

GTC SERIES CONNECTOR PRODUCTS

Series product description

Stock Code: 300351

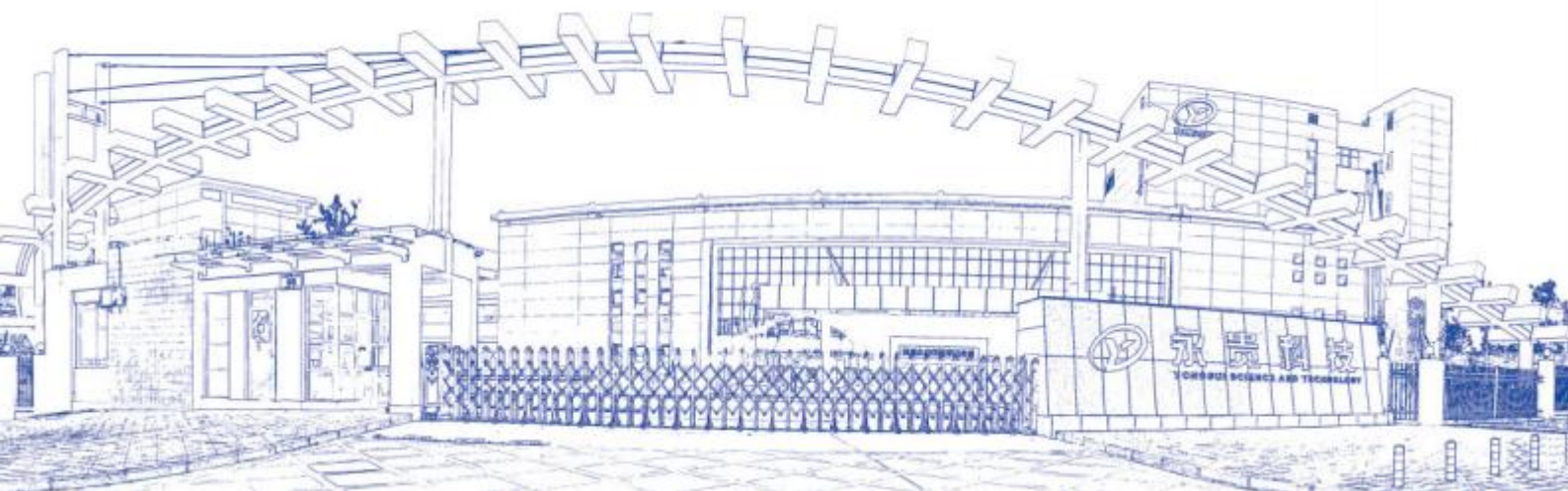


SICHUAN YONGGUI SCIENCE AND TECHNOLOGY CO., LTD

Focus on customers to maximize value

CORPORATE VISION

World class interconnect supplier



COMPANY PROFILE

Zhejiang Yonggui Electric Co., Ltd. is a national high-tech enterprise focusing on the development, manufacturing, sales and technical support of all kinds of electrical connectors, connector components and precision intelligent products. It was listed in Shenzhen Stock Exchange in 2012 (stock code: 300351). The company's rail transit connector production and sales accounted for the **rst** domestic rail transit connector market share, supporting the supply of CRRC Group, 18 railway bureaus and cities with rail transit; Yonggui has entered the supply chain system of Huawei, Siemens (China), Alstom, Mitsubishi, Hitachi, Toyo, GE (China), Chery, BYD, JAC, Yutong and other brands. The company is headquartered in Tiantai, Zhejiang Province, currently has 3 wholly-owned subsidiaries, 4 holding subsidiaries, in Zhejiang headquarters, Sichuan Mianyang, Beijing, Shenzhen, Jiangsu, Chongqing have set up production bases and R & D centers, the company also with Tsinghua University, Zhejiang University, Academy of Railway Science and other universities established industryuni-versity-research cooperation. The company's products have obtained 449 national patent authorization, has passed the ISO9001 certification, ISO/TS22163 certification, CRCC certification, ETL certification, UL and other quality systems and products quality certification.

Sichuan Yonggui Technology Co., Ltd. was established in March 2008, with a registered capital of 100 million yuan and a total asset value of 1.12 billion yuan. It is owned by Zhejiang Yonggui Electric Appliance Co., LTD. (Stock code: 300351), a wholly owned subsidiary. The company covers an area of more than 180 mu, factory and **oce** area of more than 180,000 square meters; Among them, the built-up area covers more than 110,000 square meters; The second phase of the project under construction is more than 58 mu, with a construction area of more than 70,000 square meters; With all kinds of R & D, production equipment more than 4500 sets (sets), is a national high-tech enterprises, national intellectual property demonstration enterprises, national specialized special new "Small-Size Giant Enterprise", national green factory, with independent core technology, for the national key equipment industry to provide reliable connector series products and technical services, A specialized product company that provides total solutions for interconnected systems.



BUSINESS FIELD

Domains



Railway: Highspeed, Metro, Locomotive, Maglev
Industry: Windpower, Solar, Equipment, Medical



Automotive: NE Passenger, Commercial, Special Vehicle
Charging : Pile, Outdoor, Hi-Power with Cooling, Battery Exchange



Defense: Aerospace, Space, Electronic, Ship
Special: Explosion-Proof, Deep Water, Nuclear Power, Shore Power, Aircraft



Communication: Base Station, Database, Energy Module
Energy Storage: Motor and Household, Power System, Industrial **Energy** Storage



Connect to the future
Focus on customers
to maximize value

PRODUCTS

Overall Introduction

GTC connectors are self-locking quick-plug connectors for round reverse bayonets in harsh environments. With the features of high and low temperature resistance, vibration resistance, tensile strength, impact resistance, and IP67 protection level, the GTC series is divided into four categories according to function:

Product Appearance	Product Name and Features	Page
	Control Type GTCM Series Connectors Mainly used for low and medium voltage signaling and control connection, rated voltage $\leq 750V$, current range 13A~150A.	See P1~P29 for details of related content.
	Network Type GTCN Series Connectors Stand-alone module, support 100Mb/s Gb/s /10Gb/s Ethernet and data transmission of various network signals, including MVB, WTB, Audio/Video. Each module is independently connected and individually shielded from all directions. Note: The signal type GTCS series is a derivative of network type GTCN series, and can be used with network modules.	See P30~P47 for details of related content.
	Optic Fiber GTCF Series Connectors Transmit optical signals, suitable for 62.5/125um, 50/125um multi-mode fibers. Also suitable for optical/electrical applications.	See P48~p62 for details of related content.
	High Voltage GTCH Series Connectors Transmit high-voltage and high-current loads, rated voltage 1500V, current range 46A~800A.	See P63~P76 for details of related content.
	Installation Opening The product can be mounted either in front of the panel or behind the panel.	See Appendix III for details of related content.

CONTENTS

Control Type GTCM Series Connectors

01

GTCM6L-D waterproof plug	8	GTCM0L-D individually mounted waterproof socket	16
GTCM6L-A waterproof plug	9	GTCM0L-L individually mounted waterproof socket	17
GTCM6L-L waterproof plug	10	GTCM0L-LF individually mounted waterproof socket	18
GTCM6L-LF waterproof plug	11	GTCM0L-M waterproof socket	19
GTCM6L-M waterproof plug	12	GTCM2L wall/box-mounted waterproof socket	20
GTCM8L-M waterproof elbow plug	13	GTCM2A wall/box-mounted non-waterproof socket	21
GTCM6A-B non-waterproof plug	14	Contact parts specifications and mating wire requirements	22
GTCM8A-B non-waterproof elbow plug	15	Key shift	29

Network Type GTCN Series Connectors

30

GTCN6L-LF waterproof plug	35	GTCN0L-M waterproof socket	41
GTCN6L-M waterproof plug	36	GTCN2A wall/box-mounted non-waterproof socket	42
GTCN8L-M waterproof plug	37	External dimensions of contact parts for modules	43
GTCN6A-B non-waterproof plug	38	Network module and contact parts selection list	45
GTCN8A-B non-waterproof plug	39	Signal module and contact parts selection list	46
GTCN0L-LF waterproof socket	40	Model of specialized tools	47

Optic Fiber GTCF Series Connectors

48

GTCF6L-D waterproof plug	51	GTCF0L-D individually mounted waterproof socket	58
GTCF6L-A waterproof plug	52	GTCF0L-L individually mounted waterproof socket	59
GTCF6L-L waterproof plug	53	GTCF2L wall/box-mounted waterproof socket	60
GTCF6L-M waterproof plug	54	GTCF2A wall/box-mounted non-waterproof socket	61
GTCF6A-B non-waterproof plug	55	Contact parts specifications and mating wire requirements	62
GTCF8A-B non-waterproof elbow plug	56	Key shift	62
GTCF0L-M waterproof plug	57		

CONTENTS

High Voltage GTCH Series Connectors

GTCH-A waterproof locking plug	65	GTCH-LF waterproof socket	72
GTCH-M waterproof plug	66	48L-A type plug	73
GTCH-D waterproof plug	67	48L-A type socket	74
GTCH-M waterproof socket	68	48L-D type socket	75
GTCH-A waterproof locking plug	69	Collection Block Selection List	76
GTCH-2A wall mounted socket	70	Model of specialized tools	76
GTCH-LF waterproof plug	71		

Appendix I: Dust Covers (Ordered Separately)

Appendix II: Instructions for Use

Appendix III: Installation Opening

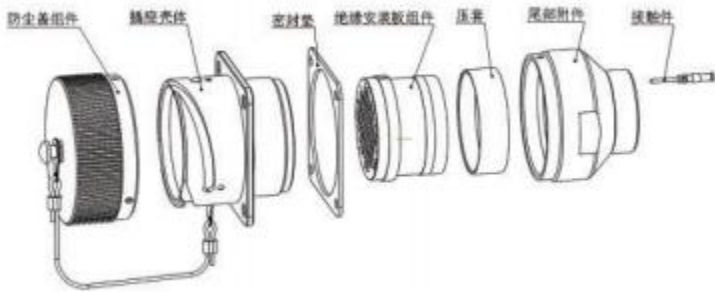
Control type GTCM series connectors

Exploded view

Dust cover assembly Seal ring Plug housing Connecting sleeve assembly Insulation installation plate assembly Straight pipe assembly
Sealing body Bushing Seal ring Tail nut Hose clamp Contact parts



The exploded view of the plug
Dust cover assembly Socket housing Seal gasket Insulation installation plate assembly Compression bushing
Tail accessories Contact parts



The exploded view of the socket

Configuration table

Optional materials	①Connector ②Contact parts (ordered separately) ③Dust cover assembly (ordered separately) ④Accessories for reserved threaded structures (ordered separately)			
Graphical symbol				/
				
Recommended configurations	Option 1: ①+② Option 2: ①+②+③ Option 13: ①+②+③+④			
Selection notes	■ Each connector has a plug and a socket, when the plug is configured with a female pin, the socket needs to be configured with a male pin, when the plug is configured with a male pin, the socket needs to be configured with a female pin. ■ See (P8-21 Connector Appearance and Mounting Dimensions) for specific connector structure. ■ For contact parts options, see (P22-28 Contact Parts Specifications and Mating Wire Requirements (Ordered Separately)) ■ See (Appendix I Dust Cover (Ordered Separately)) for dust cover assembly. ■ Please contact us for accessories for reserved threaded structures.			

Control Type GTCM Series Connectors

Technical Parameters

[Electrical Parameters]

Contact Parts Specification	Φ1.6	Φ2.4	Φ3.6	Φ5.75	Φ8
Rated current	13A	23A 46A		80A	150A
Contact resistance	2.5mΩ	1.3mΩ 0.8mΩ		0.5mΩ	0.35mΩ
Insulation resistance	5000MΩ	5000MΩ 5000MΩ		5000MΩ	5000MΩ
Withstanding voltage	See P4-P7 <contact parts arrangement>				

[Mechanical parameters]

- Mechanical life: 750 cycles
- Vibration: meet GB/T 21563 requirements for Class II vibration
- Impact: meet GB/T 21563 requirements for Class II impact

[Other parameters]

- Operating temperature: -55℃~+125℃
- Humidity: 95% (at 40℃)
- Protection class: IP67 (with suitable tail accessories)
- Environmental friendliness: RoHS
- Material: housing: aluminum alloy; insulator: engineering plastic; pinhole parts: copper alloy;
- Flame retardant grade: EN 45545
- Surface treatment: Housing - oxidized/ galvanized nickel alloy
Pinhole parts - surface treatment: silver/gold plated

Control type GTCM series connectors

Model Definition

GTCM 6 L 20 - M1 S D 20 Z A W

① Name of the series:

GTCM: control type - single key structure

GTCMK: control type - 5 key structure

② Type of connector:

0: Individually mounted socket - square plate

1: Individually mounted socket - round plate

2: Wall/Box-mounted socket - square plate

3: Wall/Box-mounted socket - round plate

4: Socket without mounting flange

9: 90° elbow socket - square plate

5: 90° bend socket - round plate

6: Straight plug

8: 90° elbow plug

③ Protection:

L: Waterproof

A: Non-waterproof

④ Housing number:

20, 24, 28, 32, 36

④ + ⑤ Arrangement of contact parts: See the spectrum table on P4~P7.

Type of contact parts:

P: Pin

S: Jack/Socket

⑦ Tail outlet:

A: Wire clip, waterproof

B: Wire clip, non waterproof

D: Nut type

L: Hose clamp type

LF: Straight pipe with hose clamp

M: Reserved metric threads

Omitted: No tail

⑧ Cable outlet:

A/B/D type: for example, 20 indicates the maximum locking thread size $\Phi 20$;

M type: for example, 25 indicates reserved thread M25;

L/LF type: omitted

Housing surface treatment:

Omitted: Oxidized black

G: Oxidized olive drab

Z: Zinc-plated nickel alloy (galvanized nickel alloy)

⑩ Extension model:

Basic (omitted), A, B;

⑪ Transpose:

N: normotopia (omitted); W; X; Y; Z

Notes: 1. Contact parts are ordered separately, see <P22-P28 Contact Parts Specifications and Mating Wire Requirements (Ordered Separately)> for ordering list;

2. ⑧ specifications, can be customized and developed according to customer needs;

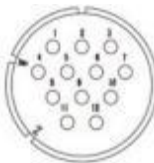
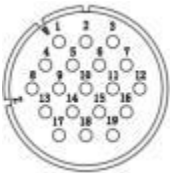
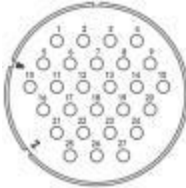
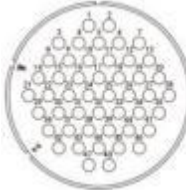
3. Please contact us for extension model.

Control Type GTCM Series Connectors

Contact parts arrangement (viewed from the front of the pin insulator)



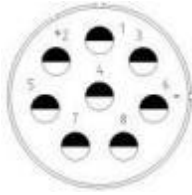
 $\Phi 1.6$ $\Phi 2.4$ $\Phi 3.6$ $\Phi 5.75$ $\Phi 8$

Type chart	Contact parts arrangement	Number of cores	Rated voltage	Withstanding Voltage (AC)	Contact parts ordering number
	20-M1	7× $\Phi 1.6$	500V	3000V	Pin Assembly 0.5 mm ² : 113 020 100 841 1.0 mm ² : 113 020 100 842 1.5 mm ² : 113 020 101 103 2.0 mm ² : 113 020 100 744 2.5 mm ² : 113 020 101 178 Jack assembly: 0.5 mm ² : 113 020 601 233 1.0 mm ² : 113 020 601 232 1.5 mm ² : 113 020 601 602 2.0 mm ² : 113 020 601 054 2.5 mm ² : 113 020 601 689
	20-M2	5× $\Phi 1.6$	500V	3000V	
	24-M60	9× $\Phi 1.6$	500V	3000V	
	28-M1	12× $\Phi 1.6$	500V	3000V	
	32-M1	19× $\Phi 1.6$	500V	3000V	
	36-M1	27× $\Phi 1.6$	500V	3000V	
	36-M10	48× $\Phi 1.6$	380V	2500V	

Control Type GTCM Series Connectors

Model Definition

 $\Phi 1.6$
 $\Phi 2.4$
 $\Phi 3.6$
 $\Phi 5.75$
 $\Phi 8$

Type chart	Contact parts arrangement	Number of cores	Rated voltage	Withstanding voltage	Contact parts ordering number
	20-M61	3× $\Phi 2.4$	750V	3500V	Pin assembly: 1.0 mm ² : 115 210 011 112 1.5 mm ² : 115 210 011 106 2.5 mm ² : 115 210 011 108 4.0 mm ² : 115 210 011 110
	24-M61	7× $\Phi 2.4$	750V	3500V	Jack assembly: 1.0 mm ² : 115 310 016 012 1.5 mm ² : 115 310 016 006 2.5 mm ² : 115 310 016 008 4.0 mm ² : 115 310 016 010
	32-M63	12× $\Phi 2.4$	750V	3500V	
	24-M1	3× $\Phi 3.6$	750V	3500V	Pin assembly: 1.5 mm ² : 113 020 101 192 2.5 mm ² : 114 020 501 901 4.0 mm ² : 113 020 100 964 6.0 mm ² : 113 020 100 764 10 mm ² : 113 020 101 151 Jack assembly: 1.5 mm ² : 115 210 011 112 2.5 mm ² : 115 210 011 106 4.0 mm ² : 115 210 011 108 6.0 mm ² : 115 210 011 110 10 mm ² : 115 210 011 110
	36-M3	8× $\Phi 3.6$	750V	3500V	Pin Assembly: 1.5 mm ² : 113 020 100 246 2.5 mm ² : 113 020 100 237 4.0 mm ² : 113 020 100 245 6.0 mm ² : 113 020 100 236 10 mm ² : 113 020 100 580 Jack assembly: 1.5 mm ² : 113 020 600 366 2.5 mm ² : 113 020 600 356 4.0 mm ² : 113 020 600 365 6.0 mm ² : 113 020 600 344 10 mm ² : 113 020 600 770

Control Type GTCM Series Connectors

Contact parts arrangement (viewed from the front of the pin insulator)







Φ1.6 Φ2.4 Φ3.6 Φ5.75 Φ8

Type chart	Contact parts arrangement	Number of cores	Rated voltage	Withstanding voltage	Contact parts ordering number
	36-M61	10×Φ3.6	750V	3500V	Pin assembly: 1.5 mm ² : 113 020 100 246 2.5 mm ² : 113 020 100 237 4.0 mm ² : 113 020 100 245 6.0 mm ² : 113 020 100 236 10 mm ² : 113 020 100 580 Jack assembly: 1.5 mm ² : 113 020 600 366 2.5 mm ² : 113 020 600 356 4.0 mm ² : 113 020 600 365 6.0 mm ² : 113 020 600 344 10 mm ² : 113 020 600 770
	28-M61	3×Φ5.75	380V	2500V	Pin Assembly: 4.0mm ² : 115 210 011 706 6.0mm ² : 115 210 011 701 10mm ² : 115 210 011 702 16mm ² : 115 210 011 703 25mm ² : 115 210 011 704
	32-M61	4×Φ5.75	380V	2500V	Jack assembly: 4.0mm ² : 115 310 017 506 6.0mm ² : 115 310 017 501 10mm ² : 115 310 017 502 16mm ² : 115 310 017 503 25mm ² : 115 310 017 504
	32-M9	4×Φ5.75	380V	2500V	Pin assembly: 6.0mm ² : 113 020 100 207 10mm ² : 113 020 100 195 16mm ² : 113 020 100 328 25mm ² : 113 020 100 196 Jack assembly: 6.0mm ² : 113 020 600 315 10mm ² : 113 020 600 303 16mm ² : 113 020 600 467 25mm ² : 113 020 600 304

Control Parts GTCM Series Connectors

Model Definition

Φ1.6 Φ2.4 Φ3.6 Φ5.75 Φ8

Type chart	Contact parts arrangement	Number of cores	Rated voltage	Withstanding voltage	Contact parts ordering number
	20-M60	1×Φ8	380V	2500V	Pin Assembly: 10mm² : 115 210 011 805 16mm² : 115 210 011 801 25mm² : 115 210 011 802 35mm² : 115 210 011 803 50mm² : 115 210 011 804
	32-M60	3×Φ8	380V	2500V	Jack assembly: 10mm² : 115 310 017 705 16mm² : 115 310 017 701 25mm² : 115 310 017 702 35mm² : 115 310 017 703 50mm² : 115 310 017 704
	32-M62	2×Φ8	380V	2500V	
	36-M60	4×Φ8	380V	2500V	

[Rated current drop rate according to TB/T 3412]

Number of contact parts	1 - 10	11-20	21-30	31-50	More than 50
Rated current drop rate	0	10%	20%	30%	50%

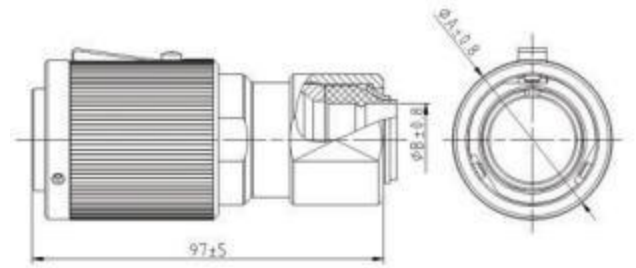
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM6L-D waterproof plugs: suitable for overall multi-core cables]



