	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8 .0

YGC1033A Series Electrical Connectors


Technical Specifications ⁽¹⁾

Preparation/Date Liu Xiaoyuan 2022.8.8

Review/Date Chen Yuanxin 2022.8.8

Approval/Date: Xiang Xiaodong 2022.8.8

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 1

	Product Name	YGC1033A Series Electrical Connectors	Document number	
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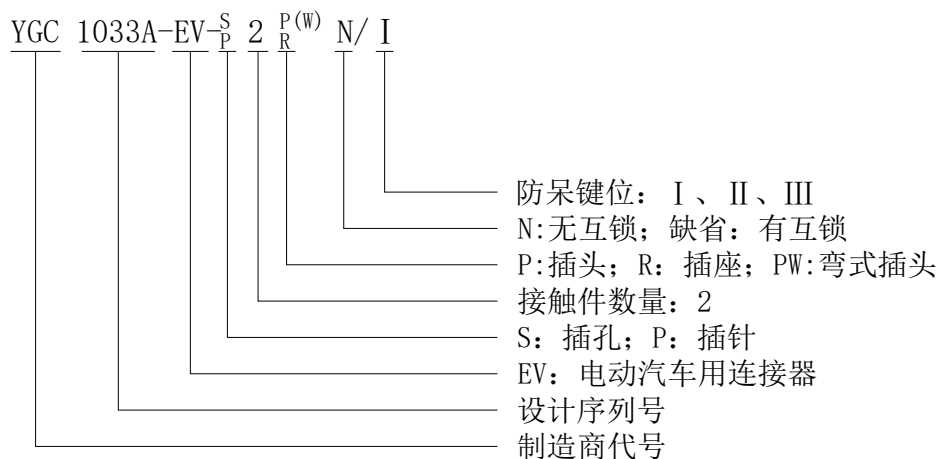
Changes and Revisions

<input type="checkbox"/> Change <input type="checkbox"/> Revision	Date	Change or revision of major matters	Modified/revised	Approver
<input checked="" type="checkbox"/> Change <input type="checkbox"/> Revision	2019.11.11	Changed naming conventions and added	Dai Yang	Xiang Xiaodong
<input type="checkbox"/> Changes <input checked="" type="checkbox"/> revisions	2019.12.18	Some pending codes are updated, wiring accessories list and foolproof key position description are added.	Dai Yang	Li Tonggang
<input type="checkbox"/> Changes <input checked="" type="checkbox"/> revisions	2020.2.27	Added naming rules for 120° curved	He Wenjun	Li Tonggang
<input type="checkbox"/> Changes <input checked="" type="checkbox"/> revisions	2021.7.17	Format Adjustment	He Wenjun	Chen Yuanxin
<input type="checkbox"/> Changes <input checked="" type="checkbox"/> revisions	2022.1.5	Add Receptacle protection cover	Liu Daqian	Chen Yuanxin
<input type="checkbox"/> Changes <input checked="" type="checkbox"/> revisions	2022.8.8	Add storage conditions	Liu Xiaoyuan	Chen Yuanxin

一、 Basic Information

1. Connector model


YGC1033A series electrical connector naming rules:



2. Product Introduction

- This series of connectors are double-core shielded connectors with small size, high power, simple structure and convenient operation;
- This product is a high-voltage and high-current connector, mainly used in new energy vehicle electronic control and battery energy systems;
- Protection level: Plugs and Receptacles meet IPXXB, and after normal insertion and locking, IP67 & IP6K9K ;
- The plug connector shell is made of aluminum alloy passivation process, 360° shielding, and

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 2

	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8 .0

meets high salt spray resistance requirements;

- Some parts of the plug connector need to be ordered separately according to the wiring specifications.


