



## ES Connector



DEGSON website



LINKEDIN



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ES 22-E01

## High Protective Energy Storage Connector

ISO9001 ISO14001 ISO80079-34 ISO/TS22163 IATF16949         RoHS REACH



## BRIEF INTRODUCTION

**01** Founded in 1990, DEGSON is a global solution provider of electrical, electronic and industrial connectors. As a National High-tech enterprise, DEGSON owns the UL and VDE certified laboratory. The company achieved ISO9001, ISO14001, ISO80079-34, ISO/TS22163 and IATF16949 management system certifications.

**02** DEGSON is engaged in supplying highly reliable and durable products to serve global customers. The company has a market-leading capability of mould processing, automatic manufacturing and advanced testing. DEGSON has the complete engineering ability to support global customers with the professional customization solution and value-added service.

**03** DEGSON products are widely recognized in China, the USA, Germany, the UK, Italy, Spain, Turkey, Russia, Japan, South Korea, Singapore, etc. totally hundred countries and regions. DEGSON supply high quality products and provide professional services globally in the industry sectors likely industrial automation, instrument, electric power, railway, marine and offshore, new energy, elevator, lighting, security, machinery, etc. The company won the recognition from partners among Fortune 500 and industry leading enterprises.

**04** Based on the business philosophy of "pragmatic innovation, responsibility, integrity, harmonious development, regulation and win-win", DEGSON continuously integrates professional technical resources, R&D innovation, product manufacturing and technology application capabilities. Relying on global sales network, DEGSON aims to supply series of multiple varieties of high-quality products and services. We provide global customers with professional and quick connected application solutions, help customers continue to create value. DEGSON is making contributions to creating a smart and interconnected world.



Degson has launched 50A~350A high protective Energy storage connectors for modular ES battery. The connectors comply with the standard UL4128 and offer safer, faster and more reliable connection for ES industry

### The features of ES connector: Degson's exclusive patents

- Endure 1500V DC voltage.
- IP67 protection.
- Special design with color-coded and mechanical coded for + and - polarity avoiding misplug and short circuit .
- The socket is with hand-proof protection.
- The plug can rotate 360° after assembled and fulfill different cabling requirement.
- The socket is with four connection Methods: Busbar, screw, crimp, copper screw.



color-coded and mechanical coded

hand-proof protection

360° rotation



Optional connection Methods:  
Busbar, screw, crimp, copper screw

### Market

The markets and applications for the ES connectors include but are not limited to the following:



Solar and wind energy



Charging station



Data center



Large-scale electric vehicle



ES-50A

- 50A ES connector
- Rated voltage: 1000V
- Rated current: 50A
- 1 Pole
- Cross section of wire: 6mm<sup>2</sup>

Technical parameters



Plug type: ESP-50A			
Number of position	1	Material of O-ring	Silicon
Insertion force	55N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	4.9-6.0mm
Rated voltage	1000V	Cross section of wire	10AWG(6mm²)
Rated current	50A	Stripping length of wire	7-8mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40℃+125℃
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40℃+80℃
Material of contact	Copper alloy	Halogon-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-50A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	50A	06	6mm <sup>2</sup>			BK	Black	00	Standard	ESP-50A-06-BK-00
								OR	Orange			ESP-50A-06-OR-00
								RD	Red			ESP-50A-06-RD-00
	S	Socket	50A	06	6mm <sup>2</sup>	B	Busbar	BK	Black	00	Standard	ESS-50A-06-B-BK-00
								OR	Orange			ESS-50A-06-B-OR-00
								RD	Red			ESS-50A-06-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-50A-06-S-BK-00
								OR	Orange			ESS-50A-06-S-OR-00
								RD	Red			ESS-50A-06-S-RD-00
						C	Crimp	BK	Black	00	Standard	ESS-50A-06-C-BK-00
								OR	Orange			ESS-50A-06-C-OR-00
								RD	Red			ESS-50A-06-C-RD-00
						B/S	Copper screw	BK	Black	00	Standard	ESS-50A-06-B/S-BK-00
								OR	Orange			ESS-50A-06-B/S-OR-00
								RD	Red			ESS-50A-06-B/S-RD-00

ES-70A

- 70A ES connector
- Rated voltage: 1500V
- Rated current: 70A
- 1 Pole
- Cross section of wire: 10mm<sup>2</sup>

