

### **RST**<sup>®</sup>

Pluggable electrical installation with highest IP rating (IP6X)

Catalog 2017





### Pluggable connections Table of contents

The idea of pluggable installation	4 - 7	
The fields of application	8 - 29	
System solutions	30 - 35	
The <b><i>RST</i>®</b> product line at a glance	36	
<b>RST</b> <sup>®</sup> MINI – the product line RST16 RST16i2/3, connector system 2-/3-pole RST16i4/5, connector system 4-/5-pole Technical data	37 - 39 40 - 49 50 - 57 58 - 61	<b>RST</b> ® MINI
<b>RST</b> <sup>®</sup> CLASSIC – the product lines RST20/25 RST20i2, connector system 2-pole RST20i3, connector system 3-pole RST25i3, connector system 3-pole RST20i4, connector system 4-pole RST20i5, connector system 5-pole RST25i5, connector system 5-pole Accessories and technical data	62 - 63 64 - 83 84 - 105 106 - 111 112 - 133 134 - 155 156 - 161 162 - 175	<b>RST</b> <sup>®</sup> CLASSIC
<b>RST</b> <sup>®</sup> MINI / <b>RST</b> <sup>®</sup> CLASSIC – Distributor Compact and multi distribution units Accessories and technical data	176 – 185 186 – 191	Compact/multi- distribution units
<b>RST</b> <sup>®</sup> POWER – the product line RST50 RST50i4, connector system 4-pole RST50i5, connector system 5-pole Accessories and technical data	192 – 195 196 – 199 200 – 205	<b>RST</b> ® POWER
Information Index Support, Service Our subsidiaries	206 - 209 210 - 219 220 - 222 223	

### The idea of pluggable installation

As easy as brilliant



#### Work steps:

#### **Power distribution:**

- Cut the cable to length
- Strip the cable sheath
- Insert the cable into the junction box
- Strip the wire insulation
- Connect the individual wires
- Close the junction box

#### Luminaire installation:

- Open the luminaire
- Cut the cable to length
- Insert the wire into the luminaire
- Strip the wire insulation
- Connect the individual wires
- Close the luminaire



#### The gesis®installation philosophy:

The idea is as easy as it is brilliant. An extensive network of components of electrical connection technology, preassembled and most carefully tested, enables a consistently pluggable solution from the distribution board to each point of demand.

This saves time and reduces costs! A great number of renowned manufacturers have recognized this positive trend and, as system partners, already offer their components with pluggable gesis® connectors.

The system's fields of application are as versatile as the system itself. In short: wherever electrical power or signals need to be distributed, gesis® has set a standard.



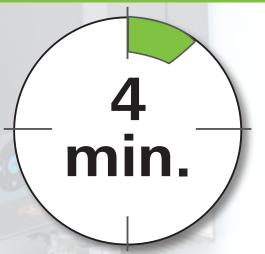




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#### **Pluggable installation from Wieland**

SPLUS





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#### Additional advantages:

- Touch-safe
- Straightforward cable layout
- Simple replacement of devices
- Easy expansions or modifications
- Re-usable
- Mechanical codings
- Integrated locking device and strain relief

#### Work steps:

Attach the luminaire

plug & play

### **Electrical installation with a system A concept for all situations**

Wieland, as the world market leader in the field of pluggable electrical installation, provides a consistently pluggable installation system: complex installations from the distribution board to each point of demand can be implemented with only four base components.

1 Connector (female + male) for the supply into the connector system

- interface between conventional and pluggable installation

- **2** Distribution blocks for power or signal distribution within the network
- **3** Pre-assembled cables for routing or supply of electrical power or signals
- 4 Device connections are directly integrated into the end devices and function as the interface to the connector system

DISTRIBUTION

INCOMING

SUPPLY

gesis<sup>®</sup>

**IP20** 

ROUTING

**DEVICE CONNECTION** 

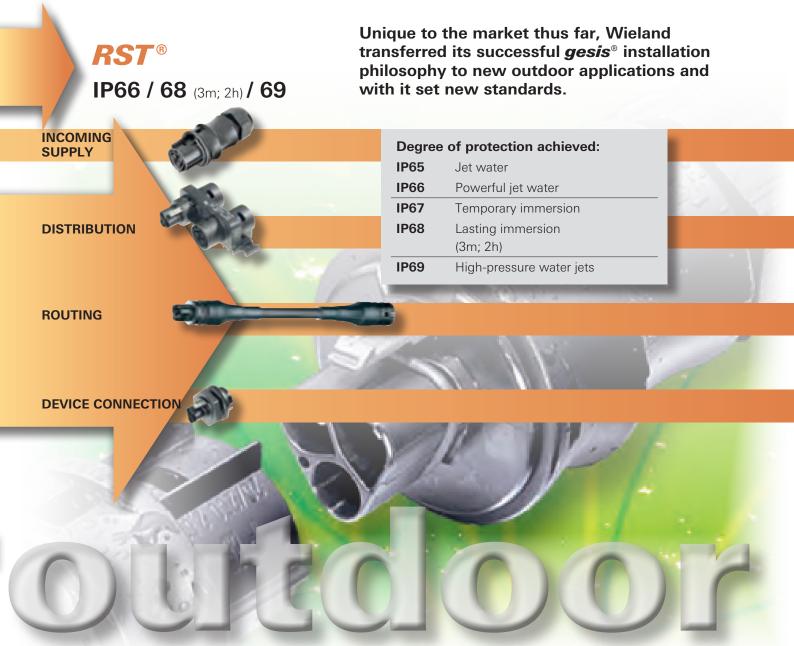
Transfer of the successful gesis® installation philosophy ...







The system



#### ... in areas with increased protection requirements



In many applications, electrical devices and systems must work safely under difficult environmental conditions for many years. For a reliable function, the ingress of water or foreign particles (such as dust, oil, and soot) into production systems, parking garages or outer premises must be avoided. Within the scope of the specified degree of protection the **RST**<sup>®</sup> system even withstands unplanned immersion.

The system is not designed for permanent operation under water.

### **Overview of the fields of application**

Power everywhere - safe and quick!

# POWER CONNECTION FOR ELECTRICAL DEVICES

1.

# CONSTRUCTION POWER SYSTEMS

# OUTDOOR LIGHTING

# SYSTEM ENGINEERING





# SOLAR TECHNOLOGY



# EVENT TECHNOLOGY





# OBJECT AND SHIP BUILDING



### **Complete system for industrial use Connecting quickly and safely**



# The pluggable electrical installation also for industrial use

#### ■ The challenge:

Whether individual applications or complex systems – the tasks are the same: electrical consumer devices must be connected quickly and safely.

Conventional installations do not meet these requirements. Cutting the cables to length, stripping the cable sheath and wire insulation, and finally connecting the components, are not only time-consuming operations, but frequently also cause errors and result in reworking. Cooperation of different trades (mechanical and electrical installation) during the setup of a system impedes the continuous progress of operations. This does not just apply to initial installations.

For expansions, regular servicing or replacement of defective devices, the same installation steps recur over and over again.

#### **Possible applications:**

- Motor connection (3~)
- Power distribution 250/400 V ~
- Power supply up to 50 V, bus
- Voltage supply 24 V, AS-i
- Workstation illumination
- Painting checks



#### The solution:

As a complete installation system, **RST**® provides definite time savings during installation. The components are preassembled in the factory and simply plugged together in the field. Troublesome cutting to length, stripping of sheath and insulation, and connecting is now a matter of the past. Operational downtimes are thus clearly reduced. In the case of defective devices or regular servicing, the consumer devices can be disconnected from the network quickly. As an additional advantage the installer does not have to open the device for completion of the electrical connection, which means that incorrect assembly especially of waterprotected devices can be excluded.



Pre-assembly in a separate location: The **RST**<sup>®</sup> installation system enables completely new possibilities. Entire system sections can be pre-assembled and tested independent of the location of operation. The individual modules are simply plugged together on site.



#### **Cost reductions:**

Connections in system sections are frequently over-dimensioned. This was not least due to a lack of alternatives. But this is where a major savings potential is provided.

The **RST**<sup>®</sup> system counts on completely pre-assembled components which only have to be plugged in on site.

# Making electrical devices pluggable

Device connectors function as an interface between the electrical consumer devices and the **RST**<sup>®</sup> installation system. The consumer device becomes pluggable through the integrated device connector and can therefore be incorporated into the installation system as required.

The device connectors have been equipped with standard threads (M16 and M25) and can therefore be replaced easily by conventional feed-through facilities.

RST<sup>®</sup> MINI: (examples of application)
 RST16i2 AS-i or 24 V
 RST16i3 Power with ⊕
 RST16i4 Power with ⊕
 AS-i and 24 V
 RST16i5 Power with ⊕
 Compact and multi-distribution units

**RST**<sup>®</sup> CLASSIC: (examples of application) **RST20i2** AS-i or 24V **RST20i3** Power with (=)

RST20i4 Power with (1) AS-i and 24V

RST20i5 Power with (=) Compact and multi-distribution units

<b>RST<sup>®</sup> POWER:</b> (examples of application)			
RST50i4	Power with 🕀, without N		
RST50i5	Power with 🕀		





### Rapid mounting system Flexible and modular AS In

# SYSTEM ENGINEERING

# Separate routing of AS-i and extra-low voltage

### AS-i and extra-low voltage up to ~50/-120V

It is possible to select an individual mechanical coding for each circuit. Mechanically coded means that only the matching male and female connector pairs can be plugged together. This ensures a clear separation of the two circuits.

> Example: AS-i with coding 250/400 V in pebble gray

Example: Extra-low voltages with coding ~50/-120V in signal brown Connectors can be pre-assorable on site and are available either for semection of a round cable or c be AS i profile cable

> out the new embled cable

**Technical data:** 

- Voltage supply 50/120 V, 20 A
- IP66 / 68 (3m; 2h) / 69
- Temperatures between -40 and +100° C
- Screw connection  $0.5-4.0\ mm^2$





Application

#### Common laying of AS-i and 24 V (example of application)

#### AS-i and 24 V combined in one cable

Until now AS-i and 24 V have normally been laid separately, but can now be combined and installed in a 4-pole version, too.

#### The highest level of flexibility

The rapid mounting system provides the decisive advantage particularly for the increasingly modular design in function modules. Depending on the application you can switch between the low-cost round cable and the AS-i profile cable as required. Everything is pluggable – for the user, this means top flexibility and at the same time quick and reliable installation. RST<sup>®</sup> MINI: (Sample applications) RST16i2 AS-i or 24V Compact and multi-distribution units

**RST**® CLASSIC: (Sample applications)**RST 20i2**AS-i or 24 V**RST 20i4**AS-i and 24 V**Compact and multi-distribution units** 

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Distribution unit AS-i/24V and power



CTF Certific

### **RST**<sup>®</sup>CLASSIC Pluggable electrical installation with ATEX, IEC Ex certification

# SYSTEM ENGINEERING

#### Used in different industries Definition of explosive hazardous areas

When talking about explosive hazardous areas, everybody thinks of the chemical industry or mining. However, explosion protection is an important topic for many sectors of the processing industry. In some cases, even carpenter's workshops and industrial bakeries may be affected. Special explosion protection measures are necessary wherever a dangerously high concentration of gas/air or dust/air mixtures occurs.

Areas where a potentially explosive atmosphere is possible must be clearly identified as explosive hazardous areas. Explosive hazardous areas are often divided into zones according to the frequency and duration of potentially explosive atmospheres.

The requirements for devices used in these areas are correspondingly high.

#### **Coding:**

electro

Electrical connectors and equipment connections: CE1258 🕢 II 3G Ex ec IIC T6 Gc CE1258 🐼 II 3D Ex tc IIIC T85 °C Dc IECEx SEV 15.0024 X SEV 07ATEX0110X With cable assembly H05VV-F: CE1258 🐼 II 3G Ex ec IIC T6 Gc CE1258 🐼 II 3D Ex tc IIIC T70 °C Dc IECEx SEV 15.0024 X SEV 07ATEX0110X With cable assembly H07RN-F: CE1258 🐼 II 3G Ex ec IIC T6 Gc CE1258 🐼 II 3G Ex ec IIC T6 Gc CE1258 🐼 II 3D Ex tc IIIC T60 °C Dc IECEx SEV 15.0024 X SEV 07ATEX0110X

#### Please note the current rating reduction

- when using H07RN-F cables:
- 2- and 3-pole  $1.5 \text{ mm}^2 \text{max}$ . 14.5 A  $2.5 \text{ mm}^2 \text{max}$ . 17.5 A 4- and 5-pole  $1.5 \text{ mm}^2 \text{max}$ . 12.5 A  $2.5 \text{ mm}^2 \text{max}$ . 17.0 A when using the splitter connection:

2-, 3-, 4- and 5-pole  $1.5 \,mm^2 - max. 16 \,A$ and when using the distribution blocks 2- and 3-pole with a cable cross section of  $2.5 \,mm^2$  to max. 17.5 A

### Application

#### **Temperature classes**

(max. device surface temperature)			
T1	450 °C		
T2	300 °C		
Т3	200 °C		
Τ4	135 °C		
T5	100 °C		
T6	85 °C		

Device group I (mining)	
Category M1	Category M2
Continuous, long, or frequent periods of exposure	Occasional periods of exposure
> Very high degree of safety	> High degree of safety

Device group II (other areas)					
Category 1		Categ	jory 2	Category 3	
Continuous, long or frequent periods of exposure		Occasional expc		Infrequent, s of exp	hort periods posure
> Very high degree of safety		> High degree of safety		> Normal degree of safety	
Zone 0	Zone 20	Zone 1	Zone 21	Zone 2	Zone 22
Material	Material	Material	Material	Material	Material
group G	group D	group G	group D	group G	group D

#### Example:

Part number

**9**6.031.4053.1 ↓

**X**6.031.4053.1

To obtain the part numbers for the components with ATEX certificate, the first digit of the regular part number "9" must be replaced with an "X". The minimum order quantity is 100 units per part.

> ATEX sample kits 3-pole: 99.663.0000.0 5-pole: 99.664.0000.0

### *podis*<sup>®</sup> flat cable power bus Remote power distribution without stripping

#### **Power bus**

The *podis*<sup>®</sup> power bus is the innovative solution for remote power distribution. The system comprises supply and distribution modules, maintenance switches, fixed and pluggable power branches, pre-assembled cable harnesses and functional motors, motor starter, LED-luminaires or service sockets.

The power (main and auxiliary power or AS-i) is distributed through an uncut 7 pole flat cable. The flat cable is tapped near the consumer device in any position required using connection modules with IDC technology. Branching and tapping to motor starters and frequency converters are implemented in a fixed or pluggable design.

# Advantages of *podis*<sup>®</sup> – at a glance:

- 5x faster installation
- Fast start-up through error-free connectivity
- Modular system for various functions
  - Smallest remote motor starter in IP65 up to 1.5 kW
  - Robust LED lamps for extreme temperature range

*podis*<sup>®</sup> power bus solutions shorten installation times, reduce production costs and increase flexibility during system expansions or later modifications to the planning.

#### Features

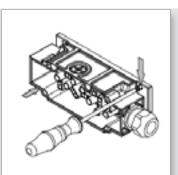
- Termination without stripping of the sheath
- Easy implementation of customer-specific solutions
  - Field distributors for SEW MOV/MOT control

**SYSTEM** 

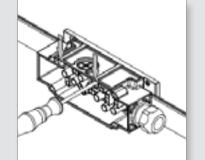
ENGINEERING

- Remote motor starters for airports and logistics applications
- LED emergency lamps for wind power plants
- UL approval for international applications

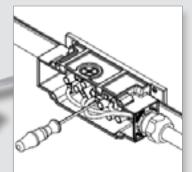




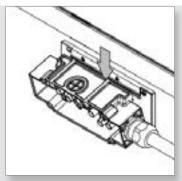
Wall mounting Open the housing



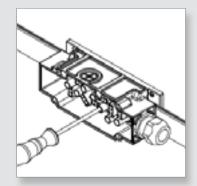
Close the top piece Cable is sealed



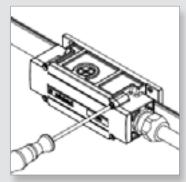
**Connect outgoing cable** 



Insert coded flat cable



Screw in penetrating screws



Close housing cover – finished!



Further information can be found in the catalog "**podis**" order no. 0830.1

### The safe path into the grid The AC Solar connector system

# SOLAR TECHNOLOGY

#### ■ The challenge:

The extraordinary benefits of a pluggable electrical installation have been restricted to the DC side of photovoltaic systems thus far. The connection on the grid side still had to be made in the time-consuming conventional way.

When several inverters are used within an array, the high installation effort becomes apparent.

#### The solution:

With its new AC Solar round connector system, Wieland provides an optimum solution for the AC area. Pre-assembled components with an increased degree of protection ensure a quick and safe installation even under the most adverse conditions.

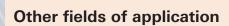
The system includes distribution panels which are delivered in a pre-assembled design, and cable assemblies for the connection between the inverters and the distribution panels.

The system is supplemented by connectors for assembly on site. Leading inverter manufacturers preassemble their devices with the relevant connectors, the interface to the system, in their factories.









- Emergency power supply through batteries (in buildings or systems)
- Transformation of on-board voltage (cars, trucks, railroad, caravans, boats)
- Metal working
- Power generation (fuel cell, wind power plants, photovoltaic systems)



More and more manufacturers recognize this positive trend and offer their devices with *RST*<sup>®</sup> connectors.



#### Solar systems for the home grid

Mobile solar systems for private use are extremely popular. These systems consisting of solar modules and module inverters do not – as usual – feed the solar power into the power supply system as per the Renewable Energies Law (EEG), but provide the energy directly to the users in the own home grid.

The **RST**<sup>®</sup> installation system is set up in next to no time while fulfilling highest safety requirements. The new **RST**<sup>®</sup> system outlet serves as a defined interface between the home grid and the solar system.



For further information on the *RST*<sup>®</sup> system outlet, see Accessories for **RST20i3** or **RST20i5**.

#### RST® MINI:

RST16i3	Single-phase supply
RST16i5	Three-phase supply

#### RST® CLASSIC:

RST25i3	Single-phase supply (up to 32A)	
RST25i5	Three-phase supply	
<b>RST®</b> system outlet		

#### RST® POWER:

RST50i4	Three-phase supply	
	(without N)	
RST50i5	Three-phase supply	

The **RST**<sup>®</sup> MINI series is particularly suitable for confined installation spaces and therefore ideal for MICRO inverters.

The **RST**<sup>®</sup> CLASSIC series has the vastest portfolio and is designed for cross sections of up to 6.0 mm<sup>2</sup>.

