PRODUCT CATALOG

HIROSE ELECTRIC CO.,LTD.

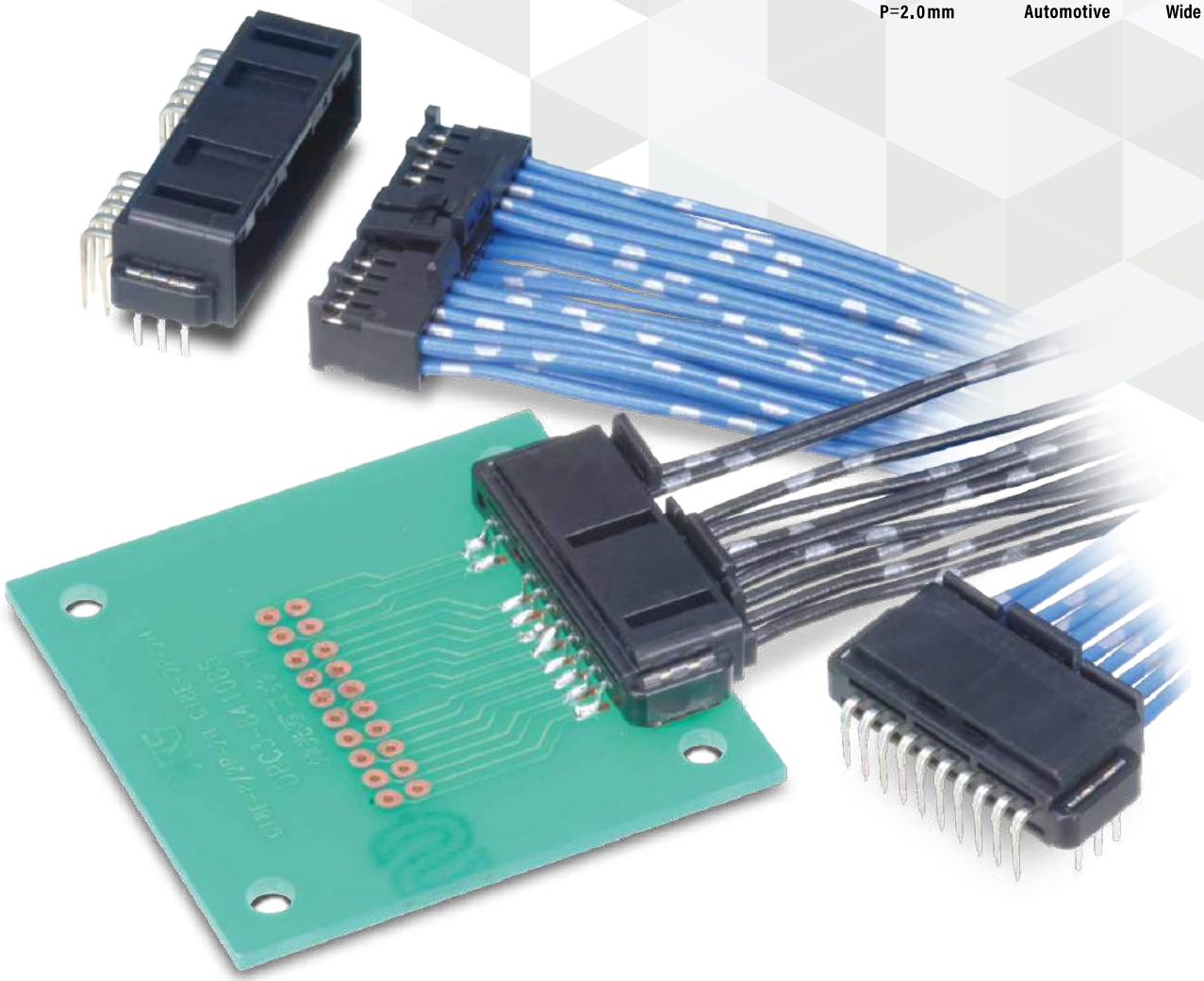
GT8E Series

2.0mm Pitch, Wire-to-Board, Wire-to-Wire Connector

P=2.0mm

Automotive

Wide Variation



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Mar. 2022

Features

1. Contact portion oxidation prevention

Air-tight dimple design prevents oxidation of the contact portion.

2. Mis-insertion prevention design

3. Prying prevention

4. Ensures high peeling strength

The SMT type pin header uses a lead reflow retention tab to ensure high peeling strength.

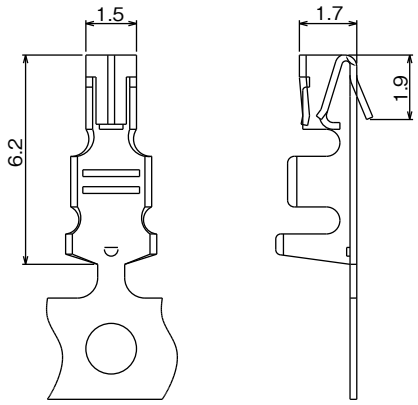
Applications

For use inside automotive and industrial equipment.

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Female Connector Terminal



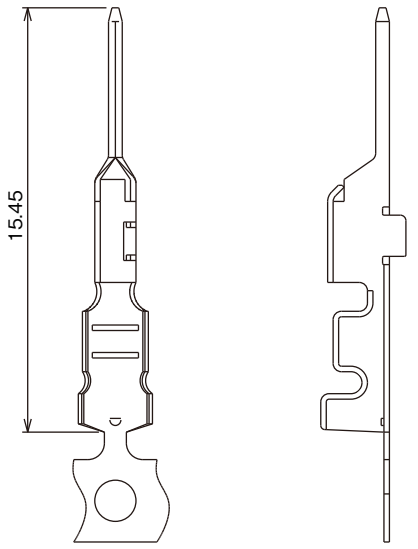


Part No.	HRS No.	Material	Finish	Wire Size	Jacket Outer Diameter	Purchase Unit
GT8E-2022SCF	CL0758-0033-4-00	Phosphor Bronze	Tin Plating	20-22 AWG	ϕ 1.3-1.5	10,000pcs per reel
GT8E-2022SCF(01)	CL0758-0033-4-01		Gold Plating			
GT8B-2428SCF	CL0758-0055-7-00		Tin Plating	24-28 AWG	ϕ 0.9-1.1	
GT8B-2428SCF(01)	CL0758-0055-7-01		Gold Plating			
GT8E-2022SC（Note）	CL0758-0101-2-00		Tin Plating	20-22 AWG	ϕ 1.3-1.5	100pcs per bag

Note : Product packaged in bag for use with hand tool.