3. Material model (Note: "*" indicates the main recommended model)

No.	90° plug assembly model	120° plug assembly model	90° plug assembly model	Receptacle assembly model	Foolproof key position
1	YGC1033A-EV-S2P/ I *	YGC1033A-EV-S2PW/ I	YGC1033D-EV-S2P/I	YGC1033A-EV-P2R/ I	
2	YGC1033A-EV-S2PN/ I	YGC1033A-EV-S2PWN/ I	/	YGC1033A-EV-P2RN/ I *	I
	YGC1033A-EV-S2PN/ I -YW960				

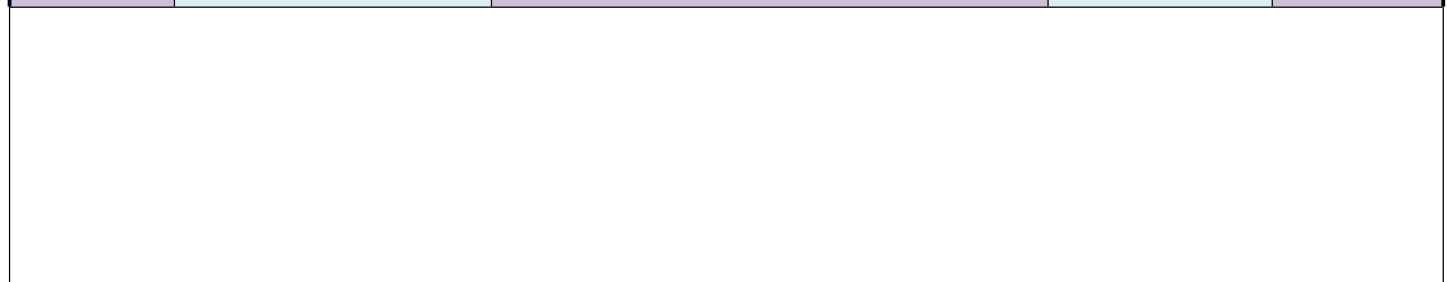
Accessories (selected based on adapter cable, purchased separately)

180° plug accessories (180°outlet)				
Accessory code	Adapter cable (Cable outer diameter)	Parts Name	Part Number	Number of packages
A	35mm ² shielded cable (φ14.6~φ15.4)	YG1033A jack assembly Φ 10-35mm ² -silver	113020601607	2
		YG1033A plug shield jacket	114022600312	2
		YG1033A plug shield inner sleeve-35	114022600322	2
		YG1033-2 Sealing wire	114050501573	2
		YG1033A plug tail cover-35	114069804180	2
B	35mm ² LV216 shielded cable (φ14.4 -0.6 mm)	YG1033A Plug shield jacket-50 (LV216)	114022600333	2
		YG1033A plug shield inner sleeve-35 (LV216)	114022600345	2

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 3


	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8 .0

		YG1033A Jack assembly Φ 10-35mm ² -Silver	113020601607	2
		YG1033A-1 Sealing wire body (216)	114050501926	2
		Φ 14.5 tail cover (orange)	114069805793	2
C	50mm ² shielded cable (ϕ 17.5 \pm 0.5mm)	YG1033A jack assembly Φ 10-50mm ² -silver	113020601608	2
		YG1033A plug shield jacket	114022600312	2
		YG1033A plug shield inner sleeve-50	114022600323	2
		YG1033 plug seal body-50mm ²	114050501410	2
D	50mm ² LV216 Shielded cable (ϕ 15.8 -0.6 mm) 501030101368	YG1033A jack assembly Φ 10-50mm ² -silver	113020601608	2
		YG1033A Plug shield jacket-50 (LV216)	114022600333	2
		YG1033A plug shield inner sleeve-50 (LV216)	114022600332	2
		YG1033A plug seal body-50mm ² (LV216)	114050501411	2
		YG1033A plug tail cover-50 (LV216)	114069804287	2



120° plug accessories (120°outlet)				
Accessory code	Adapter cable (cable outer diameter)	Parts Name	Part Number	Number of packages
F	50mm ² LV216	YG1033A Adapter Terminal 50mm ²	114020100846	2