The **RST**<sup>®</sup> POWER series combines the best possible connection capabilities with the highest possible degree of compactness. The 4- and 5-pole IP 66/67/69 connectors and device connections are designed for 250/400 V and a maximum current of 50 A. The wire range includes cross sections up to 16 mm<sup>2</sup>.

### The flexible electrical installation **Construction site supply during structural works**

# CONSTRUCTION POWER SYSTEMS

#### ■ The challenge:

Time pressure in the project business is greater than ever: it is therefore even more important that all processes function and are attuned to one another without a problem.

The construction power systems make a major contribution, as they ensure the supply of electrical power during structural work. The requirements for such construction site supply systems are extremely high. On the one hand, they must withstand extreme conditions, and on the other hand, provide as much flexibility as possible.

#### ■ The solution:

Only three base modules are required to implement even complex installations in no time and according to the requirements. The pre-assembled cables are at the core. They are ready for use in all required lengths and can be installed as required. Distribution components furthermore enable the distribution of power to the relevant location. And finally, there are the luminaires. They have been equipped with device connectors and can be integrated into the installation by simply plugging them in.











#### The benefits at a glance:

#### Low investment requirements

All connection cables have been preassembled and tested. With the available range of device connectors almost any standard luminaires can be made pluggable. Therefore, the luminaire manufacturers can easily integrate them into their products.

#### Low stock requirements

In contrast to the luminaires with a fixed connection cable, these luminaires can easily be stockpiled due to their pluggability. Transport becomes easier as well. The cables are stored separately. There are only a few different cable types, as the same lengths can be cascaded.

#### Easy handling

The luminaires can be assembled easily on the construction site, as the electrical connection is made after the luminaires have been installed. Due to the compact dimensions of the pluggable components, the cables can be laid out much more flexibly, as small bore holes or knock-outs are no obstacle.

#### High operational safety

The power supply system at the construction site cannot be used by third parties (unrelated trades), as the construction machines are normally not equipped with **RST**<sup>®</sup> connectors. Its high degree of protection prevents any failure, even with short-term flooding of the connections.



RST20i3 Power 3-pole RST20i5 Power 5-pole

**RST**<sup>®</sup> POWER: **RST50i5** Power 5-pole

### **Pluggable solutions for event technology**

**Outdoor installations – no longer an adventure** 

# EVENT TECHNOLOGY

#### The challenge:

Decorative illuminations during Christmas time or for other major events are extremely popular today. The possibilities for creating pleasant atmospheres or spotlighting objects are almost unlimited. But what happens behind the scenes? Standard outlets, carefully packed in PET bottles, or simply wrapped in a plastic bag – this is often common practice (not just in secrecy).

Apart from the fact that improvised solutions like that are questionable in view of safety technology, they are not aesthetically appealing at all. The fact is that there hasn't been an alternative up to now.

#### ■ The solution:

The solution is a system which is suitable for outdoor use without additional protection measures: *RST*<sup>®</sup>.

Consistently pluggable, and with high protection degree **RST**<sup>®</sup> enables the outdoor connection of, for example, luminaires quickly and safely. Special attention was put on the design in order to make it match inconspicuously with the existing installation.

 RST® MINI:

 RST16i3/2
 2 

 RST16i5/4
 4

2- and 3-pole 4- and 5-pole

**RST**CLASSIC: (Sample applications)RST20i2Protection class IIRST20i3Power with (=)





#### **Connectors for illumination cables:**

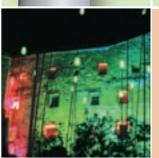
Customary illumination cables can be integrated into the installation through special 2-pole connectors with the corresponding rectangular strain relief. This applies to applications in the professional as well as in the private sector.

The connectors are protected against accidental loosening; they can be unlatched with a tool only. This is a considerable plus in safety for places that are generally accessible. For protected areas (that are only accessible by experts), the connectors can be equipped with a manual disconnect facility for easy disassembly.

#### Post outlet:

The post outlet is simply integrated into existing posts and thus ensures the power supply. It even provides minimal dimensions and optimum weather protection. The post outlet consists of a splash-water-protected device connector which is mounted directly on the post, as well as a firmly connected cable in various lengths for internal wiring.

The cable is strain-relieved and the contacts are protected against condensation. The protective cover is removed and the decorative component is plugged in with the corresponding flexible light tube – plug & play!



Event technology (project lighting, festivals, leisure parks, fairground rides, exhibitions, concerts, light advertisements) Post outlet 2-pole (L, N) and 3-pole (L, N, ⊕)





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1	
	RST
Tia E	RST
Statement and Provide Statements	<b>BST</b>

MINI:
16i3/2 2- and 3-pole
16i5/4 4- and 5-pole

10

**RST**<sup>®</sup> CLASSIC: (Sample applications)**RST20i2**Protection class II**RST20i3**Power with ⊕**RST20i5**Power with ⊕

**RST**\*POWER: (Sample applications)**RST50i5**Power with (=)









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# For requirements with increased protection degree *RST*<sup>®</sup> installation systems provide safety

# **OBJECT AND SHIP BUILDING**

### The benefits at a glance:

Installation up to date: The **RST**<sup>®</sup> installation system and its sophisticated concept mirror the state of the art in modern technology.

- Reduced construction times (initial installation): An installation with **RST**<sup>®</sup> reduces the costs not only for initial installations. Even short-term reorganization can be carried out without a problem. This is enhanced by the guarantee of continuous installation quality.
- Continuous operational cost savings: Maintenance costs and repair during operation are possible even under more difficult work conditions (architecture).
- **Safe power distribution:**

The new compact and multi-distribution units are the heart of pluggable electrical installation and can also be customized.

#### The challenge:

Whether in underground garages, greenhouses or in shipbuilding: electrical installations with increased requirements regarding the degree of protection can be found everywhere. Especially in these fields, it is extremely important that the electrical installation is carried out by an expert. But how does it work in practice? Difficult installation conditions and extreme time pressure often lead to errors, loss of protection and finally to the failure of the system.

#### The solution:

The idea is as easy as it is brilliant. An extensive network of components pre-assembled in the plant and most carefully tested enables a consistently pluggable solution from the distributor to the point of use. This saves time and reduces the costs!





### plug & play in outdoor applications Electrical installations using the "modular system"



# OUTDOOR LIGHTING

#### The challenge:

Expert workmanship plays a major role particularly for electrical installations outdoors. Difficult installation conditions and high time pressure often cause errors, loss of the protection degree and finally failure of the system.

Unfortunately customers often send their complaints about such cases to the luminaire manufacturer and are left with a bad impression.

#### The solution:

As a complete installation system, **RST**<sup>®</sup> is optimally adapted to these increased requirements. It is very flexible in its application and has proven technology at its disposal. Luminaires can thus be delivered in a pre-assembled design. They only have to be plugged in on site. The connectors are also touch-safe when they have not yet been plugged in; they provide a locking device against accidental loosening. The possibility of connecting almost all customary cable types (also underground cables), as well as the IP68 protection degree make the **RST**<sup>®</sup> connector a strong partner for outdoor lighting.

It is not possible to lay the components directly in the ground. In order to satisfy VDE 0100-520 the connections must be protected mechanically in addition and must be accessible for inspection, testing and maintenance.

#### **Connectors:**

For the various luminaire types, power connectors for 250V and low-voltage connectors for LED technology are available. These are mechanically coded and can therefore not be mismated. This provides additional safety.

RST® MINI: RST16i3/2 2- and 3-pole RST16i5/4 4- and 5-pole

RST® CLASSIC: (Sample applications)RST20i2Protection class II, low voltageRST20i3Power 3-poleRST20i5Power 5-pole

# Export-oriented solutions for all nations

International operations with **RST®** connectors

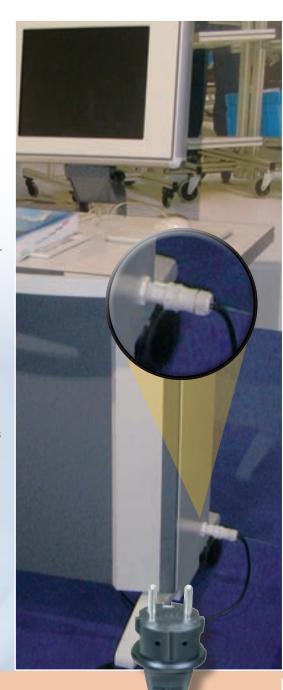
# POWER CONNECTION FOR ELECTRICAL DEVICES



Particularly the export-oriented countries must offer their products in country-specific variations. The products frequently differ only by their power connectors. Stockage of country-specific product variations has, not least, an adverse impact on delivery times and warehouse costs.

#### The solution:

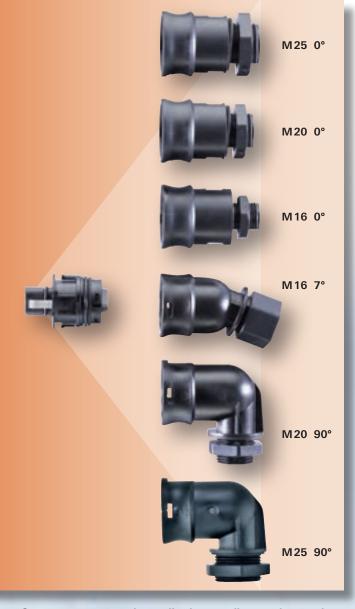
Power connections are made pluggable: one end is pre-assembled with the appropriate national power connector, while the other end always has the same **RST**® connector. Consequentially, the relevant end devices are equipped with **RST**® device connectors, independently of the country. Thus country-specific power connections are available to you. The connection set required for the target country is simply included in the delivery. This simplifies stockkeeping for particularly exportoriented products.



#### **RST**<sup>®</sup> power connectors:

The cables are pre-assembled with the desired power connector<sup>\*)</sup> on the grid side. The **RST**<sup>®</sup> connector is molded to the device side. It is not only extremely compact, but is also protected against bending. The connection between the device and the pre-assembled cable is protected against accidental loosening through an integrated safe locking device. A manual disconnect facility is optionally available.

\*) available on request



On request, we can also realize intermediate angles ranging between  $0^{\circ}$  and  $90^{\circ}$  in order to provide a solution for specific housing geometries.

**RST**® CLASSIC: (Sample applications)**RST20i2**Protection class II**RST20i3**Power with ()

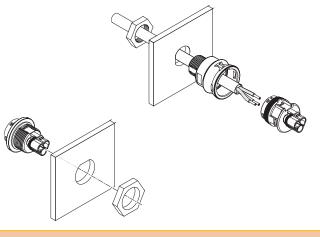
# DEVICE CONNECTORS

Device connectors are integrated into the relevant housing knock-outs and function as an outward interface.

There are basically two variations: the single-piece **M25 standard device connectors (one-piece)** are simply installed inside the housing.

The **modular device connectors** (**two-piece**) are available in M16, M20 and M25 variations as well as in 0°, 7° and 90° angles.





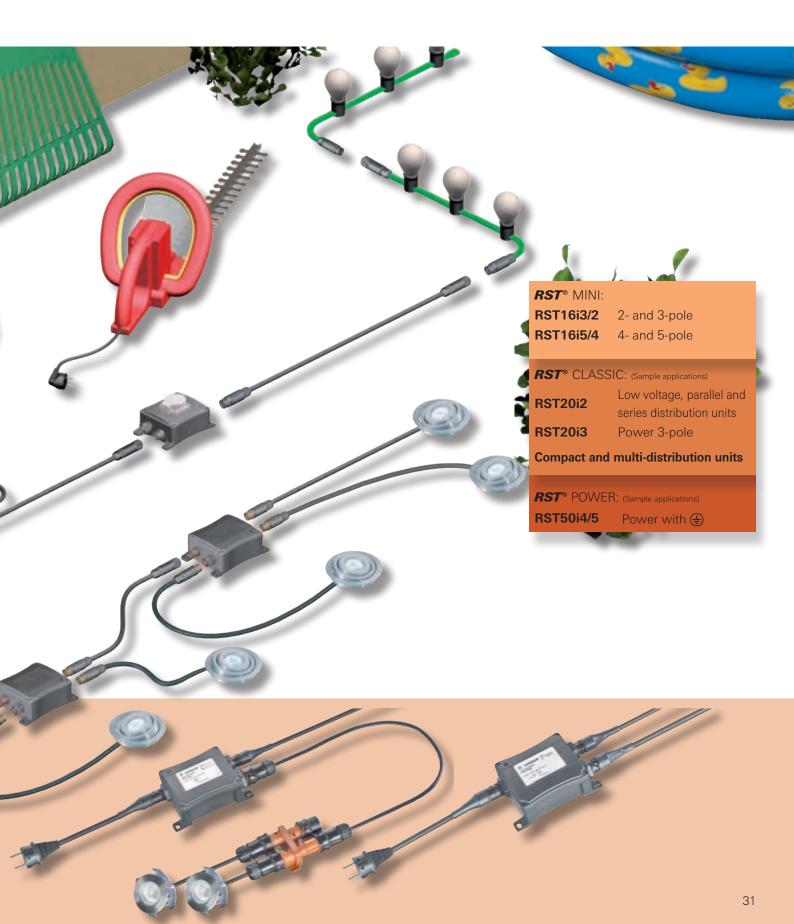
# Consistently pluggable solutions for outdoor installations

- Wireless distribution units
- Current and voltage sources
- Series and parallel distribution
- Distribution units with integrated fine fuses
- Distribution units with integrated grounding outlet



### plug & play in outdoor applications

**Solutions for most demanding requirements** 



### Pluggable 3 D distribution units More than just distribution!

#### The *RST*<sup>®</sup> compact distribution unit – more than just distribution!

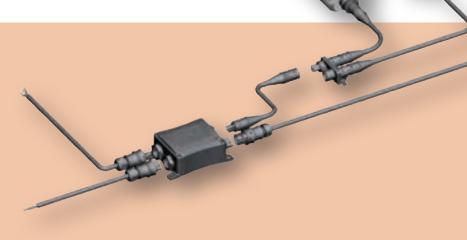
Installations differ from one another. This makes it even more important that the product range is oriented towards the application requirements. A clear separation of different circuits using mechanically coded connectors is as important as pre-assembled cables in various defined lengths.

However, the pluggable distribution units play a major role in power distribution. In their simplest function, they merely have to provide branches in the required locations.

Practice shows, however, that the requirements may be much more complex.

Examples can be found in AC and DC wiring through distribution units with fine fuses up to boxes with integrated safety outlets or switches.





### **RST**® MINI: **RST16i3/2** 2- and 3-pole

**RST16i5/4** 4- and 5-pole

#### **RST®** CLASSIC:

RST20i2	Low voltage, parallel and	
N312012	series distribution units	
RST20i3	Power 3-pole	
Compact and multi-distribution units		
<b>RST</b> <sup>®</sup> POWER: (Sample applications)		
<b>BST50i</b> 4/5	Power with	

#### 1 Connectors

Connectors can be assembled on site. Among other functions they serve as an incoming supply for the **RST**<sup>®</sup> system. Connectors with male and female components are delivered complete with strain relief and enable the connection of all common cable types. A special version also enables the connection of illumination cables for decorative light chains. Depending on the requirements the connectors are available with spring clamp or screw technology.

#### **2** Connectors, Splitter connectors

Connectors can be pre-assembled on site and serve for the through-wiring of electrical consumer devices (luminaires). All connectors are delivered complete with strain relief and are compatible with all common cable types. Depending on the requirements the connectors are available with spring clamp or screw technology. (3)

6

(4)

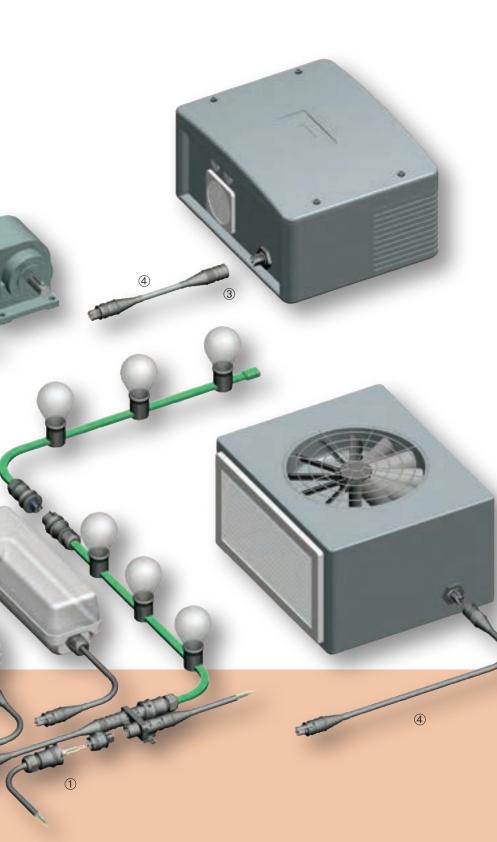
(5)

#### **③ Device connectors**

Device connections are integrated in corresponding knock-outs in the housing of devices. They are the device's interface to the **RST**<sup>®</sup> system. The devices can therefore be plugged in simply on site and integrated into the installation.



### System description Overview of the electrical installation *RST*®



Basically two variations are available: the M25 standard device connector as well as a modular version with M16 or M20 connection threads. An angled design completes the system.

#### **④** Cable assemblies

Electrical power is supplied by using cable assemblies. Three basic versions are distinguished: power connection cables provide the incoming supply of the **RST**® system. They have been prepared for a traditional connection or with a standard plug on the supply side and are preassembled with the required female connector on the outgoing side. Extension cables are pre-assembled with a female or male connector on the relevant cable ends, and serve as feed-through wiring. The connection cable is pre-assembled with a male connector and a free end for wiring to the consumer device.

#### **5** Distribution blocks

The pre-assembled plug-in distribution blocks are incorporated in the installation and thus enable a tap-off to the consumer devices. The distribution block is available with or without mounting flanges.

#### <sup>6</sup> End caps

They are used to safely cover unused contacts. The IP protection is therefore maintained when the device is unplugged.

### **Overview of the** *RST*<sup>®</sup> **product family Pluggable in many dimensions**

Since its market launch the **RST**<sup>®</sup> installation system has systematically grown with the needs of the market and now presents itself as a complete electrical installation system. A choice can be made between three series as required:



Little connectors for extremely confined spaces 2- to 5-pole design, 250V/400V, 16A

All-rounders with the most comprehensive portfolio 2- to 5-pole design, 250/400V, 20 – 32A



**RST®** CLASSIC

High-current connectors for large cross-sections 4- to 5-pole design, 250/400V, 50A



Also on our You Tube channel



**RST**<sup>®</sup> MINI

You Tube



**RST**<sup>®</sup> POWER

All installation connectors have one thing in common: They are innately fitter-friendly and adhere strictly to the system philosophy. Complex installations can be built flexibly, and consumers can simply be plugged into the installation. Mechanical codings within the product lines ensure a clear distinction between different circuits. This practically rules out incorrect connections.

