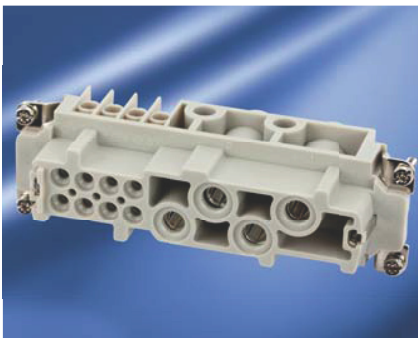
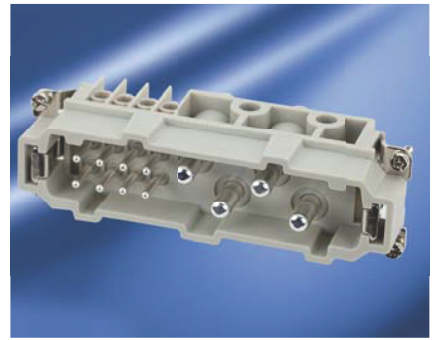
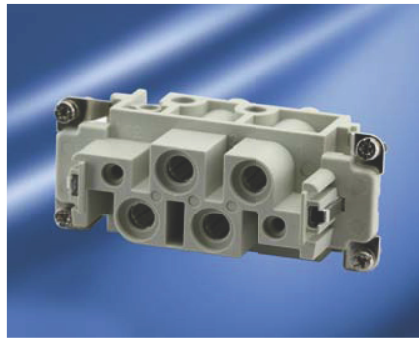
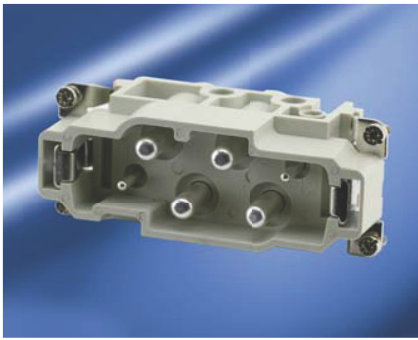






heavy | mate[®] K

- Power + signal as mixed arrangement
- Rated voltage up to 830 V
- Termination: screw, crimp

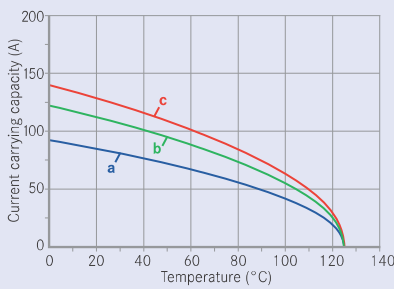


Approvals, Testhouse	Characteristics	Approval-Number
UL 	In preparation	In preparation
CSA 	In preparation	In preparation

heavy|mate® K Characteristics contact inserts 4/0 + 4 / 2

General Characteristics	Standard	Value
Number of contacts		4 / 0 (4 Power) 4 / 2 + PE (4 Power + 2 Signal)
Termination technique		screw
Wire gauge		1.5 – 16 mm ² (AWG 16–6)
Flammability	UL94	V-0
Electrical Characteristics		
Rated voltage	IEC 60664-1	830 V/400 V
Pollution degree	IEC 60664-1	3
Installation (overvoltage) category	IEC 60664-1	3
Material group	IEC 60664-1	3b
Rated impulse withstand voltage	IEC 60664-1	8.0 kV
Current carrying capacity	IEC 60512-5-2	see derating curves
Contact resistance	IEC 60512-2-1	≤ 5 mΩ
Insulation resistance	IEC 60512-3-1	≥ 10 ¹⁰ Ω
Climatical Characteristics		
Climatic category	IEC 60068-1	40/125/21
Upper temperature	IEC 60512-11-9	+125°C
Lower temperature	IEC 60512-11-10	-40°C
Mechanical Characteristics		
Mechanical operation	IEC 60512-9-1	≥500 mating cycles
Materials		
Insert		PC
Colour insert		grey
Contacts		Cu-alloy
Contact plating		Ag (silver)

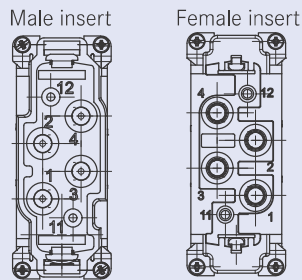
Derating Curves



Curve	Wire gauge
a	10 mm ²
b	16 mm ²
c	Single contacts with 16 mm ²

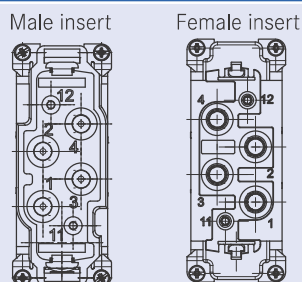
Description	Part Number	Drawing	Figure
Contact insert 4/0			
Male insert	C146 10A004 100 13		
Female insert	C146 10B004 100 13		

Pin layout



Description	Part Number	Drawing	Figure
Contact insert 4+2+PE			
Male insert	C146 10A006 100 13		
Female insert	C146 10B006 100 13		

