

# HE SERIES

Standard products





HE-006 Standard inserts

500V 16A 6+⊕



Inserts

Hoods/Housings: size 6B, please find the details on page 15-25~15-38.

Screw terminal



Insert	Designation	Order No.
Male	HE-006-M	122 006 011 0001
Female	HE-006-F	122 006 021 0001

Crimp terminal

Order crimp contacts separately



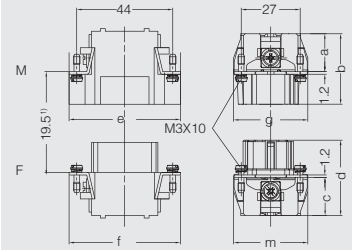
Insert	Designation	Order No.
Male	HE-006-MC <sup>1)</sup>	122 006 010 0001
Female	HE-006-FC <sup>1)</sup>	122 006 020 0001
1).can match PCB adapter,see page 14-04~14-05.		
Male	HE-006-MC/N <sup>2)</sup>	122 006 010 0101
Female	HE-006-FC/N <sup>2)</sup>	122 006 020 0101
2).for crimp contacts 16A-Enhanced III, see page 13-04.		

Spring terminal, See P00-35 for the structural characteristics of spring.



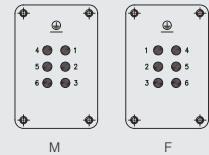
Insert	Designation	Order No.
Male	HE-006-MS	122 006 012 0001
Female	HE-006-FS	122 006 022 0001
Male	HE-006-MS B	122 006 012 0101
Female	HE-006-FS B	122 006 022 0101
Double spring connection(Two terminal per contact) Only suitable for high structure shells		
Male	HE-006-MSS	122 006 012 0201
Female	HE-006-FSS	122 006 022 0201

1) Distance for contact max. 21 mm

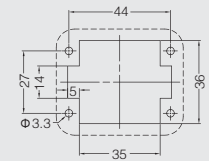


	a	b	e	g	c	d	f	m
M/F	16	32.4	51	34	16.8	34.5	50.5	34
MC/FC	18	33	51	34	18	35	50.5	34
MCN/FCN	18.3	34	51	34	19	36	51	34
MS/FS	18	33.3	51	34	18.2	35.4	50.5	34
MSS/FSS	34.5	49.5	50	34	33.4	50	50	34
MS B / FS B	19.5	34.7	51	34	19	36.5	51	34

Contact arrangement view from termination side



Panel cut out for inserts for use without hoods/housings



Crimp contacts

Crimp contacts 16A

Contact resistance ≤ 1mΩ silver plated

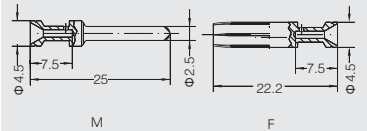


gold plated



More crimp contacts 16A see P13-04.

Male	Order No.	Female	Order No.
CESM-0.37	101 019 110 0301	CESF-0.37	101 019 120 0301
CESM-0.50	101 019 110 0401	CESF-0.50	101 019 120 0401
CESM-0.75	101 019 110 0601	CESF-0.75	101 019 120 0601
CESM-1.0	101 019 110 0801	CESF-1.0	101 019 120 0801
CESM-1.5	101 019 110 0901	CESF-1.5	101 019 120 0901
CESM-2.5	101 019 110 1001	CESF-2.5	101 019 120 1001
CESM-3.0	101 019 110 1101	CESF-3.0	101 019 120 1101
CESM-4.0	101 019 110 1201	CESF-4.0	101 019 120 1201
CEGM-0.37	101 019 210 0301	CEGF-0.37	101 019 220 0301
CEGM-0.50	101 019 210 0401	CEGF-0.50	101 019 220 0401
CEGM-0.75	101 019 210 0601	CEGF-0.75	101 019 220 0601
CEGM-1.0	101 019 210 0801	CEGF-1.0	101 019 220 0801
CEGM-1.5	101 019 210 0901	CEGF-1.5	101 019 220 0901
CEGM-2.5	101 019 210 1001	CEGF-2.5	101 019 220 1001
CEGM-3.0	101 019 210 1101	CEGF-3.0	101 019 220 1101
CEGM-4.0	101 019 210 1201	CEGF-4.0	101 019 220 1201



