wieland

Electrical
Connections

gesis® IP+

Installation System in IP 65 ... IP 68

For use in rough environments

Excerpt from the product range

0162.6 MC 04/07

gesis® IP+

Areas of applications

For electrical installations with increased requirements for the degree of protection

Consumer devices can be connected

- **quickly**
- **clearly arranged**
- **touch-proof according to VDE 0606**
- **under tough conditions**

The benefits:

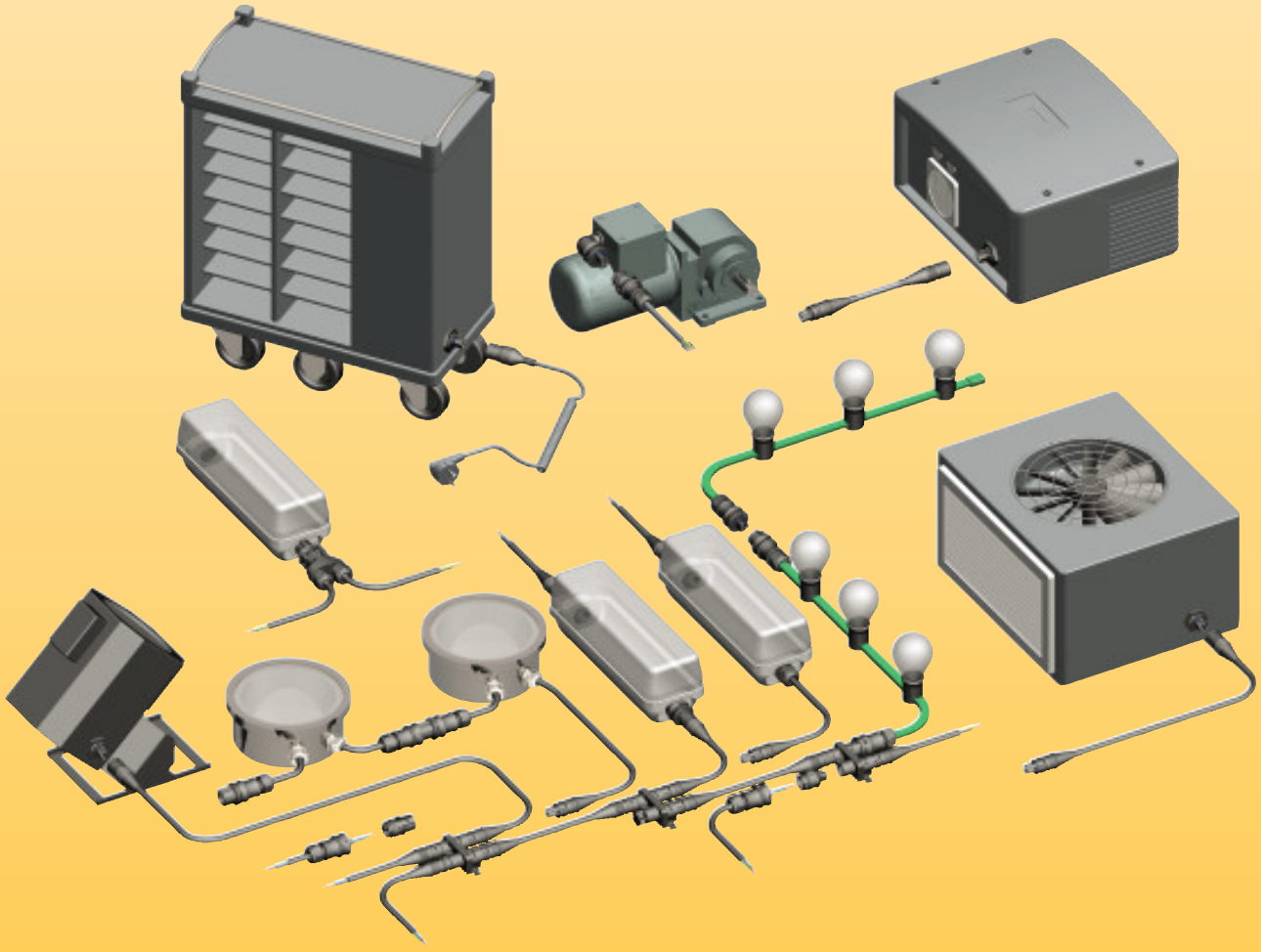
- Complete installation system
- Minimum installation costs due to small number of individual parts
- Simple and safe connection
- All components are reusable
- Essential time savings and cost reductions

