

Remotec Group



RK Series Power Waterproof Connectors

Our products are widely used in artificial intelligence, telemedicine, industrial Internet, outdoor stage lighting and audio, outdoor scenery Sightseeing lighting, rail transit, new energy, photovoltaic energy storage, and deployment in harsh outdoor environments.

CATALOGUE

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Company File

Renhotec Group



Our History

Founded in 2005, the company started its business in the communications industry and gradually expanded to the industrial, the automotive and the new energy markets.



Our Team

More than 250 employees worldwide, with integrated manufacturing and sales operations, supported by a global marketing and logistics network.



Our Values

We possess profound expertise in the core technologies of connected systems. Being vertically integrated throughout the supply chain enables us to deliver comprehensive one-stop solutions for such systems.



Company Distribution

Renhotec has extensive business cooperation worldwide



Europe

America

Southeast Asia



The company's management and technical personnel have extensive experience and professional knowledge in the connector industry, with domestic advanced manufacturing and experimental testing equipment, with a complete quality assurance system and has passed the ISO9001 international quality system certification.

Look forward to sincere cooperation with our customers, mutual benefit and mutual win, create brilliant!

Quality Assurance

Our state-certified testing laboratory offers a full suite of reliability testing services, covering mechanical, electrical and environmental performance characterization.



ISO9001



IATF16949



CE



UL



TUV



REACH SVHC



IPX8



RoHS

Product Introduction

The technical performance of this connector complies with TIA/EIA 568, MIL, IEC, CNS and other standards. Spring snap design, lock docking, safe and firm, vibration and impact resistance. Zinc alloy shell, stable electrical performance, high strong pressure resistance, high temperature resistance, explosion resistance and corrosion resistance. Gold-plated contacts, high strength, excellent corrosion resistance and electrical conductivity, effectively respond to changes in temperature rise caused by current.

The number of contacts: 2 / 3 / 4 / 5 / 6 / 7 / 8 Pin

Packaging and Storage

The product is packaged in a ziplock bag. The packaged products should be stored in a warehouse with an ambient temperature of $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$, a relative humidity not greater than 85%, and no corrosive gases such as acid and alkali in the surrounding air.

Standards

Applicable standards: Conform to TIA/EIA 568, MIL, IEC, CNS and other standards



Material, Process, Surface treatment

Contacts

Male pin: brass C2560; Female pin: phosphor bronze QSN4-3 Surface
Treatment: gold-plated, thickness 2u"

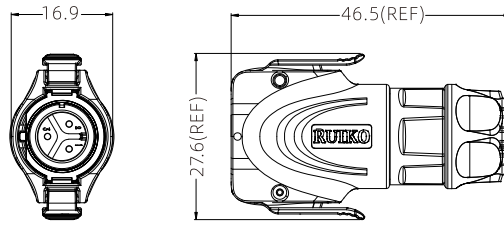
Shell

Material: Zinc Alloy
Surface treatment: pearl chrome plated, thickness 5-10u"

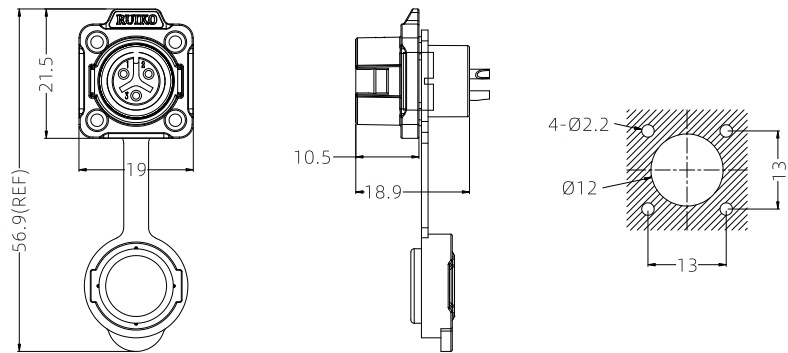
Insulator

Material: high performance engineering plastics - GF Reinforced PA66 Production
Process: injection molding

