

HQ SERIES

Compact connector



HQ-002 Compact inserts



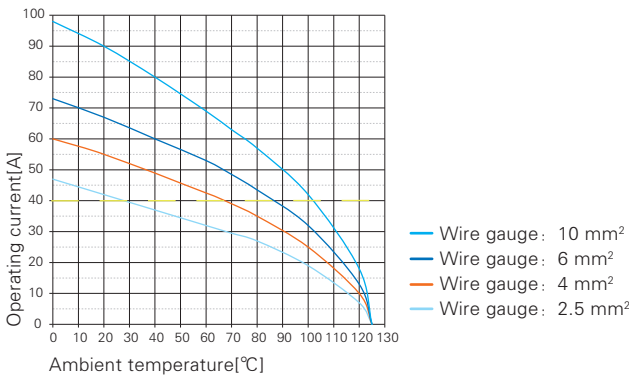
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	2+PE
Electrical data acc. to EN 61 984	
-Rated current	40A
-Rated voltage	830V
-Rated impulse voltage	6kV
-Pollution degree	3
Rated voltage acc. to UL	600V
Insulation resistance	≥ 10 ¹⁰ Ω
Material polycarbonate	polycarbonate
Limiting temperatures	-40℃...+125℃
Flammability acc. to UL 94	V0
Mechanical working life(mating cycles)	≥500
Contacts	
Material	copper alloy
Surface	hard-silver plated
Contact resistance	≤1m Ω
Axial screw termination	
- mm ²	2.5-10mm ²
- AWG	14-8
Tightening torque	1.8Nm
Stripping length	8mm ⁺¹
Hoods/Housings	
Plastic hoods/housings	
-Material	polycarbonate
-Flammability acc. to UL 94	V0
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
-Material	zinc die-cast
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65/IP68

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



HQ-002 Compact inserts-high voltage

830V 40A 2+⊕



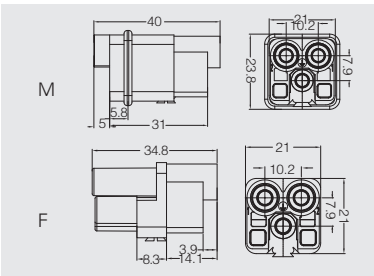
Inserts

Hoods/Housings: size 3A, please find the details on page 15-06~15-16.

Axial screw termination¹⁾
with heat shrink tube²⁾



Insert	Wire gauge	Designation	Order No.
Male	2.5-6.0mm ²	HQ-002.1-M (2.5-6.0mm ²)	130 002 011 0001
	4-10mm ²	HQ-002.2-M (4-10mm ²)	130 002 011 0002
Female	2.5-6.0mm ²	HQ-002.1-F (2.5-6.0mm ²)	130 002 021 0001
	4-10mm ²	HQ-002.2-F (4-10mm ²)	130 002 021 0002



Accessories

Tool

Hex key SW 2

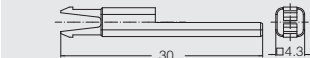


Description	Designation	Order No.
for axial setscrew with grip	SW-2*100	198 001 003 0002

Coding element



Description	Designation	Order No.
coding-, pokayoke	CODE-Q2	198 002 005 0011



1) See P00-33-00-34 for the structural characteristics and description of Axial screw terminal.
2) Compared with HQV-002, HQ-002 has pressure-tight heat shrink tubing so that insulation performance has been increased and rated voltage has been enhanced.

