	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

# YGC1176 receptacle series


## Technical Specifications

Prepared / Date Wang Gang 2020.10.20

Reviewed/dated Changjun Chan 2020.10.20

Approved/Date Li Tonggang 2020.10.20

Form number	Sector	Page number
J3-7.3-48	New Energy Research Institute	clause1Page Total11page

	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0


Changes and Revisions

<input type="checkbox"/> changes <input type="checkbox"/>	date	Change or revise the main	Revised/Revi	Approver
<input type="checkbox"/> changes <input type="checkbox"/>				
<input type="checkbox"/> Change				
<input type="checkbox"/> Change				
<input type="checkbox"/> Change				
<input type="checkbox"/> Revisions				

Send

serial	name	department	office	Contact
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Form number	Sector	Page number
J3-7. 3-48	New Energy Research Institute	clause2Page Total11page

	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

First, material information

1.1 Connector Model:

YG1176 series electrical connector naming convention:

(1) Manufacturer code: YGC

YGC 1176 -HOME-  $\overset{P}{S}$  (2 + 2)  $\overset{P}{R}$  W A /1

(2) Design serial number:1176

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (3) Series classification: EV

(4) Contact form: P-pin, S-jack

(5) Number of power

contacts: 2

(6) Number of signal contacts:

2

(7) Connector category: P-plug,

R-receptacle

(8) Tail outlet: none-straight,

W-bent

(9) Extension type: A, B, C...

(10) None-Cable outlet;/1-Loose


wire outlet

1.2 Connector introduction and details

YG1176 series connectors with shielding and high voltage interlock function

The termination method is crimp type

Form number	Sector	Page number
J3-7.3-48	New Energy Research Institute	clause3Page Total11page

	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

The 2+2 core medium  $\varnothing 3$  contacts can crimp up to 6mm<sup>2</sup> cables

The connector housing has four types of mating keys: Type I, Type II, Type III, and Type IV

Note: The receptacles in the following table do not include pinhole parts, and high-voltage interlocking signal terminals are optional as needed.

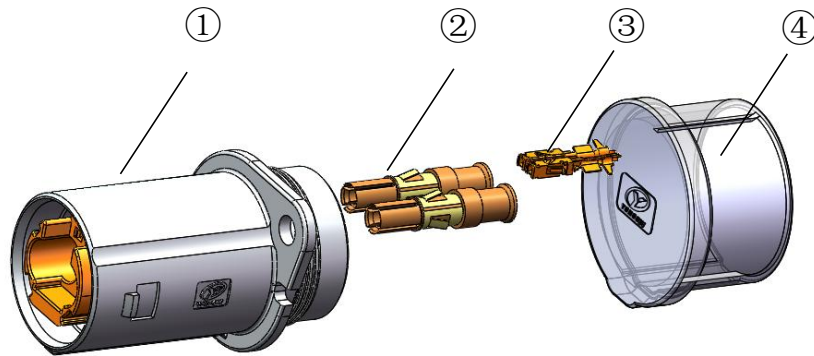



Fig.1 Upright

Form number	Sector	Page number
J3-7. 3-48	New Energy Research Institute	clause4Page Total11page


	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

serial number	Model	Package details		remark
		The name of the kitting item	Number of packages	
1	115110020401	YGC1176-EV-S(2+2)R Receptacle	1	Key Bit I.
	115110020402	YGC1176-EV-S(2+2)RA Receptacle	1	Keys II.
	115110020403	YGC1176-EV-S(2+2)RB Receptacle	1	Key Position III.
	115110020404	YGC1176-EV-S(2+2)RC receptacle	1	KeybitIV.
2	115310014203	YG1176 socket component $\Phi 3-6\text{mm}^2$	2	
	115310014202	YG1176 socket component $\Phi 3-4\text{mm}^2$	2	
	115310014201	YG1176 socket component $\Phi 3-2.5\text{mm}^2$	2	
3	501021600128	1-1411558-2 TE socket	2	
4	114069803830	YG1176 receptacle protective cap	1	