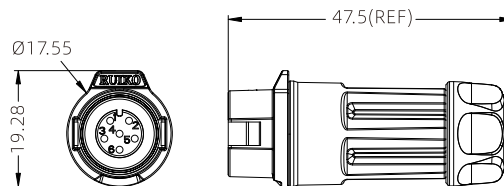
Physical Dimension



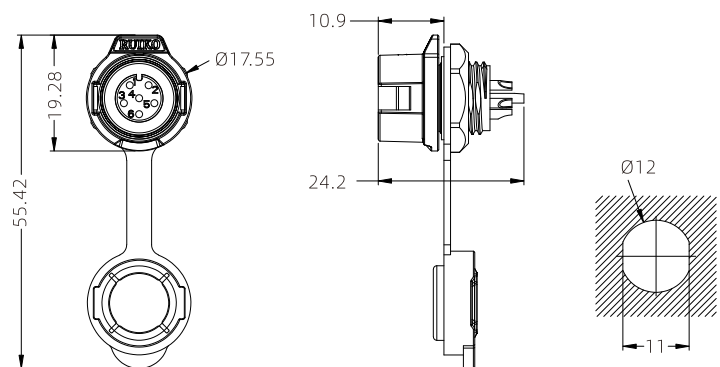
RK12 Male Plug Solder Terminal (Plastic + Metal Type)



RK12 Female Socket Four-hole Flange Solder Terminal (Metal Type)




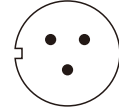
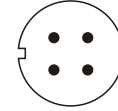
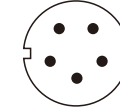
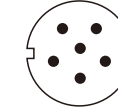
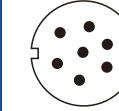
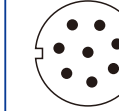
RK12 Female Docking Plug Solder Terminal (Plastic + Metal Type)



Panel Size

RK12 Female Socket Single-hole Solder Terminal (Metal Type)

Product Features

Pins	 2 Pin	 3 Pin	 4 Pin	 5 Pin	 6 Pin	 7 Pin	 8 Pin	
Rated Current	5A	5A	5A	5A	5A	3A	3A	
Operating Voltage	250V	250V	250V	250V	250V	200V	200V	
Withstand Voltage	1500V	1500V	1500V	1500V	1500V	1000V	1000V	
Contact Resistance	< 5.0m	< 5.0m	< 5.0m	< 5.0m	< 5.0m	< 10.0m	< 10.0m	
Temperature Rise	5A 30°C↓ 7A 40°C↓ 10A 50°C↓							
Wire Gauge	0.3-0.5mm ² /22-20AWG					0.2-0.3mm ² /24-22AWG		
Contacts	1.0*2	1.0*3	1.0*4	1.0*5	1.0*6	0.8*7	0.8*8	
Insertion Force	0.6N Max.	0.9N Max.	1.2N Max.	1.5N Max.	1.8N Max.	2.1N Max.	2.4N Max.	
Mechanical life	1700 Times							
Thread Torque	42-53(N·m) torque wrench 200(N·m)							
Temperature Range	-40 ~ +80							
Vibration	Frequency:5~200Hz; Amplitude:5mm; Speed:10m/s; 0.10us No momentary disconnection							
Shock proof	294m/s ²							
Salt Spray	PH6.5-7.2, NaCL,5% 48H							
Cable OD	OD: 1 - 8mm							
IP Rating	IP67							
Approval Standards	TUV and UL Certified							

Product Introduction

The technical performance of this connector complies with UL, IEC and other standards. Spring snap design, lock docking, safe and firm. Metal shell, stable electrical performance, high-strength pressure resistance, high temperature resistance, explosion resistance, corrosion resistance. Gold-plated contacts, high-strength corrosion resistance and electrical conductivity, effectively respond to changes in temperature rise caused by current.