HQV-002 Compact inserts



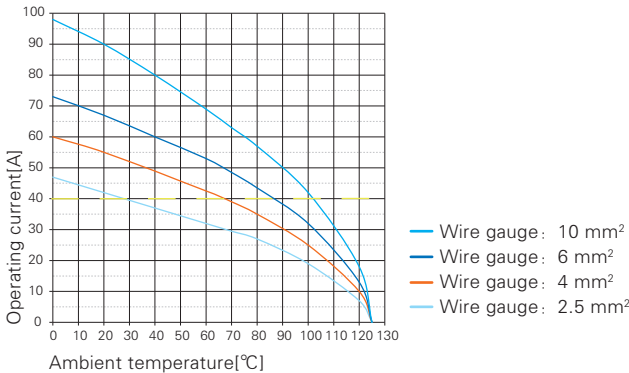
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	2+PE
Electrical data acc. to EN 61 984	
– Rated current	40A
– Rated voltage	400V
– Rated impulse voltage	6kV
– Pollution degree	3
Rated voltage acc. to UL	400V
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
Contact resistance	≤ 1m Ω
Axial screw termination	
– mm²	2.5–10mm²
– AWG	14–8
Tightening torque	1.8Nm
Stripping length	8mm ⁺¹
Hoods/Housings	
Plastic hoods/housings	
– Material	polycarbonate
– Flammability acc. to UL 94	V0
– Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
– Material	zinc die–cast
– Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65/IP68

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



HQV-002 Compact inserts

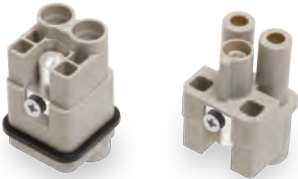
400V 40A 2+⊕



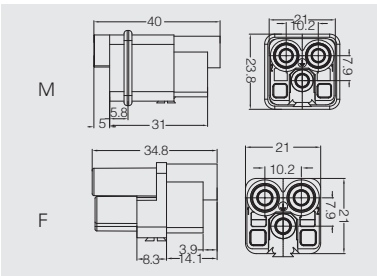
Inserts

Hoods/Housings: size 3A, please find the details on page 15-06~15-16.

Axial screw termination¹⁾



Insert	Wire gauge	Designation	Order No.
Male	2.5–6.0mm²	HQV–002.1–M (2.5–6.0mm²)	130 002 011 0101
	4–10mm²	HQV–002.2–M (4–10mm²)	130 002 011 0102
Female	2.5–6.0mm²	HQV–002.1–F (2.5–6.0mm²)	130 002 021 0101
	4–10mm²	HQV–002.2–F (4–10mm²)	130 002 021 0102



Accessories

Tool

Hex key SW 2

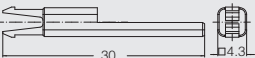


Description	Designation	Order No.
for axial setscrew with grip	SW–2*100	198 001 003 0002

Coding element



Description	Designation	Order No.
coding, pokayoke	CODE–Q2	198 002 005 0011



1) See P00–33–00–34 for the structural characteristics and description of Axial screw terminal.

HQ-005/0 Compact inserts



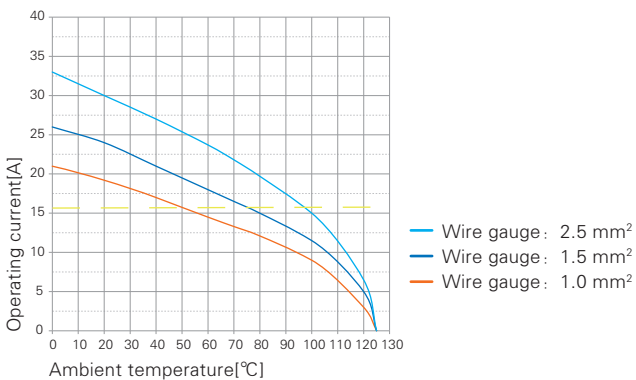
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	5+PE
Electrical data acc. to EN 61 984	
-Rated current	16A
-Rated voltage conductor – ground	230V
-Rated voltage conductor – conductor	400V
-Rated impulse voltage	4kV
-Pollution degree	3
-Pollution degree 2 also	16A 320/500V 4kV 2
Rated voltage acc. to UL	600V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40℃...+125℃
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	≤1mΩ
Crimp terminal	
- mm ²	0.14-2.5mm ²
- AWG	26-14
PE screw terminal	
- mm ²	2.5mm ²
- AWG	14
Hoods/Housings	
Plastic hoods/housings	
-Material	polycarbonate
-Flammability acc. to UL 94	V0
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
-Material	zinc die-cast
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65/IP68

