

revos



wieland



revos
Industrial Multipole Connectors

Catalog 2018





▲ Plant II, Rodezstraße
in Bamberg



▲ Company headquarters
in Bamberg



▲ STOCKO main plant
in Wuppertal

wieland group

AT HOME ALL OVER THE WORLD

Wieland Electric GmbH is a medium-sized family-run electrical and electronics company headquartered in Bamberg. Founded in 1910, Wieland is one of the pioneers of electrical connection technology.

This family business with its international outlook is a market leader in pluggable installation technology for functional buildings, with subsidiaries worldwide and production lines not only in Bamberg but also in the Czech Republic and China.

The Wieland Group, which has included STOCKO Contact GmbH & Co. KG since 1998, is therefore represented in over 70 countries and employs some 2,200 people.



Solutions for

 ***Building technology***

 ***Wind power***

 ***Machine building***

 ***Lighting
technology***

 ***Heating, ventilation,
air conditioning***



Product portfolio

- Electronic and electrical engineering for the control cabinet
- Safety technology
- Network and field bus systems
- Energy bus systems for industry and buildings
- Connectors up to protection type IP6X
- Building automation
- PCB terminals and plug connectors
- Sensor/actuator cabling



Industries

- Machine building
- Construction machines & cranes
- Buildings and lighting
- Logistics
- Power engineering
- Renewable energy sources
- Heating, ventilation and air conditioning systems



Business services

- Pre-assembly and wiring
- Product labeling service
- Integrated solutions inside distributors
- Customized solutions
- On-site project support
- Optimization of decentralized, pluggable installation solutions
- Certified machine safety tests



Safety training

- Software validation
- CSE certified safety engineers
- Basics and standards of functional safety
- Modification of old machines and major changes
- Design of safety functions and calculation with Sistema
- Machinery Directive, liability issues and CE conformity explanations



Software/configuration tools

- **wieplan** CLICK2BUY, configuration of terminal strips including online order
- **wieprint**, marking system for DIN rail terminal blocks
- **revos** configurator for connectors
- **gesis**®PLAN for building installation
- **podis**®PLAN for configuring the **podis**® energy bus system
- **samos**®PLAN 6, programming tool for **samos**®PRO COMPACT



Why Wieland?

- Standardized industrial solutions
- Customized solutions
- Support for your project
- Broad product portfolio
- Application worldwide due to international licenses
- Group-wide observance of human rights, including at suppliers
- Eco-friendly production

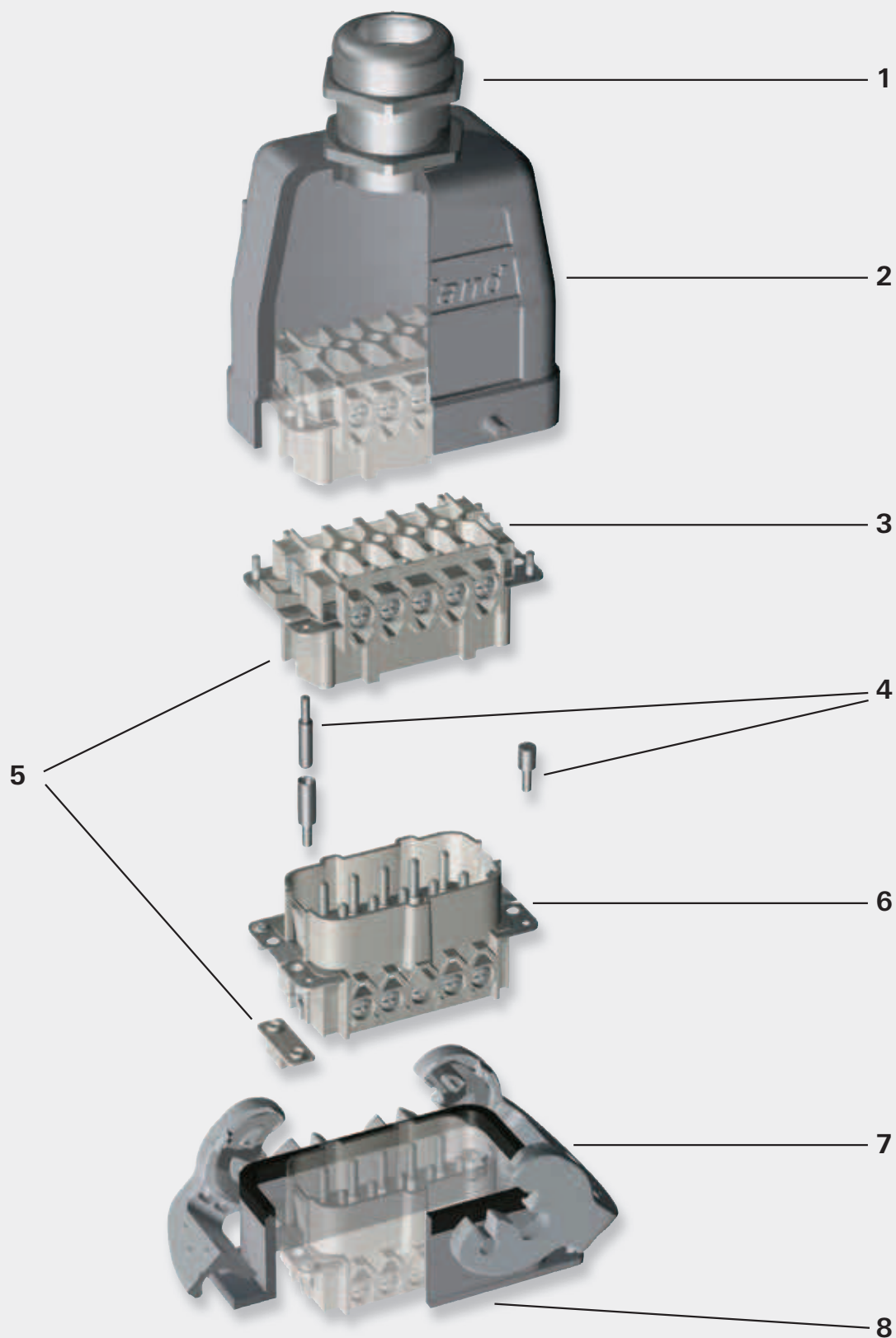
RoHS
conform



| CONTENTS |



General design of a *revos* industrial multipole connectors




1. Cable glands

For revos industrial connectors the following cable glands are available:

- Cable gland without strain relief, protection degree IP54, 7x.xxx.xxxx.0 fully assembled
- Cable glands, protection degree IP68, available as accessories in plastic or brass
- EMC cable glands

2. Hoods

Aluminum die cast alloy, silicon-free finish (housings for **revos** - and **revos** MINI are manufactured from die cast zinc alloy)

- Low and increased height designs available
- Cable entry at the side, on top or at the front
- With or without locking levers

3. Female inserts

Available in the following connection techniques:

- Screw connection
- Spring clamp connection
- Push-in connection
- Crimp connection

4. Coding accessories

Coding pins, female coding pieces and coding bolts

5. Coding bolts

Coding pieces are used for coding 690 V contact inserts.

In the 690 V housings the coding ribs are removed and insulating tape is attached inside the housing in order ensure the creepage distances and clearances to live parts.

This mechanical coding prevents the 690 V contact inserts from being mounted in 500 V housings.

6. Male inserts


Available in the following connection techniques:

- Screw connection
- Spring clamp connection
- Push-in connection
- Crimp connection

7. Locking levers

Single or double locking lever in plastic, steel or stainless steel design.

8. Bases

Aluminum die cast alloy, silicon-free finish (housings for (**revos** - und **revos** MINI are manufactured from die cast zinc alloy)

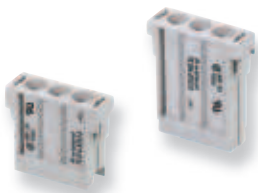
- Low and increased height designs available
- Open-bottom and closed-bottom bases
- Single or double locking lever of plastic, steel or stainless steel
- Coupling for "cable-to-cable connections"

Modular connector system 3-pole

Modular inserts revos FLEX

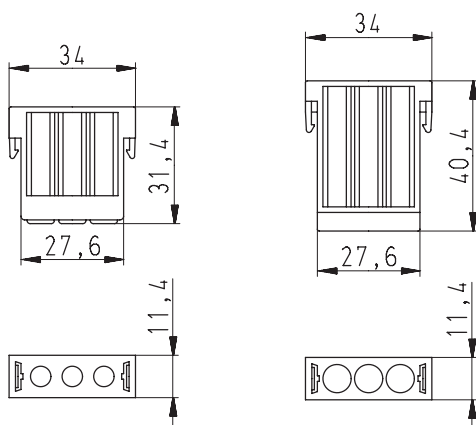


3-pole



Description	Type	Part No.	P.U.
Modular inserts revos FLEX			
3-pole			
Male insert	FLE STC 3 69	78.014.0353.0	10
Female insert	FLE BUC 3 69	78.004.0353.0	10
Contacts			
	mm² / AWG, turned Ø 3.6 mm		
Male insert, Ag (Crimping die B)	1.5 / 16	05.544.1829.8	100
Female insert, Ag (Crimping die B)	1.5 / 16	02.125.2929.8	100
Male insert, Ag (Crimping die B)	2.5 / 14	05.544.1929.8	100
Female insert, Ag (Crimping die B)	2.5 / 14	02.125.3029.8	100
Male insert, Ag (Crimping die D)	4 / 12	05.544.3129.8	100
Female insert, Ag (Crimping die D)	4 / 12	02.125.3129.8	100
Male insert, Ag (Crimping die D)	6 / 10	05.544.3229.8	100
Female insert, Ag (Crimping die D)	6 / 10	02.125.3229.8	100
Male insert, Ag (Crimping die D)	10 / 8	05.544.3329.8	100
Female insert, Ag (Crimping die D)	10 / 8	02.125.3329.8	100
Technical data			
Rated voltage	630 V		
Rated voltage according to UL/CSA	600 V		
Rated impulse voltage	8 kV		
Rated current	40 A (UL 40 A, CSA 35 A)		
Degree of pollution	3		
Insulation strip length	10 mm		
Contact resistance	≤ 1 mΩ		
Mating cycles	500		
Insulating material	Polycarbonate, halogen-free		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Derating curve	Page 111		
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"B"	05.502.2100.0	1
Crimping die	"D"	05.502.2300.0	1
Contact positioner	"1"	05.502.3100.0	1
Extraction tool		05.502.0910.0	1
Extraction tool for modular inserts		05.502.1010.0	1

