

12Pairs DC Wires Room to MXC Plate

FISCHER Connector/ Micro D connector

Talent high-density DC wires include sealed modules, heat sink modules, and twisted pair DC wires. 12 pairs of twisted pair cables are woven with stainless steel to protect the enameled wires and provide shielding. Heat sink blocks are equipped on the cooling plate of the dilution refrigeration and the cold head of the pulse tube or GM refrigerator. High density DC lines can be used to provide DC signal transmission channels for superconducting quantum chips, cryogenic amplifiers, parametric amplifiers, and other cryogenic devices. Stable transmission of DC signals across temperature zones can be achieved in extremely low heat leakage environments of dilution refrigerators.

Product features:

- Suitable for KF40 flange, fully equipped with 24 * 4 DC channels.
- Excellent sealing performance, vacuum leakage rate $\leq 5 \times 10^{-10} \text{ Pa} \cdot \text{m}^3/\text{s}$
- Adopting a dual end design with a range from room temperature to 4K and a range from 4K to MXC.

Typical applications:

Quantum chip power supply
Cryogenic device power supply

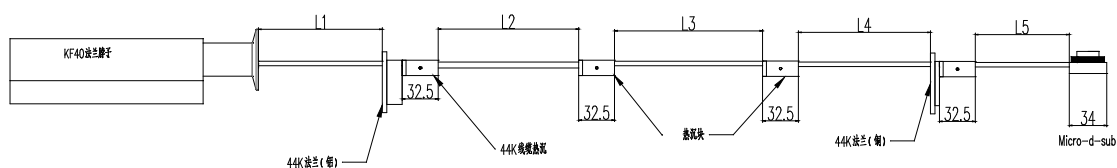
From Room to 4K DC wires

Item	Value	unit
Chanel	24 channel each group, total 96 channel (4 groups max)	
Cable material	Copper, phosphor bronze, manganese copper	
Outer diameter of enameled wire	0.79,0.10,0.114,0.127,0.152,0.178	mm
Room temperature resistance	According to cable material	Ω
Low resistance insulation to ground	≥ 1000	M Ω
Hermetic flange vacuum leakage rate	$\leq 5 \times 10^{-10}$	$\text{Pa} \cdot \text{m}^3/\text{s}$
Room temperature hermetic connector	FISCHER	
4K Connector	Micro D 25Pin	
Storage temperature	-5 to +85	$^{\circ}\text{C}$

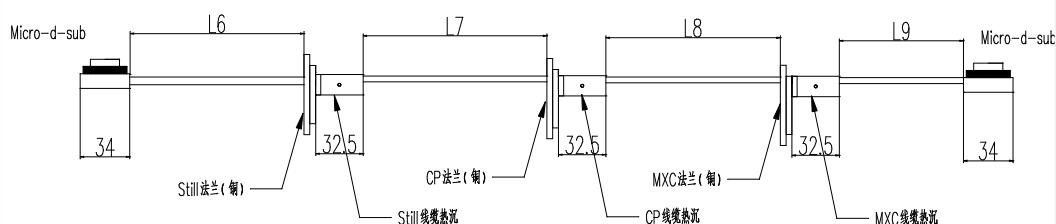
4K to MXC Plate:

Item	Value	Unit
Chanel	24 channel each group, total 96 channel (4 groups max)	
线缆材质	NbTi/CuNi mix或者NbTi/Cu mix	
Cable material	0.79,0.10,0.114,0.127,0.152,0.178	mm
Room temperature resistance	According to cable material	Ω
Low resistance insulation to ground	≥ 1000	M Ω
4K Connector	Micro D 25Pin	
MXC plate connector	Micro D 25Pin	
Storage temperature	-5 to +85	$^{\circ}\text{C}$

Outline:



Room to 4K



4K to MXC