

J599 Optical and Electrical Hybrid Connector

Product Description

J599 2 optical 2 electrical connector is an integrated optoelectronic connector that can transmit multiple optical signals and electrical signals at the same time. The connector is made of stainless steel and is suitable for long-term operation in harsh environments such as acid, alkali, corrosion and marine climate. The plug and socket adopt five Key positioning, blind insertion and mis-insertion prevention functions, three-head thread quick connection, with anti-loosening mechanism, multi-core one-time connection and blind insertion; low connection loss, high reliability; waterproof, dustproof, resistant Harsh environment, corrosion resistance and other characteristics, currently can provide 2 optical and 2 electrical, 2 optical and 4 electrical, etc., 2 optical and 2 electrical is the shell number 13, 2 optical and 4 electrical is the shell number 15, and can be customized according to customer requirements.



2 optical 2 electric plug



3 optical 3 electric socket (customized version)

Features

- Comply with GJB599A (MIL-DTL-38999) III series interface
- The connector adopts five-key positioning, with blind insertion, mis-insertion prevention and anti-vibration functions
- Using three-head thread quick connection and equipped with anti-loosening mechanism
- Using ceramic ferrules and ceramic sleeves to achieve precise optical fiber docking
- Can realize optical and electrical connection

Applications

- Smart communication substation, remote communication base station
- Military optical communication network
- Communication vehicle transmission, long-distance space transmission, communication corps portable transmission tool
- Remote video and telephone conference signal transmission for actual combat exercises
- Coal mines, oil wells, natural gas, etc.
- Geological exploration communication
- Radio and television broadcast
- Emergency access to optical fiber communications;



Product Parameter

Insertion Loss	SM	$\leq 1.0\text{dB}$
	MM	$\leq 0.6\text{dB}$
Return Loss	SM	$\geq 50\text{dB}$
Insulation Resistance		500VDC $\geq 5000\text{M}\Omega$ (normal environment)
Contact Resistance		$\leq 10\text{m}\Omega$
Mechanical Behavior	Plug	$\leq 500\text{N}$ (Main cable)
	Socket	$\leq 30\text{N}$ (Branch cable)
Operating Temperature		$-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
Insertion Loss		IP67

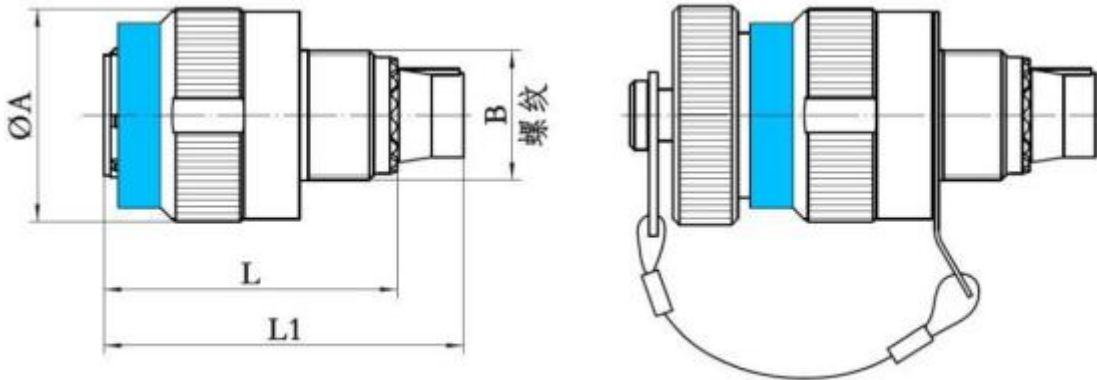
Optical Cable Parameter

Optical cable diameter	8.5mm
Sheath material	TPU
Tensile unit	KEVLAR
electric wire	1.5 square wire
Fiber type	9/125、50/125、62.5/125
tensile strength	Short time: 600N Long time: 1200N
Operating temperature	$-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$