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 4

	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8 .0

	shielded cable (φ15.8 -0.6 mm) (501030101368)	YG1033A Plug shield jacket-50 (LV216)	114022600333	2
		YG1033A plug shield inner sleeve-50 (LV216)	114022600332	2
		YG1033A plug tail assembly	113990001272	2
		YG1033A Cover assembly	113011601001	2
		Cross recessed hexagon head combination screw GB/T 9074.13 M6×12	501010100573	2
90° plug accessories (90°outlet)				
H	50mm ² unshielded cable φ13.2 (0/-0.8) mm	YGC1033D-EV-S2P/I plug	111000404645	1
Receptacle accessories				
No.	Remark	Parts Name	Part Number	Number of packages
1	Optional	YG1033A Receptacle dust cover	114069804815	1

二、 Technical Parameters

1. Electrical parameters

- Rated operating current :


150A@35mm² shielded cable 200A@50mm² shielded cable 250A@70mm² shielded cable
3A@0.5 or 0.75mm² unshielded cable

- Rated operating voltage : 1000 V (power), 24 V (signal);

Explanation: According to GB/T16935.1-2008 (IEC60664-1:2007), pollution degree 2, overvoltage category II , altitude below 2000m.

- Resistance electricity Voltage: 3500 V (power), 1000 V (signal); (50 Hz AC normal state); leakage current ≤5mA

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 5

	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8 .0

Test standard: According to 4.28.2 of QC/T1067.1-2017, duration 60s;

- Insulation resistance: $\geq 5000 \text{ M}\Omega$ (power), $\geq 1000 \text{ M}\Omega$ (signal); (normal)

Test standard: According to 4.27 of QC/T1067.1-2017 , test voltage 1000V DC;

- HVIL : optional ;

2. Mechanical parameters

- Mechanical life: 50 times ; ■ Protection level: IP 67&IP6K9K&IP68 (1m water depth, 24 hours) (mated state)

- After the Receptacle and the Receptacle dust cover are plugged in : IP3X ;

3. Work Environment

- Working temperature : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$; ■ Relative humidity : 95% (at 40°C) ;

- Flame retardant grade : UL94 V-0;

4. Material and salt spray grade

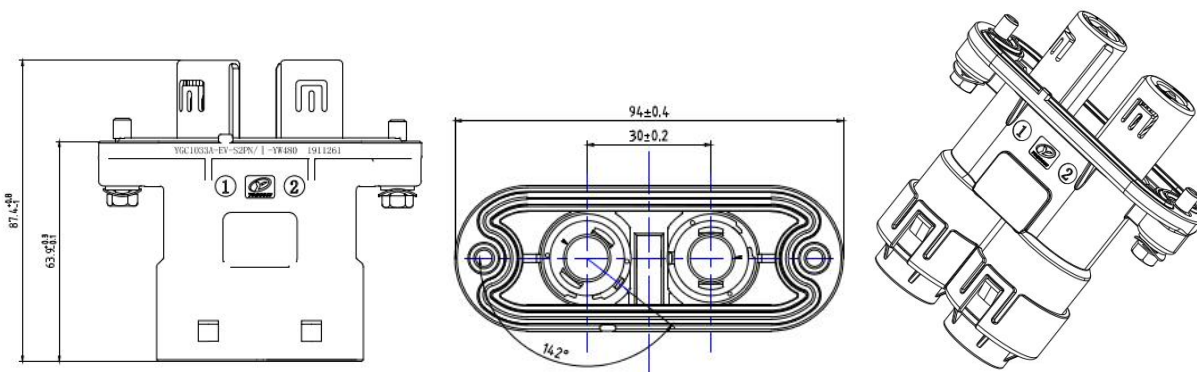
- Receptacle housing: Material PA66-GF30 (black)
- Plug housing: Material ADC12, neutral salt spray 96h.

5. Storage conditions


- Parts must be stored separately, kept neat, clean and well ventilated. The storage environment should be controlled at a humidity of $\leq 60\%$ and a temperature of $5 \sim 30^{\circ}\text{C}$.