Technical parameters



Plug type: ESP-70A			
Number of position	1	Material of O-ring	Silicon
Insertion force	55N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	6.5-7.5mm
Rated voltage	1000V	Cross section of wire	8AWG(10mm²)
Rated current	70A	Stripping length of wire	7-8mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40°C+125°C
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40°C+80°C
Material of contact	Copper alloy	Halogon-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-70A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	70A	10	10mm <sup>2</sup>			BK	Black	00	Standard	ESP-70A-10-BK-00
								OR	Orange			ESP-70A-10-OR-00
								RD	Red			ESP-70A-10-RD-00
	S	Socket	70A	10	10mm <sup>2</sup>	B	Busbar	BK	Black	00	Standard	ESS-70A-10-B-BK-00
								OR	Orange			ESS-70A-10-B-OR-00
								RD	Red			ESS-70A-10-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-70A-10-S-BK-00
								OR	Orange			ESS-70A-10-S-OR-00
								RD	Red			ESS-70A-10-S-RD-00
						C	Crimp	BK	Black	00	Standard	ESS-70A-10-C-BK-00
								OR	Orange			ESS-70A-10-C-OR-00
								RD	Red			ESS-70A-10-C-RD-00
						B/S	Copper screw	BK	Black	00	Standard	ESS-70A-10-B/S-BK-00
								OR	Orange			ESS-70A-10-B/S-OR-00
								RD	Red			ESS-70A-10-B/S-RD-00

ES-100A

- 100A ES connector
- Rated voltage: 1500V
- Rated current: 100A
- 1 Pole
- Cross section of wire: 16mm<sup>2</sup>



Technical parameters



Plug type: ESP-100A			
Number of position	1	Material of O-ring	Silicon
Insertion force	60N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	7.5-9mm
Rated voltage	1500V	Cross section of wire	6AWG(16mm <sup>2</sup> )
Rated current	100A	Stripping length of wire	13-14mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40°C+125°C
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40°C+80°C
Material of contact	Copper alloy	Halogen-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-100A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	100A	16	16mm <sup>2</sup>			BK	Black	00	Standard	ESP-100A-16-BK-00
								OR	Orange			ESP-100A-16-OR-00
								RD	Red			ESP-100A-16-RD-00
	S	Socket	100A	16	16mm <sup>2</sup>	B	Busbar	BK	Black	00	Standard	ESS-100A-16-B-BK-00
								OR	Orange			ESS-100A-16-B-OR-00
								RD	Red			ESS-100A-16-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-100A-16-S-BK-00
								OR	Orange			ESS-100A-16-S-OR-00
								RD	Red			ESS-100A-16-S-RD-00
						C	Crimp	BK	Black	00	Standard	ESS-100A-16-C-BK-00
								OR	Orange			ESS-100A-16-C-OR-00
								RD	Red			ESS-100A-16-C-RD-00
						B/S	Copper screw	BK	Black	00	Standard	ESS-100A-16-B/S-BK-00
								OR	Orange			ESS-100A-16-B/S-OR-00
								RD	Red			ESS-100A-16-B/S-RD-00

ES-120A

- 120A ES connector
- Rated voltage: 1500V
- Rated current: 120A
- 1 Pole
- Cross section of wire: 25mm<sup>2</sup>



Technical parameters



Plug type: ESP-120A			
Number of position	1	Material of O-ring	Silicon
Insertion force	60N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	9-10.5mm
Rated voltage	1500V	Cross section of wire	4AWG(25mm <sup>2</sup> )
Rated current	120A	Stripping length of wire	13-14mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40°C+125°C
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40°C+80°C
Material of contact	Copper alloy	Halogen-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-120A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	120A	25	25mm <sup>2</sup>			BK	Black	00	Standard	ESP-120A-25-BK-00
								OR	Orange			ESP-120A-25-OR-00
								RD	Red			ESP-120A-25-RD-00
	S	Socket	120A	25	25mm <sup>2</sup>	B	Busbar	BK	Black	00	Standard	ESS-120A-25-B-BK-00
								OR	Orange			ESS-120A-25-B-OR-00
								RD	Red			ESS-120A-25-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-120A-25-S-BK-00
								OR	Orange			ESS-120A-25-S-OR-00
								RD	Red			ESS-120A-25-S-RD-00
						C	Crimp	BK	Black	00	Standard	ESS-120A-25-C-BK-00
								OR	Orange			ESS-120A-25-C-OR-00
								RD	Red			ESS-120A-25-C-RD-00
						B/S	Copper screw	BK	Black	00	Standard	ESS-120A-25-B/S-BK-00
								OR	Orange			ESS-120A-25-B/S-OR-00
								RD	Red			ESS-120A-25-B/S-RD-00