Product appearance

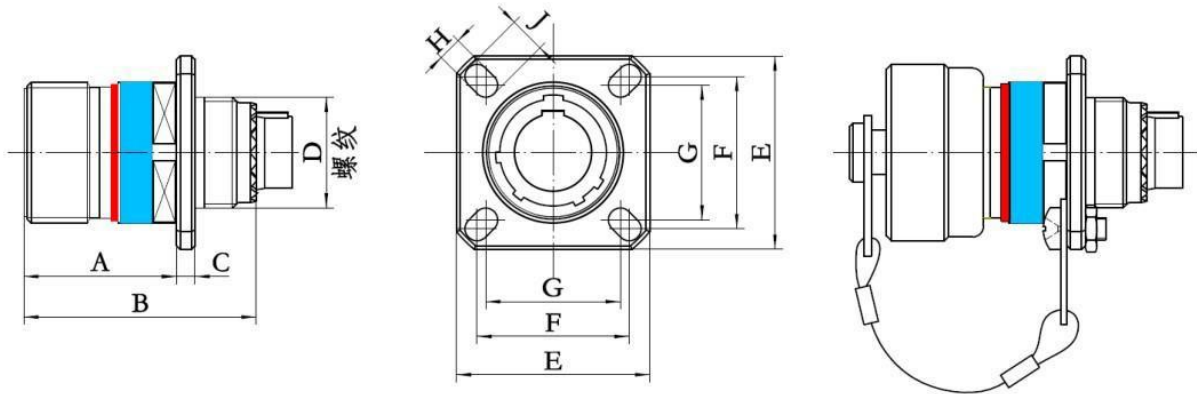
Plug

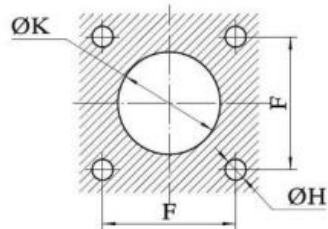
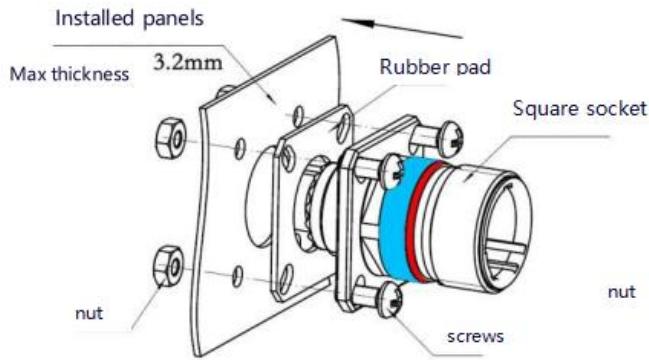


Plug outline drawing (without tail attachment)

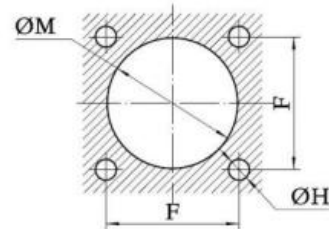
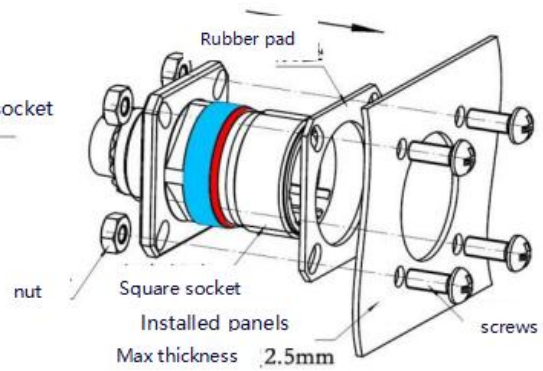
Shell NO.	Shell Code	A Max	Thread	L Max	L1 Max
13	B	25.00	M15x1-6g	32	42
15	C	29.40	M18x1-6g	32	42

Socket





Square plate socket front installation and panel opening dimensions



Square plate socket rear installation and panel opening dimensions

Shell NO.	Shell Code	A Max	B Max	C Max	D Thread	E	F	G	H	J	K Mini	M Mini
13	B	20.90	36.50	2.50	M15x1-6g	26.20	20.62	18.26	3.25	4.93	15.88	20.22
15	C	20.90	36.50	2.50	M18x1-6g	28.60	23.01	20.62	3.25	4.93	19.05	23.42

