

HYBRID SERIES

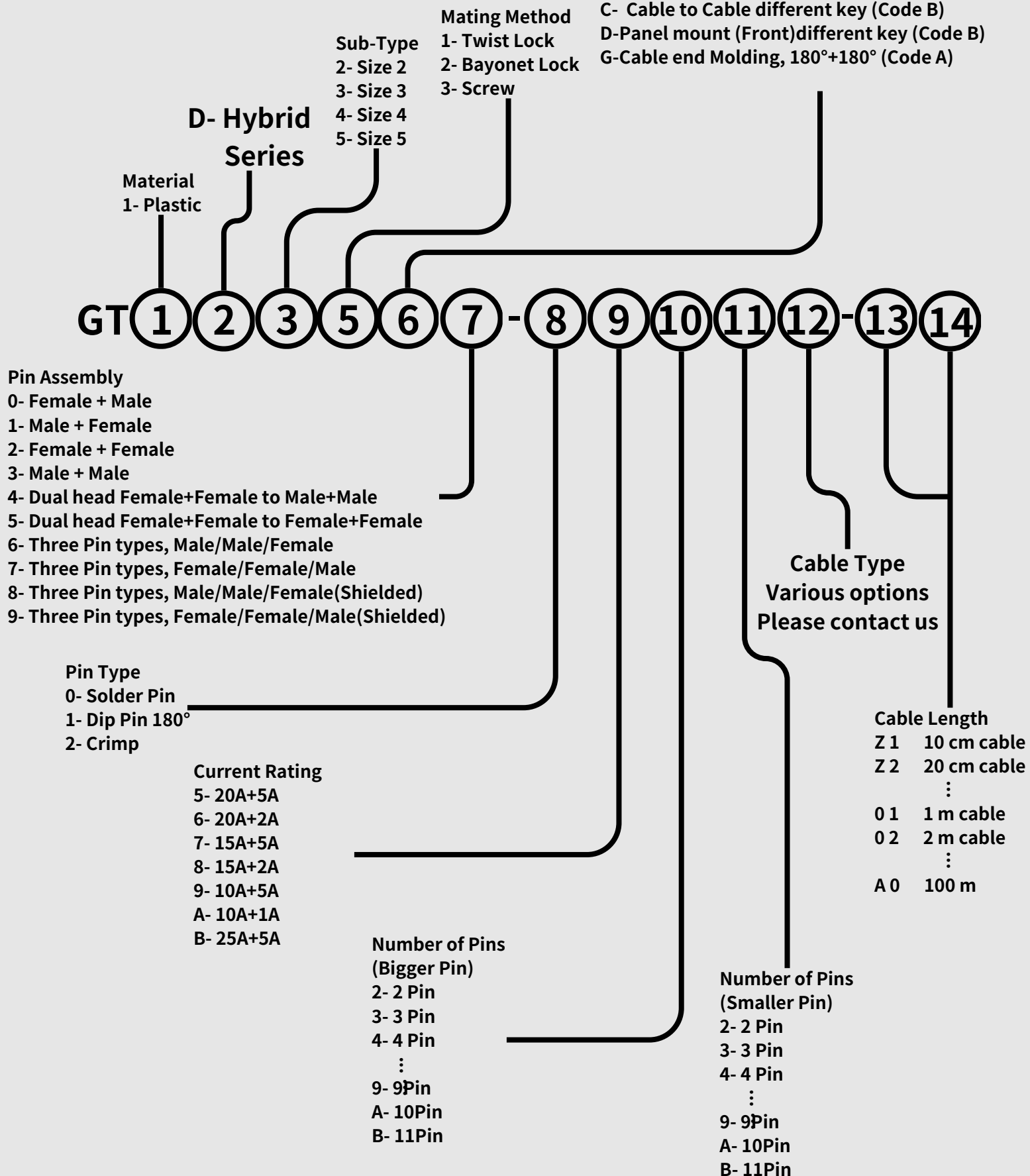


Hybrid

Part Numbering System

Connector Type

- 0- Panel mount (Front)
- 1- Panel mount (Rear)
- 2- Cable end (Molding, 180°) (Code A)
- 3- Cable to Cable (Molding)
- 7- Cable end w/ Housing
- 8- Cable to Cable w/ Housing
- 9- Panel mount (Front) different key
- A-Cable end (Molding 180°) different key (Code B)
- B-Panel mount (Rear) different key (Code B)
- C- Cable to Cable different key (Code B)
- D-Panel mount (Front)different key (Code B)
- G-Cable end Molding, 180°+180° (Code A)