Packaging and Storage

The product is packaged in a ziplock bag. The packaged products should be stored in a warehouse with an ambient temperature of $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$, a relative humidity not greater than 85%, and no corrosive gases such as acid and alkali in the surrounding air.

Standards

Applicable standards: Conform to TIA/EIA 568, MIL, IEC, CNS and other standards



Material, Process, Surface treatment

Contacts

Standard parts: MPO fiber optic jumper

Shell

Material: engineering plastic PBT/zinc alloy

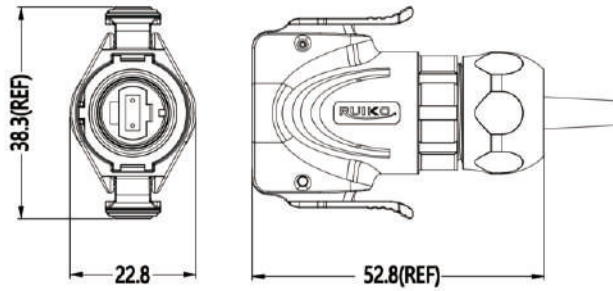
Socket

Material: zinc alloy/engineering plastic PBT

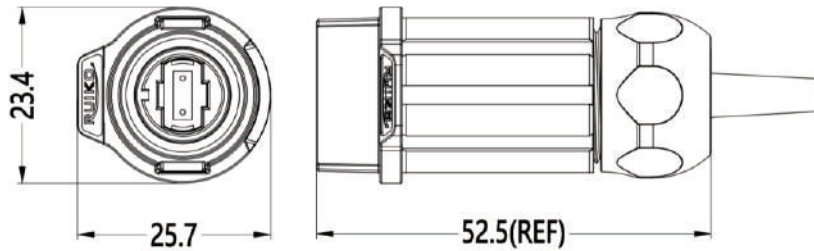
Insulator

Material: engineering plastic PBT

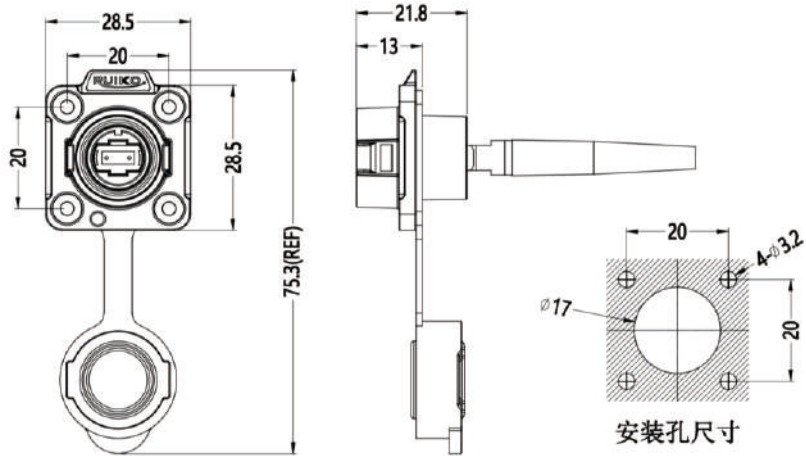
Physical Dimension



RK16 MPO Female Plug Metal Type

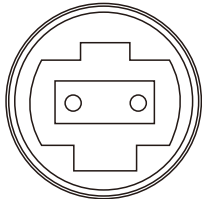


RK16 MPO Docking Male Plug Metal Type



RK16 MPO Male Socket Four-hole Flange Metal Type

Product Features

Applicable Connector Type	 MPO fiber 2- 24 cores (can be customized)
Fiber Types	Suitable for singlemode or multimode fiber
Connection	Dual-snap quick bayonet connection
Insertion Loss	0.75dB standard single mode; 0.35dB low loss single mode; 0.50dB standard multimode; 0.35dB low loss multimode
Return Loss	大于等于55db
Repeatability	0.10dB
Interface	PC UPC APC
Operating temperature	-40 ~ +80
Mechanical life	500 Times
Vertical Tension	300N (resistance force at the end of the plug)
Vibration	Tested under mating state, frequency: 5~200Hz, amplitude: 5mm, Speed: 10m/s, 0.10us, insertion loss within 0.75db
