

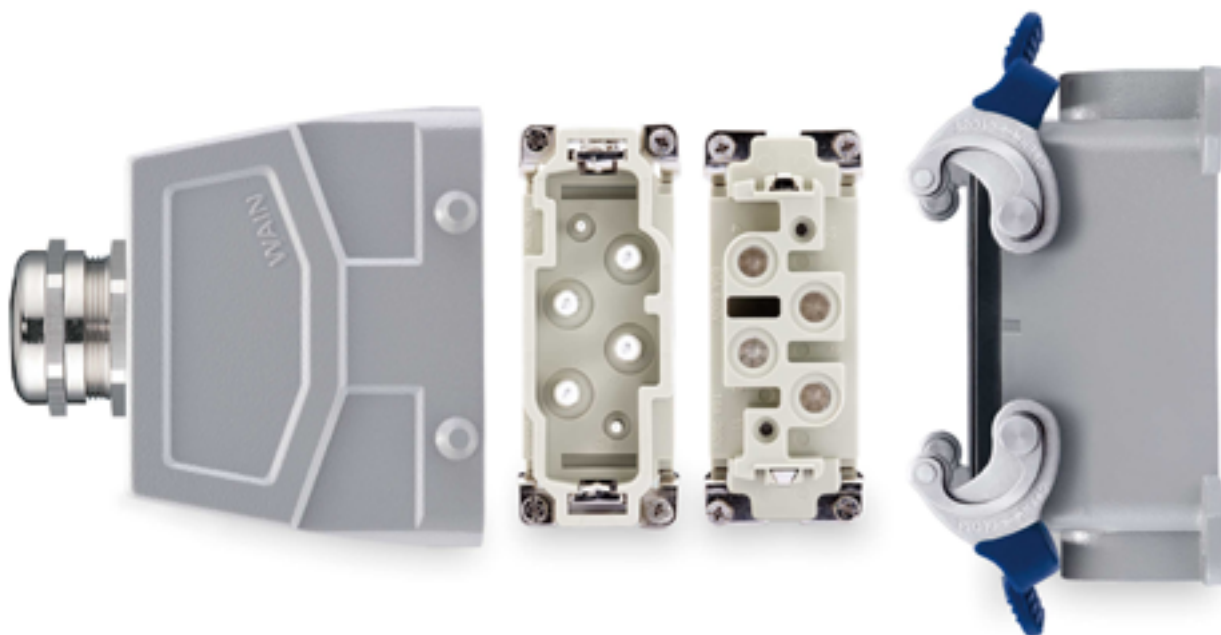


HSB

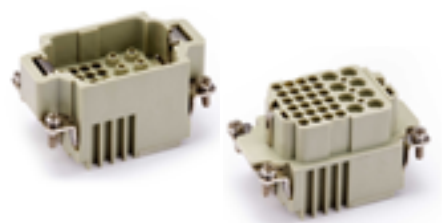


HK SERIES

Combination connector



HK-008/24 Combination inserts



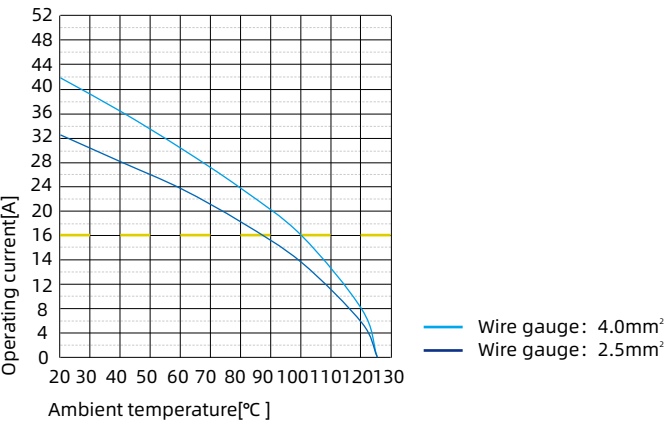
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	8/24+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	16A
-Rated voltage conductor	400V
-Rated impulse voltage	6kV
-Pollution degree	3
Signal area	
-Rated current	10A
-Rated voltage	250V
-Rated impulse voltage	4kV
-Pollution degree	3
Rated voltage acc. to UL	600/300V
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life (mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
	hard-gold plated
-Contact resistance	≤ 1mΩ
-Crimp terminal	
-mm ²	0.5-4mm ²
-AWG	20-12
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
	hard-gold plated
-Contact resistance	≤ 3mΩ
-Crimp terminal	
-mm ²	0.14-2.5mm ²
-AWG	25-14

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



HK-008/24 Combination inserts

400/250V 16/10A 8/24+ 

Inserts

Remark: SPQ is 5pcs

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

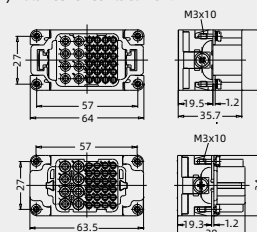
Crimp terminal

order crimp contacts separately

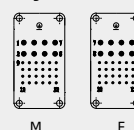


Insert	Designation	Order No.
Male	HK-008/24-MC	128 032 010 0001
Female	HK-008/24-FC	128 032 020 0001

1) Distance for contact max. 21 mm



Contact arrangement view from termination side



Crimp contacts

Crimp contacts 10A

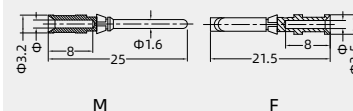
Contact resistance $\leq 3\text{m}\Omega$
silver plated

gold plated

More crimp contacts 10A
see P13-02, P13-03.

Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001



Wire gauge	Φ	Stripping length
0.09-0.25 mm ² AWG 28-24	0.65	5 mm
0.14-0.37 mm ² AWG 26-22	0.9	8 mm
0.5 mm ² AWG 20	1.1	8 mm
0.75 mm ² AWG 18	1.3	8 mm
1 mm ² AWG 18	1.45	8 mm
1.5 mm ² AWG 16	1.75	8 mm
2.5 mm ² AWG 14	2.25	6 mm

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Crimp contacts 16A

silver plated



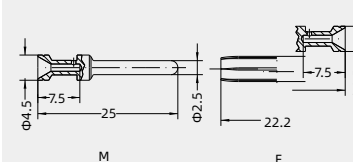
gold plated



More crimp contacts 16A see P13-04.

Remark: SPQ is 100pcs

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 ² AWG 26-22	7.5mm
no groove	0.5 mm ² AWG 20	7.5mm
1 groove	0.75 mm ² AWG 18	7.5mm
1 groove	1 mm ² AWG 18	7.5mm
2 grooves	1.5 mm ² AWG 16	7.5mm
3 grooves	2.5 mm ² AWG 14	7.5mm
wide groove	3 mm ² AWG 12	7.5mm
no groove	4 mm ² AWG 12	7.5mm

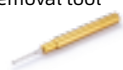
When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Tools

Crimping tool



Contact removal tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011
Wire gauge: 16A crimp contacts 0.14-0.37mm ² please select TL02 crimping tool.		
Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001
16A contact removal tool: cross-slotted screw driver (size 0 acc. to DIN 5260).		

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

HK-004/4 Combination crimp inserts

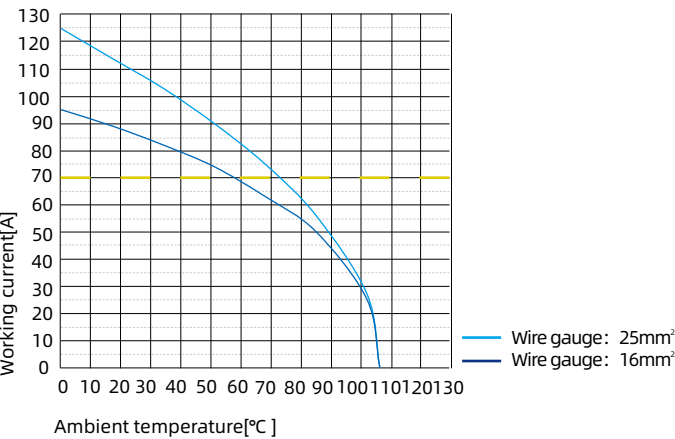
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	C E E
Number of contacts	4/4+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	70A
-Rated voltage	690V
-Rated impulse voltage	8kV
-Pollution degree	3
Signal area	
-Rated current	16A
-Rated voltage	250V
-Rated impulse voltage	4kV
-Pollution degree	3
Rated voltage acc. to UL	600/230V
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life (mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 0.5mΩ
-Crimp terminal	
- wire gauge	10-25mm ²
-Max. insulation diameter	11mm
Stripping length	15.5mm
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 1mΩ
-Crimp terminal	
-mm ²	0.14-4mm ²
-AWG	26-12

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



HK-004/4 Combination crimp inserts

690/250V 70/16A 4/4+⊕

CE

Inserts

Remark: SPQ is 5pcs

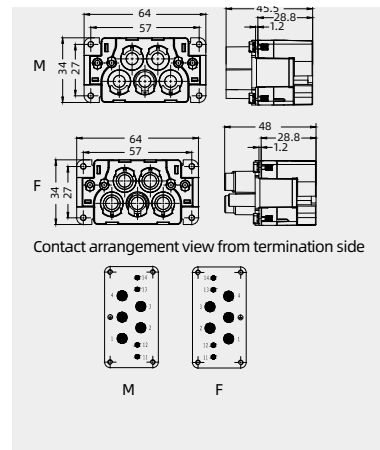
Hoods/Housings: size 10B, please find the details on page 15-39~15-69.

Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HK-004/4-MC	128 008 010 0001
Female	HK-004/4-FC	128 008 020 0001



Crimp contacts

Crimp contacts 70A

silver plated

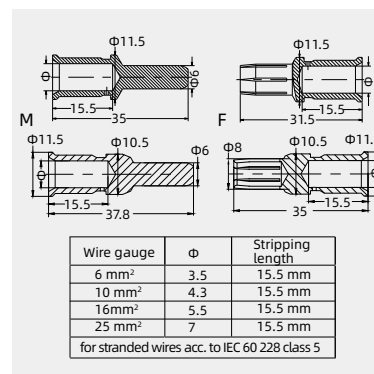
Contact resistance $\leq 0.5\text{m}\Omega$ 

PE Contact



Remark: SPQ is 5pcs

Male	Order No.	Female	Order No.
CKSM70-6	101 034 110 1301	CKSF70-6	101 034 120 1301
CKSM70-10	101 034 110 1401	CKSF70-10	101 034 120 1401
CKSM70-16	101 034 110 1501	CKSF70-16	101 034 120 1501
CKSM70-25	101 034 110 1601	CKSF70-25	101 034 120 1601
CKSM70PE-10	101 034 110 1404	CKSF70PE-10	101 034 120 1404
CKSM70PE-16	101 034 110 1504	CKSF70PE-16	101 034 120 1504
CKSM70PE-25	101 034 110 1604	CKSF70PE-25	101 034 120 1604



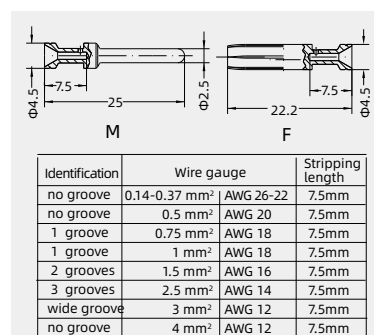
Crimp contacts 16A

silver plated

Contact resistance $\leq 1\text{m}\Omega$ 

Remark: SPQ is 100pcs

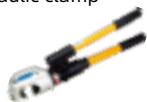
Male	Order No.	Female	Order No.
CESM-0.37	101 019 110 0301	CESF-0.37	101 019 120 0301
CESM-0.50	101 019 110 0401	CESF-0.50	101 019 120 0401
CESM-0.75	101 019 110 0601	CESF-0.75	101 019 120 0601
CESM-1.0	101 019 110 0801	CESF-1.0	101 019 120 0801
CESM-1.5	101 019 110 0901	CESF-1.5	101 019 120 0901
CESM-2.5	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



More crimp contacts 16A see P13-04.

Tools

Manual hydraulic clamp



Crimping tool



Contact removal tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
10-240mm ²	TL05	198 001 001 0005

Remark: for wire gauge 6mm², need to order 2980010010037 TL05 6C die separately.

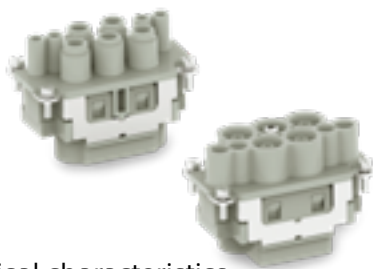
Wire gauge	Designation	Order No.
0.5-4mm ²	TL02G	198 001 001 0011

Wire gauge: 16A crimp contacts 0.14-0.37mm² please select TL02 crimping tool.

Application	Designation	Order No.
for crimp contacts 70A	TL12	198 001 000 0024
for crimp contacts 16A	TL01	198 001 000 0002

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

HK-004/4 Combination inserts



Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	4/4+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	63A
-Rated voltage	690V
-Rated impulse voltage	8kV
-Pollution degree	3
Signal area	
-Rated current	16A
-Rated voltage	250V
-Rated impulse voltage	4kV
-Pollution degree	3
Rated voltage acc. to UL	600/230V
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 0.5mΩ
-Screw terminal	
- geometric wire gauge	6-22mm ²
- AWG	8-4
-Max. insulation diameter	11mm
-Stripping length	11mm
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 3mΩ
-Spring terminal	
-mm ²	0.14-2.5mm ²
-AWG	26-14
-Stripping length	7-9mm

HK-004/4 Combination inserts

690/250V 63/16A 4/4+⏚



Inserts

Remark: SPQ is 5pcs

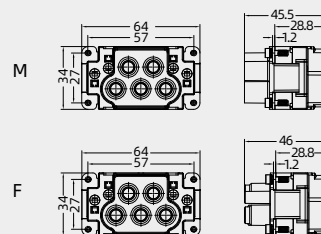
Hoods/Housings: only suitable for size 10B high structure shells, please find the details on page 15-39~15-69.

Screw terminal

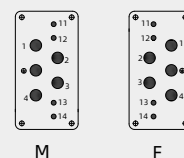


Insert	Designation	Order No.
Male	HK-004/4.1-M(6-16mm ²)	128 008 011 0002
	HK-004/4.2-M(14-22mm ²)	128 008 011 0003
Female	HK-004/4.1-F(6-16mm ²)	128 008 021 0002
	HK-004/4.2-F(14-22mm ²)	128 008 021 0003

1) Distance for contact max. 21 mm



Contact arrangement view from termination side



Accessories

Tool

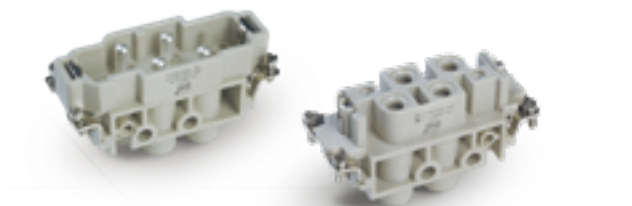
Remark: SPQ is 1pc

hexagonal driver



Description	Designation	Order No.
for axial setscrew with grip	SW-2.5*100	198 001 003 0003

HK-004/0,004/2 Combination inserts



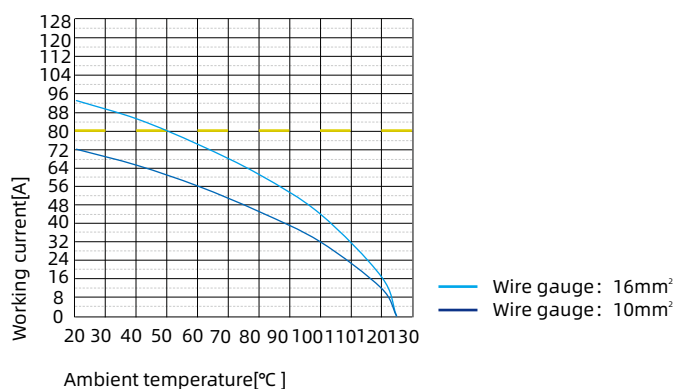
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	4/0+PE,4/2+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	80A
-Rated voltage	830V
-Rated impulse voltage	8kV
-Pollution degree	3
-Pollution degree 2 also	80A 1000V 8kV 2
Signal area	
-Rated current	16A
-Rated voltage	400V
-Rated impulse voltage	6kV
-Pollution degree	3
-Pollution degree 2 also	16A 400/690V 6kV 2
Rated voltage acc. to UL	600/300V
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	$\leq 0.3m\Omega$
-Screw terminal	
- geometric wire gauge	1.5-16mm ²
- AWG	16-6
-Tightening torque	
-mm ²	1.5 2.5 4 6 10 16
-N.m	1.2 2 3 3 3 3
-Stripping length	14mm
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	$\leq 1m\Omega$
-Screw terminal	
-mm ²	0.5-2.5mm ²
-AWG	20-14
-Tightening torque	0.5Nm
-Stripping length	7.5mm

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



HK-004/0,004/2 Combination inserts

830/400V 80/16A 4/0,4/2+⊕

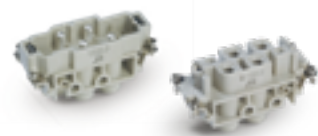


Inserts

Remark: SPQ is 5pcs

Hoods/Housings: size 16B, please find the details on page 15-70~15-1071.