Application examples:

- Underground garages; parking garages; prefabricated houses
- Mechanical and system engineering
- Solar technology
- Lighting for construction sites
- Light advertisement systems
- Temporary installations (e.g. Christmas or marquee lighting)

Technical data:

- IP 65...IP 68 (3 m, 2 hours)
- 250 V, 250 V/400 V, 20 A (25 A, 1~)
- Spring clamp connection for the wires,
  rigid 0.5 – 2.5 mm^2
  flexible 0.5 – 1.5 mm^2
- Screw connection for rigid and flexible wires 1.5 – 4.0 mm^2



The system

From the distribution unit to the consumer devices

The ***gesis*** IP+ system consists of four basic components:

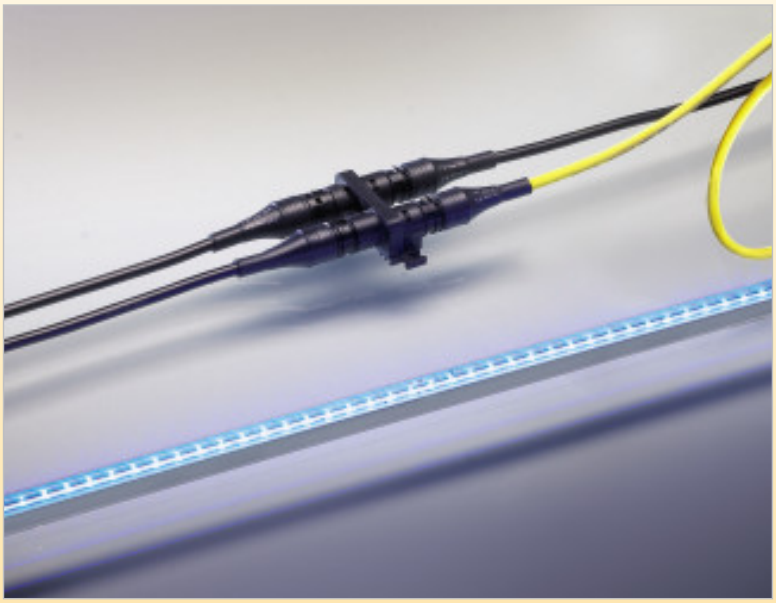
- Connectors for self-assembly
- Pre-assembled distribution blocks
- Cable assemblies and
- Device connections

The latter are integrated directly in the consumer device. Pre-assembled in the factory, the luminaires for example can be delivered to the construction site ready for plug-in. Cover pieces guarantee IP protection for unused slots.
These components enable consistent installations from the distribution unit to the consumer devices in protection degree IP 65 ... IP 68.

The entire product range is provided in the ***gesis*** IP+ master catalog:
part no. 0061.5 German
part no. 0161.5 English

RST 20i2

Mains, 2 pole, low voltage



General

The two pole connector is based on the 3 pole variation with one pole left empty.

Basically there are two variations. A connector for low-voltage applications (such as LED lamps) and a connector for protection class II applications. The latter are downward compatible with the 3 pole system with ground connector (RST 20i3). Thus you can change from the system with ground connector to the 2 pole system – but not vice versa!

Protection class II
L, N

gray black

x = 0 = gray
x = 1 = black
y = length in m
z = 0 = H05VV
z = 3 = H07RN-F

Connectors

with screw connections

Pole marking:
L, N, protection class II
Design:
for illumination cable
H05RNH2-F 2x1,5

