

REB 系列单芯 300A 塑料连接器技术规格书

Product Specification for REB Connector



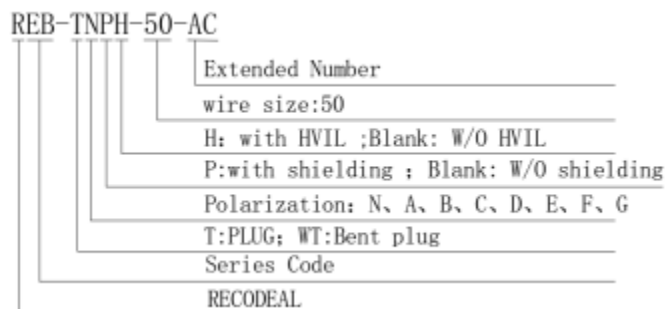
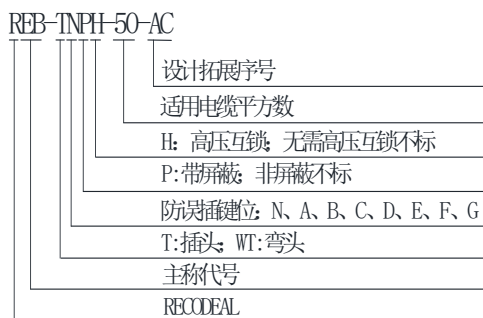
版本 Rev.	变更描述 / 变更内容 Change Description	修 改 日 期 Revise. Date	编 制 Prepared By	批 准 Approved By
1.0	首次发布 Initial Release	2018.04.24	董猛	
2.0	额 定 电 压 750V 改 为 1000V Rated voltage: 750V to 1000V	2021.06.16	董猛	
3.0	格式升级, 增加线缆规格 Modify the format, Add Cable specification	2022.04.11	孙晓琳	

一、物料简介：Product Instruction

- ◆ REB 系列连接器主要用于电动汽车行业，为设备之间提供稳定的高压、大电流传输。
Used for electric vehicles, providing stable high-voltage and high current transmission between devices.
- ◆ 本系列产品外壳采用工程塑料压铸，阻燃、耐高温；并且成本相对于同类金属单芯连接器更低，质量更轻、体积更小。
The housing is made with engineering plastics, with flame retardant, high temperature resistant function. Compared to comparable metal connectors, the plastic connector is lower cost, lighter weight and smaller size.
- ◆ 本系列产品头座连接采用的是锁扣连接，并带有二次锁紧结构；连接器要求的操作空间小，特别适用于安装空间有限的场合。
Design with latching connection and secondary locking structure; Requires small operating space and particularly suitable for applications where installation space is limited.
- ◆ 本系列产品额定工作电流为 120A-300A，接触件规格为 $\Phi 11\text{mm}$ ，接线范围从 25mm^2 - 70mm^2 ，满足客户的不同电气参数需求。
Current rating: 120A-300A. Contact size: $\Phi 11\text{mm}$, Wire size: 25mm^2 - 70mm^2 .
- ◆ 本系列产品有八种防误插的键位，能够满足同一设备同时安装多个此类连接器的要求。
8 polarization for multiple connectors on the same device.
- ◆ 本系列产品有直出线 and 侧出线两种结构，节约安装空间。
With vertical and right angle type.
- ◆ 本系列产品插头与插座均带有防触电的功能，能避免在使用时意外触电。
Anti-touch finger function for plug and receptacle connector for safety.
- ◆ 本系列产品防护等级高，头座对插后能实现 IP68 的防护等级。
IP68 sealing class with mated.
- ◆ 本系列产品也可以根据客户需要由我司做成线缆组件，方便客户使用。
This series of products can also be made into cable assemblies by Recodeal according to customer needs.
- ◆ 本系列产品带高压互锁和屏蔽功能。
With HVIL function and with shielding function.