Dimensions



Modular connector system 4-pole + ground

Modular inserts **revos**FLEX

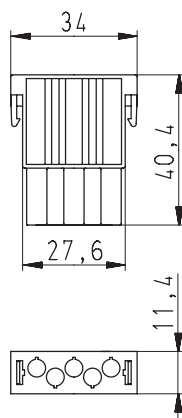
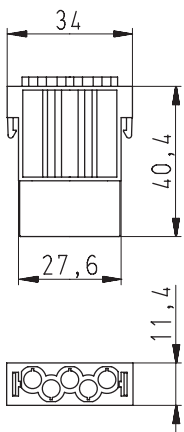


4-pole + ground



Description	Type	Part No.	P.U.
Modular inserts revosFLEX			
Male insert	4-pole + ground FLE STC 4P 1K	78.013.0453.0	10
Female insert	FLE BUC 4P 1K	78.003.0453.0	10
Contacts			
	mm ² / AWG, stamped Ø 2.5 mm		
Male insert, Ag	0.5 – 1.5 / 20 – 16	05.544.3429.8	100
Female insert, Ag	0.5 – 1.5 / 20 – 16	02.125.3429.8	100
Male insert, Ag	1.5 – 2.5 / 16 – 14	05.544.3529.8	100
Female insert, Ag	1.5 – 2.5 / 16 – 14	02.125.3529.8	100
Technical data			
Rated voltage	1000 V		
Rated voltage according to UL/CSA	600 V		
Rated impulse voltage	8 kV		
Rated current	16 A (UL 13 A, CSA 16 A)		
Degree of pollution	3		
Insulation strip length	4 mm		
Contact resistance	≤ 5 mΩ		
Mating cycles	500		
Insulating material	Polyamide 6.6 GF, halogen-free		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Derating curve	Page 111		
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"C"	05.502.2200.0	1
Contact positioner	"2"	05.502.3200.0	1
Extraction tool		05.502.0610.0	1
Extraction tool for modular inserts		05.502.1010.0	1

Dimensions

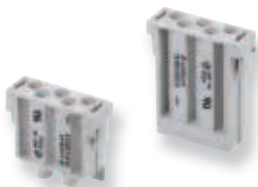


Modular connector system 5-pole

Modular inserts revos FLEX

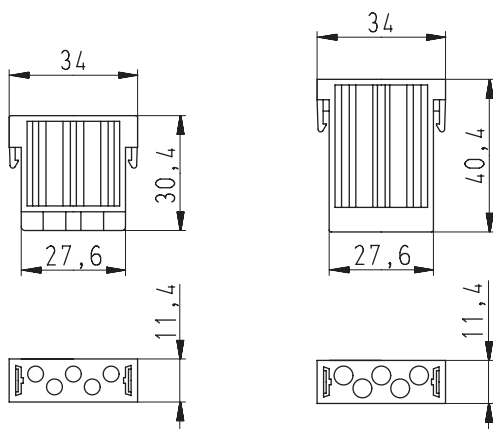


5-pole



Description	Type	Part No.	P.U.
Modular inserts revos FLEX			
5-pole			
Male insert	FLE STC 5 25	78.013.0553.0	10
Female insert	FLE BUC 5 5	78.003.0553.0	10
Contacts			
	mm ² / AWG, turned Ø 2.5 mm		
Male insert, Ag	0.5 / 20	05.544.3629.8	100
Female insert, Ag	0.5 / 20	02.125.3629.8	100
Male insert, Ag	0.75 – 1.0 / 18	05.544.3729.8	100
Female insert, Ag	0.75 – 1.0 / 18	02.125.3729.8	100
Male insert, Ag	1.5 / 16	05.544.3829.8	100
Female insert, Ag	1.5 / 16	02.125.3829.8	100
Male insert, Ag	2.5 / 14	05.544.3929.8	100
Female insert, Ag	2.5 / 14	02.125.3929.8	100
Male insert, Ag	4 / 12	05.544.4029.8	100
Female insert, Ag	4 / 12	02.125.4029.8	100
Technical data			
Rated voltage	250 V		
Rated voltage according to UL/CSA	UL 400 V, CSA 600 V		
Rated impulse voltage	6 kV		
Rated current	20 A (UL 20 A, CSA 16 A)		
Degree of pollution	3		
Insulation strip length	8 mm		
Contact resistance	≤ 2 mΩ		
Mating cycles	500		
Insulating material	Polycarbonate, halogen-free		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Derating curve	Page 111		
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"B"	05.502.2100.0	1
Contact positioner	"1"	05.502.3100.0	1
Extraction tool		05.502.0810.0	1
Extraction tool for modular inserts		05.502.1010.0	1

Dimensions

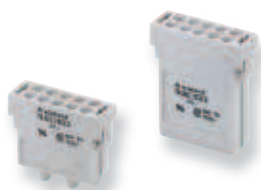


Modular connector system 10-pole

Modular inserts revos FLEX



10-pole



Modular inserts revos FLEX

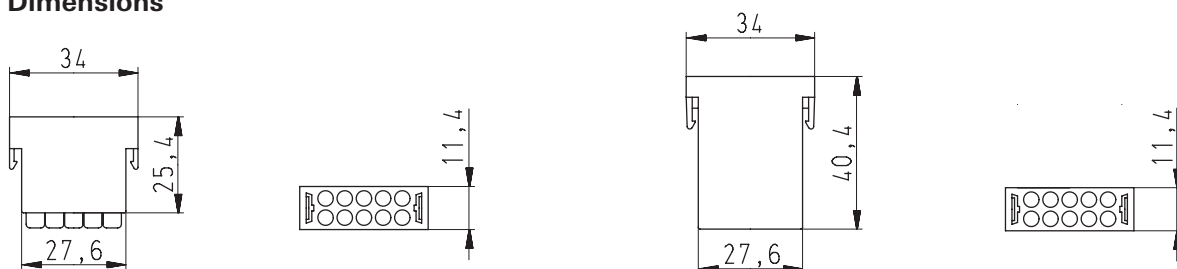


10-pole



Description	Type	Part No.	P.U.
Modular inserts revos FLEX			
10-pole			
Male insert	FLE STC 10 25	78.012.1053.0	10
Female insert	FLE BUC 10 25	78.002.1053.0	10
Technical data			
Rated voltage	250 V		
Rated voltage according to UL/CSA	UL 240 V, CSA 600 V		
Rated impulse voltage	4 kV		
Rated current	10 A		
Degree of pollution	3		
Insulation strip length	8 mm		
Contact resistance	≤ 5 mΩ		
Mating cycles	500		
Insulating material	Polycarbonate, halogen-free		
Colour	gray		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Derating curve	Page 111		
Modular inserts revos FLEX			
10-pole			
Male insert	FLE STC 10 40 sw	78.012.1053.1	10
Female insert	FLE BUC 10 40 sw	78.002.1053.1	10
Technical data			
Rated voltage	400 V		
Rated voltage according to UL	UL 600 V		
Rated impulse voltage	4 kV		
Rated current	10 A		
Degree of pollution	3		
Insulation strip length	8 mm		
Contact resistance	≤ 5 mΩ		
Mating cycles	500		
Insulating material	PA, halogen-free		
Colour	black		
Flammability	UL 94 V-0		
Temperature range	-40 ... +100 °C		
Derating curve	Page 111		
Description	Type	Part No.	P.U.
Contacts			
	mm ² / AWG, turned Ø 1.6 mm		
Male insert, Ag	0.14 – 0.37 / 26 – 22	05.544.4129.8	100
Female insert, Ag	0.14 – 0.37 / 26 – 22	02.125.4129.8	100
Male insert, Ag	0.5 / 20	05.544.4229.8	100
Female insert, Ag	0.5 / 20	02.125.4229.8	100
Male insert, Ag	0.75 – 1.0 / 18	05.544.4329.8	100
Female insert, Ag	0.75 – 1.0 / 18	02.125.4329.8	100
Male insert, Ag	1.5 / 16	05.544.4429.8	100
Female insert, Ag	1.5 / 16	02.125.4429.8	100
Male insert, Ag	2.5 / 14	05.544.4529.8	100
Female insert, Ag	2.5 / 14	02.125.4529.8	100
Male insert, LWL POF	Ø 1.6 mm	05.544.8121.0	5
Female insert, LWL POF	Ø 1.6 mm	02.125.2421.0	5
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"B"	05.502.2100.0	1
Contact positioner	"1"	05.502.3100.0	1
Extraction tool		05.502.0710.0	1
Extraction tool for modular inserts		05.502.1010.0	1
Set of tools for optical fiber POF contacts		95.101.2000.0	1