ES-150A

- 150A ES connector
- Rated voltage: 1500V
- Rated current: 150A
- 1 Pole
- Cross section of wire: 35mm<sup>2</sup>



Technical parameters



Plug type: ESP-150A			
Number of position	1	Material of O-ring	Silicon
Insertion force	100N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	11-12.5mm
Rated voltage	1500V	Cross section of wire	2AWG(35mm²)
Rated current	150A	Stripping length of wire	13-14mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40℃+125℃
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40℃+80℃
Material of contact	Copper alloy	Halogon-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-150A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	150A	35	35mm <sup>2</sup>			BK	Black	18	180°	ESP-150A-35-BK-18
								OR	Orange	90	90°	ESP-150A-35-OR-90
								RD	Red	90	90°	ESP-150A-35-RD-90
	S	Socket	150A	35	35mm <sup>2</sup>	B	Busbar	BK	Black	18	180°	ESS-150A-35-B-BK-18
								OR	Orange	90	90°	ESS-150A-35-B-OR-90
								RD	Red	90	90°	ESS-150A-35-B-RD-90
						S	Screw	BK	Black	18	180°	ESS-150A-35-S-BK-18
								OR	Orange	90	90°	ESS-150A-35-S-OR-90
								RD	Red	90	90°	ESS-150A-35-S-RD-90
						C	Crimp	BK	Black	18	180°	ESS-150A-35-C-BK-18
								OR	Orange	90	90°	ESS-150A-35-C-OR-90
								RD	Red	90	90°	ESS-150A-35-C-RD-90
						B/S	Copper screw	BK	Black	18	180°	ESS-150A-35-B/S-BK-18
								OR	Orange	90	90°	ESS-150A-35-B/S-OR-90
								RD	Red	90	90°	ESS-150A-35-B/S-RD-90

ES-200A

- 200A ES connector
- Rated voltage: 1500V
- Rated current: 200A
- 1 Pole
- Cross section of wire: 50mm<sup>2</sup>



Technical parameters



Plug type: ESP-200A			
Number of position	1	Material of O-ring	Silicon
Insertion force	100N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	12.5-14mm
Rated voltage	1500V	Cross section of wire	1/0AWG(50mm²)
Rated current	200A	Stripping length of wire	13-14mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40°C+125°C
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40°C+80°C
Material of contact	Copper alloy	Halogen-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-200A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	200A	50	50mm <sup>2</sup>			BK	Black	18	180°	ESP-200A-50-BK-18
								OR	Orange	90	90°	ESP-200A-50-OR-90
								RD	Red	90	90°	ESP-200A-50-RD-90
	S	Socket	200A	50	50mm <sup>2</sup>	B	Busbar	BK	Black	18	180°	ESS-200A-50-B-BK-18
								OR	Orange	90	90°	ESS-200A-50-B-OR-90
								RD	Red	90	90°	ESS-200A-50-B-RD-90
						S	Screw	BK	Black	18	180°	ESS-200A-50-S-BK-18
								OR	Orange	90	90°	ESS-200A-50-S-OR-90
								RD	Red	90	90°	ESS-200A-50-S-RD-90
						C	Crimp	BK	Black	18	180°	ESS-200A-50-C-BK-18
								OR	Orange	90	90°	ESS-200A-50-C-OR-90
								RD	Red	90	90°	ESS-200A-50-C-RD-90
						B/S	Copper screw	BK	Black	18	180°	ESS-200A-50-B/S-BK-18
								OR	Orange	90	90°	ESS-200A-50-B/S-OR-90
								RD	Red	90	90°	ESS-200A-50-B/S-RD-90

ESS-200A-A

- 200A ES connector
- Rated voltage: 1500V
- Rated current: 200A
- 1 Pole
- Cross section of wire: 50mm<sup>2</sup>