二、命名规则：Naming Convention

插头：Plug:



如：REB-WT-AP-70-AC 表示：REB 系列侧出线（弯式）插头，带屏蔽，A 键位不带互锁，接线 70 平方。

For example: REB-WT-AP-70-AC means REB series right angle plug with shielding, polarization A and W/O HVIL, wire size 70mm².

插座: Receptacle

REB-ZNPYH0.3-50-AC	设计拓展序号
	适用电缆平方数 (仅适用插针尾部为压线式)
	高压互锁线 (0.5mm ²) 长度 (单位m)
	H: 高压互锁; 无需高压互锁不标
	接触件尾部端接形式:
	Y 压接电缆;
	T 连接铜排;
	D1 连接端子 (通孔);
	D2 连接端子 (螺纹孔)
	P: 带屏蔽; 非屏蔽不标
	防误插键位: N、A、B、C、D、E、F、G
	座: 插座
	主称代号
	RECODEAL

REB-ZNPYH0.3-50-AC	Extended Number
	wire size:50 (It is only applicable to press the pin tail)
	High voltage interlocking wire:0.5mm ² , length (m)
	H: with HVIL ;Blank: W/O HVIL
	Form of tail-end contact:
	Y Crimped cable;
	T Connecting copper bar;
	D1Connecting terminal (Through hole);
	D2Connecting terminal (Threaded hole)
	P:with shielding ; Blank: W/O shielding
	Polarization:N、A、B、C、D、E、F、G
	Z:Receptacle
	Series Code
	RECODEAL

如: REB1-ZNPD1H0.5-AC 表示: REB 系列插座, N 键位带屏蔽, 接触件尾部为通孔形式, 带高压互锁, 高压互锁线长为 0.5m

For example: REB1-ZNPD1H0.5-AC means REB series receptacle through-hole type, polarization N with shielding and with HVIL, HVIL wire length 0.5m.

三、技术参数: Technical Parameters

1. 电气特性: Electrical characteristics:

- ◆ 额定电流: 120A (适配25mm² 线缆);
180A (适配35mm² 线缆);
250A (适配50mm² 线缆);
300A (适配70mm² 线缆);
Current Rating: 120A (adaptation:25mm²);
180A (adaptation:35mm²);
250A (adaptation:50mm²);
300A (adaptation:70mm²);
- ◆ 额定电压: 1000V DC;
Voltage Rating: 1000V DC;
- ◆ 耐电压: 3750V;
Dielectric Withstanding Voltage: 3750 V
- ◆ 绝缘电阻: 1000V DC, >500MΩ;
Insulation Resistance:500MΩ@1000V DC;
- ◆ 屏蔽: 有;
Shielding: With
- ◆ 高压互锁: 有。
HVIL: With

2. 机械特性: Mechanical characteristics:

- ◆ 机械寿命: 50次以上;
Durability: 50 cycles;
- ◆ 振动: V1 (USCAR 2.0)
Vibration level: V1 (USCAR 2.0) ;

3. 工作环境: working Environment:

- ◆ 温度: $-40^{\circ}\text{C} \sim +130^{\circ}\text{C}$;
Operating temperature: $-40^{\circ}\text{C} \sim +130^{\circ}\text{C}$;
- ◆ 湿度: 95%以下(40℃时);
Humidity: 95% (40℃);
- ◆ 盐雾等级: 48小时(5%NaCl中性盐雾);
Salt Spray: 96Hours (5% NaCl Neutral salt spray);
- ◆ 防护等级: IP68(头座插合时);
Sealing Class: IP68 (mated)
- ◆ 阻燃等级: GB/T 2408水平HB, 垂直V0。
Flame Retardant: GB/T 2408 plane HB Vertical V0.