Screw terminal



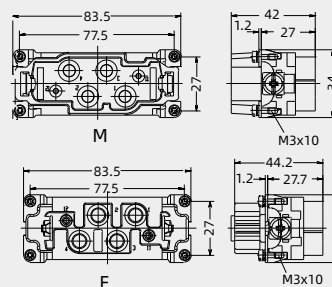
Insert	Designation	Order No.
Male	HK-004/0-M	128 004 011 0001
Female	HK-004/0-F	128 004 021 0001

Screw terminal

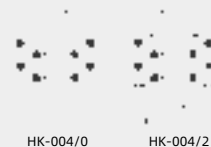


Insert	Designation	Order No.
Male	HK-004/2-M	128 006 011 0001
Female	HK-004/2-F	128 006 021 0001

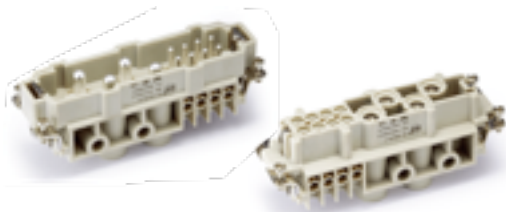
1) Distance for contact max. 21 mm



Contact arrangement view from termination side



HK-004/8 Combination inserts



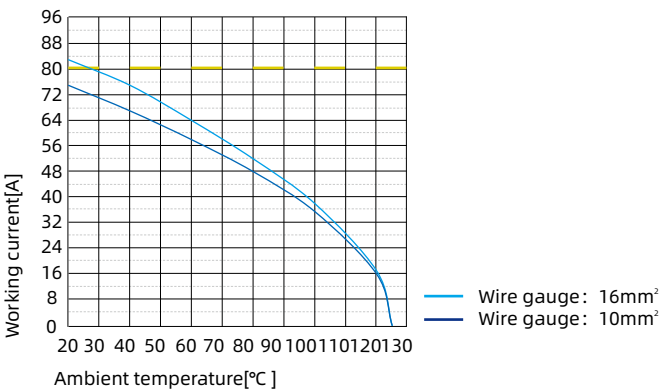
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	4/8+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	80A
-Rated voltage	400V
-Rated impulse voltage	6kV
-Pollution degree	3
Signal area	
-Rated current	16A
-Rated voltage	400V
-Rated impulse voltage	6kV
-Pollution degree	3
Rated voltage acc. to UL	600/600V
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 0.3mΩ
-Screw terminal	
- geometric wire gauge	1.5-16mm ²
- AWG	16-6
-Tightening torque	
-mm ²	1.5 2.5 4 6 10 16
-N.m	1.2 2 3 3 3 3
-Stripping length	14mm
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 1mΩ
-Screw terminal	
-mm ²	0.5-2.5mm ²
-AWG	20-14
-Tightening torque	0.5Nm
-Stripping length	7.5mm

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



HK-004/8 Combination inserts

400/400V 80/16A 4/8+⏚

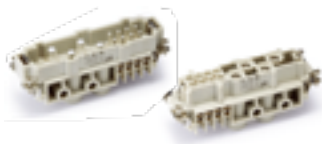


Inserts

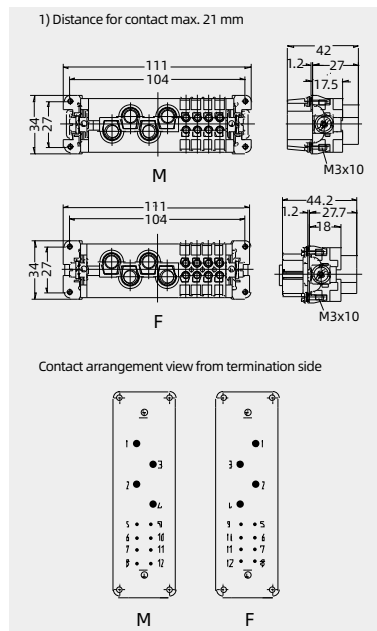
Remark: SPQ is 5pcs

Hoods/Housings: size24B, please find the details on page 15-108~15-150.

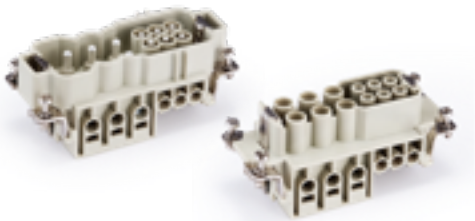
Screw terminal



Insert	Designation	Order No.
Male	HK-004/8-M	128 012 011 0001
Female	HK-004/8-F	128 012 021 0001



HWK-006/6 Combination inserts



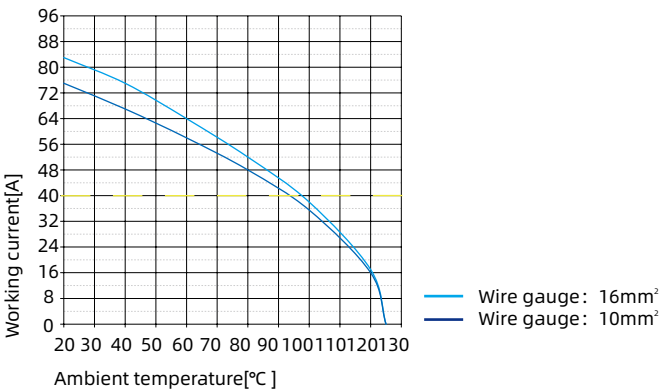
Technical characteristics

Technical characteristics	DIN EN 60 664	DIN EN 61 984
Approvals		
Inserts		
Number of contacts	6/6+PE	
Electrical data acc. to EN 61 984		
Power area		
-Rated current	40A	
-Rated voltage	690V	
-Rated impulse voltage	8kV	
-Pollution degree	3	
Signal area		
-Rated current	16A	
-Rated voltage	400V	
-Rated impulse voltage	6kV	
-Pollution degree	3	
Rated voltage acc. to UL	600/600V	
Insulation resistanc	≥ 10 ¹⁰ Ω	
Material	polycarbonate	
Limiting temperatures	-40°C ...+125°C	
Flammability acc. to UL 94	V0	
Mechanical working life(mating cycles)	≥ 500	
Contacts		
Material	copper alloy	
Surface	hard-silver plated	
Terminal	screw terminal	
Contact resistance		
-power area	≤ 1mΩ	
-signal area	≤ 1mΩ	
Wire gauge		
-power area		
-mm2	4-10mm ²	
-AWG	12-8	
-signal area		
-mm2	1-2.5mm ²	
-AWG	18-4	
Tightening tourque		
-power area	mm ² 1.5 2.5 4 6 10	
	N.m 1.2 2 3 3 3	
-signal area	0.5N.m	

Current carrying capacity

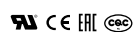
The current carrying is limited by maximum temperature of materials for inserts and contacts including terminals

Control and test procedures according to DIN EN 60512-5



HWK-006/6 Combination inserts

690/400V 40/16A 6/6+ 



Inserts

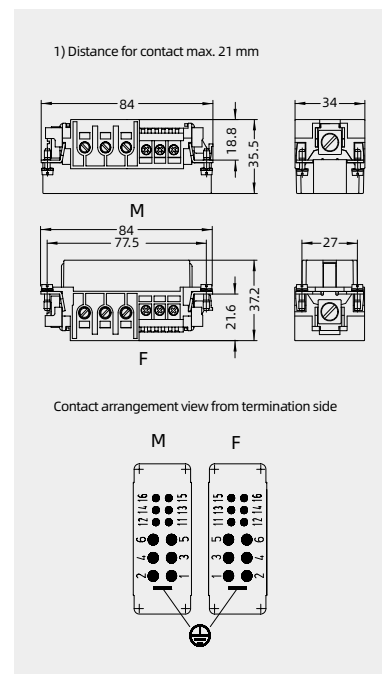
Remark: SPQ is 5pcs

Hoods/Housings: size168, please find the details on page 15-70~15-1071.