③

④

Form number	Sector	Page number
J3-7.3-48	New Energy Research Institute	clause5Page Total11page

	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

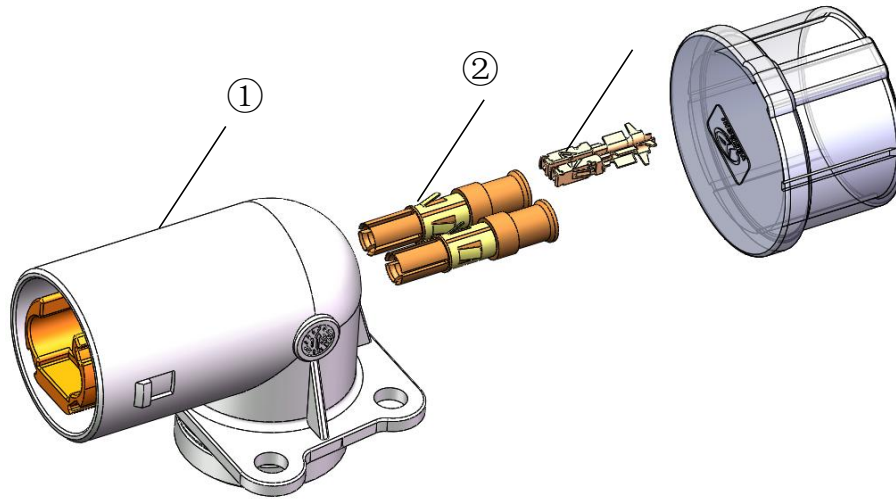



Fig.2. Curved seat

serial number	Model	Package details		remark
		The name of the kitting item	Number of packages	
1	115110020301	YGC1176-EV-S(2+2)RW Receptacle	1	Key Bit I.
	115110020302	YGC1176-EV-S(2+2)RWA Receptacle	1	Keys II.
	115110020303	YGC1176-EV-S(2+2)RWB Receptacle	1	Key Position III.
	115110020304	YGC1176-EV-S(2+2)RWC Receptacle	1	KeybitIV .
2	115310014203	YG1176 socket component $\Phi 3-6\text{mm}^2$	2	
	115310014202	YG1176 socket component $\Phi 3-4\text{mm}^2$	2	
	115310014201	YG1176 socket component $\Phi 3-2.5\text{mm}^2$	2	
3	501021600128	1-1411558-2 TE socket	2	
4	114069803830	YG1176 receptacle protective cap	1	

Form number	Sector	Page number
J3-7.3-48	New Energy Research Institute	clause6Page Total11page

	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

## Second, technical parameters

### 2.1 Electrical characteristics

■ Rated operating current: 40A (ø3 contact pair) 1A (signal terminal).

40A (suitable for 6 square cables, scattered cables are not recommended for the time being)

30A (for 4mm<sup>2</sup> cables)

20A (for 2.5mm<sup>2</sup> cables)

1A (for 0.5mm<sup>2</sup> cables)

■ Rated working voltage: 800V AC (power), 24V (signal)

Interpretation: According to GB/T16935.1-2008 (IEC60664-1:2007), pollution level 2, overvoltage category III., altitude below 2000m

■ Voltage: 3500V (power), 1000V (signal) 50Hz AC (normal)

■ Insulation resistance:  $\geq 3000M\Omega$  (power),  $\geq 1000M\Omega$  (signal)

■ REST:有

### 2.2 Mechanical characteristics

■ Mechanical life:  $\geq 50$  times

■ Protection level: IP67 & IP6K9K (headstand mating), IPXXB (unmated)


### 2.3 Working environment

■ Operating temperature: -40° C ~ +125° C

■ Relative humidity: 95% (at 40° C)

