

# HA SERIES

Compact standard connector

HA



## HA SERIES The slim inserts

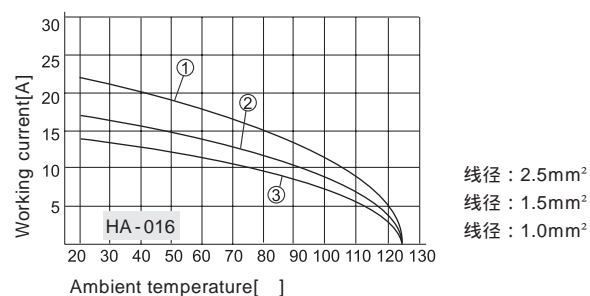
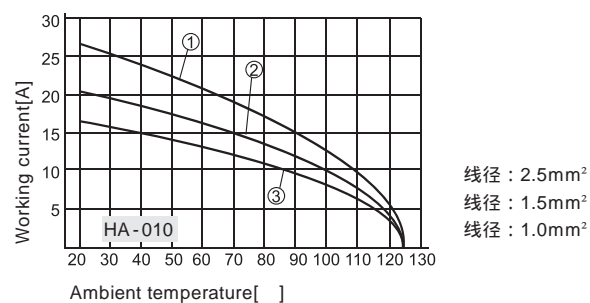
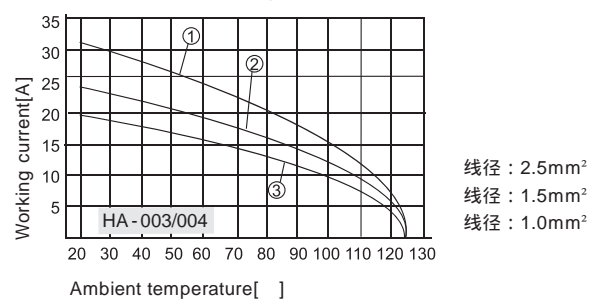
## Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	3,4,10,16,32(2X16)+PE
Electrical data acc. to EN 61 984	
HA - 003/HA - 004	
- Rated current	10A
- Rated voltage conductor	230V
- Rated voltage conductor	400V
- Rated impulse voltage	4kV
- Pollution degree	3
- or	10A 250V 4kV 3
HA - 010/HA - 016	
- Rated current	16A
- Rated voltage	250V
- Rated impulse voltage	4kV
- Pollution degree	3
- Pollution degree 2 also	16A 230/400V 4kV 2
Rated voltage acc. to UL/CSA	600V
Insulation resistance	10 <sup>10</sup>
Material	polycarbonate
Limiting temperatures	-40 ...+125
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	500
Contacts	
Material	copper alloy
Surface	hard - gold plated hard - silver plated
Contact resistance	1m
Screw terminal	
- Wrie gauge	1.0 - 2.5mm <sup>2</sup>
- AWG	18 - 14
- Tightening/Test torque	0.25Nm ( HA - 003/004 ) or 0.5Nm ( HA - 010/016 )
Crimp terminal	
- Wrie gauge	0.14 - 4.0mm <sup>2</sup>
- AWG	26 - 12
Spring terminal	
- Wrie gauge	0.14 - 2.5mm <sup>2</sup>
- AWG	26 - 14

## Current carrying capacity

The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

Control and test procedures according to DIN EN 60512-5



HA-003/004 The slim inserts

230/400V 10A 3/4+⊕



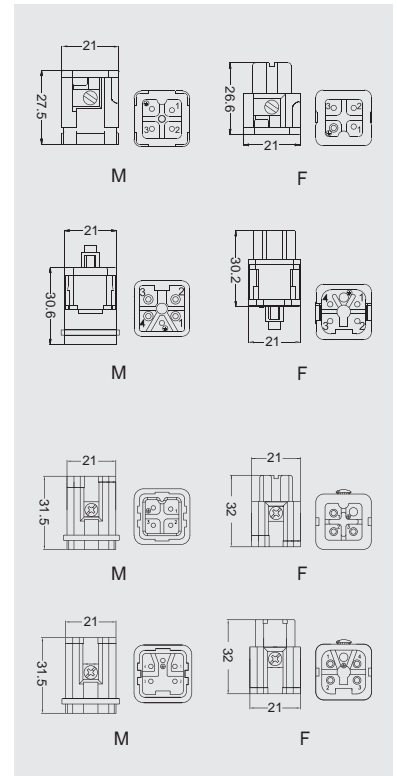
Inserts

Hoods/Housings : size 3A, detail please find the page16-04~16-10.

