

VL31 Series Rectangular Electrical Connectors

Brief introduction

- Plug and receptacle use thread guiding rod coupling locking style
- Hyperboloid wire spring socket with low contact resistance
- Vibration and shock resistant
- Hexagonal guiding pin to avoid mismatching
- Applied in electrical connection between railway train and signal control boxes.
- Modular configuration, free modular combination per customer requirements
- Standard: Q/21EJ775

Main technical characteristics

[Mechanical characteristics]

- vibration: 10~100Hz, acceleration 20m/s², no electrical discontinuity more than 10μs
- shock: peak acceleration 30g, duration 18ms, shock 6 times for each three directions
- durability: 500 cycles

[Electrical characteristics]

- contact resistance and rated current:

Contact size	Rated current (A)	Contact resistance (mΩ)
Φ1.5	8	≤2.5
Φ3	25	≤0.7

- rated voltage: 110V (20-pole); 220V (56-pole)

- withstanding voltage: 2550V AC, 50Hz, 1min

- Insulation resistance: ≥5000MΩ

[Environmental characteristics]

- Operation temperature: -40~+100°C

- Protection performances: IP50

Designation

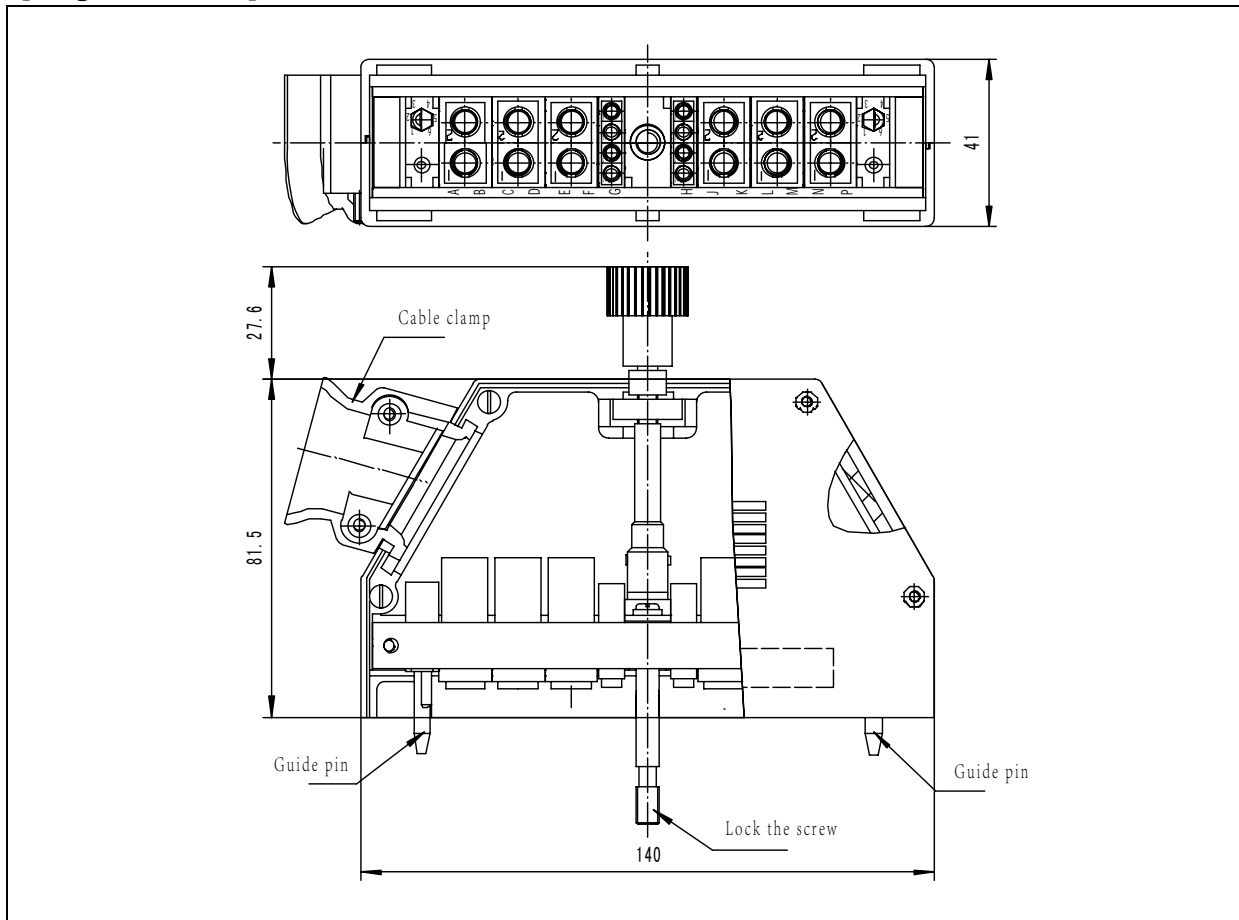
Series	VL31	J	56	T	Y	-01
Contact type	J—pin; K—socket					
Contact No.	20, 56					
Connector type	T—Plug ; Z—Receptacle					
termination type	Y—crimp					
Modification code	-01					