4. 主要材料: Main materials:

- ◆ 外壳: 热塑性工程塑料;
Housing: Thermoplastic engineering plastics
- ◆ 屏蔽件: 铜合金镀银;
Shielding: Copper alloy with silver plating
- ◆ 密封件: 橡胶或弹性体。
Seals: Rubber or elastomer

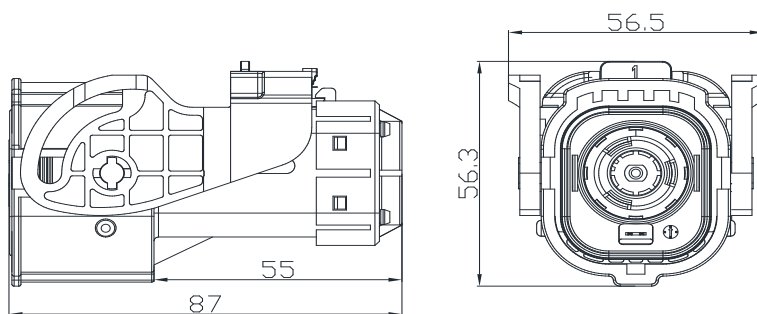
5. 适配线缆: Wire Spec

线缆规格 Wire Spec	线缆内被尺寸 Wire Inner Diameter	线缆外被尺寸 Wire Outer Diameter
25mm² 非屏蔽线 unshielded wire	/	$\Phi 9.6 \pm 0.4\text{mm}$
35mm² 非屏蔽线 unshielded wire	/	$\Phi 11 \pm 0.3\text{mm}$
50mm² 非屏蔽线 unshielded wire	/	$\Phi 13.5 \pm 0.3\text{mm}$
70mm² 非屏蔽线 unshielded wire	/	$\Phi 15.5 \pm 0.3\text{mm}$
25mm² 屏蔽线 shielded wire	/	$\Phi 13.5 \pm 0.3\text{mm}$
35mm² 屏蔽线 shielded wire	/	$\Phi 14.5 \pm 0.3\text{mm}$
50mm² 屏蔽线 shielded wire	/	$\Phi 17.0 \pm 0.5\text{mm}$
70mm² 屏蔽线 shielded wire	/	$\Phi 19.2 \pm 0.5\text{mm}$
50mm² 硅胶线 silicon wire	/	$\Phi 15.5 \pm 0.3\text{mm}$
70mm² 硅胶线 silicon wire	/	

四、外形尺寸图：Contour Dimension

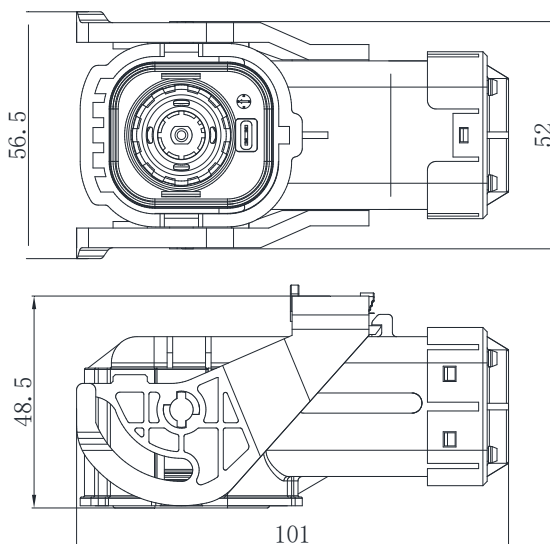
1、连接器插头（直头 T）：

Vertical Plug (T)



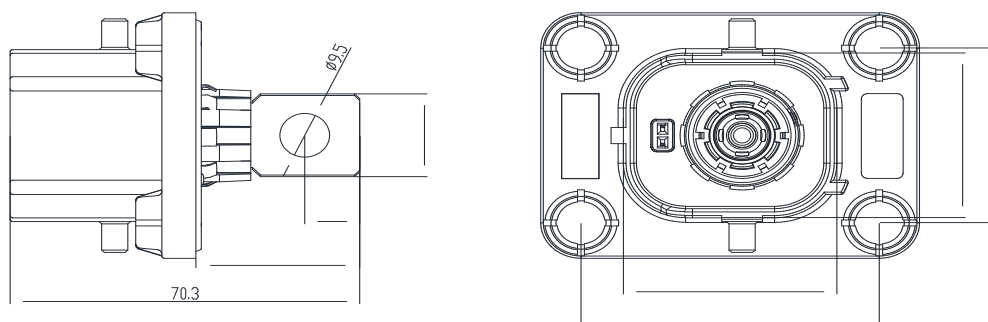
2、连接器插头（弯头 WT）：

Right Angle Plug (WT) :



