reel	YES

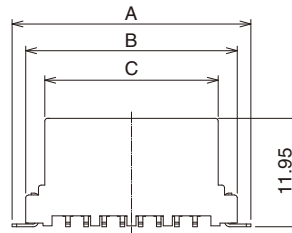
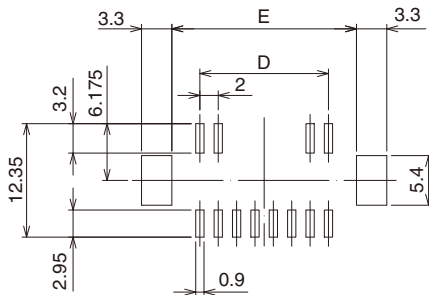
## ■ Straight pin header (Double-row, SMT with L shape metal fittings)



LOT No.



### ◆ Recommended PCB pattern



n : Number of contacts

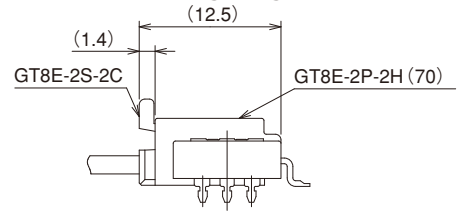
Part No.	HRS No.	Material	Color	No. of contacts	A	B	C	D	E	Packaging	RoHS
GT8EH-12DP-2V	(Under development)	PPS	Black	12	26.3	23.3	19.1	14	20.1	200 pcs/reel	YES
GT8EH-14DP-2V				14	28.3	25.3	21.1	16	22.1		
GT8EH-24DP-2V				24	38.3	35.3	31.1	26	32.1		

- GT5
- GT13
- GT16
- PO5G
- GT19
- GT21
- GT26
- GT36
- GT11
- GT17
- GT32
- GT3
- GT7
- GT10
- GT18W
- GT25
- GT8E**
- GT9
- GT15

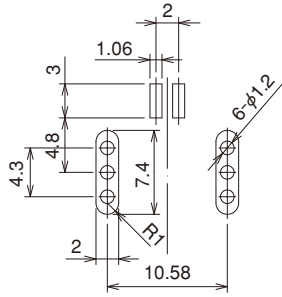
## Right angle pin header (Single-row SMT low profile type)



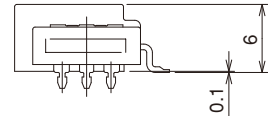
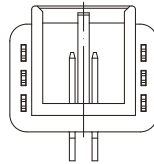
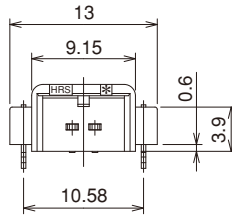
### ◆Fitting diagram



### ◆Recommended PCB pattern



GT8E-2P-2H(70)



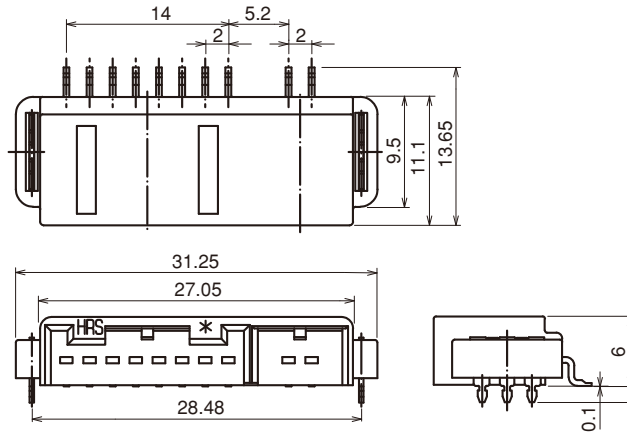
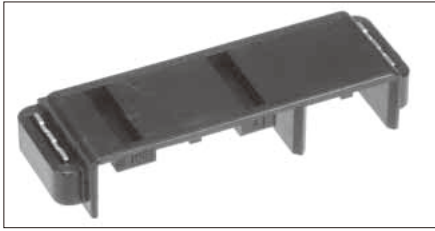
Part No.	HRS No.	Material	Color	No. of contacts	Packaging	RoHS
GT8E-2P-2H(70)	758-0032-1 70	PPS	Black	2	500 pcs/reel	YES

Note1 : Mates with GT8E-2S-2C.