Shock proof	490m/s, duration 11ms
Cable OD	Applicable OD range (4- 9) mm (The inner diameters of the three tail waterproof rings are: 5mm/ 7mm/ 9mm)
IP Rating	IP67

Product Introduction

The technical performance of this connector complies with TIA/EIA 568, MIL, IEC, CNS and other standards. Spring snap design, lock docking, safe and firm, anti-vibration, impact resistance. Zinc alloy pearl chrome-plated shell, with complete electromagnetic and radio frequency interference protection. Gold-plated contacts, high-strength corrosion resistance and electrical conductivity, effectively respond to changes in temperature rise caused by current.

The number of contacts: 2 / 3 / 4 / 5 / 7 / 8 / 9 Pin

Packaging and Storage

The product is packaged in a ziplock bag. The packaged products should be stored in a warehouse with an ambient temperature of $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$, a relative humidity not greater than 85%, and no corrosive gases such as acid and alkali in the surrounding air.

Standards

Applicable standards: Conform to TIA/EIA 568, MIL, IEC, CNS and other standards



Material, Process, Surface treatment

Contacts

Male pin: brass HPB59-1; Female pin: phosphor bronze QSN4-3

Surfacetreatment: gold-plated, thickness 2-4u"

Shell

Material: Zinc Alloy

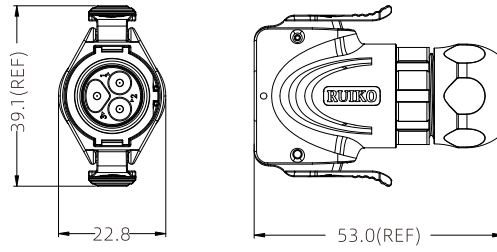
Surface treatment: pearl chrome plated, thickness 5-10u"

Insulator

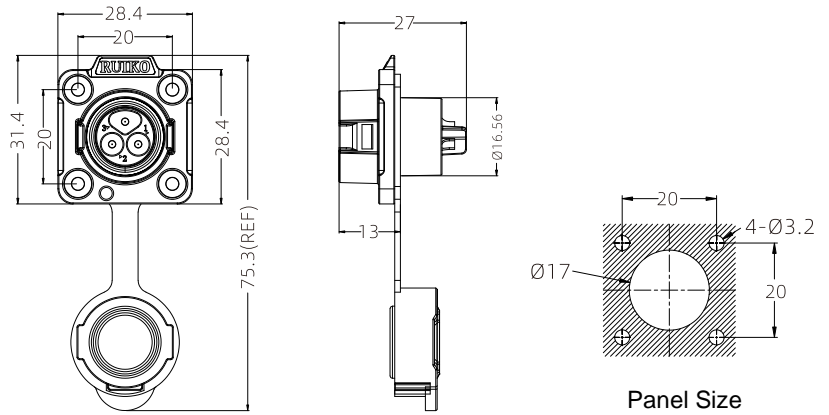
Material: high performance engineering plastics - GF Reinforced PA66 Production