Identification	Wire gauge	Stripping length
no groove	0.14-0.37 mm <sup>2</sup>	AWG 26-22 7.5mm
no groove	0.5 mm <sup>2</sup>	AWG 20 7.5mm
1 groove	0.75 mm <sup>2</sup>	AWG 18 7.5mm
1 groove	1 mm <sup>2</sup>	AWG 18 7.5mm
2 grooves	1.5 mm <sup>2</sup>	AWG 16 7.5mm
3 grooves	2.5 mm <sup>2</sup>	AWG 14 7.5mm
wide groove	3 mm <sup>2</sup>	AWG 12 7.5mm
no groove	4 mm <sup>2</sup>	AWG 12 7.5mm

When the wire gauge is less than 0.75mm<sup>2</sup>, it's better to use the auxiliary pin assembly tool TL15.

Tools

Crimping tool



Contact removal tool



Wire gauge	Designation	Order No.
0.14-4mm <sup>2</sup>	TL02G	198 001 001 0011

Wire gauge: 0.14-0.37mm<sup>2</sup> please select TL02 Crimping tool.

Application	Designation	Order No.
for crimp contacts 16A	TL01	198 001 000 0002

More tools detail please find the page 32-03~32-06.

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

# HE-010 Standard inserts

500V 16A 10+ 



## Inserts

Hoods/Housings: size 10B, please find the details on page 15-39~15-69.

### Screw terminal



Insert	Designation	Order No.
Male	HE-010-M	122 010 011 0001
Female	HE-010-F	122 010 021 0001

### Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HE-010-MC <sup>1)</sup>	122 010 010 0001
Female	HE-010-FC <sup>1)</sup>	122 010 020 0001

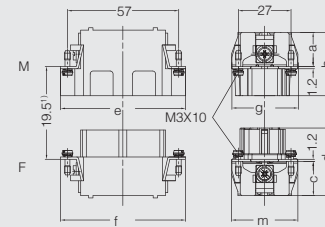
1).can match PCB adapter,see page 14-04~14-05.

Spring terminal, See P00-35 for the structural characteristics of spring.



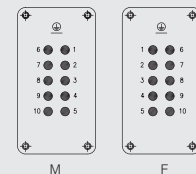
Insert	Designation	Order No.
Male	HE-010-MS	122 010 012 0001
Female	HE-010-FS	122 010 022 0001
Male	HE-010-MS B	122 010 012 0101
Female	HE-010-FS B	122 010 022 0101
Double spring connection(Two terminal per contact ) Only suitable for high structure shells		
Male	HE-010-MSS	122 010 012 0201
Female	HE-010-FSS	122 010 022 0201

1) Distance for contact max. 21 mm

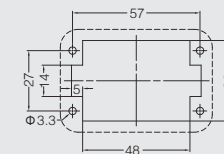


	a	b	e	g	c	d	f	m
M/F	16.5	32	64.5	34	16.8	34.2	64	34
MC/FC	18	33	64	34	17.5	35.2	64	34
MS/FS	18.5	33.5	64	34	18.5	36.6	64	34
MSS/FSS	34	49	64	34	33.5	49.5	63	34
MS B / FS B	19	34.5	64	34	18.6	36	64	34

Contact arrangement view from termination side



Panel cut out for inserts for use without hoods/housings



## Crimp contacts

### Crimp contacts 16A

Contact resistance  $\leq 1m\Omega$   
silver plated



gold plated



More crimp contacts 16A see P13-04.

### Tools

Crimping tool



Contact removal tool



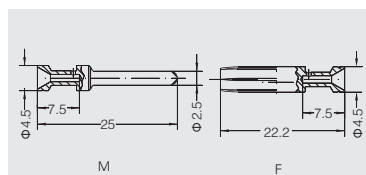
Male	Order No.	Female	Order No.
CESM-0.37	101 019 110 0301	CESF-0.37	101 019 120 0301
CESM-0.50	101 019 110 0401	CESF-0.50	101 019 120 0401
CESM-0.75	101 019 110 0601	CESF-0.75	101 019 120 0601
CESM-1.0	101 019 110 0801	CESF-1.0	101 019 120 0801
CESM-1.5	101 019 110 0901	CESF-1.5	101 019 120 0901
CESM-2.5	101 019 110 1001	CESF-2.5	101 019 120 1001
CESM-3.0	101 019 110 1101	CESF-3.0	101 019 120 1101
CESM-4.0	101 019 110 1201	CESF-4.0	101 019 120 1201
CEGM-0.37	101 019 210 0301	CEGF-0.37	101 019 220 0301
CEGM-0.50	101 019 210 0401	CEGF-0.50	101 019 220 0401
CEGM-0.75	101 019 210 0601	CEGF-0.75	101 019 220 0601
CEGM-1.0	101 019 210 0801	CEGF-1.0	101 019 220 0801
CEGM-1.5	101 019 210 0901	CEGF-1.5	101 019 220 0901
CEGM-2.5	101 019 210 1001	CEGF-2.5	101 019 220 1001
CEGM-3.0	101 019 210 1101	CEGF-3.0	101 019 220 1101
CEGM-4.0	101 019 210 1201	CEGF-4.0	101 019 220 1201