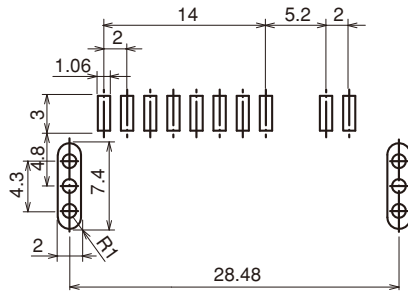
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- GT5
- GT13
- GT16
- PO5G
- GT19
- GT21
- GT26
- GT36
- GT11
- GT17
- GT32
- GT3
- GT7
- GT10
- GT18W
- GT25
- Internal connection
- GT8E
- GT9
- GT15

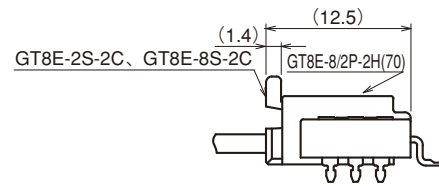
## Right angle pin header (Single-row SMT low profile combo type)



◆Recommended PCB pattern



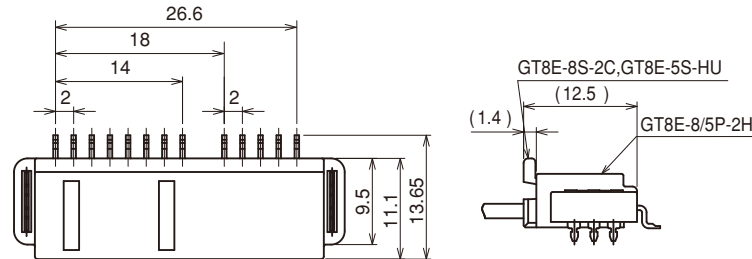
◆Fitting diagram



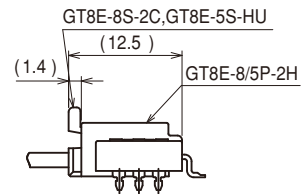
Part No.	HRS No.	Material	Color	Packaging	RoHS
GT8E-8/2P-2H(70)	758-0031-9 70	PPS	Black	500 pcs/reel	YES

Note : Mates with GT8E-2S-2C and GT8E-8S-2C.

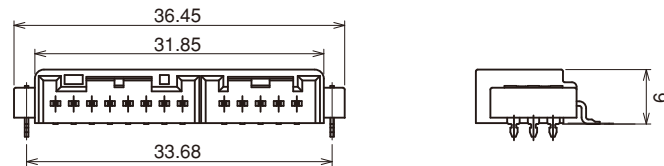
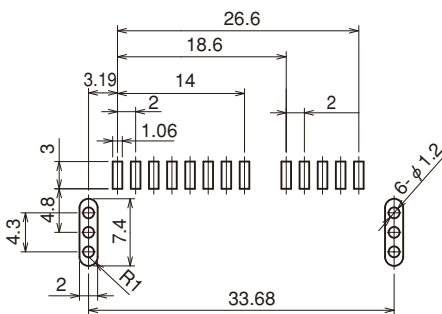
## Right angle pin header (Single-row SMT low profile combo type)



◆Fitting diagram



◆Recommended PCB pattern

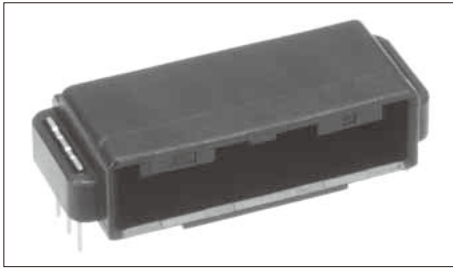


Part No.	HRS No.	Material	Color	Packaging	RoHS
GT8E-8/5P-2H	758-0073-9	PPS	Black	500 pcs/reel	YES