Process: injection molding

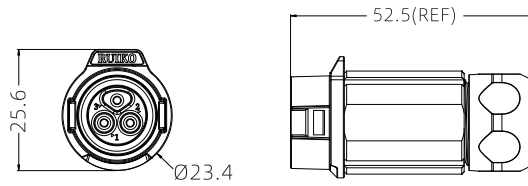
Physical Dimension



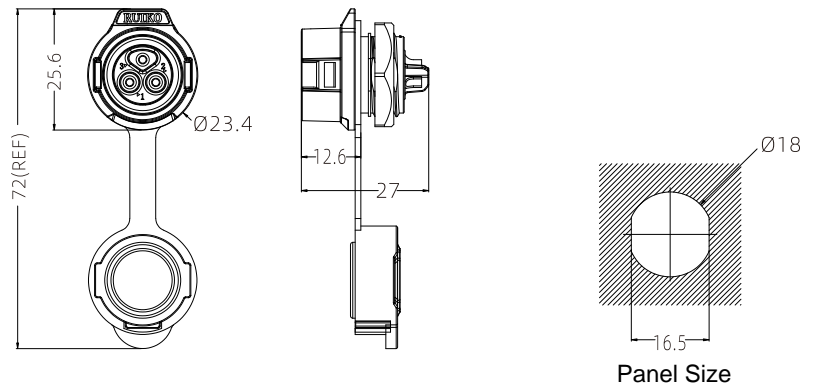
RK16 Male/Female Plug Solder Terminal (Full Metal Type)



RK16 Male/Female Socket Four-hole Flange Solder Terminal (Metal Type)

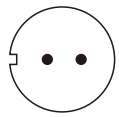
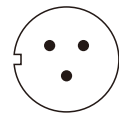
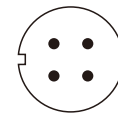
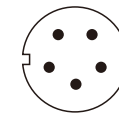
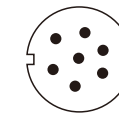
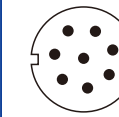
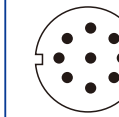


RK16 Male/Female Docking Plug Solder Terminal (Full Metal Type)



RK16 Male/Female Socket Single-hole Solder Terminal (Metal Type)

Product Features

Pins							
Rated Current	10A	10A	10A	5A	5A	5A	5A
Operating Voltage	400V	400V	400V	250V	250V	250V	250V
Withstand Voltage	1500V	1500V	1500V	1500V	1500V	1500V	1500V
Contact Resistance	< 3.0m	< 3.0m	< 3.0m	< 5.0m	< 5.0m	< 5.0m	< 5.0m
Wire Gauge	1.0-1.5mm ² /18-16AWG			0.3-0.5mm ² /22-20AWG			
Contacts	1.5*2	1.5*3	1.5*4	1.0*5	1.0*7	1.0*8	1.0*9
Insertion Force	1.2N Max.	1.8N Max.	2.4N Max.	1.5N Max.	1.8N Max.	2.4N Max.	2.7N Max.
Mechanical life	1700 Times						
Thread Torque	42-53(N·m) torque wrench 200(N·m)						
Temperature Range	-40 ~ +80						
Vibration	Frequency:5~200Hz; Amplitude:5mm; Speed:10m/s; 0.10us No momentary disconnection						
Shock proof	294m/s ²						
Salt Spray	PH6.5-7.2, NaCL,5% 48H						
Cable OD	Applicable OD range (4- 9) mm (The inner diameters of the three tail waterproof rings are: 5mm/ 7mm/ 9mm)						
IP Rating	IP67						

Product Introduction

The technical performance of this connector complies with TIA/EIA 568, MIL, IEC, CNS and other standards. Spring snap design, lock docking, safe and firm, anti-vibration, impact resistance. Zinc alloy shell, stable electrical performance, high-strength pressure resistance, high temperature resistance, explosion resistance, and corrosion resistance. Gold-plated contacts, high-strength corrosion resistance and electrical conductivity, effectively respond to changes in temperature rise caused by current.

The number of contacts: 2 / 3 / 4 / 5 / 7 / 9 / 12 / 14 Pin

Packaging and Storage

The product is packaged in a ziplock bag. The packaged products should be stored in a warehouse with an ambient temperature of $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$, a relative humidity not greater than 85%, and no corrosive gases such as acid and alkali in the surrounding air.