## The **RST**<sup>®</sup> MINI connector series Optimized for installation in confined spaces

The **RST**<sup>®</sup> MINI series marks a continuation of the story of the **RST**<sup>®</sup> installation system's success and logically follows the trend towards compact designs.

The 2- to 5-pole plug connectors and device connectors have been designed for 250/400V and 16A and are all available in the screw connection technology that electricians trust.

Customized distributors as well as pre-assembled cables round the system off perfectly and offer a huge range of different possible uses, not just in building automation or industry.



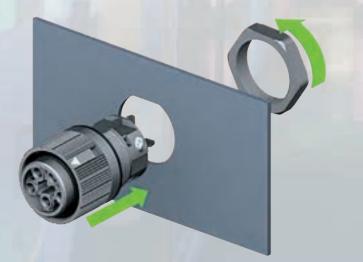
## Benefits at a glance

- TWISTLOCK technology
- Compact design
- Color-coded and mechanically coded
- Easy to install
- Save up to 80% of installation time

## **RST**<sup>®</sup> MINI plug & play Simple and functional

## Easy assembly

The housing of the connector has been designed in two parts and geared toward simple assembly right from the outset. The connector dispenses with the common technique of screwing individual parts and relies on an easy-to-use quick fastener.



## **Retrofitting made easy**

The device connectors have M20.2 (5-/4-pole) or M16 (3-/2-pole) threads. This means they can be directly integrated in M20 or M16 housing feed-throughs – taking the tolerances into account. It is therefore easy to switch from traditional cable glands to the convenient pluggable alternative. There is the option of using a flattened top on the thread of the device connector to fix it in position.

## Safe and secure

Unused slots must be protected against moisture and dirt penetration. The end caps for unused slots are joined to the connector directly using a strap and are therefore protected against loss.



**RST**<sup>®</sup> MINI

## **RST**<sup>®</sup> MINI click & safe The patented locking device

## **TWISTLOCK** technology

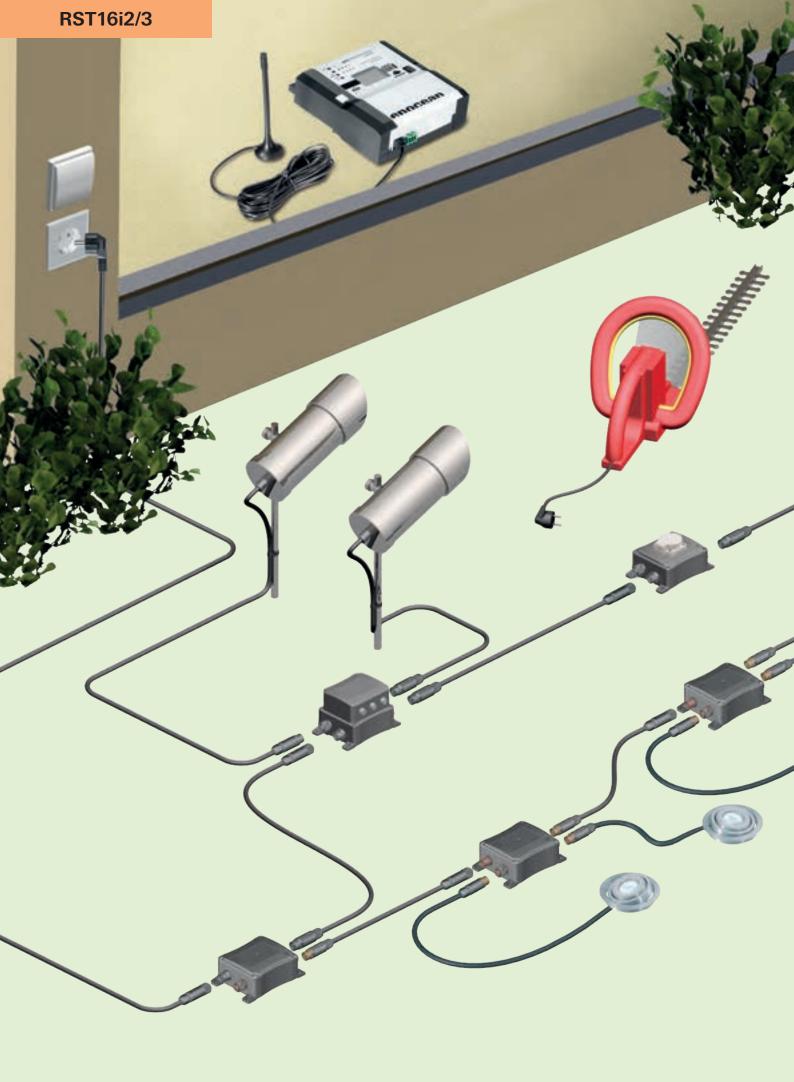
With the smart TWISTLOCK locking mechanism, the connectors lock automatically when plugged together and give the user clear feedback on the correct end position. A slight rotation severs the connection easily.

> automatic locking mechanism

click safe

Close

Open



# The RST16i2/3 product line – mains connection, lighting installation, DALI, DMX, applications in the extra-low voltage range (LED technology), loudspeaker applications

## **Application example**

## General

With the 2-/3-pole connectors, there are five available codings. These can cover applications relating to the mains connection of electrical consumers, the connection of LED luminaires in the extra-low voltage range, and also the electrification of DALI, DMX, or loudspeaker systems. The main focus is the mains connection of electrical equipment with a compact design. The mechanical codings have the advantage that only associated pairs of male and female connectors can be connected, with the correct polarity ensured. This gives you the security of a clear distinction.

The connectors are also available in a 2-pole variant. This is based on the 3-pole housing, but with one pole not configured.

## Coding

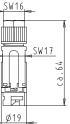
	Application	25	OV	250/400V	250/400V	250/400V	~50/-120V	
		L, N, PE		1, 2, PE	1, 2, 3	1, 2, 3	D1, D2, PE	
	Mechanical coding							
Name	Description	black	light gray	green	turquoise	light blue	signal brown	
Connectors								
M16 device connections								
	RST® compact and multiple distribution unit							
Distribution units	Distribution block 1E/2A							
	Individual distribution box	on request						
	Device connection cable Male – free end			on request	on request	on request	on request	
Cable assemblies	Connection cable Female – free end			on request	on request	on request	on request	
	Extension cable Female – male			on request	on request	on request	on request	

# **Connectors,** straight for cables Ø 5.0 – 9.5 mm<sup>2)</sup>

Female coi	nnector		SW16	<del>-</del>		
				Δ	Rated values	
				<u>SW17</u>	Rated voltage	250/400V
1	21		루니다	ca.7	Rated current	16A
A2	C-			v	Rated cross-section	0.25 to 1.5 mm <sup>2</sup> (up to 1.0 mm <sup>2</sup> suitable for ferrules), 2.5 mm <sup>2</sup> rigid
20				 	Approvals	VDE, cULus being prepared: LR, DNV/GL, RINA, BV
Application	Coding		Pole marking	Color		Part No.
					with	a screw connection
		L, N, PE	Ø 5.0 – 9.5 mm <sup>2)</sup>	black light gray		46.031.4553.1 46.031.4553.0
		L, N	Ø 5.0 – 9.5 mm <sup>2)</sup>	black light gray		46.031.4554.1 46.031.4554.0
		1, 2, PE	Ø 5.0 – 9.5 mm <sup>2)</sup>	green		46.031.4555.7
250/400 V		1, 2, 3	Ø 5.0 – 9.5 mm <sup>2)</sup>	light blue		46.031.4553.9
		1, 2 <sup>1)</sup>	Ø 5.0 – 9.5 mm <sup>2)</sup>	light blue		46.031.4554.9
		D1, D2, PE	Ø 5.0 – 9.5 mm <sup>2)</sup>	turquoise		46.031.4550.6
		D1, D2 1)	Ø 5.0 – 9.5 mm <sup>2)</sup>	turquoise		46.031.4551.6
		D1, D2 <sup>1)</sup>	AS-i profile cable	turquoise		46.031.4951.6
		1, 2, 3	Ø 5.0 – 9.5 mm <sup>2)</sup>	signal brown		46.031.4550.4
~50/-120V		1, 2 <sup>1)</sup>	Ø 5.0 – 9.5 mm <sup>2)</sup>	signal brown		46.031.4551.4
		1, 2 1)	AS-i profile cable	signal brown		46.031.4951.4

### Male connector





Rated voltage	250/400V
Rated current	16A
Rated cross-section	0.25 to 1.5 mm <sup>2</sup> (up to 1.0 mm <sup>2</sup> suitable for ferrules), 2.5 mm <sup>2</sup> rigid
Approvals	VDE, cULus being prepared: LR, DNV/GL, RINA, BV

Application	Coding		Pole marking	Color	Part No.
					with screw connection
		L, N, PE	$\emptyset \; 5.0 - 9.5 \; \text{mm}^{ 2)}$	black light gray	46.032.4553.1 46.032.4553.0
		L, N	Ø 5.0 – 9.5 mm <sup>2)</sup>	black light gray	46.032.4554.1 46.032.4554.0
		1, 2, PE	Ø 5.0 – 9.5 mm $^{2)}$	green	46.032.4555.7
250/400 V		1, 2, 3	Ø 5.0 – 9.5 mm $^{2)}$	light blue	46.032.4553.9
		1, 2 <sup>1)</sup>	$\emptyset \; 5.0 - 9.5 \; mm^{2)}$	light blue	46.032.4554.9
		D1, D2, PE	$0.0 = 9.5 \text{ mm}^{2}$	turquoise	46.032.4550.6
		D1, D2 1)	$\emptyset \; 5.0 - 9.5 \; mm^{2)}$	turquoise	46.032.4551.6
		D1, D2 1)	AS-i profile cable	turquoise	46.032.4951.6
		1, 2, 3	Ø 5.0 – 9.5 mm <sup>2)</sup>	signal brown	46.032.4550.4
~50/-120V		1, 2 <sup>1)</sup>	Ø 5.0 – 9.5 mm <sup>2)</sup>	signal brown	46.032.4551.4
		1, 2 1)	AS-i profile cable	signal brown	46.032.4951.4

<sup>1)</sup> One pole not configured <sup>2)</sup> Other diameters available upon request. Please note: Individual H07RN-F 1.5 cables can have a diameter of more than 9.5 mm.

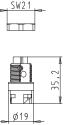
# M16 device connections straight

Г

		SW21	-	Rated values		
				Rated voltage	250/400V	
	-			Rated current	16A	
6			<u>6</u>	Rated cross-section	0.25 to 1.5 mm <sup>2</sup> (up to 1.0 mm <sup>2</sup> suitable for ferrules), 2.5 mm <sup>2</sup> rigid	
			± ₽	Approvals	VDE, cULus being prepared: LR, DNV/GL, RINA, E	3V
	For housing c Technical Dat	ut-out see Ø19,9	-	Wall thicknesses	up to 8 mm	
oplication	Coding	Pole marking	Color		Part No.	
				wit	h screw connection	
		L, N, PE	black light gray		46.031.5053.1 46.031.5053.0	
		L, N	black light gray		46.031.5054.1 46.031.5054.0	
		1, 2, PE	green		46.031.5055.7	
250/400 V		1, 2, 3	light blue		46.031.5053.9	
		1, 2 <sup>1)</sup>	light blue		46.031.5054.9	
		D1, D2, PE	turquoise		46.031.5050.6	
		D1, D2 <sup>1)</sup>	turquoise		46.031.5051.6	
~50/-120V		1, 2, 3	signal brown		46.031.5050.4	
		1, 2 <sup>1)</sup>	signal brown		46.031.5051.4	

## Male connector





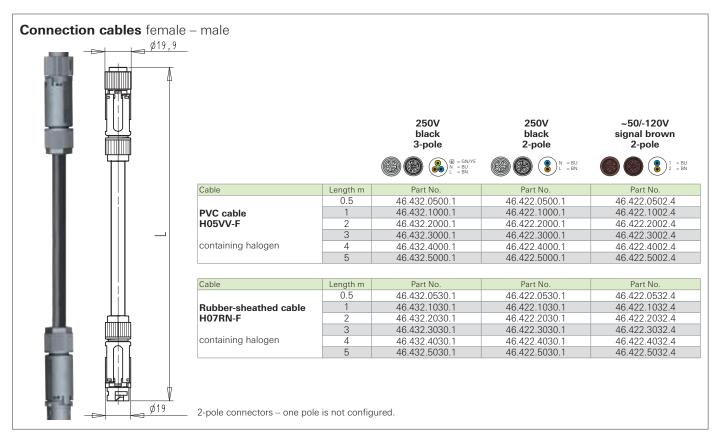
Rated voltage	250/400V
Rated current	16A
Rated cross-section	0.25 to 1.5 mm <sup>2</sup> (up to 1.0 mm <sup>2</sup> suitable for ferrules), 2.5 mm <sup>2</sup> rigid
Approvals	VDE, cULus being prepared: LR, DNV/GL, RINA, BV
Wall thicknesses	up to 8 mm

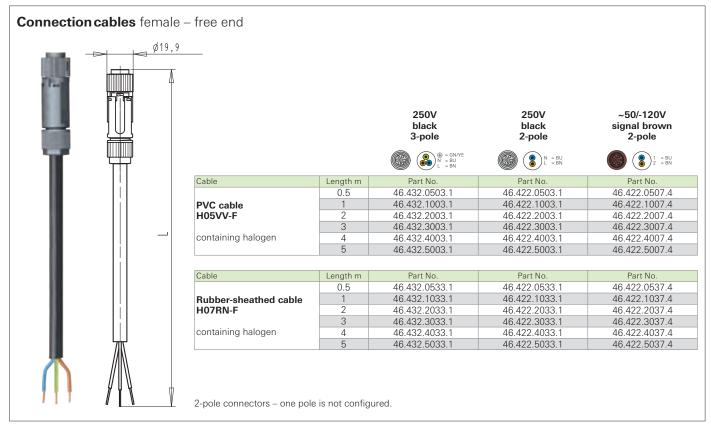
Application	Coding	Pole marking	Color	Part No.
				with screw connection
		L, N, PE	black light gray	46.032.5053.1 46.032.5053.0
		L, N	black light gray	46.032.5054.1 46.032.5054.0
		1, 2, PE	green	46.032.5055.7
250/400 V		1, 2, 3	light blue	46.032.5053.9
	0	1, 2 <sup>1)</sup>	light blue	46.032.5054.9
		D1, D2, PE	turquoise	46.032.5050.6
	69	D1, D2 <sup>1)</sup>	turquoise	46.032.5051.6
~50/-120V	6	1, 2, 3	signal brown	46.032.5050.4
~50/-120V		1, 2 <sup>1)</sup>	signal brown	46.032.5051.4

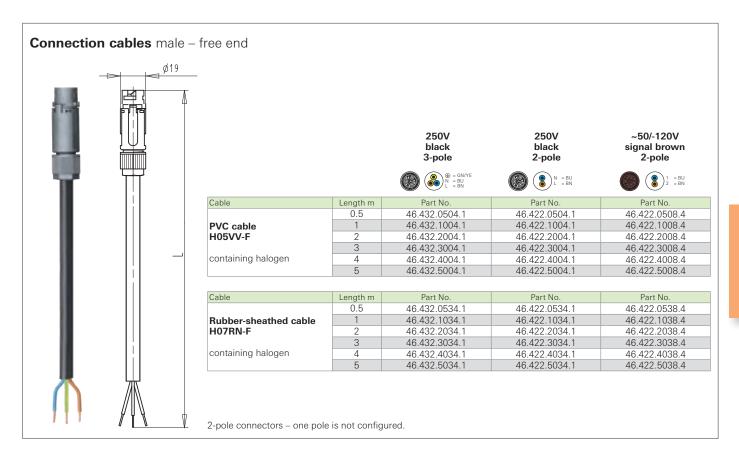
<sup>1)</sup> One pole not configured

**RST**<sup>®</sup> MINI

Rated values			Connection type of cable	cable gland
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Insulation strip length	(open cable end)	9 mm	Color handle shell	black







**Connection cable** Schuko plug - RST16i3 female 250V black 3-pole (€) € = GN/YE N = BU L = BN Length m 1.5 Part No. Cable 99.700.0000.8 99.701.0000.8 99.702.0000.8 PVC cable H05VV-F 2.5 4 5 99.703.0000.8 containing halogen 8 99.704.0000.8 Cable Length m Part No. 1.5 99.705.0000.8 Rubber-sheathed cable H07RN-F 2.5 99.706.0000.8 4 99.707.0000.8 5 99.708.0000.8 containing halogen 8 99.709.0000.8

### Connection cable

RST16i3 - Schuko coupling



		250V black 3-pole
		₩ = GN/YE N = BU L = BN
Cable	Length m	Part No.
	0.5	99.710.0000.8
Rubber-sheathed cable	1	
H07RN-F	2	other lengths
	3	on request
containing halogen	4	
	5	



## **Distribution units**

RST compact dist	ribution units	pre-wired with	1	.5 mm² (halogen	free)		
Dimensions	104 x 162 x 57.2 mm	Mounting option	Y	′es			
		Color	Application	Pole marking	Input	Outputs	Part No.
		black	250V	L, N, PE	1	3	46.030.0153.1
		light gray	250V	L, N, PE	1	3	46.030.0153.0
		black	250V	L, N	1	3	46.030.0154.1
	11	light gray	250V	L, N	1	3	46.030.0154.0
		leaves green	250/400V	1, 2, PE	1	3	46.030.0155.7
		light blue	250/400V	1, 2, 3	1	3	46.030.0153.9
6.		light blue	250/400V 1)	1, 2	1	3	46.030.0154.9
22 22		turquoise blue	250/400V	D1, D2, PE	1	3	46.030.0150.6
		turquoise blue	250/400V 1)	D1, D2	1	3	46.030.0151.6
6	·	signal brown	~50/-120V	1, 2, 3	1	3	46.030.0150.4
		signal brown	~50/-120V 1)	1, 2	1	3	46.030.0151.4

## **RST® MINI distribution block 1I/20**



Mounting option	with	separate mou	unting plate		
Color	Application	Pole marking	Input	Outputs	Part No.
black	250V	L, N, PE	1	2	46.030.1253.1
light gray	250V	L, N, PE	1	2	46.030.1253.0
black	250V	L, N	1	2	46.030.1254.1
light gray	250V	L, N	1	2	46.030.1254.0
leaves green	250/400V	1, 2, PE	1	2	46.030.1255.7
light blue	250/400V	1, 2, 3	1	2	46.030.1253.9
light blue	250/400V 1)	1, 2	1	2	46.030.1254.9
turquoise blue	250/400V	D1, D2, PE	1	2	46.030.1250.6
turquoise blue	250/400V 1)	D1, D2	1	2	46.030.1251.6
signal brown	~50/-120V	1, 2, 3	1	2	46.030.1250.4
signal brown	~50/-120V 1)	1, 2	1	2	46.030.1251.4

### Mounting plate for distribution block **RST®** MINI



## **Accessories**

## **Cover caps**

### for female

for male

For the safe closure of female and male connectors. With mounting strap for snapping onto plug connectors and device connectors

		for male
Color	Part No.	Part No.
light gray	Z6.561.6953.0	Z6.561.7253.0
■ black	Z6.561.6953.1	Z6.561.7253.1



## Sample kit

### RST16i3 sample kit



in.