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



HQ-005/0 Compact inserts

230/400V 16A 5+⊕

Inserts

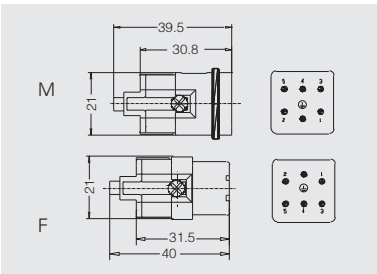
Hoods/Housings: size 3A, please find the details on page 15-06~15-16.

Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ-005/0-MC	130 005 010 0001
Female	HQ-005/0-FC	130 005 020 0001



Crimp contacts

Crimp contacts 16A

contact resistance ≤ 1mΩ
silver plated



gold plated



More crimp contacts 16A see P13-04.

Relay contacts

silver plated



Tools

Crimping tool



Contact removal tool



Coding element



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
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

Wire gauge(mm ²)	Designation	Order No.
1	CESM-1.0R	101 019 110 0808
1.5	CESM-1.5R	101 019 110 0908
2.5	CESM-2.5R	101 019 110 1008

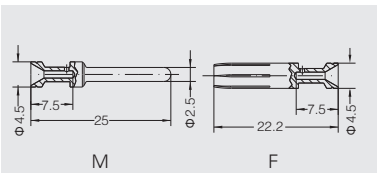
Wire gauge	Designation	Order No.
0.5-4mm ²	TL02G	198 001 001 0011

Wire gauge: 0.14-0.37mm² please select TL02 Crimping tool.

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

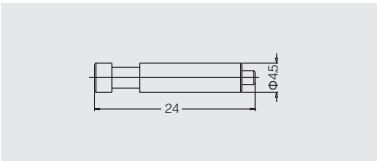
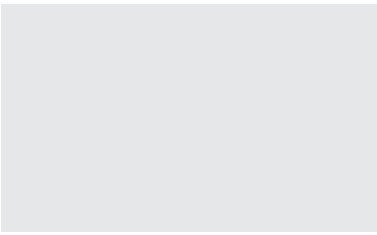
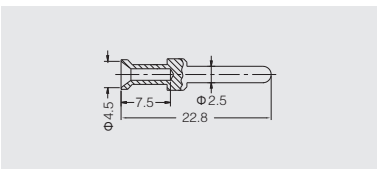
More tools detail please find the page 32-02-32-05.

Description	Designation	Order No.
coding, pokayoke	CODE-E	198 002 005 0002



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

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. Please select the tools recognized by our company.

HQ-007 Compact inserts



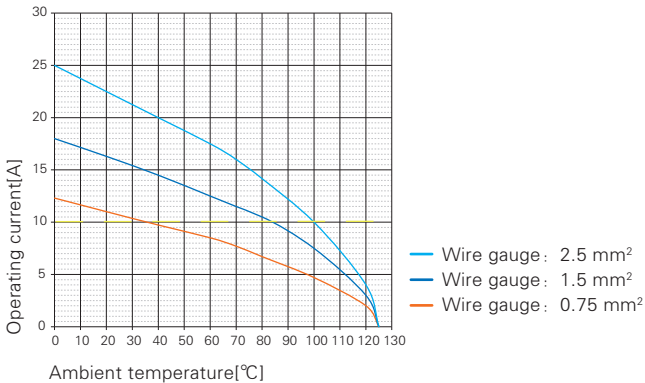
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	7+PE
Electrical dataacc. to EN 61 984	
–Rated current	10A
–Rated voltage	400V
–Rated impulse voltage	6kV
–Pollution degree	3
–Pollution degree 2 also	10A 400/690V 6kV 2
Rated voltage acc. to UL	600V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	–40℃...+125℃
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	0.14–2.5mm ²
– AWG 26 ... 14	26–14
PE screw terminal	
– mm ²	2.5mm ²
– AWG	14
Hoods/Housings	
Plastic hoods/housings	
–Material	polycarbonate
–Flammability acc. to UL 94	V0
–Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
–Material	zinc die–cast
–Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65/IP68

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



HQ-007 Compact inserts

400V 10A 7+⊕

Inserts

Hoods/Housings: size 3A, please find the details on page 15-06~15-16.