Plug appearance



Plug external dimensions

Type chart Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB
20-M2	20	5×Φ1.6	GTCM6L20-M2SD(20)	45	20
20-M1	20	7×Φ1.6	GTCM6L20-M1SD(20)	45	20
20-M60	20	1×Φ8	GTCM6L20-M60SD(20)	45	20
24-M60	24	9×Φ1.6	gtcm6l24-m60sd(20)	51	20
28-M1	28	12×Φ1.6	gtcm6 l28-m1sd(22)	56	22
32-M1	32	19×Φ1.6	GTCM6L32-M1SD(26)	62.5	26
36-M1	36	27×Φ1.6	GTCM6L36-M1SD(39)	68	39
36-M10	36	48×Φ1.6	gtcm6l36-m10sd(39)	68	39

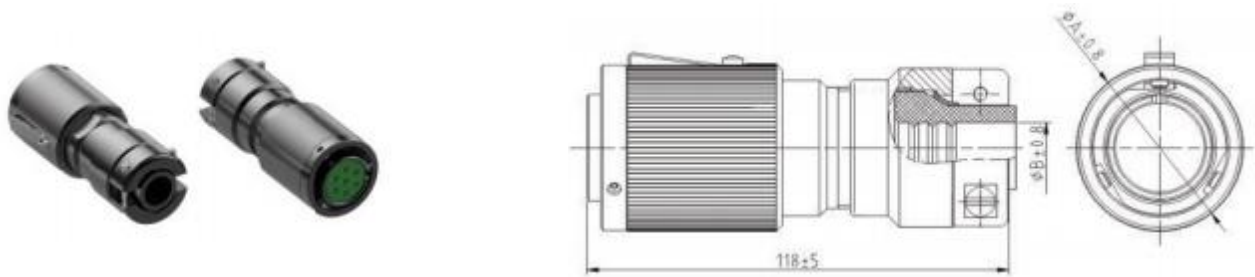
Notes:

1. The "B" value above can be customized according to customer needs. If you have such needs, please contact us.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM6L-A waterproof plugs: suitable for overall multi-core cables



Plug appearance

Plug external Dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB
20-M2	20	5×Φ1.6	gtcm6l20-m2sa (16.5)	45	16.5
20-M1	20	7×Φ1.6	GTCM6L20-M1SA(16.5)	45	16.5
20-M60	20	1×Φ8	gtcm6l20-m60sa (16.5)	45	16.5
24-M60	24	9×Φ1.6	GTCM6L24-M60SA(20)	51	20
28-M1	28	12×Φ1.6	GTCM6L28-M1SA(22)	56	22
32-M1	32	19×Φ1.6	GTCM6L32-M1SA(26)	62.5	26
36-M1	36	27×Φ1.6	GTCM6L36-M1SA(39)	68	39
36-M10	36	48×Φ1.6	GTCM6L36-M10SA(39)	68	39

- Notes:
- 1. The "B" value above can be customized according to customer needs. If you have such needs, please contact us.
 - 2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
 - 3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

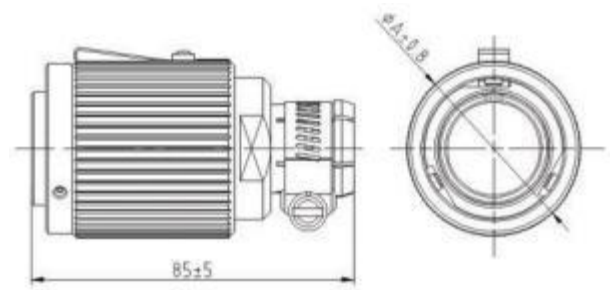
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM6L-L waterproof plugs: suitable for bulkhead sealing]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA
20-M2	20	5×Φ1.6	GTCM6L20-M2SL	45
20-M1	20	7×Φ1.6	GTCM6L20-M1SL	45
24-M1	24	3×Φ3.6	GTCM6L24-M1SL	51
24-M60	24	9×Φ1.6	GTCM6L24-M60SL	51
28-M1	28	12×Φ1.6	GTCM6L28-M1SL	56
32-M1	32	19×Φ1.6	GTCM6L32-M1SL	62.5
36-M1	36	27×Φ1.6	GTCM6L36-M1SL	68
36-M10	36	48×Φ1.6	GTCM6L36-M10SL	68

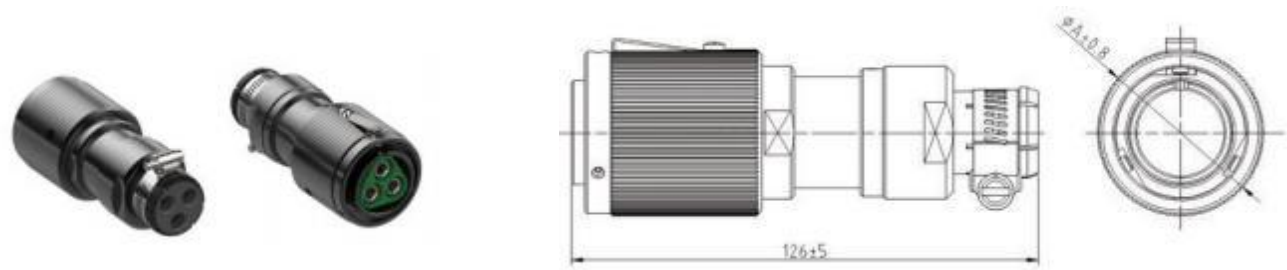
Notes:

1. When the outer diameter of the cable $\geq 2.5\text{mm}$, the protection level meets IP67; when the outer diameter of the cable is $1.8 \sim 2.5\text{mm}$, the protection level meets IP66, the rest meets IP54.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series, please contact us if you need them.

Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM6L-LF waterproof plugs: suitable for cable sealing]



Plug appearance

Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	Cable O.D.
20-M60	20	1×Φ8	GTCM6L20-M60SLF	45	1 x (5~9.5)
28-M61	28	3×Φ5.75	GTCM6L28-M61SLF	56	3×(5~9.5)
32-M9	32	4×Φ5.75	GTCM6L32-M9SLF	62.5	4 x (5~9.5)
32-M60	32	3×Φ8	GTCM6L32-M60SLF	62.5	3×(5~9.5)
32-M61	32	4×Φ5.75	GTCM6L32-M61SLF	62.5	4 x (5~9.5)
36-M60	36	4×Φ8	GTCM6L36-M60SLF	68	4 x (5~9.5)

- Notes:
- 1.The value of "Cable O.D." can be customized according to customer needs, if you have such needs, please contact us;
 - 2.The models shown above are plug jacks (female pins), if you need plug pins (male pins), please contact us;
 - 3.All the structures above have the corresponding GTCMK (5-key) series, please contact us if you need them.

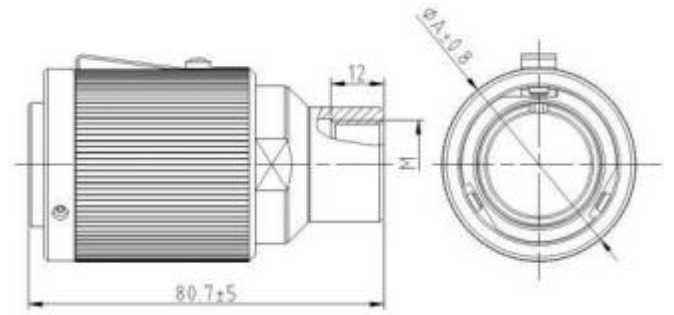
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM6L-M waterproof plugs: suitable for connectors]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	M
20-M2	20	5×Φ1.6	GTCM6L20-M2SM20	45	M20×1.5
20-M1	20	7×Φ1.6	GTCM6L20-M1SM20	45	M20×1.5
20-M60	20	1×Φ8	GTCM6L20-M60SM20	45	M20×1.5
20-M61	20	3×Φ2.4	GTCM6L20-M61SM20	45	M20×1.5
24-M1	24	3×Φ3.6	GTCM6L24-M1SM25	51	M25×1.5
24-M60	24	9×Φ1.6	GTCM6L24-M60SM25	51	M25×1.5
24-M61	24	7×Φ2.4	GTCM6L24-M61SM25	51	M25×1.5
28-M1	28	12×Φ1.6	GTCM6 L28-M1SM32	56	M32×1.5
28-M61	28	3×Φ5.75	GTCM6 L28-M61SM32	56	M32×1.5
32-M1	32	19×Φ1.6	GTCM6L32-M1SM32	62.5	M32×1.5
32-M9	32	4×Φ5.75	GTCM6L32-M9SM32	62.5	M32×1.5
32-M60	32	3×Φ8	GTCM6L32-M60SM40	62.5	M40×1.5
32-M61	32	4×Φ5.75	GTCM6L32-M61SM40	62.5	M40×1.5
32-M62	32	2×Φ8	GTCM6L32-M62SM32	62.5	M32×1.5
32-M63	32	12×Φ2.4	GTCM6L32-M63SM40	62.5	M40×1.5
36-M1	36	27×Φ1.6	GTCM6L36-M1SM40	68	M40×1.5
36-M3	36	8×Φ3.6	GTCM6L36-M3SM32	68	M32×1.5
36-M10	36	48×Φ1.6	GTCM6L36-M10SM40	68	M40×1.5
36-M60	36	4×Φ8	GTCM6L36-M60SM40	68	M40×1.5
36-M61 36		10×Φ3.6	GTCM6L36-M61SM40	68	M40×1.5

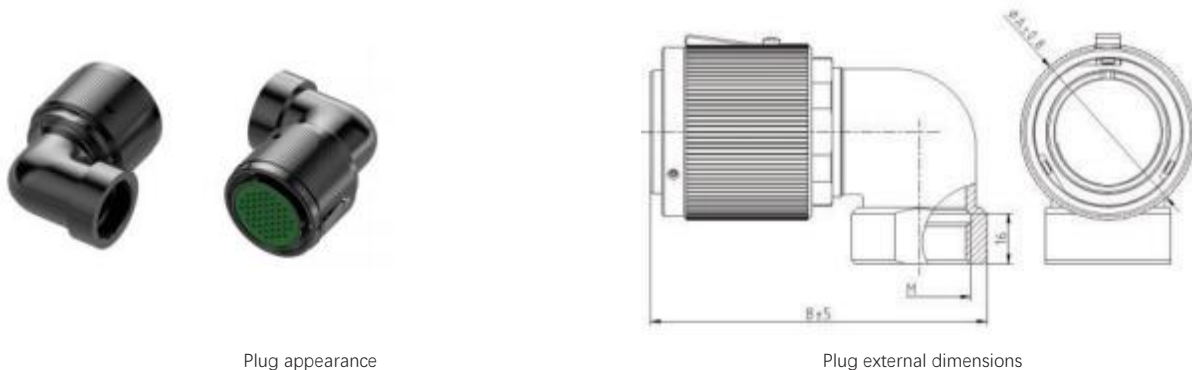
Notes:

1. The "M" value above can be customized according to customer's requirements. If you need to order the connectors matching the "M" value, please contact us.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

Control Type GTCM Series Connectors

Connector External Dimensions

External dimensions of GTCM8L-M waterproof elbow plugs: suitable for connectors



Plug appearance

Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	M
20-M2	20	5×Φ1.6	GTCM8L20-M2SM20	45	88	M20×1.5
20-M1	20	7×Φ1.6	GTCM8L20-M1SM20	45	88	M20×1.5
20-M60	20	1×Φ8	GTCM8L20-M60SM20	45	88	M20×1.5
20-M61	20	3×Φ2.4	GTCM8L20-M61SM20	45	88	M20×1.5
24-M1	24	3×Φ3.6	GTCM8L24-M1SM25	51	97	M25×1.5
24-M60	24	9×Φ1.6	GTCM8L24-M60SM25	51	97	M25×1.5
24-M61	24	7×Φ2.4	GTCM8L24-M61SM25	51	97	M25×1.5
28-M1	28	12×Φ1.6	GTCM8L28-M1SM32	56	108	M32×1.5
28-M61	28	3×Φ5.75	GTCM8L28-M61SM32	56	108	M32×1.5
32-M1	32	19×Φ1.6	GTCM8L32-M1SM32	62.5	107	M32×1.5
32-M9	32	4×Φ5.75	GTCM8L32-M9SM32	62.5	107	M32×1.5
32-M60	32	3×Φ8	GTCM8L32-M60SM32	62.5	107	M32×1.5
32-M61	32	4×Φ5.75	GTCM8L32-M61SM32	62.5	107	M32×1.5
32-M62	32	2×Φ8	GTCM8L32-M62SM32	62.5	107	M32×1.5
32-M63	32	12×Φ2.4	GTCM8L32-M63SM32	62.5	107	M32×1.5
36-M1	36	27×Φ1.6	GTCM8L36-M1SM40	68	114	M40×1.5
36-M3	36	8×Φ3.6	GTCM8L36-M3SM40	68	114	M40×1.5
36-M10	36	48×Φ1.6	GTCM8L36-M10SM40	68	114	M40×1.5
36-M60	36	4×Φ8	GTCM8L36-M60SM40	68	114	M40×1.5
36-M61 36		10×Φ3.6	GTCM8L36-M61SM40	68	114	M40×1.5

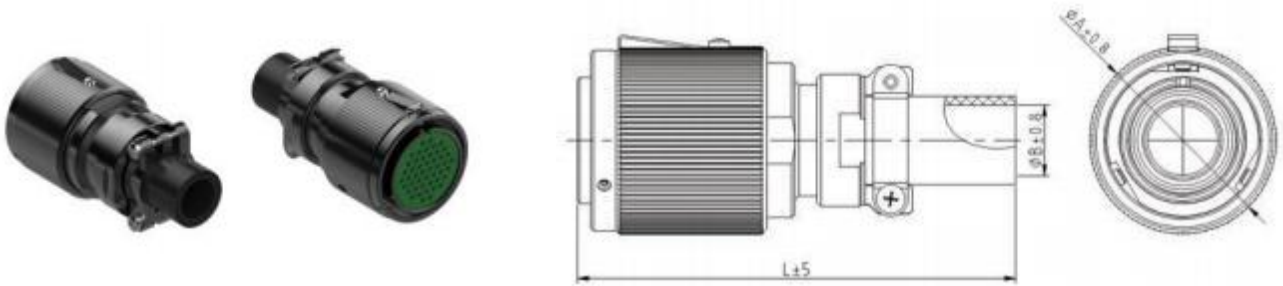
Notes:

1. The "M" value above can be customized according to customer's requirements. If you need to order the connectors matching the "M" value, please contact us.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

Control Type GTCM Series Connectors

| Connector External Dimensions

[External dimensions of GTCM6A-B non-waterproof plugs: suitable for cables]



Plug appearance

Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB	L
20-M2	20	5×Φ1.6	GTCM6A20-M2SB19	45	19	119
20-M1	20	7×Φ1.6	GTCM6A20-M1SB19	45	19	119
20-M60	20	1×Φ8	GTCM6A20-M60SB19	45	19	119
20-M61	20	3×Φ2.4	GTCM6A20-M61SB19	45	19	119
24-M1	24	3×Φ3.6	GTCM6A24-M1SB19	51	19	119
24-M60	24	9×Φ1.6	GTCM6A24-M60SB19	51	19	119
24-M61	24	7×Φ2.4	GTCM6A24-M61SB19	51	19	119
28-M1	28	12×Φ1.6	GTCM6A28-M1SB24	56	24	126
28-M61	28	3×Φ5.75	GTCM6A28-M60SB24	56	24	126
32-M1	32	19×Φ1.6	GTCM6A32-M1SB24	62.5	24	126
32-M9	32	4×Φ5.75	GTCM6A32-M9SB24	62.5	24	126
32-M60	32	3×Φ8	GTCM6A32-M60SB24	62.5	24	126
32-M61	32	4×Φ5.75	GTCM6A32-M61SB24	62.5	24	126
32-M62	32	2×Φ8	GTCM6A32-M62SB24	62.5	24	126
32-M63	32	12×Φ2.4	GTCM6A32-M63SB24	62.5	24	126
36-M1	36	27×Φ1.6	GTCM6A36-M1SB31	68	31	123
36-M3	36	8×Φ3.6	GTCM6A36-M3SB31	68	31	123
36-M10	36	48×Φ1.6	GTCM6A36-M10SB31	68	31	123
36-M60	36	4×Φ8	GTCM6A36-M60SB31	68	31	123
36-M61 36		10×Φ3.6	GTCM6A36-M61SB31	86	31	123

Notes:

1. The "B" value above can be customized according to customer needs, if you have such needs, please contact us.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

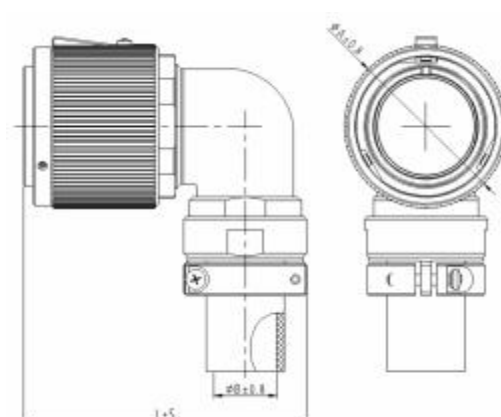
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM8A-B non-waterproof elbow plugs: suitable for cables]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB	L
20-M2	20	5×Φ1.6	GTCM8A20-M2SB19	45	19	94
20-M1	20	7×Φ1.6	GTCM8A20-M1SB19	45	19	94
20-M60	20	1×Φ8	GTCM8A20-M60SB19	45	19	94
20-M61	20	3×Φ2.4	GTCM8A20-M61SB19	45	19	94
24-M1	24	3×Φ3.6	GTCM8A24-M1SB19	51	19	100
24-M60	24	9×Φ1.6	GTCM8A24-M60SB19	51	19	100
24-M61	24	7×Φ2.4	GTCM8A24-M61SB19	51	19	100
28-M1	28	12×Φ1.6	GTCM8A28-M1SB24	56	24	110
28-M61	28	3×Φ5.75	GTCM8A28-M60SB24	56	24	110
32-M1	32	19×Φ1.6	GTCM8A32-M1SB24	62.5	24	110
32-M9	32	4×Φ5.75	GTCM8A32-M9SB24	62.5	24	110
32-M60	32	3×Φ8	GTCM8A32-M60SB24	62.5	24	110
32-M61	32	4×Φ5.75	GTCM8A32-M61SB24	62.5	24	110
32-M62	32	2×Φ8	GTCM8A32-M62SB24	62.5	24	110
32-M63	32	12×Φ2.4	GTCM8A32-M63SB24	62.5	24	110
36-M1	36	27×Φ1.6	GTCM8A36-M1SB31	68	31	116
36-M3	36	8×Φ3.6	GTCM8A36-M3SB31	68	31	116
36-M10	36	48×Φ1.6	GTCM8A36-M10SB31	68	31	116
36-M60	36	4×Φ8	GTCM8A36-M60SB31	68	31	116
36-M61 36		10×Φ3.6	GTCM8A36-M61SB31	86	31	116

Notes:

1. The "B" value above can be customized according to customer needs, if you have such needs, please contact us.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

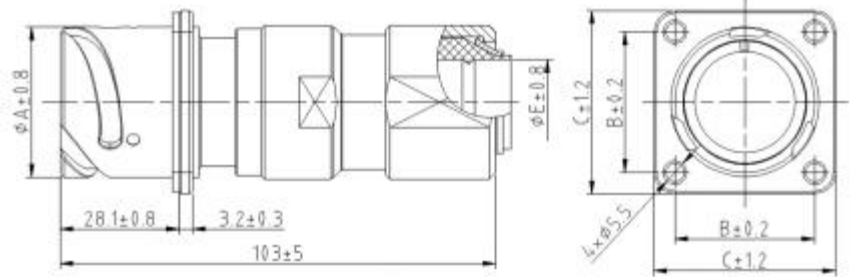
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCMOL-D individually mounted waterproof socket: suitable for overall multi-core cables]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C	ΦE
20-M2	20	5×Φ1.6	GTCM0L20-M2PD(20)	35.3	33	43	20
20-M1	20	7×Φ1.6	GTCM0L20-M1PD(20)	35.3	33	43	20
20-M60	20	1×Φ8	GTCM0L20-M60PD(20)	35.3	33	43	20
24-M60	24	9×Φ1.6	GTCM0L24-M60PD(20)	41.7	38	50	20
28-M1	28	12×Φ1.6	GTCM0L28-M1PD(22)	46.5	42	54	22
32-M1	32	19×Φ1.6	GTCM0L32-M1PD(26)	52.8	46	60	26
36-M1	36	27×Φ1.6	GTCM0L36-M1PD(39)	58.4	52	66	39
36-M10	36	48×Φ1.6	gtcm0l36-m10pd(39)	58.4	52	66	39

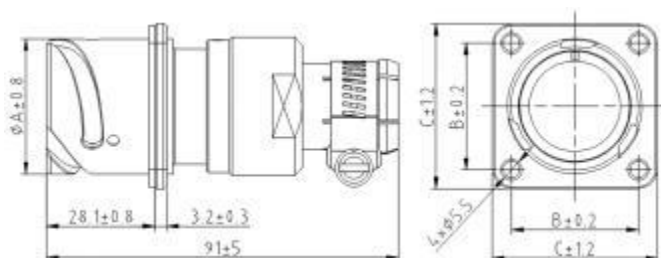
Notes:

1. The "E" value above can be customized according to customer needs, if you have such needs, please contact us.
2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us;
3. All of the structures above have corresponding GTCMK (5-key) series, if you need them, please contact us.
4. See Appendix III for details on installation openings.

Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCMOL-L individually mounted waterproof socket: suitable for bulkhead sealing]



Socket appearance

Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C
20-M2	20	5× $\Phi 1.6$	GTCM0L20-M2PL	35.3	33	43
20-M1	20	7× $\Phi 1.6$	GTCM0L20-M1PL	35.3	33	43
24-M1	24	3× $\Phi 3.6$	GTCM0L24-M1PL	41.7	38	50
24-M60	24	9× $\Phi 1.6$	GTCM0L24-M60PL	41.7	38	50
28-M1	28	12× $\Phi 1.6$	GTCM0L28-M1PL	46.5	42	54
32-M1	32	19× $\Phi 1.6$	GTCM0L32-M1PL	52.8	46	60
36-M1	36	27× $\Phi 1.6$	GTCM0L36-M1PL	58.4	52	66
36-M10 36		48× $\Phi 1.6$	GTCM0L36-M10PL	58.4	52	66

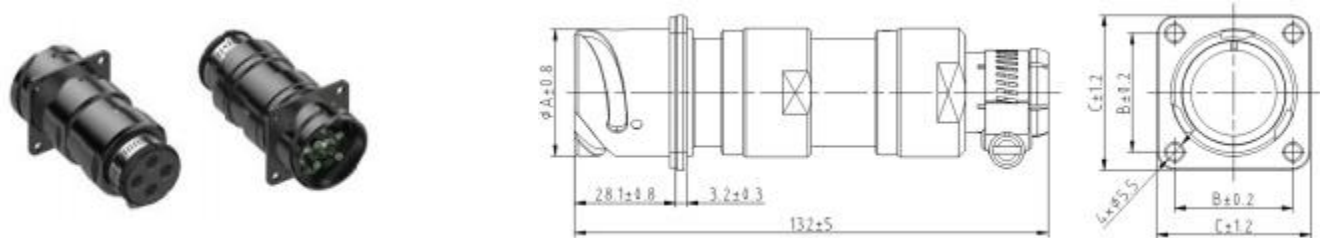
Notes:

1. When the cable OD $\geq 2.5\text{mm}$, the protection level meets IP67; when the cable OD is $1.8 \sim 2.5\text{mm}$, the protection level meets IP66, the rest meets IP54.
2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us;
3. All of the structures above have corresponding GTCMK (5-key) series, if you need them, please contact us.
4. See Appendix III for details on installation openings.

Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCMOL-LF individually mounted waterproof socket: suitable for cable sealing]



Socket appearance

Socket external dimensions

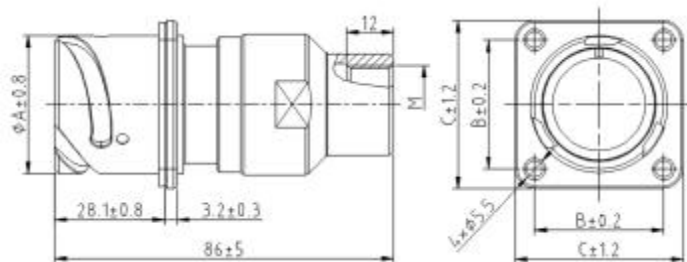
Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C	Cable O.D.
20-M60	20	1×Φ8	GTCM0L20-M60PLF	35.3	33	43	1 x (5~9.5)
28-M60	28	3×Φ5.75	GTCM0L28-M60PLF	46.5	42	54	3×(5~9.5)
32-M9	32	4×Φ5.75	GTCM0L32-M9PLF	52.8	46	60	4 x (5~9.5)
32-M60	32	3×Φ8	GTCM0L32-M60PLF	52.8	46	60	3×(5~9.5)
32-M61	32	4×Φ5.75	GTCM0L32-M61PLF	52.8	46	60	4 x (5~9.5)
36-M60	36	4×Φ8	GTCM0L36-M60PLF	58.4	52	66	4 x (5~9.5)

- Notes:
- 1. The cable outer diameter (Cable O.D.) can be customized according to customer needs, if you have such needs, please contact us.
 - 2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us;
 - 3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
 - 4. See Appendix III for details on installation openings.

Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCMOL-M waterproof socket: suitable for connectors]



Socket appearance

Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C	M
20-M2	20	5× $\Phi 1.6$	GTCM0L20-M2PM20	35.3	33	43	M20×1.5
20-M1	20	7× $\Phi 1.6$	GTCM0L20-M1PM20	35.3	33	43	M20×1.5
20-M60	20	1× $\Phi 8$	GTCM0L20-M60PM20	35.3	33	43	M20×1.5
20-M61	20	3× $\Phi 2.4$	GTCM0L20-M61PM20	35.3	33	43	M20×1.5
24-M1	24	3× $\Phi 3.6$	GTCM0L24-M1PM25	41.7	38	50	M25×1.5
24-M60	24	9× $\Phi 1.6$	GTCM0L24-M60PM25	41.7	38	50	M25×1.5
24-M61	24	7× $\Phi 2.4$	GTCM0L24-M61PM25	41.7	38	50	M25×1.5
28-M1	28	12× $\Phi 1.6$	GTCM0L28-M1PM32	46.5	42	54	M32×1.5
28-M61	28	3× $\Phi 5.75$	GTCM0L28-M61PM32	46.5	42	54	M32×1.5
32-M1	32	19× $\Phi 1.6$	GTCM0L32-M1PM32	52.8	46	60	M32×1.5
32-M9	32	4× $\Phi 5.75$	GTCM0L32-M9PM32	52.8	46	60	M32×1.5
32-M60	32	3× $\Phi 8$	GTCM0L32-M60PM40	52.8	46	60	M40×1.5
32-M61	32	4× $\Phi 5.75$	GTCM0L32-M61PM40	52.8	46	60	M40×1.5
32-M62	32	2× $\Phi 8$	GTCM0L32-M62PM32	52.8	46	60	M32×1.5
32-M63	32	12× $\Phi 2.4$	GTCM0L32-M63PM40	52.8	46	60	M40×1.5
36-M1	36	27× $\Phi 1.6$	GTCM0L36-M1PM40	58.4	52	66	M40×1.5
36-M3	36	8× $\Phi 3.6$	GTCM0L36-M3PM40	58.4	52	66	M40×1.5
36-M10	36	48× $\Phi 1.6$	GTCM0L36-M10PM40	58.4	52	66	M40×1.5
36-M60	36	4× $\Phi 8$	GTCM0L36-M60PM40	58.4	52	66	M40×1.5
36-M61 36		10× $\Phi 3.6$	GTCM0L36-M61PM40	58.4	52	66	M40×1.5

Notes:

1. The "M" value above can be customized according to customer's requirements. If you need to order the connectors matching the "M" value, please contact us.
2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us;
3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
4. See Appendix III for details on installation openings.

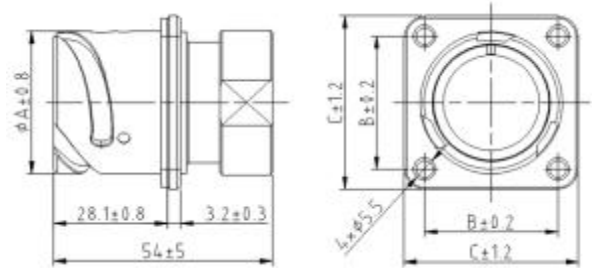
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM2L wall/box-mounted waterproof socket: suitable for bulkhead sealing]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C
20-M2	20	5× $\Phi 1.6$	GTCM2L20-M2P	35.3	33	43
20-M1	20	7× $\Phi 1.6$	GTCM2L20-M1P	35.3	33	43
24-M1	24	3× $\Phi 3.6$	GTCM2L24-M1P	41.7	38	50
24-M60	24	9× $\Phi 1.6$	GTCM2L24-M60P	41.7	38	50
28-M1	28	12× $\Phi 1.6$	GTCM2L28-M1P	46.5	42	54
32-M1	32	19× $\Phi 1.6$	GTCM2L32-M1P	52.8	46	60
36-M1	36	27× $\Phi 1.6$	GTCM2L36-M1P	58.4	52	66
36-M10	36	48× $\Phi 1.6$	GTCM2L36-M10P	58.4	52	66

Notes:

1. The models shown above are socket pins (male pins), please contact us if you need socket jacks (female pins);
2. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
3. See Appendix III for details on installation openings.

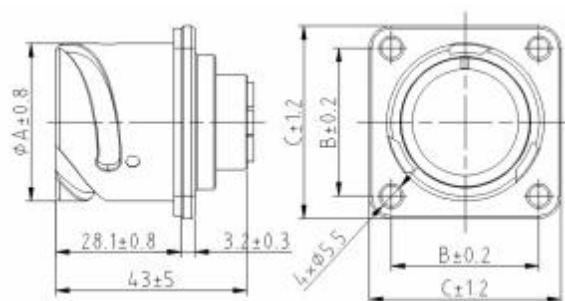
Control Type GTCM Series Connectors

Connector External Dimensions

[External dimensions of GTCM2A wall/box-mounted non-waterproof socket]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C
20-M2	20	5 $\times\Phi 1.6$	GTCM2A20-M2P	35.3	33	43
20-M1	20	7 $\times\Phi 1.6$	GTCM2A20-M1P	35.3	33	43
20-M60	20	1 $\times\Phi 8$	GTCM2A20-M60P	35.3	33	43
20-M61	20	3 $\times\Phi 2.4$	GTCM2A20-M61P	35.3	33	43
24-M1	24	3 $\times\Phi 3.6$	GTCM2A24-M1P	41.7	38	50
24-M60	24	9 $\times\Phi 1.6$	GTCM2A24-M60P	41.7	38	50
24-M61	24	7 $\times\Phi 2.4$	GTCM2A24-M61P	41.7	38	50
28-M1	28	12 $\times\Phi 1.6$	GTCM2A28-M1P	46.5	42	54
28-M61	28	3 $\times\Phi 5.75$	GTCM2A28-M61P	46.5	42	54
32-M1	32	19 $\times\Phi 1.6$	GTCM2A32-M1P	52.8	46	60
32-M9	32	4 $\times\Phi 5.75$	GTCM2A32-M9P	52.8	46	60
32-M60	32	3 $\times\Phi 8$	GTCM2A32-M60P	52.8	46	60
32-M61	32	4 $\times\Phi 5.75$	GTCM2A32-M61P	52.8	46	60
32-M62	32	2 $\times\Phi 8$	GTCM2A32-M62P	52.8	46	60
32-M63	32	12 $\times\Phi 2.4$	GTCM2A32-M63P	52.8	46	60
36-M1	36	27 $\times\Phi 1.6$	GTCM2A36-M1P	58.4	52	66
36-M3	36	8 $\times\Phi 3.6$	GTCM2A36-M3P	58.4	52	66
36-M10	36	48 $\times\Phi 1.6$	GTCM2A36-M10P	58.4	52	66
36-M60	36	4 $\times\Phi 8$	GTCM2A36-M60P	58.4	52	66
36-M61 36		10 $\times\Phi 3.6$	GTCM2A36-M61P	58.4	52	66

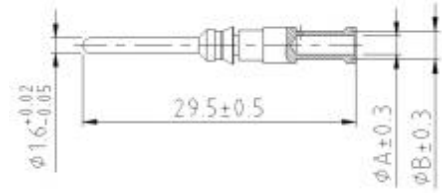
Notes:

1. The models shown above are socket pins (male pins), please contact us if you need socket jacks (female pins);
2. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
3. See Appendix III for details of installation openings.

Control Type GTCM Series Connectors

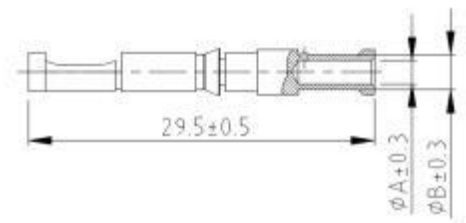
Contact parts specification and mating wire requirements (ordered separately)

[Φ1.6 contact pair]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Pins	113020100841	0.5	1	1.9	RT-4	M22520/2-01
	113020100842	75-1 1.5	1.4 1.8	2.4 2.8		
	113020101103	2 2.5	2 2.2	3		M22520/1-01
	113020100744			3.2		
	113020101178					

Note: Applicable to 20-M1; 20-M2; 24-M60; 28-M1; 32-M1; 36-M1; 36-M10



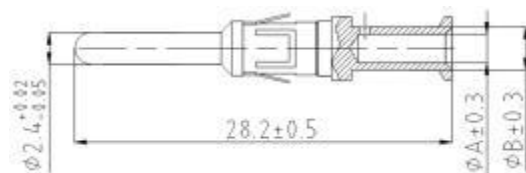
Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Jacks	113020601233	0.5	1	1.9	RT-4	M22520/2-01
	113020601232	0.75-1	1.4 1.8	2.4 2.8		
	113020601602	1.5	2 2.2	3		M22520/1-01
	113020601054	2		3.2		
	113020601689	2.5				

Note: Applicable to 20-M1; 20-M2; 24-M60; 28-M1; 32-M1; 36-M1; 36-M10

Control Type GTCM Series Connectors

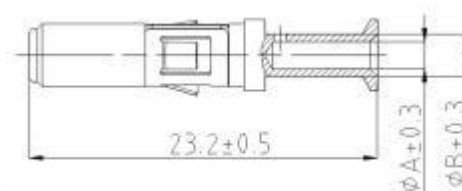
Contact parts specification and mating wire requirements (ordered separately)

[Φ2.4 contact pair]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Pins	115210011112	1.0	1.4	2.4	RT-2B	M22520/1-01
	115210011106	1.5	1.8	2.8		
	115210011108	2.5	2.2	3.2		
	115210011110	4.0	2.8	4.0		

Note: Applicable to 20-M61; 24-M61; 32-M63

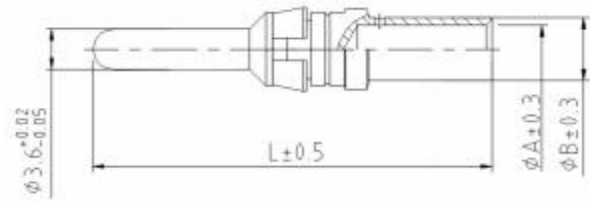


Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Jacks	115310016012	1.0	1.4	2.4	RT-2B	M22520/1-01
	115310016006	1.5	1.8	2.8		
	115310016008	2.5	2.2	3.2		
	115310016010	4.0	2.8	4.0		

Note: Applicable to 20-M61; 24-M61; 32-M63

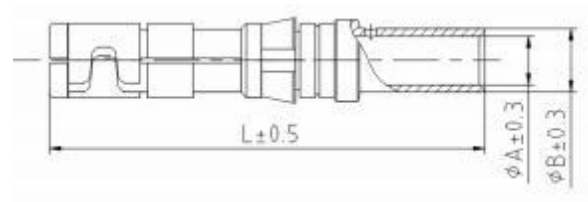
Control Type GTCM Series Connectors

Contact parts specification and mating wire requirements (ordered separately)
 [Φ3.6 contact pair]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	L	Disassembly tool	Crimping tool
Pins	113020101192	1.5	1.8	2.8	34.6	YJQ-M309	
	114020501901	2.5	2.5 3.2	3.6 4.6	34.6		
	113020100964	4	4.3 4.6	5.6 6	35.6	RTSCA-30	YJQ-M300
	113020100764	6			35.6		
	113020101151	10			35.6		

Note: For 24-M1 only

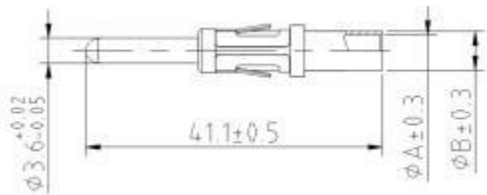


Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	L	Disassembly tool	Crimping tool
Jacks	113020601692	1.5	1.8	2.5 2.8	3.6 37.2	YJQ-M309	
	113020601359	2.5	3.2	4.3 4.6	5.6 6 37.2		
	113020601378	4	4.6		38.2	RTSCA-30	YJQ-M300
	113020601103	6			38.2		
	113020601659	10			38.2		

Note: For 24-M1 only

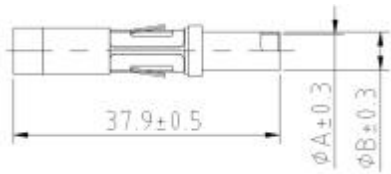
Control Type GTCM Series Connectors

Contact parts specification and mating wire requirements (ordered separately)
[Φ3.6 contact pair 2]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Pins	113020100246	1.5	1.8	3	RTSCA-08	YJQ-M309
	113020100237	2.5	2.2 3	3.2 4		
	113020100245	4	4.3 4.7	5.5 6.5		YJQ-M300
	113020100236	6				
	113020100580	10				

Note: Applicable to 36-M3; 36-M61

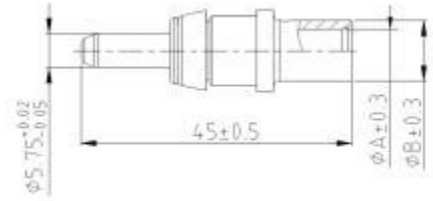


Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Jacks	113020600366	1.5	1.8 2.2	3	RTSCA-08	YJQ-M309
	113020600356	2.5	3	3.2		
	113020600365	4	4.3 4.7	4		YJQ-M300
	113020600344	6		5.5 6.5		
	113020600770	10				

Note: Applicable to 36-M3; 36-M61

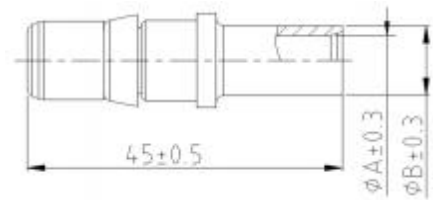
Control Type GTCM Series Connectors

Contact parts specification and mating wire requirements (ordered separately)
 [Φ5.75 contact pair]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Pins	115210011701	6	3.5	5.5	RTSCB-59	YQK-70
	115210011702	10	4.5 5.7	6		
	115210011703	16	7.2 2.8	8.5		
	115210011704	25		10		
	115210011706	4		4		

Note: Applicable to 28-M61; 32-M61

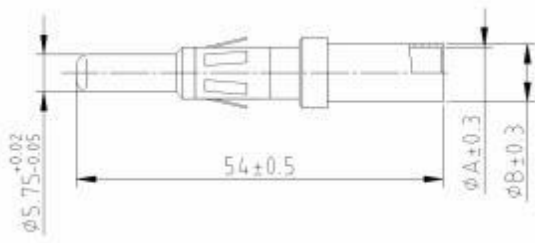


Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Jacks	115310017501	6	3.5	5.5 6	RTSCB-59	YQK-70
	115310017502	10	4.5 5.7	8.5		
	115310017503	16	7.2 2.8	10		
	115310017504	25		4		
	115310017506	4				

Note: Applicable to 28-M61; 32-M61

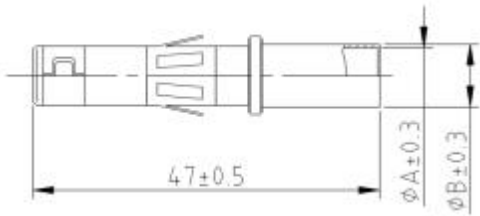
Control Type GTCM Series Connectors

Contact parts specification and mating wire requirements (ordered separately)
[Φ5.75 contact pair 2]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Pins	113020100207	6	3.5	5	RTSCA-10	YQK-70
	113020100195	10	4.6	6.6		
	113020100328	16	6	9		
	113020100196	25	7.6	11		

Note: For 32-M9 only

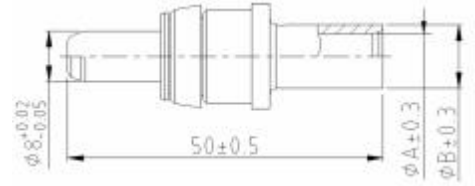


Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Jacks	113020600315	6	3.5	5	RTSCA-10	YQK-70
	113020600303	10	4.6	6.6		
	113020600467	16	6	9		
	113020600304	25	7.6	11		

Note: For 32-M9 only

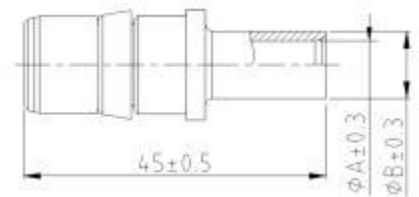
Control Type GTCM Series Connectors

Contact parts specification and mating wire requirements (ordered separately)
 [Φ8 contact pair]



Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Pins	115210011801	16	5.7	8.5	RTSCB-57	YQK-70
	115210011802	25	7.2 8.6	10		
	115210011803	35	10.2 4.5	12.5		
	115210011804	50		14.5 6		
	115210011805	10				

Note: Applicable to 20-M60; 32-M60; 32-M62; 36-M60



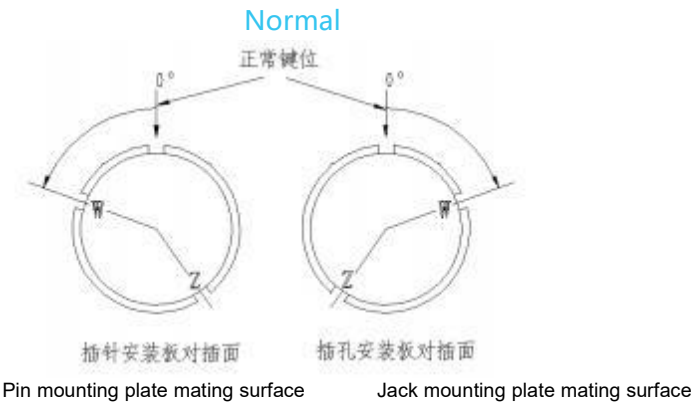
Type	Part numbers	Adaptable wire mm ²	ΦA	ΦB	Disassembly tool	Crimping tool
Jacks	115310017701	16	5.7	8.5	RTSCB-57	YQK-70
	115310017702	25	7.2 8.6	10		
	115310017703	35	10.2 4.5	12.5		
	115310017704	50		14.5 6		
	115310017705	10				