Male Connector Terminal





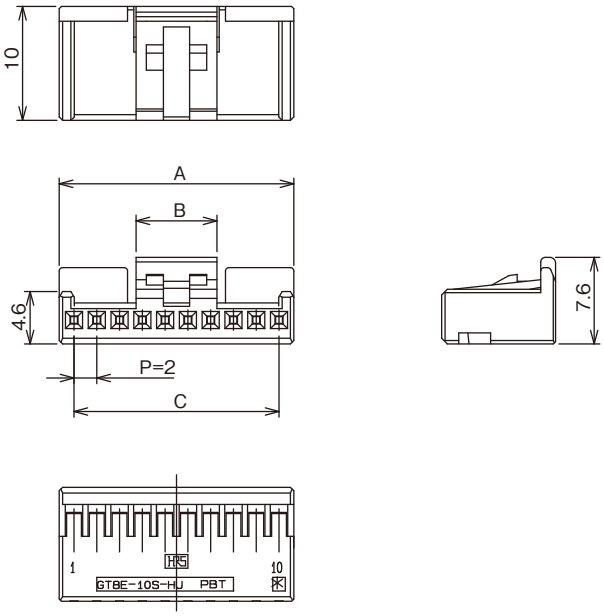
Part No.	HRS No.	Material	Finish	Wire Size	Jacket Outer Diameter	Purchase Unit
GT8E-2022PCF	CL0758-0039-0-00	Brass	Tin Plating	20-22 AWG	ϕ 1.3-1.5	10,000pcs per reel
GT8EF-2022PCF	CL0758-0111-6-00		Gold Plating			8,000pcs per reel
GT8E-2428PCF	CL0758-0067-6-00		Tin Plating	24-28 AWG	ϕ 0.9-1.1	10,000pcs per reel
GT8EF-2428PCF	CL0758-0106-6-00		Gold Plating		ϕ 1.3-1.5	8,000pcs per reel

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Female Connector Housing (1 Row Type)

● GT8E-#S-HU





Unit : mm

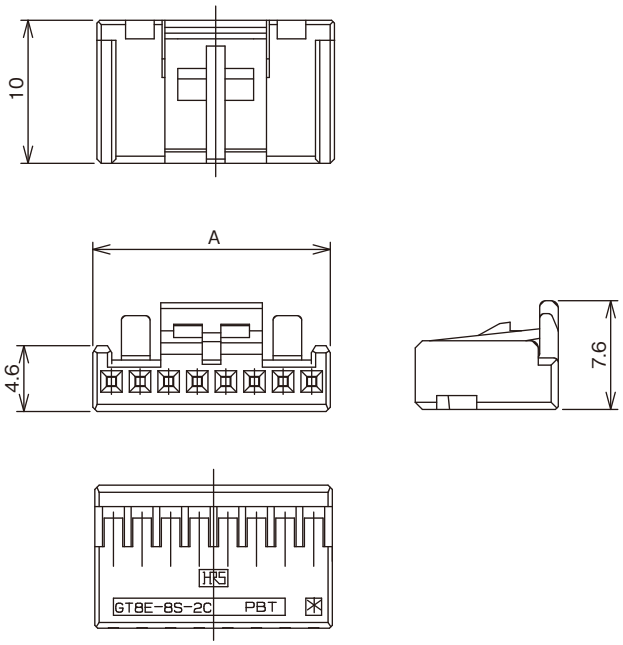
Part No.	HRS No.	Material	Color	No. of Pos.	A	B	C	Purchase Unit
GT8E-3S-HU	CL0758-0061-0-00	PBT	Black	3	7.9	7.9	4.0	100pcs per bag
GT8E-4S-HU	CL0758-0047-9-00			4	8.6	8.6	6.0	
GT8E-5S-HU	CL0758-0062-2-00			5	12.0	7.1	8.0	
GT8E-6S-HU	CL0758-0048-1-00			6	12.6		10.0	
GT8E-7S-HU	CL0758-0063-5-00			7	15.6		12.0	
GT8E-8S-HU	CL0758-0049-4-00			8	16.6		14.0	
GT8E-10S-HU	CL0758-0050-3-00			10	20.6		18.0	

Note : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

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● GT8E-#S-2C





Unit : mm

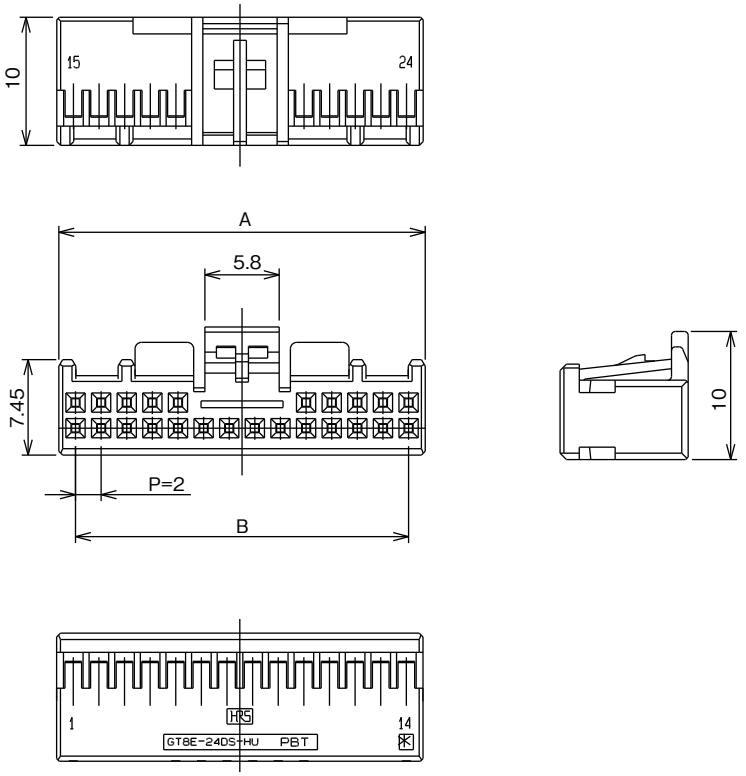
Part No.	HRS No.	Material	Color	No. of Pos.	A	Purchase Unit
GT8E-2S-2C	CL0758-0030-6-00	PBT	Black	2	7.1	100pcs per bag
GT8E-8S-2C	CL0758-0029-7-00			8	16.6	