Part number matching list

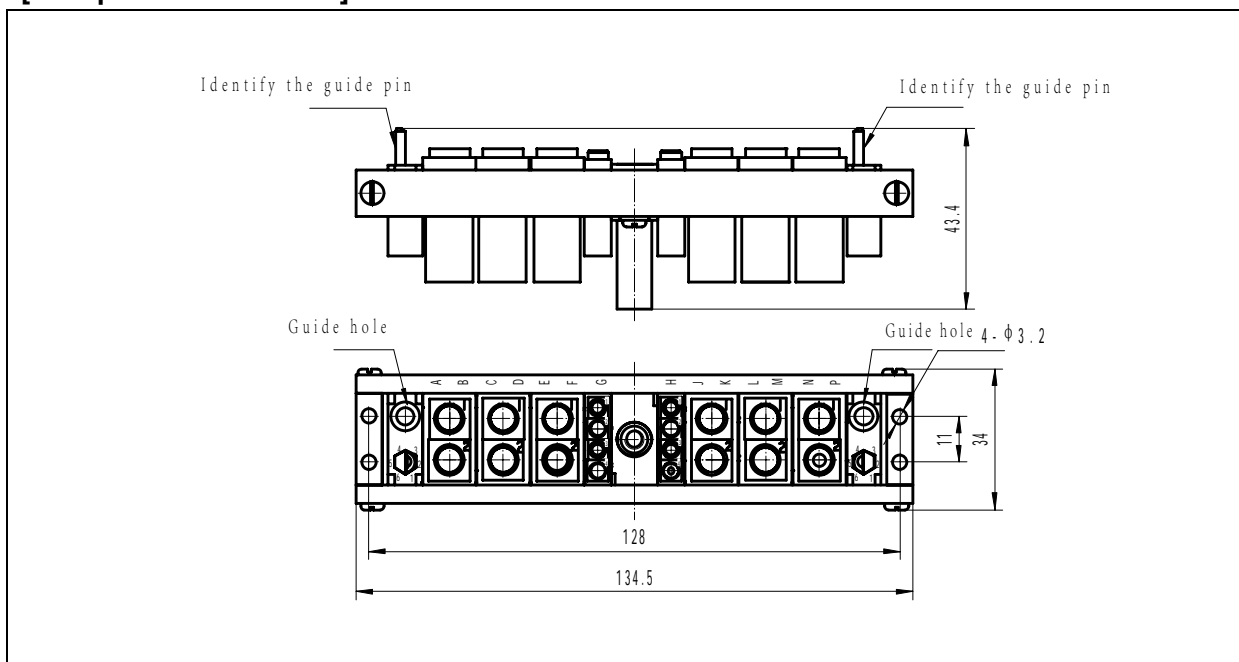
Plug P/N	Receptacle P/N	Contact number and size
VL31J20TY	VL31K20ZY	8-Φ1.5, 12-Φ3
VL31J56TY-01	VL31K56ZY-01	56-Φ1.5