Specifications

C2 Hybrid Engineering Specifications

Specifications

Current Rating	10A+1A	
	10A+5A	
AWG Gauge	10A+1A	18AWG, 26AWG
	10A+5A	18AWG, 22AWG
Operation temperature	With Cable -40°C / +85°C	
	Without Cable -40°C / +125°C	
IP Rating	IP67	

Product Technical Data

Characteristics	Standard	Description	
Visual and Dimensional Inspection	EIA 364-18	Must meet or exceed the requirements specified by the most current version of the C2 Hybrid Specification.	
Insulation Resistance	EIA 364-21 or IEC 60512-3a	DC500V±10% , test for 1 minute and the insulation resistance should be more than100MΩ	
Dielectric Withstanding Voltage	EIA 364-20 or IEC 60512-4a	10A+1A	1500 V AC contact-to-contact, for 1min.
		10A+5A	1000 V AC contact-to-contact, for 1min.
Contact Resistance	EIA 364-06 Method B or IEC 60512-2b	10mΩ at 10mA Max.	
Pin Pull Test	EIA 364-08 or IEC 60512-16d	1.Initial: 24 N minimum. 2.After Test: 16 N minimum.	
Waterproof Test	IEC 60529	Under 1 M water for 30 min.	
Durability	EIA 364-09 or IEC 60512-9a	10A+1A	Screw type 500 cycles ,rate of 200 cycles per hour. Lock type 200 cycles ,rate of 200 cycles per hour.
		10A+5A	Lock type 200 cycles ,rate of 200 cycles per hour.

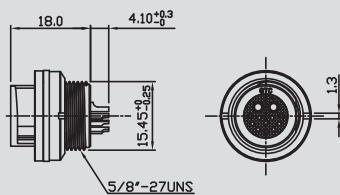
Product Technical Data		
Characteristics	Standard	Description
Cable Pull-Out	EIA 364-38 Test Condition A or IEC 60512-13a	After the application of a steady state axial load of 40 N for one minute.
Cable Flexing	EIA 364-41	A traverse 180° in one direction plus 180° in the opposite direction shall be called one cycle, the cycling rate shall be 12 to 14 cycles per minute. After completion of 100 cycles, test withstanding voltage and insulation resistance.
Physical Shock	EIA 364 27 Test Condition H or IEC 60512-6c	No discontinuities of 1 μs or longer duration when mated C2 Hybrid connectors are subjected to 11 ms duration 30 Gs half-sine shock pulses. Three shocks in each direction applied along three mutually perpendicular planes for a total of 18 shocks.
Vibration	EIA 364-28 or IEC 60512-6d	The electrical load conditions shall be 100mA maximum for all contacts. Frequency: 50 to 2000 Hz PDS: 0.04 g ² /Hz. Duration: 1 Hour/Axis, 3 Axes Total. g's: 7.56 g rms
Thermal Shock	EIA 364-32 Test Condition VIII or IEC 60512-11d	5 cycles at -40°C / +105°C, after the test, the function and appearance can't be impacted.
Salt Spray	EIA 364-26 or IEC 60512-11f	The test liquid (NaCl) thickness is 5%, Compressing the air pressure is 0.083Mpa, Spraying amount is 1~2 ml/80cm/h, Temperature of the pressure barrel is 43°C, LAB temperature is 35°C, relative humidity of LAB is 95%~98%, test time is 24hr, after the test, check if there is rusty and oxidized phenomenon
Temperature Life W/O Electrical Load	EIA364-17 Condition 3 or IEC 60512-9b	85°C for 96 Hours .
Low Temperature	EIA364-59 Condition 3 or IEC 60512-11k	-40°C for 96 Hours
Temperature Humidity Cycling	EIA 364-31, Method III Test Condition A	4 cycles at 25°C / +65°C 95%RH (1 cycles/day)
UV Exposure	ASTM G154-06 operating fluorescent light apparatus for UV exposure of nonmetallic materials	24 H equal 1 year: 8 h UV at 70 (±3) °C Black Panel Temperature 4 h Condensation at 50 (±3) °C Black Panel Temperature