Dimensions

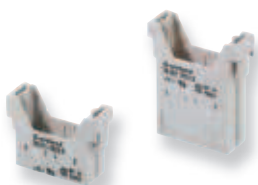


Modular connector system

Modular inserts revos FLEX



20-pole

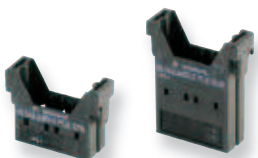


Description	Type	Part No.	P.U.
Modular inserts revos FLEX			
Male insert	FLE STC 20 10	78.011.2053.0	10
Female insert	FLE BUC 20 10	78.001.2053.0	10
Contacts		mm ² / AWG, stamped Ø 1.0 mm	
Male insert, Au	0.09 – 0.25 / 28 – 24	05.544.4629.7	100
Female insert, Au	0.09 – 0.25 / 28 – 24	02.125.4629.7	100
Male insert, Au	0.25 – 0.5 / 24 – 20	05.544.4729.7	100
Female insert, Au	0.25 – 0.5 / 24 – 20	02.125.4729.7	100
Technical data			
Rated voltage	100 V		
Rated voltage according to UL/CSA	60 V		
Rated impulse voltage	1,5 kV		
Rated current	4 A (UL , CSA 5 A)		
Degree of pollution	3		
Insulation strip length	3 mm		
Contact resistance	≤ 5 mΩ		
Mating cycles	500		
Insulating material	Polycarbonate, halogen-free		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Derating curve		Page 111	
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"A"	05.502.2000.0	1
Contact positioner	"4"	05.502.3800.0	1
Extraction tool		05.502.0410.0	1
Extraction tool for modular inserts		05.502.1010.0	1

Modular inserts revos FLEX



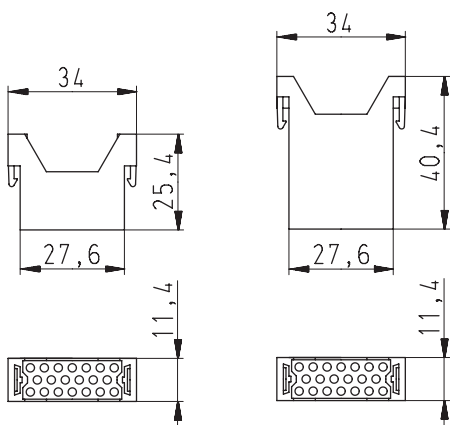
Blind module



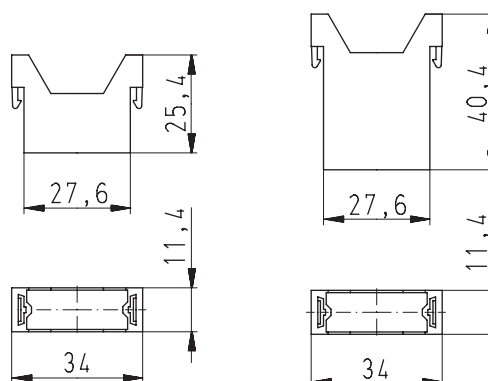
Description	Type	Part No.	P.U.
Modular inserts revos FLEX			
Male	Blind module	05.562.6353.0	10
Female		05.562.6453.0	10
Technical data			
Insulating material	Polyamide 66, halogen-free		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		

Dimensions

20-pole



Blind module



Derating curve

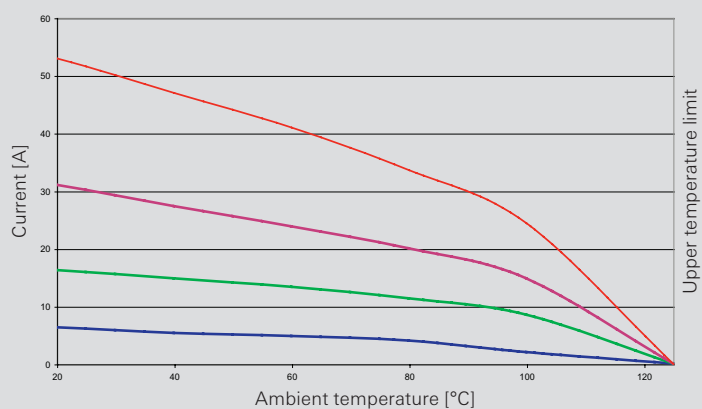
Derating curve

according to IEC 60512 sec. 3

revos FLEX

Size 6,
equipped with 2 modules

- Contact Ø 1 mm stamped, 0.5 mm², 2x20 poles
- Contact Ø 1.6 mm turned, 1.5 mm², 2x10 poles
- Contact Ø 2.5 mm turned, 2.5 mm², 2x5 poles
- Contact Ø 3.6 mm turned, 6 mm², 2x3 poles



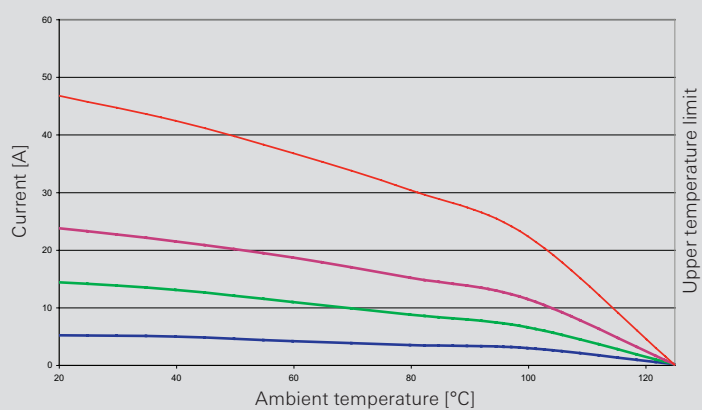
Derating curve

according to IEC 60512 sec. 3

revos FLEX

Size 10,
equipped with 3 modules

- Contact Ø 1 mm stamped, 0.5 mm², 3x20 poles
- Contact Ø 1.6 mm turned, 1.5 mm², 3x10 poles
- Contact Ø 2.5 mm turned, 2.5 mm², 3x5 poles
- Contact Ø 3.6 mm turned, 6 mm², 3x3 poles



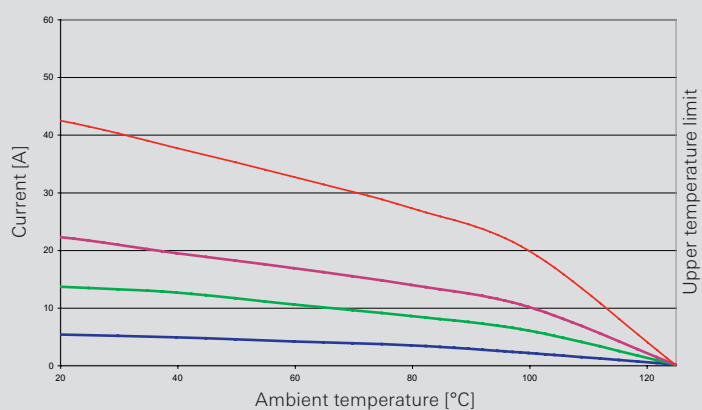
Derating curve

according to IEC 60512 sec. 3

revos FLEX

Size 16,
equipped with 5 modules

- Contact Ø 1 mm stamped, 0.5 mm², 5x20 poles
- Contact Ø 1.6 mm turned, 1.5 mm², 5x10 poles
- Contact Ø 2.5 mm turned, 2.5 mm², 5x5 poles
- Contact Ø 3.6 mm turned, 6 mm², 5x3 poles



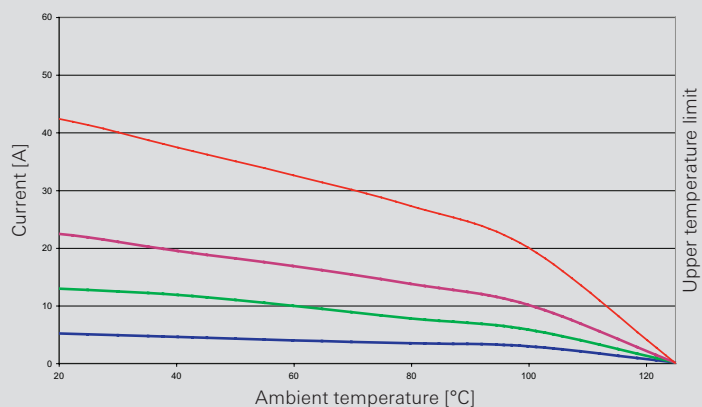
Derating curve

according to IEC 60512 sec. 3

revos FLEX

Size 24,
equipped with 7 modules

- Contact Ø 1 mm stamped, 0.5 mm², 7x20 poles
- Contact Ø 1.6 mm turned, 1.5 mm², 7x10 poles
- Contact Ø 2.5 mm turned, 2.5 mm², 7x5 poles
- Contact Ø 3.6 mm turned, 6 mm², 7x3 poles