Note: Applicable to 20-M60; 32-M60; 32-M62; 36-M60

Control Type GTCM Series Connectors

Key shift

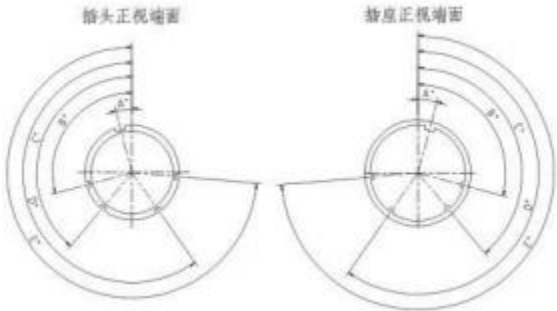
[Insulator key shift]



Type chart	Key angle		
	N	W	Z
20-M2	0	30	120
20-M1	0	75	285
20-M61	0	75	285
24-M60	0	80	150
24-M61	0	80	150
28-M1	0	70	135
32-M1	0	35	100
32-M63	0	35	100
36-M1	0	70	130
36-M10 0		70	130

[GTCMK series housing key shift]

Front facing end face of plug Front facing end face of socket

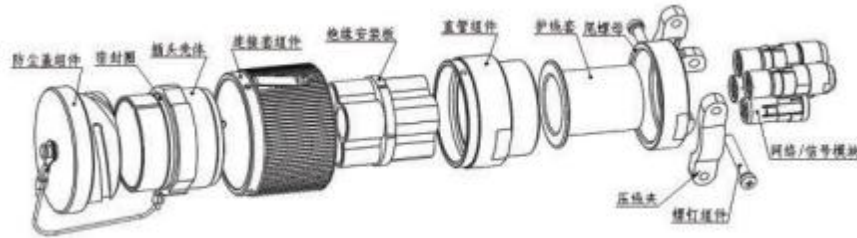


Key	Key angle					Color bank
	A°	B°	C°	D°	E°	
N	0	105	140	215	265	None
W	15	105	140	215	265	Red
X	25	105	140	215	265	White
Y	35	105	140	215	265	Blue
Z	55	105	140	215	265	Pink

Network Type GTCN Series Connectors

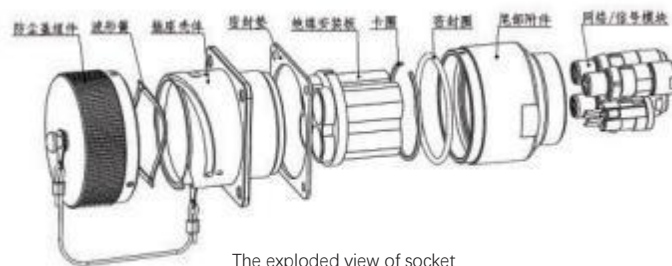
Exploded view

Dust cover assembly Seal ring Plug housing Connecting sleeve assembly Insulation installation plate Straight pipe assembly
Bushing Tail nut Crimping clamp Screw assembly Network/Signal module



The exploded view of plug

Dust cover assembly Waveform spring Socket housing Seal gasket
Insulation installation plate Circlip Seal ring Tail accessories Network/Signal module



The exploded view of socket

Configuration table

Optional materials	① Connector	② Module (ordered separately)	③ Contact parts for modules (ordered separately)	④ Dust cover assembly (ordered separately)	⑤ Accessories for reserved threaded structures (ordered separately)
Graphical symbol	 Plug  Socket	 Jack - pin module  Pin- jack module	 Pin (male pin)  Jack (female pin)	 Dust cover assembly of plug  Dust cover assembly of socket	/
Recommended configurations	Option 1: ①+②+③ Option 2: ①+②+③+④ Option 3: ①+②+③+④+⑤				
Selection notes	- Each connector has a plug and a socket, which can be configured with network modules and signaling modules; - The specific structure of the connectors is shown in <P35-P42 Connector Appearance and Mounting Dimensions>; - GTCN pin-to-jack modules (network modules) and GTCS pin modules (signaling modules) are recommended for the pin-mount board side of the connector; GTCN jack-pin modules (network modules) and GTCS jack modules (signaling modules) are recommended for the jack-mount side; - See <P45-P46 Module and Contact Parts Selection List> for module and contact parts options; - See (Appendix I Dust Covers (Ordered Separately)) for dust cover assembly. - Please contact us for accessories for reserved threaded structures.				

Network Type GTCN Series Connectors

Configuration table

Example	Illustration
Modules mixed for use	Q4 Module Q8 Module QG Module GTCS-1 module GTCS-1.6 module GTCS-2.8 module
Network module naming diagram	Module housing Module contacts Jack-Pin Module Pin-Jack Module X-X Module Module contacts Module housings

Technical Parameters

[Electrical parameters - network module]

Parameters	Q4S Module	Q4 Module	Q8 Module	QG Module
Number of terminals	4×Φ0.8 2A	4×Φ1 4A	8×Φ0.8 2A	4×2×Φ0.6 0.5A
Rated current	50V	50V	50V	50V
Rated voltage	650V	1400V	650V	500V
Withstanding voltage	≤8mΩ	≤5mΩ	≤8mΩ	≤12mΩ
Contact resistance	≥800MΩ	≥1500MΩ 100Mbps	≥1500MΩ	≥1500MΩ
Insulation resistance	100Mbps	Cat.5 and above	100Mbps	1000Mbps
Network performance	Cat.5 and above	AWG(26~17) ≤2.4mm/pin	Cat.5e and above	Cat.6A and above
Applicable cables	AWG(26~20) ≤2.3mm/pin		AWG(26~20) ≤2.1mm/pin	AWG(28~22) ≤1.8mm/pin
Wiring specifications				
Outer diameter of applicable core wire				

Network Type GTCN Series Connectors

Technical Parameters

[Electrical Parameters - Signal Module]

Parameters	GTCN-1 module	GTCN-1.6 module	GTCN-2.8 module
Number of terminals	5×Φ1 5A	4×Φ1.6 13A	3×Φ2.8 25A
Rated current	250V	250V	250V
Rated voltage	2500V	2500V	2500V
Withstanding voltage	≤5mΩ	≤2.5mΩ	≤1.5mΩ
Contact resistance	≥5000MΩ	≥5000MΩ	≥5000MΩ
Insulation resistance	≤3mm/pin	≤3.6mm/pin	≤4.8mm/pin
Cable O.D.	0.25 to 1mm ²	0.14 to 2.5mm ²	1.5 ~ 4mm ²
Wiring specifications			

[Mechanical parameters]

- Mechanical life: 500 cycles
- Vibration: meet GB/T 21563 requirements for Class I Level B vibration
- Impact: to meet GB/T 21563 requirements for Class I Level B impact

[Other parameters]

- Operating temperature: -55℃~+125℃
- Humidity: 95% (at 40℃)
- Protection class: IP67 (with suitable tail accessories)
- Environmental friendliness: RoHS
- Material: housing: aluminum alloy;
Insulator: engineering plastics; Flame retardant rating: EN 45545
Pinhole parts: copper alloy;
- Surface treatment: housing - oxidized/ galvanized nickel alloy
Pinhole – surface treatment: gold-plated

Network Type GTCN Series Connectors

Model Definition

GTCNK 6 L 20 -N1 S M 20 G A W

① Name of the series:

GTCN: network type -single key structure

GTCNK: network type-5 key structure

② Type of connector:

0: Individually mounted socket - square plate

1: Individually mounted socket - round plate

2: Wall/Box-mounted socket - square plate

3: Wall/Box-mounted socket - round plate

4: Socket without mounting flange

9: 90° elbow socket - square plate

5: 90°elbow socket - round plate

6: Straight plug

8: 90° elbow plug

③ Protection:

L : Waterproof

A : Non-waterproof

④ Housing number:

20, 28, 32, 36

④ + ⑤ Arrangement of contact parts: See the type chart table

⑥ Type of contact:

P: Pin mounting plate

S: Socket/Jack mounting plate

⑦ Tail outlet method:

B: Wire clamp, non waterproof

LF: Straight pipe with hose clamp

M: Reserved metric threads

Omitted: No tail

⑧ Cable outlet: type B/LF: Omitted;

Type M: e.g. 25 indicates reserved thread M25:

Housing surface treatment:

Omitted: Oxidized black

G: Oxidized olive drab

Z: Zinc-plated nickel alloy (galvanized nickel alloy)

⑩ Extension model:

¹¹Basic (omitted), A, B;

¹¹Transpose:

N: normotopia (omitted); W; X; Y; Z

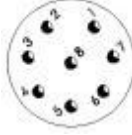
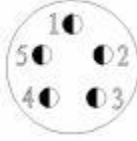
Notes: 1. Modules and contact parts are ordered separately; please refer to <P45-P46 Modules and Contact Parts Selection List> for detail.
2. Please contact us for expansion models.

Network Type GTCN Series Connectors

Contact parts arrangement (viewed from the front of the pin insulator)



[Module arrangement]

Chart	Module series			
Network Module	 Q4S	 Q4	 Q8	 QG
Signal Module	 GTCS-1	 GTCS-1.6	 GTCS-2.8	

[Connector arrangement]

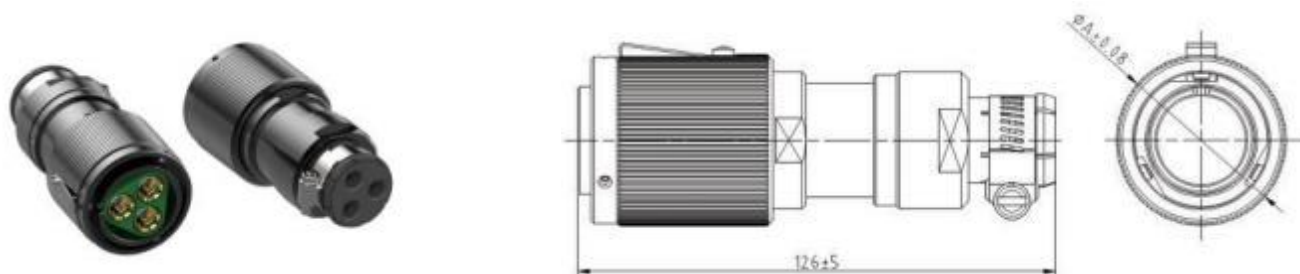
Type chart arrangement	Adaptor Modules			Remarks
	Diagram	Network Module	Signal Module	
28-N1			/	See P45< Q4S Module and Contact Parts Selection List> for module and contact selection.
32-N2		Module name: Q4S Applicable cable: Cat.5 Transmission rate: 100Mbps Wire specification: AWG(26~20) O.D. of applicable core wire.: ≤2.3mm/pin		
20-N1				1. Modules can be mixed for use; 2. For details on module and contact selection, see P45-P46 <Module and Contact Parts Selection List>.
32-N1		Module name: Q4 Applicable cable: Cat.5 Transmission rate: 100Mbps Wire specification: AWG(26~17) O.D. of applicable core wire.: ≤2.4mm/pin	Module name: GTCS-1 Applicable cable: ≤3mm/pin Number of contacts and specifications: 5×Φ1	
32-N3		Module name: Q8 Applicable cable: cat.5e Transmission rate: 1000Mbps Wire specification: AWG(26~20) O.D. of applicable core wire.: ≤2.1mm/pin	Module name: GTCS-1.6 Applicable cable: ≤3.6mm/pin Number of contacts and specifications: 4×Φ1.6	
36-N1		Module name: QG Applicable cable: cat.7 Transmission Rate: 10000Mbps Wire specification: AWG(28~22) O.D. of applicable core wire.: ≤1.8mm/pin	Module name: GTCS-2.8 Applicable cable: ≤4.8mm/pin Number of contacts and specifications: 3×Φ2.8	

Note: Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable.

Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCN6L-LF waterproof plug]



Plug appearance

Plug external dimensions

Type chart arrangement	Housing number	Model number	Adaptor module	number of modules	ΦA	Cable O.D.
20-N1	20	GTCN6L20-N1SLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	45	Φ5~Φ9.5
28-N1	28	GTCN6L28-N1SLF	Q4S	3	56	3×(Φ5~Φ8)
32-N1	32	GTCN6L32-N1SLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	62.5	3×(Φ5~Φ9.5)
32-N2	32	GTCN6L32-N2SLF	Q4S	4	62.5	4×(Φ5~Φ8)
32-N3	32	GTCN6L32-N3SLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	62.5	2×(Φ5~Φ9.5)
36-N1	36	GTCN6L36-N1SLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	68	4×(Φ5~Φ9.5)

Notes:

1. The adaptor module is ordered separately.
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable.
3. The models shown above are plug jack mounting plates and are recommended for use with GTCN jack-pin modules (network modules) and GTCS jack modules (signal modules).
4. Contact us if you need a plug pin mounting plate.
5. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.

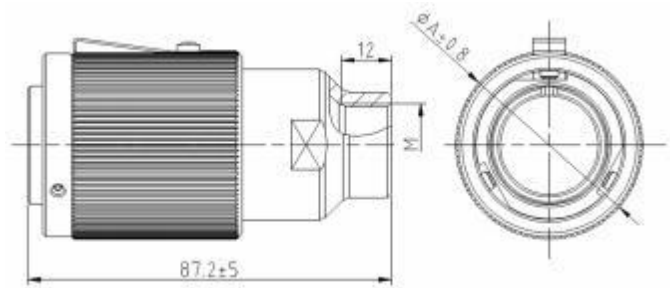
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCN6L-M waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Model number	Adaptor modules	Number of modules	ΦA	M
20-N1	20	GTCN6L20-N1SM20	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	45	M20x1.5
28-N1	28	GTCN6L28-N1SM32	Q4S	3	56	M32x1.5
32-N1	32	GTCN6L32-N1SM32	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	62.5	M32x1.5
32-N2	32	GTCN6L32-N2SM32	Q4S	4	62.5	M32x1.5
32-N3	32	GTCN6L32-N3SM32	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	62.5	M32x1.5
36-N1	36	GTCN6L36-N1SM40	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	68	M40x1.5

Notes:

1. The adapter module is ordered separately;
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable;
3. Dimension M can be customized and developed according to customer needs, if you have such need, please contact us;
4. The models shown above are plug jack mounting plates, and are recommended for use with GTCN jack-pin modules (network modules) and GTCS jack modules (signal modules);
5. Please contact us if you need a plug pin mounting plate;
6. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
7. Connectors adapted with M should be purchased separately; please contact us if you need them..

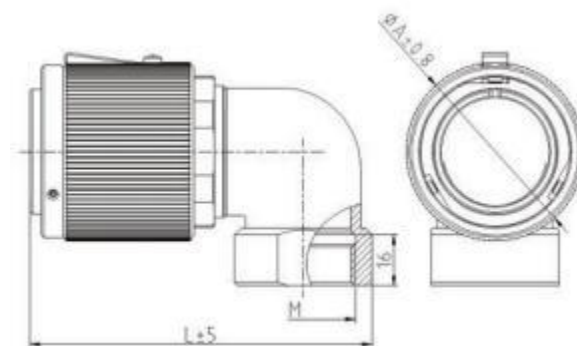
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCN8L-M waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Model number	Adaptor modules	Number of modules	ΦA	M	L
20-N1	20	GTCN8L20-N1SM20	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	45	M20x1.5	88
28-N1	28	GTCN8L28-N1SM32	Q4S	3	56	M32x1.5	108
32-N1	32	GTCN8L32-N1SM32	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	62.5	M32x1.5	108
32-N2	32	GTCN8L32-N2SM32	Q4S	4	62.5	M32x1.5	108
32-N3	32	GTCN8L32-N3SM32	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	62.5	M32x1.5	108
36-N1	36	GTCN8L36-N1SM40	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	68	M40x1.5	114

Notes:

1. The adaptor module is ordered separately.
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable.
3. Dimension M can be customized according to customer needs, if you have such needs, please contact us.
4. The models shown above are plug jack mounting plates and are recommended for use with GTCN jack-pin modules (network modules) and GTCS jack modules (signal modules).
5. Contact us if you need a plug pin mounting plate.
6. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
7. Connectors adapted with M should be ordered separately; please contact us if you need them.

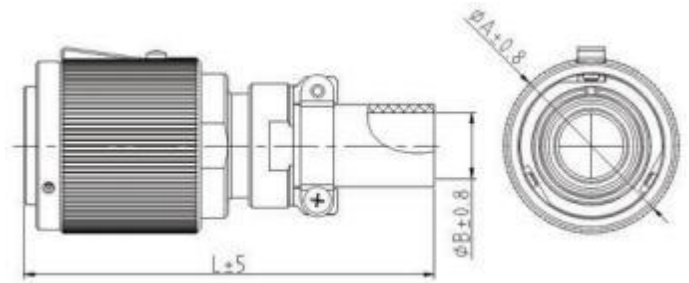
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCN6A-B non-waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Model number	Adaptor modules	Number of modules	ΦA	Adaptable cable O.D. ΦB	L
20-N1	20	GTCN6A20-N1SB19	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	45	19	120
28-N1	28	GTCN6A28-N1SB24	Q4S	3	56	24	126
32-N1	32	GTCN6A32-N1SB24	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	62.5	24	126
32-N2	32	GTCN6A32-N2SB24	Q4S	4	62.5	24	126
32-N3	32	GTCN6A32-N3SB24	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	62.5	24	126
36-N1	36	GTCN6A36-N1SB31	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	68	31	123

Notes:

1. The adapter module is ordered separately.
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable.
3. Dimension B can be customized according to customer needs, if you have such needs, please contact us.
4. The models shown above are plug jack mounting plates and are recommended for use with GTCN jack-pin modules (network modules) and GTCS jack modules (signal modules).
5. Contact us if you need a plug pin mounting plate.
6. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.

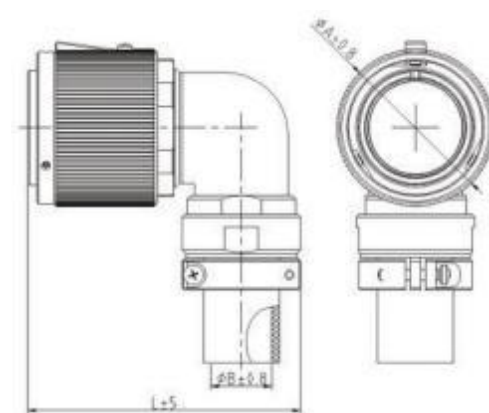
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCN8A-B waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Model number	Adaptor modules	Number of modules	ΦA	Adaptable cable O.D. ΦB	L
20-N1	20	GTCN8A20-N1SB19	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	45	19	94
28-N1	28	GTCN8A28-N1SB24	Q4S	3	56	24	110
32-N1	32	GTCN8A32-N1SB24	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	62.5	24	110
32-N2	32	GTCN8A32-N2SB24	Q4S	4	62.5	24	110
32-N3	32	GTCN8A32-N3SB24	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	62.5	24	110
36-N1	36	GTCN8A36-N1SB31	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	68	31	116

Notes:

1. The adapter module is ordered separately.
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable.
3. Dimension B can be customized according to customer needs, if you have such needs, please contact us.
4. The models shown above are plug jack mounting plates and are recommended for use with GTCN jack-pin modules (network modules) and GTCS jack modules (signal modules).
5. Contact us if you need a plug pin mounting plate.
6. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.

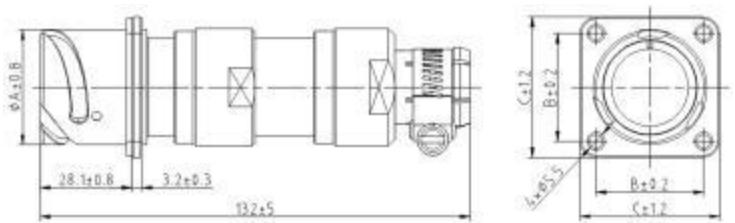
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCNOL-LF waterproof socket]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing Model number		Adaptor modules	Number of modules	ΦA	B	C	Cable OD
20-N1	20	GTCN0L20-N1PLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	35.3	33	43	Φ5~Φ9.5
28-N1	28	GTCN0L28-N1PLF	Q4S	3	46.5	42	54	3×(Φ5~Φ8)
32-N1	32	GTCN0L32-N1PLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	52.8	46	60	3×(Φ5~Φ9.5)
32-N2	32	GTCN0L32-N2PLF	Q4S	4	52.8	46	60	4×(Φ5~Φ8)
32-N3	32	GTCN0L32-N3PLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	52.8	46	60	3×(Φ5~Φ9.5)
36-N1	36	GTCN0L36-N1PLF	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	58.4	52	66	4×(Φ5~Φ9.5)

Notes:

1. The adapter module is ordered separately.
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable.
3. The models shown above are socket pin mounting plates and are recommended for use with GTCN pin-jack modules (network modules) and GTCS pin modules (signal modules).
4. Please contact us if you need a socket jack mounting plate.
5. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
6. See Appendix III for installation openings.