Dimensions

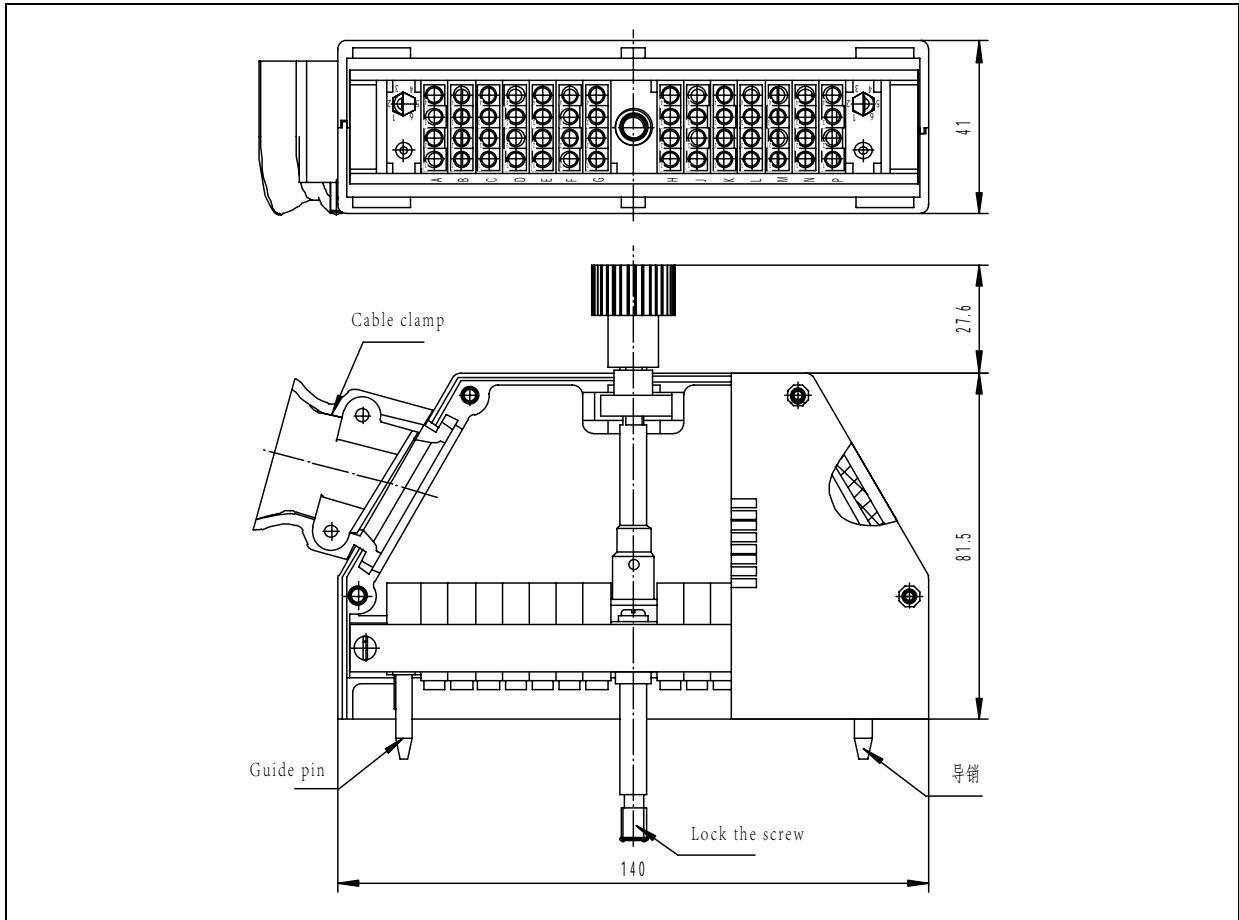
[Plug VL31J20TY]



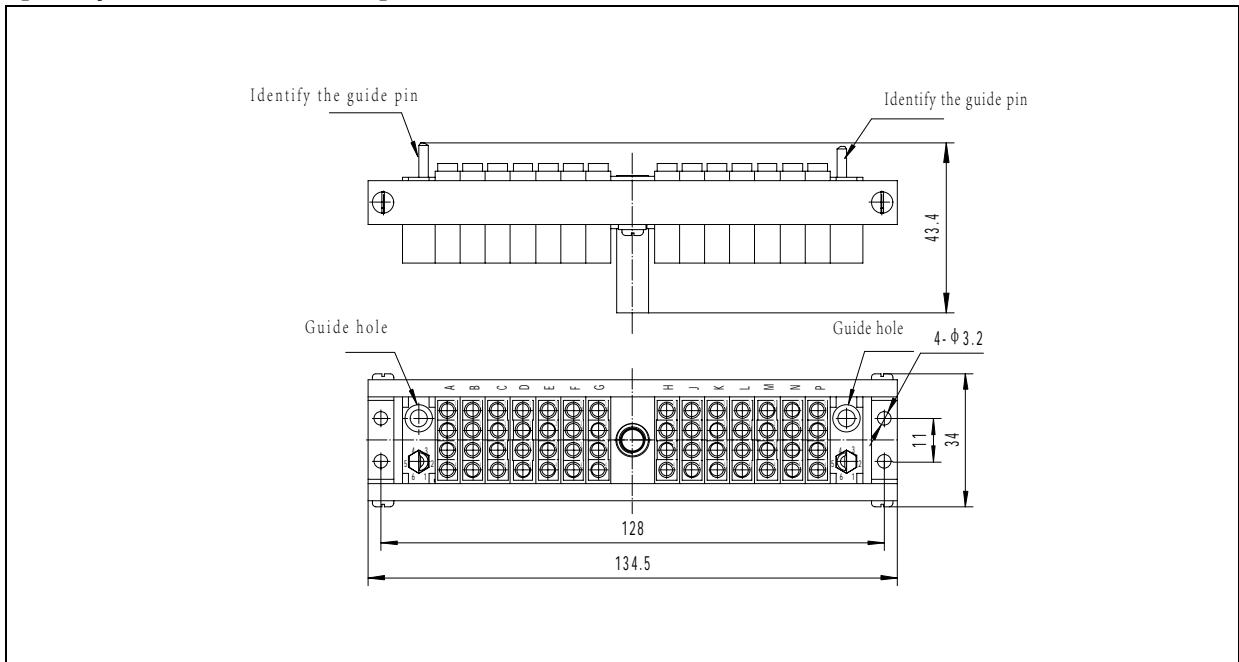
[Receptacle VL31K20ZY]