≡、Dimensions

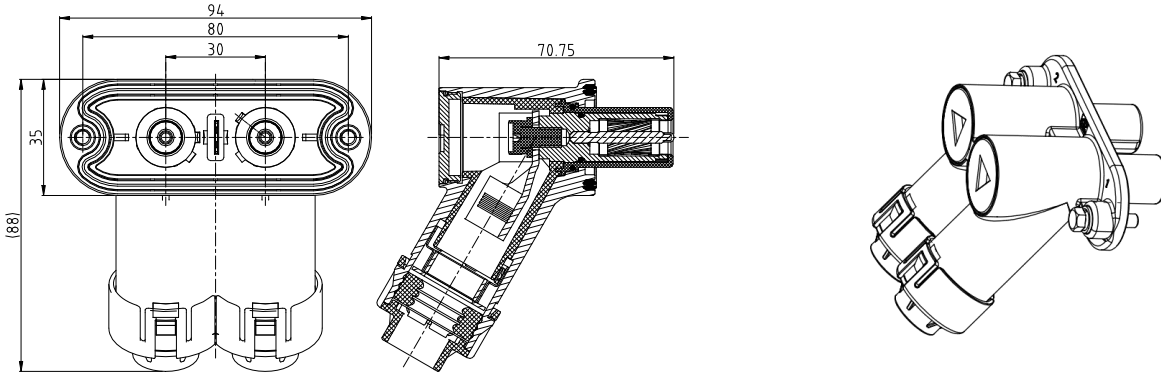
1. Plug dimensions (90°)



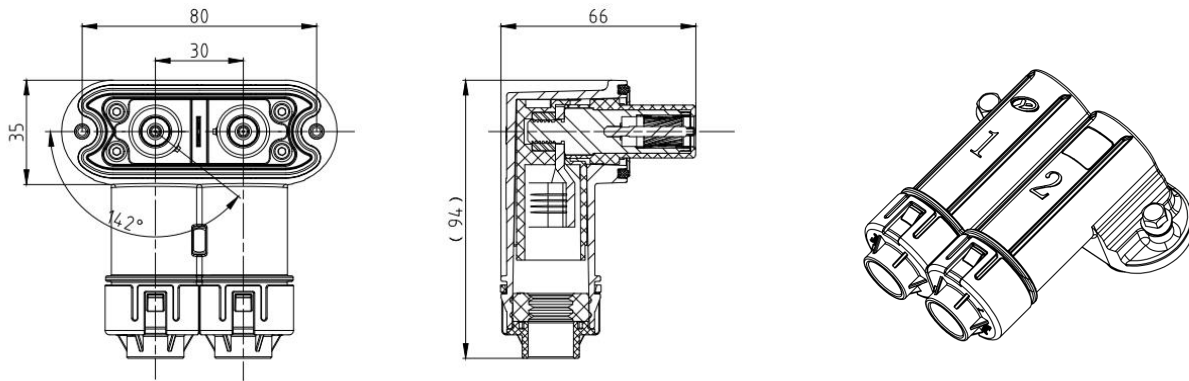
Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 6

	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8.0

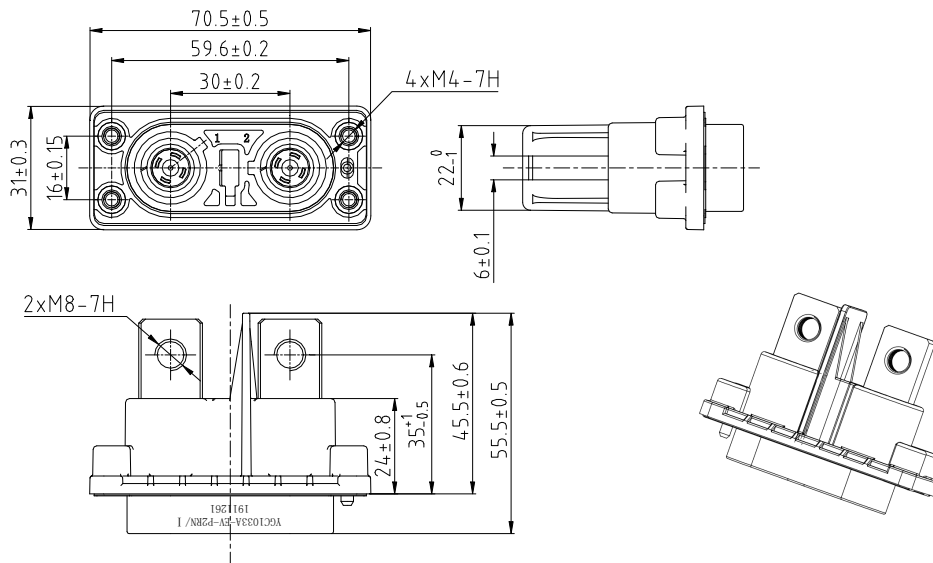
2. Plug dimensions (bent 120°)