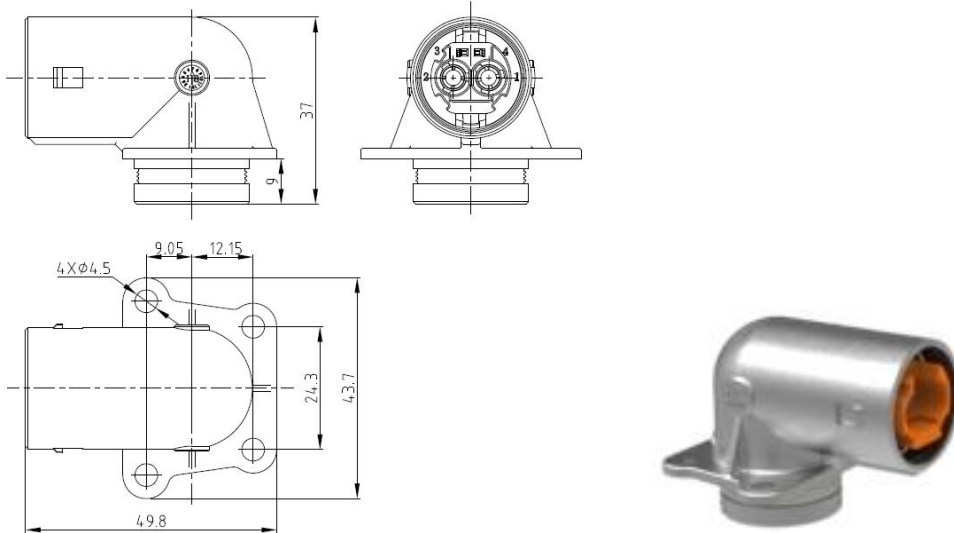
■ Flame Retardant Rating: UL94 V-0

Form number	Sector	Page number
J3-7.3-48	New Energy Research Institute	clause7Page Total11page

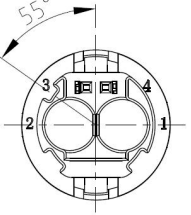
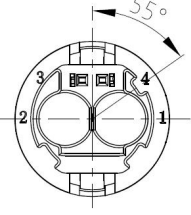
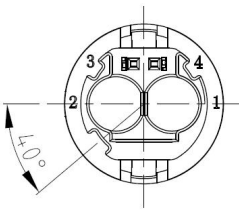
	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

### 3、Dimensions

#### YGC1176-EV-S (2+2) RW Series Receptacle Form Factor




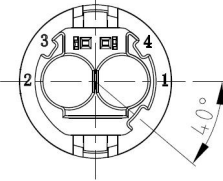
Schematic diagram of receptacle indexing

Product model	Schematic diagram of the keybits	Keys	Mounting plate color
YGC1176-EV-S(2+2)RW		I	orange
YGC1176-EV-S(2+2)RWA		II	black
YGC1176-EV-S(2+2)COTTON		III	orange

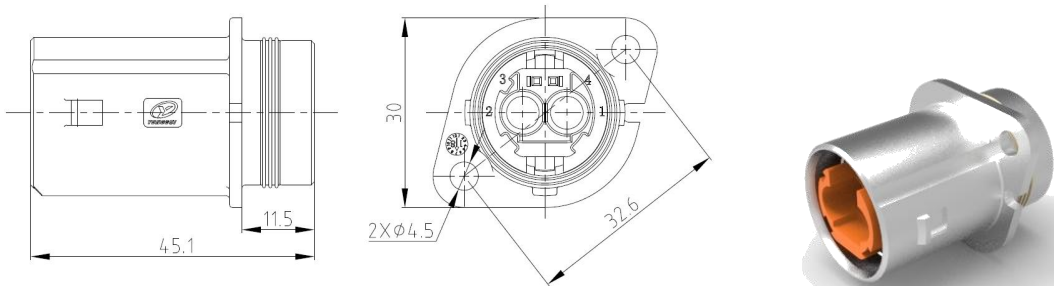
Form number	Sector	Page number
J3-7. 3-48	New Energy Research Institute	clause8Page Total11page