Specifications

C4&C5 Hybrid Engineering Specifications		
Specifications		
Current Rating	600VAC/25A+30VDC/5A	
AWG Gauge	12AWG, 24AWG	
Operation temperature	With Cable -40°C / +85°C	
	Without Cable -40°C / +125°C	
IP Rating	IP67	
Product Technical Data		
Characteristics	Standard	Description
Visual and Dimensional Inspection	EIA 364-18	Must meet or exceed the requirements specified by the most current version of the C4/C5 Hybrid Specification.
Insulation Resistance	EIA 364-21 or IEC 60512-3a	DC 500V±10%, test for 1 minute and the insulation resistance should be more than100MΩ
Dielectric Withstanding Voltage	EIA 364-20 or IEC 60512-4a	Power Pin : 2500 V AC contact-to-contact, for 1min.
		Signal Pin : 500 V AC contact-to-contact, for 1min.
Contact Resistance	EIA 364-06 Method B or IEC 60512-2b	10mΩ at 10mA Max.
Pin Pull Test	EIA 364-08 or IEC 60512-16d	1. Initial : 24 N minimum. 2. After Test : 16 N minimum.
Durability	EIA 364-09 or IEC 60512-9a	Lock type 200 cycles ,rate of 200 cycles per hour.
Cable Pull-Out	EIA 364-38 or IEC 60512-13a Test Condition A	After the application of a steady state axial load of 40 N for one minute.
Cable Flexing	EIA 364-41	A traverse 180° in one direction plus 180° in the opposite direction shall be called one cycle, the cycling rate shall be 12 to 14 cycles per minute. After completion of 100 cycles, test withstanding voltage and insulation resistance

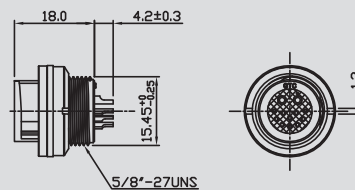
Product Technical Data		
Characteristics	Standard	Description
Physical Shock	EIA 364 27 Test Condition H or IEC 60512-6c	No discontinuities of 1 μ s or longer duration when mated C4/C5 Hybrid connectors are subjected to 11 ms duration 30 Gs half-sine shock pulses. Three shocks in each direction applied along three mutually perpendicular planes for a total of 18 shocks.
Vibration	EIA 364-28 or IEC 60512-6d	The electrical load conditions shall be 100mA maximum for all contacts. Frequency : 50 to 2000 Hz PDS : 0.04 g^2 /Hz. Duration : 1 Hour/Axis, 3 Axes Total. g 's: 7.56 g rms
Thermal Shock	EIA 364-32 Test Condition VIII or IEC 60512-11d	5 cycles at -40°C / +105°C, after the test, the function and appearance can't be impacted.
Salt Spray	EIA 364-26 or IEC 60512-11f	The test liquid (NaCl) thickness is 5%, Compressing the air pressure is 0.083Mpa, Spraying amount is 1~2 ml/80cm/h, Temperature of the pressure barrel is 43 °C, LAB temperature is 35 °C, relative humidity of LAB is 95%~98%, test time is 24hr, after the test, check if there is rusty and oxidized phenomenon.
Waterproof Test	IEC 60529	Under 1 M water for 30 min.
Temperature Life W/O Electrical Load	EIA364-17 Condition 3 or IEC 60512-9b	85°C for 96 Hours .
Low Temperature	EIA364-59 Condition 3 or IEC 60512-11k	-40°C for 96 Hours
Temperature Humidity Cycling	EIA 364-31, Method III Test Condition A	4 cycles at 25°C / +65°C 95%RH (1 cycles/day)
UV Exposure	ASTM G154-06 operating fluorescent light apparatus for UV exposure of nonmetallic materials	24 H equal 1 year: 8 h UV at 70 (\pm 3) °C Black Panel Temperature 4 h Condensation at 50 (\pm 3) °C Black Panel Temperature

C2 Plastic Panel Rear Mount Female Solder Lock (Code A)



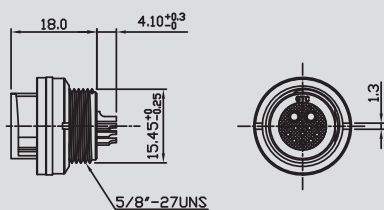
P/N	Rated current (A)	Contacts
GT1D2212-0A2A0(S)	10+1	2+10

C2 Plastic Panel Rear Mount Male Solder Lock (Code A)