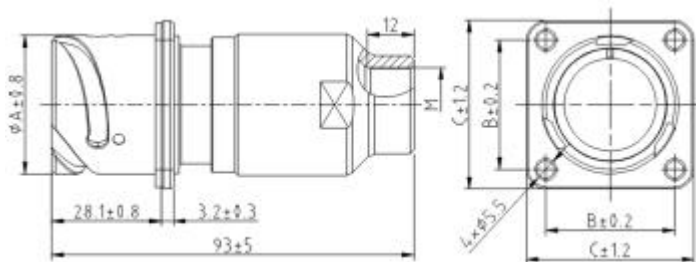
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions for GTCN0L-M waterproof socket]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing number	Model number	Adaptor modules	Number of modules	ϕA	B	C	M
20-N1	20	GTCN0L20-N1PM20	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	35.3	33	43	M20x1.5
28-N1	28	GTCN0L28-N1PM32	Q4S	3	46.5	42	54	M32x1.5
32-N1	32	GTCN0L32-N1PM32	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	52.8	46	60	M32x1.5
32-N2	32	GTCN0L32-N2PM32	Q4S	4	52.8	46	60	M32x1.5
32-N3	32	GTCN0L32-N3PM32	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	52.8	46	60	M32x1.5
36-N1	36	GTCN0L36-N1PM40	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	58.4	52	66	M40x1.5

Notes:

1. The adaptor module is ordered separately;
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable;
3. Dimension M can be customized and developed according to customer needs, if you have such need, please contact us;
4. The models shown above are socket pin mounting plates and are recommended for use with GTCN pin-jack modules (network modules) and GTCS pin modules (signal modules);
5. Please contact us if you need a socket jack mounting plate;
6. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
7. Connectors adapted with M should be ordered separately; please contact us if you need them.
8. See Appendix III for installation openings.

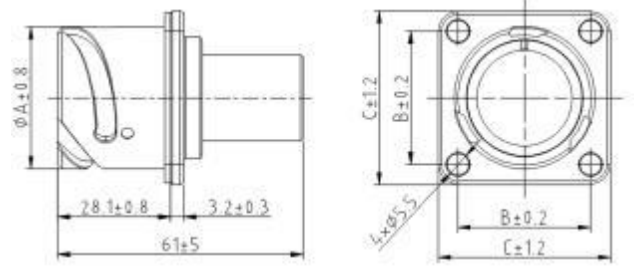
Network Type GTCN Series Connectors

Connector External Dimensions

[External dimensions of GTCN2A wall/box-mounted non-waterproof socket]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing Model number		Adaptor modules	Number of modules	ΦA	B	C	Cable O.D.
20-N1	20	GTCN2A20-N1P	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	1	35.3	33	43	Φ5~Φ9.5
28-N1	28	GTCN2A28-N1P	Q4S	3	46.5	42	54	3×(Φ5~Φ8)
32-N1	32	GTCN2A32-N1P	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	3	52.8	46	60	3×(Φ5~Φ9.5)
32-N2	32	GTCN2A32-N2P	Q4S	4	52.8	46	60	4×(Φ5~Φ8)
32-N3	32	GTCN2A32-N3P	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	2	52.8	46	60	3×(Φ5~Φ9.5)
36-N1	36	GTCN2A36-N1P	Q4/Q8/QG (GTCS-1/GTCS-1.6/GTCS-2.8)	4	58.4	52	66	4×(Φ5~Φ9.5)

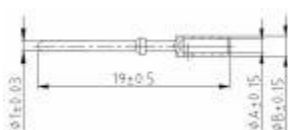
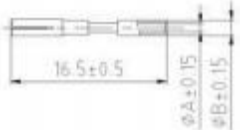
Notes:

1. The adapter module is ordered separately;
2. Modules Q4/Q8/QG/GTCS-1/GTCS-1.6/GTCS-2.8 are mixable;
3. The models shown above are socket pin mounting plates and are recommended for use with GTCN pin-jack modules (network modules) and GTCS pin modules (signal modules);
4. Please contact us if you need a socket jack mounting plate;
5. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
6. See Appendix III for installation openings.

Network Type GTCN Series Connectors

External Dimensions of Contact Parts for Modules

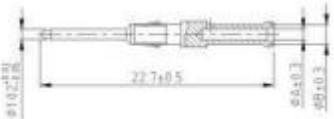
[External dimensions of contact parts for network modules]

Type	Appearance	Part numbers	mm ²	Adaptor modules AWG	A	B	Remarks
Pins		114020502355	0.34	awg(26-22)	0.9 1.1	1.6 1.8	For Q4
		114020502354	.5 1	awg(24-20)	1.4	2.1	
		114020502353		awg(20-17)			
Jacks		114021002429	0.34	awg(26-22)	0.9 1.1	1.6 1.8	For Q4
		114021002428	.5 1	awg(24-20)	1.4	2.1	
		114021002427		awg(20-17)			
Pins		114020502358	.34 0.5	awg(26-22)	0.9 1.1	1.6 1.6	For Q4S/Q8
		114020502357		awg(24-20)			
Jacks		114021002483	.34 0.5	AWG (26-22)	0.9	1.5	
		114021002482		AWG (24-20)	1.1	1.5	
Pins		114020502004 0.25~0.34 AWG(28-22) 0.9 1.3					For QG
Jacks		114021002533 0.25~0.34 AWG(28-22) 0.8 1.2					

Network Type GTCN Series Connectors

External Dimensions of Contact Parts for Modules

[External dimensions of contact parts for signal modules]

Type	Appearance	Part numbers	Adaptor module mm ²	A	B	Remarks
Pins		113020100229	0.25-0.37	0.8	2.0	For GTCS-1
		113020100101	0.5	1.1	1.9	
		113020100239	0.75-1	1.3	2.4	
Jacks		113020600321	0.25-0.37	0.8	2.0	For GTCS-1
		113020600144	0.5	1.1	1.9	
		113020600323	0.75-1	1.3	2.2	
Pins		115210010801	0.14-0.37	0.9	2.1	For GTCS-1.6
		115210010802	0.5	1.1	2.1	
		115210010804	1.0	1.4	2.6	
		115210010805	1.5	1.7	3.0	
		115210010901	2.5	2.2	3.2	
Jacks		115310016101	4-	0.9	2.1	For GTCS-1.6
		115310016102	0.37	1.1	2.1	
		115310016104	0.5	1.4	2.6	
		115310016105	1.0	1.7	3.0	
		115310016106	1.5	2.2	3.2	
Pins		113020100251	1.5	1.8	2.8	For GTCS-2.8
		113020100696	2.5	2.5	3.6	
		113020100247	4	2.9	4.2	
Jacks		113020600373	1.5	1.8	2.8	For GTCS-2.8
		113020600417	2.5	2.5	3.6	
		113020600369	4	2.8	4.2	

Network Type GTCN Series Connectors

Network Module and Contact Parts Selection List (Ordered Separately)

[Q4S module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Pin-Jack Module-Q4S	113020601629	≤2.3mm/pin	GTCN Jack-Pin Module-Q4S	113020101133
2	H80JJB001-H34GC Jacks	114021002483	0.34mm ²	H80JJS003-H34GC Pins	114020502358
3	H80JJB001-H50GC Jacks	114021002482	0.5mm ²	H80JJS003-H50GC Pins	114020502357

[Q4 module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Pin-Jack Module-Q4	113022100044	≤2.4mm/pin	GTCN Jack-Pin Module-Q4	113022600101
2	T10JJB002-H34GC Jacks	114021002429	0.34mm ²	T10JJS006-H34GC Pins	114020502355
3	T10JJB002-H50GC Jacks	114021002428	0.5mm ²	T10JJS006-H50GC Pins	114020502354
4	T10JJB002-T10GC Jacks	114021002427	1.0mm ²	T10JJS006-T10GC Pins	114020502353

[Q8 module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Pin-Jack Module-Q8	113020101159	≤2.1mm/pin	GTCN Jack-Pin Module-Q8	113020601661
2	H80JJB001-H34GC Jacks	114021002483	0.34mm ²	H80JJS003-H34GC Pins	114020502358
3	H80JJB001-H50GC Jacks	114021002482	0.5mm ²	H80JJS003-H50GC Pins	114020502357

[QG module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Pin-Jack Module-QG	113020101163	≤1.8mm/pin	GTCN Jack-Pin Module-QG	113020601664
2	H60SFB001-H34GC Jacks	114021002533	0.34mm ²	H60SFS001-H34GC Pins	114020502004

Network Type GTCN Series Connectors**Signal Module and Contact Parts Selection List (Ordered Separately)**

[GTCN-1 module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Jack Insulator-Φ1	114060202528	≤3mm	GTCN Pin Insulator-Φ1	114060102784
2	T10WAB001-(H25-H34) GC Jack Assembly	113020600321	0.25-0.37mm ²	T10WAS001-(H25-H34) GC pins	113020100229
3	T10WAB001-H50GC Jack Assembly	113020600144	0.5mm ²	T10WAS001-H50GC Pin Assembly	113020100101
4	T10WAB001-T10GC Jack Assembly	113020600323	0.75-1.0mm ²	T10WAS001-T10GC Pin Assembly	113020100239

[GTCN-1.6 module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Jack Insulator-Φ1.6	114060202524	≤3.6mm	GTCN Pin Insulator-Φ1.6	114060102781
2	HDC-DGFT (0.14-0.37) Female Pin	115310016101	0.14-0.37mm ²	HDC-DGMT (0.14-0.37) Male Pin	115210010801
3	HDC-DGFT 0.5 Female Pin	115310016102	0.5mm ²	HDC-DGMT0.5 Male Pin	115210010802
4	HDC-DGFT (0.75-1.0) Female Pin	115310016104	1.0mm ²	HDC-DGMT (0.75-1.0) Male Pin	115210010804
5	HDC-DGFT 1.5 Female Pin	115310016105	1.5mm ²	HDC-DGMT 1.5 Male Pin	115210010805
6	HDC-DGFT 2.5 Female Pin	115310016106	2.5mm ²	HDC-DGMT 2.5 Male Pin	115210010901

[GTCN-2.8 module and its contact parts selection list]

Serial number	Name	Part numbers	Wire diameter	Counterpart name	Counterpart ordering number
1	GTCN Jack Insulator-Φ2.8	114060202527	≤4.8mm	GTCN Pin Insulator-Φ2.8	114060102783
2	T28WAB001-(T10-T15) GC Jack Assembly	113020600373	1.5mm ²	T28WAS001-(T10-T15) GC Pin Assembly	113020100251
3	T28WAB001-(T25-T30) GC Jack Assembly	113020600417	2.5mm ²	T28WAS001-(T25-T30) GC Pin Assembly	113020100696
4	T28WAB001-(T35-T40) GC Jack Assembly	113020600369	4mm ²	T28WAS001-(T35-T40) GC Pin Assembly	113020100247

Network Type GTCN Series Connectors

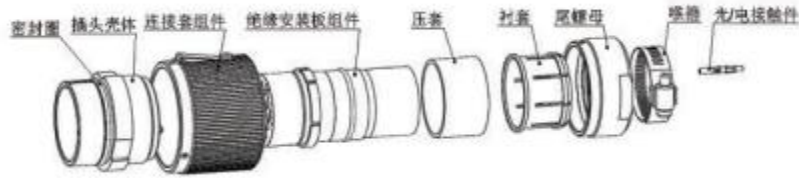
Model of Specialized Tools (Ordered Separately)

Module Type	Disassembly tool		Crimping tool	
	Module disassembly tool	Pinhole disassembly tool	Model number	Applicable crimping range
Q4S module	RTSCB-59	Not required	M22520/2-01	0.15-0.5 mm ² or 26AWG-20AWG
Q4 module	RTSCB-57	Not required	m22520/2-01	0.15-0.5 mm ² or 26AWG-20AWG
			m22520/1-01	0.5-3 mm ² or 20AWG-12AWG
Q8 module	RTSCB-57	Not required	M22520/2-01	0.15-0.5 mm ² or 26AWG-20AWG
QG module	RTSCB-57	Not required	M22520/2-01	0.15-0.5 mm ² or 26AWG-20AWG
GTCS-1 module	RTSCB-57	RTSCA-01	m22520/2-01	0.15-0.5 mm ² or 26AWG-20AWG
			m22520/1-01	0.5-3 mm ² or 20AWG-12AWG
GTCS-1.6 module	RTSCB-57	HDC-HD-CX	m22520/2-01	0.15-0.5 mm ² or 26AWG-20AWG
			m22520/1-01	0.5-3 mm ² or 20AWG-12AWG
GTCS-2.8 module	RTSCB-57	RT-2B YJQ-M309		0.81-8.37mm ²

Optic Fiber GTCF Series Connectors

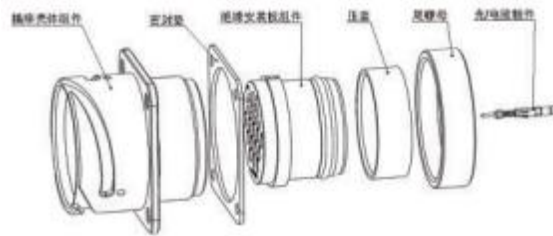
Exploded view

Seal ring Plug housing Connecting sleeve assembly Insulation installation plate assembly
Gland Bushing Tail nut Hose clamp Optical/electrical contact



The exploded view of plug

Socket housing assembly Seal gasket Insulation installation plate assembly Gland Tail nut Optical/electrical contact



The exploded view of socket

Configuration table

Optional materials	① Connector	② Contact parts (ordered separately)	④ Dust cover assembly (ordered separately)	⑤ Accessories for reserved threaded structures (ordered separately)
Graphical symbol	 Plug  Socket	 Jack Assembly (Female Pin)  Pin Assembly (Male Pin)	 Dust Cover Assembly of Plug  Dust Cover Assembly of Socket	/
Recommended configurations	Option 1: ① + ② Option 2: ①+②+③ Option 3: ①+②+③+④			
Selection notes	- Each connector has a plug and a socket, when the plug is configured with a female pin, the socket needs to be configured with a male pin, when the plug is configured with a male pin, the socket needs to be configured with a female pin; - For connector structure, see <P51-P61 Connector Appearance and Mounting Dimensions>. - For contact parts options, see <P62 Contact Parts Specifications and Mating Wire Requirements (Ordered Separately)>. - See <Appendix I Dust Covers (Ordered Separately)> for dust cover assembly. - Please contact us for accessories for reserved threaded structures.			

Optic Fiber GTCF Series Connectors

Technical Parameters

[Electrical Parameters]

- Insertion loss: $\leq 0.2\text{dB}$
- Return loss: $\geq 50\text{dB}$
- Repeatability (500 times): $\leq 0.5\text{dB}$
- Interchangeability: $\leq 0.3\text{dB}$
- Working temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

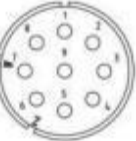
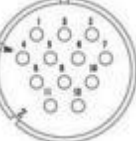
[Mechanical Parameters]

- Mechanical life: 500
- Vibration: meet GB/T 21563 requirements for Class 1, Level B vibration
- Impact: meet GB/T 21563 requirements for Class 1 Level B impact

[Electrical Parameters]

- Humidity: 95% (at 40°C)
- Protection class: IP67 (with suitable tail accessories)
- Environmental friendliness: RoHS
- Housing: aluminum alloy; surface treatment: oxidized/ galvanized nickel alloy
- Insulator: engineering plastics; Flame retardant rating: EN 45545
- Pinhole parts: stainless steel;
- Applicable fiber type: 50/125 multimode fiber;

Contact parts arrangement (viewed from the front of the pin insulator)

Contact arrangement	20-F1	20-F2	24-F1	28-F1	32-F1
Chart	 7×Φ1.6	 5×Φ1.6	 9×Φ1.6	 12×Φ1.6	 19×Φ1.6

Optic Fiber GTCF Series Connectors

Model Definition

	GTCF	6	L	20	-F1	S	D	20	Z	A	W
① Name of the series:											
GTCF: Optic fiber type - single key											
GTCFK: Optic fiber type - 5-key											
② Type of connector:											
0: Individually mounted socket											
2: Wall/box-mounted socket											
6: Straight plug											
8: 90° elbow plug											
③ Protection											
L: Waterproof											
A: Non-waterproof											
④ Housing number:											
20, 24, 28, 32											
④ + ⑤ Arrangement of contact parts: See the type chart											
Type of contact parts:											
P: Pin											
S: Jack											
⑦ Tail outlet method:											
A: Clip, waterproof, reinforced tensile type											
B: Clip, non-waterproof, reinforced tensile type											
D: Nut type											
M: Tail outlet with metric threads											
Omitted: No tail											
⑧ Outlet aperture:											
A,B,D type: for example, 20 indicates that the inner diameter of the outlet port is $\Phi 20$;											
M type: for example, 25 indicates that the inner thread of the outlet port is M25.											
⑨ Housing surface treatment:											
Omitted: Oxidized black											
Z: Zinc-plated nickel alloy (galvanized nickel alloy)											
⑩ Extension model:											
Basic (omitted), A, B;											
⑪ Transpose:											
N: normotopia (omitted); W; X;											

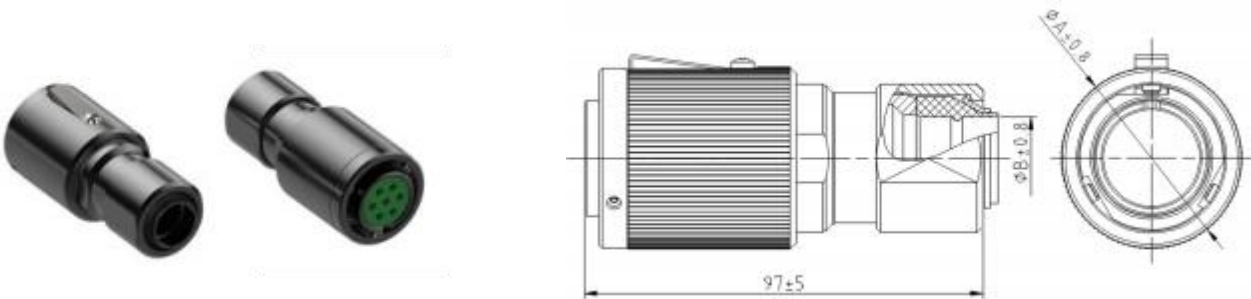
Notes:

1. Contact parts are ordered separately, see <P62 Contact Parts Specifications and Mating Wire Requirements (Ordered Separately)> for the ordering list;
2. ⑧ specifications, can be customized and developed according to customer needs;
3. Please contact us for extension model;

Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF6L-D waterproof plug: suitable for overall multi-core cables]



Plug appearance

Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB
20-F2	20	5×Φ1.6	gtcf6l20-f2sd(20)	45	20
20-F1	20	7×Φ1.6	gtcf6l20-f1sd(20)	45	20
24-F1	24	9×Φ1.6	gtcf6l24-f1sd(20)	51	20
28-F1	28	12×Φ1.6	gtcf6 l28-f1sd(22)	56	22
32-F1	32	19×Φ1.6	gtcf6l32-f1sd(26)	62.5	26

Notes:

- 1. The "B" value above can be customized according to customer needs, if you have such needs, please contact us.
- 2. The models shown above are plug jacks (female pins), if you need plug pins (male pins), please contact us.
- 3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.

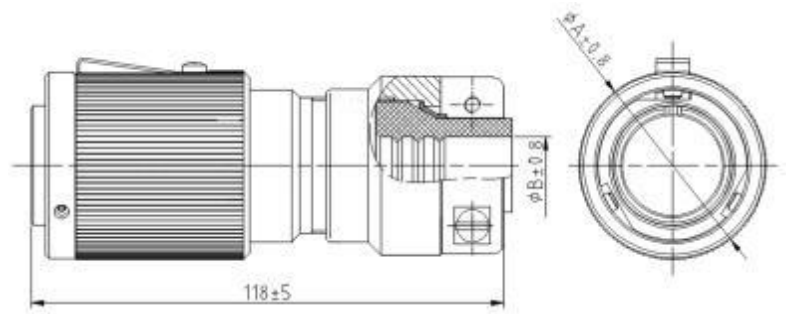
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF6L-A waterproof plug: suitable for overall multi-core cables]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB
20-F2	20	5×Φ1.6	gtcf6l20-f2sa(20)	45	16.5
20-F1	20	7×Φ1.6	gtcf6l20-f1sa(20)	45	16.5
24-F1	24	9×Φ1.6	gtcf6l24-f1sa(20)	51	20
28-F1	28	12×Φ1.6	gtcf6 l28-f1sa(22)	56	22
32-F1	32	19×Φ1.6	GTCF6L32-F1SA26)	62.5	26

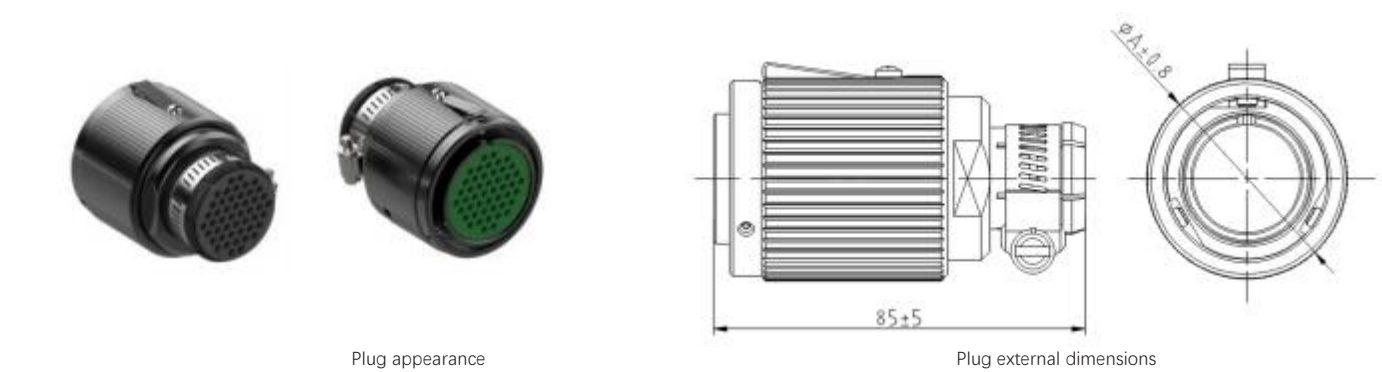
Notes:

1. The "B" value above can be customized according to customer needs, if you have such needs, please contact us.
2. The models shown above are plug jacks (female pins), if you need plug pins (male pins), please contact us.
3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.

Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF6L-L waterproof plug: suitable for bulkhead sealing]



Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA
20-F2	20	5×Φ1.6	GTCF6L20-F2SL	45
20-F1	20	7×Φ1.6	GTCF6L20-F1SL	45
24-F1	24	9×Φ1.6	GTCF6L24-F1SL	51
28-F1	28	12×Φ1.6	GTCF6L28-F1SL	56
32-F1	32	19×Φ1.6	GTCF6L32-F1SL	62.5

- Notes:
1. When the outer diameter of the cable ≥ 2.5mm, the protection level meets IP67; when the outer diameter of the cable is 1.8 ~ 2.5mm, the protection level meets IP66, and the rest meets IP54.
 2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
 3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

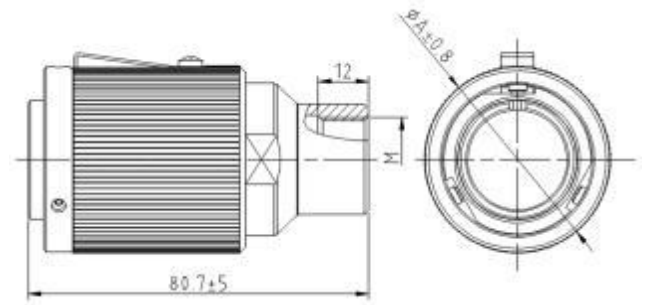
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF6L-M waterproof plug: suitable for connectors]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	M
20-F2	20	5× $\Phi 1.6$	GTCF6L20-F2SM20	45	M20×1.5
20-F1	20	7× $\Phi 1.6$	GTCF6L20-F1SM20	45	M20×1.5
24-F1	24	9× $\Phi 1.6$	GTCF6L24-F1SM25	51	M25×1.5
28-F1	28	12× $\Phi 1.6$	GTCF6 L28-F1SM32	56	M32×1.5
32-F1	32	19× $\Phi 1.6$	GTCF6L32-F1SM40	62.5	M40×1.5

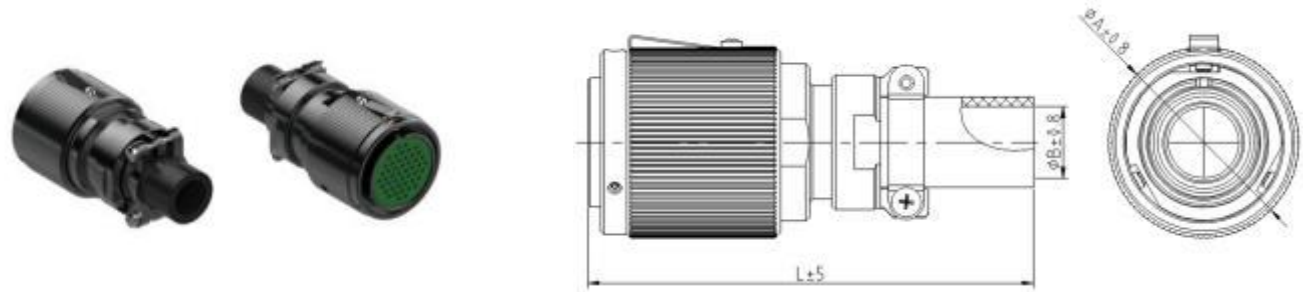
Notes:

1. The "M" value above can be customized according to customer's requirements. If you need to order the connectors matching the "M" value, please contact us.
2. The models shown above are plug jacks (female pins), please contact us if you need plug pins (male pins);
3. All of the configurations above have corresponding GTCMK (5-key) series; please contact us if you need them.

Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF6A-B non-waterproof plug: suitable for cables]



Appearance of nut retaining socket

Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB	L
20-F2	20	5×Φ1.6	GTCF6A20-F2SB16	45	19	119
20-F1	20	7×Φ1.6	GTCF6A20-F1SB16	45	19	119
24-F1	24	9×Φ1.6	GTCF6A24-F1SB16	51	19	119
28-F1	28	12×Φ1.6	GTCF6A28-F1SB19	56	24	126
32-F1	32	19×Φ1.6	GTCF6A32-F1SB24	62.5	24	126

Notes:

- 1. The "B" value above can be customized according to customer needs, if you have such needs, please contact us.
- 2. The models shown above are plug jacks (female pins), if you need plug pins (male pins), please contact us.
- 3. All of the structures above have corresponding GTCMK (5-key) series; o please contact us if you need them.

Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF8A-B non-waterproof elbow plug: suitable for cables]



Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	ΦB	L
20-F2	20	5×Φ1.6	GTCF8A20-F2SB16	45	19	94
20-F1	20	7×Φ1.6	GTCF8A20-F1SB16	45	19	94
24-F1	24	9×Φ1.6	GTCF8A24-F1SB16	51	19	100
28-F1	28	12×Φ1.6	GTCF8A28-F1SB19	56	24	110
32-F1	32	19×Φ1.6	GTCF8A32-F1SB24	62.5	24	110

- Notes:
1. The "B" value above can be customized according to customer needs, if you have such needs, please contact us.
 2. The models shown above are plug jacks (female pins), if you need plug pins (male pins), please contact us.
 3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.

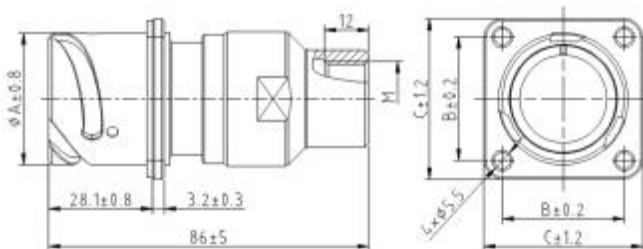
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCFOL-M waterproof socket: suitable for connectors]



Plug appearance



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ϕA	B	C	M
20-F2	20	5× $\phi 1.6$	GTCF0L20-F2PM20	35.3	33	43	M20×1.5
20-F1	20	7× $\phi 1.6$	GTCF0L20-F1PM20	35.3	33	43	M20×1.5
24-F1	24	9× $\phi 1.6$	GTCF0L24-F1PM25	41.7	38	50	M25×1.5
28-F1	28	12× $\phi 1.6$	GTCF0L28-F1PM32	46.5	42	54	M32×1.5
32-F1	32	19× $\phi 1.6$	GTCF0L32-F1PM32	52.8	46	60	M32×1.5

Notes:

1. The "M" value above can be customized according to customer's requirements. If you need to order the connectors matching the "M" value, please contact us.
2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us.
3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
4. See Appendix III for details on installation openings.

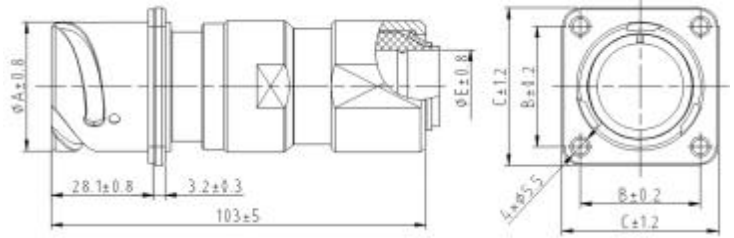
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCFOL-D individually mounted waterproof socket: for overall multi-core cables]



Appearance of nut retaining socket



Plug external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C	ΦE
20-F2	20	5× $\Phi 1.6$	gtcf0l20-f2pd(20)	35.3	33	43	20
20-F1	20	7× $\Phi 1.6$	gtcf0l20-f1pd(20)	35.3	33	43	20
24-F1	24	9× $\Phi 1.6$	gtcf0l24-f1pd(20)	41.7	38	50	20
28-F1	28	12× $\Phi 1.6$	gtcf0l28-f1pd(22)	46.5	42	54	22
32-F1	32	19× $\Phi 1.6$	gtcf0l32-f1pd(26)	52.8	46	60	26

Notes:

1. The "E" value above can be customized according to customer needs, if you have such need, please contact us.
2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us.
3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
4. See Appendix III for details on installation openings.

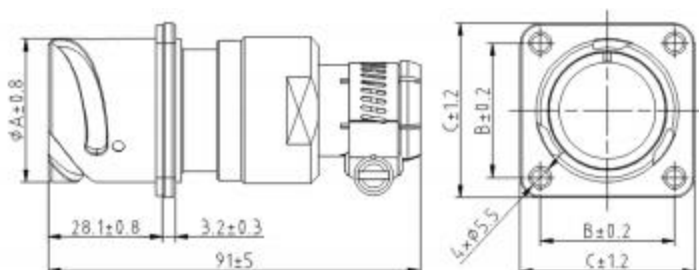
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCFOL-L individually mounted waterproof socket: suitable for bulkhead sealing]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C
20-F2	20	5×Φ1.6	GTCF0L20-F2PL	35.3	33	43
20-F1	20	7×Φ1.6	GTCF0L20-F1PL	35.3	33	43
24-F1	24	9×Φ1.6	GTCF0L24-F1PL	41.7	38	50
28-F1	28	12×Φ1.6	GTCF0L28-F1PL	46.5	42	54
32-F1	32	19×Φ1.6	GTCF0L32-F1PL	52.8	46	60

Notes:

1. When the outer diameter of the cable $\geq 2.5\text{mm}$, the protection level meets IP67; when the outer diameter of the cable is $1.8 \sim 2.5\text{mm}$, the protection level meets IP66, and the rest meets IP54.
2. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us;
3. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
4. See Appendix III for details on installation openings.

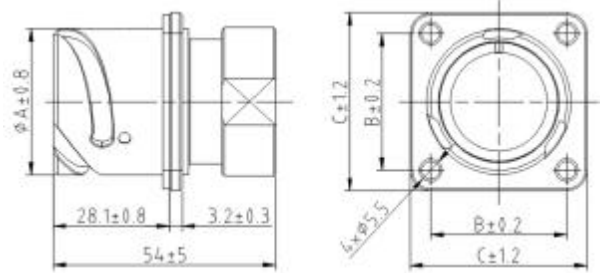
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF2L wall/box-mounted waterproof socket: for bulkhead sealing]



Socket appearance



Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C
20-F2	20	5× $\Phi 1.6$	GTCF2L20-F2P	35.3	33	43
20-F1	20	7× $\Phi 1.6$	GTCF2L20-F1P	35.3	33	43
24-F1	24	9× $\Phi 1.6$	GTCF2L24-F1P	41.7	38	50
28-F1	28	12× $\Phi 1.6$	GTCF2L28-F1P	46.5	42	54
32-F1	32	19× $\Phi 1.6$	GTCF2L32-F1P	52.8	46	60

Notes:

1. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us.
2. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
3. See Appendix III for details on installation openings.

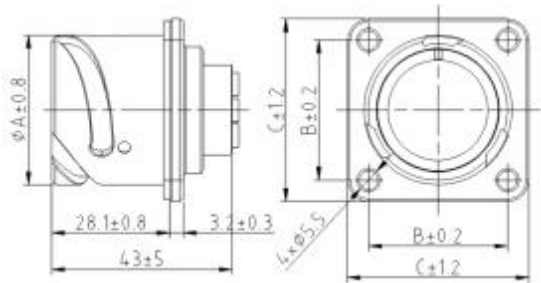
Optic Fiber GTCF Series Connectors

Connector External Dimensions

[External dimensions of GTCF2A wall/box-mounted non-waterproof socket]



Socket appearance



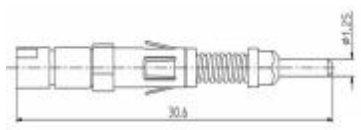
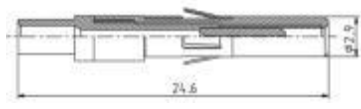
Socket external dimensions

Type chart arrangement	Housing number	Contact parts specification	Model number	ΦA	B	C
20-F2	20	5×Φ1.6	GTCF2A20-F2P	35.3	33	43
20-F1	20	7×Φ1.6	GTCF2A20-F1P	35.3	33	43
24-F1	24	9×Φ1.6	GTCF2A24-F1P	41.7	38	50
28-F1	28	12×Φ1.6	GTCF2A28-F1P	46.5	42	54
32-F1	32	19×Φ1.6	GTCF2A32-F1P	52.8	46	60

Notes: 1. The models shown above are socket pins (male pins), if you need socket jacks (female pins), please contact us.
2. All of the structures above have corresponding GTCMK (5-key) series; please contact us if you need them.
3. See Appendix III for details on installation openings.

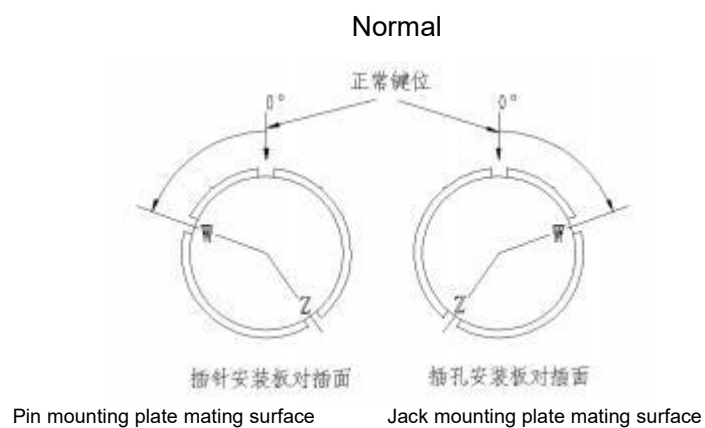
Optic Fiber GTCF Series Connectors

Contact parts specification and mating wire requirements

External dimensions	Name	Part numbers	Disassembly tool
	GTCF-Φ1.6 Optic Fiber Pin Assembly	113039800939	RT-4
	GTCF-Φ1.6 Optic Fiber Jack Assembly	113039800938	RT-4

Notes: This series can be used together with electric contact parts, see GTCM P22< Φ1.6 contact pair> for the selection of electric contact parts.

Key shift

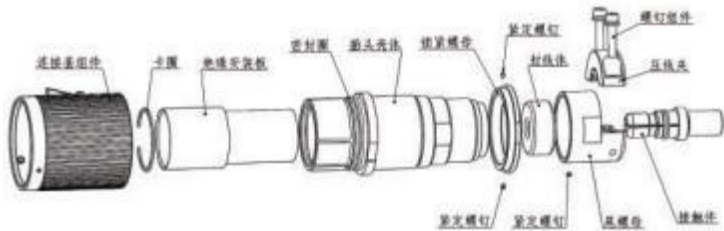


Type chart	Key Angle		
	N	W	Z
20-F2	0	30	120
20-F1	0	75	285
24-F1	0	80	150
28-F1	0	70	135
32-F1	0	35	100

High Voltage GTCH Series Connectors

Exploded view

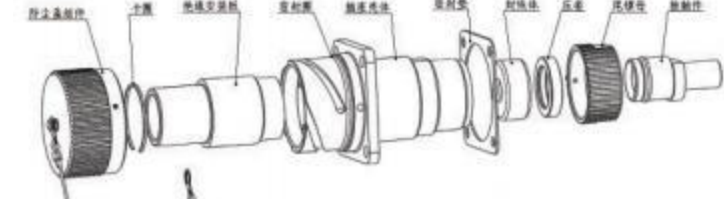
Connecting sleeve assembly Circlip Insulation installation plate Seal ring Plug housing
Locking nut Set screw Sealing body Screw assembly Crimping clamp



Set screw Set screw Tail nut Contact parts

The exploded view of plug

Dust cover assembly Circlip Insulation installation plate Seal ring Socket housing
Sealing gasket Sealing body Gland Tail nut Contact parts



The exploded view of socket

Technical Parameters

[Electrical Parameters]

Type chart arrangement	Contact specification	Rated current	Rated voltage	Contact resistance	Electrical insulation resistance	Withstanding voltage	Corresponding Series
20-H1	Φ9.07	240A	600V	≤0.3mΩ	5000MΩ	4000V	YG129
32-H1	Φ18	650A	1500V	≤0.15mΩ	5000MΩ	6000V	YG620
32-H2	Φ3.6	46A	1500V	≤0.8mΩ	5000MΩ	6000V	YG142
32L-H1	Φ10	250A	1500V	≤0.2mΩ	5000MΩ	6000V	YG300
36-H1	3×Φ9.07	240A	1500V	≤0.3mΩ	5000MΩ	6000V	YG152
36L-H1	Φ17	400A	1500V	≤0.15mΩ	5000MΩ	6000V	YG301
40L-H1	Φ20	650A	1500V	≤0.15mΩ	5000MΩ	6000V	YG205
40L-H2	Φ23	800A	1500V	≤0.12mΩ	5000MΩ	6000V	YG233
48L-H1	3×Φ10+Φ8	300A (Φ10) 200A (Φ8)	1500V	≤0.2mΩ ≤0.35mΩ	5000MΩ	6000V	YG176
48L-H2	4×Φ12	360A	1500V	≤0.15mΩ	5000MΩ	6000V	YG1060

[Mechanical parameters]

- Mechanical life: 500 cycles
- Vibration: meet GB/T 21563 requirements for Class 1, Level B vibration
- Impact: meet GB/T 21563 requirements for Class 1 Level B impact

[Other parameters]

- Operating Temperature: -55℃~+125℃
- Humidity: 95% (at 40℃)
- Protection class: IP67 (with suitable tail accessories)
- Environmental friendliness: RoHS
- Housing aluminum alloy;
- Insulator: engineering plastics; Flame retardant rating: EN 45545
- Pinhole: copper alloy; surface treatment: silver plated

High Voltage GTCH Series Connectors

Model Definition

	GTCH	6	L	20 - H1	S	D	70	Z	M	/A	W
① Name of the series:	GTCH: High Voltage type										
② Type of connector:	0: Individually mounted socket 2: Wall/box-mounted socket 6: Straight plugs 8: 90° elbow plug										
③ Protection:	L : Waterproof A : Non-waterproof										
④ Housing number:	20,32,32I,36,36I,40I,48I										
④ + ⑤ Arrangement of contact parts: See the type chart.	Type of contact: parts: P: Pin S: Jack										
⑦ Tail outlet method:	A: Wire clamp, waterproof, reinforced tensile type D: Nut type M: Tail outlet with metric threads LF: Straight pipe with hose clamp Omitted: No tail										
⑧ Outlet aperture:	A,D,LF type: e.g., 20-12/16 indicates wiring 20mm ² , suitable for cable O.D. 12-16mm; M type: e.g. M25-20 indicates reserved thread M25, wiring 20mm ² ; e.g. M25 indicates reserved thread M25, pinhole sourced separately; no tail: -20, indicates wiring 20mm ² ; omitted indicates pinhole sourced separately										
⑨ Housing surface treatment:	Omitted: Oxidized black G: Oxidized olive drab Z: Zinc-plated nickel alloy (galvanized nickel alloy)										
⑩ Dust cover	Omitted: None; M: Metal dust cover; P: Plastic dust cover										
⑪ Extension model:	Basic (omitted), /A, /B;										
⑫ Transpose:	N: normotopia (omitted); W; X;										

Notes:

- For 48L-H1 and 48L-H2, ⑧ is omitted, and the cable specification is not reflected in the model number, but is indicated with the extension model;
- For extension mode, please contact us.

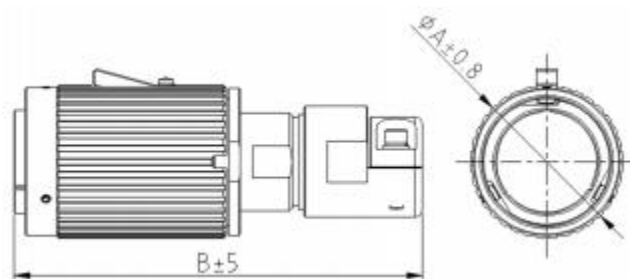
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-A waterproof-locking plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Model number	Part numbers	ΦA	B	Wire specifications	Applicable cable External diameter
32-H1	gtch6l32-h1pa150-20/22p	112030104086	62.5	177	150	Φ20~Φ22
32-H1	gtch6l32-h1pa185-21/23p	112030104141	62.5	177	185	Φ21~Φ23
32-H1	gtch6l32-h1pa240-27/29p	112030104080	62.5	177	240	Φ27~Φ29
32L-H1	gtch6l32l-h1pa50-12/13	112030100402	58	158	50	Φ12~Φ13
32L-H1	gtch6l32l-h1pa35-16/18	112030101542	58	158	35	Φ16~Φ18
32L-H1	gtch6l32l-h1pa70-18/19p	111000400320	58	158	70	Φ18~Φ19
32L-H1	gtch6l32l-h1pa25-12/13	111000400388	58	158	25	Φ12~Φ13
36L-H1	gtch6l36l-h1pa150-21/23	111000400212	65	166	150	Φ21~Φ23
36L-H1	gtch6l36l-h1pa50-13.5/16.5	112030101045	65	166	50	Φ13.5~Φ16.5
36L-H1	gtch6l36l-h1pa95-18/20	111000400387	65	166	95	Φ18~Φ20
36L-H1	gtch6l36l-h1pa120-21/23	112030103819	65	166	120	Φ21~Φ23
40L-H1	gtch6l40l-h1pa185-24/26	111000400178	78	173	185	Φ24~Φ26
40L-H1	gtch6l40l-h1pa100-20/22p	111000400195	78	173	100	Φ20~Φ22
40L-H1	gtch6l40l-h1pa150-24/26	112030102516	78	173	150	Φ24~Φ26
40L-H1	gtch6l40l-h1pa35-12/13p	112030102818	78	173	35	Φ12~Φ13
40L-H1	gtch6l40l-h1pa185-32/34m	112030104364	78	173	185	Φ32~Φ34
40L-H1	gtch6l40l-h1pa70-17/19p	112030104570	78	173	70	Φ17~Φ19
40L-H1	gtch6l40l-h1pa50-13.5/15.5p	111000400194	78	173	50	Φ13.5~Φ15.5
40L-H2	gtch6l40l-h2pa185-21/23	112030101047	78	175	185	Φ21~Φ23
40L-h2	gtch6l40l-h2pa240-27/29	111000400242	78	175	240	Φ27~Φ29

Notes: Please contact us for other crimp specifications and cable specifications.