Contents: Connectors Device connectors Contact parts in various codings Cover caps

Part No.

99.674.0000.0

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2

The RST16i4/5 product line – general network applications, lighting installation with dimming function, connection of electrical (sunblind) drives, applications in the extra-low voltage range (LED technology)

### **Application example**



### General

The **RST16i4/5** product line has a total of four mechanical codings and can therefore cover a wide range of applications from general network applications to applications in the extra-low voltage range. The main focus is the connection of dimmable luminaires with a compact design. This series is also tailored for the electrification of RGB or RGB-W/A outdoor spotlights. There are different mechanical codings available for every application. This means that only associated pairs of male and female connectors can be connected, with the correct polarity ensured. This gives you the security of a clear distinction.

The codings are also available in a 4-pole variant. This is based on the 5-pole housing, but with one pole not configured.

county						
	Application	250/	400V	250V	250/400V	~50/- 120V
	Mechanical coding, for example	1, 2, 3, N, PE		L, N, PE, 1, 2	1, 2, 3, 4, 5	1, 2, 3, 4, 5
Name	Description	black	light gray	turquoise	signal brown	light blue
Connectors						
Device connectors M20,2						
	$RST^{ \odot}$ compact and multiple distributors					
Distribution units	Distribution block 1E/2A					
	Individual distribution box	on request	on request	on request	on request	on request
	Device connector cable Male – free end		on request		on request	on request
Cable assemblies	Connection cable Female — free end	$\checkmark$	on request		on request	on request
	Extension cable Female – male	$\checkmark$	on request		on request	on request

## Coding

# **Connectors,** straight for cables Ø 7.1 – 13 mm<sup>2)</sup>

	onnector	SW 19	<u>هــــــــــــــــــــــــــــــــــــ</u>	Rated values	
			SW 22	Rated voltage	250/400V
	100 100	whatanno	œ	Rated current	16A
				Rated cross-section	0.25 to 2.5 mm <sup>2</sup> (up to 1.5 mm <sup>2</sup> suitable for ferrules)
5	0			Approvals	VDE, cULus, CSA, LR, DNV/GL, RINA, BV
		Ø 24,9			
Application	Coding	Pole marking	Color		Part No.
				with	screw connection
		1, 2, 3, N, PE	black		46.051.4553.1 46.051.4553.0
		1, 2, 3, PE <sup>1)</sup>	light gray black		46.051.4554.1 46.051.4554.0 46.051.4554.0
250/400V		L, N, PE, 1, 2	light gray turquoise		46.051.4553.6
		1, 2, 3, 4, 5	light blue		46.051.4553.9
		1, 2, 3, 4, 5	signal brown		46.051.4550.4
~50/-120V		1, 2, 3, 4 <sup>1)</sup>	signal brown		46.051.4551.4
Male conr	nector	SW 19			
Male conr	nector	SW 19		Rated values	
Vale conr	nector			Rated values Rated voltage	250/400V
Vale conr	nector		sw 22 1 <sup>2</sup>		16 A
Male conr	nector			Rated voltage	
Vale con	nector			Rated voltage Rated current	16 A 0.25 to 2.5 mm <sup>2</sup>
Vale con	nector			Rated voltage Rated current Rated cross-section	16 A 0.25 to 2.5 mm <sup>2</sup> (up to 1.5 mm <sup>2</sup> suitable for ferrules)
	nector Coding			Rated voltage Rated current Rated cross-section	16 A 0.25 to 2.5 mm <sup>2</sup> (up to 1.5 mm <sup>2</sup> suitable for ferrules)
Male cont				Rated voltage         Rated current         Rated cross-section         Approvals	16 A       0.25 to 2.5 mm <sup>2</sup> (up to 1.5 mm <sup>2</sup> suitable for ferrules)       VDE, cULus, CSA, LR, DNV/GL, RINA, BV
	Coding		Color	Rated voltage Rated current Rated cross-section Approvals with	16 A         0.25 to 2.5 mm²         (up to 1.5 mm² suitable for ferrules)         VDE, cULus, CSA, LR, DNV/GL, RINA, BV         Part No.         screw connection         46.052.4553.1
Application	Coding	Pole marking	Color black light gray black	Rated voltage Rated current Rated cross-section Approvals with	16 A           0.25 to 2.5 mm² (up to 1.5 mm² suitable for ferrules)           VDE, cULus, CSA, LR, DNV/GL, RINA, BV           Part No.           screw connection           46.052.4553.1           46.052.4553.0           46.052.4553.1
	Coding	Pole marking	Color black light gray	Rated voltage Rated current Rated cross-section Approvals with	16 A           0.25 to 2.5 mm² (up to 1.5 mm² suitable for ferrules)           VDE, cULus, CSA, LR, DNV/GL, RINA, BV           Part No.           screw connection           46.052.4553.1           46.052.4553.0
Application	Coding	Pole marking 1, 2, 3, N, PE 1, 2, 3, PE <sup>1</sup>	Color Color black light gray black light gray	Rated voltage Rated current Rated cross-section Approvals with	16 A         0.25 to 2.5 mm² (up to 1.5 mm² suitable for ferrules)         VDE, cULus, CSA, LR, DNV/GL, RINA, BV         Part No.         screw connection         46.052.4553.1         46.052.4553.0         46.052.4554.1         46.052.4554.0
Application 250/400V	Coding	Pole marking           1, 2, 3, N, PE           1, 2, 3, PL	Color Color black light gray black light gray turquoise	Rated voltage Rated current Rated cross-section Approvals vvith	16 A         0.25 to 2.5 mm² (up to 1.5 mm² suitable for ferrules)         VDE, cULus, CSA, LR, DNV/GL, RINA, BV         Part No.         screw connection         46.052.4553.1         46.052.4553.0         46.052.4553.6
Application	Coding	Pole marking 1, 2, 3, N, PE 1, 2, 3, PE 1, 2, 3, 4, 5	Color Color black light gray black light gray turquoise light blue	Rated voltage Rated current Rated cross-section Approvals with	16 A         0.25 to 2.5 mm² (up to 1.5 mm² suitable for ferrules)         VDE, cULus, CSA, LR, DNV/GL, RINA, BV         Part No.         Screw connection         46.052.4553.1         46.052.4553.0         46.052.4553.4         46.052.4553.6         46.052.4553.9

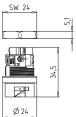
<sup>1)</sup> One pole not configured
 <sup>2)</sup> Other diameters available upon request

# M20.2 device connector straight

Г

			5	Rated voltage		250/400V
			H I			
				Rated current		16A 0.25 to 2.5 mm <sup>2</sup>
6			41,6	Rated cross-section		(up to 1.5 mm <sup>2</sup> suitable for ferrules)
	3			Approvals		VDE, cULus, CSA, LR, DNV/GL, RINA, BV being prepared
	For housing cut-out see Technical Data	Ø 24,9	1	Wall thicknesses		up to 5 mm
pplication	Coding	Pole marking	Color		Part I	No.
					with screw	connection
		1, 2, 3, N, PE	black light gray		46.051. 46.051.	
		1, 2, 3, PE <sup>1)</sup>	black light gray		46.051. 46.051.	5054.1
250/4001/		L, N, PE, 1, 2	turquoise		46.051.	
250/400V		L, IN, I L, I, Z				
250/400V		1, 2, 3, 4, 5	light blue		46.051.	5053.9
			light blue signal brown		46.051. 46.051.	
~50/-120V		1, 2, 3, 4, 5	0			5050.4
		1, 2, 3, 4, 5 1, 2, 3, 4, 5	signal brown		46.051.	5050.4
		1, 2, 3, 4, 5 1, 2, 3, 4, 5	signal brown		46.051.	5050.4
		1, 2, 3, 4, 5 1, 2, 3, 4, 5	signal brown		46.051.	5050.4
	ector	1, 2, 3, 4, 5 1, 2, 3, 4, 5	signal brown	Rated values	46.051.	5050.4



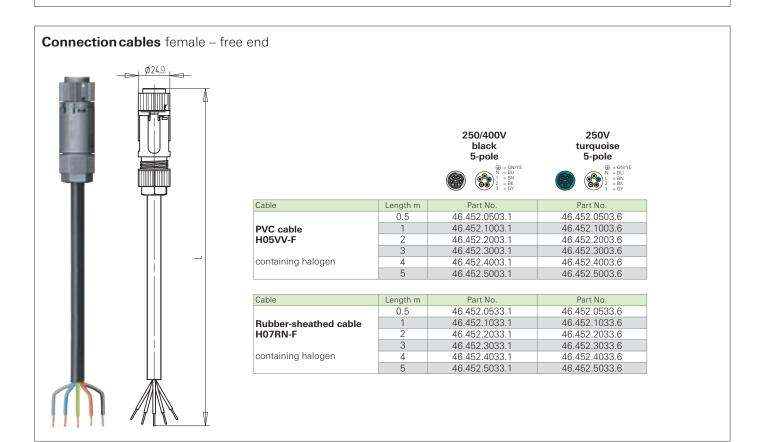


Rated voltage	250/400V
Rated current	16A
Rated cross-section	0.25 to 2.5 mm <sup>2</sup> (up to 1.5 mm <sup>2</sup> suitable for ferrules)
Approvals	VDE, cULus, CSA, LR, DNV/GL, RINA, BV being prepared
Wall thicknesses	up to 5 mm

Application	Coding	Pole marking	Color	Part No.
				with screw connection
	8	1, 2, 3, N, PE	black	46.052.5053.1
		.,_, ., .,	light gray	46.052.5053.0
		1, 2, 3, PE <sup>1)</sup>	black	46.052.5054.1
250/400V			light gray	46.052.5054.0
		L, N, PE, 1, 2	turquoise	46.052.5053.6
		1, 2, 3, 4, 5	light blue	46.052.5053.9
E0(120)/		1, 2, 3, 4, 5	signal brown	46.052.5050.4
~50/-120V		1, 2, 3, 4 <sup>1)</sup>	signal brown	46.052.5051.4
		·		

Rated values			Connection type of cable	cable gland
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Insulation strip length	(open cable end)	9 mm	Color handle shell	black

### Connection cables female - male Ø2,4,9 250/400V 250V black turquoise 5-pole 5-pole **?** Length m 0.5 Part No Cable Part No. 46.452.0500.1 46.452.0500.6 46.452.2000.6 46.452.2000.6 PVC cable H05VV-F 46.452.1000.1 46.452.2000.1 2 3 46.452.3000.1 46.452.3000.6 containing halogen Δ 46.452.4000.1 46.452.4000.6 5 46.452.5000.1 46.452.5000.6 Cable Length m Part No. Part No. 0.5 46.452.0530.1 46.452.0530.6 **Rubber-sheathed cable** 46.452.1030.1 46.452.1030.6 H07RN-F 46.452.2030.1 46.452.2030.6 3 46.452.3030.1 46.452.3030.6 containing halogen 4 46.452.4030.1 46.452.4030.6 5 46.452.5030.1 46.452.5030.6 V F Ø24



54 Observe the installation instructions in the Technical Data that follow the product pages. Other cables, other lengths, other codings upon request

Connection cables male – fre			250/400V black 5-pole	250V turquoise 5-pole
	Cable	Length m	Part No.	Part No.
		0.5	46.452.0504.1	46.452.0504.6
	PVC cable	1	46.452.1004.1	46.452.1004.6
	H05VV-F	2	46.452.2004.1	46.452.2004.6
		3	46.452.3004.1	46.452.3004.6
	containing halogen	4	46.452.4004.1	46.452.4004.6
		5	46.452.5004.1	46.452.5004.6
	L.			
	Cable	Length m	Part No.	Part No.
		0.5	46.452.0534.1	46.452.0534.6
	Rubber-sheathed cable	1	46.452.1034.1	46.452.1034.6
	H07RN-F	2	46.452.2034.1	46.452.2034.6
		3	46.452.3034.1	46.452.3034.6
	containing halogen	4	46.452.4034.1	46.452.4034.6
		5	46.452.5034.1	46.452.5034.6

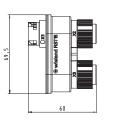
## **Distribution units**

RST compact dis	<b>tribution units</b> 104 x 162 x 57.2 mm	pre-wired with Mounting option		1.5 mm² yes			
500		Color black light gray black light gray turquoise blue light blue signal brown signal brown	Application 250/400V 250/400V 250/400V <sup>1)</sup> 250/400V <sup>1)</sup> 250/ 250/400V ~50/-120V ~50/-120V <sup>1)</sup>	Pole marking 1, 2, 3, N, PE 1, 2, 3, N, PE 1, 2, 3, PE 1, 2, 3, PE L, N, PE, 1, 2 1, 2, 3, 4, 5 1, 2, 3, 4, 5 1, 2, 3, 4	Input 1 1 1 1 1 1 1 1 1	Outputs 3 3 3 3 3 3 3 3 3 3 3	Part No. 46.050.0153.1 46.050.0153.0 46.050.0154.1 46.050.0154.0 46.050.0153.6 46.050.0153.9 46.050.0150.4 46.050.0151.4

Mounting option

### **RST®** MINI distribution block 1I/20





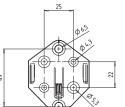
Color	Application	Pole marking	Input	Outputs	Part No.
black	250/400V	1, 2, 3, N, PE	1	2	46.050.1253.1
light gray	250/400V	1, 2, 3, N, PE	1	2	46.050.1253.0
black	250/400V 1)	1, 2, 3, PE	1	2	46.050.1254.1
light gray	250/400V 1)	1, 2, 3, PE	1	2	46.050.1254.0
turquoise blue	250V	L, N, PE, 1, 2	1	2	46.050.1253.6
light blue	250/400V	1, 2, 3, 4, 5	1	2	46.050.1253.9
signal brown	~50/-120V	1, 2, 3, 4, 5	1	2	46.050.1250.4
signal brown	~50/-120V 1)	1, 2, 3, 4	1	2	46.050.1251.4

with separate mounting plate

### Mounting plate for distribution block **RST**<sup>®</sup> MINI

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Color	Part No.
■ black	06.562.5853.1
light gray	06.562.5853.0

## **Accessories**

## For the safe closure of female and male connectors. With mounting strap for snapping onto plug connectors and device connectors

Ċ,

for female

**Cover caps** 

for male



	for female	for male
Color	Part No.	Part No.
light gray	Z6.561.6853.0	Z6.561.7153.0
black	Z6.561.6853.1	Z6.561.7153.1



## Sample kit

### RST16i5 sample kit



Contents: Connectors Device connectors Contact parts in various codings Cover caps

Part No.

99.675.0000.0

## Technical data RST® MINI

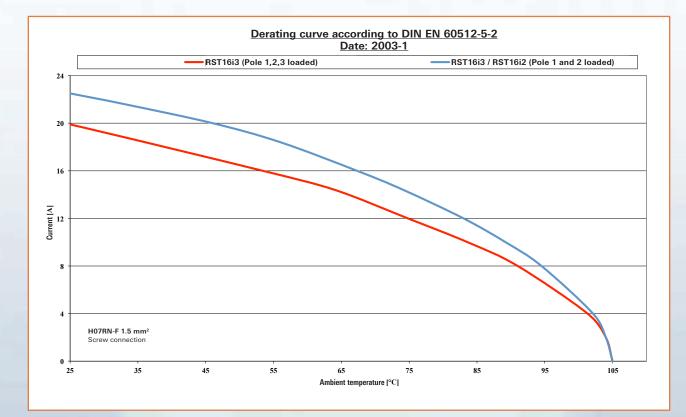
	RST16i2/3	RST16i4/5
Rated voltage	250/400V	250/400V
Rated current	16A	16A
Number of poles	2/3	4/5

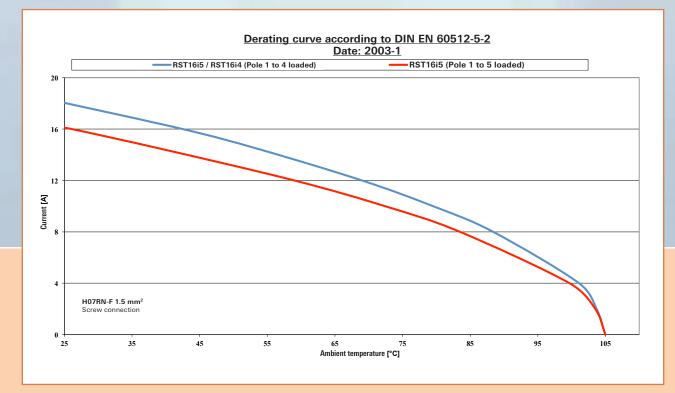
Connector	
temperature range:	- 40 °C to 100 °C
Material:	Contact parts: brass, surface-treated Housing parts: Polyamide, halogen-free, V2 Sealing material: NBR
Pollution degree:	3 (when connected)
Degree of protection:	IP66/68 (3m; 2h)/69
IK-Code	IK07 (2 Joule)
Plugging cycles:	according to IEC 61535 100x without load and 50x under nominal load (cos phi = 0.6)
Approvals:	VDE (IEC 61535) UL (UL 2238 / UL 1977) CSA (C22.2 No.182.1 / C22.2 No.182.3) RINA, LR, DNV/GL, BV

# Wire strip lengths fine-stranded (suitable for ferrules)

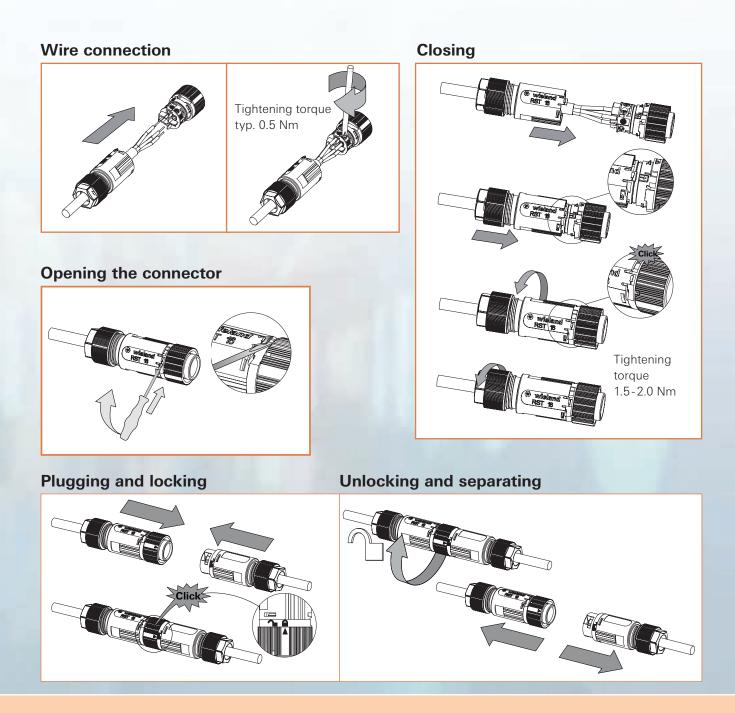


Conductor	PE	N, L, 1, 2, 3
Sheath strip length y (mm)	33	25
Wire strip length x (mm)	8	8





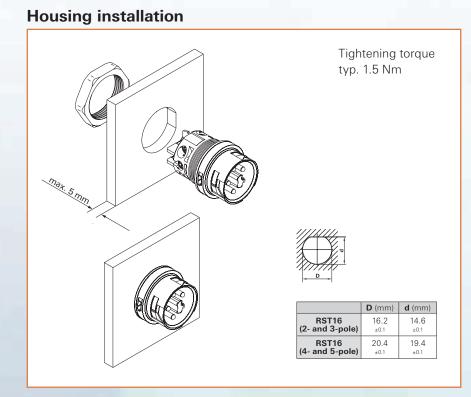
## Connectors 2-/3- and 4-/5-pole



Please note that electrical connections and installation shall only be done by trained experts. Observe the included installation instructions!