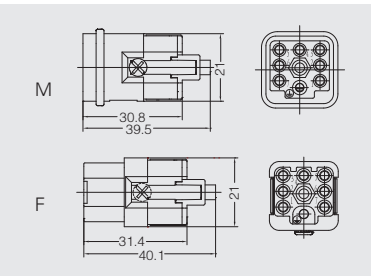
Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ–007/0–MC ¹⁾	130 007 010 0001
Female	HQ–007/0–FC ¹⁾	130 007 020 0001

1).can match PCB adapter,see page 14–08~14–09.



Crimp contacts

Crimp contacts 10A

contact resistance ≤3mΩ
silver plated



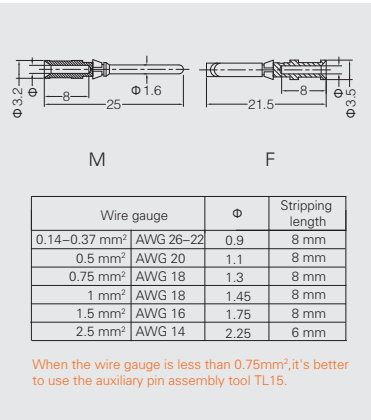
gold plated



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

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

Wire gauge	Order No.	Wire gauge	Order No.
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



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



Wire gauge	Designation	Order No.
0.14–4mm ²	TL02G	198 001 001 0011

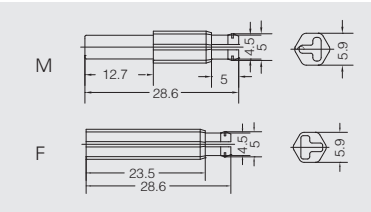
Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001

More tools detail please find the page32–02~32–05.

Coding element



Description	Category	Designation	Order No.
coding,pokayoke	Male	CODE–Q7M	198 002 005 0007
	Female	CODE–Q7F	198 002 005 0008



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

HQ-012/0 Compact inserts



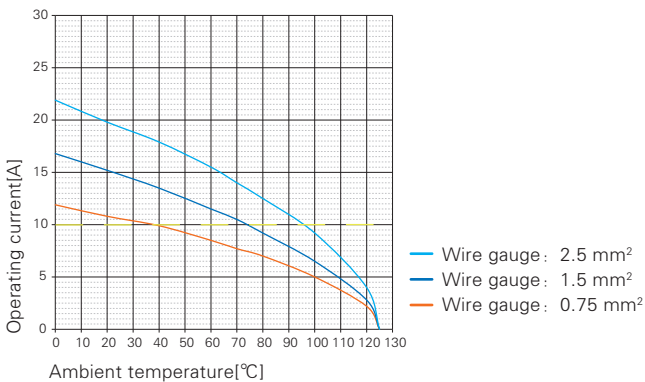
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	12+PE
Electrical data acc. to EN 61 984	
–Rated current	10A
–Rated voltage	400V
–Rated impulse voltage	6kV
–Pollution degree	3
–Pollution degree 2 also	10A 400/690V 6kV 2
Rated voltage acc. to UL	600V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	–40℃...+125℃
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	0.14–2.5mm ²
– AWG	26–14
PE contact	
– mm ²	0.5–2.5mm ²
– AWG	20–14
Hoods/Housings	
Plastic hoods/housings	
–Material	polycarbonate
–Flammability acc. to UL 94	V0
–Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
–Material	zinc die–cast
–Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65/IP68

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



HQ-012/0 Compact inserts

400V 10A 12+⊕

Inserts

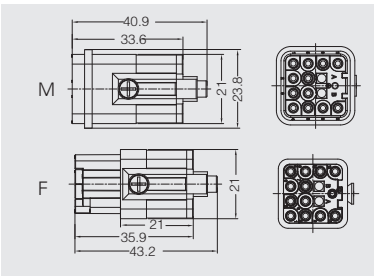
Hoods/Housings: size 3A, please find the details on page 15-06~15-16.

Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ-012/0-MC	130 012 010 0001
Female	HQ-012/0-FC	130 012 020 0001



Crimp contacts

Crimp contacts 10A

contact resistance ≤3mΩ
silver plated



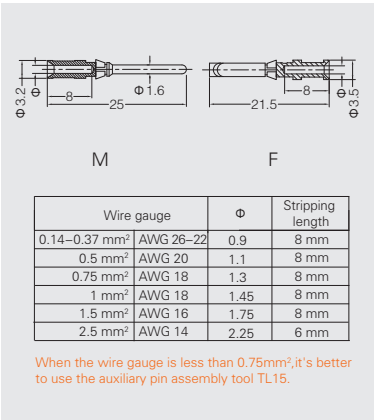
gold plated



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

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

Wire gauge	Φ	Stripping length
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



Tools

Crimping tool



Contact removal tool



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

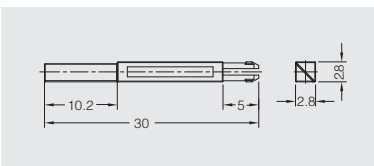
Application	Designation	Order No.
for crimp contacts 10A	TL00	198 001 000 0001

More tools detail please find the page32-02~32-05.

Coding element



Description	Designation	Order No.
coding,pokayoke	CODE-Q12	198 002 005 0010



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

HQ-008/0 Compact inserts



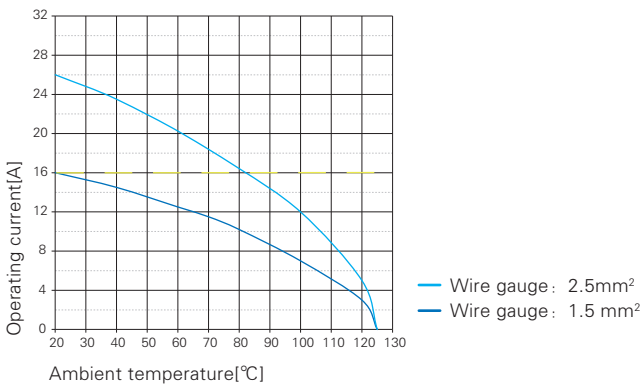
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	8+PE
Electrical dataacc. to EN 61 984	
-Rated current	16A
-Rated voltage	500V
-Rated impulse voltage	6kV
-Pollution degree	3
-Pollution degree 2 also	16A 400/690V 6kV 2
-Mounted metal hood	16A 230/400V 4kV 3
Rated voltageacc. to UL	600V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40℃...+125℃
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	≤1mΩ
Crimp terminal	
- mm²	0.14-4mm² partly loaded up to 4 mm² is possible
- AWG	26-12
Hoods/Housings	
Plastic hoods/housings	
Material	thermoplastic
-Locking element	Polyamide
-Hoods/Housings seal	NBR
-Limiting temperatures	-40℃...+125℃
-Flammability acc. to UL 94	V0
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
-Material	metal
-Locking element	Stainless steel
-Hoods/Housings seal	NBR
-Limiting temperatures	-40℃...+125℃
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65

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



HQ-008/0 Compact inserts

500V 16A 8+⊕

Inserts

Hoods/Housings: size **HC**, please find the details on page 15-163~15-168.

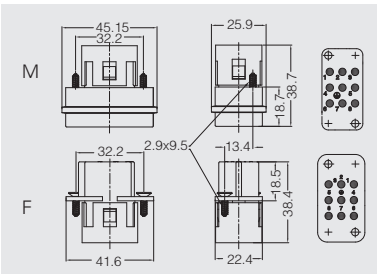
Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ-008/0-MC ¹⁾	130 008 010 0001
Female	HQ-008/0-FC ¹⁾	130 008 020 0001

1).can match PCB adapter,see page 14-10~14-11.