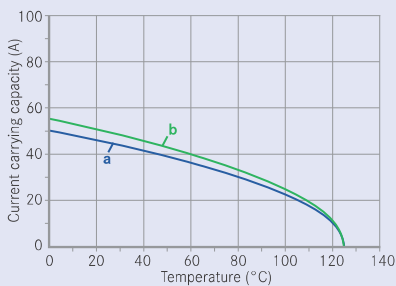
Pin layout



heavy|mate® K Characteristics contact inserts 6 / 36 + PE

General Characteristics	Standard	Value
Number of contacts		6/36 + PE
Termination technique		crimp
Wire gauge		1.5 – 6.0mm ² (AWG 16-10) 0.14 – 2.5mm ² (AWG 26-14)
Flammability	UL94	V-0
Electrical Characteristics		
Rated voltage	IEC 60664-1	690 / 160V
Pollution degree	IEC 60664-1	3
Installation (overvoltage) category	IEC 60664-1	3
Material group	IEC 60664-1	3b
Rated impulse withstand voltage	IEC 60664-1	8.0 / 2.5 kV
Current carrying capacity	IEC 60512-5-2	see derating curves
Contact resistance	IEC 60512-2-1	≤ 5 mΩ
Insulation resistance	IEC 60512-3-1	≥ 10 ¹⁰ Ω
Climatical Characteristics		
Climatic category	IEC 60068-1	40 / 125 / 21
Upper temperature	IEC 60512-11-9	125°C
Lower temperature	IEC 60512-11-10	-40°C
Mechanical Characteristics		
Mechanical operation	IEC 60512-9-1	≥500 mating cycles
Materials		
Insert		PC
Colour insert		grey
Contacts		Cu-alloy
Contact plating		Ag (silver) / Au (gold)

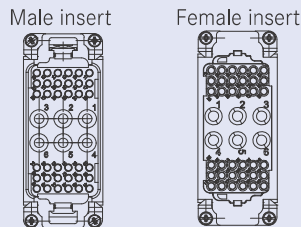
Derating Curves



Curve	Wire gauge
a	1.5 mm ² with signal-contacts
b	6 mm ²

Description	Part Number	Drawing	Figure
Contact insert 6 / 36 + PE (Please order contacts separately)			
Male insert	C146 10A042 500 13		
Female insert	C146 10B042 500 13		

Pin layout



Supplied as	for wire gauge	AWG	Pieces	Part Number		Figure
				Male contact	Female contact	
Turned 4 mm crimp contacts single contact						
silver plating	1.5 mm ²	16	100	VN01 040 0010 1C	VN02 040 0010 1C	
	2.5 mm ²	14	100	VN01 040 0011 1C	VN02 040 0011 1C	
	4 mm ²	12	100	VN01 040 0012 1C	VN02 040 0012 1C	
	6 mm ²	10	100	VN01 040 0013 1C	VN02 040 0013 1C	

Turned 1.6 mm crimp contacts single contact						
silver plating	0.14 - 0.37 mm ²	26-22	100	VN01 016 0024 1C	VN02 016 0024 1C	
	0.5 mm ²	20	100	VN01 016 0025 1C	VN02 016 0025 1C	
	0.75 - 1.0 mm ²	20-16	100	VN01 016 0026 1C	VN02 016 0026 1C	
	1.5 mm ²	16-15	100	VN01 016 0027 1C	VN02 016 0027 1C	
	2.5 mm ²	14	100	VN01 016 0028 1C	VN02 016 0028 1C	

Tools for 4 mm² turned contacts

Description	for wire gauge	Part Number		
		Contact locator	Calibration pin	Tool
Removal tool for contacts		TB 0000 146 0008	TP 0000 146 1400	FG 0300 146 5000
4-indent crimping tool ¹⁾				TB 0700 146

Tools for 1.6 mm² turned contacts

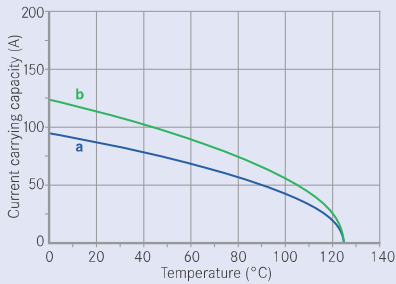
Description	for wire gauge	Contact locator	Crimping dies	Tool
Removal tool for contacts				FG 0300 146 1
Service crimping tool	0.14 - 0.5 mm ² 0.5 - 1.5 mm ²			TA 0100 146
Crimping tool for single contacts	0.14 - 1.0 mm ² 1.5 mm ²	TA 0010 146 000 1	TA 0000 184	TA 0000 TA 0500

Further tools see catalogue "Tools"

heavy|mate® K Characteristics contact inserts 4 / 8 + PE

General Characteristics	Standard	Value
Number of contacts		4/8 + PE
Termination technique		schrauben
Wire gauge		1.5 – 16mm ² (AWG 16-6)
Flammability	UL94	V-0
Electrical Characteristics		
Rated voltage	IEC 60664-1	400V / 400V
Pollution degree	IEC 60664-1	3
Installation (overvoltage) category	IEC 60664-1	3
Material group	IEC 60664-1	3b
Rated impulse withstand voltage	IEC 60664-1	8,0 kV
Current carrying capacity	IEC 60512-5-2	see derating curves
Contact resistance	IEC 60512-2-1	≤ 5 mΩ
Insulation resistance	IEC 60512-3-1	≥ 10 ¹² Ω
Climatical Characteristics		
Climatic category	IEC 60068-1	40 / 125 / 21
Upper temperature	IEC 60512-11-9	125°C
Lower temperature	IEC 60512-11-10	-40°C
Mechanical Characteristics		
Mechanical operation	IEC 60512-9-1	≥500 mating cycles
Materials		
Insert		PC
Colour insert		grey
Contacts		Cu-alloy
Contact plating		Ag (silver)

Derating Curves



Curve	Wire gauge
a	10 mm ²
b	16 mm ²

Description	Part Number	Drawing	Figure
Contact insert 4/8 + PE			
Male insert	C146 10A012 100 13		
Female insert	C146 10B012 100 13		

Pin layout