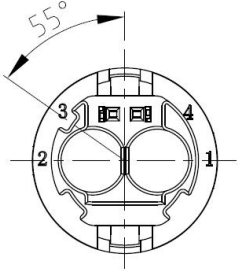
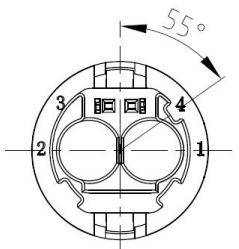
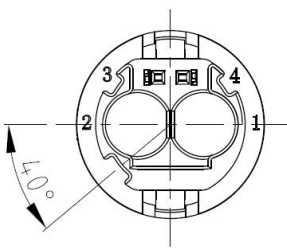


	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0


YGC1176-EV-S(2+2)RWC		IV	black
----------------------	---	----	-------

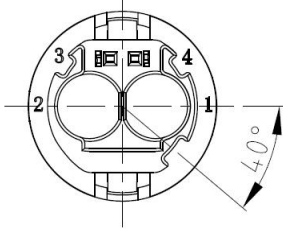
YGC1176-EV-S (2+2)R series receptacle form factor



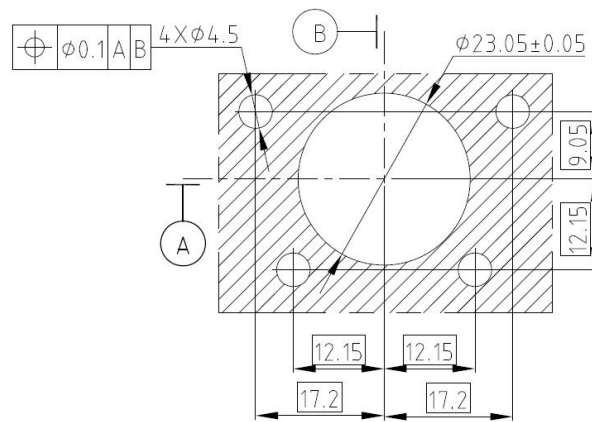
Product model	Schematic diagram of the keybits	Keys	Mounting plate color
YGC1176-EV-S(2+2)R		I	orange
YGC1176-EV-S(2+2)RA		II	black
YGC1176-EV-S(2+2)RB		III	orange

Form number	Sector	Page number
J3-7. 3-48	New Energy Research Institute	clause9Page Total11page

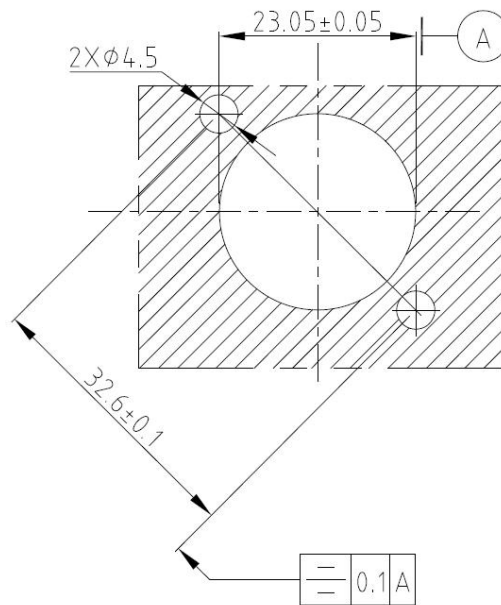
	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

YGC1176-EV-S(2+2)BC		IV	black
---------------------	--	----	-------

YGC1176-EV-S (2+2) RW Series Receptacle Mounting Cut-out Size




YGC1176-EV-S(2+2)R series receptacle mounting cut-out size



The recommended panel thickness is 15mm

4. Special tool model (ordered separately)

Form number	Sector	Page number
J3-7.3-48	New Energy Research Institute	clause10Page Total11page

	Product name	YGC1176 receptacle series	Document number	/
	Product model	/	Edition	S0.0

#### 4.1 Needle withdrawal tool model:

Power jack: 767 needle withdrawal tool (114030300168).

Power pin: XC-Φ3

Signal terminal: GZ939-02-03-00 removal tool

Form number	Sector	Page number
J3-7. 3-48	New Energy Research Institute	clause11Page Totall1page