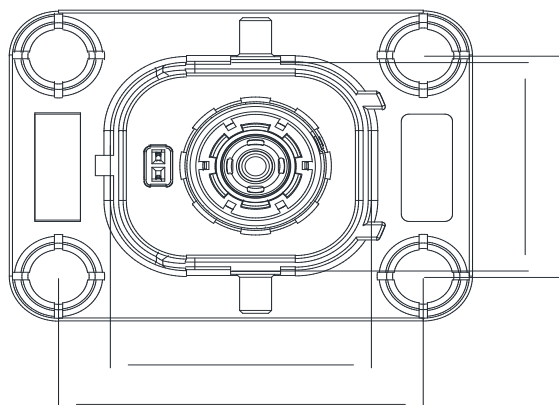
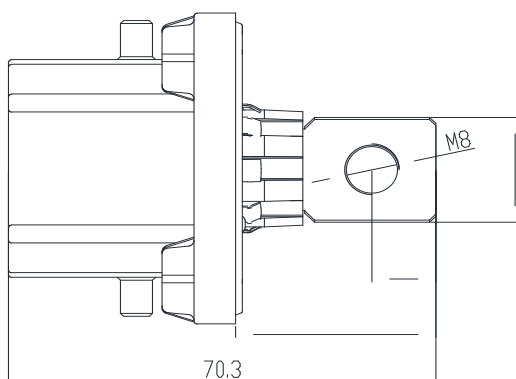
3、连接器插座-通孔（连接接线端子）：

Receptacle- Through hole (With Crimping Terminal) :



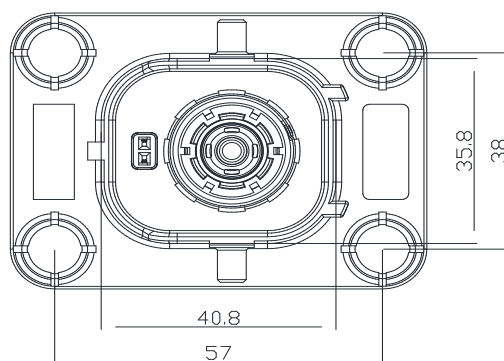
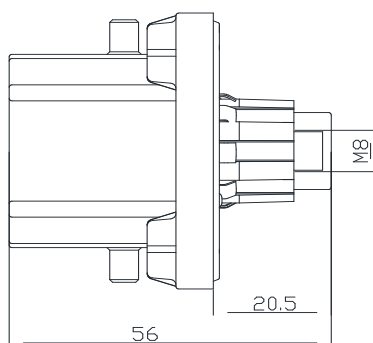
4、连接器插座-螺纹孔（连接接线端子）：

Receptacle- Threaded hole (With Crimping Terminal)



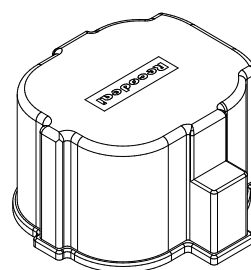
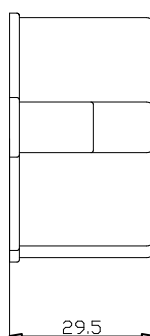
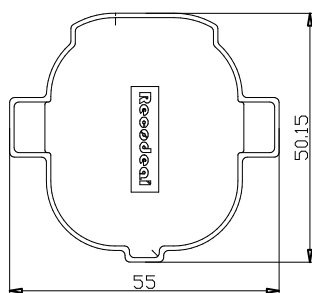
5、连接器插座-连接铜排：