Note 1 : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).
Note 2 : Socket GT8E-2S-2C mates with GT8E-2P-2H(57), GT8E-8/2P-2H(56) and GT8E-2P-DS(55).
Socket GT8E-8S-2C mates with GT8E-8/2P-2H(56) and GT8E-8/5P-2H(55).

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Female Connector Housing (2 Row Type)





Unit : mm

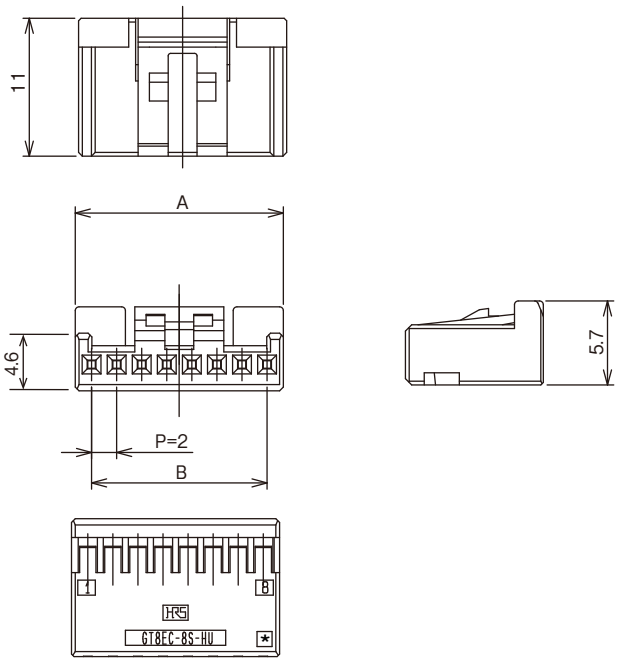
Part No.	HRS No.	Material	Color	No. of Pos.	A	B	Purchase Unit
GT8E-12DS-HU	CL0758-0051-6-00	PBT	Black	12	16.6	14.0	100pcs per bag
GT8E-16DS-HU	CL0758-0064-8-00			16	21.85	18.0	
GT8E-20DS-HU	CL0758-0052-9-00			20	24.6	22.0	
GT8E-24DS-HU	CL0758-0054-4-00			24	28.6	26.0	

Note : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

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Female Connector Housing (Low Height Type)





Unit : mm

Part No.	HRS No.	Material	Color	No. of Pos.	A	B	Purchase Unit
GT8EC-3S-HU	CL0758-1017-3-00	PBT	Black	3	7.9	4.0	100pcs per bag
GT8EC-5S-HU	CL0758-0074-1-00			5	12.0	8.0	
GT8EC-8S-HU	CL0758-1018-6-00			8	16.6	14.0	
GT8EC-14S-HU	CL0758-0224-2-00			14	28.4	26.0	

Note : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

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In-line Type



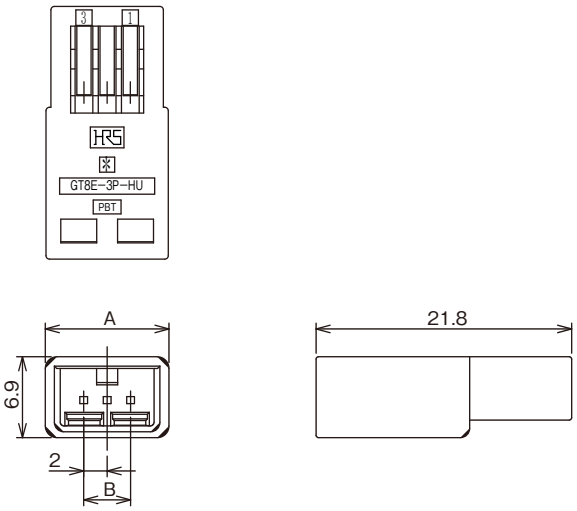
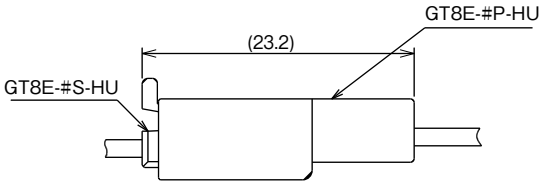


Diagram of Mating Condition During Use



Unit : mm

Part No.	HRS No.	Material	Color	No. of Pos.	A	B	Purchase Unit
GT8E-3P-HU	CL0758-0084-5-00	PBT	Black	3	10.55	4.0	100pcs per bag
GT8E-4P-HU	CL0758-0082-0-00			4		6.0	
GT8E-8P-HU	CL0758-0038-8-00			8	18.55	14.0	

Note 1 : The compatible terminals for tin plating are GT8E-2022PCF and GT8E-2428PCF.
The compatible terminals for gold plating are GT8EF-2022PCF and GT8EF-2428PCF.
Note 2 : GT8E-3P-HU mates with GT-8E-3S-HU. GT8E-4P-HU mates with GT8E-4S-HU. GT8E-8P-HU mates with GT8E-8S-2C.
Note 3 : GT8E-8P-HU can mate with GT8E-8S-HU, but if mated at a diagonal can interfere with the male terminal.