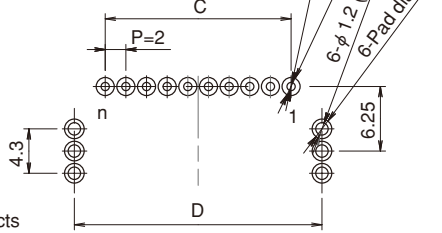
Note : Mates with GT8E-5S-HU and GT8E-8S-2C.

## Right angle pin header (Single-row DIP type)

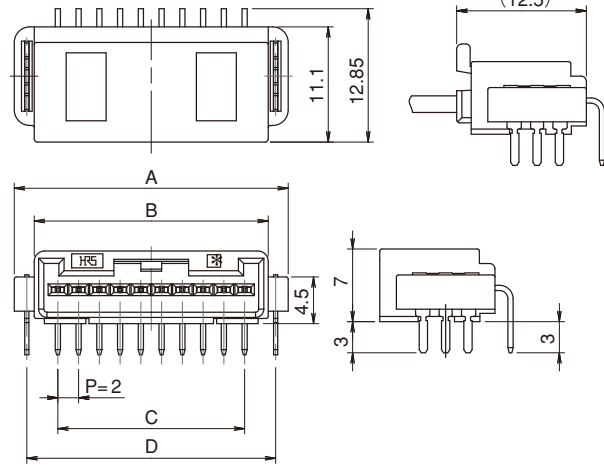
◆ Fitting diagram



◆ Recommended PCB pattern and pin assignment.



n : Number of contacts



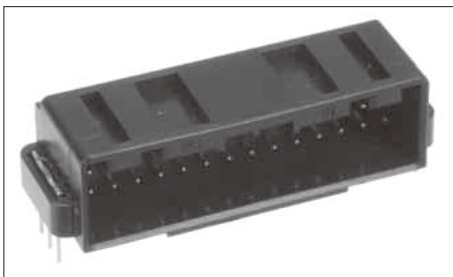
Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	D dimension	Packaging	RoHS
GT8E-2P-DS	758-0040-0	PBT	Black	2	13	9.15	2	10.58	1	YES
GT8E-3P-DS	758-0057-2			3	13.7	9.85	4	11.28		
GT8E-4P-DS	758-0041-2			4	14.4	10.55	6	11.98		
GT8E-5P-DS	758-0058-5			5	17.8	13.95	8	15.38		
GT8E-6P-DS	758-0042-5			6	18.4	14.55	10	15.98		
GT8E-7P-DS	758-0059-8			7	21.4	17.55	12	18.98		
GT8E-8P-DS	758-0043-8			8	22.4	18.55	14	19.98		
GT8E-10P-DS	758-0044-0			10	26.4	22.55	18	23.98		

Note 1 : Mates with GT8E-\*S-HU.

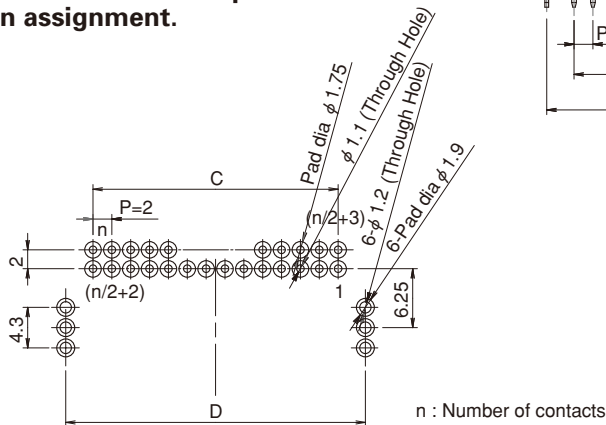
Note 2 : GT8E-2P-DS can only be mated with GT8E-2S-2C.