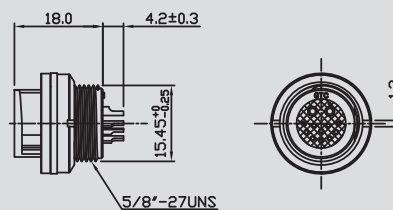
P/N	Rated current (A)	Contacts
GT1D2213-0A2A0(S)	10+1	2+10

C2 Plastic Panel Rear Mount Female Solder Lock (Code B)



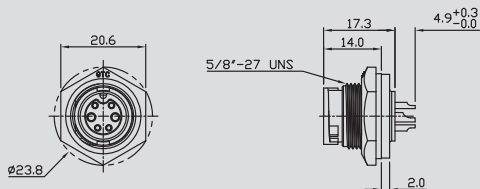
P/N	Rated current (A)	Contacts
GT1D22B2-0A2A0(S)	10+1	2+10

C2 Plastic Panel Rear Mount Male Solder Lock (Code B)



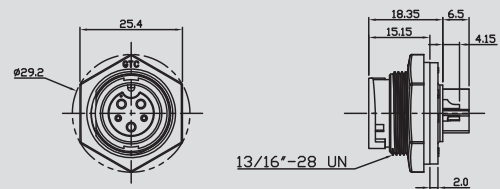
P/N	Rated current (A)	Contacts
GT1D22B3-0A2A0(S)	10+1	2+10

C2 Plastic Panel Female Solder Lock



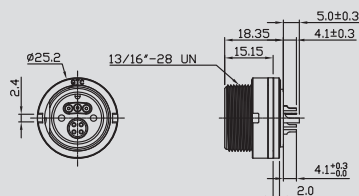
P/N	Rated current (A)	Contacts
GT1D2202-09240	5+10	2+4

C3 Plastic Panel Female Solder Lock



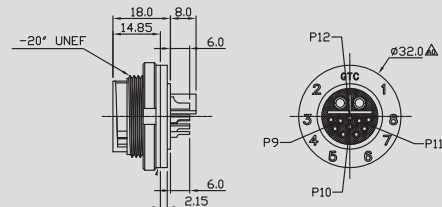
P/N	Rated current (A)	Contacts
GT1D3202-0A320(FS)	10+2	3+2
GT1D3202-08220	15+2	2+2
GT1D3202-082A0(FS)	15+2	2+10

C3 Plastic Panel Male / Female Solder Screw



P/N	Rated current (A)	Contacts
GT1D3308-08270(S)	15+2+2	2+3+4

C4 Plastic Panel Female Solder Lock (Code A)



P/N	Rated current (A)	Contacts
GT1D4202-052A0(FS)	25+5	2+10

C4 Plastic Panel Male Solder Lock (Code A)



P/N	Rated current (A)	Contacts
GT1D4203-052A0(FS)	25+5	2+10

C4 Plastic Panel Female Solder Lock (Code B)



P/N	Rated current (A)	Contacts
GT1D4292-052A0(FS)	25+5	2+10

C4 Plastic Panel Male Solder Lock (Code B)



P/N	Rated current (A)	Contacts
GT1D4293-052A0(FS)	25+5	2+10

C5 Plastic Panel Female Twist Lock



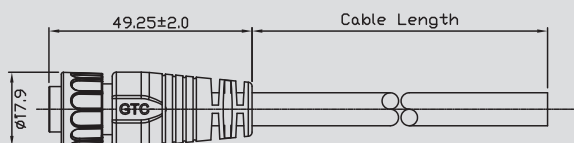
P/N	Rated current (A)	Contacts
GT1D5102-05390(FS)	20+5	3+9
GT1D5102-162J0(FS)	20+2	2+18

C5 Plastic Panel Male Twist Lock



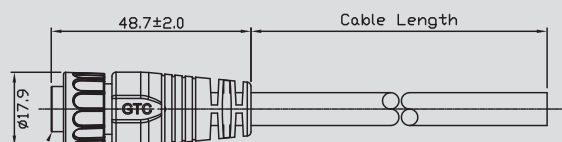
P/N	Rated current (A)	Contacts
GT1D5103-05390(FS)	20+5	3+9

C2 Plastic Cable End Male Lock (Code A)



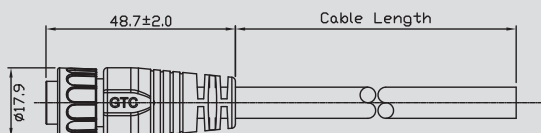
P/N	Rated current (A)	Contacts
GT1D2223-2A2A1-XX	10+1	2+10