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Right Angle Pin Header (1 Row SMT Type)



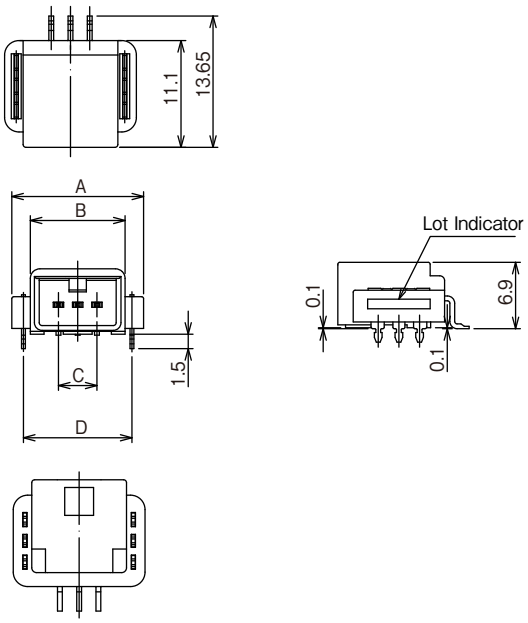
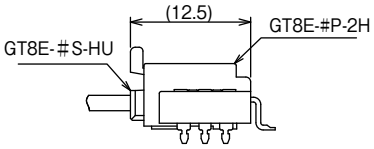
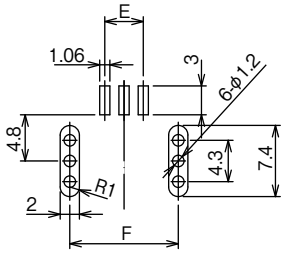


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Unit : mm

Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	D	E	F	Purchase Unit
GT8EA-2P-2H(55)	CL0758-0113-1-55	Material : PPS Color : Black	Tin Plating	2	12.9	9.05	2.0	10.58	2.0	10.58	450pcs per reel
GT8E-3P-2H(55)	CL0758-0096-4-55			3	13.7	9.85	4.0	11.28	4.0	11.28	400pcs per reel
GT8E-3P-2H(56)	CL0758-0096-4-56		Contact Area : Gold Plating Mounting Area : Tin Plating								
GT8E-4P-2H(55)	CL0758-0079-5-55		Tin Plating	4	14.4	10.55	6.0	11.98	6.0	11.98	
GT8E-5P-2H(55)	CL0758-1004-1-55			5	17.8	13.95	8.0	15.38	8.0	15.38	450pcs per reel
GT8E-6P-2H(55)	CL0758-1005-4-55			6	18.4	14.55	10.0	15.98	10.0	15.98	
GT8E-7P-2H(55)	CL0758-0126-3-55			7	21.4	17.55	12.0	18.98	12.0	18.98	
GT8E-8P-2H(55)	CL0758-1006-7-55			8	22.4	18.55	14.0	19.98	14.0	19.98	
GT8E-10P-2H(55)	CL0758-1007-0-55			10	26.4	22.55	18.0	23.98	18.0	23.98	
GT8E-14P-2H(55)	CL0758-0223-0-55			14	36.4	30.55	26.0	31.78	26.0	31.78	

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Right Angle Pin Header (2 Row SMT Type)



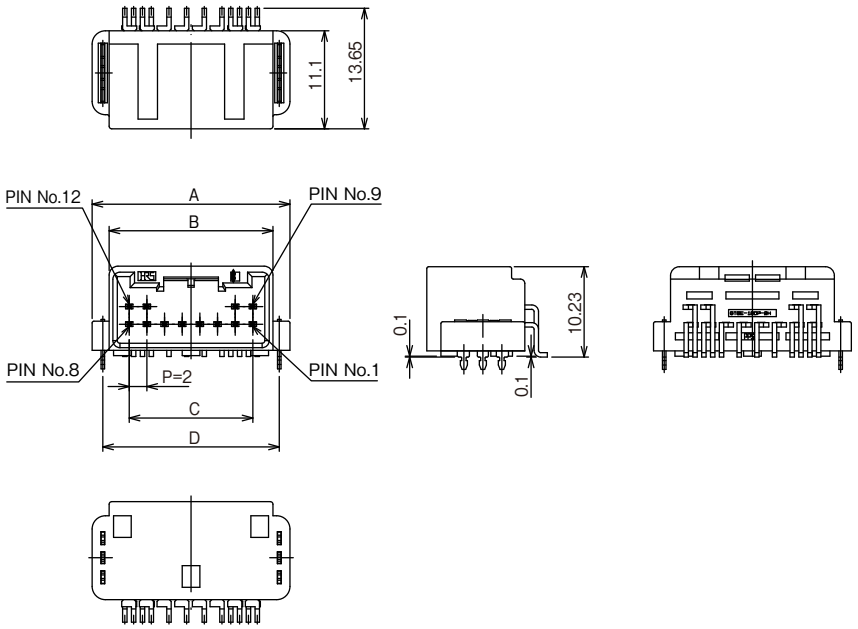
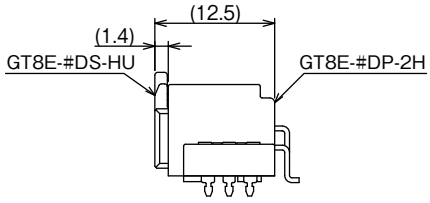
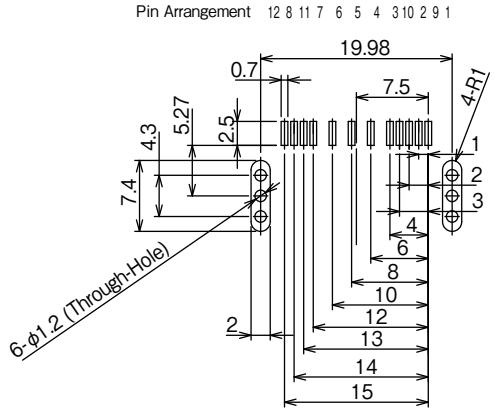