The respective installation instructions BA000960 can be found under https://eshop.wieland-electric.com

## **Device connections 2-/3- and 4-/5-pole**



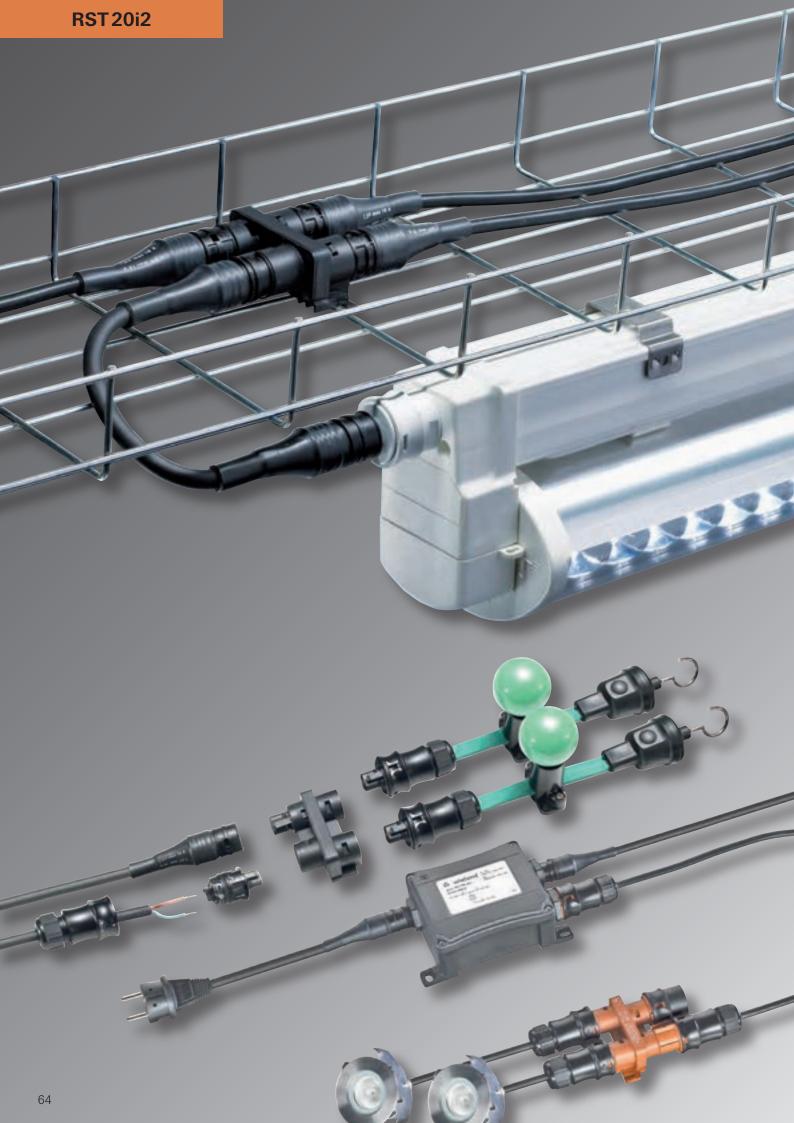
Please note that electrical connections and installation shall only be done by trained experts. Observe the included installation instructions!

The respective installation instructions BA000960 can be found under https://eshop.wieland-electric.com

## **Overview matrix** *RST***<sup>®</sup> CLASSIC. Codings and applications at a glance**

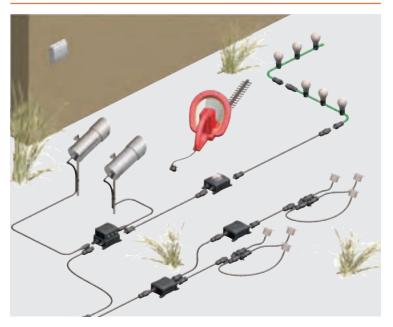
				RST 20i2			RST	20i3	
				2-pole, 20A			3-pol	e, 20A	
	Pole	marking	L, N	+, -	1, 2	L, N, 🖶	1, 2, 🖶	1, 2, 3	1, 2, 🖶
	Appli	ication	250V black or light gray	250/400V pebble gray	~50/-120V signal brown	250V black or light gray	250/400V leaf green	250/400V light blue	~50/-120V signal brown
		act insert	<b>(</b>	() ()	Ö	() ()	Ø	<b>(</b> )	
	male	and female	Spring clamp Screw	Screw	Spring clamp Screw	Spring clamp Screw Crimp	Spring clamp Screw	Spring clamp Screw	Spring clamp Screw
		Ø 6 –10 mm	Sciew	Sciew	Sciew		Sciew	Screw	Sciew
	ıtry	Ø 10 –14 mm	$\checkmark$	$\overline{\mathbf{v}}$	$\checkmark$		$\checkmark$	$\checkmark$	
ŷ	1 x cable entry	Ø 13 –18 mm				$\checkmark$	$\checkmark$	$\checkmark$	
Connectors	1 x ca	Flat cable 13 x 6 mm AS-i profile cable	$\checkmark$						
ပိ	itry	Ø 6 –10 mm	$\overline{\checkmark}$						
	2 x cable entry	Ø 10 –14 mm	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
	2 х са	AS-i Profilleitung							
Ś	1 piece	M25	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Device connectors		M16 straight	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$
onne		M16 7° angled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
e cc	2 piece	M20 straight	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Jevic		M20 angled						$\checkmark$	$\checkmark$
		M25 angled		$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$
ە ە		Distribution block 1 I/3 O		$\checkmark$	$\checkmark$		$\checkmark$		
Distrib. units	mul	RST <sup>°</sup> compact/ lti-distribution units			$\checkmark$				
		Individual distribution box					$\checkmark$		
		Expansion cable Female – Male							
Cable assemblies		Power connection Female – Free end							
Cable sembli		Device connection Male – Free end		$\checkmark$	$\checkmark$				
ass		Power connection afety plug – female							
Europe		cable/contour cable ector, SKII – female							

							1.	RS	T <sup>®</sup> CLASSIC	2
	_	N				Q.	1			
	2			4.3	· ?:	• • •	0) v V		<u>.</u> 	
<b>RST 25i3</b>	RST	20i4		all constants	RST 20it	5		RST 25i5		
3-pole, 32A	4-pole	e, 20A			5-pole, 20A			5-pole, 25 A (3~)	*	0
L, N, ⊕ 250V concrete gray	1, 2, 3, ⊕ 250/400V black or light gray	<b>1, 2, 3, 4</b> ~50/-120V signal brown	250/400V black or light gray	L, N, (), D1, D2 250V turquoise	<b>1, 2, 3, 4, 5</b> 250/400V light blue	N, E, 1, 2, 3 250/400V yellow	<b>1, 2, 3, 4, 5</b> ~50/-120V signal brown	L, N, ⊕, 1, 2 250/400∨ concrete gray	1111/22	: 4
	<b>@</b>		۲	<b>@</b>	۲	<b>@</b>	Ö		1. 1.	1.25
۲	۲	٢	۲	۲	۲	۲	۲	۲	0	• /
Screw	Screw Crimp	Screw Crimp	Screw Crimp	Screw Crimp	Screw Crimp	Screw	Screw Crimp	Screw		
		$\checkmark$				$\checkmark$			100	
									and the second s	
					$\checkmark$				1 · · ·	100 m
									THA	ASSIC
$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		P	ILAS
$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$					RST® CL
		$\checkmark$								RS
$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				
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					$\checkmark$					



## Applications in the range of protection class II and extra-low voltage for industry and LED technology

### **Application example**



You therefore have the security of a clear separation of different applications without having to redo any incorrect connections. The color of the connectors indicates the links that belong together.

## General

The two-pole connectors are based on the 3-pole variant, but with one pole not configured.

There are essentially two variants. One coding can be used for protection class II applications and is downwardly compatible with the 3-pole system with ground conductor (RST 20i3). This makes it possible to transition from a system with earthing contact to a 2-pole system – but not the other way round!

The other version is aimed at applications in the extra-low voltage range, such as serial or parallel LED wiring, or at industrial applications with 24 V auxiliary power and AS-i. All connectors are mechanically coded. This means that only associated pairs of male and female can be connected with the correct polarity.

## Coding

	tes visit the website at			Application		250V		~50/-120V
http://eshop.wieland-electric.com. Assembly instructions and other technical information can be found in the Technical Data or in eShop.				Mechanical coding, for example	L, N		+,-	1, 2
Name	Description	Connection style	Strain relief housing	Connection points per pole	light gray	black	pebble gray	signal brown
Connector	1 x cable entry	Screw Spring clamp	yes	1 2	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
GOIIIIECIUI	2 x cable entry	Screw Spring clamp	yes	1	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Distribution units	Distribution block 1 I/3 0				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	RST compact distribution unit/multi-distribution unit				$\checkmark$	$\checkmark$	on request	$\checkmark$
	Individual distribution box				on request	on request	on request	on request
	Series distribution unit for power LEDs							$\checkmark$
	M16 device connector, modular, straight				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	M16 device connector, modular, angled 7°				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Device	M25 device connector, standard				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
connectors	M20 device connector, standard				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	M20 device connector, modular, angled				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	M25 device connector, modular, angled				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Connection cable Male – Free end	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Connection cable Female – Free end	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Cable	Connection cable Male – Female	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
ssemblies	Connection cable Europ. conn. SK II – Female	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Round cable	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	AS-i profile cable	pre- assembled	pre- assembled	pre- assembled			$\overline{\mathbf{A}}$	

## **Connectors**, straight for cables Ø 6 – 10 mm and 10 –14 mm

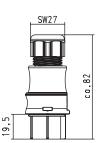
### Female connector

Unmounted with cable gland.

See the Technical Data for insulation strip lengths as well as the ferrules to be used.







with screw connection<sup>1)</sup> with spring clamp connection Wire mm<sup>2</sup> Ferrules Wire mm<sup>2</sup> 0.5 - 2.5 rigid rigid without with 0.75 - 6.02) fine-stranded 0.5 - 1.5 fine-stranded ferrules with ferrules without 0.75 - 1.5 stranded stranded ferrules ferrules Application Coding Cable diameter in mm Color Part No. Part No. 96.021.4053.0 light gray 96.021.0053.0 6 - 10black 96.021.0053.1 96.021.4053.1 light gray 96.021.0153.0 96.021.4153.0 10 - 14L. N black 96.021.0153.1 96.021.4153.1 250V Illumination cable 13.3x5.3 light gray 96.021.0453.0 96.021.4453.0 H05RNH2-F2 x 1.52 black 96.021.0453.1 96.021.4453.1 Round cable 6-10 pebble gray 96.021.0050.8 96.021.4050.8 +, -AS-i profile cable pebble gray 96.021.0950.8 96.021.4950.8 6 - 10 signal brown 96.021.0051.4 96.021.4051.4 AS-i profile cable 96.021.0951.4 96.021.4951.4 signal brown ~50/-120V 1, 2 Illumination cable 13.3x5.3 96.021.0451.4 96.021.4451.4 signal brown H05RNH2-F2 x 1.52

### Male connector

Unmounted with cable gland and locking device.

See the Technical Data for insulation strip lengths as well as the ferrules to be used.





with spring clamp connection

with screw connection<sup>1)</sup>

				, which opining t	olump oonin	Jotion		onnootion	
				Wire	mm <sup>2</sup>	Ferrules	Wire	mm <sup>2</sup>	
				rigid	0.5 - 2.5		rigid		
				fine-stranded	0.5 - 1.5	with ferrules	fine-stranded	$0.75 - 6.0^{2}$	without ferrules
				stranded	0.75 – 1.5	with ferrules	stranded		without ferrules
Application	Coding	Cable diameter in mm	Color		Part No.			Part No.	
		6 - 10	light gray black	96.022.0053.0 96.022.0053.1				96.022.4053.0 96.022.4053.1	
250V	<b>(N</b> , L	10 - 14	light gray black	96.022.0153.0 96.022.0153.1			96.022.4153.0 96.022.4153.1		
250 V		Illumination cable 13.3x5.3	light gray		96.022.0453.	0		96.022.4453.	0
		H05RNH2-F2 x 1.5 <sup>2</sup>	black		96.022.0453.	1		96.022.4453.	1
		Round cable 6-10	pebble gray		96.022.0050.	8		96.022.4050.	8
	<b>(()</b> –, +	AS-i profile cable	pebble gray		96.022.0950.	8		96.022.4950.	8
		6 - 10	signal brown		96.022.0051.	4		96.022.4051.	4
~50/-120V		AS-i profile cable	signal brown		96.022.0951.	4		96.022.4951.	4
~50/-1200	2, 1	Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup>	signal brown		96.022.0451.	4		96.022.4451.	4

Ø34,6

<sup>1)</sup> With wire protection available on request <sup>2)</sup> With 6.0 mm<sup>2</sup> wires, the pull and bending forces at the connector must be taken into consideration and compensated using suitable measures if required. See also chapter on Technical Data and eShop. 66

# **Connectors,** angled 90° for cables Ø 6 – 10 mm and 10 –14 mm

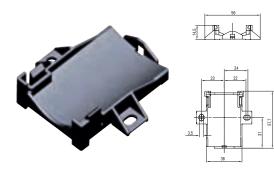
remale c	connector		ø34,6				F	55,5	~	
Jnmounted v 90° angle.	with cable gland	1.								
	nical Data for in ell as the ferrule									
				with spring	clamp conne	ction	with screw of			
				Wire	mm <sup>2</sup>	Ferrules	Wire	mm <sup>2</sup>		
				rigid	0.5 - 2.5		rigid			
				fine-stranded	0.5 - 1.5	with ferrules	fine-stranded	$0.75 - 6.0^{2}$	without ferrules	
				stranded	0.75 – 1.5	with ferrules	stranded		without ferrules	
pplication	Coding	Cable diameter in mm	Color		Part No.			Part No.		
		6 – 10	light gray		96.023.0053.0			96.023.4053.0		
			black light gray		96.023.0053.′ 96.023.0153.(			96.023.4053. 96.023.4153.0		
250V	L, N	10-14	black		96.023.0153.1	1		96.023.4153.	1	
2001		Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup>	light gray black		96.023.0453.0 96.023.0453.1			96.023.4453.0 96.023.4453.		
		Round cable 6 –10	pebble gray		96.023.0453. 96.023.0050.8			96.023.4453.		
	+, -	AS-i profile cable	pebble gray		96.023.0950.8	3		96.023.4950.8	3	
		6 – 10 AS-i profile cable	signal brown signal brown		96.023.0051.4 96.023.0951.4			96.023.4051.4 96.023.4951.4		
~50/-120V	1, 2	Illumination cable 13.3x5.3	0							
		H05RNH2-F2 x 1.5 <sup>2</sup>	signal brown		96.023.0451.4	+		96.023.4451.4	+	
90° angle. See the Techi	with cable gland nical Data for in ell as the ferrule	sulation strip	34,6		5)		ca. 62,3			
engins as we								SW27		
enguis as we			<u>u</u>	with spring	clamp conne	ection	with screw o			
enguis as we				Wire	mm <sup>2</sup>	ection Ferrules	with screw of Wire			
enguis as we				Wire rigid	mm <sup>2</sup> 0.5 - 2.5		Wire rigid	mm <sup>2</sup>	without	
enguis as we				Wire rigid fine-stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5	Ferrules with ferrules	with screw of Wire	connection <sup>1)</sup>	ferrules	
enguis as we				Wire rigid	mm <sup>2</sup> 0.5 - 2.5	Ferrules with	Wire rigid	mm <sup>2</sup>		
J	Coding	Cable diameter in mm	Color	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No.	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	0.75 – 6.0 <sup>2)</sup>	ferrules without ferrules	
J	Coding	Cable diameter in mm 6 – 10	light gray	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053.0	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	econnection <sup>1)</sup> mm <sup>2</sup> 0.75 - 6.0 <sup>2)</sup> Part No. 96.024.4053.	ferrules without ferrules	
upplication		6 - 10	light gray black light gray	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053.0 96.024.0153.0	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	Part No. 96.024.4053. 96.024.4153.	ferrules without ferrules	
J	Coding	6 - 10 10 - 14	light gray black light gray black	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053.0 96.024.0153.0 96.024.0153.1	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	Part No. 96.024.4053. 96.024.4153. 96.024.4153.	ferrules without ferrules	
application		6 – 10 10 – 14 Illumination cable 13.3x5.3	light gray black light gray black light gray	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053.0 96.024.0053.0 96.024.0153.0 96.024.0153.3 96.024.0153.1	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	mm²           0.75 - 6.0²           Part No.           96.024.4053.           96.024.4153.           96.024.4153.           96.024.4153.           96.024.4153.           96.024.4153.	ferrules without ferrules	
pplication	<b>N</b> , L	6 – 10 10 – 14 Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup> Round cable 6 –10	light gray black light gray black light gray black pebble gray	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053. 96.024.0153. 96.024.0153. 96.024.0453. 96.024.0453. 96.024.0453.	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	Part No. 96.024.4053. 96.024.4153. 96.024.4153. 96.024.4153. 96.024.4153. 96.024.4453. 96.024.4453. 96.024.4453.	ferrules without ferrules	
pplication		6 – 10 10 – 14 Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup> Round cable 6 –10 AS-i profile cable	light gray black light gray black light gray black pebble gray pebble gray	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053. 96.024.0153. 96.024.0153. 96.024.0453. 96.024.0453. 96.024.0453. 96.024.0050. 896.024.0050. 896.024.0050.	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	Part No. 96.024.4053. 96.024.4053. 96.024.4153. 96.024.4153. 96.024.4453. 96.024.4453. 96.024.4453. 96.024.4453. 96.024.4050.8	ferrules without ferrules	
Application 250V	() N, L	6 – 10 10 – 14 Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup> Round cable 6 –10 AS-i profile cable 6 – 10	light gray black light gray black light gray black pebble gray	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053. 96.024.0153. 96.024.0153. 96.024.0453. 96.024.0453. 96.024.0453.	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	Part No. 96.024.4053. 96.024.4153. 96.024.4153. 96.024.4153. 96.024.4153. 96.024.4453. 96.024.4453. 96.024.4453.	ferrules without ferrules	
application	<b>N</b> , L	6 – 10 10 – 14 Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup> Round cable 6 –10 AS-i profile cable	light gray black light gray black light gray black pebble gray pebble gray signal brown	Wire rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 Part No. 96.024.0053.0 96.024.0153.0 96.024.0153.0 96.024.0453.0 96.024.0453.0 96.024.0453.0 96.024.0050.8 96.0050.8 96.0050.8 96.0050.8 96.0050.8 9	Ferrules with ferrules with ferrules	with screw of Wire rigid fine-stranded	Part No. 96.024.4053. 96.024.4053. 96.024.4153. 96.024.4153. 96.024.4453. 96.024.4453. 96.024.4453. 96.024.4453. 96.024.4450. 96.024.4950. 96.024.4950.	ferrules without ferrules	

<sup>1)</sup> With wire protection available on request <sup>2)</sup> With 6.0 mm<sup>2</sup> wires, the pull and bending forces at the connector must be taken into consideration and compensated using suitable measures if required. See also chapter on Technical Data and eShop.