C2 Plastic Cable End Female Lock (Code A)



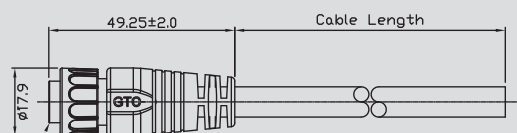
P/N	Rated current (A)	Contacts
GT1D2222-2A2A1-XX	10+1	2+10

C2 Plastic Cable End Female Lock (Code B)



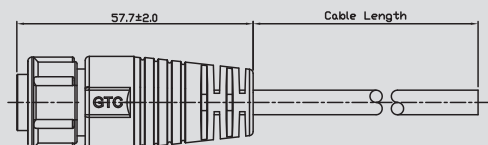
P/N	Rated current (A)	Contacts
GT1D22A2-2A2A1-XX	10+1	2+10

C2 Plastic Cable End Male Lock (Code B)



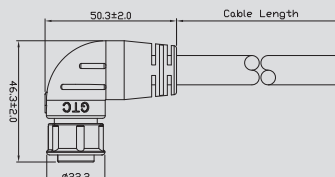
P/N	Rated current (A)	Contacts
GT1D22A3-2A2A1-XX	10+1	2+10

C3 Plastic Cable End Male Lock



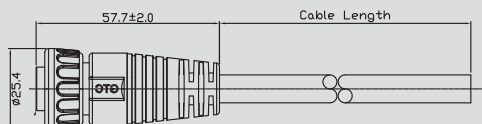
P/N	Rated current (A)	Contacts
GT1D3223-0A327-XX	10+2	3+2
GT1D3223-28221-XX	15+2	2+2

C3 Plastic Cable End 90° Male Lock



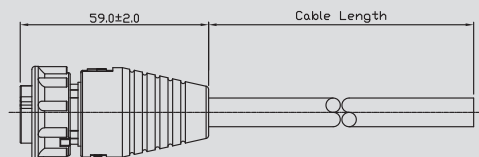
P/N	Rated current (A)	Contacts
GT1D3263-282A1-XX(F)	15+2	2+10

C3 Plastic Cable End Male / Female Screw



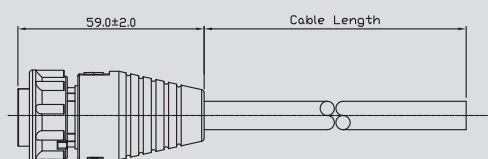
P/N	Rated current (A)	Contacts
GT1D3329-08271-XX	15+2+2	2+3+4

C4 Plastic Cable End Female Lock (Code A)



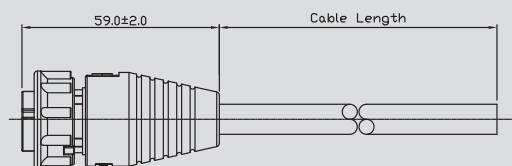
P/N	Rated current (A)	Contacts
GT1D4222-052A8-XX(F)	25+5	2+10

C4 Plastic Cable End Male Lock (Code A)



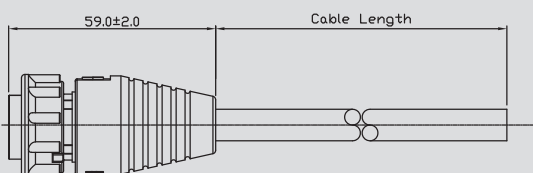
P/N	Rated current (A)	Contacts
GT1D4223-052A8-XX(F)	25+5	2+10

C4 Plastic Cable End Female Lock (Code B)



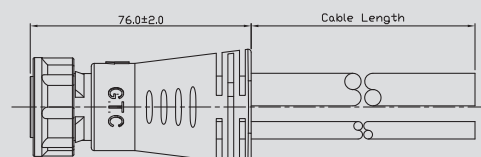
P/N	Rated current (A)
GT1D42A2-052A8-XX(F)	25+5

C4 Plastic Cable End Male Lock (Code B)



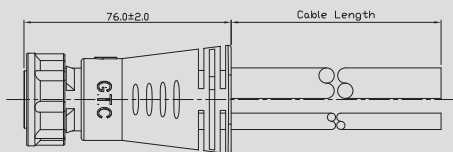
P/N	Rated current (A)	Contacts
GT1D42A3-052A8-XX(F)	25+5	2+10