Screw terminal



Insert	Designation	Order No.
Male	HWK-006/6-M	128 012 011 0201
Female	HWK-006/6-F	128 012 021 0201



HK-006/12 Combination inserts



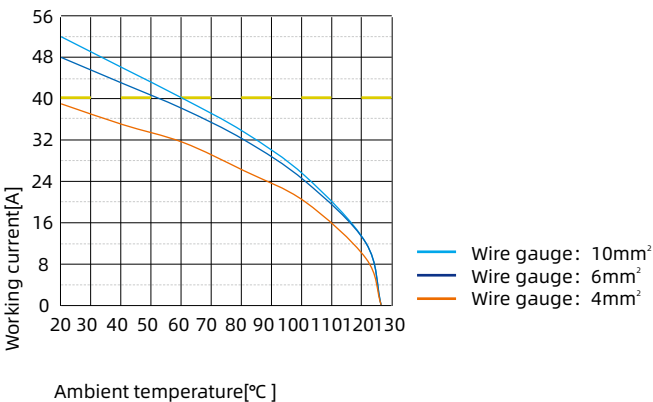
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	6/12+PE
Electrical data acc. to EN 61 984	
Power area	
Rated current	40A
Rated voltage	690V
Rated impulse voltage	6kV
Pollution degree	3
Signal area	
Rated current	10A
Rated voltage conductor	230/400V
Rated impulse voltage	4kV
Pollution degree	3
Rated voltage acc. to UL	600/300V
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 1mΩ
-Axial screw termination	
- geometric wire gauge	2.5-10mm ²
- AWG	14-8
-Max. insulation diameter	6.1mm
-Tightening torque	
-mm ²	2.5 4 6 10
-Nm	1.5 1.5 2 2
-Stripping length	
-mm ²	2.5 4 6 10
-mm	5 ⁺¹ 5 ⁺¹ 8 ⁺¹ 8 ⁺¹
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	≤ 3mΩ
-Screw terminal	
- geometric wire gauge	0.2-2.5mm ²
- AWG	24-14
-Tightening torque	0.8Nm
-Stripping length	7.5mm

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



HK-006/12 Combination inserts

690/400V 40/10A 6/12+ 



Inserts

Remark: SPQ is 5pcs

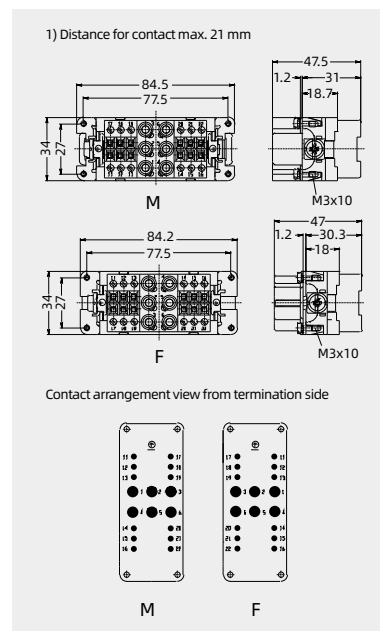
Hoods/Housings: size16B, please find the details on page 15-70~15-1071.

Axial screw terminal¹⁾/Screw terminal



Insert	Wire gauge	Designation	Order No.
Male	2.5-8mm ²	HK-006.1/12-M(2.5-8mm ²)	128 018 011 0001
	6-10mm ²	HK-006.2/12-M(6-10mm ²)	128 018 011 0002
Female	2.5-8mm ²	HK-006.1/12-F(2.5-8mm ²)	128 018 021 0001
	6-10mm ²	HK-006.2/12-F(6-10mm ²)	128 018 021 0002

1) See P00-12~00-13 for the structural characteristics and description of Axial screw terminal.



Accessories

Tool

Remark: SPQ is 1pc

hexagonal driver

Description	Designation	Order No.
for axial setscrew with grip	SW-2*100	198 001 003 0002



HK-006/36 Combination inserts



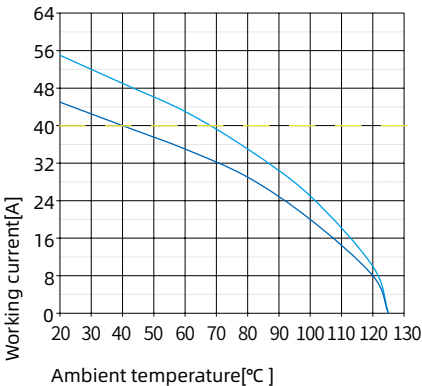
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	6/36+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	40A
-Rated voltage	690V
-Rated impulse voltage	8kV
-Pollution degree	3
Signal area	
-Rated current	10A
-Rated voltage	160V
-Rated impulse voltage	2.5kV
-Pollution degree	3
-Pollution degree 2 also	10A 250V 4kV 2
Rated voltage acc. to UL	600/300V
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated hard-gold plated
-Contact resistance	$\leq 1m\Omega$
-Crimp terminal	
- mm ²	1.5-6mm ²
- AWG	16-10
-Max. insulation diameter	5mm
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated hard-gold platedi
-Contact resistance	$\leq 3m\Omega$
-Crimp terminal	
- mm ²	0.14-2.5mm ²
- 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



Wire gauge: 10mm²
Wire gauge: 6mm²
Wire gauge: 4mm²

HK-006/36 Combination inserts

690/160V 40/10A 6/36+⚡



Inserts

Remark: SPQ is 5pcs

Hoods/Housings: size 16B, please find the details on page 15-70~15-1071.

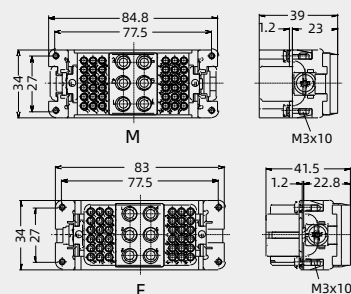
Crimp terminal

order crimp contacts separately

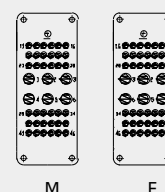


Insert	Designation	Order No.
Male	HK-006/36-MC	128 042 010 0001
Female	HK-006/36-FC	128 042 020 0001

1) Distance for contact max. 21 mm



Contact arrangement view from termination side



Crimp contacts

Crimp contacts 10A

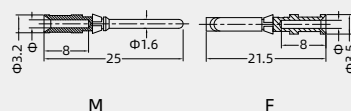
Contact resistance $\leq 3\text{m}\Omega$
silver plated

gold plated

More crimp contacts 10A
see P13-02,P13-03.

Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001



Wire gauge	Φ	Stripping length
0.09-0.25 mm ² AWG 28-24	0.65	5 mm
0.14-0.37 mm ² AWG 26-22	0.9	8 mm
0.5 mm ² AWG 20	1.1	8 mm
0.75 mm ² AWG 18	1.3	8 mm
1 mm ² AWG 18	1.45	8 mm
1.5 mm ² AWG 16	1.75	8 mm
2.5 mm ² AWG 14	2.25	6 mm

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Crimp contacts 40A

silver plated

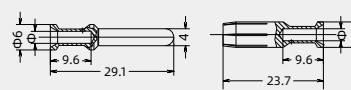


gold plated



Remark: SPQ is 50pcs

Male	Order No.	Female	Order No.
CCSM-1.5	101 023 110 0901	CCSF-1.5	101 023 120 0901
CCSM-2.5	101 023 110 1001	CCSF-2.5	101 023 120 1001
CCSM-4.0	101 023 110 1201	CCSF-4.0	101 023 120 1201
CCSM-6.0	101 023 110 1301	CCSF-6.0	101 023 120 1301
CCGM-1.5	101 023 210 0901	CCGF-1.5	101 023 220 0901
CCGM-2.5	101 023 210 1001	CCGF-2.5	101 023 220 1001
CCGM-4.0	101 023 210 1201	CCGF-4.0	101 023 220 1201
CCGM-6.0	101 023 210 1301	CCGF-6.0	101 023 220 1301



Wire gauge	Φ	Stripping length
1.5 mm ² AWG 16	1.75	9.6 mm
2.5 mm ² AWG 14	2.25	9.6 mm
4 mm ² AWG 12	2.85	9.6 mm
6 mm ² AWG 10	3.5	9.6 mm

Tools

Crimping tool



Contact removal tool



Remark: SPQ is 1pc

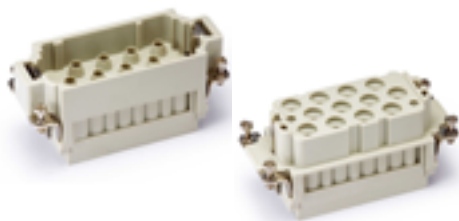
Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011
1.5-6mm ²	TL02-0G	198 001 001 0012

Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001

Application	Designation	Order No.
for crimp contacts 40A	TL06G	198 001 000 0009

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

HK-012/2 Combination inserts



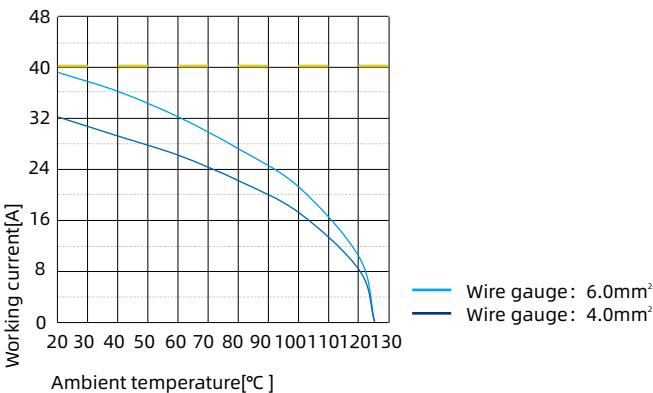
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	12/2+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	40A
-Rated voltage	690V
-Rated impulse voltage	8kV
-Pollution degree	3
Signal area	
-Rated current	10A
-Rated voltage	250V
-Rated impulse voltage	4kV
-Pollution degree	3
Rated voltage acc. to UL	600/300V
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated hard-gold plated
-Contact resistance	$\leq 1\text{m}\Omega$
-Crimp terminal	
- mm ²	1.5-6mm ²
- AWG	16-10
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated hard-gold plated
-Contact resistance	$\leq 3\text{m}\Omega$
-Crimp terminal	
- mm ²	0.14-2.5mm ²
- 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



HK-012/2 Combination inserts

690/250V 40/10A 12/2+⊕



Inserts

Remark: SPQ is 5pcs

Hoods/Housings: size 16B, please find the details on page 15-70~15-1071.