Screw terminal



Insert	Designation	Order No.
Male	HA - 003 - M	02100310100
Female	HA - 003 - F	02100310200
Male	HA - 004 - M	02100410100
Female	HA - 004 - F	02100410200



Spring terminal



Insert	Designation	Order No.
Male	HA - 003 - MS	02100330100
Female	HA - 003 - FS	02100330200
Male	HA - 004 - MS	02100430100
Female	HA - 004 - FS	02100430200

HA-010 The slim inserts

250V 16A 10+⊕



Inserts

Hoods/Housings : size 10A, detail please find the page16-11~16-12.

Screw terminal



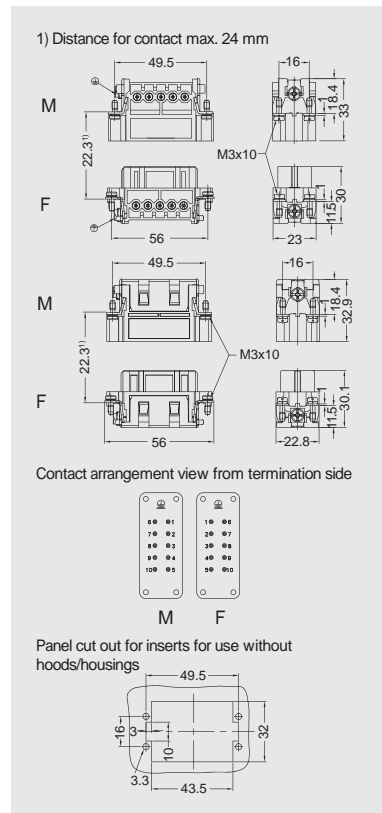
Insert	Designation	Order No.
Male	HA -010 - M	02101010100
Female	HA -010 - F	02101010200

Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HA -010 - MC	02101020100
Female	HA -010 - FC	02101020200



Accessories

Crimp contacts 16A

Contact resistance 1m silver plated



gold plated



Male	Order No.	Female	Order No.
CESM - 0.37	08121131000	CESF - 0.37	08121132000
CESM - 0.5	08121133000	CESF - 0.5	08121134000
CESM - 0.75	08121135000	CESF - 0.75	08121136000
CESM - 1.0	08121137000	CESF - 1.0	08121138000
CESM - 1.5	08121139000	CESF - 1.5	08121140000
CESM - 2.5	08121141000	CESF - 2.5	08121142000
CESM - 3.0	08121143000	CESF - 3.0	08121144000
CESM - 4.0	08121145000	CESF - 4.0	08121146000
CEGM - 0.37	08121131010	CEGF - 0.37	08121132010
CEGM - 0.5	08121133010	CEGF - 0.5	08121134010
CEGM - 0.75	08121135010	CEGF - 0.75	08121136010
CEGM - 1.0	08121137010	CEGF - 1.0	08121138010
CEGM - 1.5	08121139010	CEGF - 1.5	08121140010
CEGM - 2.5	08121141010	CEGF - 2.5	08121142010
CEGM - 3.0	08121143010	CEGF - 3.0	08121144010
CEGM - 4.0	08121145010	CEGF - 4.0	08121146010

More crimp contacts16A see P17 - 03.