# **Splitter connector,** straight for cables Ø 6 – 10 mm and 10 –14 mm

Female c	onnec	tor							<u>SW27</u> _	
Unmounted w	vith cable o	gland.								
See the Techn lengths as wel				59				co. 95, 9		
					with spring	clamp conne	ection	with screw c	onnection <sup>1)</sup>	
					Wire rigid fine-stranded stranded	$\begin{array}{c c} mm^2 \\ \hline 0.5 & -2.5 \\ \hline 0.5 & -1.5 \\ \hline 0.75 & -1.5 \end{array}$	Ferrules with ferrules with ferrules	Wire rigid fine-stranded stranded	0.75 – 2.5	without ferrules without ferrules
Application	Coding		Cable diameter in mm	Color		Part No.			Part No.	
250V	<u>ل</u> الله الم	N	6 – 10 10 – 14 Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup>	light gray black light gray black light gray black		96.021.0253. 96.021.0253. 96.021.0353. 96.021.0353. 96.021.0353. on request on request	1 D	9	96.021.4253 96.021.4253 96.021.4353 96.021.4353 96.021.4353 on request on request	.1 .0 .1
~50/-120V	1,	2	6 – 10 AS-i profile cable Illumination cable 13.3x5.3 H05RNH2-F2 x 1.5 <sup>2</sup>	signal brown signal brown signal brown		96.021.0251. 96.021.0351. on request			96.021.4251 96.021.4351 on request	.4 .4

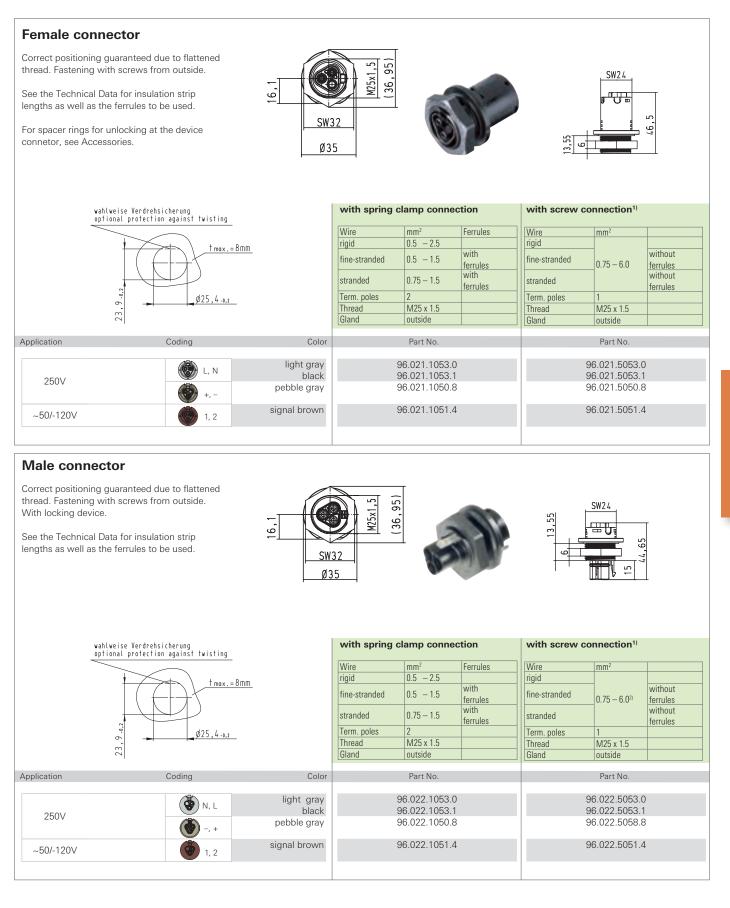
### Mounting plate for splitter connectors



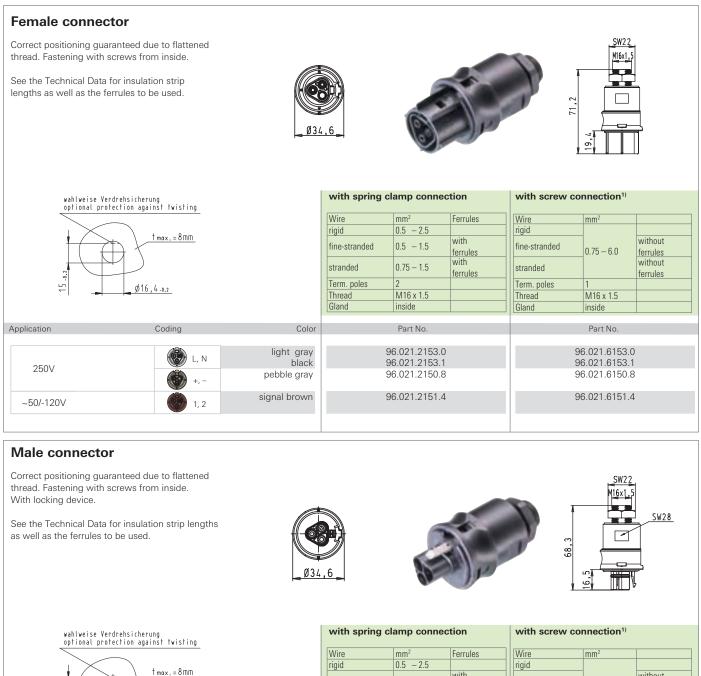


<sup>1)</sup> With wire protection available on request

## M25 device connector straight, standard



## M16 device connector straight, modular



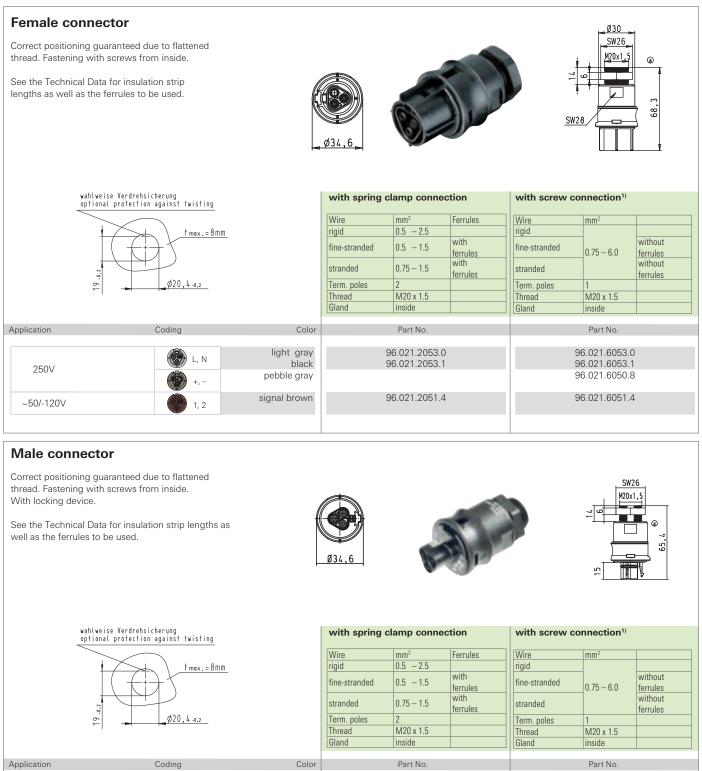
15-4.2	¢16,4-0,2		rigid fine-stranded stranded Term. poles Thread Gland	0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 2 M16 x 1.5 inside	with ferrules with ferrules	rigid fine-stranded stranded Term. poles Thread Gland	0.75 - 6.0 1 M16 x 1.5 inside	without ferrules without ferrules
Application	Coding	Color		Part No.			Part No.	
250V	() N, L	light gray black pebble gray	ç	)6.022.2153.0 )6.022.2153.1 )6.022.2150.8		9	96.022.6153.0 96.022.6153.1 96.022.6150.8	
~50/-120V	1, 2	signal brown	ç	6.022.2151.4		ę	96.022.6151.4	

1) With wire protection available on request

## M16 device connector angled 7°, modular

Female connector				SW 24
Correct positioning guaranteed thread. Fastening with screws With locking device.				
See the Technical Data for insu lengths as well as the ferrules t		¢34		19.4 co.87
wahiweise Ver	drehsicherung		with spring clamp connection	with screw connection <sup>1)</sup>
optional prot	ection against twisting $t_{max. = 8mm}$ $\phi_{20, 4 - 0, 2}$		Wire         mm²         Ferrules           rigid         0.5         - 2.5         with           fine-stranded         0.5         - 1.5         with           stranded         0.75         - 1.5         with           ferrules         Term. poles         2         Thread         M16 x 1.5         Gland         inside	Wire     mm <sup>2</sup> rigid     without       fine-stranded     0.75 - 6.0       stranded     without       Term. poles     1       Thread     M16 x 1.5       Gland     inside
pplication	Coding	Color	Part No.	Part No.
250V	L, N	light gray black pebble gray	96.025.2153.0 96.025.2153.1	96.025.6153.0 96.025.6153.1 96.025.6150.8
230 V	÷, –			
~50/-120V Male connector	1, 2	signal brown	96.025.2151.4	96.025.6151.4
~50/-120V <b>Vale connector</b> Correct positioning guaranteed nread. Fastening with screws Vith locking device. See the Technical Data for insu	d due to flattened from inside. ulation strip	signal brown		
~50/-120V Male connector Correct positioning guaranteed thread. Fastening with screws With locking device. See the Technical Data for insu engths as well as the ferrules t	d due to flattened from inside. ulation strip to be used.			SW24 @
~50/-120V Male connector Correct positioning guaranteed thread. Fastening with screws With locking device. See the Technical Data for insulengths as well as the ferrules the set optional prot	d due to flattened from inside. ulation strip		,7       Image: constraint of the second secon	with screw connection <sup>1</sup> Wire       mm <sup>2</sup> rigid       0.75 - 6.0         stranded       0.75 - 6.0
~50/-120V Male connector Correct positioning guaranteed thread. Fastening with screws With locking device. See the Technical Data for insu engths as well as the ferrules t	d due to flattened from inside. ulation strip to be used. drehsicherung ection against twisting		,7	with screw connection <sup>1</sup> Wire       mm <sup>2</sup> rigid       0.75 - 6.0         stranded       0.75 - 6.0
~50/-120V Male connector Correct positioning guaranteed hread. Fastening with screws With locking device. See the Technical Data for insu engths as well as the ferrules t wahlweise Ver optional prot	d due to flattened from inside. ulation strip to be used. drehsicherung ection against twisting tmax.=8mm		with spring clamp connection         Wire       mm²       Ferrules         rigid       0.5       - 2.5       with         fine-stranded       0.5       - 1.5       with         stranded       0.75       - 1.5       with         fremules       stranded       0.75       - 1.5         Term. poles       2       Thread       M16 x 1.5	SW2 4       Image:
~50/-120V Male connector Correct positioning guaranteed hread. Fastening with screws With locking device. See the Technical Data for insu- engths as well as the ferrules the structure optional prot	d due to flattened from inside. ulation strip to be used.	ø34	with spring clamp connection         Wire       mm²         rigid       0.5       -2.5         fine-stranded       0.5       -1.5         stranded       0.75       -1.5         stranded       0.75       -1.5         fine-stranded       0.75       -1.5         stranded       0.75       -1.5         fine-stranded       0.75       -1.5         gland       inside	with screw connection¹'         Wire mm²         rigid         fine-stranded         0.75 - 6.0         stranded         Term. poles         Thread         M16 x 1.5         Gland

## M20 device connector straight, modular



Application	Coding	Color	Part No.	Part No.
250V	L, N	light gray black pebble gray	96.022.2053.0 96.022.2053.1	96.022.6053.0 96.022.6053.1 96.022.6050.8
~50/-120V	1, 2	signal brown	96.022.2051.4	96.022.6051.4

1) With wire protection available on request

# M20 device connector angled 90°, modular

#### **Female connector** Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. Ø34,6 90° angle. See the Technical Data for insulation strip lengths as well as the ferrules to be used. M20x1,5 SW26 73,4 wahlweise Verdrehsicherung optional protection against twisting with spring clamp connection with screw connection<sup>1)</sup> Wire mm<sup>2</sup> 0.5 - 2.5 Ferrules Wire mm<sup>2</sup> t max. = 8 mm rigid rigid without with fine-stranded 0.5 - 1.5 fine-stranded 0.75 - 6.0 ferrules without ferrules with stranded 0.75 – 1.5 stranded ferrules ferrules Ø20,4-0,2 19 Term. poles Term. poles Thread M20 x 1.5 Thread M20 x 1.5 Gland Gland inside inside Application Coding Color Part No. Part No. 96.023.2053.0 light gray 96.023.6053.0 L, N black 96.023.2053.1 96.023.6053.1 250V pebble gray 96.023.2050.8 96.023.6050.8 signal brown 96.023.2051.4 96.023.6051.4 ~50/-120V 1, 2

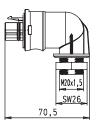
#### Male connector

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. With locking device. 90° angle.

See the Technical Data for insulation strip lengths as well as the ferrules to be used.

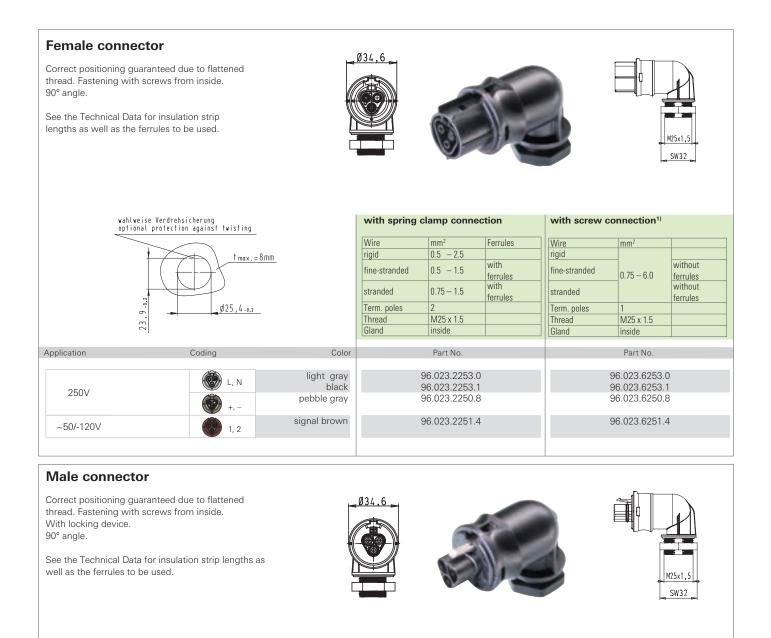






wahlweise Verdrehsicherung optional protection against twisting		with spring	clamp conne	ction	with screw c	onnection <sup>1)</sup>		
			Wire	mm <sup>2</sup>	Ferrules	Wire	mm <sup>2</sup>	
	t max.=8mm		rigid	0.5 - 2.5		rigid		
			fine-stranded	0.5 – 1.5	with ferrules	fine-stranded	0.75 – 6.0	without ferrules
:			stranded	0.75 – 1.5	with ferrules	stranded		without ferrules
0	Ø20,4-0,2		Term. poles	2		Term. poles	1	
	I		Thread	M20 x 1.5		Thread	M20 x 1.5	
			Gland	inside		Gland	inside	
Application	Coding	Color		Part No.			Part No.	
	() L, N	light gray		96.024.2053.0	)		96.024.6053.	0
250V	L, N	black 96.024.2053.1		96.024.6053.1				
230 V	() +, -	pebble gray		96.024.2050.8	3		96.024.6050.	8
~50/-120V	1, 2	signal brown		96.024.2051.4	1		96.024.6051.	4

## M25 device connector angled 90°, modular



wahlweise Verdrehsicherung optional protection against twisting			with spring c	lamp connee	ction	with screw c	onnection <sup>1)</sup>	
			Wire	mm <sup>2</sup>	Ferrules	Wire	mm <sup>2</sup>	
	t max.=8mm		rigid	0.5 - 2.5		rigid		
			fine-stranded	0.5 - 1.5	with ferrules	fine-stranded	0.75 - 6.0	without ferrules
-0.2			stranded	0.75 – 1.5	with ferrules	stranded		without ferrules
- 6	Ø25,4-0.2		Term. poles	2		Term. poles	1	
, 			Thread	M25 x 1.5		Thread	M25 x 1.5	
5			Gland	inside		Gland	inside	
Application	Coding	Color		Part No.			Part No.	
	🛞 L, N	light gray	9	6.024.2253.0			96.024.6253.0	)
250V	L, N	black	9	6.024.2253.1			96.024.6253.	1
2300	+, -	pebble gray	9	6.024.2250.8			96.024.6250.8	3
~50/-120V	1, 2	signal brown	9	6.024.2251.4			96.024.6251.4	1
	,							