C5 Plastic Cable End Female Twist Lock



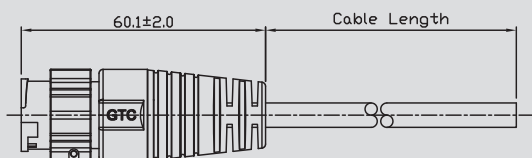
P/N	Rated current (A)	Contacts
GT1D5122-2539X-XX(F)	20+5	3+9

C5 Plastic Cable end Male Twist Lock



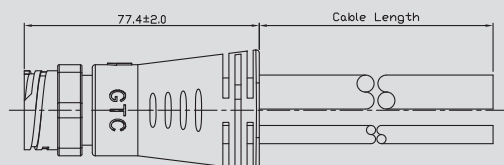
P/N	Rated current (A)	Contacts
GT1D5123-2539X-XX(F)	20+5	3+9
GT1D5123-262J1-XX(F)	20+2	2+18

C3 Plastic Cable To Cable Female Lock with Cable



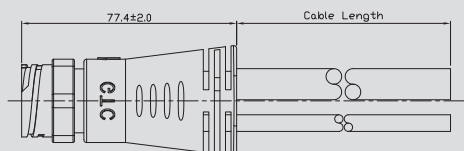
P/N	Rated current (A)	Contacts
GT1D3232-0A327-XX	10+2	3+5

C5 Plastic Cable to Cable Female Twist Lock with Cable



P/N	Rated current (A)	Contacts
GT1D5132-2539X-XX(F)	20+5	3+9

C5 Plastic Cable to Cable Male Twist Lock with Cable

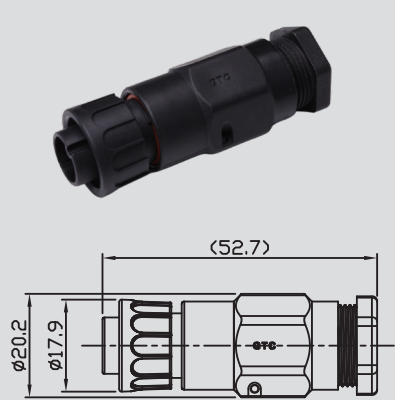


P/N	Rated current (A)	Contacts
GT1D5133-2539X-XX(F)	20+5	3+9

PLASTIC FIELD INSTALLABLE

HYBRID

C2 Plastic Field Installable Cable End Male Crimp Lock



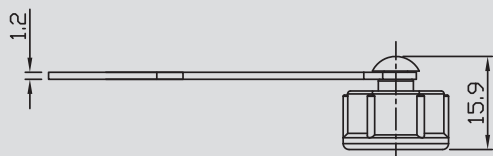
P/N	Rated current (A)	Contacts
GT1D2243-29240	5+10	4+2

C2 Plastic Field Installable Cable To Cable Female Crimp Lock



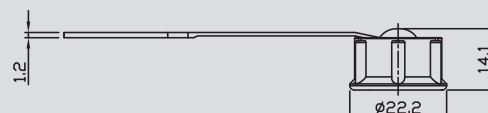
P/N	Rated current (A)	Contacts
GT1D2252-29240	5+10	4+2

Cap Plastic For C2 Lock Panel



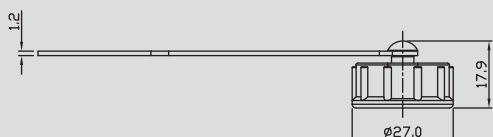
P/N	Mating Series No.
GT1C5221X2	GT1D22B2 Series
	GT1D22B3 Series
	GT1D2202 Series
	GT1D2212 Series
	GT1D2213 Series

Cap Plastic for C3 Lock Panel



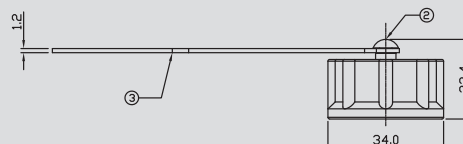
P/N	Mating Series No.
GT1C5321X2	GT1D3202 Series
	GT1D3202 Series

Cap Plastic For C4 Lock Panel



P/N	Mating Series No.
GT1C5421X2	GT1D4202 Series
	GT1D4203 Series
	GT1D4292 Series
	GT1D4293 Series

Cap Plastic for C5 Twist Lock Panel



P/N	Mating Series No.
GT1C5511X2	GT1D5102 Series
	GT1D5103 Series



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