Wire gauge	Designation	Order No.
0.14-4mm <sup>2</sup>	TL02G	198 001 001 0011

Wire gauge: 0.14-0.37mm<sup>2</sup> please select TL02 Crimping tool.

Application	Designation	Order No.
for crimp contacts 16A	TL01	198 001 000 0002

More tools detail please find the page 32-03~32-06.



Identification	Wire gauge	Stripping length	
no groove	0.14-0.37 mm <sup>2</sup>	AWG 26-22	7.5mm
no groove	0.5 mm <sup>2</sup>	AWG 20	7.5mm
1 groove	0.75 mm <sup>2</sup>	AWG 18	7.5mm
1 groove	1 mm <sup>2</sup>	AWG 18	7.5mm
2 grooves	1.5 mm <sup>2</sup>	AWG 16	7.5mm
3 grooves	2.5 mm <sup>2</sup>	AWG 14	7.5mm
wide groove	3 mm <sup>2</sup>	AWG 12	7.5mm
no groove	4 mm <sup>2</sup>	AWG 12	7.5mm

When the wire gauge is less than 0.75mm<sup>2</sup>, it's better to use the auxiliary pin assembly tool TL15.

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.



# HE-024 Standard inserts

500V 16A 24+



## Inserts

Hoods/Housings: size 24B, please find the details on page 15-108-15-150.

### Screw terminal



Insert	Designation	Order No.
Male	HE-024-M	122 024 011 0001
Female	HE-024-F	122 024 021 0001

### Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HE-024-MC <sup>1)</sup>	122 024 010 0001
Female	HE-024-FC <sup>1)</sup>	122 024 020 0001

1).can match PCB adapter,see page 14-04-14-05.

### Spring terminal, See P00-35 for the structural characteristics of spring.



Insert	Designation	Order No.
Male	HE-024-MS	122 024 012 0001
Female	HE-024-FS	122 024 022 0001
Male	HE-024-MS B	122 024 012 0101
Female	HE-024-FS B	122 024 022 0101
Double spring connection(Two terminal per contact) Only suitable for high structure shells		
Male	HE-024-MSS	122 024 012 0201
Female	HE-024-FSS	122 024 022 0201

## Crimp contacts

### Crimp contacts 16A

Contact resistance  $\leq 1m\Omega$   
silver plated



gold plated



More crimp contacts 16A see P13-04.

### Tools

Crimping tool



Contact removal tool



Male	Order No.	Female	Order No.
CESM-0.37	101 019 110 0301	CESF-0.37	101 019 120 0301
CESM-0.50	101 019 110 0401	CESF-0.50	101 019 120 0401
CESM-0.75	101 019 110 0601	CESF-0.75	101 019 120 0601
CESM-1.0	101 019 110 0801	CESF-1.0	101 019 120 0801
CESM-1.5	101 019 110 0901	CESF-1.5	101 019 120 0901
CESM-2.5	101 019 110 1001	CESF-2.5	101 019 120 1001
CESM-3.0	101 019 110 1101	CESF-3.0	101 019 120 1101
CESM-4.0	101 019 110 1201	CESF-4.0	101 019 120 1201
CEGM-0.37	101 019 210 0301	CEGF-0.37	101 019 220 0301
CEGM-0.50	101 019 210 0401	CEGF-0.50	101 019 220 0401
CEGM-0.75	101 019 210 0601	CEGF-0.75	101 019 220 0601
CEGM-1.0	101 019 210 0801	CEGF-1.0	101 019 220 0801
CEGM-1.5	101 019 210 0901	CEGF-1.5	101 019 220 0901
CEGM-2.5	101 019 210 1001	CEGF-2.5	101 019 220 1001
CEGM-3.0	101 019 210 1101	CEGF-3.0	101 019 220 1101
CEGM-4.0	101 019 210 1201	CEGF-4.0	101 019 220 1201

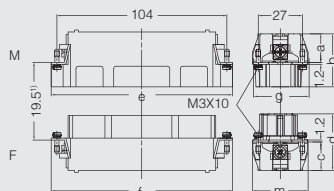
Wire gauge	Designation	Order No.
0.14-4mm <sup>2</sup>	TL02G	198 001 001 0011

Wire gauge: 0.14-0.37mm<sup>2</sup> please select TL02 Crimping tool.