Crimp contacts

Crimp contacts 16A

contact resistance ≤ 1mΩ
silver plated



gold plated



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-3.5	101 019 220 1101
CEGM-4.0	101 019 210 1201	CEGF-4.0	101 019 220 1201

More crimp contacts 16A see P13-04.

Relay contacts

silver plated



Wire gauge(mm²)	Designation	Order No.
1	CESM-1.0R	101 019 110 0808
1.5	CESM-1.5R	101 019 110 0908
2.5	CESM-2.5R	101 019 110 1008

Tools

Crimping tool



Contact removal tool



Coding element



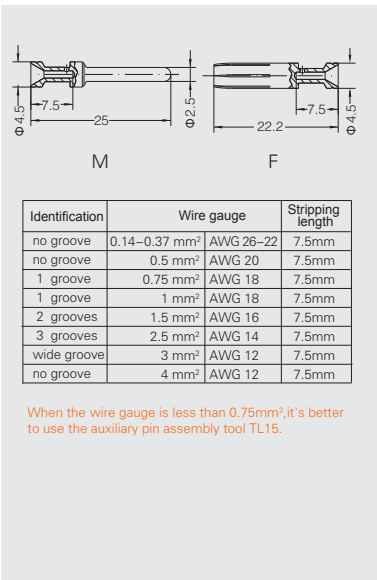
Wire gauge	Designation	Order No.
0.5-4mm²	TL02G	198 001 001 0011

Wire gauge: 0.14-0.37mm² please select TL02 Crimping tool.

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

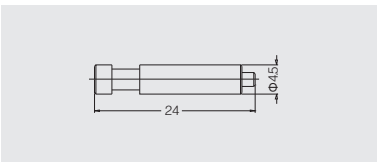
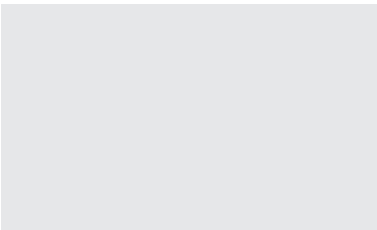
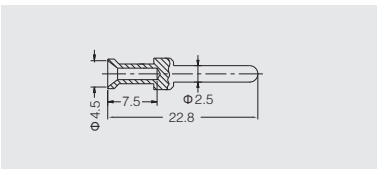
More tools detail please find the page32-02~32-05.

Description	Designation	Order No.
coding, pokayoke	CODE-E	198 002 005 0002



Identification	Wire gauge		Stripping length
no groove	0.14–0.37 mm²	AWG 26–22	7.5mm
no groove	0.5 mm²	AWG 20	7.5mm
1 groove	0.75 mm²	AWG 18	7.5mm
1 groove	1 mm²	AWG 18	7.5mm
2 grooves	1.5 mm²	AWG 16	7.5mm
3 grooves	2.5 mm²	AWG 14	7.5mm
wide groove	3 mm²	AWG 12	7.5mm
no groove	4 mm²	AWG 12	7.5mm

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. Please select the tools recognized by our company.

HQ-017 Compact inserts



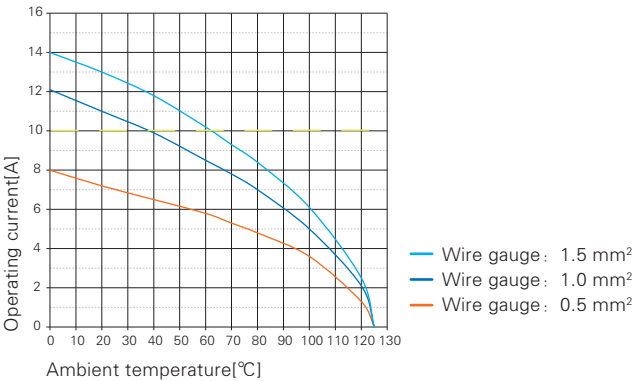
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	17+PE
Electrical data acc. to EN 61 984	
-Rated current	10A
-Rated voltage	250V
-Rated impulse voltage	4kV
-Pollution degree	2
Rated voltage acc. to UL	250V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	-40℃...+125℃
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	≤3m Ω
Crimp terminal	
- mm ²	0.14-2.5mm ²
- AWG	26-14
Hoods/Housings	
Plastic hoods/housings	
Material	thermoplastic
-Locking element	polyamide
-Hoods/Housings seal	NBR
-Limiting temperatures	-40℃...+125℃
-Flammability acc. to UL 94	V0
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65
Hoods/Housings, metal	
-Material	metal
-Locking element	stainless steel
-Hoods/Housings seal	NBR
-Limiting temperatures	-40℃...+125℃
-Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65