Modular connector system

Modular inserts **revos** FLEX

Pneumatic module 1 connection



Pneumatic module 2 connections

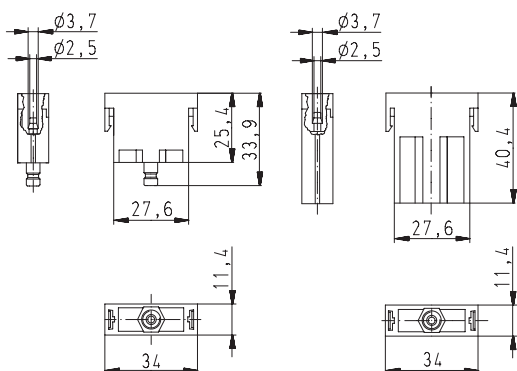


Description	Type	Part No.	P.U.
Modular inserts revos FLEX		Pneumatic module Ø 2,5 mm	
1 connection			
Male insert	FLE STP 1 2.5	78.913.0153.0	5
Female insert with valve	FLE BUP 1 2.5	78.903.0153.0	5
2 connections			
Male insert	FLE STP 2 2.5	78.913.0253.0	5
Female insert with valve	FLE BUP 2 2.5	78.903.0253.0	5
Modular inserts revos FLEX		Pneumatic module Ø 4 mm	
1 connection			
Male insert	FLE STP 1 4	78.914.0153.0	5
Female insert with valve	FLE BUP 1 4	78.904.0153.0	5
2 connections			
Male insert	FLE STP 2 4	78.914.0253.0	5
Female insert with valve	FLE BUP 2 4	78.904.0253.0	5
Technical data			
Hose connection	Type / Ø inside	Module Ø 2.5 mm / 2.5 mm	Module Ø 4 mm / 4 mm
Operational pressure		10 bar	
Material of the pneumatic contact		Brass MS 58	
Insulating material		Polyamide 6.6 GF	
Flammability class		UL 94 V-0	
Temperature range		-40 ... +100 °C	

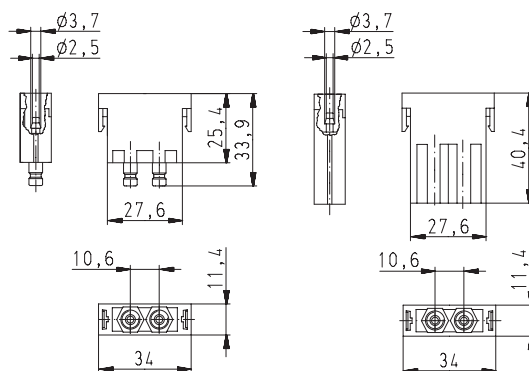
Dimensions

Pneumatic module Ø 2.5 mm

1 connection

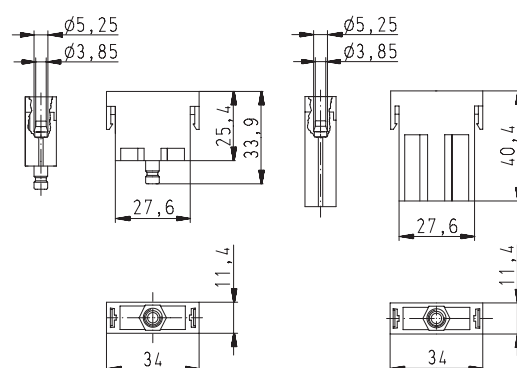


2 connections

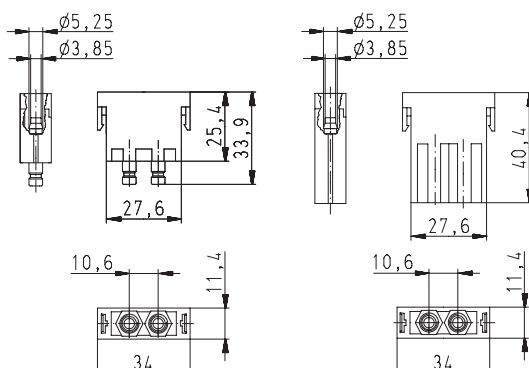


Pneumatic module Ø 4 mm

1 connection



2 connections



Modular connector system

Modular inserts **revos**FLEX

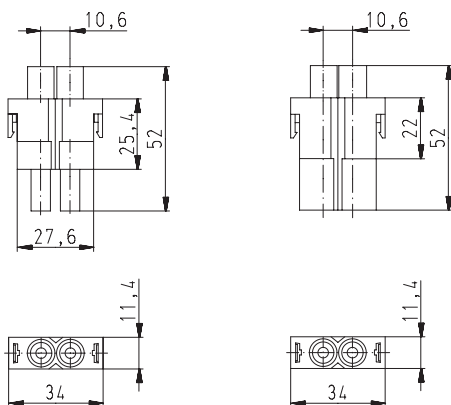


High voltage module 2-pole



Description	Type	Part No.	P.U.
Modular inserts revosFLEX			
2-pole			
Male insert	FLE SUC 2 5K	78.013.0253.0	5
Female insert	FLE BUC 5 5K	78.003.0253.0	5
Contacts			
	mm ² / AWG, turned Ø 2.5 mm		
Male insert, Ag	0.5 / 20	05.544.3629.8	100
Female insert, Ag	0.5 / 20	02.125.3629.8	100
Male insert, Ag	0.75 – 1.0 / 18	05.544.3729.8	100
Female insert, Ag	0.75 – 1.0 / 18	02.125.3729.8	100
Male insert, Ag	1.5 / 16	05.544.3829.8	100
Female insert, Ag	1.5 / 16	02.125.3829.8	100
Male insert, Ag	2.5 / 14	05.544.3929.8	100
Female insert, Ag	2.5 / 14	02.125.3929.8	100
Male insert, Ag	4 / 12	05.544.4029.8	100
Female insert, Ag	4 / 12	02.125.4029.8	100
Technical data			
Rated voltage	2.8 kV / 5.5 kV at pollution degree 2		
Rated voltage according to UL/CSA	-		
Rated impulse voltage	18 kV		
Rated current	20 A		
Degree of pollution	3		
Insulating material	Polyamid 6.6		
Flammability class	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"B"	05.502.2100.0	1
Contact positioner	"1"	05.502.3100.0	1
Extraction tool		05.502.0810.0	1
Extraction tool for modular inserts		05.502.1010.0	1

Dimensions



Modular connector system

Modular inserts **revos**FLEX



High current module 1-pole + ground



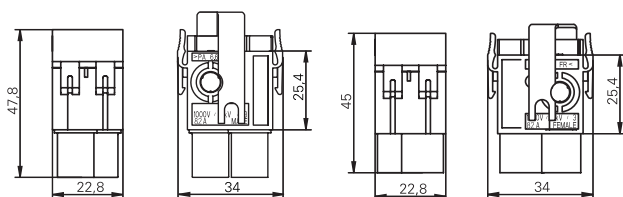
High current module 2-pole



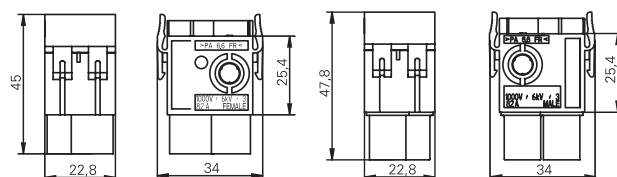
Description	Type	Part No.	P.U.
Modular inserts <i>revos</i>^{FLEX}		1-pole + ground	
Male insert	FLE STS 1P 25 1K AG	78.116.0153.0	5
Female insert	FLE BUS 1P 25 1K AG	78.106.0153.0	5
Modular inserts <i>revos</i>^{FLEX}		2-pole	
Male insert	FLE STS 2 25 1K AG	78.116.0253.0	5
Female insert	FLE BUS 2 25 1K AG	78.106.0253.0	5
Technical data			
Rated voltage	1000 V		
Rated voltage according to UL/CSA	600 V		
Rated impulse voltage	8 kV		
Rated current	82 A		
Degree of pollution	3		
Insulation strip length	15 mm		
Rated cross section			
EN 60999	10 – 25 mm ²		
UL	8 – 4 AWG		
CSA	8 – 4 AWG		
Mating cycles	100		
Contact resistance	≤ 2 mΩ		
Surface	Ag		
Insulating material	PA 6.6		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Screws head design	Clamping screws M6		
Recomm. torque	2.5 Nm slot		

