

技术规格书/Technical Specification

YG1040手动维护开关连接器

YG1040 Manual Maintenance Switch Connector

• 产品概述/Product instruction



应用场景/Application

适用于电动汽车电池包等的电气连接。

It is applicable to r electrical connections such as those in electric vehicle battery packs.

优势/Advantages

✓ 本产品为混合动力及纯电动汽车开发、设计，主要应用于高电压，大电流主干线的动力电连接，集成熔断器于一体，实现电路的短路保护；

This product is developed and designed for hybrid and pure electric vehicles. It is primarily used for power electrical connections in high-voltage, high-current trunk lines, integrates a fuse into a single unit, and provides circuit short-circuit protection.

✓ 本产品将分断装置和熔断器合二为一，既节省了空间，又方便了设备维护、检修的操作；

This product integrates the disconnection device and fuse into one unit, saving space and facilitating equipment maintenance and servicing.

✓ 本产品在插头端增加了拔出助力机构，操作更轻松、方便；

This product incorporates an extraction-assist mechanism on the plug end to reduce extraction force and improve ease of operation.

✓ 本产品在插孔端采用了双环簧接触对，该结构连接可靠，载流能力强；

The socket end adopts a dual-ring spring contact design, ensuring reliable connection and high current-carrying capacity.

订货信息（总成）/熔断器品牌(友容)/Order information (assembly) /Fuse brand (Yourong)

产品名称/ Product name	YG1040-EV-P4P-CF125 插头 YG1040-EV-P4P-CF125 plug	YG1040-EV-P4P-CF160 插头 YG1040-EV-P4P-CF160 plug	YG1040-EV-P4P-CF200 插头 YG1040-EV-P4P-CF200 plug	YG1040-EV-P4P-CF250 插头 YG1040-EV-P4P-CF250 plug	YG1040-EV-P4P-CF315 插头 YG1040-EV-P4P-CF315 plug	YG1040-EV-P4P-CF350 插头 YG1040-EV-P4P-CF350 plug
产品编号/ Product code	115010021212	115010021213	115010021214	115010021215	115010021216	111000402304
产品名称/ Product name	YG1040-EV-P4P-CF400 插头 YG1040-EV-P4P-CF400 plug	YG1040-EV-P4P-CF450 插头 YG1040-EV-P4P-CF450	YG1040-EV-P4P-CF500 插头 YG1040-EV-P4P-CF500 plug	YG1040-EV-P4P-CF550 插头 YG1040-EV-P4P-CF550	YG1040-EV-P4P-CF630 插头 YG1040-EV-P4P-CF630 plug	YG1040-EV-P4P 插头 (短接) YG1040-EV-P4P plug (with

		plug		plug		shorting link)
产品编号/ Product code	115010021217	115010021218	115010021219	115010021220	115010021221	112010102638
对插端名称/ Receptacle name	YGC1040-EV-S4R 插座 YGC1040-EV-S4R receptacle					
对插端编号 Receptacle No.						