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



HQ-017 Compact inserts

250V 10A 17+⊕

Inserts

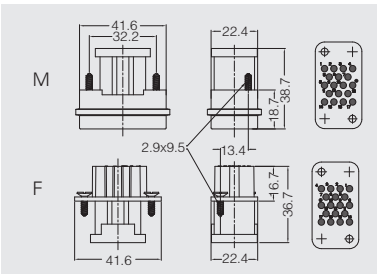
Hoods/Housings: size **HC**, please find the details on page 15-163~15-168.

Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ-017-MC	130 017 010 0001
Female	HQ-017-FC	130 017 020 0001



Crimp contacts

Crimp contacts 10A

contact resistance ≤3m Ω
silver plated



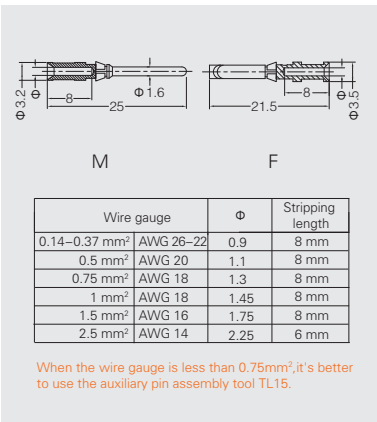
gold plated



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

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

Wire gauge	Order No.	Wire gauge	Order No.
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



Tools

Crimping tool



Contact removal tool



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

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

More tools detail please find the page 32-02~32-05.

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

HQ-004/2 Compact inserts



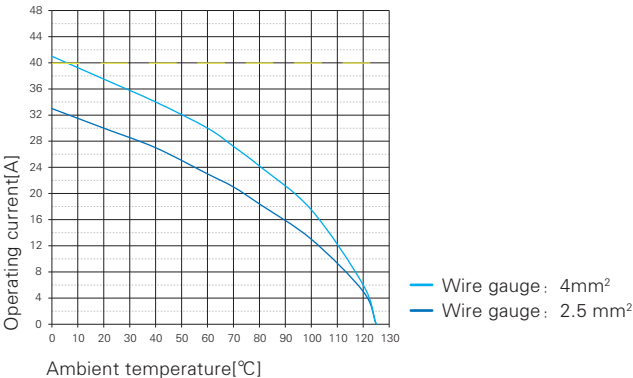
Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	4/2+PE
Electrical data acc. to EN 61 984	
Power side	
–Rated current	40A
–Rated voltage conductor – ground	400V
–Rated voltage conductor – conductor	690V
–Rated impulse voltage	6kV
–Pollution degree	3
Signal side	
–Rated current	10A
–Rated voltage	250V
–Rated impulse voltage	4kV
–Pollution degree	3
Rated voltage acc. to UL	600/250V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	–40℃...+125℃
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	≤1m Ω
Crimp terminal	
– mm ²	1.5–6mm ² / 0.14–2.5mm ²
– AWG	16–10 / 26–14
Max. insulation diameter	
– Power contacts	5mm
Hoods/Housings	
Plastic hoods/housings	
Material	thermoplastic
–Locking element	polyamide
–Hoods/Housings seal	NBR
–Limiting temperatures	–40℃...+125℃
–Flammability acc. to UL 94	V0
–Degree of protection acc. to DIN EN 60 529 for coupled connector	IP65