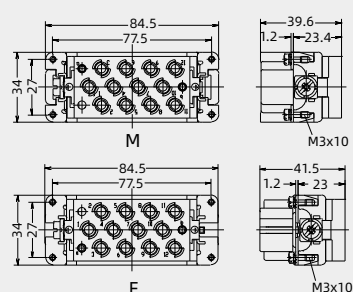
Crimp terminal

order crimp contacts separately

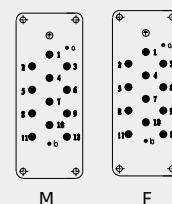


Insert	Designation	Order No.
Male	HK-012/2-MC	128 014 010 0001
Female	HK-012/2-FC	128 014 020 0001

1) Distance for contact max. 21 mm



Contact arrangement view from termination side



Crimp contacts

Crimp contacts 10A

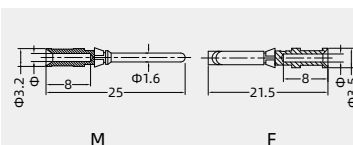
Contact resistance $\leq 3\text{m}\Omega$
silver plated

gold plated

More crimp contacts 10A
see P13-02,P13-03.

Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001



Wire gauge	Φ	Stripping length
0.09-0.25 mm ²	AWG 28-24	0.65 5 mm
0.14-0.37 mm ²	AWG 26-22	0.9 8 mm
0.5 mm ²	AWG 20	1.1 8 mm
0.75 mm ²	AWG 18	1.3 8 mm
1 mm ²	AWG 18	1.45 8 mm
1.5 mm ²	AWG 16	1.75 8 mm
2.5 mm ²	AWG 14	2.25 6 mm

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Crimp contacts 40A

silver plated

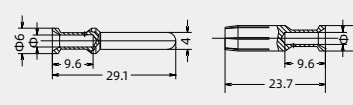


gold plated



Remark: SPQ is 50pcs

Male	Order No.	Female	Order No.
CCSM-1.5	101 023 110 0901	CCSF-1.5	101 023 120 0901
CCSM-2.5	101 023 110 1001	CCSF-2.5	101 023 120 1001
CCSM-4.0	101 023 110 1201	CCSF-4.0	101 023 120 1201
CCSM-6.0	101 023 110 1301	CCSF-6.0	101 023 120 1301
CCGM-1.5	101 023 210 0901	CCGF-1.5	101 023 220 0901
CCGM-2.5	101 023 210 1001	CCGF-2.5	101 023 220 1001
CCGM-4.0	101 023 210 1201	CCGF-4.0	101 023 220 1201
CCGM-6.0	101 023 210 1301	CCGF-6.0	101 023 220 1301



Wire gauge	Φ	Stripping length
1.5 mm ²	AWG 16	1.75 9.6 mm
2.5 mm ²	AWG 14	2.25 9.6 mm
4 mm ²	AWG 12	2.85 9.6 mm
6 mm ²	AWG 10	3.5 9.6 mm

Tools

Crimping tool



Contact removal tool



Remark: SPQ is 1pc

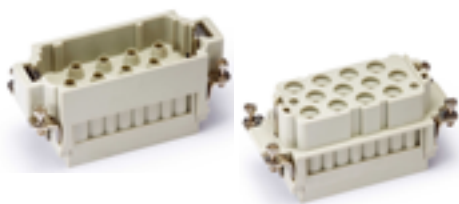
Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011
1.5-6mm ²	TL02-OG	198 001 001 0012

Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001

Application	Designation	Order No.
for crimp contacts 40A	TL06G	198 001 000 0009

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

HKH-012/0 Combination high mating cycle inserts



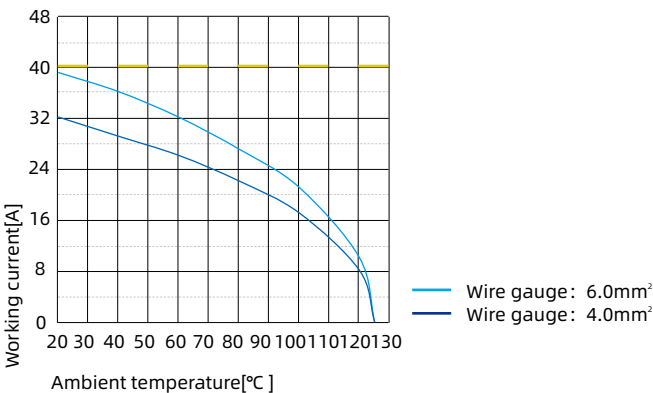
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	CE ENEC
Inserts	
Number of contacts	12/0+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	40A
-Rated voltage	690V
-Rated impulse voltage	8kV
-Pollution degree	3
Rated voltage acc. to UL	600/300V
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles) ≥ 5000	
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-gold plated
-Contact resistance	$\leq 1m\Omega$
-Crimp terminal	
-mm ²	1.5-6mm ²
-AWG	16-10

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



HKH-012/0 Combination high mating cycle inserts

690V 40A 12/0+ CE 

Inserts

Remark: SPQ is 5pcs

Hoods/Housings: size 16B, please find the details on page 15-70~15-1071.

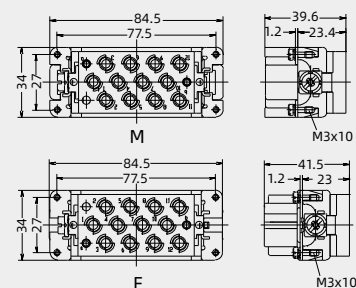
Crimp terminal

order crimp contacts separately

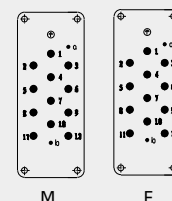


Insert	Designation	Order No.
Male	HKH-012/0-MC	128 012 010 0001
Female	HKH-012/0-FC	128 012 020 0001

1) Distance for contact max. 21 mm



Contact arrangement view from termination side



Crimp contacts

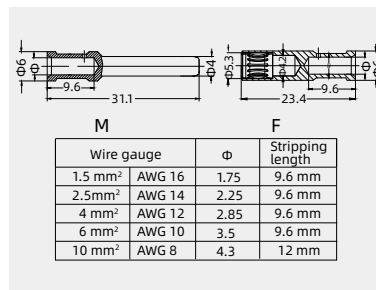
Crimp contacts 40A-high mating cycle

Remark: SPQ is 50pcs

gold plated

Mechanical working life
(mating cycles) ≥ 5000

Male	Order No.	Female	Order No.
CCGMH-1.5	101 023 210 0909	CCGFH-1.5G	101 023 220 0909
CCGMH-2.5	101 023 210 1009	CCGFH-2.5G	101 023 220 1009
CCGMH-4.0	101 023 210 1209	CCGFH-4.0G	101 023 220 1209
CCGMH-6.0	101 023 210 1309	CCGFH-6.0G	101 023 220 1309
CCGMH-10.0	101 023 210 1409	CCGFH-10.0G	101 023 220 1409



Tools

Remark: SPQ is 1pc

Crimping tool



Contact removal tool



Wire gauge	Designation	Order No.
1.5-6mm ²	TL02-0G	198 001 001 0012
4/6/10mm ²	TL02-3G	198 001 001 0013