Technical parameters



Plug type: ESP-200A			
Number of position	1	Material of O-ring	Silicon
Insertion force	100N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	12.5-14mm
Rated voltage	1500V	Cross section of wire	1/0AWG(50mm²)
Rated current	200A	Stripping length of wire	13-14mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40℃+125℃
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40℃+80℃
Material of contact	Copper alloy	Halogon-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-200A-A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	200A	50	50mm <sup>2</sup>			BK	Black	18	180°	ESP-200A-50-BK-18
								OR	Orange	90	90°	ESP-200A-50-OR-90
								RD	Red	90	90°	ESP-200A-50-RD-90
	Angle of positioning keyway											
	S	Socket	200A	50	50mm <sup>2</sup>	B	Busbar	BK	Black	16	180°	ESS-200A-50-B-BK-16
								OR	Orange	20	90°	ESS-200A-50-B-OR-20
								RD	Red	20	90°	ESS-200A-50-B-RD-20
						S	Screw	BK	Black	16	180°	ESS-200A-50-S-BK-16
								OR	Orange	20	90°	ESS-200A-50-S-OR-20
								RD	Red	20	90°	ESS-200A-50-S-RD-20
						C	Crimp	BK	Black	16	180°	ESS-200A-50-C-BK-16
								OR	Orange	20	90°	ESS-200A-50-C-OR-20
								RD	Red	20	90°	ESS-200A-50-C-RD-20
						B/S	Copper screw	BK	Black	16	180°	ESS-200A-50-B/S-BK-16
								OR	Orange	20	90°	ESS-200A-50-B/S-OR-20
								RD	Red	20	90°	ESS-200A-50-B/S-RD-20

ES-250A

- 250A ES connector
- Rated voltage: 1500V
- Rated current: 250A
- 1 Pole
- Cross section of wire: 70mm<sup>2</sup>



Technical parameters



Plug type: ESP-250A			
Number of position	1	Material of O-ring	Silicon
Insertion force	100N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	15.5-17mm
Rated voltage	1500V	Cross section of wire	2/0AWG(70mm²)
Rated current	250A	Stripping length of wire	19-21mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40°C+125°C
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40°C+80°C
Material of contact	Copper alloy	Halogen-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	4000m
Socket type: ESS-250A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	250A	70	70mm²			BK	Black	00	Standard	ESP-250A-70-BK-00
								OR	Orange			ESP-250A-70-OR-00
								RD	Red			ESP-250A-70-RD-00
	S	Socket	250A	70	70mm²	B	Busbar	BK	Black	00	Standard	ESS-250A-70-B-BK-00
								OR	Orange			ESS-250A-70-B-OR-00
								RD	Red			ESS-250A-70-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-250A-70-S-BK-00
								OR	Orange			ESS-250A-70-S-OR-00
								RD	Red			ESS-250A-70-S-RD-00
						C	Crimp	BK	Black	00	Standard	ESS-250A-70-C-BK-00
								OR	Orange			ESS-250A-70-C-OR-00
								RD	Red			ESS-250A-70-C-RD-00
						B/S	Copper screw	BK	Black	00	Standard	ESS-250A-70-B/S-BK-00
								OR	Orange			ESS-250A-70-B/S-OR-00
								RD	Red			ESS-250A-70-B/S-RD-00

ES-300A

- 300A ES connector
- Rated voltage: 1500V
- Rated current: 300A
- 1 Pole
- Cross section of wire: 95mm<sup>2</sup>

Technical parameters



Plug type: ESP-300A			
Number of position	1	Material of O-ring	Silicon
Insertion force	100N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	18.0-19.0mm
Rated voltage	1500V	Cross section of wire	3/0AWG(95mm²)
Rated current	300A	Stripping length of wire	16-18mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40℃+125℃
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40℃+80℃
Material of contact	Copper alloy	Halogon-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-300A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	300A	95	95mm <sup>2</sup>			BK	Black	00	Standard	ESP-300A-95-BK-00
								OR	Orange			ESP-300A-95-OR-00
								RD	Red			ESP-300A-95-RD-00
	S	Socket	300A	95	95mm <sup>2</sup>	B	Busbar	BK	Black	00	Standard	ESS-300A-95-B-BK-00
								OR	Orange			ESS-300A-95-B-OR-00
								RD	Red			ESS-300A-95-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-300A-95-S-BK-00
								OR	Orange			ESS-300A-95-S-OR-00
								RD	Red			ESS-300A-95-S-RD-00
	C	Crimp						BK	Black	00	Standard	ESS-300A-95-C-BK-00
								OR	Orange			ESS-300A-95-C-OR-00
								RD	Red			ESS-300A-95-C-RD-00
	B/S	Copper screw						BK	Black	00	Standard	ESS-300A-95-B/S-BK-00
								OR	Orange			ESS-300A-95-B/S-OR-00
								RD	Red			ESS-300A-95-B/S-RD-00