Standards

Applicable standards: Conform to TIA/EIA 568, MIL, IEC, CNS and other standards



Material, Process, Surface treatment

Contacts

Male pin: brass HPB59-1; Female pin: phosphor bronze QSN4-3

Surface treatment: gold-plated, thickness 4u"

Shell

Material: Zinc Alloy

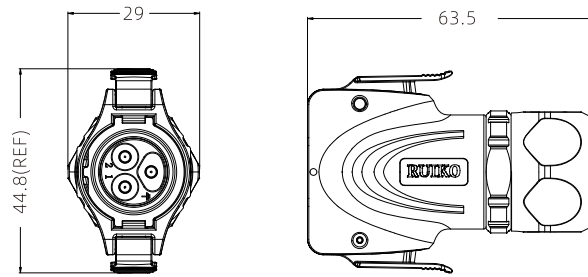
Surface treatment: pearl chrome plated, thickness 5-10u"

Insulator

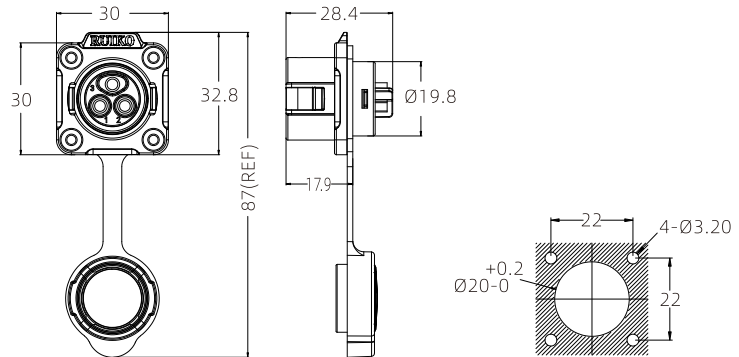
Material: high performance engineering plastics - GF Reinforced PA66 Production

Process: injection molding

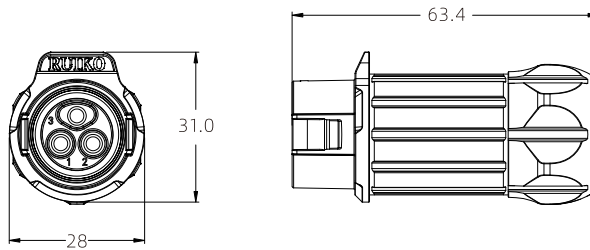
Physical Dimension



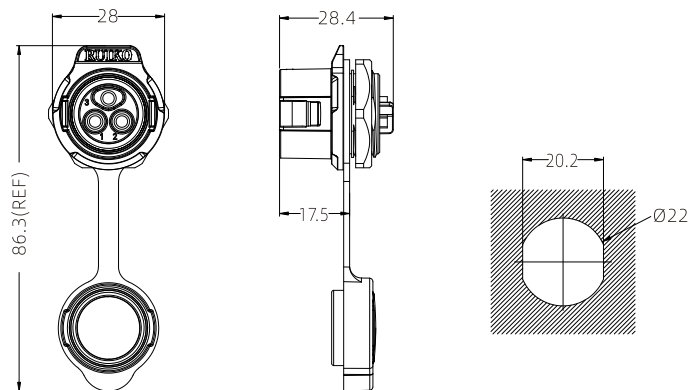
RK20 Male/Female Plug Solder Terminal (Full Metal Type)



RK20 Male/Female Socket Four-hole Flange Solder Terminal (Metal Type)



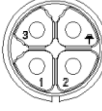



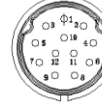



RK20 Male/Female Docking Plug Solder Terminal (Full Metal Type)



RK20 Male/Female Socket Single-hole Solder Terminal (Metal Type)