## Right angle pin header (Double-row DIP type)

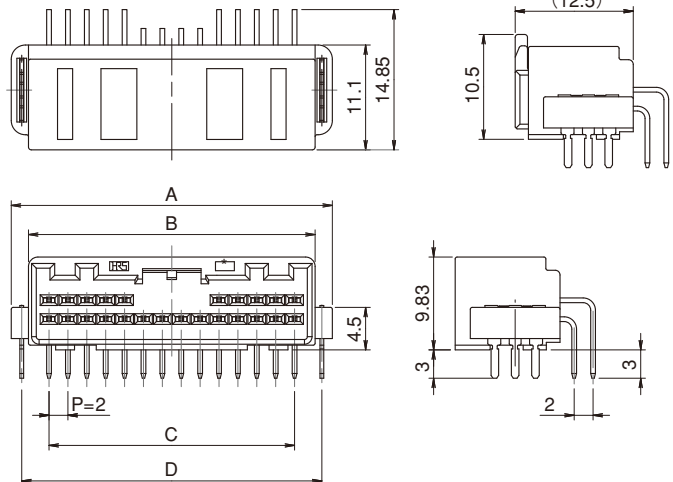
◆ Fitting diagram



◆ Recommended PCB pattern and pin assignment.



n : Number of contacts

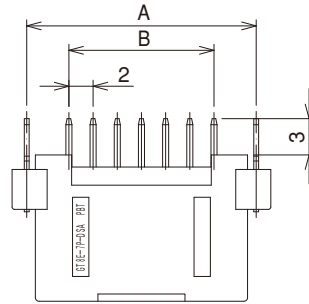
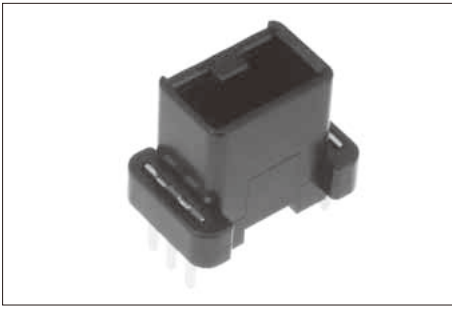


Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	D dimension	Packaging	RoHS
GT8E-12DP-DS	758-0045-3	PBT	Black	12	22.4	18.55	14	19.98	1	YES
GT8E-16DP-DS	758-0060-7			16	27.25	23.6	18	25.03		
GT8E-20DP-DS	758-0046-6			20	30	26.35	22	27.78		
GT8E-24DP-DS	758-0053-1			24	34	30.35	26	31.78		

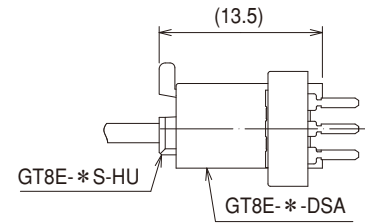
Note 1 : GT8E-2P-DS can only be mated GT8E-2S-2C.

- GT5
- GT13
- GT16
- PO5G
- GT19
- GT21
- GT26
- GT36
- GT11
- GT17
- GT32
- GT3
- GT7
- GT10
- GT18W
- GT25
- GT8E
- GT9
- GT15

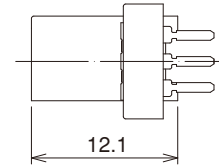
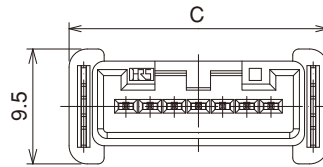
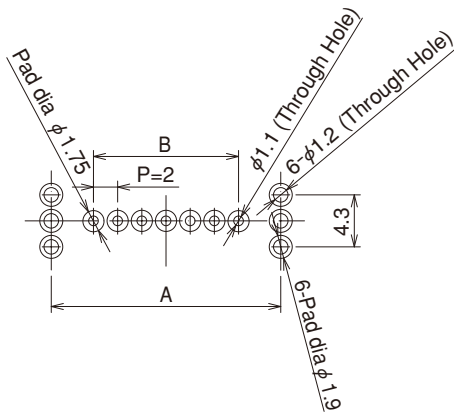
## ■ M connector straight pin header (DIP type)