3. Plug dimensions (90° bend)



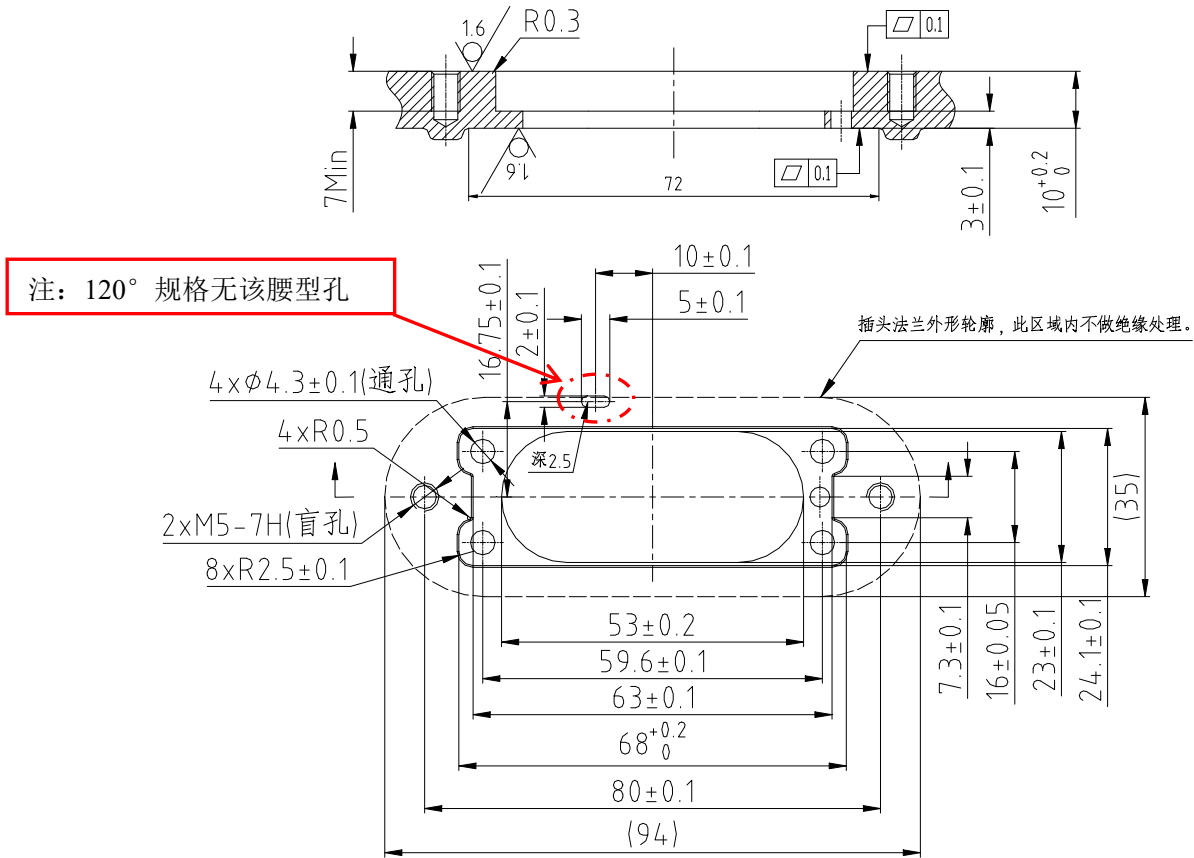
4. Receptacle dimensions



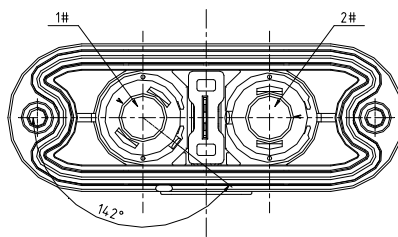
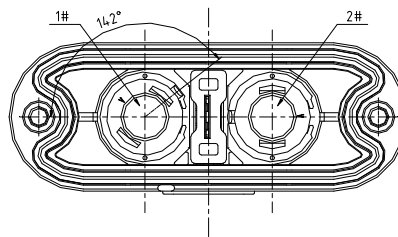
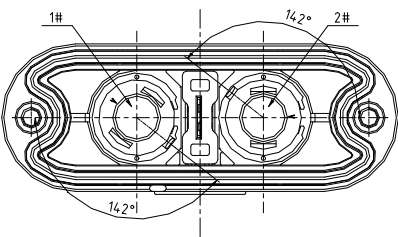
Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 7

	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8.0


四、Installation Dimensions

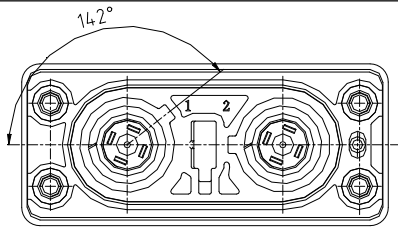
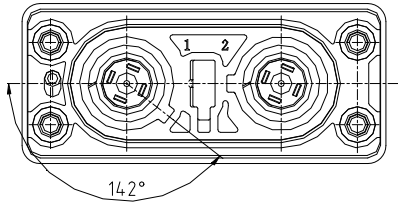
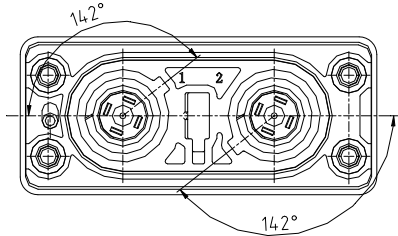
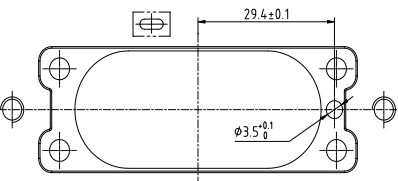
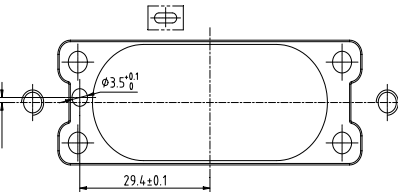
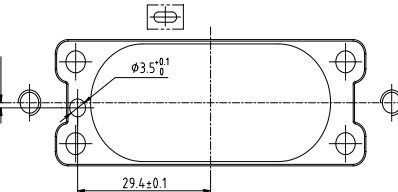


五、Foolproof key position indication and size

Key position	I	II	III
plug			

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 8

	Product Name	YGC1033A Series Electrical Connectors	Document number	
	Product Model	YG1033A Series Electrical Connectors	Version	S 8 .0

Receptacle			
Installation			

六、 Terminal protection

During packaging, transportation, transfer, production and assembly, the terminals should be protected from collision, contact with corrosive gases and liquids, and direct contact with hands, etc., to ensure that the terminal contact surface is in good condition.

Note (1): Product performance and specifications are constantly being improved and are subject to change without prior notice. To obtain the latest product information, please contact Sichuan Yonggui Technology Co., Ltd. professionals; Sichuan Yonggui Technology Co., Ltd. reserves the final right of interpretation of this matter.

Form Number	Department	page number
J3-7.3-48	New Energy Research Institute	Page 1 9