Diagram of Mating Condition During Use



Recommended PCB Dimensions

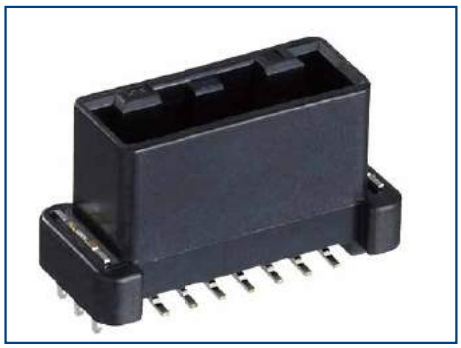


Unit : mm

Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	D	Purchase Unit
GT8E-12DP-2H(55)	CL0758-1008-2-55	Material : PPS Color : Black	Tin Plating	12	22.4	18.55	14.0	19.98	300pcs per reel
GT8E-16DP-2H(55)	CL0758-1009-5-55			16	27.45	23.6	18.0	25.03	
GT8E-20DP-2H(55)	CL0758-1010-4-55			20	30.2	26.35	22.0	27.78	
GT8E-24DP-2H(55)	CL0758-1011-7-55			24	34.2	30.35	26.0	31.78	

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Straight Pin Header (1 Row SMT Type)



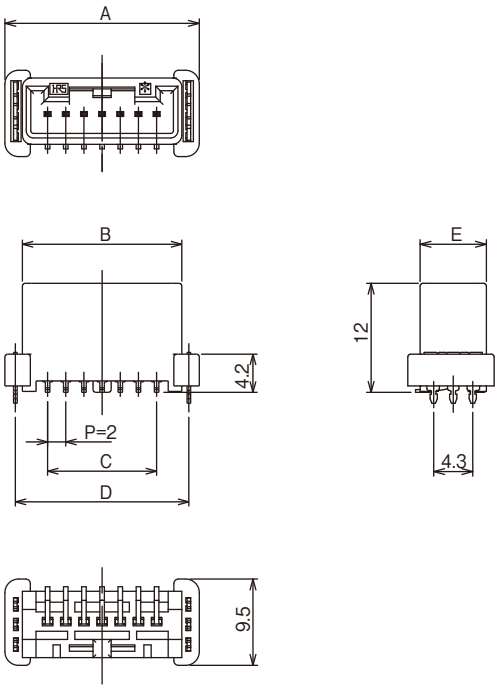
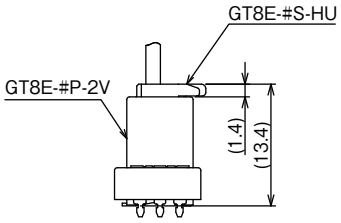
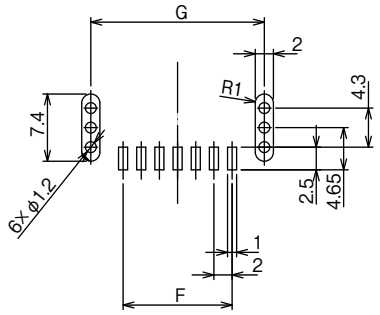


Diagram of Mating Condition During Use



Recommended PCB Dimensions (Connector Side)

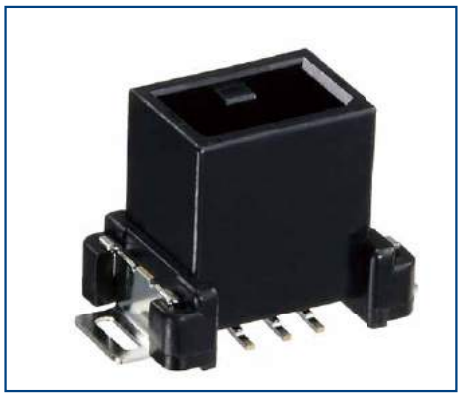


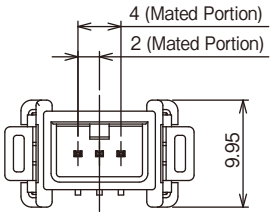
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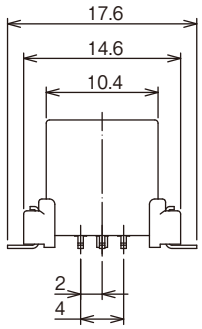
Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	D	E	F	G	Purchase Unit
GT8E-2P-2V(55)	CL0758-0202-0-55	Material : PPS Color : Black	Tin Plating	2	13.0	9.15	2.0	10.6	6.85	2.0	10.6	300pcs per reel
GT8E-4P-2V(55)	CL0758-0121-0-55			4	14.4	10.55	6.0	11.98	7.3	6.0	11.98	
GT8E-7P-2V(55)	CL0758-0227-0-55			7	21.4	17.55	12.0	19.1	7.3	12.0	19.1	
GT8E-10P-2V(55)	CL0758-0232-0-55			10	26.4	22.55	18.0	24.1	7.3	18	24.1	

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Straight Pin Header (1 Row SMT with L-shaped Retention Tabs)







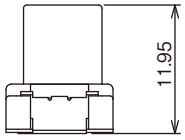
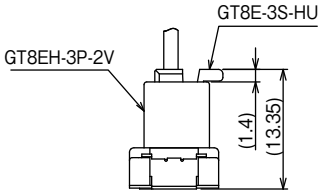
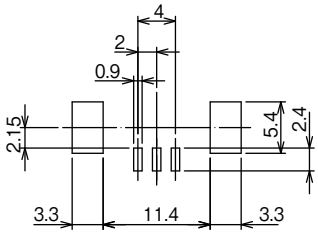