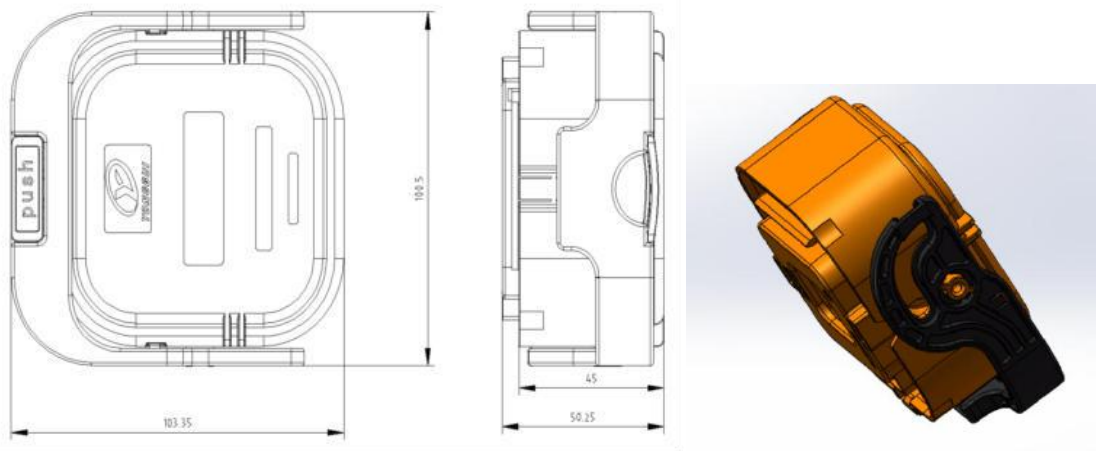
• 订货信息/Ordering information

• 技术数据/Technical data

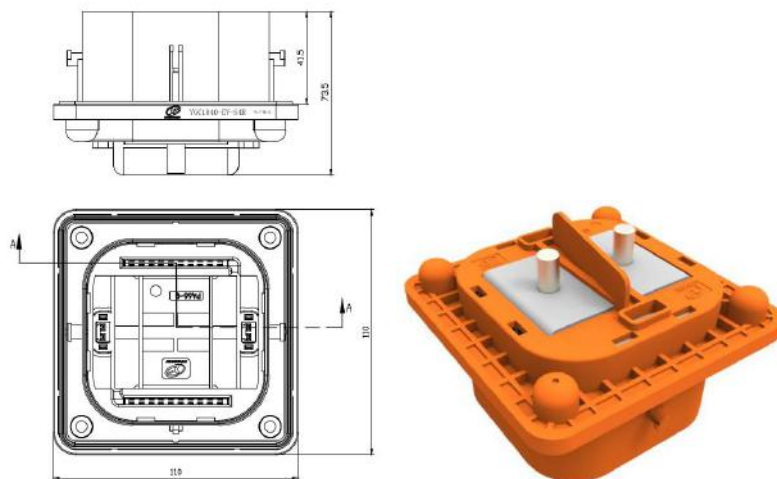
基本信息/Basic information	
PIN 距/Pin pitch	34mm
芯数/Numbers of pins	2pin
壳体材质/Material of shell	塑料/Plastic
电气性能/Electrical specification	
额定电压/Rated voltage	750V DC (功率) , 24 V DC (信号) 750V DC (power), 24 V DC (signal)
额定电流/Rated current	200A (50mm ²) 、250A (70mm ²)
绝缘电阻/Insulation resistance	≥5000MΩ(常态) , ≥200MΩ(湿热) ≥5000MΩ (normal condition) , ≥200MΩ (damp heat condition)
耐电压/Withstand voltage	4000V (50Hz,AC 常态) 4000V (50Hz,AC normal condition)
HVIL	是/Yes
机械性能/Mechanical specification	
机械寿命/Life cycles	≥100 次/times
振动等级/Vibration	LV214 S2、USCAR V2
冲击等级/Shock	LV214 S2、USCAR V2
耐环境性能/Environmental resistance specification	
工作温度/Ambient temperature	-40°C ~ +125°C
相对湿度/Humidity range	95% (40°C时) /95%(at 40°C)
盐雾/Salt spray	96h
防护等级/IP rating	IP67&IP6K9K (插合后) /IP67&IP6K9K(After mating)
材料/涂覆/外观/Materials/Finish/Outline	
壳体/Shell	PA66-GF
标准及认证/Standards and certifications	
阻燃等级/Flame retardant rating	UL94 V-0(塑料)、HB(橡胶)/UL94 V-0(Plastic)、HB(Rubber)
环保要求/Environmental requirements	RoHS 2.0

• 产品尺寸图及安装开孔尺寸/Product size & mounting hole dimension

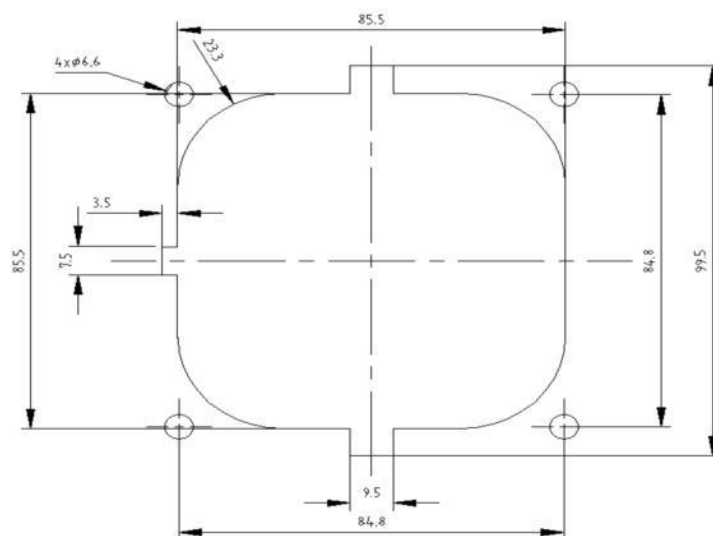
1. 插头外形/Plug outline



2. 插座外形/ Receptacle outline



3. 插座安装开孔尺寸/ Receptacle mounting hole



• 安装说明/Installation

螺柱/Stud	M8(力矩建议根据螺纹材质选择: 碳钢为 6~7N.m 不锈钢为 5.5~6N.m) M8 (Recommended torque based on thread material:carbon steel is 6~7N.m, stainless steel is 5.5~6N.m)
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• 储存/Storage

包装储存&转运说明/Storage& transportation	
存放要求/ Storage requirement	接触件（镀金、镀银）类零部件必须单独保存，保持整洁、干净、通风。存储环境应控制在湿度≤60%、温度在5~30℃。参考保存期 6 个月。 Components with contact elements (gold-plated, silver-plated) must be stored separately, kept clean, tidy and in a well-ventilated environment. The storage environment shall be controlled with a humidity of ≤ 60% and a temperature ranging from 5°C to 30°C. The reference storage period is 6 months.
运输要求/ Transportation requirement	端子在包装、运输、转运和生产、装配过程中应避免碰撞、接触腐蚀性气体和液体、以及手直接接触等，以保证端子接触表面良好。 During packaging, transportation, transfer, production, and assembly processes, terminals shall be protected from collisions, contact with corrosive gases and liquids, and direct hand contact, so as to ensure the good condition of the terminal contact surfaces.