Female connector

Design
Illumination cable

Part no.
96.021.4453.x

Male connector

Design
Illumination cable

Part no.
96.022.4453.x

Distribution block

Pole marking:
L, N, ground, 20 A

with mounting option

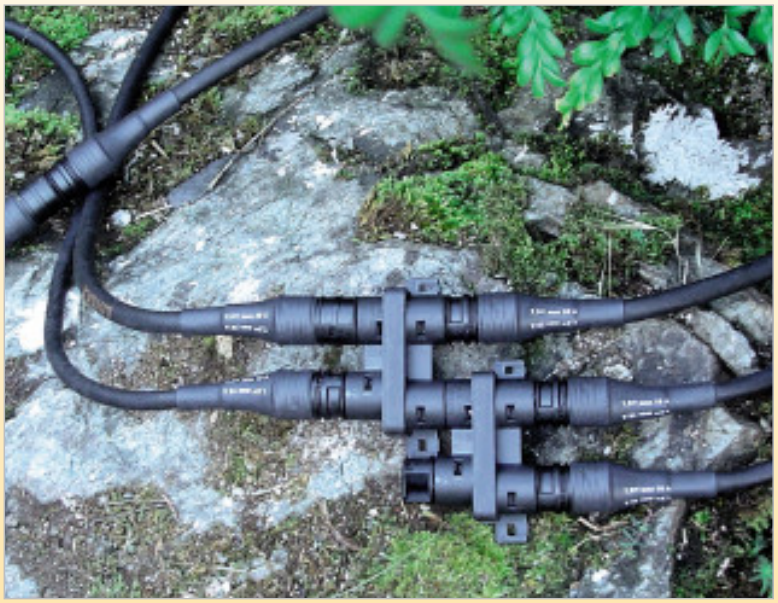
Part no.
96.020.0153.x

without mounting option

Part no.
96.020.0253.x

RST 20i3

Mains, 3 pole



General

The 3 pole connectors come in two variations. The standard version for general mains applications, and a green coding for applications in multi-phase systems.

Both connectors are mechanically coded. This means that only associated pairs of male and female can be connected with the correct polarity. You therefore have the security of a clear separation of different applications without having to redo any incorrect connections.

Connectors

with screw connections

Pole marking:
L, N, ground, 20 A
Design:
For cables Ø 6 – 10 mm,
Ø 10 – 14 mm

Female connector

Design	Part no.
Ø 6 – 10 mm	96.031.4053.x
Ø 10 – 14 mm	96.031.4153.x

Male connector

Design	Part no.
Ø 6 – 10 mm	96.032.4053.x
Ø 10 – 14 mm	96.032.4153.x

Splitter connector

with screw connections

Pole marking:
L, N, ground, 20 A
Design:
For cables Ø 6 – 10 mm,
Ø 10 – 14 mm

See “Accessories” for the mounting plate used to fasten the splitter connector

Female connector

Design	Part no.
Ø 6 – 10 mm	96.031.4253.x
Ø 10 – 14 mm	96.031.4353.x

Device connection M25, standard

with spring clamp connections

Pole marking:
L, N, ground, 20 A

Female connector

Part no.
96.031.1053.x

Male connector

Part no.
96.032.1053.x

Device connection M20, modular, angled

with spring clamp connections

Pole marking:
L, N, ground, 20 A

Female connector

Part no.
96.033.2053.x

Male connector

Part no.
96.034.2053.x

Cable assemblies, 1.5 mm²

Extension cable

Female – Male
with locking device

Pole marking:
L, N, ground, 20 A

Part no.
96.232.y0z0.x

Connection cable

Female – Free end
with ultrasonically welded wire ends

Pole marking:
L, N, ground, 20 A

Part no.
96.232.y0z3.x

Device connection cable

Male – Free end
with ultrasonically welded wire ends and locking device
Pole marking:
L, N, ground, 20 A