Diagram of Mating Condition During Use



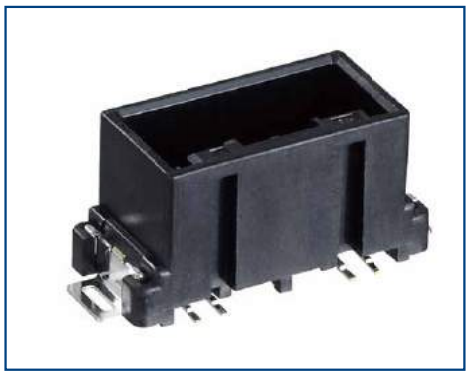
Recommended PCB Dimensions

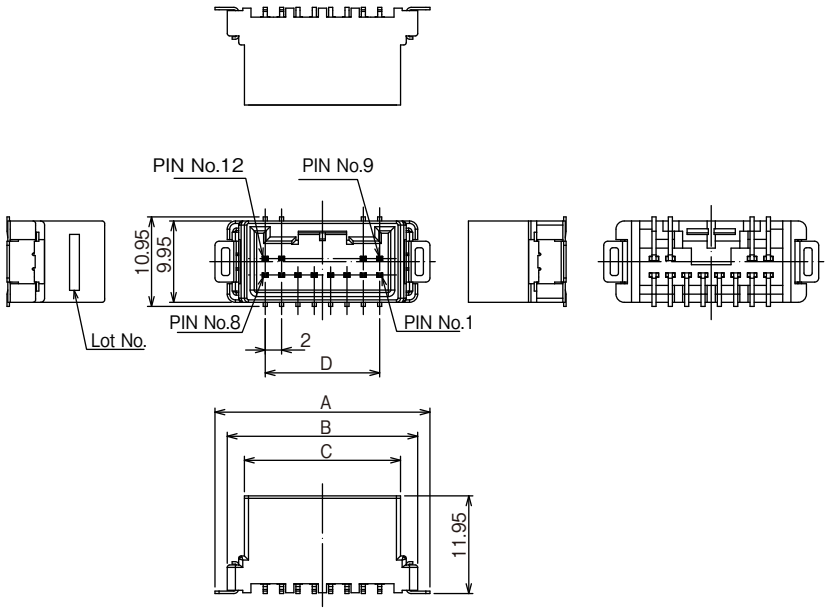


Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	Purchase Unit
GT8EH-3P-2V(55)	CL0758-1016-0-55	Material : PPS Color : Black	Tin Plating	3	200pcs per reel

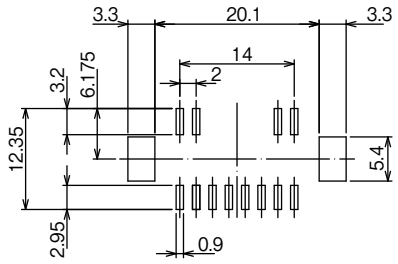
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Straight Pin Header (2 Row SMT with L-shaped Retention Tabs)





Recommended PCB Dimensions



Note : Drawing of GT8EH-12DP-2V(58)

Unit : mm

Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	D	Purchase Unit
GT8EH-12DP-2V(58)	CL0758-1019-9-58	Material : PPS Color : Black	Tin Plating	12	26.3	23.3	19.1	14.0	200pcs per reel
GT8EH-14DP-2V(56)	CL0758-0225-5-56		Contact Area : Gold Plating Mounting Area : Tin Plating	14	28.3	25.3	21.1	16	
GT8EH-24DP-2V(57)	CL0758-1020-8-57			24	38.3	35.3	31.1	26	

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Right Angle Pin Header (1 Row SMT, Low Profile Type)



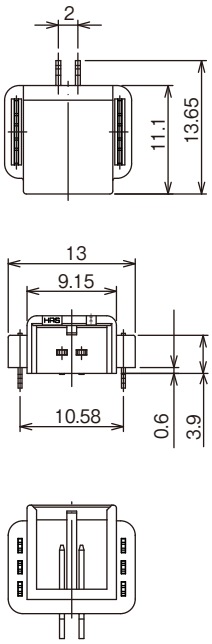
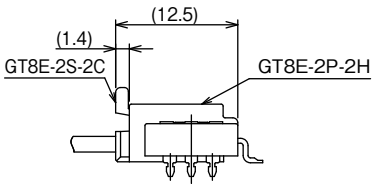
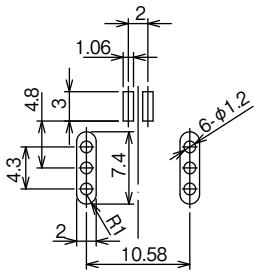


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	Purchase Unit
GT8E-2P-2H(57)	CL0758-0032-1-57	Material : PPS Color : Black	Tin Plating	2	500pcs per reel

Note : This product mates with GT8E-2S-2C.

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Right Angle Pin Header (1 Row SMT, Low Profile Hybrid Type)

● 8 pin / 2 pin Hybrid Type



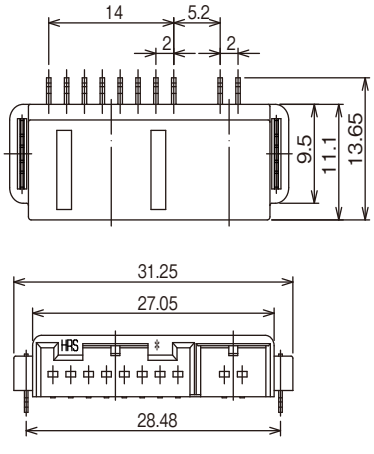
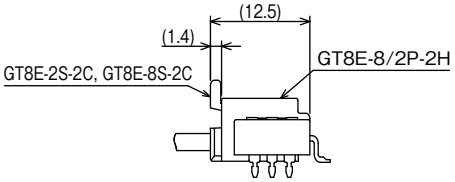
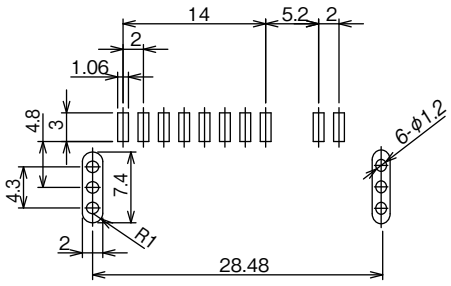


Diagram of Mating Condition During Use



Recommended PCB Dimensions



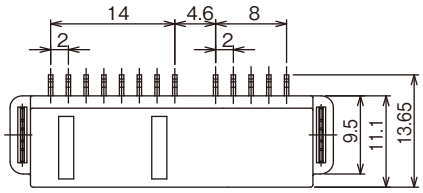
Part No.	HRS No.	Housing	Terminal (Finish)	Purchase Unit
GT8E-8/2P-2H(56)	CL0758-0031-9-56	Material : PPS Color : Black	Tin Plating	500pcs per reel

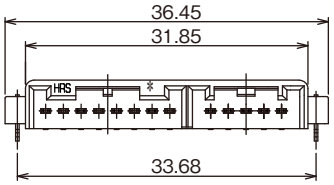
Note : This product mates with GT8E-2S-2C and GT8E-8S-2C.