1) With wire protection available on request

# **Accessories – Cover pieces**

#### **Cover pieces**

For the safe closure of female and male connectors. With mounting strap for snapping onto plug connectors and device connectors

for female



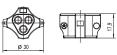


	not captive against loss
	Color
	light grey
39,05	black

for female	for male
Part No.	Part No.
Z5.564.4553.0	05.564.4453.0
Z5.564.4553.1	05.564.4453.1

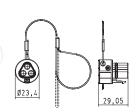
for male





for female

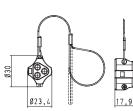




captive against loss for male for female Color Part No. Part No. light greyblack 99.415.6205.2 99.416.6205.2 99.413.6205.2 99.414.6205.2

for male





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<b>ST</b> <sup>®</sup>

C

## Cable assemblies Cable 2 x 1.5 mm<sup>2</sup>; 16 A

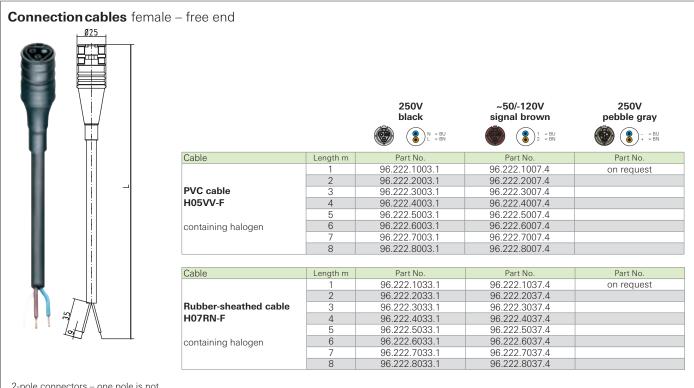
Rated values			Pull relief	shrinkage tube
Wire ends	ds (open cable end) ultrason. welded		Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color shrinkage tube	black

#### Connection cables female - male



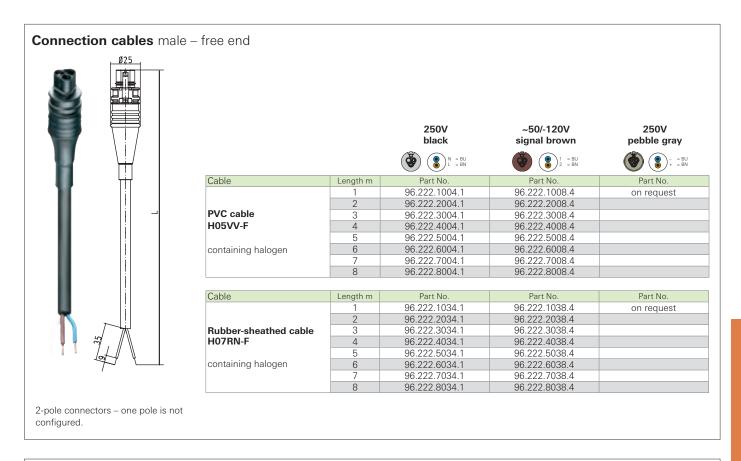
		250V	~50/-120V	250V
		black	signal brown	pebble gray
		N = BU L = BN	2 = BN	- = BU + = BN
able	Length m	Part No.	Part No.	Part No.
	1	96.222.1000.1	96.222.1002.4	on request
	2	96.222.2000.1	96.222.2002.4	
VC cable	3	96.222.3000.1	96.222.3002.4	
105VV-F	4	96.222.4000.1	96.222.4002.4	
	5	96.222.5000.1	96.222.5002.4	
ontaining halogen	6	96.222.6000.1	96.222.6002.4	
0 0	7	96.222.7000.1	96.222.7002.4	
	8	96.222.8000.1	96.222.8002.4	
able	Length m	Part No.	Part No.	Part No.
	1	96.222.1030.1	96.222.1032.4	on request
	2	96.222.2030.1	96.222.2032.4	
ubber-sheathed cable	3	96.222.3030.1	96.222.3032.4	
07RN-F	4	96.222.4030.1	96.222.4032.4	
	5	96.222.5030.1	96.222.5032.4	
ontaining halogen	6	96.222.6030.1	96.222.6032.4	
-	7	96.222.7030.1	96.222.7032.4	
	8	96.222.8030.1	96.222.8032.4	

2-pole connectors – one pole is not configured.



2-pole connectors – one pole is not configured.

#### Cable assemblies Cable 2 x 1.5 mm<sup>2</sup>; 16 A



#### **Power Connection cable**

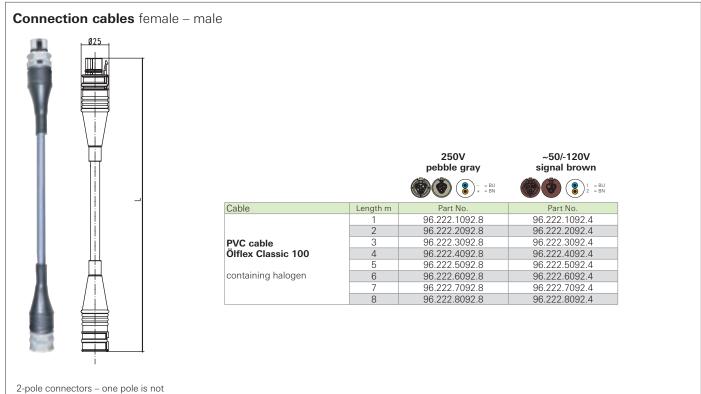
Male: european standard (SKII) – female: RST®



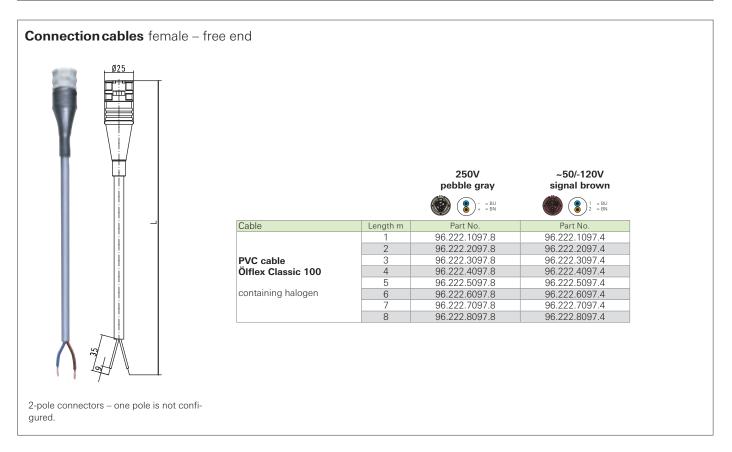
		250V black
Cable	Length m	Part No
Rubber-sheathed cable	1.5	99.708.0000.7
H07RN-F	2.5	99.709.0000.7
containing halogen		

# Cable assemblies Cable 2 x 1.5 mm<sup>2</sup>; 16 A

Rated values			Pull relief	shrinkage tube
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	gray
Wire strip length	(open cable end)	9 mm	Color shrinkage tube	black

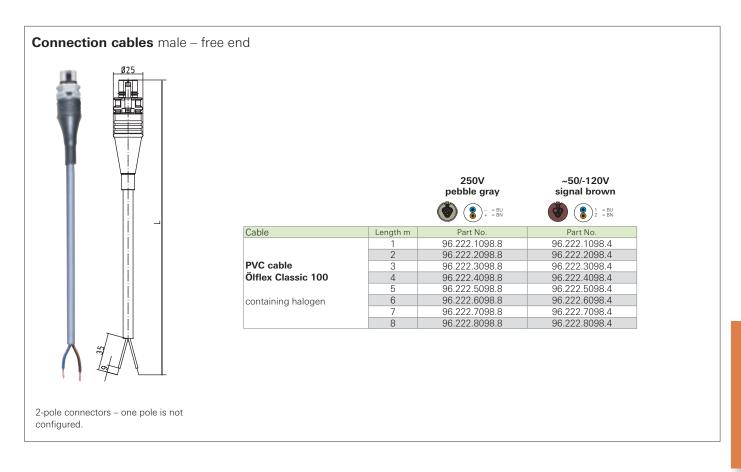


configured.



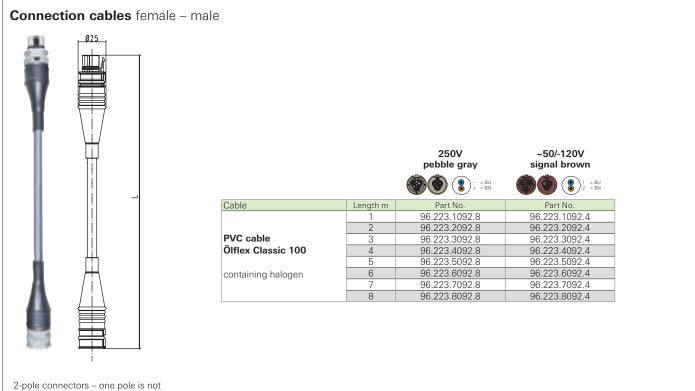
**RST 20i2** 

## Cable assemblies Cable 2 x 1.5 mm<sup>2</sup>; 16 A

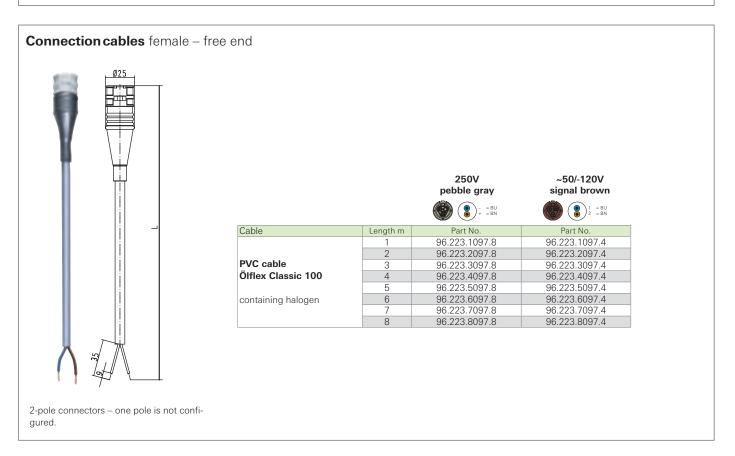


### Cable assemblies Cable 2 x 2.5 mm<sup>2</sup>; 20 A

Rated values			Pull relief	shrinkage tube
Wire ends (c	open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length (c	open cable end)	35 mm	Color cable	gray
Wire strip length (c	open cable end)	9 mm	Color shrinkage tube	black

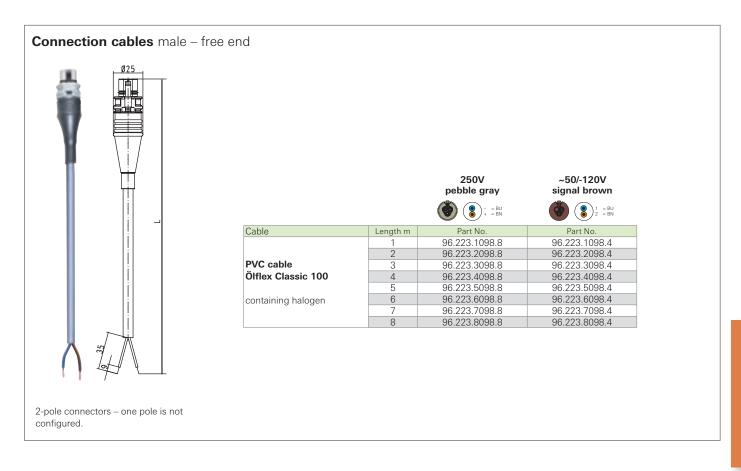


configured.



**RST 20i2** 

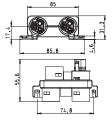
## Cable assemblies Cable 2 x 2.5 mm<sup>2</sup>; 20 A



# **Distribution block**

Distribution block 1I/30 (parallel connection), Interlock for protection class II, AS-i or LEDs





#### with fastening option

Color	Application	Pole marking	Input	Outputs	Part No.
black	250V	L, N	1	3	96.020.0153.1
light grey	250V	L, N	1	3	96.020.0153.0
pebble gray	250V	+, -	1	3	96.020.0150.8
signal brown	~50/-120V	1, 2	1	3	96.020.0151.4

Yes



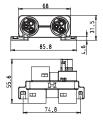
Circuit diagram

#### without fastening option

Color	Application	Pole marking	Input	Outputs	Part No.
black	250V	L, N	1	3	96.020.0253.1
light grey	250V	L, N	1	3	96.020.0253.0
pebble gray	250V	+, -	1	3	96.020.0250.8
signal brown	~50/-120V	1, 2	1	3	96.020.0251.4

#### Distribution block 1 I/3 0 (series connection) for power LEDs





Circuit diagram

with fastening option

Color	Application	Pole marking	Input	Outputs	Part No.
signal brown	~50/-120V	1, 2	1	3	99.910.0000.7

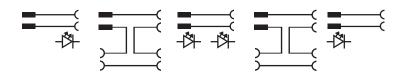




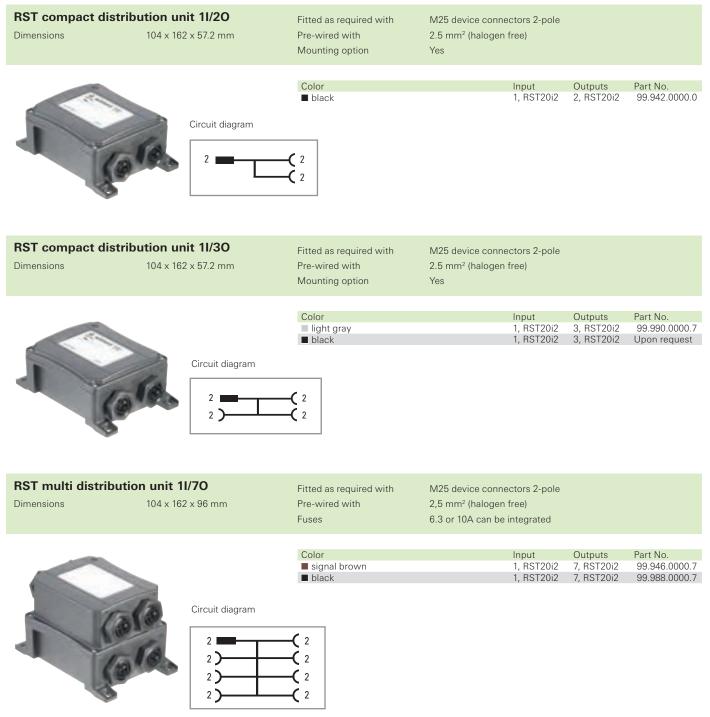
jumper plug					
Color	Application	Pole marking	Input	Outputs	Part No.
signal brown	~50/-120V	1, 2	1	3	99.537.0000.7

For jumpering od unused slots on the series distribution unit

e.g. circuit diagrams

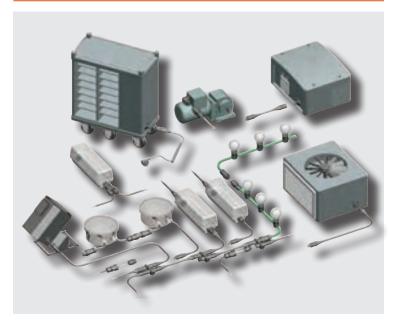


# **Distribution unit**



# Standard variant for network applications – polyphase systems, switching applications 250 V and low voltage

#### **Application example**



#### General

With the 3-pole connectors, there are four available variants: Three versions for applications up to 250/400V (e.g. general network applications, switching applications, applications for multiphase systems) and a version for extra-low voltages up to ~50/-120V. 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.

The color of the connectors indicates the links that belong together.

#### Coding

	visit the website at			Application	25	OV	250/400V	250/400V	~50/-120V
http://eshop.wieland-electric.com. Assembly instructions and other technical information can be found in the Technical Data or in eShop.				Mechanical coding, for example	L, N	, 🕀	1, 2, 🖶	1, 2, 3	1, 2, 🖶
Name	Description	Connection style	Strain relief housing	Connection points per pole	light gray	black	leaf green	light blue	signal brown
Connector	1 x cable entry	Screw Spring clamp Crimp	yes	1	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	2 x cable entry	Screw Spring clamp Crimp	yes	2	$\checkmark$	$\checkmark$	$\checkmark$		
Distribution units	Distribution block 11/30				$\overline{\mathbf{A}}$	$\checkmark$	$\checkmark$	$\checkmark$	$\overline{\mathbf{v}}$
	RST compact distribution unit / multi-distribution unit				on request	on request	on request	on request	on request
	Individual distribution box				on request	on request	on request	on request	on request
	M16 device connector, modular, straight				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	M16 device connector, modular, angled 7°				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Device	M25 device connector, standard				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
connectors	M20 device connector, standard				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	M20 device connector, modular, angled				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	M25 device connector, modular, angled				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Connection cable Male – Free end	pre- assembled	pre- assembled	pre- assembled	$\overline{\mathbf{v}}$	$\checkmark$	$\checkmark$		$\overline{\mathbf{A}}$
Cable	Connection cable Female – Free end	pre- assembled	pre- assembled	pre- assembled	$\overline{\mathbf{v}}$	$\checkmark$	$\checkmark$		$\overline{\mathbf{A}}$
assemblies	Extension cable Male – Female	pre- assembled	pre- assembled	pre- assembled	$\overline{\mathbf{v}}$	$\overline{\checkmark}$	$\checkmark$		$\overline{\mathbf{A}}$
	Connection cable Schuko – Female	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$			

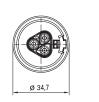
# **Connectors,** straight for cables Ø 6 – 10 mm and 10 – 14 mm

Female	connee	ctor				SW 27
Unmounted	with cable	gland.				
		for insulation strip ferrules to be used.		ø 34,7		
				with spring clamp conn.       Wire     mm <sup>2</sup> rigid     0.5 - 2.5	with screw connection <sup>1)</sup> Wire     mm <sup>2</sup> rigid     mm <sup>2</sup>	with crimp connection           Wire         mm²           fine-stranded         0.75 - 4.0
				fine-stranded         0.5         - 1.5           stranded         0.75 - 1.5	stranded 0.75 – 6.0 <sup>2)</sup>	
pplication	Coding	Cable diameter in mm	Color	Part No.	Part No.	Part No.
		6 – 10	light gray black	96.031.0053.0 96.031.0053.1	96.031.4053.0 96.031.4053.1	96.131.0053.0 96.131.0053.1
250/4001/	() L, N, ⊕	10 – 14	light gray black	96.031.0153.0 96.031.0153.1	96.031.4153.0 96.031.4153.1	96.131.0153.0 96.131.0153.1
250/400V	<ul> <li>(€)</li> <li>(€)</li> </ul>	6 – 10 10 –14	leaf green	96.031.0055.7 96.031.0155.7	96.031.4055.7 96.031.4155.7	
	() 3 1, 2, 3	6 - 10 10 -14	light blue	96.031.0053.9 96.031.0153.9	96.031.4053.9 96.031.4153.9	
~50/-120V	<ul> <li>●</li> <li>1, 2,</li> <li>●</li> </ul>	6 – 10 10 –14	signal- brown	96.031.0051.4 96.031.0151.4	96.031.4051.4 96.031.4151.4	
				Fine-stranded and stranded wires only with ferrules (see accessories)	Fine-stranded and stranded wires <b>without</b> ferrules	Contacts separately under Accessories.