Dimensions

1-pole + ground



2-pole



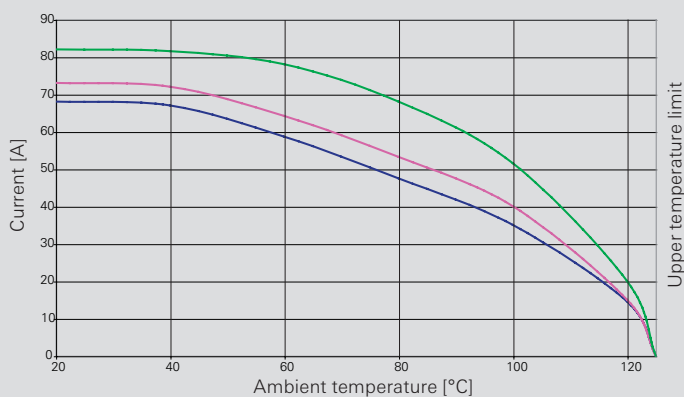
Derating curve

according to IEC 60512 sec. 3

revosFLEX

high voltage module 78.106/116.01/0253.0
1000 V / 82 A

- 10 mm²
- 16 mm²
- 25 mm²



Modular connector system

Modular inserts revos^{FLEX} HC 1M

c_{UL} pending

High current module
with crimp connection

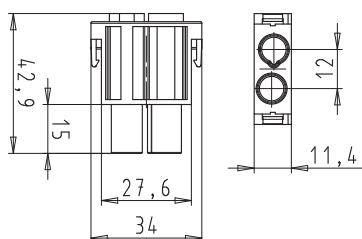


Description	Type	Part No.	P.U.
Modular inserts revos^{FLEX}			
Male insert	FLE STC 2 16 1	78.014.0253.0	10
Female insert	FLE BUC 2 16 1	78.004.0253.0	10
Contacts			
	mm ² / AWG, turned Ø 3,6 mm		
Male insert, Ag	16 / 6	05.546.3021.8	20
Female insert, Ag	16 / 6	02.126.9721.8	20
Technical data			
Rated voltage (EN 60664-1)	1000 V		
Rated voltage according to UL/CSA	600 V		
Rated impulse voltage	8.0 kV		
Degree of pollution	3		
Overvoltage category	III		
Rated current	65 A (UL 60 A, CSA 55 A)		
Continuity resistor	< 1 mΩ		
Insulation resistor	> 10 ¹² Ω		
Rated cross-section (EN 60999)	16 mm ²		
Rated cross-section (UL/CSA)	6 AWG		
Material			
Insulating housing	PA		
Colour	black		
Flammability	UL 94 V-0		
Contacts			
Contact surface	silver plated		
Rated cross-section	16 mm ²		
Numbers of poles	2		
Mating cycles	500		
Temperature range	-40 °C ... + 120 °C		
Description	Part No.	Part No.	
Accessoires		Contacts	Fork cable lug
Crimping tool	95.000.1000.0		95.101.0800.0
Crimping die for connection range 10 mm ²	05.502.5300.0		
Fork cable lug for protective earth connection 10 mm ²			06.600.6127.6
Fork cable lug for protective earth connection 16 mm ²			06.600.6227.6
Crimping die for connection range 10 mm ²			05.502.2800.0
Crimping die for connection range 16 mm ²			05.502.2900.0
Extraction tool	05.502.0910.0		

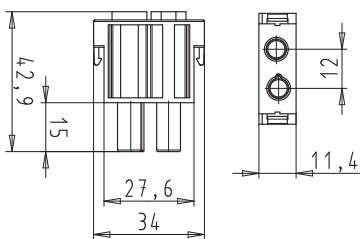
Klauke type 60/22-L pneumatic crimping tool can also be used.

Dimensions

Male insert



Female insert



General requirements

- Due to reduced cross sections at PE contacts of frames, the PE contact has to be additionally protected against short circuits by using a protection circuit offering a sufficiently short breaking time (< 0,25 s).
- Parts to be used as connectors, not as plug devices (connector with breaking capacity). Do not mate under current or voltage!

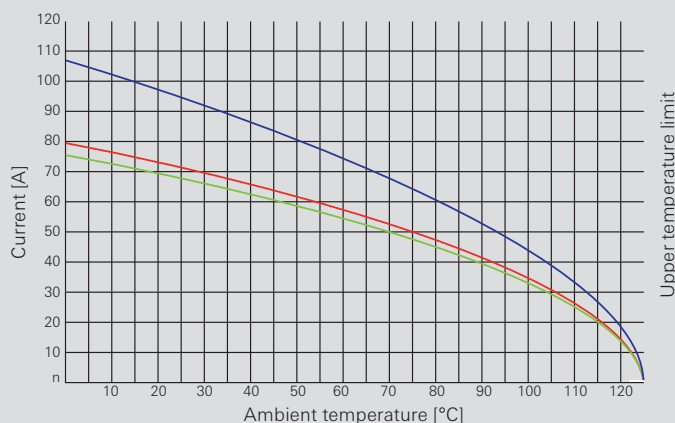
Derating curve

according to IEC 60512-2 test 5b

revos^{FLEX}

High current module 78.004/014.0253.0
1000 V

- 1 module
- 3 modules
- 7 modules



Modular connector system

Modular inserts revos^{FLEX} HC 2M

c  pending

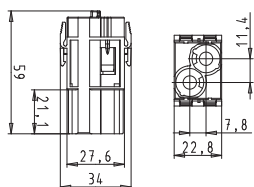


Description	Type	Part No.	P.U.
Modular inserts <i>revos</i>^{FLEX}			
Male insert	FLE STC 2 35 1	78.016.0253.0	10
Female insert	FLE BUC 2 35 1	78.006.0253.0	10
Contacts			
mm ² / AWG, gedreht Ø 6 mm			
Male insert, Ag	16 / 6	05.546.2721.8	20
Female insert, Ag	16 / 6	02.126.7421.8	20
Male insert, Ag	25 / 4	05.546.2821.8	20
Female insert, Ag	25 / 4	02.126.7521.8	20
Male insert, Ag	35 / 2	05.546.2921.8	20
Female insert, Ag	35 / 2	02.126.7621.8	20
Technical data			
Rated voltage (EN 60664-1)	1000 V		
Rated voltage according to UL/CSA	600 V		
Rated impulse voltage	8.0 kV		
Degree of pollution	3		
Overvoltage category	III		
Rated current (θ _{amb} = 40 °C) & 35 mm ² Leiter	150 A (UL, CSA 120 A)		
Continuity resistor	< 1 mΩ		
Insulation resistor	> 10 ⁹ Ω		
Rated cross-section (EN 60999)	16-35 mm ²		
Rated cross-section (UL/CSA)	2 AWG		
Material			
Insulating housing	PA		
Colour	black		
Flammability	UL 94 V-0		
Contacts			
Contact surface	silver plated		
Rated cross-section	16 / 25 / 35 mm ²		
Numbers of poles	2		
Mating cycles	500		
Temperature range	-40 °C ... + 120 °C		
Description	Type	Part No.	P.U.
Zubehör			
Crimping tool	95.000.1000.0	95.101.0800.0	
Crimping die for connection range 10 mm ²		05.502.2800.0	
Crimping die for connection range 16 mm ²	05.502.4600.0	05.502.2900.0	
Crimping die for connection range 25 mm ²	05.502.4700.0		
Crimping die for connection range 35 mm ²	05.502.4800.0		
Fork cable lug for protective earth connection 10mm ²		06.600.6127.6	
Fork cable lug for protective earth connection 16mm ²		06.600.6227.6	
Klauke type 60/22-L pneumatic crimping tool can also be used.			

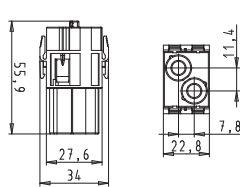
Klauke type 60/22-L pneumatic crimping tool can also be used.

Dimensions

Male insert



Female insert



General requirements

- Due to reduced cross sections at PE contacts of frames, the PE contact has to be additionally protected against short circuits by using a protection circuit offering a sufficiently short breaking time (< 0,25 s).
- Parts to be used as connectors, not as plug devices (connector with breaking capacity).
Do not mate under current or voltage!

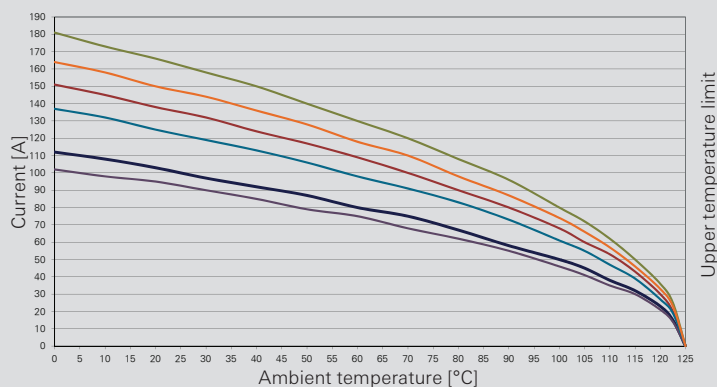
Derating curve

according to IEC 60512 sec. 3

revos^{FLEX}

High current module 78.006/016.0253.0
1000 V / 150 A

- 2-pole / 16 mm²
- 2-pole / 25 mm²
- 2-pole / 35 mm²
- 2 x 3-pole / 16 mm²
- 2 x 3-pole / 25 mm²
- 2 x 3-pole / 35 mm²

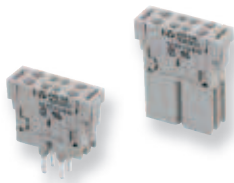


Modular connector system

Modular inserts **revos**FLEX



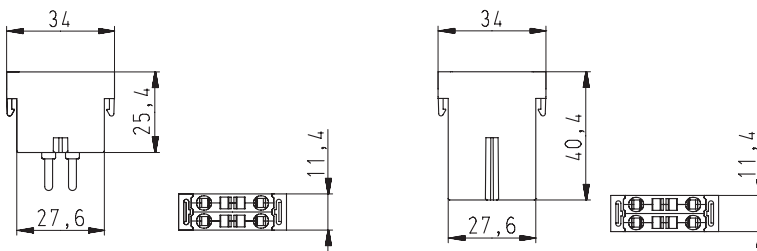
Spring clamp module 4-pole



Description	Type	Part No.	P.U.
Modular inserts revosFLEX			
Male insert	FLE STF 4 2,5 40 AG	78.213.0453.0	10
Female insert	FLE BUS 4 2,5 40 AG	78.203.0453.0	10
Technical data			
Rated voltage	400 V		
Rated voltage according to UL/CSA	600 V		
Rated impulse voltage	6 kV		
Rated current	14 A		
Degree of pollution	3		
Insulation strip length	10 mm		
Rated cross section			
EN 60999	0.5 – 2.5 mm ²		
UL	20 – 12 AWG		
CSA	20 – 12 AWG		
Mating cycles	200		
Contact resistance	≤ 5 mΩ		
Surface	Ag		
Mating cycles	100		
Insulating material	Polycarbonate. halogen-free		
Flammability	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Description	Type	Part No.	P.U.
Accessories			
Screwdriver blade	DIN 5264 A 0,6 x 3,5 mm	06.502.4000.0	5