ES-350A

- 350A ES connector
- Rated voltage: 1500V
- Rated current: 350A
- 1 Pole
- Cross section of wire: 120mm<sup>2</sup>

Technical parameters



Plug type: ESP-350A			
Number of position	1	Material of O-ring	Silicon
Insertion force	100N MAX	Insertion/withdrawal cycles	100
Withdrawal force	>10N	External cable diameter	19.9-20.9mm
Rated voltage	1500V	Cross section of wire	4/0AWG(120mm²)
Rated current	350A	Stripping length of wire	16-18mm
Contact resistance	<5mΩ	Connection method	Crimp
Degree of pollution	3	Degree of protection	IP67
Insulation resistance	> 100MΩ	Ambient temperature (operation)	-40°C+125°C
Color	Orange/Black/Red	Ambient temperature (storage/transport)	-40°C+80°C
Material of contact	Copper alloy	Halogen-free	Yes
Material of housing	PA	Flammability rating according to UL 94	V0
Material of seal	Silicon	Altitude	2000m
Socket type: ESS-350A			
Connection method	Busbar,Crimp,Screw,Copper screw	Layout torque	M4/0.4-0.7N.m

Ordering information

Product series	Type		Rated current	Cross section of wire		Connection method		Color		Keyway		Product description
ES	P	90° Right-angle plug	350A	120	120mm <sup>2</sup>			BK	Black	00	Standard	ESP-350A-120-BK-00
								OR	Orange			ESP-350A-120-OR-00
								RD	Red			ESP-350A-120-RD-00
	S	Socket	350A	120	120mm <sup>2</sup>	B	Busbar	BK	Black	00	Standard	ESS-350A-120-B-BK-00
								OR	Orange			ESS-350A-120-B-OR-00
								RD	Red			ESS-350A-120-B-RD-00
						S	Screw	BK	Black	00	Standard	ESS-350A-120-S-BK-00
								OR	Orange			ESS-350A-120-S-OR-00
								RD	Red			ESS-350A-120-S-RD-00
	C	Crimp						BK	Black	00	Standard	ESS-350A-120-C-BK-00
								OR	Orange			ESS-350A-120-C-OR-00
								RD	Red			ESS-350A-120-C-RD-00
	B/S	Copper screw						BK	Black	00	Standard	ESS-350A-120-B/S-BK-00
								OR	Orange			ESS-350A-120-B/S-OR-00
								RD	Red			ESS-350A-120-B/S-RD-00

Socket Dimensions

Item	Screw connection		Crimp connection		Screw connection		Busbar connection	
Size								
	A	B	A	B	A	B	A	B
50A/70A	16.2	41.1	/	/	/	/	/	/
100A/120A	19	53.7	19	53.5	19	45.5	19	53.7
150A/200A	22	68.1	22	61.8	22	55.1	22	68.1
250A	24.6	70	24.6	70	24.6	60	24.6	70
300A/350A	30.3	66.6	/	/	/	/	/	/

Plug Dimensions

Item	Crimp connection			
Size				
	A	B	C	D
50A/70A	21.2	51	24.3	16
100A/120A	25	68.3	30.7	19
150A/200A	29.4	76.7	40.7	22
250A	33.8	89.2	40.7	23.5
300A/350A	39	101	44	29