Receptacle-With Busbar



6、插座防尘帽：

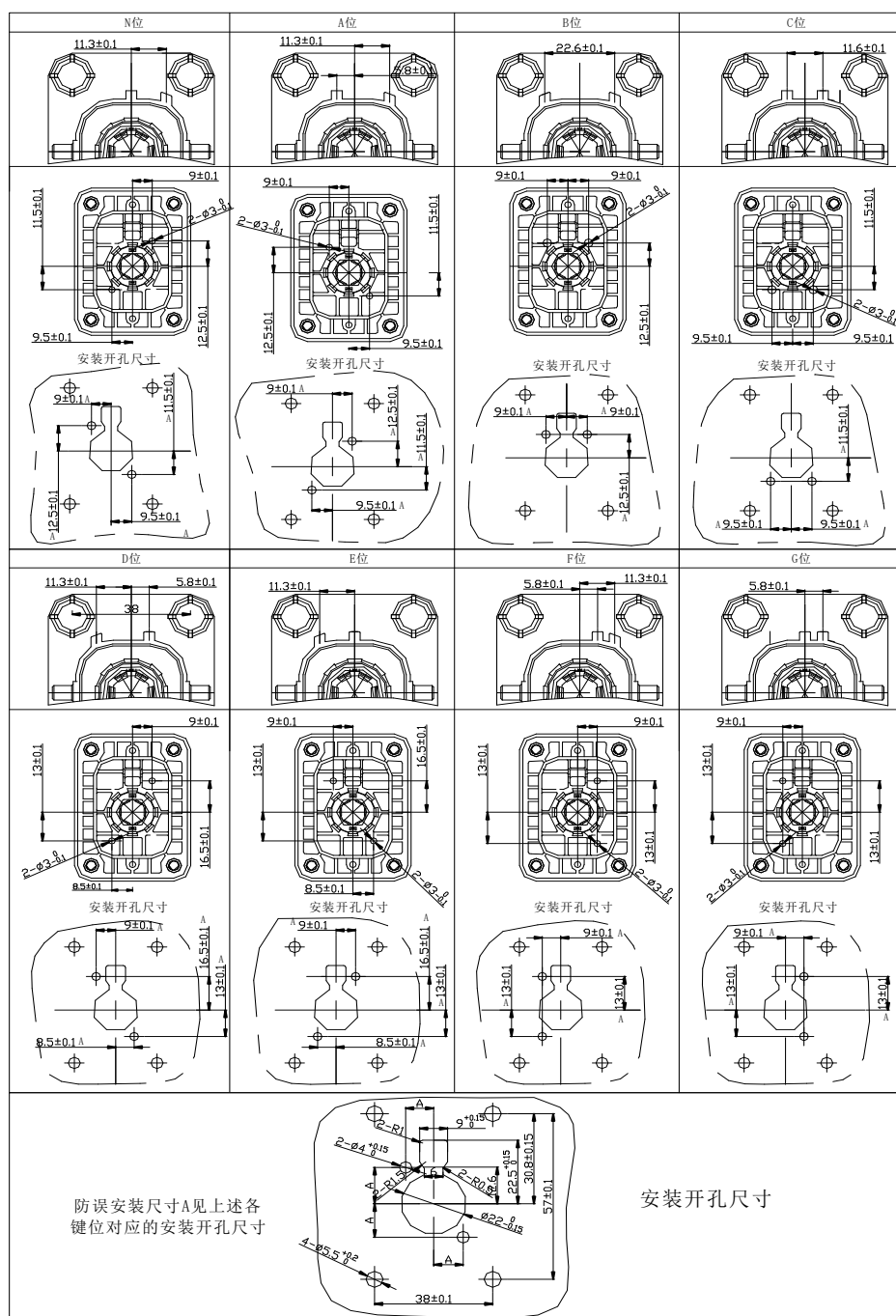
Receptacle dust cover



Revision: V0 Date: 2025/12/17

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7、推荐安装开孔尺寸：Panel cut-out dimensions



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