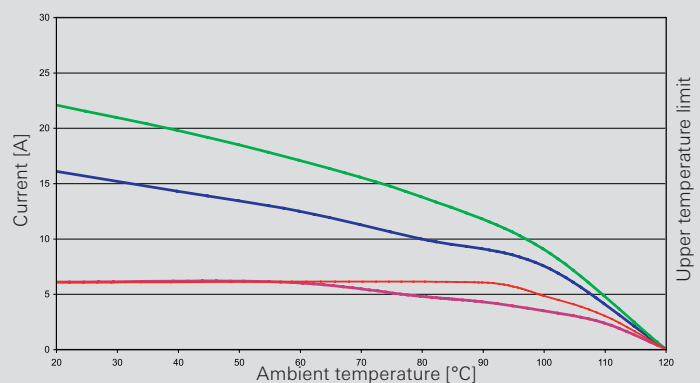
Dimensions

Spring clamp module 4-pole



Derating curve according to IEC 60512 sec. 3 **revos**FLEX^{2,2}

- 2.5 mm² highest number of pole (28-contacts / Size 24)
- 2.5 mm² highest number of pole (8-contacts / Size 6)
- 0.5 mm² highest number of pole (28-contacts / Size 24)
- 0.5 mm² highest number of pole (8-contacts / Size 6)



Modular connector system

Modular inserts **revos**FLEX

USB module



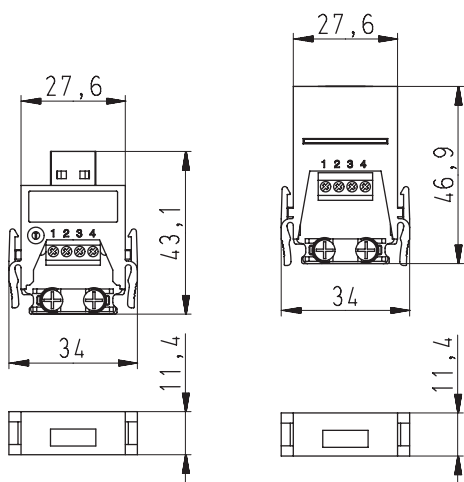
Profibus module



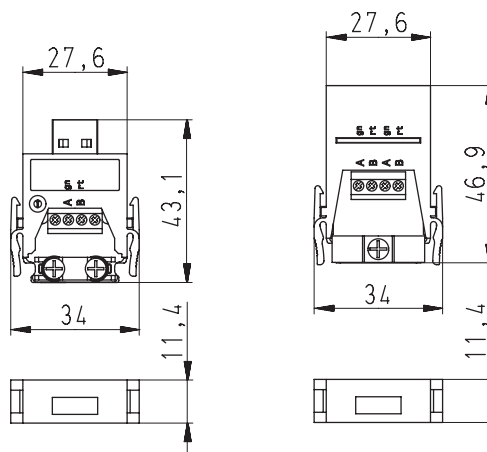
Description	Type	Part No.	P.U.
Modular inserts <i>revos</i>^{FLEX}			
Male insert	FLE STK 4S 1,5 03 AU	78.111.0453.0	5
Female insert	FLE BUK 4S 1,5 03 AU	78.101.0453.0	5
Modular inserts <i>revos</i>^{FLEX}			
Profibus module			
Male insert	FLE STD 2S 1,5 03 AU	78.191.0453.0	5
Female insert	FLE BUD 2S 1,5 03 AU	78.181.0453.0	5
Technical data			
Rated voltage	30 V		
Rated voltage according to UL/CSA	-		
Conductor cross section			
USB module	0.8 – 1.5 mm ² / 28 – 16 AWG		
Profibus module	according to PROFIBUS DP regulations		
Rated current	1 A		
Number of poles			
USB module	4+screen		
Profibus module	2+screen		
Connection torques screen / PCB connector	0.5 Nm / 0.2 Nm		
Data transmission rate			
USB module	12 MBit/s		
Profibus module	1.5 MBit/s		
Insulating material	Polycarbonate		
Flammability class of insulating housing	UL 94 V-0		
Temperature range	-20 ... +85 °C		

Dimensions

USB module



Profibus module



Modular connector system

Modular inserts **revos**FLEX



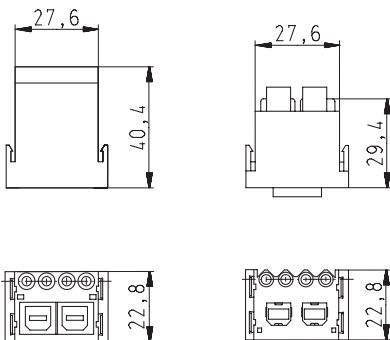
RJ45 module



Description	Type	Part No.	P.U.
Modular inserts revosFLEX			
RJ45 module			
Male insert	FLE SRC 4 40	78.930.0453.0	5
Female insert	FLE BRC 4 40	78.920.0453.0	5
Contacts			
	mm ² / AWG, turned Ø 1.6 mm		
Male insert	0.14 – 0.37 / 26 – 22	05.544.4129.8	100
Female insert	0.14 – 0.37 / 26 – 22	02.125.4129.8	100
Male insert	0.5 / 20	05.544.4229.8	100
Female insert	0.5 / 20	02.125.4229.8	100
Male insert	0.75 – 1.0 / 18	05.544.4329.8	100
Female insert	0.75 – 1.0 / 18	02.125.4329.8	100
Male insert	1.5 / 16	05.544.4429.8	100
Female insert	1.5 / 16	02.125.4429.8	100
Male insert	2.5 / 14	05.544.4529.8	100
Female insert	2.5 / 14	02.125.4529.8	100
Male insert, LWL POF	Ø 1.6 mm	05.544.8121.0	5
Female insert, LWL POF	Ø 1.6 mm	02.125.2421.0	5
Technical data			
Rated voltage	Data 30 V / power contacts 400 V		
Transmission rate	according to Category 5, ≤ 100 MBit/s		
Rated current	Data 1 A / power contacts 10 A		
Degree of pollution	3		
Insulating material	Polyamide 6.6		
Flammability	UL 94 V-0		
Temperature range	-20 ... +80 °C		
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"B"	05.502.2100.0	1
Contact positioner	"1"	05.502.3100.0	1
Extraction tool		05.502.0710.0	1
Extraction tool for modular inserts		05.502.1010.0	1
Set of tools for optical fiber POF contacts		95.101.2000.0	1