Application	Designation	Order No.
for crimp contacts 40A	TL06G	198 001 000 0009

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

HK-006/6 Combination inserts



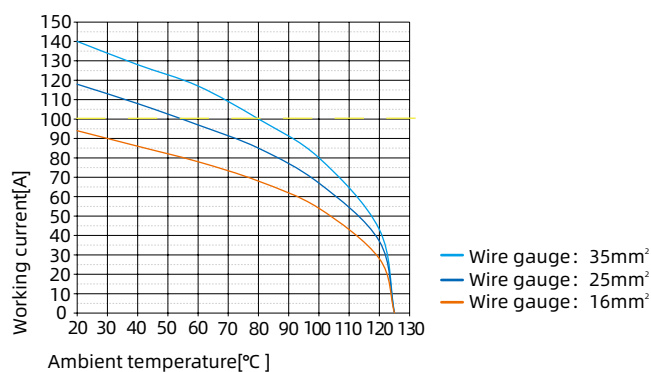
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	CE ENEC
Inserts	
Number of contacts	6/6+PE
Electrical data acc. to EN 61 984	
Power area	
-Rated current	100A
-Rated voltage	690V
-Rated impulse voltage	8kV
-Pollution degree	3
-Pollution degree 2 also	100A 1000V 8kV 2
Signal area	
-Rated current	16A
-Rated voltage	400V
-Rated impulse voltage	6kV
-Pollution degree	3
Rated voltage acc. to UL	600/300V
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Power contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	$\leq 0.5\text{m}\Omega$
-Axial screw termination	
- geometric wire gauge	16-35mm ²
- AWG	5-2
-Max. insulation diameter	11.4mm
-Tightening torque	
-mm ²	16 25 35
-Nm	6 7 8
-Stripping length	13 ⁺¹ mm
Signal contacts	
-Material	copper alloy
-Surface	hard-silver plated
-Contact resistance	$\leq 3\text{m}\Omega$
-Screw terminal	
- geometric wire gauge	0.2-2.5mm ²
- AWG	24-13
-Tightening torque	0.8Nm
-Stripping length	7.5mm

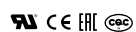
Current carrying capacity

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



HK-006/6 Combination inserts

690/400V 100/16A 6/6+ 

Hoods/Housings: Only suitable for size 24B high structure shells, please find the details on page 15-108~15-135.

Not suitable for high structure shells with side entry and without sleeve.

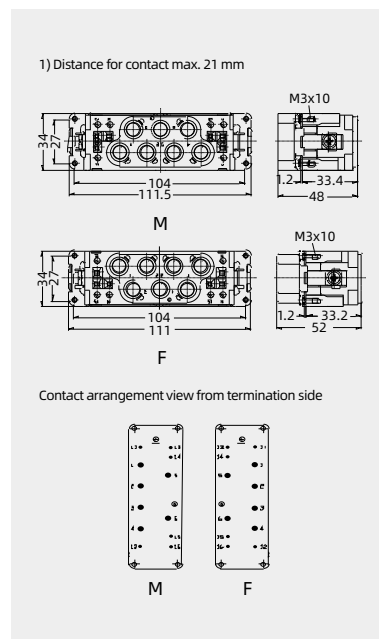
Inserts

Remark: SPQ is 5pcs

Axial screw terminal¹⁾/Screw terminal

Insert	Designation	Order No.
Male	HK-006/6-M	128 012 011 0101
Female	HK-006/6-F	128 012 021 0101

1) See P00-12~00-13 for the structural characteristics and description of Axial screw terminal.



Accessories

Tool

Remark: SPQ is 1pc

hexagonal driver



Description	Designation	Order No.
for axial setscrew with grip	SW-4*150	198 001 003 0001

HK-008/0 Combination inserts



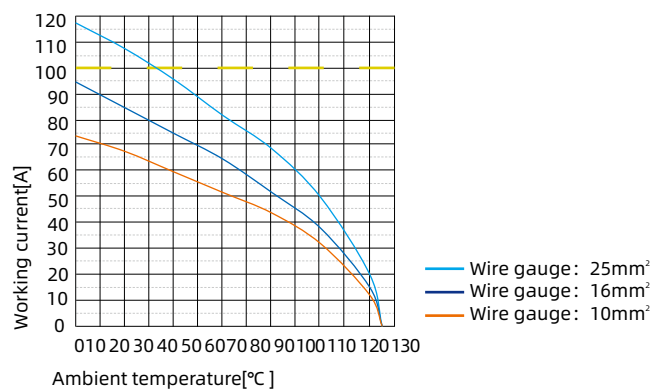
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	8/0+PE
Electrical data acc. to EN 61 984	
Power area	
Rated current	100A
Rated voltage	690V
Rated impulse voltage	8kV
Pollution degree	3
Pollution degree 2 also	100A 1000V 8kV 2
Rated voltage acc. to UL	600V
Rated current acc. to UL	82A
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Material	copper alloy
Surface	hard-silver plated
Contact resistance	$\leq 0.5m\Omega$
Axial screw termination	
- geometric wire gauge	10-25mm ²
- AWG	7-3
Max. insulation diameter	11.4mm
Tightening torque	
-mm ²	10 16 25
-Nm	6 6 7
Stripping length	13 ^{±1} mm

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



HK-008/0 Combination inserts

690V 100A 8/0+ 

Inserts

Remark: SPQ is 5pcs

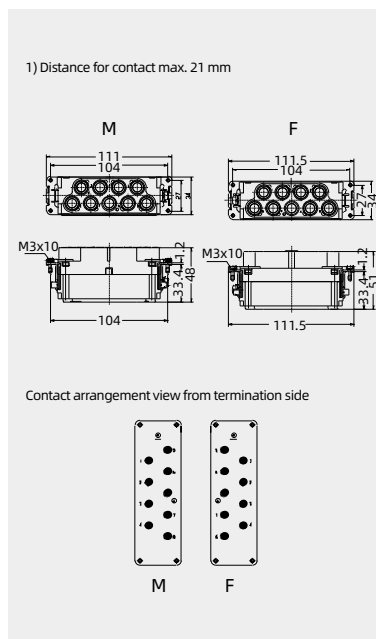
Hoods/Housings: size 24B, please find the details on page 15-108~15-135.
Not suitable for high structure shells with side entry and without sleeve.

Axial screw terminal1)/Screw terminal



Insert	Designation	Order No.
Male	HK-008/0-M	128 008 011 0001
Female	HK-008/0-F	128 008 021 0001

1) See P00-12~00-13 for the structural characteristics and description of Axial screw terminal.



Accessories

Tool

Remark: SPQ is 1pc

hexagonal driver

Description	Designation	Order No.
for axial setscrew with grip	SW-4*150	198 001 003 0001



HK-009/9/18 Combination inserts



Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	9/9/18
Electrical data acc. to EN 61 984	
Rated current	40A/16A/10A
Rated voltage	830V/830V/250V
Rated impulse voltage	8kV/8kV/4kV
Pollution degree	3
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Material	copper alloy
Surface	hard-silver plated
	hard-gold plated
Contact resistance	≤ 3mΩ
Crimp terminal	
-mm ²	1.5-6mm ² / 0.14-4mm ² / 0.14-2.5mm ²
-AWG	16-10 / 26-12 / 26-14
Stripping length	9.5/7.5/8 (6)mm

HK-009/9/18 Combination inserts

830V/830V/250V 40A/16A/10A 9/9/18+ 

Inserts

Remark: SPQ is 5pcs

Hoods/Housings: size 16B, please find the details on page 15-70~15-107.1.

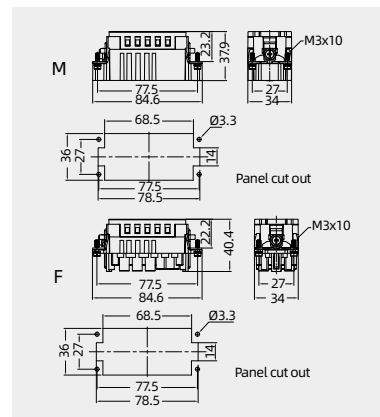
Crimp terminal

order crimp contacts separately

Insert	Designation	Order No.
Male	HK-009/9/18-MC	128 036 010 0001
Female	HK-009/9/18-FC	128 036 020 0001



To ensure that the grounding pin comes into contact first during the insertion process, it is necessary to use a guide pin/guide hole in conjunction with 1980020050017 and 1980020050031 → P14-17



Crimp contacts 10A

Contact resistance $\leq 3\text{m}\Omega$
silver plated

gold plated

More crimp contacts 10A
see P13-02, P13-03.

Crimp contacts 16A

Contact resistance $\leq 1\text{m}\Omega$
silver plated

gold plated

More crimp contacts 16A
see P13-04.

Crimp contacts 40A

silver plated



gold plated



Tools

Remark: SPQ is 1pc

Crimping tool

Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011
1.5-6mm ²	TL02-OG	198 001 001 0012



Tools

Remark: SPQ is 1pc

Contact removal tool

Application	Designation	Order No.
for 10A crimp contact	TL00	198 001 000 0001
for 16A crimp contact	TL01	198 001 000 0002
for 40A crimp contact	TL06G	198 001 000 0009



Notes: The tools for crimp terminal may influence the product quality and stability.
Please select the tools recognized by our company.
More tools detail please find the page 32-03~32-06.