### ◆ Fitting diagram



### ◆ Recommended PCB pattern and Pin No.

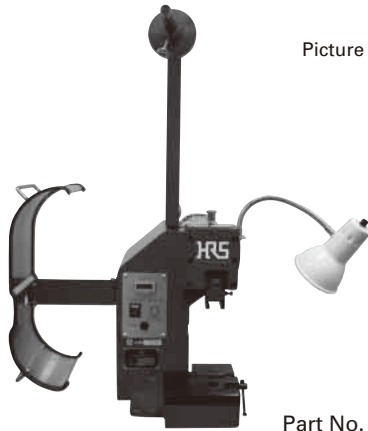


Part No.	HRS No.	Material	Color	No. of contacts	A dimension	B dimension	C dimension	Packaging	RoHS
GT8E-2P-DSA	758-0204-5 00	PA	Black	2	10.58	2	13	1	YES
GT8E-3P-DSA	758-0112-9 00			3	11.28	4	13.7		
GT8E-4P-DSA	758-0065-0 00	PBT		4	11.98	6	14.4		
GT8E-5P-DSA	758-0205-8 00	PA		5	16.38	8	18.8		
GT8E-6P-DSA	758-0201-7 00			6	16.98	10	19.4		
GT8E-7P-DSA	758-0066-3 00	PBT		7	18.98	12	21.4		

## ◆ Crimping tools

User manuals are available. Please contact your Hirose Electric account representative.

### ● Automatic Crimping Machine



Picture reference only

Part No. CM-105C

#### Specifications

Item	Specification	Remarks
Press capacity	1.5tons	—
Stroke Length	30mm	—
Number of strokes	200spm (50Hz)	240spm (60Hz)
Weight	72kg	—
Motor	0.2kw	AC100V
Crimping speed	2,000 to 4,000 pcs/hour	—

### ● Crimping tools

Terminal Part No.	Terminal HRS No.	Tool No.	Tool HRS No.
GT8B-2428SCF	758-0055-7 00	AP105-GT8B-2428S	901-5172-3 00
GT8B-2428SCF(01)	758-0055-7 01		
GT8E-2428PCF	758-0067-6 00	AP105-GT8E-2428P	901-5192-0 00
GT8EF-2428PCF	758-0106-6 00	AP105-GT8EF-2428P	901-5194-6 00
GT8E-2022SCF	758-0033-4 00	AP105-GT8-2022S	901-5144-8 00
GT8E-2022SCF(01)	758-0033-4 01		
GT8E-2022PCF	758-0039-0 00	AP105-GT8E-2022P	901-5161-7 00
GT8EF-2022PCF	758-0111-6 00	AP105-GT8E-2022P	901-5161-7 00

Note 1 : Please refer to the crimp height table for for each cable type.

Please contact Hirose for additional information.

When using cables not already specified, new crimp heights will need to determined by Hirose.

### ● Hand tool



Terminal No.	Terminal HRS No.	Tool No.	Tool HRS No.
GT8B-2428SCF	758-0055-7 00	HT102/GT8-2428S	780-0019-4 00
GT8B-2428SCF(01)	758-0055-7 01		
GT8E-2022SCF	758-0033-4 00	HT304/GT8E-2022S	780-0042-6 00
GT8E-2022SC	758-0101-2 00		
GT8E-2022SCF(01)	758-0033-4 01		

Note 1 : HT304/GT8E-2022S is rated for 22 AWG or 0.3mm SQ cable only.

Note 2 : The HT304/GT8E-2022S hand tool can not terminate 20 AWG or 0.5mm SQ cable.

Note 3 : The HT304/GT8E-2022S hand tool terminates contacts one at a time.