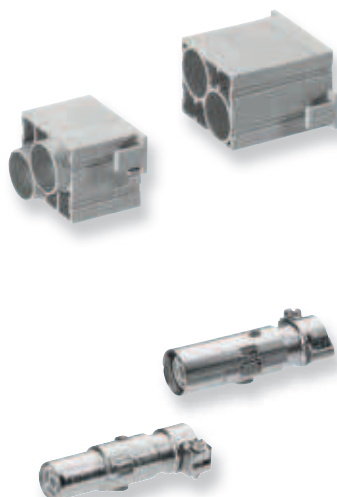
Dimensions

RJ45 module



Modular connector system

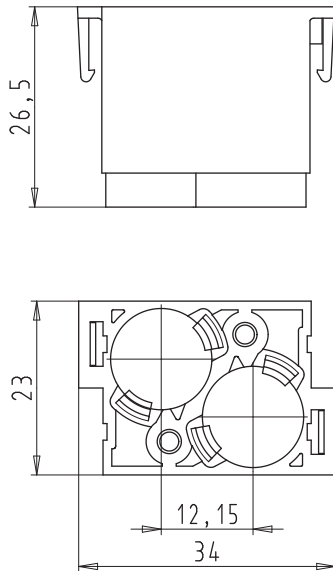
Modular inserts **revos**FLEX TWIN BUS



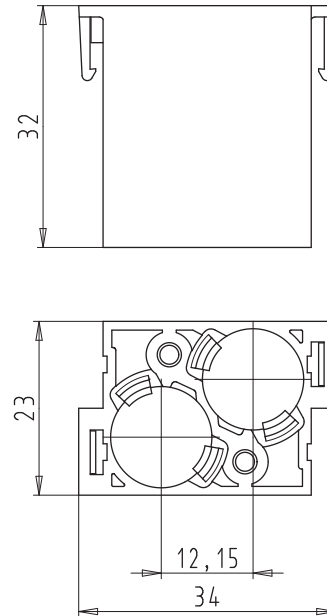
Description	Type	Part No.	P.U.
Modular inserts revosFLEX			
Male insert	FLE STC 2 05	78.019.0253.0	1
Female insert	FLE BUC 2 05	78.009.0253.0	1
Contact holder male insert	FLE STKT 1 05	Z5.566.6056.0	1
Contact holder female insert	FLE BUKT 1 05	Z5.566.5956.0	1
Kontakte			
	mm ² / AWG, gedreht Ø 1,6 mm		
Male insert, Ag	0,14 – 0,37 / 26 – 22	05.544.4129.8	100
Female insert, Ag	0,14 – 0,37 / 26 – 22	02.125.4129.8	100
Male insert, Ag	0,5 / 20	05.544.4229.8	100
Female insert, Ag	0,5 / 20	02.125.4229.8	100
Male insert, Ag	0,75 – 1,0 / 18	05.544.4329.8	100
Female insert, Ag	0,75 – 1,0 / 18	02.125.4329.8	100
Male insert, Ag	1,5 / 16	05.544.4429.8	100
Female insert, Ag	1,5 / 16	02.125.4429.8	100
Male insert, Ag	2,5 / 14	05.544.4529.8	100
Female insert, Ag	2,5 / 14	02.125.4529.8	100
Male insert, Au	0,14 – 0,37 / 26 – 22	05.544.4129.7	100
Female insert, Au	0,14 – 0,37 / 26 – 22	02.125.4129.7	100
Male insert, Au	0,5 / 20	05.544.4229.7	100
Female insert, Au	0,5 / 20	02.125.4229.7	100
Male insert, Au	0,75 – 1,0 / 18	05.544.4329.7	100
Female insert, Au	0,75 – 1,0 / 18	02.125.4329.7	100
Male insert, Au	1,5 / 16	05.544.4429.7	100
Female insert, Au	1,5 / 16	02.125.4429.7	100
Male insert, Au	2,5 / 14	05.544.4529.7	100
Female insert, Au	2,5 / 14	02.125.4529.7	100
Technical data			
Rated voltage	50V		
Rated voltage according to UL/CSA	50 V AC/DC		
Rated impulse voltage	0.8 kV		
Rated current	10 A		
Degree of pollution	3		
Rated cross section			
EN 60999	0.5 – 2.5 mm ²		
UL	see table below		
CSA	see table below		
Number of contacts	1		
Shielding	Shielding positioned over the cable clamp on the contact carrier		
External diameter of the sheathed cable	3 – 6 mm / 6 – 9.5 mm		
Insulating material	PC		
Flammability class of insulating housing	UL 94 V-0		
Kontakte			
Material	Copper alloy		
Surface	Ag, Au		
Contact resistance	< 4 mΩ		
Temperature range	-40 ... +70 °C		
Description	Type	Part No.	P.U.
Accessories			
Crimping tool		95.101.0800.0	1
Crimping die	"B"	05.502.2100.0	1
Contact positioner	"1"	05.502.3100.0	1
Extraction tool		05.502.0710.0	1
Wire cross section			
	Rated current		
	UL	CSA	
16 AWG, stranded, Cu	20.5 A	11 A	
18 AWG, stranded, Cu	18 A	9.5 A	
20 AWG, stranded, Cu	14 A	7.5 A	
22 AWG, stranded, Cu	12 A	6 A	
24 AWG, stranded, Cu	8.5 A	4.5 A	
26 AWG, stranded, Cu	7 A	3.5 A	

Dimensions

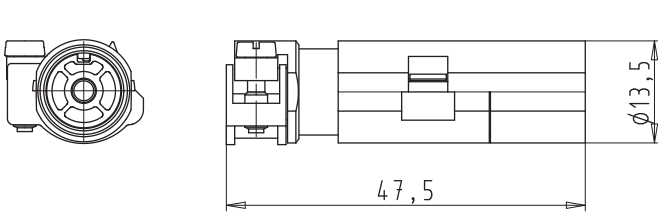
Male insert



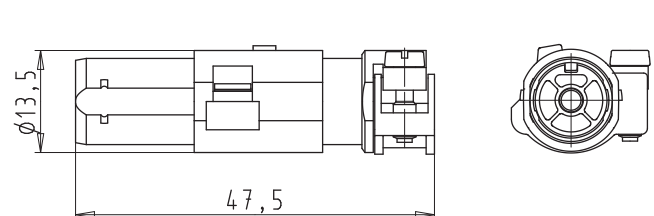
Female insert



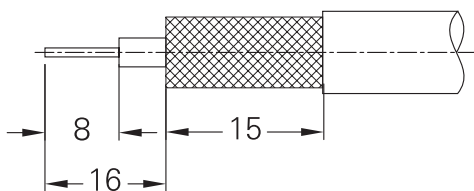
Contact holder male insert



Contact holder female insert

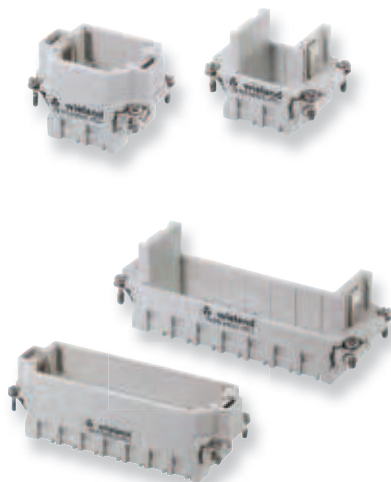


Insulation strip length



Modular connector system

Module frame *revos*^{FLEX}

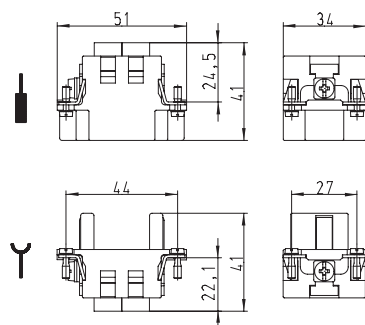


Figures:
2-Slots and 7-Slots
Male / Female

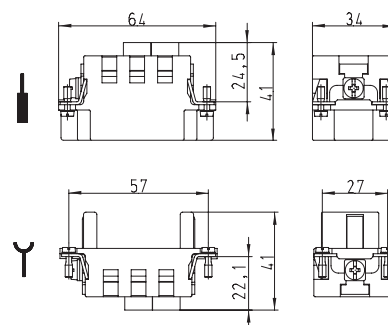
Description	Type	Part No.	P.U.
Module frame <i>revos</i>^{FLEX}			
gray RAL 7032	2-Slots, Size 6		
Male	FLE MRS 6	78.010.0653.0	10
Female	FLE MRB 6	78.000.0653.0	10
Module frame <i>revos</i>^{FLEX}			
gray RAL 7032	3-Slots, Size 10		
Male	FLE MRS 10	78.010.1053.0	10
Female	FLE MRB 10	78.000.1053.0	10
Module frame <i>revos</i>^{FLEX}			
gray RAL 7032	5-Slots, Size 16		
Male	FLE MRS 16	78.010.1653.0	10
Female	FLE MRB 16	78.000.1653.0	10
Module frame <i>revos</i>^{FLEX}			
gray RAL 7032	7-Slots, Size 24		
Male	FLE MRS 24	78.010.2453.0	10
Female	FLE MRB 24	78.000.2453.0	10
Technical data			
Insulating material	Polycarbonate, halogen-free		
Flammability class	UL 94 V-0		
Temperature range	-40 ... +120 °C		
Housing <i>revos</i>^{BASIC} / <i>revos</i>^{BASIC M}		Page	
Size	6/6H	134–141, 210, 212	
Size	10/10H	142–159, 214, 216	
Size	16/16H	160–179, 218, 220	
Size	24/24H	180–199, 222, 224	

Dimensions

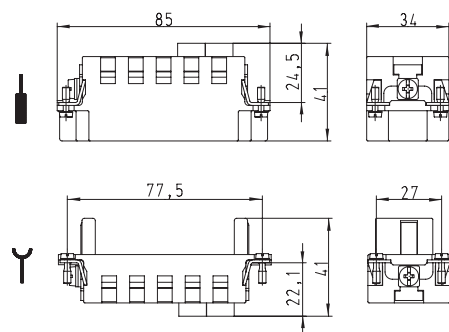
2-Slots



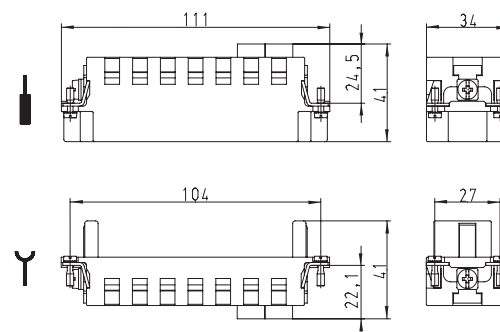
3-Slots



5-Slots

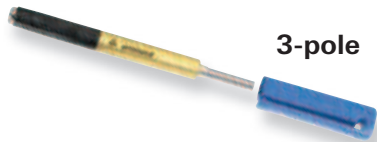


7-Slots



Modular connector system – Extraction tool

Extraction tool



3-pole



4-pole



5-pole



10-pole



20-pole

for modular inserts



Description	Type	Part No.	P.U.
Accessories			
Extraction tool	MOD. 3POL	05.502.0910.0	1
Extraction tool	MOD. 4POL	05.502.0610.0	1
Extraction tool	MOD. 5POL	05.502.0810.0	1
Extraction tool	MOD. 10POL	05.502.0710.0	1
Extraction tool	MOD. 20POL	05.502.0410.0	1
Extraction tool for modular inserts		05.502.1010.0	1

Module Carrier and Upper Shell

Module Carrier and Upper Shell **revos** FLEX COMPACT 1M

Module Carrier

with locking lever
without locking lever



Upper Shell Lateral cable entry



Upper Shell Top cable entry



Description	Type	M	Part No.	P.U.
Module Carrier				
with locking lever	RFC MC L 1 M A20		78.320.0134.0	1
without locking lever	RFC MC 1 M A20		78.330.0134.0	1
Upper Shell				
Lateral cable entry M20				
with threaded collar	RFC TS 1M M20S A21	20	78.352.0134.1	1
with cable gland, IP68, $\rightarrow \text{Ø} \leftarrow$ 8 – 13 mm	RFC TS 1M M20S A25	20	78.352.0134.5	1
Lateral cable entry M25				
with threaded collar	RFC TS 1M M25S A21	25	78.353.0134.1	1
with cable gland, IP68, $\rightarrow \text{Ø} \leftarrow$ 11 – 18 mm	RFC TS 1M M25S A25	25	78.353.0134.5	1
Top cable entry M20				
with threaded collar	RFC TS 1M M20T A21	20	78.362.0134.1	1
with cable gland, IP68, $\rightarrow \text{Ø} \leftarrow$ 8 – 13 mm	RFC TS 1M M20T A25	20	78.362.0134.5	1
Top cable entry M25				
with threaded collar	RFC TS 1M M20T A21	25	78.363.0134.1	1
with cable gland, IP68, $\rightarrow \text{Ø} \leftarrow$ 11 – 18 mm	RFC TS 1M M20T A25	25	78.363.0134.5	1