Application	Designation	Order No.
for crimp contacts 16A	TL01	198 001 000 0002

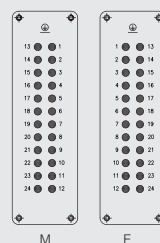
More tools detail please find the page 32-03-32-06.

1) Distance for contact max. 21 mm

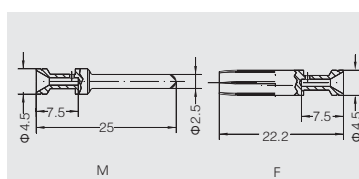
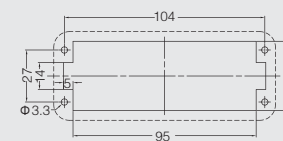


	a	b	e	g	c	d	f	m
M/F	17	32.5	111	33.5	17	34.5	111	33.5
MC/FC	18.3	33.5	111	34	18.3	35.5	111	34
MS/FS	18.5	33.6	111	34	18.5	36.6	111	34
MSS/FSS	34	49	110	34	32	49	110	34
MS B / FS B	19.6	34.7	111	34	19	36.2	111	34

Contact arrangement view from termination side



Panel cut out for inserts for use without hoods/housings



Identification	Wire gauge	Stripping length	
no groove	0.14-0.37 mm <sup>2</sup>	AWG 26-22	7.5mm
no groove	0.5 mm <sup>2</sup>	AWG 20	7.5mm
1 groove	0.75 mm <sup>2</sup>	AWG 18	7.5mm
1 groove	1 mm <sup>2</sup>	AWG 18	7.5mm
2 grooves	1.5 mm <sup>2</sup>	AWG 16	7.5mm
3 grooves	2.5 mm <sup>2</sup>	AWG 14	7.5mm
wide groove	3 mm <sup>2</sup>	AWG 12	7.5mm
no groove	4 mm <sup>2</sup>	AWG 12	7.5mm

When the wire gauge is less than 0.75mm<sup>2</sup>, it's better to use the auxiliary pin assembly tool TL15.

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.



# HE-032 Standard inserts

500V 16A 32+



## Inserts

Hoods/Housings: size **32B**, please find the details on page 15-151~15-159.

### Screw terminal



Insert	Designation	Order No.
Male	HE-016-M	122 016 011 0001
	HE-016-M(17-32)	122 016 011 0002
Female	HE-016-F	122 016 021 0001
	HE-016-F(17-32)	122 016 021 0002

### Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HE-016-MC	122 016 010 0001
	HE-016-MC(17-32) <sup>1)</sup>	122 016 010 0002
Female	HE-016-FC	122 016 020 0001
	HE-016-FC(17-32) <sup>1)</sup>	122 016 020 0002

1).can match PCB adapter,see page 14-04~14-05.

### Spring terminal, See PU0-33 for the structural characteristics of spring.



Insert	Designation	Order No.
Male	HE-016-MS	122 016 012 0001
	HE-016-MS(17-32)	122 016 012 0002
Female	HE-016-FS	122 016 022 0001
	HE-016-FS(17-32)	122 016 022 0002
Male	HE-016-MS B	122 016 012 0101
	HE-016-MS B(17-32)	122 016 012 0102
Female	HE-016-FS B	122 016 022 0101
	HE-016-FS B(17-32)	122 016 022 0102
Double spring connection(Two terminal per contact) Only suitable for high structure shells		
Male	HE-016-MSS	122 016 012 0201
	HE-016-MSS(17-32)	122 016 012 0202
Female	HE-016-FSS	122 016 022 0201
	HE-016-FSS(17-32)	122 016 022 0202

### Crimp contacts

#### Crimp contacts 16A

Contact resistance  $\leq 1m\Omega$   
silver plated



gold plated



More crimp contacts 16A see P13-04.