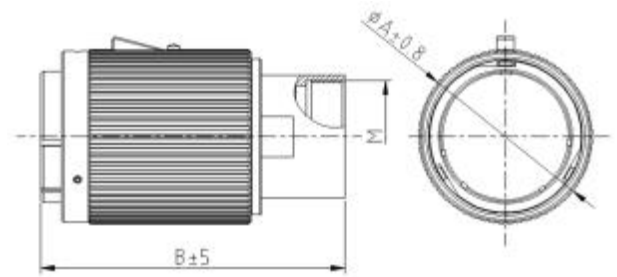
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-M waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Model number	Part numbers	ΦA	B	Reserved thread M	Wire specifications
32-H1	gtch6l32-h1pm40-240p/a	112030100524	62.5	175	M40×1.5	240
32-H1	gtch6l32-h1pm32-120/a	112030100525	62.5	175	M32×1.5	120
32-H1	gtch6l32-h1pm32-150p/a	112030103492	62.5	175	M32×1.5	150
32-H1	gtch6l32-h1pm25-70m/a	112030103497	62.5	175	M25×1.5	70
32-H2	GTCH6L32-H2SM25G	112030101455	62.5	100	M25×1.5	Ordered separately
32L-H1	GTCH6L32L-H1PM25-35	112030103249	58	110	M25x1.5	35
32L-H1	gtch6l32l-h1pm32-70/a	112030102391	58	110	M32x1.5	70
36L-H1	gtch6l36l-h1pm32-95/a	111000400319	65	124	M32×1.5	95
40L-H1	gtch6l40l-h1pm40-150/a	112030102389	78	130	M40×1.5	150
40L-H2	gtch6l40l-h2pm50-240p/a	111000400356	78	136	M50×1.5	240

Notes:

1. Reserved thread M can be customized according to customer needs, if you have such needs, please contact us;
2. Other crimp specifications and cable specifications, please contact us;
3. A in the model number indicates extension model. Here it means with connector, please contact us for details of the connector.

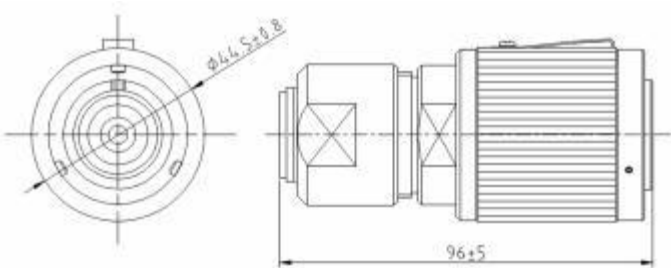
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-D waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Model number	Part numbers	Crimp cable mm ²	Cable O.D. mm
20-H1	gtch6l20-h1pd70-13.5/16	111000200954	70	Φ13.5~Φ16
	gtch6l20-h1pd25-8.5/11	111000200956	25	Φ8.5~Φ11

Notes: Please contact us for other crimp specifications and cable specifications.

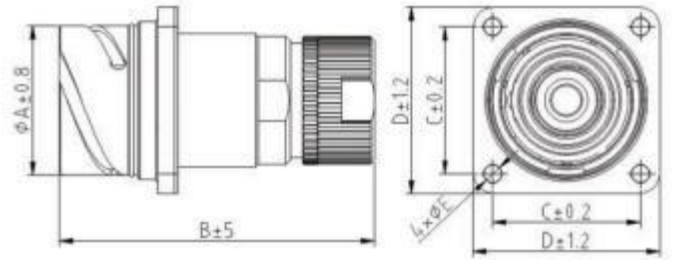
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-D waterproof socket]



Socket appearance



Socket external dimensions

Type chart	Model number	Part numbers	ΦA	B	C	D	E		Applicable Cable	
									Wire specification mm ²	O.D.
32L-H1	gtch0l32l-h1sa50-13/17	112040100630	47.8	115	48	62	6.3	50	Φ13~Φ17	
32L-H1	gtch0l32l-h1sa35-8/12	112040101693	47.8	115	48	62	6.3	35	Φ8~Φ12	
32L-H1	gtch0l32l-h1sa70-13/17p	111000500095	47.8	115	48	62	6.3	70	Φ13~Φ17	
32L-H1	gtch0l32l-h1sa25-8/12	111000500141	47.8	115	48	62	6.3	25	Φ8~Φ12	
36L-H1	gtch0l36l-h1pd150-21/32	111000500003	55.8	135	56	70	6.5	150	Φ21~Φ32	
36L-H1	gtch0l36l-h1pd95-18/21	111000500094	55.8	135	56	70	6.5	95	Φ18~Φ21	
36L-H1	gtch0l36l-h1pd50-13/16m	111000500115	55.8	135	56	70	6.5	50	Φ13~Φ16	
36L-H1	gtch0l36l-h1pd120-18/21	112040103801	55.8	135	56	70	6.5	120	Φ18~Φ21	
40L-H1	gtch0l40l-h1sd35-13/17	111000200041	72	145	67	85	9	35	Φ13~Φ17	
40L-H1	gtch0l40l-h1sd70-17/21	111000200045	72	145	67	85	9	70	Φ17~Φ21	
40L-H1	gtch0l40l-h1sd95-21/25	111000200046	72	145	67	85	9	95	Φ21~Φ25	
40L-H1	gtch0l40l-h1sd185-23.5/26.5	111000200069	72	145	67	85	9	185	Φ23.5~Φ26.5	
40L-H1	gtch0l40l-h1sd100-17/21p	111000500101	72	145	67	85	9	100	Φ17~Φ21	
40L-H1	gtch0l40l-h1sd240-26.5/29.5	112040101510	72	145	67	85	9	240	Φ26.5~Φ29.5	
40L-H1	gtch0l40l-h1sd185-33/37	115110009301	72	145	67	85	9	185	Φ33~Φ37	
40L-H1	gtch0l40l-h1sd150-17/21p	112040102601	72	145	67	85	9	150	Φ17~Φ21	
40L-H1	gtch0l40l-h1sd35-12/20p	112040102872	72	145	67	85	9	35	Φ12~Φ20	
40L-H1	gtch0l40l-h1sd50-11.5/14.5p	112040103897	72	145	67	85	9	50	Φ11.5~Φ14.5	
40L-H1	gtch0l40l-h1sd185-24/32m	112040104399	72	145	67	85	9	185	Φ24~Φ32	
40L-H1	gtch0l40l-h1sd185-28/31p	111000200089	72	145	67	85	9	185	Φ28~Φ31	
40L-H2	gtch0l40l-h2sd240-28/31	111000200091	72	145	67	85	9	240	Φ28~Φ31	
40L-H2	gtch0l40l-h2sd185-21/25p	112040101252	72	145	67	85	9	185	Φ21~Φ25	
40L-H2	gtch0l40l-h2sd240-26.5/29.5	111000500119	72	145	67	85	9	240	Φ26.5~Φ29.5	

Notes: Please contact us for other crimp specifications and cable specifications;

See Appendix III for details on installation openings.

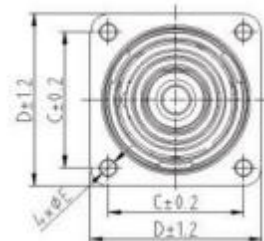
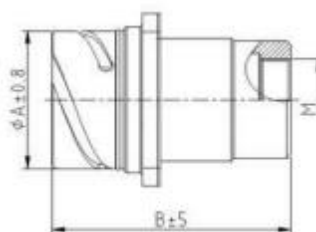
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-M waterproof socket]



Socket appearance



Socket external dimensions

Type chart arrangement	Model number	Part numbers	ΦA	B	C	D	E	M	Wiring mm ²
32-H1	gtch0l32-h1pm40-240p/a	112040100751	53	155	46	60	5.5	M40×1.5	240
32-H1	gtch0l32-h1pm32-120/a	112040100752	53	155	46	60	5.5	M32×1.5	120
32-H1	gtch0l32-h1pm32-150m/a	112040103502	53	155	46	60	5.5	M32×1.5	150
32-H1	gtch0l32-h1pm25-70m/a	112040103506	53	155	46	60	5.5	M25×1.5	70
32-H1	gtch0l32-h1pm40-150p/a	112040104152	53	155	46	60	5.5	M40×1.5	150
32-H1	gtch0l32-h1pm40-185p/a	112040104153	53	155	46	60	5.5	M40×1.5	185
32-H2	GTCH0L32-H2PM25G	112040103263	52.8	108	46	60	5.5	M25×1.5	Ordered separately
32L-H1	gtch0l32l-h1pm32-70/a	112040102500	47.8	90	48	62	6.3	M32x1.5	
40l-h1	gtch0l40l-h1sm40-150/a	112040102496	72	160	67	85	9	M40×1.5	150

Notes:

1. The reserved thread M can be customized according to customer needs, if you have such needs, please contact us.
2. A in the model number indicates the extension mode; here it means with connector, please contact us for details of the connector.
3. For 32-H2 contact parts, see Control Type <P25 Φ3.6 contact pair 2>.
4. See Appendix III for details on installation openings.

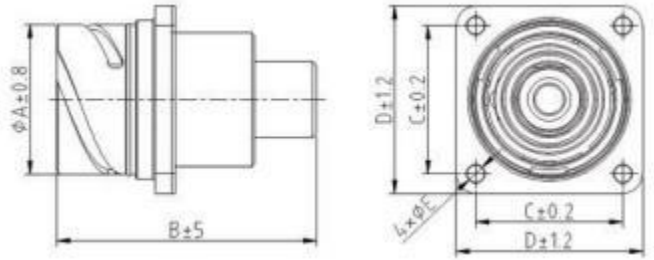
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-2A wall-mounted socket]



Socket appearance



Socket external dimensions

Type chart arrangement	Model number	Part numbers	ΦA	B	C	D	E	Wire specification mm ²
20-H1	GTCH2A20-H1S-70	111000200957	35	70.6	33	43.5	5.5	70
20-H1	GTCH2A20-H1S-25	111000200958	35	70.6	33	43.5	5.5	25
32-H2	GTCH2A32-H2PG	112040101612	52.8	63	46	60	5.5	separate order
32-H2	GTCH2A32-H2P	112040101509	52.8	63	46	60	5.5	separate order
36-H1	GTCH2A36-H1P	112040102021	58.5	92.3	52	Φ85	5.5	separate order
36-H1	GTCH2A36-H1P-50	112040102972	58.5	92.3	52	Φ85	5.5	50

Notes: 1. 36-H1, the flanges are discs.

2. For the selection of 32-H2 contact parts, see Control Type <P25 Φ3.6 contact pair 2>.

3. See Appendix III for details on installation openings.

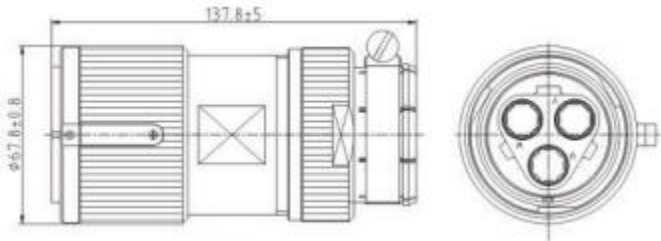
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-LF waterproof plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Model number	Part numbers	Crimp cable mm²	Cable O. D.
36-H1	gtch6l36-h1slf35-11/14	111000400163	35	Φ11~Φ14
36-H1	gtch6l36-h1slf35-15/18	112030101197	35	Φ15~Φ18
36-H1	gtch6l36-h1slf50-11/14	112030101376	50	Φ11~Φ14
36-H1	gtch6l36-h1slf70-15/18	112030101692	70	Φ15~Φ18
36-H1	gtch6l36-h1slf16-13/16	112030104392	16	Φ13~Φ16
36-H1	GTCH6L36-H1SLF25-15/18	112030104393	25	Φ15~Φ18

Notes: For other crimping specifications and cable specifications, please contact us.

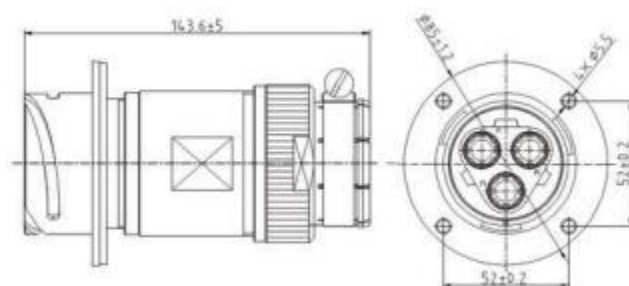
High Voltage GTCH Series Connectors

Connector External Dimensions

[External dimensions of GTCH-LF waterproof socket]



Socket appearance



Socket external dimensions

Type chart	Model number	Part numbers	Crimp cable mm ²	Cable O. D.
36-H1	gtch0l36-h1plf35-11/14	111009800006	35	Φ11~Φ14
36-H1	gtch0l36-h1plf35-15/18	112040101355	35	Φ15~Φ18
36-H1	gtch0l36-h1plf50-11/14	112040101514	50	Φ11~Φ14
36-H1	gtch0l36-h1plf70-15/18	112040101838	70	Φ15~Φ18
36-H1	gtch0l36-h1plf16-13/16	112040104422	16	Φ13~Φ16
36-h1	gtch0l36-h1plf25-15/18	112040104423	25	Φ15~Φ18

Notes:

1. Please contact us for other crimping specifications.
2. See Appendix III for details on installation openings.

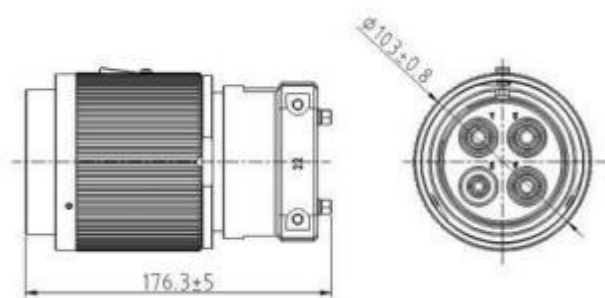
High Voltage GTCH Series Connectors

Connector External Dimensions

[48L-A type plug]



Plug appearance



Plug external dimensions

Type chart arrangement	Model number	Part numbers	Crimp cable mm ²	Cable O.D. mm
48L-H1	GTCH6L48L-H1PA3×95+25	112030100220	3 × 95 + 25	3 × (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×70+25/AC	112030100772	3 × 70 + 25	3 × (Φ15.5-Φ25) + (Φ7.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×95+50/AF	112030102532	3 × 95 + 50	3 × (Φ15.5-Φ25) + (Φ7.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×95+35/AG	112030101981	3 × 95 + 35	3 × (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×70+50/AH	112030102209	3 × 70 + 50	4×(Φ16-Φ23.5)
48L-H1	GTCH6L48L-H1PA3×50+35M/C	112030104461	3 × 50 + 35	3 × (Φ11.5-Φ21) + (Φ7.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×120+50/E	111000400326	3 × 120 + 50	3 × (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×70+70/H	111000400598	3×70+70	3 × (Φ11.5-Φ21) + (Φ7.5-Φ17)
48L-H1	GTCH6L48L-H1PA3×25+16/J	111000400351	3 × 25 + 16	4×(Φ7.5-Φ15.5)
48L-H2	GTCH6L48L-H2PA3×120+50/A	112030104465	3 × 120 + 50	3 × (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H2	GTCH6L48L-H2PA4×95/B	112030104053	4 × 95	4×(Φ16-Φ23.5)
48L-H2	gtch6l48l-h2pa3×95+50/c	112030104569	3 × 95 + 50	3 × (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H2	GTCH6L48L-H2PA3×95+25/D	112030104636	3 × 95 + 25	3 × (Φ15.5-Φ25) + (Φ7.5-Φ17)

Notes: For other crimp specifications and cable specifications, please contact us;

See Appendix III for details on installation openings.

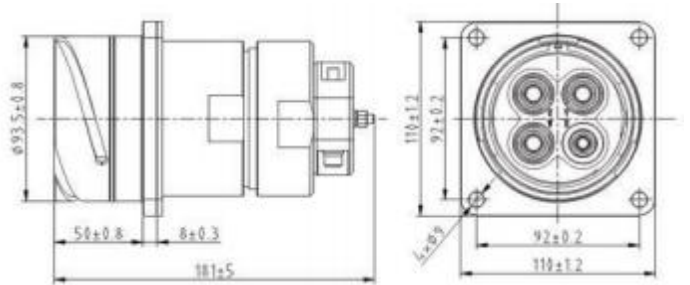
High Voltage GTCH Series Connectors

Connector External Dimensions

[48L-A type socket]



Socket appearance



Socket external dimensions

Type chart arrange me	Model number	Part numbers	Crimp cable mm ²	Cable O.D. mm
48L-H1	GTCH0L48L-H1SA3×95+25	112040100296	3 × 95 + 25	3 × (Φ15.5-Φ25) + (Φ7.5-Φ17)
48L-H1	GTCH0L48L-H1SA3×50+25/F	111000500044	3 × 50 + 25	3 × (Φ11.5-Φ21) + (Φ7.5-Φ17)
48L-H1	GTCH0L48L-H1SA3×70+25/AC	112040101018	3 × 70 + 25	3 × (Φ15.5-Φ25) + (Φ7.5-Φ17)
48L-H2	GTCH0L48L-H2SA3×120+50/A	112040104496	3 × 120 + 50	3 × (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H2	GTCH0L48L-H2SA4×95P/B	112040104052	4 × 95	4 × (Φ16-Φ23.5)
48L-H2	GTCH0L48L-H2SA3×95+25/D	112040104655	3 × 95 + 25	3 × (Φ15.5-Φ25) + (Φ7.5-Φ17)

Notes: For other crimp specifications and cable specifications, please contact us;

See Appendix III for details on installation openings.

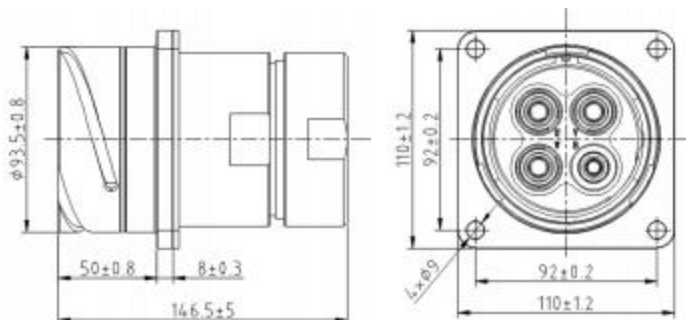
High Voltage GTCH Series Connectors

Connector External Dimensions

[48L-D type socket]



Socket appearance



Socket external dimensions

Type chart arrangement	Model number	Part numbers	Crimp cable mm ²	Cable O.D. mm
48L-H1	GTCH0L48L-H1SD3×95/A	112040100307	3 x 95 + 25	3 x (Φ15.5-Φ25) + (Φ7.5-Φ17)
48L-H1	GTCH0L48L-H1SD4×25/B	112040100308	35	4 x (Φ10-Φ15.5)
48L-H1	gtch0l48l-h1sd3×95+35/ag	112040102128	3 x 95 + 35	3 x (Φ19-Φ25) + (Φ11.5-Φ17)
48L-H1	GTCH0L48L-H1SD3×70+50/AH	112040102361	3 x 70 + 50	Φ16-Φ23.5
48L-H1	GTCH0L48L-H1SD3×70+25/AR	112040103895	3 x 70 + 25	3 x (Φ11.5-Φ21) + (Φ7.5-Φ17)
48L-H1	gtch0l48l-h1sd3×50+35/c	112040104492	3 x 50 + 35	3 x (Φ11.5-Φ21) + (Φ7.5-Φ17)
48L-H1	GTCH0L48L-H1SD3×120+70/E	111000500100	3×120+70	3 x (Φ15.5-Φ25) + (Φ7.5-Φ17)
48L-H1	gtch0l48l-h1sd3×95+50/g	111000500097	3 x 95 + 50	3 x (Φ15.5-Φ25) + (Φ11.5-Φ17)
48L-H1	GTCH0L48L-H1SD3×70+70/H	111000500273	3×70+70	3 x (Φ11.5-Φ21) + (Φ7.5-Φ17)
48L-H1	GTCH0L48L-H1SD3×25+16/J	111000500113	3 x 25 + 16	4 x (Φ7.5-Φ15.5)
48l-h2	gtch0l48l-h2sd3×95+50p/c	112040104599	3 x 95 + 50	3 x (Φ15.5-Φ25) + (Φ11.5-Φ17)

Notes: For other crimp specifications and cable specifications, please contact us;

See Appendix III for details on installation openings.