Layout Dimensions

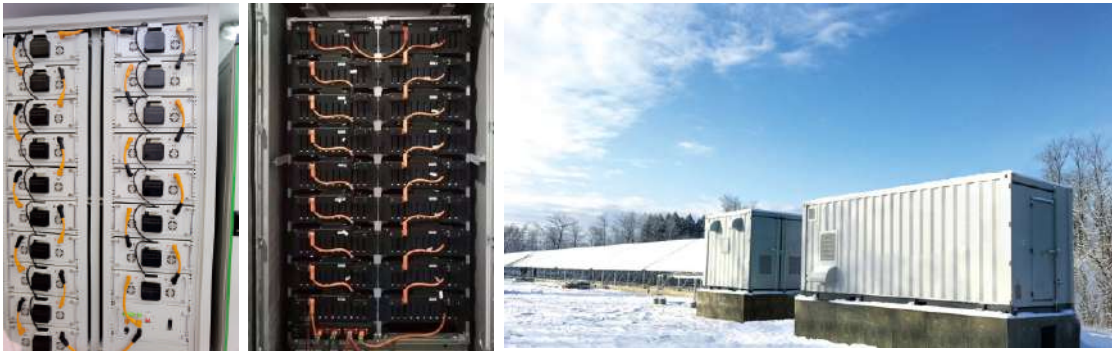
Current	A	ΦC	D	Layout Torque	Receptacle Contact Torque		Figure
					Busbar Torque	Screw Torque	
50A/70A	24±0.1	12.9±0.2	M4 Screw	0.4-0.7N.m	M4 Screw 1.2-1.5N.m	/	

Layout Dimensions

Current	A	B	ΦC	D	Layout Torque	Busbar Torque	Screw Torque	Figure
100A/120A	21±0.1	21±0.1	20.3±0.1	M4 Screw	M4 bolts: 0.4-0.7N.m	M5 bolts: 2N.m max	M6 Nut: 2N.m max	
150A/200A (Exclude ESS-200A-A)	21.8±0.1	21.8±0.1	18.6±0.1	M4 Screw	M4 bolts: 0.4-0.7N.m	M5 bolts: 2N.m max	M8 Nut: 8N.m max	
250A	36±0.1	36±0.1	32±0.1	M4 Screw	M4 bolts: 0.4-0.7N.m	M8 Nut: 8N.m max	M8 Nut: 8N.m max	
300A/350A	24.5±0.1	24.5±0.1	22.5+0.2/-0	M4 Screw	M4 bolts: 0.4-0.7N.m	M6 bolts: 2N.m max	M10 Nut: 8N.m max	

Successful applications

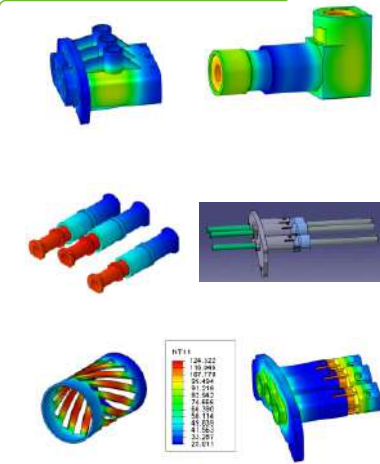
The high protective ES connectors have been approved and applied by a lot of customers after market launch. Currently 120A and 200A ES connectors were widely applied in solar station,international household energy storage and large-scale electric vehicles. We keep doing the best to offer safer, faster and more reliable connection for ES industry. Meanwhile,we are able to offer complete product solution for ES industry. The vision of Degson is to keep developing best products for ES industry.



Strong customization strength

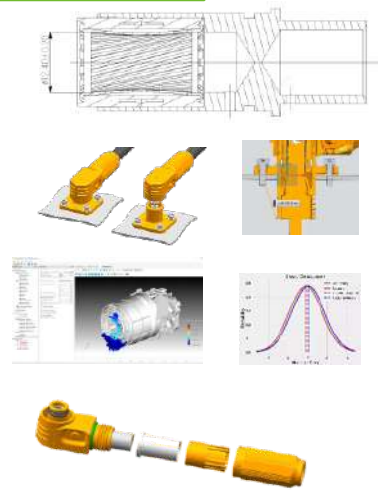
Mechanic Simulation,Development & Verification

Structure & Process Simulation



- Structural FEM /ANSYS LS-DYNA
- Thermal CFD / Autodesk/FloTHERM
- Molding / Stamping Analysis
  - ANSYS
  - Simufact
  - Moldflow

Product Development



- Computer Aided Design
- Statistical Analysis
- Monte Carlo Analysis
- Design of Experiments
- DFMEA/ PFMEA

Design Verification



- Dimensional Measurements
- Environmental testing
- Material Characterization SEM/FIB
- CT-scanning

Value added service