Part no.
96.232.y0z4.x

x = 0 = gray
x = 1 = black
y = length in m
z = 0 = H05VV
z = 3 = H07RN-F

Cable assemblies, 2.5 mm²

Extension cable

Female – Male
with locking device

Pole marking:
L, N, ground, 20 A

Part no.
96.233.y0z0.1

Connection cable

Female – Free end
with ultrasonically welded wire ends

Pole marking:
L, N, ground, 20 A

Part no.
96.233.y0z3.1

Device connection cable

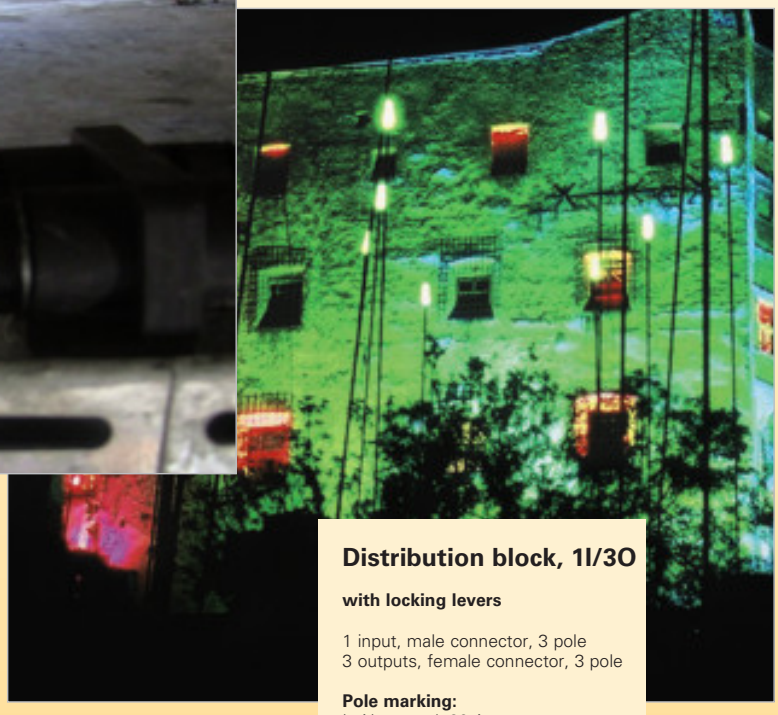
Male – Free end
with ultrasonically welded wire ends and locking device
Pole marking:
L, N, ground, 20 A

Part no.
96.233.y0z4.1

x = 0 = gray
x = 1 = black
Y = length in m
Z = 0 = H05VV
Z = 3 = H07RN-F

RST 20i3

Mains, 3 pole



Power cable (molded variation)

Connection cable

Safety plug
(indoor applications)
with cable H05VV 3G1,5
with RST female connector in gray
Pole marking:
L, N, ground, 20 A

Part no.
99.706.0000.7 Length: 1.5 m

Connection cable

Safety plug
(outdoor applications)
with splash guard
Cable H07RN-F 3G1,5
with black RST female connector
Pole marking:
L, N, ground, 20 A

Part no.
99.704.0000.7 Length: 1.5 m

Distribution block, 1I/3O

with locking levers

1 input, male connector, 3 pole
3 outputs, female connector, 3 pole

Pole marking:
L, N, ground, 20 A

with mounting option

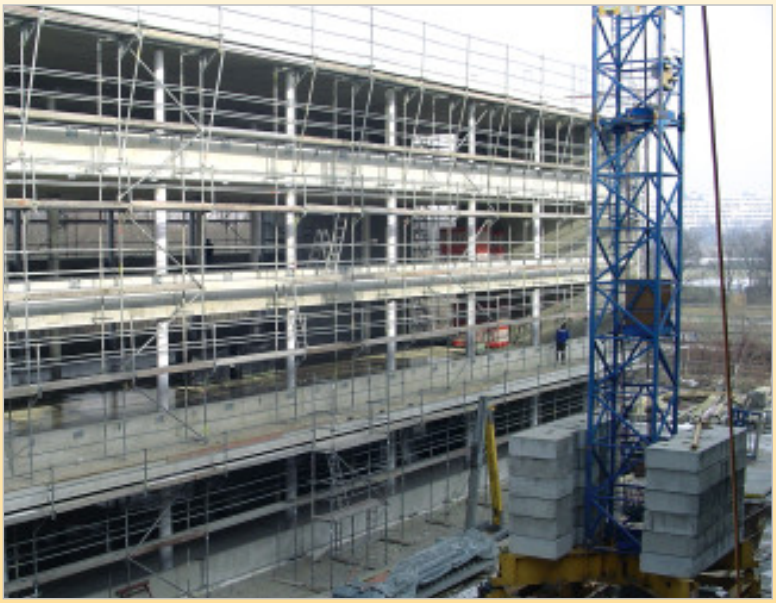
Part no.
96.030.0153.x

without mounting option

Part no.
96.030.0253.x

RST 20i5

Mains, 5 pole, low voltage, mains + dimming



General

The 5 pole connectors come in three variations. The standard version for general mains applications; a version to combine mains and dimming signals; and finally a version for low voltage applications.