Product Features

Pins								
	2 Pin	3 Pin	4 Pin	5 Pin	7 Pin	9 Pin	12 Pin	14 Pin
Rated Current	20A			12A		5A		
Operating Voltage	500V			250V		200V		
Withstand Voltage	2000V			1500V		1500V		
Contact Resistance	< 1.0m			< 3.0m		< 5.0m		
Contacts	2.7*2	2.7*3	2.7*4	1.8*5	1.8*7	1.0*9	1.0*12	1.0*14
Mechanical life	1700 Times							
Temperature Range	-40 ~ +80							
Vibration	Frequency:5~200Hz; Amplitude:5mm; Speed:10m/s; 0.10us No momentary disconnection							
Shock proof	294m/s ²							
Salt Spray	PH6.5-7.2, NaCL,5% 48H							
Wire Gauge	2.5-4.0mm ² /14-12AWG			1.0-1.5mm ² /18-16AWG		0.3-0.5mm ² /22-20AWG		
Cable OD (Power)	Applicable OD range (9- 13) mm							
Cable OD (Signal)	Applicable OD range (7- 10) mm							
IP Rating	IP67							
Approval Standards	TUV and UL Certified							

Product Introduction

The technical performance of this connector complies with TIA/E IA 568, MIL, IEC, CNS and other standards. Spring snap design, lock docking, safe and firm. PBT material shell, stable electrical performance, high-strength pressure resistance, high temperature resistance, explosion resistance, corrosion resistance. Gold-plated contacts, high-strength corrosion resistance and electrical conductivity, effectively respond to changes in temperature rise caused by current.

The number of contacts: 3 / 4 / 10 / 12 / 19 / 24 Pin

Packaging and Storage

The product is packaged in a ziplock bag. The packaged products should be stored in a warehouse with an ambient temperature of $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$, a relative humidity not greater than 85%, and no corrosive gases such as acid and alkali in the surrounding air.

Standards

Applicable standards: Conform to TIA/EIA 568, MIL, IEC, CNS and other standards



Material, Process, Surface treatment

Contacts

Male pin: brass HPB59-1; Female pin: phosphor bronze QSN4-3 Production

Process: machining

Surfacetreatment: gold-plated, thickness 4u"