Wire gauge	Φ	Stripping length
0.09-0.25 mm ²	AWG 28-24	0.65 5 mm
0.14-0.37 mm ²	AWG 26-22	0.9 8 mm
0.5 mm ²	AWG 20	1.1 8 mm
0.75 mm ²	AWG 18	1.3 8 mm
1 mm ²	AWG 18	1.45 8 mm
1.5 mm ²	AWG 16	1.75 8 mm
2.5 mm ²	AWG 14	2.25 6 mm

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

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

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Wire gauge	Φ	Stripping length
1.5 mm ²	AWG 16	1.75 9.6 mm
2.5mm ²	AWG 14	2.25 9.6 mm
4 mm ²	AWG 12	2.85 9.6 mm
6 mm ²	AWG 10	3.5 9.6 mm

HK-032/55 Combination inserts



Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	32/55
Electrical data acc. to EN 61 984	
Signal area	
Rated current	4A
Rated voltage	50V
Rated impulse voltage	0.8kV
Pollution degree	2
Power area	
Rated current	10A
Rated voltage	250V
Rated impulse voltage	4kV
Pollution degree	2
Rated voltage acc. to UL	600V
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Material	copper alloy
Surface	hard-silver plated hard-gold plated
Contact resistance	≤ 3mΩ
Crimp terminal	
-mm ²	0.09-0.52mm2/0.14-2.5mm ²
-AWG	28-20/26-14
Stripping length	5/8mm

HK-032/55 Combination inserts

250/50V 10/4A 32/55+ 

Inserts

Remark: SPQ is 5pcs

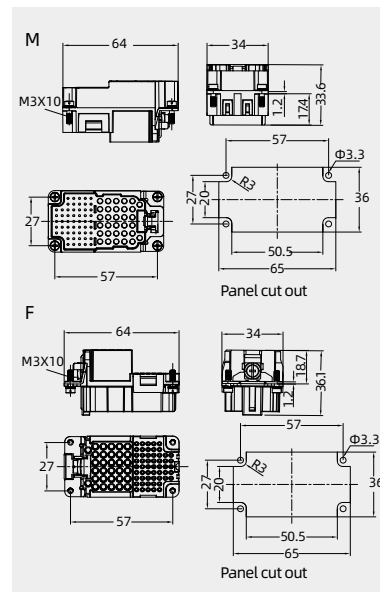
Hoods/Housings: size 10B, please find the details on page 15-39~15-69.

Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HK-032/55-MC	128 087 010 0001
Female	HK-032/55-FC	128 087 020 0001



Crimp contacts

Crimp contacts 5A

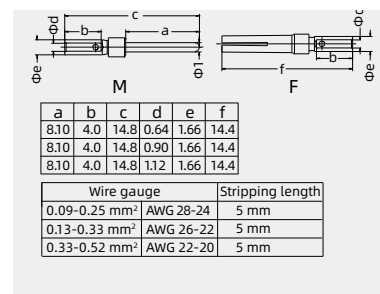
Remark: SPQ is 100pcs

Contact resistance $\leq 3\text{m}\Omega$
silver plated

gold plated



Male	Order No.	Female	Order No.
CSSM-0.25	101 014 110 0101	CSSF-0.25	101 014 120 0101
CSSM-0.33	101 014 110 0201	CSSF-0.33	101 014 120 0201
CSSM-0.52	101 014 110 0501	CSSF-0.52	101 014 120 0501
CSGM-0.25	101 014 210 0101	CSGF-0.25	101 014 220 0101
CSGM-0.33	101 014 210 0201	CSGF-0.33	101 014 220 0201
CSGM-0.52	101 014 210 0501	CSGF-0.52	101 014 220 0501



Stamped contacts 5A

Contact resistance $\leq 10\text{m}\Omega$

Remark: SPQ is 3000pcs

silver plated



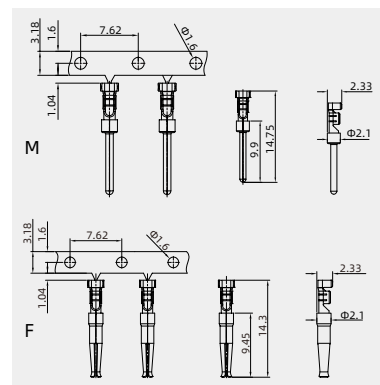
gold plated



coil stock



Male	Order No.	Female	Order No.
CSSM-0.82P	101 014 110 0750	CSSF-0.82P	101 014 120 0750
CSGM-0.82P	101 014 210 0750	CSGF-0.82P	101 014 220 0750



Note: 10kpcs/volume

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

HK-032/55 Combination inserts

Crimp contacts 10A
Contact resistance ≤ 3mΩ
silver plated



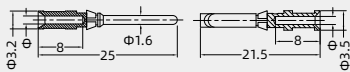
gold plated



More crimp contacts 10A
see P13-02,P13-03.

Remark: SPQ is 1000pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001



M

F

Wire gauge	Φ	Stripping length
0.09-0.25 mm ²	AWG 28-24	0.65 5 mm
0.14-0.37 mm ²	AWG 26-22	0.9 8 mm
0.5 mm ²	AWG 20	1.1 8 mm
0.75 mm ²	AWG 18	1.3 8 mm
1 mm ²	AWG 18	1.45 8 mm
1.5 mm ²	AWG 16	1.75 8 mm
2.5 mm ²	AWG 14	2.25 6 mm

When the wire gauge is less than 0.75mm²,it's better to use the auxiliary pin assembly tool TL15.

Tools Remark: SPQ is 1pc

Crimping tool	Wire gauge	Designation	Order No.
	0.09-0.82mm ²	TL03	198 001 001 0002
Contact removal tool	Application	Designation	Order No.
	for 5A crimp contact	TL08	198 001 000 0006

Tools Remark: SPQ is 1pc

Crimping tool	Wire gauge	Designation	Order No.
	0.14-4mm ²	TL02G	198 001 001 0011
Contact removal tool	Application	Designation	Order No.
	for 10A crimp contact	TL00	198 001 000 0001

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company. More tools detail please find the page32-03~32-06.

HK-009/12/25 Combination inserts



Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	UL UL
Inserts	
Number of contacts	9/12/25
Electrical data acc. to EN 61 984	
Signal area	
Rated current	5A
Rated voltage	50V
Rated impulse voltage	0.8kV
Pollution degree	3
Power area	
Rated current	10A/40A
Rated voltage	250V/630V
Rated impulse voltage	4kV/8kV
Pollution degree	3
Insulation resistance	$\geq 10^{10}\Omega$
Material	polycarbonate
Limiting temperatures	-40°C ...+125°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Contacts	
Material	copper alloy
Surface	hard-silver plated hard-gold plated
Contact resistance	$\leq 3m\Omega/1m\Omega$
Crimp terminal	
-mm ²	0.09-0.52mm ² /0.14-2.5mm ² / 1.5-6mm ²
-AWG	28-20/26-14/16-10
Stripping length	5/8/9(9.6)mm

HK-009/12/25 Combination inserts

630/250/50V 40/10/5A 009/12/25+ 



Inserts

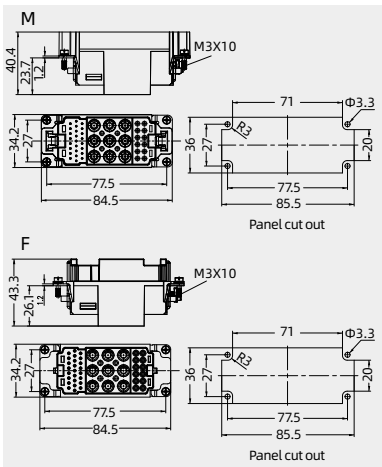
Remark: SPQ is 5pcs

Hoods/Housings: size16B, please find the details on page 15-70~15-1071.

Crimp terminal
order crimp contacts separately



Insert	Designation	Order No.
Male	HK-009/12/25-MC	128 009 010 0002
Female	HK-009/12/25-FC	128 009 020 0002



Crimp contacts

Crimp contacts 5A

Contact resistance $\leq 3\text{m}\Omega$
silver plated



gold plated



Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CSSM-0.25	101 014 110 0101	CSSF-0.25	101 014 120 0101
CSSM-0.33	101 014 110 0201	CSSF-0.33	101 014 120 0201
CSSM-0.52	101 014 110 0501	CSSF-0.52	101 014 120 0501
CSGM-0.25	101 014 210 0101	CSGF-0.25	101 014 220 0101
CSGM-0.33	101 014 210 0201	CSGF-0.33	101 014 220 0201
CSGM-0.52	101 014 210 0501	CSGF-0.52	101 014 220 0501

a	b	c	d	e	f
8.10	4.0	14.8	0.64	1.66	14.4
8.10	4.0	14.8	0.90	1.66	14.4
8.10	4.0	14.8	1.12	1.66	14.4
Wire gauge		Stripping length			
0.09-0.25 mm ²		AWG 28-24			
0.13-0.33 mm ²		AWG 26-22			
0.33-0.52 mm ²		AWG 22-20			

Stamped contacts 5A

Contact resistance $\leq 10\text{m}\Omega$
silver plated



gold plated



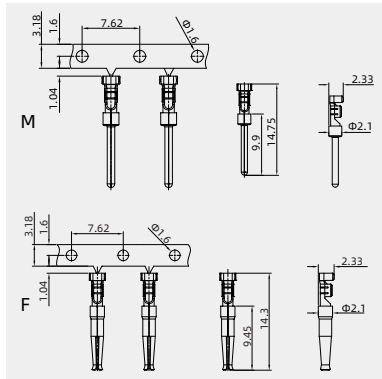
coil stock



Note: 10kpcs/volume

Remark: SPQ is 3000pcs

Male	Order No.	Female	Order No.
CSSM-0.82P	101 014 110 0750	CSSF-0.82P	101 014 120 0750
CSGM-0.82P	101 014 210 0750	CSGF-0.82P	101 014 220 0750



Crimp contacts 10A

Contact resistance $\leq 3\text{m}\Omega$
silver plated



gold plated



More crimp contacts 10A
see P13-02,P13-03.