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



HQ-004/2 Compact inserts

400/690V 40/10A 4/2+⊕

Inserts

Hoods/Housings: size **HC**, please find the details on page 15-163~15-168.
(cannot match the metal hood with side entry:130 008 510 1003, 130 608 510 1003)

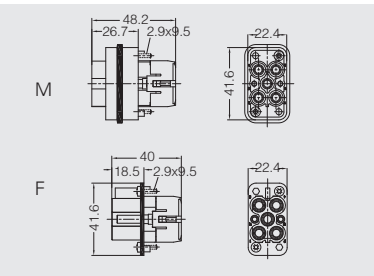
Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ–004/2–MC ¹⁾	130 006 010 0001
Female	HQ–004/2–FC ¹⁾	130 006 020 0001

1).can match PCB adapter,see page 14–06~14–07.



Crimp contacts

Crimp contacts 10A

contact resistance ≤3m Ω
silver plated



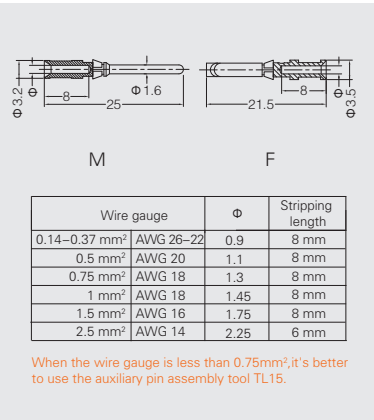
gold plated



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

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

Male	Order No.	Female	Order No.
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

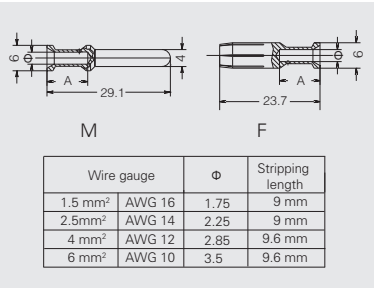


Crimp contacts 40A

contact resistance ≤0.3m Ω
silver 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



Tools

Crimping tool



Contact removal 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

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

More tools detail please find the page32–02~32–05.

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

HQ-021 High Density inserts

Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Inserts	
Number of contacts	21
Electrical data acc. to EN 61 984	
–Rated current	6.5A
–Rated voltage	50V
–Rated impulse voltage	0.8kV
–Pollution degree	3
Rated voltage AC	50 V
Rated voltage DC	120 V
Insulation resistance	≥10 ¹⁰ Ω
Material	polycarbonate
Limiting temperatures	–40℃...+125℃
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	
–mm²	0.09–0.52mm²
–AWG	28–20

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

Operating current[A]

Ambient temperature[℃]

— Wire gauge : 0.5 mm²
— Wire gauge : 0.25 mm²
— Wire gauge : 0.14 mm²

HQ-021 High Density inserts

50V 6.5A 21

Inserts

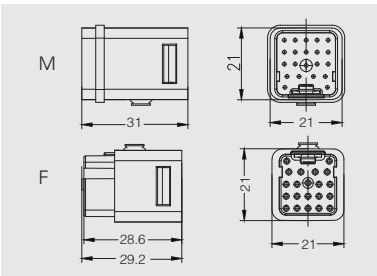
Hoods/Housings: size3A, please find the details on page 15-06~15-16.

Crimp terminal

order crimp contacts separately



Insert	Designation	Order No.
Male	HQ–021–MC	130 021 010 0001
Female	HQ–021–FC	130 021 020 0001



Crimp contacts

Crimp contacts 5A

Contact resistance≤3mΩ
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

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 mm²	AWG 28–24
0.13–0.33 mm²	AWG 26–22
0.33–0.52 mm²	AWG 22–20

Tools

Crimping tool



Contact removal tool



Wire gauge	Designation	Order No.
0.09–0.82mm²	TL03	198 001 001 0002
Application	Designation	Order No.
for 5A crimp contact	TL08	198 001 000 0006

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