Shell

Material: engineering plastic PBT

Production process: injection molding

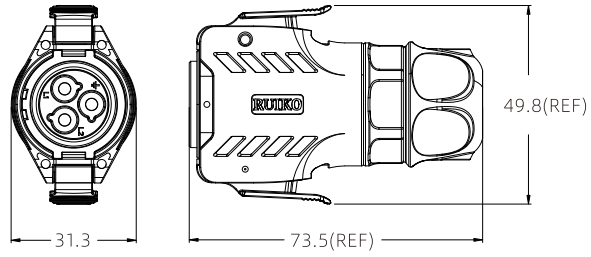
Insulator

Material: high performance engineering plastics - GF Reinforced PA66 Production

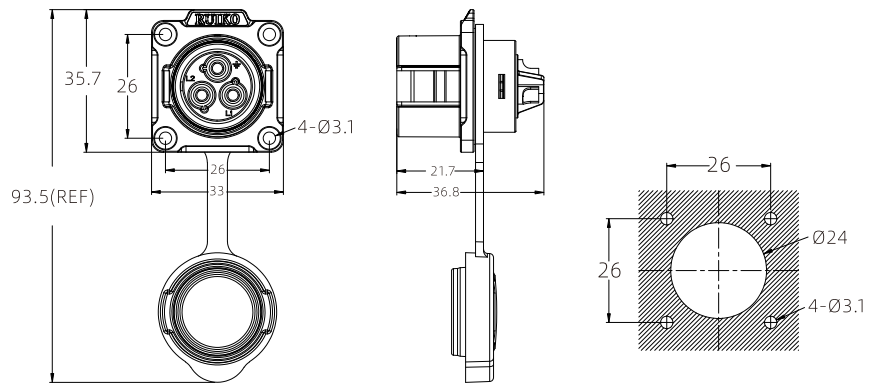
Process: injection molding

Colour: Black

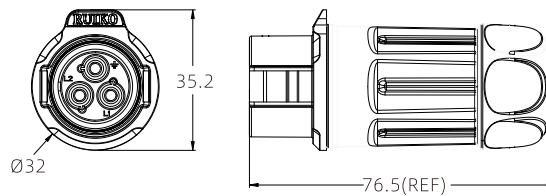
Physical Dimension



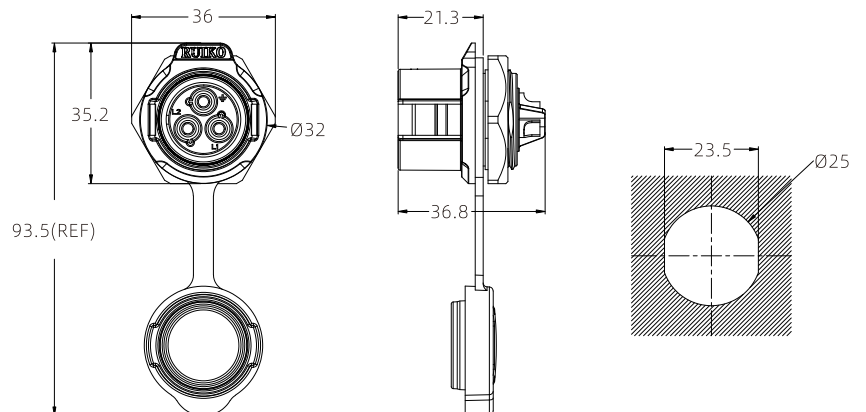
RK24 Male/Female Plug Solder Terminal (Plastic Type)



RK24 Male/Female Socket Four-hole Flange Solder Terminal (Metal Type)

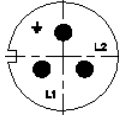
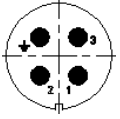
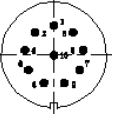
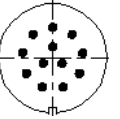
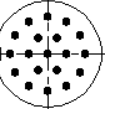
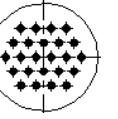


RK24 Male/Female Docking Plug Solder Terminal (Plastic Type)



RK24 Male/Female Socket Single-hole Solder Terminal (Metal Type)

Product Features

Pins						
	3 Pin	4 Pin	10 Pin	12 Pin	19 Pin	24 Pin
Rated Current	25A		10A		5A	
Operating Voltage	500V		400V		150V	
Withstand Voltage	2500V		2500V		1500V	
Contact Resistance	< 1.0m		< 2.5m		< 5.0m	
Temperature Rise	25A 30°C ↓ 30A 40°C ↓ 35A 50°C ↓		10A 30°C ↓ 12A 40°C ↓ 15A 50°C ↓		5A 30°C ↓ 7A 40°C ↓ 10A 50°C ↓	
Contacts	3.0*3	3.0*4	1.5*10	1.5*12	1.0*19	1.0*24
Insertion Force	4.5N Max.	6.0N Max.	14N Max.	16N Max.	19N Max.	22N Max.
Mechanical life	1700 Times					
Thread Torque	42-53(N·m) torque wrench 200(N·m)					
Temperature Range	-40 ~ +80					
Vibration	Frequency:5~200Hz; Amplitude:5mm; Speed:10m/s; 0.10us No momentary disconnection					
Shock proof	294m/s ²					
Salt Spray	PH6.5-7.2, NaCL,5% 48H					
Wire Gauge	2.5-4.0mm ² /14-12AWG		1.0-1.5mm ² /18-16AWG		0.3-0.5mm ² /22-20AWG	
Cable OD	Applicable OD range (9- 14) mm					
IP Rating	IP67					
Approval Standards	TUV and UL Certified					