Remark: SPQ is 100pcs

Male	Order No.	Female	Order No.
CDSM-0.25	101 017 110 0101	CDSF-0.25	101 017 120 0101
CDSM-0.37	101 017 110 0301	CDSF-0.37	101 017 120 0301
CDSM-0.50	101 017 110 0401	CDSF-0.50	101 017 120 0401
CDSM-0.75	101 017 110 0601	CDSF-0.75	101 017 120 0601
CDSM-1.0	101 017 110 0801	CDSF-1.0	101 017 120 0801
CDSM-1.5	101 017 110 0901	CDSF-1.5	101 017 120 0901
CDSM-2.5	101 017 110 1001	CDSF-2.5	101 017 120 1001
CDGM-0.25	101 017 210 0101	CDGF-0.25	101 017 220 0101
CDGM-0.37	101 017 210 0301	CDGF-0.37	101 017 220 0301
CDGM-0.50	101 017 210 0401	CDGF-0.50	101 017 220 0401
CDGM-0.75	101 017 210 0601	CDGF-0.75	101 017 220 0601
CDGM-1.0	101 017 210 0801	CDGF-1.0	101 017 220 0801
CDGM-1.5	101 017 210 0901	CDGF-1.5	101 017 220 0901
CDGM-2.5	101 017 210 1001	CDGF-2.5	101 017 220 1001

Wire gauge		Φ	Stripping length
0.09-0.25 mm ²		0.65	5 mm
0.14-0.37 mm ²		0.9	8 mm
0.5 mm ²		1.1	8 mm
0.75 mm ²		1.3	8 mm
1 mm ²		1.45	8 mm
1.5 mm ²		1.75	8 mm
2.5 mm ²		2.25	6 mm

When the wire gauge is less than 0.75mm², it's better to use the auxiliary pin assembly tool TL15.

Notes: The tools for crimp terminal may influence the product quality and stability.

08-27 WAIN ELECTRICAL

Crimp contacts

Crimp contacts 40A

Remark: SPQ is 50pcs

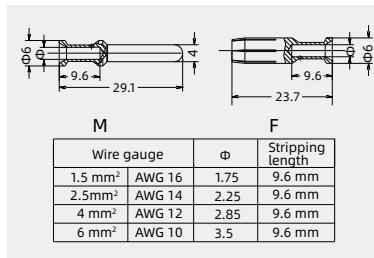
silver plated



gold plated



Male	Order No.	Female	Order No.
CCSM-1.5	101 023 110 0901	CCSF-1.5	101 023 120 0901
CCSM-2.5	101 023 110 1001	CCSF-2.5	101 023 120 1001
CCSM-4.0	101 023 110 1201	CCSF-4.0	101 023 120 1201
CCSM-6.0	101 023 110 1301	CCSF-6.0	101 023 120 1301
CCGM-1.5	101 023 210 0901	CCGF-1.5	101 023 220 0901
CCGM-2.5	101 023 210 1001	CCGF-2.5	101 023 220 1001
CCGM-4.0	101 023 210 1201	CCGF-4.0	101 023 220 1201
CCGM-6.0	101 023 210 1301	CCGF-6.0	101 023 220 1301



Tools

Remark: SPQ is 1pc

Crimping tool



Wire gauge	Designation	Order No.
0.09-0.82mm ²	TL03	198 001 001 0002
0.14-4mm ²	TL02G	198 001 001 0011
1.5-6mm ²	TL02-0G	198 001 001 0012

Tools

Remark: SPQ is 1pc

Contact removal tool

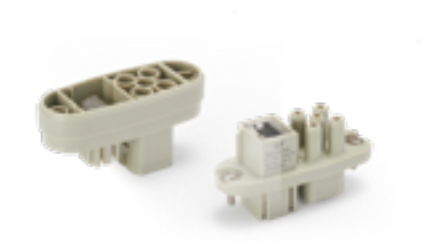


Wire gauge	Designation	Order No.
for 5A crimp contact	TL08	198 001 000 0006
for 10A crimp contact	TL00	198 001 000 0001
for 40A crimp contact	TL06G	198 001 000 0009

Notes: The tools for crimp terminal may influence the product quality and stability.

Please select the tools recognized by our company. More tools detail please find the page 32-03~32-06.

HY-004/RJ45 Combination inserts



Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Electrical data acc. to EN 61 984	
Power area	
Number of contacts	4+PE
Rated current	16A
Rated voltage	240V
Rated impulse voltage	4kV
Pollution degree	3
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Color	RAL 7032 (Light grey)
Limiting temperatures	-40°C - +85°C
Signal area	
Number of contacts	8
Rated current	1A
-Rated voltage	50V
-Rated impulse voltage	0.8kV
-Pollution degree	3
Insulation resistance	≥ 10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40°C ...+85°C
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥ 500
Transmission characteristics:	over 6 type jumper up to 500MHz According to ISO/IEC 24 702; ISO/IEC 11 801
Transmission rate:	10/100/1000Mbit/10Gbit/s
Contacts	
Material	copper alloy
Surface	hard-silver plated hard-gold plated
Contact resistance	≤ 1mΩ
Crimp terminal	
-mm ²	0.37-4mm ²
-AWG	22-12

HY-004/RJ45 Combination inserts

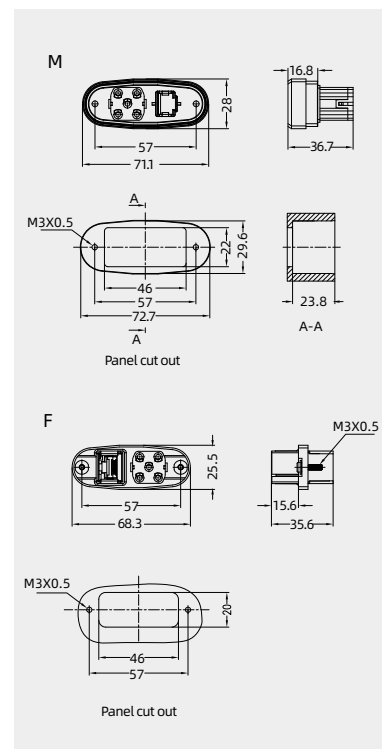
240/50V 16/1A 4+ 

Inserts

Remark: SPQ is 5pcs

Crimp terminal
order crimp contacts separately

Insert	Designation	Order No.
Male	HY-004/RJ45-MC	138 004 010 0001
Female	HY-004/RJ45-FC	138 004 020 0001



Crimp contacts

Crimp contacts 16A

Contact resistance $\leq 1\text{m}\Omega$
silver plated

gold plated



More crimp contacts 16A see P13-04.

Tools



Remark: SPQ is 100pcs

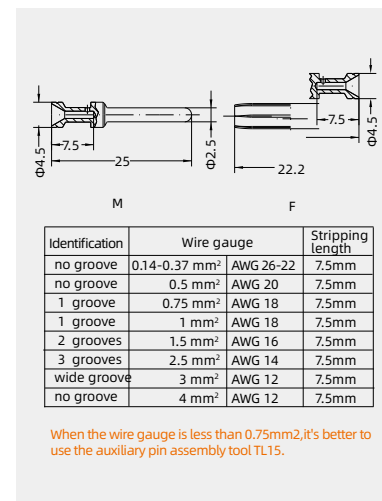
Male	Order No.	Female	Order No.
CESM-0.37	101 019 110 0301	CESF-0.37	101 019 120 0301
CESM-0.50	101 019 110 0401	CESF-0.50	101 019 120 0401
CESM-0.75	101 019 110 0601	CESF-0.75	101 019 120 0601
CESM-1.0	101 019 110 0801	CESF-1.0	101 019 120 0801
CESM-1.5	101 019 110 0901	CESF-1.5	101 019 120 0901
CESM-2.5	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

Male	Order No.	Female	Order No.
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

Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.14-4mm ²	TL02G	198 001 001 0011
Wire gauge: 0.14-0.37mm ² 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.