Tools

Crimping tool



Contact removal tool

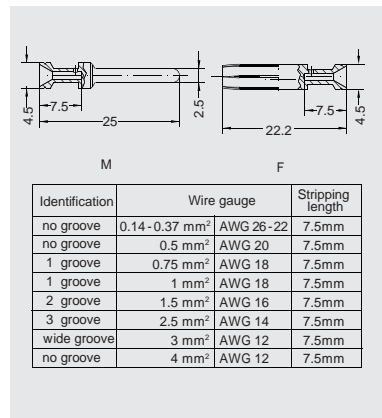


Wire gauge	Designation	Order No.
0.5 - 4mm <sup>2</sup>	TL02G	09100021020

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

Application	Designation	Order No.
for crimp contacts16A	TL01	09100012000

More tools detail please find the page18- 13~18- 14.



HA-016 The slim inserts

250V 16A 16+⊕



Inserts

Hoods/Housings : size 16A, detail please find the page 16-13-16-14.

Screw terminal



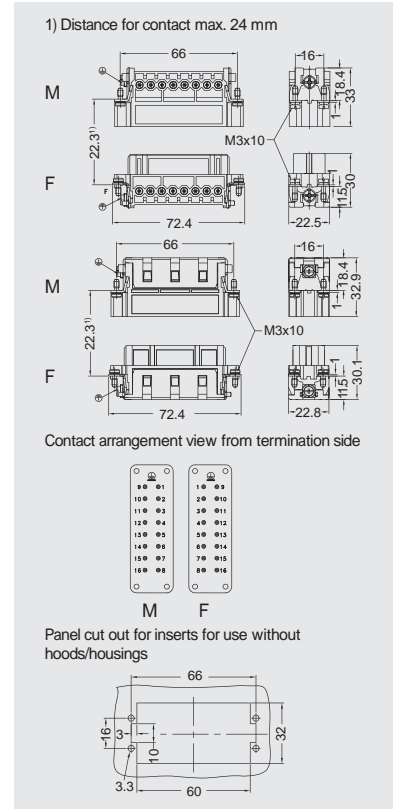
Insert	Designation	Order No.
Male	HA -016 - M	02101610100
Female	HA -016 - F	02101610200

Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HA -016 - MC	02101620100
Female	HA -016 - FC	02101620200



Accessories

Crimp contacts 16A

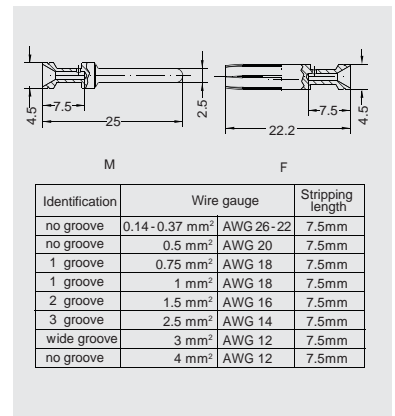
Contact resistance 1m silver plated



gold plated



Male	Order No.	Female	Order No.
CESM - 0.37	08121131000	CESF - 0.37	08121132000
CESM - 0.5	08121133000	CESF - 0.5	08121134000
CESM - 0.75	08121135000	CESF - 0.75	08121136000
CESM - 1.0	08121137000	CESF - 1.0	08121138000
CESM - 1.5	08121139000	CESF - 1.5	08121140000
CESM - 2.5	08121141000	CESF - 2.5	08121142000
CESM - 3.0	08121143000	CESF - 3.0	08121144000
CESM - 4.0	08121145000	CESF - 4.0	08121146000
CEGM - 0.37	08121131010	CEGF - 0.37	08121132010
CEGM - 0.5	08121133010	CEGF - 0.5	08121134010
CEGM - 0.75	08121135010	CEGF - 0.75	08121136010
CEGM - 1.0	08121137010	CEGF - 1.0	08121138010
CEGM - 1.5	08121139010	CEGF - 1.5	08121140010
CEGM - 2.5	08121141010	CEGF - 2.5	08121142010
CEGM - 3.0	08121143010	CEGF - 3.0	08121144010
CEGM - 4.0	08121145010	CEGF - 4.0	08121146010



More crimp contacts 16A see P17 - 03.