Male	Order No.	Female	Order No.
CESM-0.37	101 019 110 0301	CESF-0.37	101 019 120 0301
CESM-0.50	101 019 110 0401	CESF-0.50	101 019 120 0401
CESM-0.75	101 019 110 0601	CESF-0.75	101 019 120 0601
CESM-1.0	101 019 110 0801	CESF-1.0	101 019 120 0801
CESM-1.5	101 019 110 0901	CESF-1.5	101 019 120 0901
CESM-2.5	101 019 110 1001	CESF-2.5	101 019 120 1001
CESM-3.0	101 019 110 1101	CESF-3.0	101 019 120 1101
CESM-4.0	101 019 110 1201	CESF-4.0	101 019 120 1201
CEGM-0.37	101 019 210 0301	CEGF-0.37	101 019 220 0301
CEGM-0.50	101 019 210 0401	CEGF-0.50	101 019 220 0401
CEGM-0.75	101 019 210 0601	CEGF-0.75	101 019 220 0601
CEGM-1.0	101 019 210 0801	CEGF-1.0	101 019 220 0801
CEGM-1.5	101 019 210 0901	CEGF-1.5	101 019 220 0901
CEGM-2.5	101 019 210 1001	CEGF-2.5	101 019 220 1001
CEGM-3.0	101 019 210 1101	CEGF-3.0	101 019 220 1101
CEGM-4.0	101 019 210 1201	CEGF-4.0	101 019 220 1201

#### Tools

Crimping tool



Contact removal tool



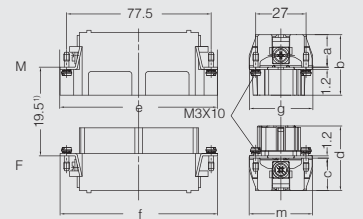
Wire gauge	Designation	Order No.
0.14-4mm <sup>2</sup>	TL02G	198 001 001 0011

Wire gauge: 0.14-0.37mm<sup>2</sup> please select TL02 Crimping tool.

Application	Designation	Order No.
for crimp contacts 16A	TL01	198 001 000 0002

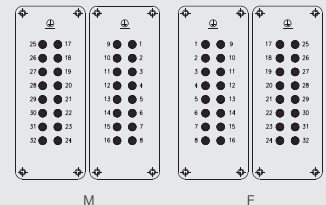
More tools detail please find the page 32-03~32-06.

1) Distance for contact max. 21 mm

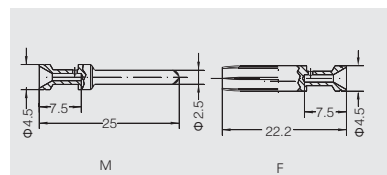
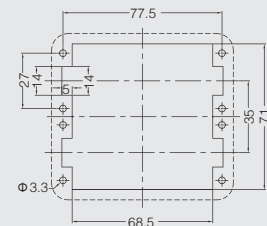


	a	b	e	g	c	d	f	m
M/F	17	32.5	84.2	34	17	34.5	84.2	33.5
MC/FC	18	33.5	84.5	34	18	35	84.5	34
MS/FS	18	33.7	84.5	34	18.2	35.5	84.5	34
MSS/FSS	34.3	49	84.5	34	32.2	49	84.5	34
MS B / FS B	19.6	34.7	84.3	34	18.6	36	84.5	34

Contact arrangement view from termination side



Panel cut out for inserts for use without hoods/housings



Identification	Wire gauge	Stripping length
no groove	0.14-0.37 mm <sup>2</sup>	AWG 26-22 7.5mm
no groove	0.5 mm <sup>2</sup>	AWG 20 7.5mm
1 groove	0.75 mm <sup>2</sup>	AWG 18 7.5mm
1 groove	1 mm <sup>2</sup>	AWG 18 7.5mm
2 grooves	1.5 mm <sup>2</sup>	AWG 16 7.5mm
3 grooves	2.5 mm <sup>2</sup>	AWG 14 7.5mm
wide groove	3 mm <sup>2</sup>	AWG 12 7.5mm
no groove	4 mm <sup>2</sup>	AWG 12 7.5mm

When the wire gauge is less than 0.75mm<sup>2</sup>, it's better to use the auxiliary pin assembly tool TL15.

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.





## HE push spring insert

## Tools

HE B Spring open machine<sup>1)</sup>

Description	Designation	Order NO.
for all HE B spring inserts	SOM01	198 001 003 0008

1) It can open all the shrapnel windows of insert at one time; suitable for using in mass assembly, greatly improving the efficiency of the connection.



HE