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● 8 pin / 5 pin Hybrid Type







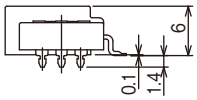
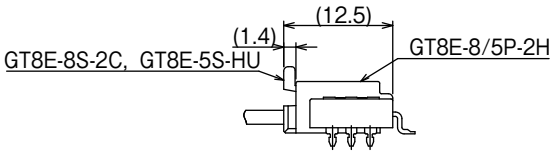
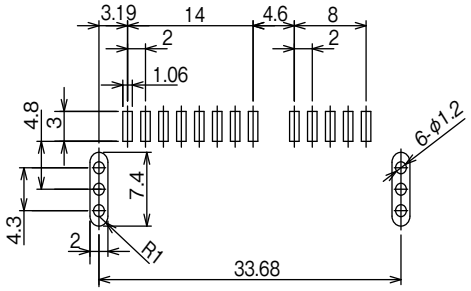


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Part No.	HRS No.	Housing	Terminal (Finish)	Purchase Unit
GT8E-8/5P-2H(55)	CL0758-0073-9-55	Material : PPS Color : Black	Tin Plating	500pcs per reel

Note : This product mates with GT8E-5S-HU and GT8E-8S-2C.

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Right Angle Pin Header (1 Row Through-Hole Type)



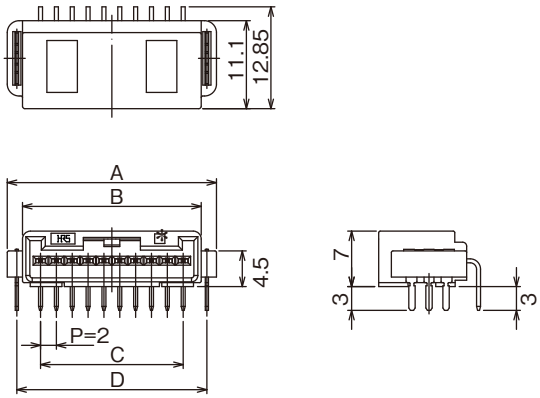
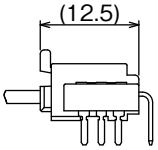
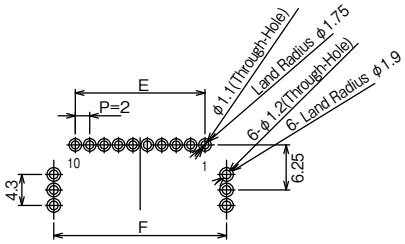


Diagram of Mating Condition During Use



Connector Side Recommended PCB Dimensions and Pin No.



Unit : mm

Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	D	E	F	Purchase Unit
GT8E-2P-DS(55)	CL0758-0040-0-55	Material : PPS Color : Black	Tin Plating	2	13.0	9.15	2.0	10.58	2.0	10.58	192pcs per tray
GT8E-3P-DS(55)	CL0758-0057-2-55			3	13.7	9.85	4.0	11.28	4.0	11.28	184pcs per tray
GT8E-4P-DS(55)	CL0758-0041-2-55			4	14.4	10.55	6.0	11.98	6.0	11.98	176pcs per tray
GT8E-5P-DS(55)	CL0758-0058-5-55			5	17.8	13.95	8.0	15.38	8.0	15.38	144pcs per tray
GT8E-6P-DS(55)	CL0758-0042-5-55			6	18.4	14.55	10.0	15.98	10.0	15.98	136pcs per tray
GT8E-7P-DS(55)	CL0758-0059-8-55			7	21.4	17.55	12.0	18.98	12.0	18.98	120pcs per tray
GT8E-8P-DS(55)	CL0758-0043-8-55			8	22.4	18.55	14.0	19.98	14.0	19.98	112pcs per tray
GT8E-10P-DS(55)	CL0758-0044-0-55			10	26.4	22.55	18.0	23.98	18.0	23.98	96pcs per tray

Note 1 : This product mates with GT8E-#S-HU.
Note 2 : Only GT8E-2P-DS mates with GT8E-2S-2C.

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Right Angle Pin Header (2 Row Through-Hole Type)



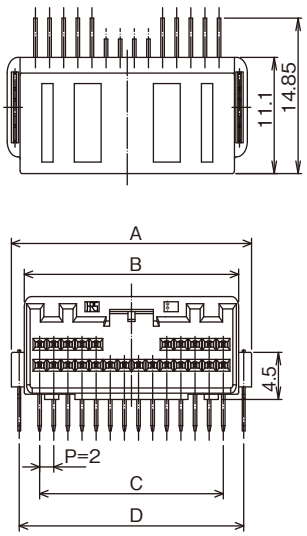
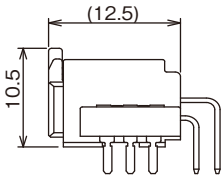
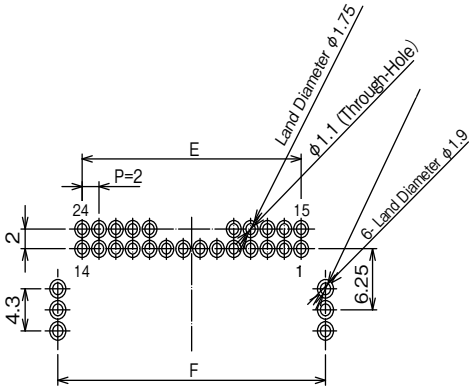


Diagram of Mating Condition During Use



Connector Side Recommended PCB Dimensions and Pin No.