High Voltage GTCH Series Connectors

Collection Block Selection List (Ordered Separately)

Housing number	Collection Block Model	Part numbers	Remarks	Protection class
32L	GTCH Collection Block-32LM	112049800012	With dust cover	IP67
40L	GTCH Collection Block - 40LM	112049800013	With dust cover	IP67
48L	GTCH Collection Block - 48LM	112049800011	With dust cover	IP67

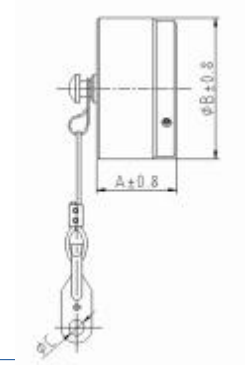
Model of Specialized Tools (Ordered Separately)

Type chart arrangement	Disassembly tools		Crimping tool	
	For plugs	For sockets	Model number	Applicable crimping range
20-H1	RTSCA-11	RTSCA-11	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
32-H1	RTSCB-36	RTSCB-36	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
32-H2	RTSCA-08	RTSCA-08	YJQ-M300	2-10mm ²
32L-H1	RTSCB-07	RTSCB-08	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
36-H1	RTSCA-11	RTSCA-11	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
36L-H1	RTSCB-02	RTSCB-02	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
40L-H1	RTSCB-03	RTSCB-03	EK120	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
40L-H2	RTSCB-04	RTSCB-05	EK120	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
48L-H1	RTSCB-07	RTSCB-08	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²
48L-h2 rtscb-55		RTSCB-54	EK6022L	Spot Crimp:(16-95)mm ² Hex Crimp:(16-300)mm ²

Appendix

Appendix I: Dust Covers (Ordered Separately)

Dust Covers of Plugs

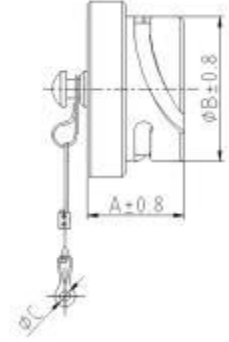


Housing number	Dust Cover Model	Part numbers	Color	A	ΦB	ΦC	Remark 1	Remark 2	Protection class
20	GTCM Plug Dust Cover Assembly A-20#	115430001901	Black	25	35.3	/	Without rope	Metal	IP67
20	GTCM Plug Dust Cover Assembly A-20#-GN	115430001903	Olive drab	25	35.3	/	Without rope	Metal	IP67
20	GTCM Plug Dust Cover Assembly -20#	115430001701	Black	28	35.3	3.4	With rope	Metal	IP67
20	GTCM Plug Dust Cover Assembly -20#-GN	115430001711	Olive drab	28	35.3	3.4	With rope	Metal	IP67
24	GTCM Plug Dust Cover Assembly A-24#	115430001904	Black	25	41.7	/	Without rope	Metal	IP67
24	GTCM Plug Dust Cover Assembly A-24#-GN	115430001906	Olive drab	25	41.7	/	Without rope	Metal	IP67
24	GTCM Plug Dust Cover Assembly -24#	115430001703	Black	28	41.7	3.4	With rope	Metal	IP67
24	GTCM Plug Dust Cover Assembly -24#-GN	115430001712	Olive drab	28	41.7	3.4	With rope	Metal	IP67
28	GTCM Plug Dust Cover Assembly A-28#	115430001907	Black	25	46.5	/	Without rope	Metal	IP67
28	GTCM Plug Dust Cover Assembly A-28#-GN	115430001909	Olive drab	25	46.5	/	Without rope	Metal	IP67
28	GTCM Plug Dust Cover Assembly -28#	115430001705	Black	28	46.5	3.4	With rope	Metal	IP67
28	GTCM Plug Dust Cover Assembly -28#-GN	115430001713	Olive drab	28	46.5	3.4	With rope	Metal	IP67
32	GTCM Plug Dust Cover Assembly A-32#	115430001910	Black	25	52.8	/	Without rope	Metal	IP67
32	GTCM Plug Dust Cover Assembly A-32#-GN	115430001912	Olive drab	25	52.8	/	Without rope	Metal	IP67
32	GTCM Plug Dust Cover Assembly -32#	115430001707	Black	28	52.8	3.4	With rope	Metal	IP67
32	GTCM Plug Dust Cover Assembly -32#-GN	115430001714	Olive drab	28	52.8	3.4	With rope	Metal	IP67
32	GTCH Plug Dust Cover Assembly -32#	113011600619	Black	47	52.8	3.4	32-H1 only	Metal	IP67
32	GTCH Plug Plastic Dust Cover -32#	114069800632	/	/	/	/	32-H1 only	Plastics	IPX3
32L	BXEC39.5-25 Protective Cap (Yellow)	501021300039	/	/	/	/	/	Rubber	IPX3
36	GTCM Plug Dust Cover Assembly A-36#	115430001913	Black	25	58.4	/	Without rope	Metal	IP67
36	GTCM Plug Dust Cover Assembly A-36#-GN	115430001915	Olive drab	25	58.4	/	Without rope	Metal	IP67
36	GTCM Plug Dust Cover Assembly -36#	115430001709	Black	28	58.4	3.4	With rope	Metal	IP67
36	GTCM Plug Dust Cover Assembly -36#-GN	115430001715	Olive drab	28	58.4	3.4	With rope	Metal	IP67
36L	GTCH Plug Dust Cover Assembly -36L	113011600217	Black	39.5	55.8	3.4	With rope	Metal	IP67
40L	GTCH Plug Dust Cover Assembly -40L-6.5	113011600792	Black	49	68	6.5	With rope	Metal	IP67
40L	GTCH Plug Dust Cover Assembly A-40L	113011600585	Black	49	68	/	Without rope	Metal	IP67
40L	GTCH Plug Dust Cover Assembly -40L	113011600582	Black	49	68	3.4	With rope	Metal	IP67
40L	BXEC59-25 Protective Cap (Yellow)	501021300042	/	/	/	/	/	Rubber	IPX3
48L	GTCH Plug Dust Cover Assembly -48L-6.5	113011600794	Black	58	93.5	6.5	With rope	Metal	IP67
48L	FPEC83-25(1.5)/E22 Protective Cap (Blue)	501021300019	/	/	/	/	/	Rubber	IPX3

Appendix

Appendix I: Dust Covers (Ordered Separately)

Dust Covers of Sockets (with Rope)



Housing number	Dust Cover Model	Part numbers	Color	A	ΦB	ΦC	Remarks	Protection class
20	GTCM Socket Dust Cover Assembly-20#	115430001801	Black	29	45	5.5	Metal	IP67
20	GTCM Socket Dust Cover Assembly-20#-GN	115430001811	Olive drab	29	45	5.5	Metal	IP67
24	GTCM Socket Dust Cover Assembly-24#	115430001803	Black	29	51	5.5	Metal	IP67
24	GTCM Socket Dust Cover Assembly-24#-GN	115430001812	Olive drab	29	51	5.5	Metal	IP67
28	GTCM Socket Dust Cover Assembly-28#	115430001805	Black	29	56	5.5	Metal	IP67
28	GTCM Socket Dust Cover Assembly-28#-GN	115430001813	Olive drab	29	56	5.5	Metal	IP67
32	GTCM Socket Dust Cover Assembly-32#	115430001807	Black	29	62.5	5.5	Metal	IP67
32	GTCM Socket Dust Cover Assembly-32#-GN	115430001814	Olive drab	29	62.5	5.5	Metal	IP67
32	GTCH Socket Dust Cover Assembly-32#	113011600620	Black	38	61.5	5.5	32-H1 only	IP67
32	GTCH Socket Plastic Dust Cover-32#	114069800633	/	/	/	/	32-H1 only	IPX3
32L	GTCH Socket Plastic Dust Cover-32L-6.5	113011600118	Black	45	58	6.5	Metal	IP67
32L	BXEC48-30 Protective Cap (Blue)	501021300025	/	/	/	/	Rubber	IPX3
36	GTCM Socket Dust Cover Assembly-36#	115430001809	Black	29	68	5.5	Metal	IP67
36	GTCM Socket Dust Cover Assembly-36#-GN	115430001815	Olive drab	29	68	5.5	Metal	IP67
36L	GTCH Socket Dust Cover Assembly-36L-6.5	113011600116	Black	37.5	66	6.5	Metal	IP67
40L	GTCH Socket Dust Cover Assembly-40L-8.5	113011600485	Black	42.8	79	8.5	Metal	IP67
40L	BXEC68-30 Protective Cap (Yellow)	501021300041	/	/	/	/	Rubber	IPX3
48L	GTCH Socket Dust Cover Assembly-48L-8.5	113011600484	Black	42	103	8.5	Metal	IP67
48L	BXEC93.5-30 Protective Cap (Blue)	501021300020	/	/	/	/	Rubber	IPX3

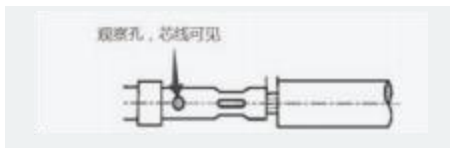
Appendix

Appendix II: Instructions for Use

GTCM/GTCF/GTCN Instructions for Use

1. Crimping

After crimping, the core of the wire is visible through the observation hole of the contact parts.



The core of the wire is visible through the observation hole

2. Disassembly and connection methods

Disassemble the connector:

Hold the tail and rotate the connecting sleeve counterclockwise until you see the fastening screw in the hole on the connecting sleeve as shown in the figure; loosen the fastening screw with a screwdriver (it is recommended only to loosen it).



② Remove the tail assembly with a wrench and disassemble it.



③ Thread the cable (the pinholes have been crimped) into the connector and its accessories, and the straight tube in turn, as shown in the figure.



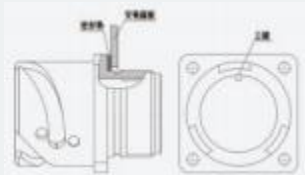
Assemble the plug:

Put the assembled module into the mounting plate. When assembled in place, you should be able to hear a slight sound, pull back about 10N force, ensure that the module does not come out of the mounting plate, and then tighten the straight tube (and the tail accessories). It is recommended that the threads be applied with thread adhesive, as shown in the figure.

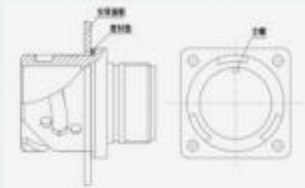


3. Install the socket.

Fix the assembled socket on the mounting plate. When mounting – ensure that the main key should be on the top, as shown in the figure.



Mounting in front of the plate



Mounting behind the plate

Notes:

1. Recommended plate thickness: $\leq 5\text{mm}$;
2. Recommended mounting screw specification: Hexagon socket head cap screw M5 $\times$;
3. When waterproof mounting is required, it is necessary to change the mounting screw hole to a blind hole with M5 thread.
4. See Appendix III for screw tightening torque details.

Appendix

Appendix II: Instructions for Use

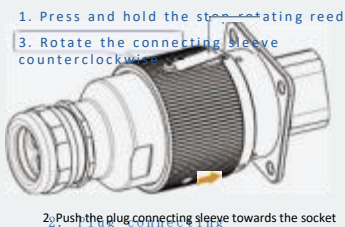
I GTCM/GTCF/GTCN Instructions for Use

4.Connector pair insertion

When connecting the plug and socket, insert the main keyway of the plug and the main key on the socket in alignment, then rotate the plug connector in clockwise direction, and when the connector is in place, you will hear a clear and crisp sound.



When separating the plug from the socket, press the stop-rotating reed and push the plug connecting sleeve towards the socket, and then rotate the plug connecting sleeve in the counterclockwise direction until the plug is separated from the socket.



5. Disassemble contact parts

- ①Choose the correct type of de-pinning tool.
- ②Insert the de-pinning tool from the opposite side of the connect parts (Notes: Insert it in place, fully retract the tooth sleeve until you hear a "pop" sound).
- ③Push the tail of the tool so that the module can be ejected out by the ejector rod.



I GTCH Instructions for Use

1. Crimp terminal

Crimp the terminal with the corresponding crimping pliers according to the parameters. After crimping, it should be like this as shown in the figure:



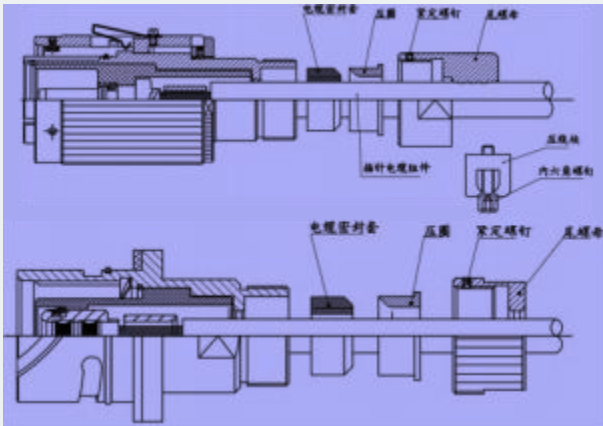
Appendix

Appendix II: Instructions for Use

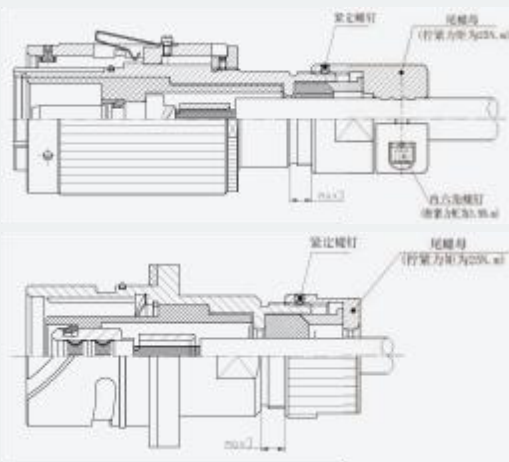
GTCH Instructions for Use

2. Disassembly and connection methods

① Loosen the set screw, remove the crimp block, tail nut, pressing ring and cable gland, and set them on the pin (jack) cable assembly, and then install the pin (jack) cable assembly into the plug (socket). When the pin (jack) is assembled in place, you will hear a "click" sound;



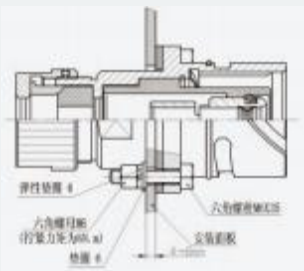
② Install the cable gland and pressing ring into the plug (socket) in turn, use a pipe wrench or a special wrench to tighten the tail nut to a gap of not more than 3mm or a tightening torque of 25N.m with the connector body, and use the hexagonal screw to connect the crimp block to the tail nut, and tighten the hexagonal screw (tightening torque 3.5 N.m) to fix the cable. Then tighten the set screws.



Set screw Tail nut (tightening torque 25Nm) Hexagonal screw (tightening torque 3.5 N.m)

3. Installation of sockets

Fix the connector socket to the mounting plate using hexagonal bolt, washer, elastic washer and hexagonal nut. For the tightening torque, see Appendix III.



Elastic washer 6 Hexagonal nut M6 (tightening torque 6Nm) Washer 6
Hexagon bolt M6X35 Mounting plate

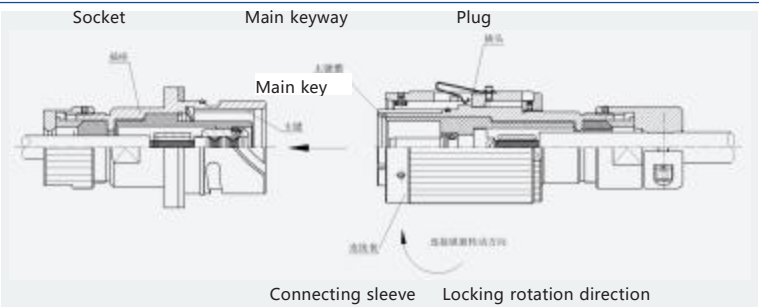
Appendix

Appendix II: Instructions for Use

GTCH Instructions for Use

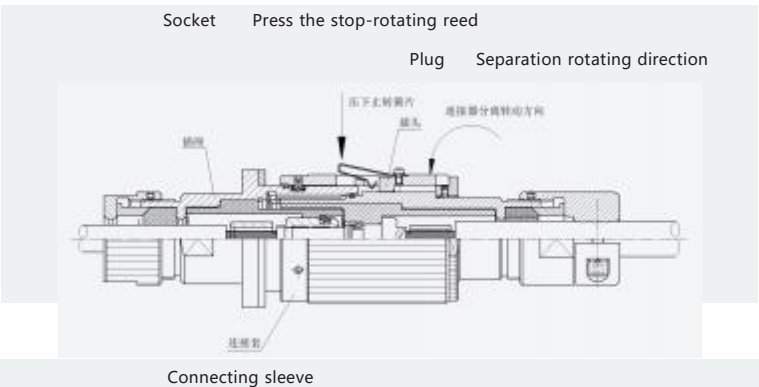
4. Connector pair insertion

When connecting the connector, align the main keyway of the plug with the main key of the socket, and then turn the connecting sleeve right (clockwise direction) to the marked place to lock it (when the connection is in place, you will hear a clear "click" sound).



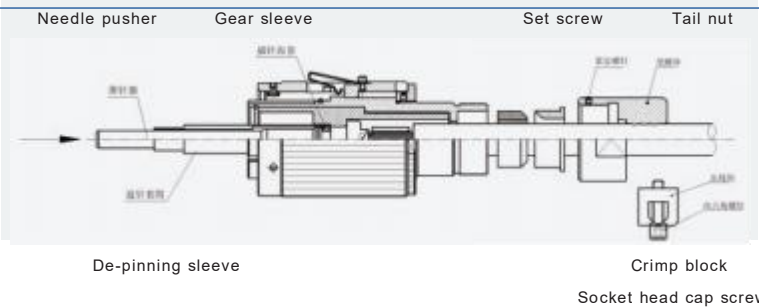
② Connector separation

To separate the connector, press the stop-rotating reed and turn the connecting sleeve left (counterclockwise direction) to separate the connector.



5. Disassemble the contact parts

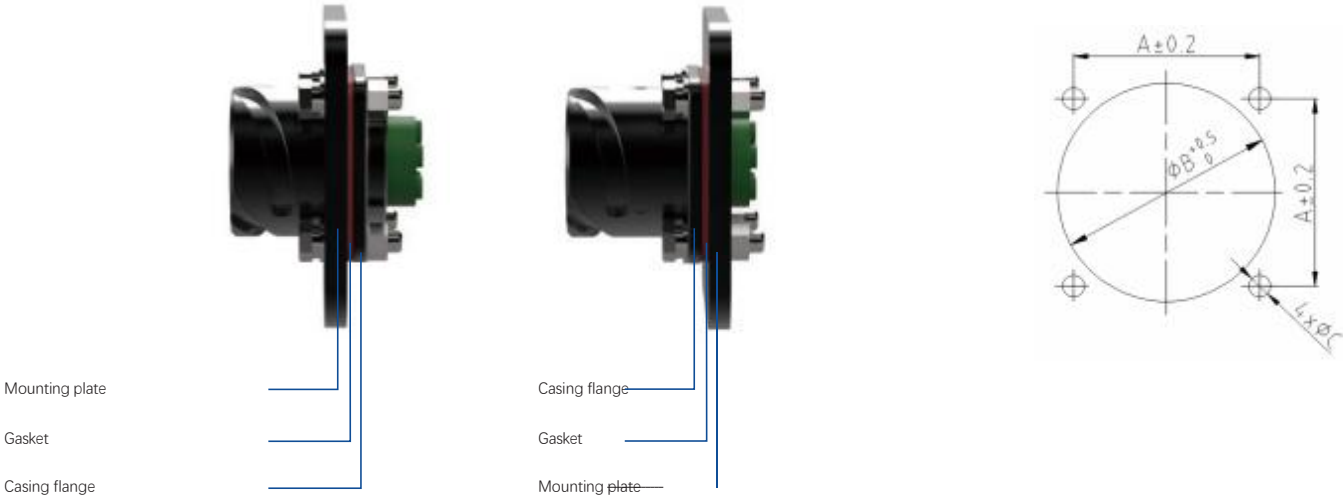
To disassemble the pin, first loosen the crimp block as shown in the figure, then remove the tail nut, pressing ring, gland and washer, and then use the appropriate de-pinning tool to insert from the end face, then push the pin backward with the needle pusher after the gear sleeve is completely open. The method for disassembling the socket is the same as described above.



Appendix

Appendix III: Installation Openings

Installation Schematic Diagram:



Mounting behind the plate

Mounting in front of the plate

Recommended mounting cutout size

Housing number	A	ΦB		ΦC	
		Mounting behind the plate	Mounting in front of the plate	Through-hole T	Treaded hole
20#	33	36	31	5.5	M5
24#	38	43	37	5.5	M5
28#	42	48	42	5.5	M5
32#	46	54	49	5.5	M5
32L#	48	/	43	6.3	M6
36#	52	60	55	5.5	M5
36L#	56	/	53	6.5	M6
40L#	67	/	63	9	M8
48L#	92	/	93	9	M8

Notes: 1. Recommended plate thickness: ≤5mm.
2. If waterproof installation is required, it is necessary to change ΦC to the corresponding specification of threaded blind holes.
3. Recommended tightening torques are shown in the table below:

Nominal screw diameter	Recommended tightening torque N .m		
	Grade 8.8 carbon steel	Stainless steel screws (A2-70)	
		Brass screws	
M5	4	3	2.3
M6	8	5.2	3.2
M8	20	12.7	7.5

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