All connectors are mechanically coded. This means that only associated pairs of male and female can be connected with the correct polarity. You therefore have the security of a clear separation of different applications without having to redo any incorrect connections.

Connector for cable Ø 10 – 14 mm and Ø 13 – 18 mm

with screw connections for rigid, fine-stranded and stranded wires of 0.75 – 4.0 mm². Unassembled with cable gland and locking device.

Pole marking:
3, ground, N, 2, 1

Female connector

Design	Part no.
Ø 10 – 14 mm	96.051.4153.x
Ø 13 – 18 mm	96.051.4553.x

Male connector

Design	Part no.
Ø 10 – 14 mm	96.052.4153.x
Ø 13 – 18 mm	96.052.4553.x

Splitter connector

with screw connections for rigid, fine-stranded and stranded cables of 0.75 – 1.5 mm². Unassembled with cable gland and locking device.

Pole marking:
3, ground, N, 2, 1

Female connector

Design	Part no.
Ø 10 – 14 mm	96.051.4353.x

M 25 device connection

With screw connections for rigid, fine-stranded and stranded cables of 0.75 – 4.0 mm².
1 connection point per pole. With locking device. Fixing in position guaranteed by flattening the thread. With M25x1.5 thread, external cable gland.

Pole marking:
3, ground, N, 2, 1

Female connector

Part no.
96.051.5053.x

Male connector

Part no.
96.052.5053.x

Device connection M20, modular, angled

With screw connections for rigid, fine-stranded and stranded cables of 0.75 – 4.0 mm².
1 connection point per pole. With locking device. Fixing in position guaranteed by flattening the thread. With M20x1.5 thread, internal cable gland.
Pole marking:
3, ground, N, 2, 1

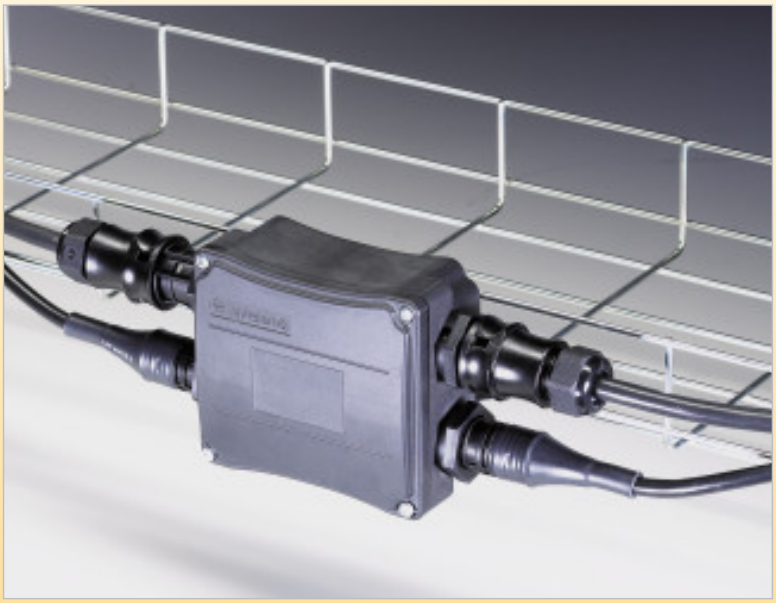
Female connector

Part no.
96.053.6053.x

Male connector

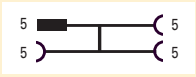
Part no.
96.054.6053.x

Distribution units



Distribution units

Circuit diagram

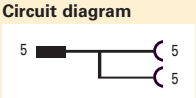


Design:
black coding

Part no.
96.050.0153.1

Distribution units

Circuit diagram

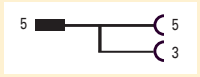


Design:
black coding
unused output is closed

Part no.
96.050.1153.1

Distribution units

Circuit diagram

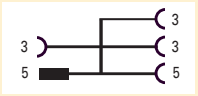


Design:
black coding
unused output is closed

Part no.
96.050.3153.1 (L1)
96.050.4153.1 (L2)
96.050.5153.1 (L3)