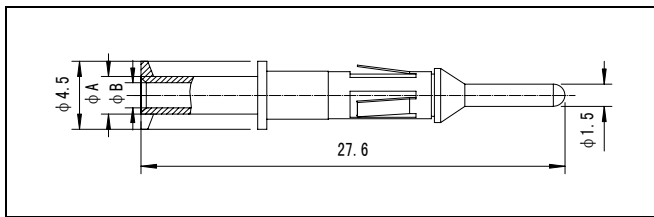


[Plug VL31J56TY-01]

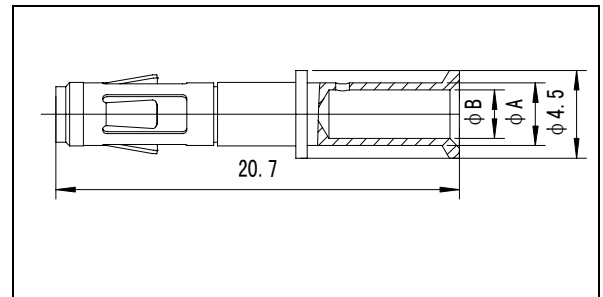


[Receptacle VL31K56ZY-01]

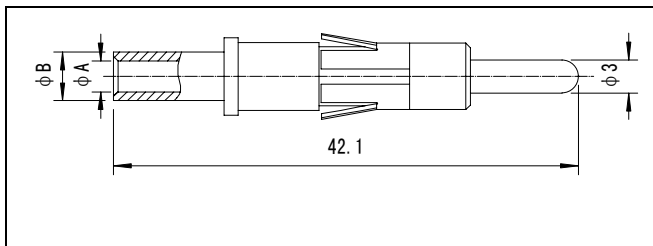


Contact (ordered separately)
Φ1.5pin


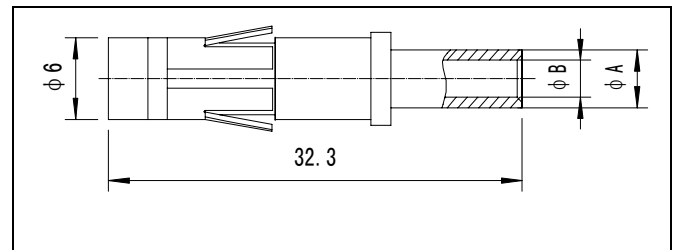
Ordering P/N	B	A
21E6-570-1851-L17	1.3	2.5
21E6-570-2505-L17	1.9	2.75
21E6-570-2506-L17	2.5	3.2

Φ1.5 socket


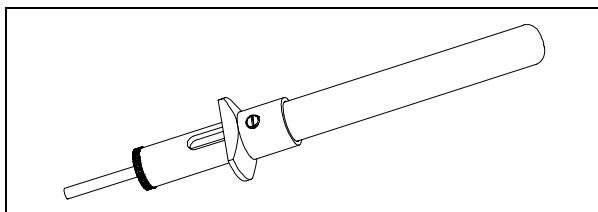
Ordering P/N	B	A
21E6-571-3396-L17	1.3	2.5
21E6-571-4598-L17	1.9	2.75
21E6-571-4599-L17	2.5	3.2

Φ3 pin


Ordering P/N	B	A
21E6-570-1592-L17	4.4	2.9
21E6-570-2747-L17	4.4	3.4

Φ3 socket


Ordering P/N	B	A
21E6-571-2803-L17	4.4	2.9
21E6-571-3464-L17	4.4	3.4

Extraction tool (ordered separately)


Contact size	Extraction tool P/N
Φ1.5	QX-01B
Φ3	QX-Φ3