Technical data

Material	aluminum
Surface	-
Locking levers	stainless steel
Gasket	NBR
PE connection	0.34 – 10 mm ²
Corrosion protection	720 hrs (ISO 9227)
Mating cycles	500 (EN 61984)
Vibration	Class B – Category 1 (DIN EN 50155)

Degree of protection

with appropriate cable glands	IP65 & IP68 (3 m / 10 hrs) & IP69k (DIN EN 60529)
Temperature range	-40 °C – +120 °C

EMC

EMC coupling resistance acc. to IEC60603-7-3	< 10 mOhm DC to 10 MHz
EMC shielding attenuation	> 70dB 10 MHz to 100 MHz

Expanded measuring span (in connection with suitable EMC cable screw gland)

Approval

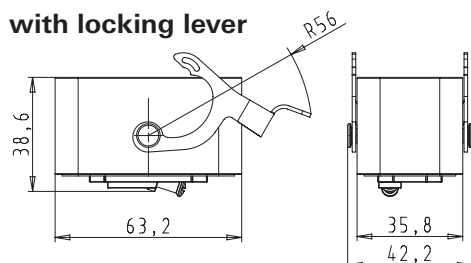
NEMA-Degree of protection	UL Type 4x
Applicable modules	all modules with module width 1

Description	Type	M	Part No.	P.U.
Accessories				
Cable gland IP68, nickel-plated brass	Connection range 8 – 13mm	20	Z5.507.1321.0	10
Cable gland IP68, nickel-plated brass	Connection range 11 – 18mm	25	Z5.507.1521.0	10
Cable gland IP68 EMC, nickel-plated brass	Connection range 8 - 13 mm	20	Z5.507.4821.0	10
Cable gland IP68 EMC, nickel-plated brass	Connection range 11 - 18 mm	25	Z5.507.5021.0	10
Cable gland IP69k nickel-plated brass	Connection range 6 - 12 mm	20	Z5.505.7121.0	10
Cable gland IP69k nickel-plated brass	Connection range 11 - 17 mm	25	Z5.505.7221.0	10

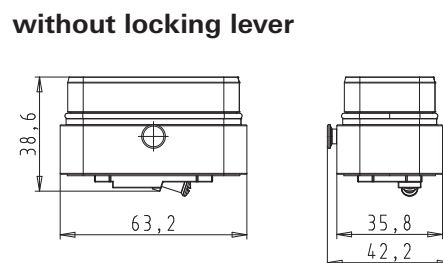
Dimensions

Module Carrier

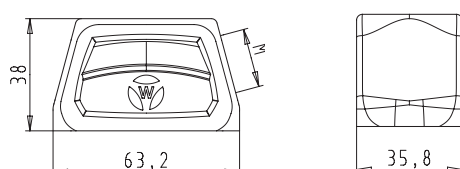
with locking lever



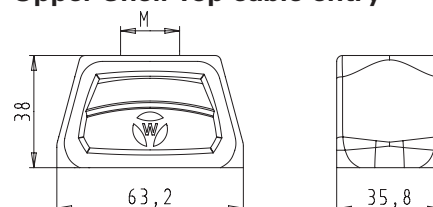
without locking lever



Upper Shell Lateral cable entry



Upper Shell Top cable entry

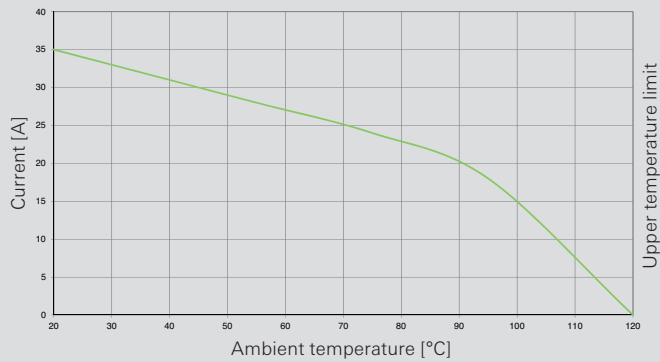


Derating curve

Derating curve according to IEC 60512 sec. 3

78.003/013.0253.0 **revos**FLEX 2-pole / **revos**FLEX COMPACT 1 M

— Contact Ø 2.5 mm turned, 2.5 mm², 2-pole

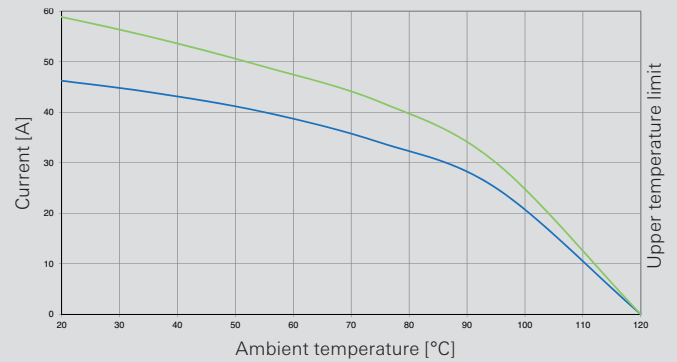


Derating curve according to IEC 60512 sec. 3

78.004/014.0353.0 **revos**FLEX 3-pole / **revos**FLEX COMPACT 1 M

— Contact Ø 3.6 mm turned, 6.0 mm², 3-pole

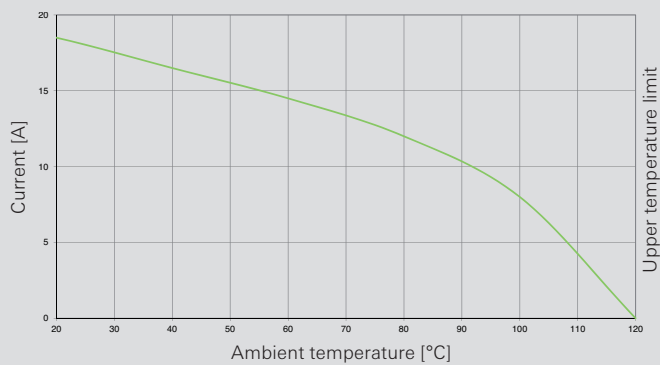
— Contact Ø 3.6 mm turned, 10 mm², 3-pole



Derating curve according to IEC 60512 sec. 3

78.003/013.0453.0 **revos**FLEX 4-pole / **revos**FLEX COMPACT 1 M

— Contact Ø 2.5 mm stamped, 1.5 mm², 4-pole

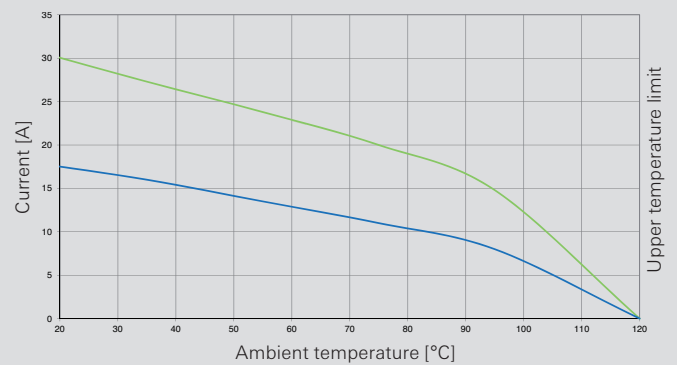


Derating curve according to IEC 60512 sec. 3

78.003/013.0553.0 **revos**FLEX 5-pole / **revos**FLEX COMPACT 1 M

— Contact Ø 2.5 mm turned, 1.0 mm², 5-pole

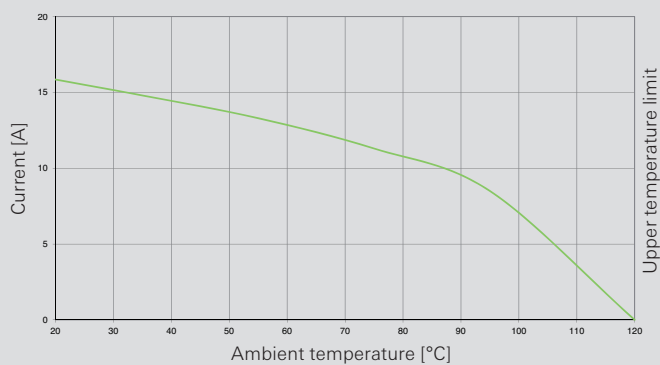
— Contact Ø 2.5 mm turned, 2.5 mm², 5-pole



Derating curve according to IEC 60512 sec. 3

78.002/012.1053.0 **revos**FLEX 10-pole / **revos**FLEX COMPACT 1 M

— Contact Ø 1.6 mm turned, 1.0 mm², 10-pole



Derating curve according to IEC 60512 sec. 3

revosFLEX Spring clamp module 78.203/213.0453.0 / **revos**FLEX COMPACT 1 M

— Ø 1.0 mm², 4-pole

— Ø 2.5 mm², 4-pole

