

FTL Series Marine Anti-corrosion Watertight High Current Connector

Description

- Tri-start anti-decoupling connection
- Application: between equipment and cable and between cables in the severe environments such as moisture and water immersion
- 50m watertight after being mated
- Applicable to high current transmission
- Termination : solder
- Five key orientation to blind mate and avoid mis-mating
- High reliable crown band socket make connector soft insertion and separation and low contact resistance
- Plug and receptacle loaded with either pin or socket
- Enterprise standard: Q/21EJ184



Main technical characteristic

[Mechanical]

- Shell: corrosion resistant steel, passive, copper alloy satin nickel plating or aluminum alloy electroless nickel plating
- Insulator: thermosetting material
- Grommet and Sealing ring: silicone rubber
- Contact: copper alloy, gold plating
- Endurance: 1000 cycles

[Electrical]

—Contact resistance and rated current:

Contact size (mm)	Contact resistance (mΩ)	Rated current (A)	Inner dia. of solder cup (mm)
φ5.0	0.75	75	φ6.5
φ7.5	0.60	100	φ8.0
φ9.1	0.40	150	φ10.0

—Rated voltage, withstanding voltage and insulation resistance:

Operation condition	Rated voltage (V)	Withstanding voltage (V)	Insulation resistance (MΩ)
Normal	500	2300	≥5000
Damp & heat	500	750	≥100
Altitude (1Kpa)	250	300	—
Water immersion	500	750	≥100

[Environmental]

- Operating temperature: -55℃~+200℃
- Relative humidity: 95% at 60℃
- Vibration: frequency 10~2000 Hz, acceleration 196m/s²
- Shock: acceleration 980 m/s²
- Constant acceleration: 980 m/s²
- Hermetic: 0~50m water immersion
- Salt spray: corrosion resistant steel—1000h; copper alloy—500h; aluminum alloy—48h

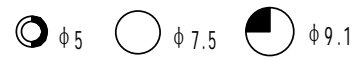
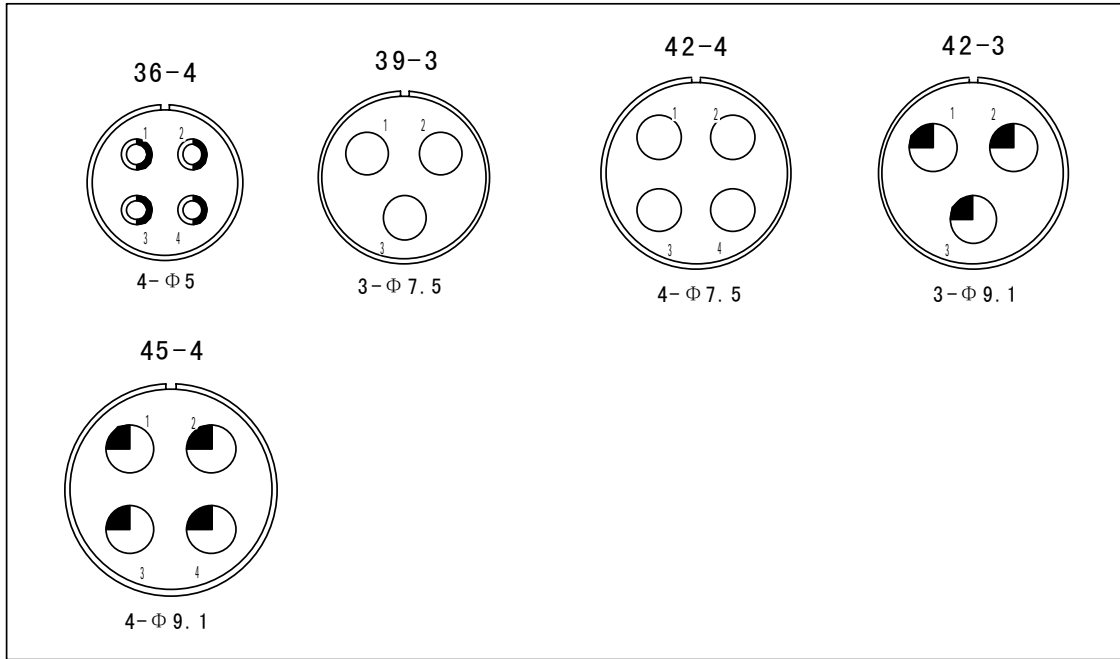
—EMI shielding: frequency 100MHz~1GHz, leakage attenuation minimum 60dB

—Fungus and dust resistance

Ordering information

Basic series	FTL	36	T	4	K₁	P	40	(W)
FTL - Marine anti-corrosion waterproof high current connector								
Shell size	36-39-42-45							
Type	T - plug F – square flange receptacle							
Contact number	see the insert arrangement							
Contact styles	Z ₁ – pin, gold plating K ₁ – socket, gold plating							
Shell structure	P – thread termination, with back shell							
Shell materials and plating	1 - Aluminum alloy, electroless nickel 11- Copper alloy, electroless nickel 12- Copper alloy, satin nickel plating 40 – Stainless steel, passive							
Polarization	Blank—N , (W) —W, (X) —X, (Y) —Y, (Z) —Z							

FTL series inert arrangement (mating face of pin inserts)

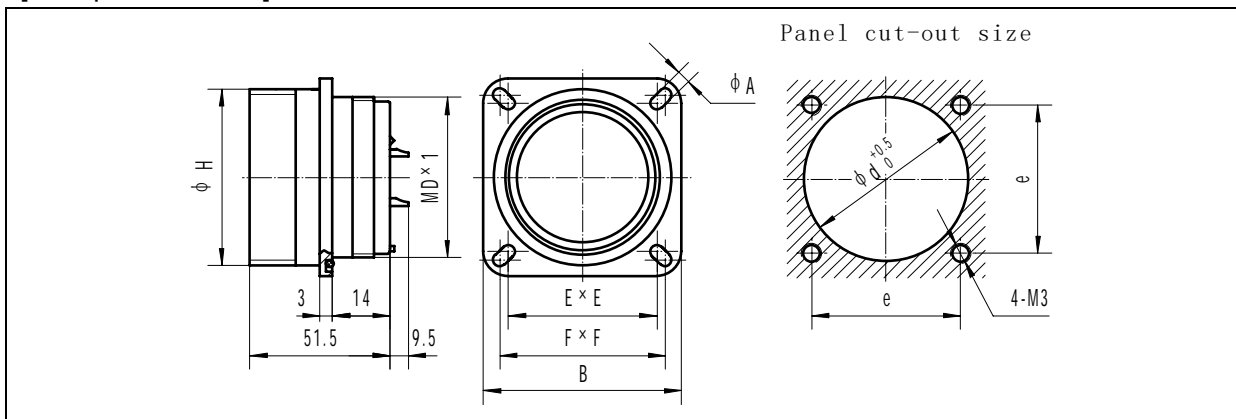


Outline dimensions

[Plug FTL-T-P]

	Shell size	C	D
	36	48	36
	39	51	39
	42	54.6	42
	45	57.6	45

[Receptacle TL-F-P]



Shell size	A	B	D	E	F	H	d	e
36	3.2	45	36	33	37	41.2	36.5	33.0~37.0
39	4.4	48	39	39	-	44.5	39.5	39.0
42	4.4	50	42	41	-	47.6	42.5	41.0
45	4.4	52	45	42	-	50.8	45.5	42.0