Unit : mm

Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	D	E	F	Purchase Unit
GT8E-12DP-DS(55)	CL0758-0045-3-55	Material : PPS Color : Black	Tin Plating	12	22.4	18.55	14.0	19.98	14.0	19.98	104pcs per tray
GT8E-16DP-DS(55)	CL0758-0060-7-55			16	27.25	23.6	18.0	25.03	18.0	25.03	88pcs per tray
GT8E-20DP-DS(55)	CL0758-0046-6-55			20	30.0	26.35	22.0	27.78	22.0	27.78	80pcs per tray
GT8E-24DP-DS(55)	CL0758-0053-1-55			24	34.0	30.35	26.0	31.78	26.0	31.78	72pcs per tray

Note : This product mates with GT8E-#DS-HU.

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Male Connector Straight Pin Header (Through-Hole Type)



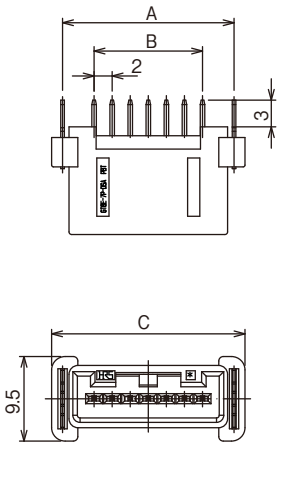
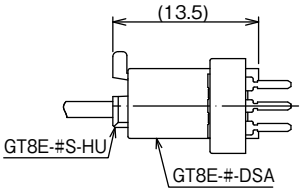
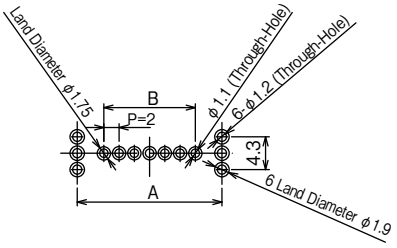


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Unit : mm

Part No.	HRS No.	Housing	Terminal (Finish)	No. of Pos.	A	B	C	Purchase Unit
GT8E-2P-DSA(55)	CL0758-0204-5-55	Material : PA Color : Black	Tin Plating	2	10.58	2.0	13.0	160pcs per tray
GT8E-3P-DSA(55)	CL0758-0112-9-55			3	11.28	4.0	13.7	150pcs per tray
GT8E-4P-DSA(55)	CL0758-0065-0-55	Material : PBT Color : Black		4	12.0	6.0	14.4	150pcs per tray
GT8E-5P-DSA(55)	CL0758-0205-8-55	Material : PA Color : Black		5	16.4	8.0	18.8	110pcs per tray
GT8E-6P-DSA(55)	CL0758-0201-7-55			6	16.98	10.0	19.4	110pcs per tray
GT8E-7P-DSA(55)	CL0758-0066-3-55	Material : PBT Color : Black		7	18.98	12.0	21.4	100pcs per tray

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Termination Tools

Instruction manuals are available for each termination tool. Please contact a Hirose sales representative.

Automatic Crimp Machine



Product No. : CM-105C

The picture is an example. There may be changes.

Specifications

Item	Specification	Reference
Press Capacity	1.5ton	
Stroke Length	30mm	
Number of Strokes	200spm(50Hz)	240spm(60Hz)
Weight	75kg	
Motor	0.2kw	100V AC
Crimping Speed	2,000 to 4,000pcs./h	

Terminal Part No.	Terminal HRS No.	Applicator Part No.	Applicator HRS No.
		CM-105C	CL0901-0001-0-00
GT8B-2428SCF	CL0758-0055-7-00	AP105-GT8B-2428S	CL0901-5172-3-00
GT8B-2428SCF(01)	CL0758-0055-7-01		
GT8E-2428PCF	CL0758-0067-6-00	AP105-GT8E-2428P	CL0901-5192-0-00
GT8EF-2428PCF	CL0758-0106-6-00	AP105-GT8EF-2428P	CL0901-5194-6-00
GT8E-2022SCF	CL0758-0033-4-00	AP105-GT8-2022S	CL0901-5144-8-00
GT8E-2022SCF(01)	CL0758-0033-4-01		
GT8E-2022PCF	CL0758-0039-0-00	AP105-GT8E-2022P	CL0901-5161-7-00
GT8EF-2022PCF	CL0758-0111-6-00		

The crimp height of the terminal must be set for each cable type. Please contact your sales representative.
Please note that a new cable requires a new crimp height setting and evaluation requires a few days.

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Hand Tool



The picture is an example. There may be changes.

Terminal Part No.	Terminal HRS No.	Hand Tool Part No.	Hand Tool HRS No.
GT8B-2428SCF	CL0758-0055-7-00	HT102/GT8-2428S	CL0780-0019-4-00
GT8B-2428SCF(01)	CL0758-0055-7-01		
GT8E-2022SCF	CL0758-0033-4-00	HT304/GT8E-2022S	CL0780-0042-6-00
GT8E-2022SC	CL0758-0101-2-00		
GT8E-2022SCF(01)	CL0758-0033-4-01		

・HT304/GT8E-2022S is compatible with 0.3SQ (22 AWG equivalent)
・HT304/GT8E-2022S is not compatible with 0.5SQ (20 AWG equivalent).
・Use HT304/GT8E-2022S by cutting the reels into loose terminals.

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While Taking into Consideration

Specifications mentioned in this catalog are reference values.
When considering to order or use this product, please confirm the Drawing and Product Specifications sheets.
Use an appropriate cable when using the connector in combination with cables.
If considering usage of a non-specified cable, please contact your sales representative.
If assembly process is done by jigs & tools which are not identified by Hirose, assurance will not be given.
If considering usage for below mentioned applications, please contact your sales representative.
In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/ defense etc. Hirose must review before assurance of reliability can be given.