Distribution units

Circuit diagram

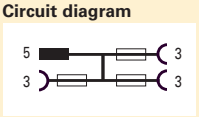


Design:
black coding
through-wiring 5 pole
Outputs 3 pole: L1, L2, L3

Part no.
99.902.0000.7

Distribution units

Circuit diagram

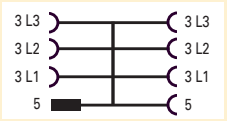


Design:
black coding
input 5 pole, outputs 3 pole:
L1, L2, L3 with 10 A fine fuse
included in the delivery

Part no.
99.901.0000.7

Distribution units

Circuit diagram



Design:
black coding
through-wiring 5 pole
outputs 3 pole: 2x L1, L2, L3

Part no.
96.050.7153.1

Cover pieces with protection against loss

2 – 3 pole

Female connector

Design	Part no.
gray	99.415.6205.2
black	99.416.6205.2

Male connector

Design	Part no.
gray	99.413.6205.2
black	99.414.6205.2

Cover pieces with protection against loss

4 – 5 pole

Female connector

Design	Part no.
gray	99.531.0000.7
black	99.532.0000.7

Male connector

Design	Part no.
gray	99.529.0000.7
black	99.530.0000.7

Mounting plate

for splitter connectors

Coding	Part no.
gray	01.006.1553.0
black	01.006.1553.1

Accessories

RST 20i2...i5 sample kit

Complete kit

Contents:
– Connectors,
  including all codings
– Device connections
– Cable assemblies
– Distribution units
– Cover pieces

Part no.
99.431.0000.0

RST 20i3 sample kit

to get to know

Contents:
– Connectors
– Device connections
– Cover pieces

Part no.
99.429.0000.0

RST 20i5 sample kit

to get to know

Contents:
– Connectors
– Device connections
– Cover pieces

Part no.
99.430.0000.0

wieland

Electrical
Connections

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Your contact person:

AT Wieland

Components and system components for the control cabinet
- DIN rail terminal blocks
  - with screw connection
  - with spring clamp connection
  - with IDC connection
- Safety
  - Safety relays
  - Modular safety systems
- Fieldbus components
- Interface
  - Power supplies
  - Overvoltage protection
  - Measuring and monitoring relays
  - Time and switching relays
  - Coupling relays/solid state relays
  - Analog modules
  - Passive interfaces

Components and system components for field applications
- Remote automation
  - Remote power distribution
  - Remote fieldbus interface
- Industrial multipole connectors
  - Modular multipole connectors
  - High-density multipole connectors
  - High-current multipole connectors
  - Multipole connectors for hazardous areas
  - Bushings for control cabinets
  - D-Sub connectors
- Round connectors

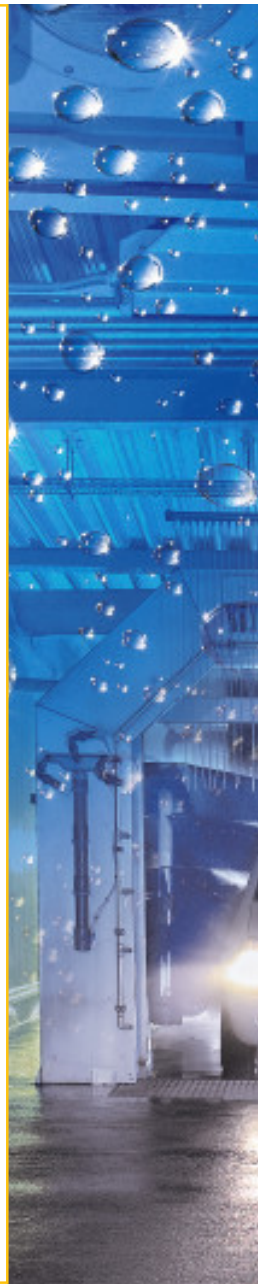
Empty housings and appliance connectors/terminal strips

AT Schleicher

PLC systems and CNC based control systems
- Operator panels
- Application engineering & system solutions
- Customized products

BIT Wieland
- Building installation systems
  - Mains connectors IP20/IP65...IP68
  - Bus connectors
  - Combined connectors
  - Low-voltage connectors
  - Flexible flat cable systems
  - Distribution systems
  - Switching devices for EIB/KNX, LON, radio control
  - DIN rail terminal blocks for electrical installations
  - Overvoltage protection

PCB connectors Wieland
- PC board connectors
  - with screw connection
  - with spring clamp connection
  - with TOP connection



P r o d u c t R a n g e