Tools

Crimping tool



Contact removal tool



Wire gauge	Designation	Order No.
0.5 - 4mm <sup>2</sup>	TL02G	09100021020

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

Application	Designation	Order No.
for crimp contacts 16A	TL01	09100012000

More tools detail please find the page 18- 13-18- 14.

# HA-032 The slim inserts

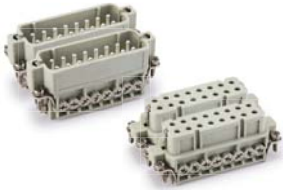
250V 16A 32+⊕



## Inserts

Hoods/Housings : size 32A, detail please find the page16-15-16-16.

### Screw terminal



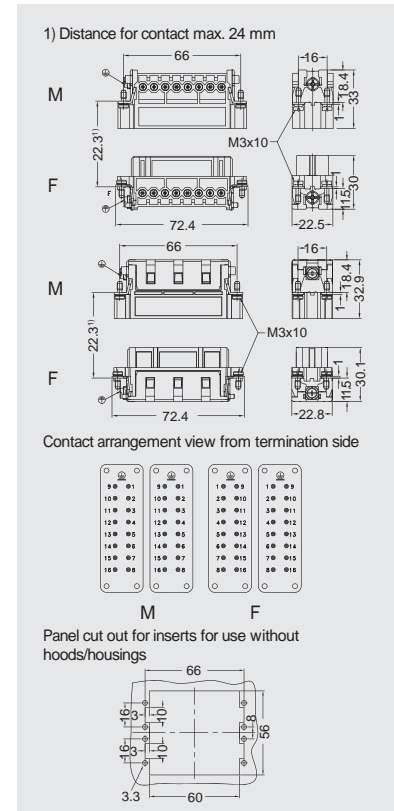
Insert	Designation	Order No.
Male	HA - 016 - M	02101610100
	HA - 016 - M (17 - 32)	02101612100
Female	HA - 016 - F	02101610200
	HA - 016 - F (17 - 32)	02101612200

### Crimp terminal

Order crimp contacts separately



Insert	Designation	Order No.
Male	HA - 016 - MC	02101620100
	HA - 016 - MC (17 - 32)	02101622100
Female	HA - 016 - FC	02101620200
	HA - 016 - FC (17 - 32)	02101622200



## Accessories

### Crimp contacts 16A

Contact resistance 1m silver plated



gold plated



Male	Order No.	Female	Order No.
CESM - 0.37	08121131000	CESF - 0.37	08121132000
CESM - 0.5	08121133000	CESF - 0.5	08121134000
CESM - 0.75	08121135000	CESF - 0.75	08121136000
CESM - 1.0	08121137000	CESF - 1.0	08121138000
CESM - 1.5	08121139000	CESF - 1.5	08121140000
CESM - 2.5	08121141000	CESF - 2.5	08121142000
CESM - 3.0	08121143000	CESF - 3.0	08121144000
CESM - 4.0	08121145000	CESF - 4.0	08121146000
CEGM - 0.37	08121131010	CEGF - 0.37	08121132010
CEGM - 0.5	08121133010	CEGF - 0.5	08121134010
CEGM - 0.75	08121135010	CEGF - 0.75	08121136010
CEGM - 1.0	08121137010	CEGF - 1.0	08121138010
CEGM - 1.5	08121139010	CEGF - 1.5	08121140010
CEGM - 2.5	08121141010	CEGF - 2.5	08121142010
CEGM - 3.0	08121143010	CEGF - 3.0	08121144010
CEGM - 4.0	08121145010	CEGF - 4.0	08121146010

More crimp contacts 16A see P17 - 03.

### Tools

Crimping tool



Contact removal tool



Wire gauge	Designation	Order No.
0.5 - 4mm <sup>2</sup>	TL02G	09100021020

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

Application	Designation	Order No.
for crimp contacts 16A	TL01	09100012000

More tools detail please find the page18- 13-18- 14.