#### Male connector

Unmounted with cable gland and locking device.

See the Technical Data for insulation strip lengths as well as the ferrules to be used.







				with spring clamp conn.	with screw connection <sup>1)</sup>	with crimp connection
				Wire         mm²           rigid         0.5         - 2.5           fine-stranded         0.5         - 1.5           stranded         0.75 - 1.5	Wire         mm²           rigid	Wire         mm²           fine-stranded         0.75 - 4.0
Application	Coding	Cable diameter in mm	Color	Part No.	Part No.	Part No.
	N, L, 6 – 10 light gray black		96.032.0053.0 96.032.0053.1	96.032.4053.0 96.032.4053.1	96.132.0053.0 96.132.0053.1	
250/400V		10 – 14	light gray black	96.032.0153.0 96.032.0153.1	96.032.4153.0 96.032.4153.1	96.132.0153.0 96.132.0153.1
200/4007	<b>2</b> , 1, ⊕	6 – 10 10 –14	leaf green	96.032.0055.7 96.032.0155.7	96.032.4055.7 96.032.4155.7	
	2, 1 3	6 – 10 10 –14	light blue	96.032.0053.9 96.032.0153.9	96.032.4053.9 96.032.4153.9	
~50/-120V	<b>2</b> , 1, ⊕	6 – 10 10 –14	signal- brown	96.032.0051.4 96.032.0151.4	96.032.4051.4 96.032.4151.4	
				Fine-stranded and stranded wires <b>only with</b> ferrules (see accessories)	Fine-stranded and stranded wires <b>without</b> ferrules	Contacts separately under Accessories.

# **Connectors,** angled 90° for cables Ø 6 – 10 mm and 10 – 14 mm

Unmounte 90° angle. See the Tee				\$				51 69 69 5W27	
				with spring	g clamp conn.	with screw co	nnection <sup>1)</sup>	with crimp	connection
				Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>
				rigid	0.5 - 2.5	rigid		fine-stranded	0.75 - 4.0
				fine-stranded	0.5 - 1.5	fine-stranded	0.75 - 6.02)		
				stranded	0.75 – 1.5	stranded		]	
Application	Coding	Cable diameter in mm	Color		Part No.	Par	t No.	F	Part No.
		0	light gray	96.	.033.0053.0	96.033	3.4053.0	96.1	133.0053.0
	🧥 L, N,	6 – 10	black		.033.0053.1		3.4053.1		133.0053.1
	<b>W</b> 🖯	10 – 14	light gray		.033.0153.0		3.4153.0		133.0153.0
250/400V	-		black		.033.0153.1		3.4153.1	96.1	133.0153.1
	1, 2, ⊕	6 – 10 10 –14	leaf green		.033.0055.7 .033.0155.7		3.4055.7 3.4155.7		
			-		.033.0051.4		3.4051.4		
	1, 2, 3	10-14	light blue		.033.0151.4		3.4151.4		
E0/ 100)/		6 - 10	signal-		.033.0053.9		3.4053.9		
~50/-120V	1, 2, ⊕	10 –14	brown	96.	.033.0153.9	96.033	3.4153.9		
				Fine-stranded and ferrules (see acce	d stranded wires <b>only with</b> ssories)	Fine-stranded and stra ferrules	nded wires without	Contacts separatel	y under Accessories.
Unmounte device. 90° See the Ter	° angle. chnical Data	<b>Dr</b> e gland and locking a for insulation strip ferrules to be used.		Ø34,6		ET)		Ga. 62, 3 2MS	55,7

				with spring clamp conn.           Wire         mm²           rigid         0.5         -2.5           fine-stranded         0.5         -1.5           stranded         0.75         -1.5	with screw connection <sup>1)</sup> Wire         mm <sup>2</sup> rigid         0.75 - 6.0 <sup>2</sup> stranded         0.75 - 6.0 <sup>2</sup>	with crimp connection           Wire         mm²           fine-stranded         0.75 - 4.0
Application	Coding	Cable diameter in mm	Color	Part No.	Part No.	Part No.
	(€) N, L, (⊕)	6 – 10 10 – 14	light gray black light gray black	96.034.0053.0 96.034.0053.1 96.034.0153.0	96.034.4053.0 96.034.4053.1 96.034.4153.0 96.034.4153.1	96.134.0053.0 96.134.0053.1 96.134.0153.0 96.134.0153.1
250/400V	€ 2, 1, €	6 – 10 10 –14	leaf green	96.034.0153.1 96.034.0055.7 96.034.0155.7	96.034.4155.7 96.034.4155.7 96.034.4155.7	96.134.0153.1
	2, 1 3	<u>6 - 10</u> 10 - 14	light blue	96.034.0053.9 96.034.0153.9	96.034.4053.9 96.034.4153.9	
~50/-120V	2, 1, €	6 – 10 10 –14	signal- brown	96.034.0051.4 96.034.0151.4	96.034.4051.4 96.034.4151.4	
				Fine-stranded and stranded wires <b>only with</b> ferrules (see accessories)	Fine-stranded and stranded wires <b>without</b> ferrules	Contacts separately under Accessories.

# **Connectors,** straight for cables Ø 13 – 18 mm

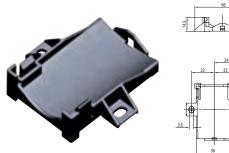
Female connector	r		- SW32
Jnmounted with cable glan	d.		
See Technical Data for shea engths.	th and insulation strip	Ø35,4	
		with screw connection <sup>1)</sup>	with crimp connection
		Wire mm <sup>2</sup>	Wire mm <sup>2</sup>
		rigid fine-stranded 0.75 – 6.0 <sup>2)</sup> without ferrules	fine-stranded 0.75 – 4.0
		stranded without ferrules	
pplication Coding Cat	ble diameter in mm Colo	Part No.	Part No.
(∰ L, N, ⊕	13 –18 light grav blac		96.131.4553.0 96.131.4553.1
250/400∨ ● 1, 2,	13 –18 leaf greer		00.101.4000.1
	13 –18 light blue		
		Fine-stranded and stranded wires <b>without</b> ferrules	Contacts separately under Accessories.
Male connector			
Jnmounted with cable glan See Technical Data for shea engths.		Ø35.4	
		with screw connection <sup>1)</sup>	with crimp connection
		Wire         mm²           rigid	Wire         mm²           fine-stranded         0.75 – 4.0

				stranded	without ferrules	
Application	Coding	Cable diameter in mm	Color	Part No.		Part No.
	(€) N, L,	13 –18	light gray black	96.032.4553.0 96.032.4553.1		96.132.4553.0 96.132.4553.1
250/400V	<b>2</b> , 1, ⊕	13 –18	leaf green	96.032.4555	.7	
	2, 1 3	13 –18	light blue	96.032.4553.9		
				Fine-stranded and stranded wires without	ferrules	Contacts separately under Accessories.

# **Splitter connector,** straight for cables Ø 6 – 10 mm and 10 – 14 mm

Female	conneo	ctor							27 SW 27
Unmounted	I with cable	gland.	1					, fi	RMT
		for insulation strip ferrules to be used.	88	59					
				with spring clamp connection			with screw	connection <sup>1)</sup>	
				Leitungen rigid fine-stranded stranded	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5	with ferrules with ferrules	Leitungen rigid fine-stranded stranded	mm <sup>2</sup> 0.75 – 2.5	
Application	Coding	Cable diameter in mm	Color		Part No.			Part No.	
250/400V -	(€) L, N, €	6 - 10 10 - 14	light gray black light gray black	96.031.0253.0 96.031.0253.1 96.031.0353.0 96.031.0353.1 96.031.0255.7		96.031.4253.0 96.031.4253.1 96.031.4353.0 96.031.4353.1 96.031.4353.1 96.031.4255.7			
-	() () () () () () () () () ()	6 - 10 10 - 14 10 - 14	leaf green light blue	96.031.0355.7 96.031.4355.7					
				Fine-stranded and	l stranded wires <b>only wi</b>	<b>th</b> ferrules (see accessories)	Fine-stranded and	stranded wires without	t ferrules

#### Mounting plate for splitter connectors



	Co
A	

¢

Color	Part No.
gray	01.006.1553.0
black	01.006.1553.1

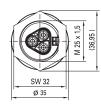
# M25 device connector straight, standard

#### **Female connector** Correct positioning guaranteed due to SW 24 flattened thread. Fastening with screws 36.95 ) from outside. 125x1,5 See the Technical Data for insulation strip lengths as well as the ferrules to be used. SW 32 Ø 35 For the spacer rings for unlocking the device connectors, see Accessories. wahlweise Verdrehsicherung optional protection against twisting with spring clamp conn. with screw connection with crimp connection Wire Wire Wire mm<sup>2</sup> mm<sup>2</sup> mm 0.5 - 2.5 0.75 - 4.0 rigid fine-stranded † max. = 8 MM rigid fine-stranded 0.5 - 1.5 fine-stranded Term. poles 0.75 - 6.00.75 - 1.5 Thread stranded stranded M25 x 1.5 Term. poles Term. poles Gland outside 23,9-0.2 Thread M25 x 1.5 M25 x 1.5 Thread Ø25,4-0,2 Gland outside Gland outside Application Coding Color Part No. Part No. Part No. light gray 96.031.1053.0 96.031.5053.0 96.131.1053.0 L, N, 🕀 96.031.1053.1 96.031.5053.1 96.131.1053.1 black 250/400V 1, 2, 🕀 leaf green 96.031.1055.7 96.031.5055.7 96.131.1055.7 96.031.1053.9 96.031.5053.9 1, 2, 3 light blue ~50/-120V 1, 2, 🕀 signal brown 96.031.1051.4 96.031.5051.4 Fine-stranded and stranded wires **only with** ferrules (see accessories) Fine-stranded and stranded wires **without** ferrules Contacts separately under Accessories.

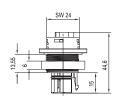
#### Male connector

Correct positioning guaranteed due to flattened thread. Fastening with screws from outside. With locking device.

See the Technical Data for insulation strip lengths.

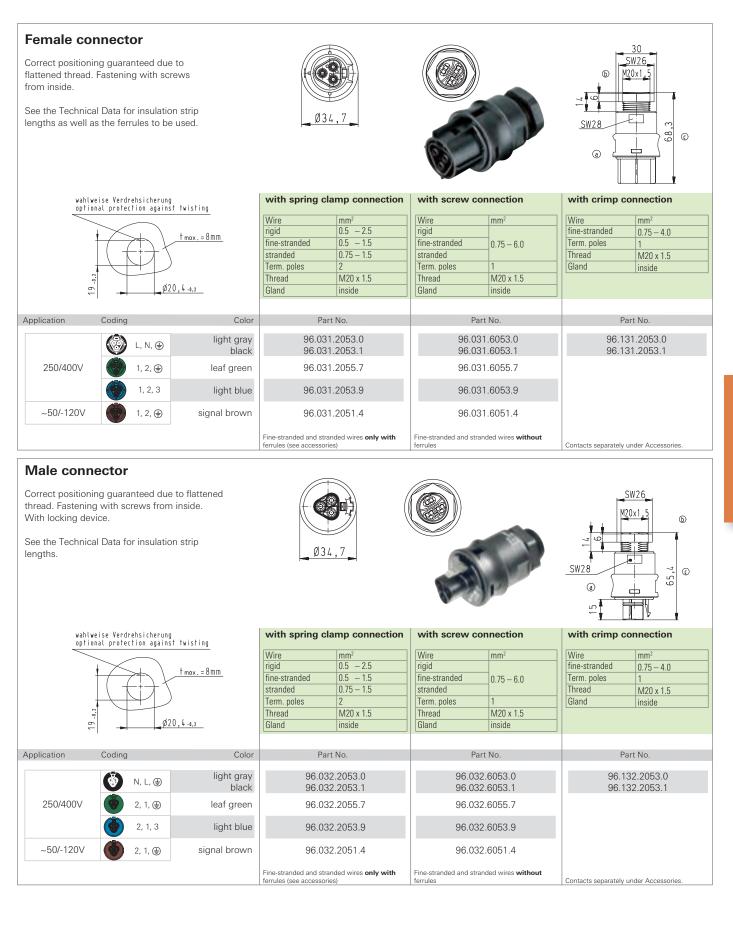






wahlw optio	eise Verdrehsicherung nal protection agains	t twisting	with spring cla	amp conn.	with screw c	onnection	with crimp c	connection
	23.9 -0.2	± t max. = 8mm	Wire rigid fine-stranded stranded Term. poles Thread Gland	mm²           0.5         - 2.5           0.5         - 1.5           0.75         - 1.5           2         M25 x 1.5           outside         000000000000000000000000000000000000	Wire rigid fine-stranded stranded Term. poles Thread Gland	mm <sup>2</sup> 0.75 - 6.0 1 M25 x 1.5 outside	Wire fine-stranded Term. poles Thread Gland	mm²           0.75 - 4.0           1           M25 x 1.5           outside
Application	Coding	Color	Par	t No.	Pa	art No.	P	art No.
	N, L, 🖶	light gray black		2.1053.0 2.1053.1		32.5053.0 32.5053.1		32.1053.0 32.1053.1
250/400V	2, 1, 🕀	leaf green	96.032	2.1055.7	96.032.5055.7		96.1	32.1055.7
	2, 1, 3	light blue	96.032.1053.9		96.03	32.5053.9		
~50/-120V	2, 1, 🕀	signal brown	96.032	2.1051.4	96.03	32.5051.4		
			Fine-stranded and stra ferrules (see accessorie		Fine-stranded and str ferrules	anded wires without	Contacts separately	under Accessories.

# M20 device connector straight, modular



# M16 device connector straight, modular

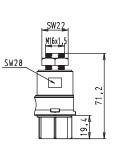
#### **Female connector**

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside.

See the Technical Data for insulation strip lengths as well as the ferrules to be used.







wah opt	nlweise Verdrehsicheru tional protection agai	ing inst twisting	with spring cla	amp connection	with screw co	nnection	with crimp co	onnection
			Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>	Wire	mm2
	$\times$	L 0	rigid	0.5 - 2.5	rigid		fine-stranded	0.75 - 4.0
1		† max. = 8 MM	fine-stranded	0.5 - 1.5	fine-stranded	0.75 - 6.0	Term. poles	1
			stranded	0.75 - 1.5	stranded		Thread	M16 x 1.5
1			Term. poles	2	Term. poles	1	Gland	inside
-0.2			Thread	M16 x 1.5	Thread	M16 x 1.5		
15	ø16	, 4 -0,2	Gland	inside	Gland	inside		
Application	Coding	Color	Par	t No.	Par	t No.	Par	rt No.
	() L, N, ⊕	light gray black		1.2153.0 1.2153.1		.6153.0 .6153.1		1.2153.0 1.2153.1
250/400V	1, 2, 🕀	leaf green	96.03	1.2155.7	96.031	.6155.7		
	1, 2, 3	light blue	96.03	1.2153.9	96.031	.6153.9		
~50/-120V	1, 2, 🕀	signal brown	96.03	1.2151.4	96.031	.6151.4		
			Fine-stranded and stra ferrules (see accessori		Fine-stranded and stra ferrules	nded wires without	Contacts separately u	inder Accessories.

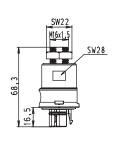
#### Male connector

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. With locking device.

See the Technical Data for insulation strip lengths.

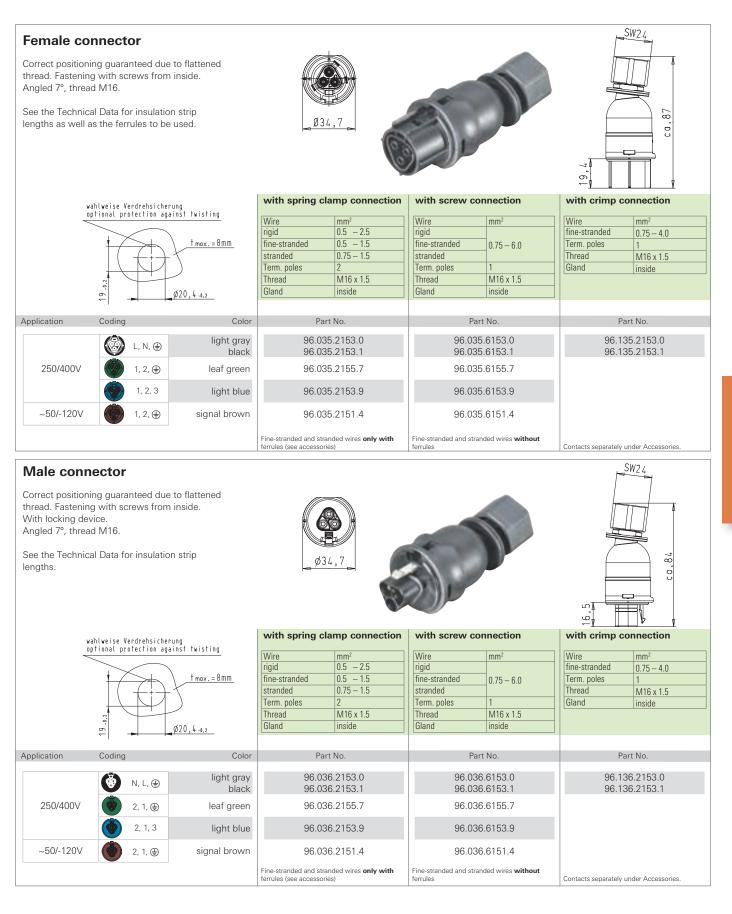






wah opt	nlweise Verdrehsicher tional protection aga	ung inst twisting_	with spring c	lamp connection	with screw cor	nnection	with crimp co	nnection
	$\sim$		Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>
	$\times$	L 0	rigid	0.5 - 2.5	rigid		fine-stranded	0.75 - 4.0
4	$\rightarrow$	† max. = 8 MM	fine-stranded	0.5 - 1.5	fine-stranded	0.75 - 6.0	Term. poles	1
			stranded	0.75 – 1.5	stranded		Thread	M16 x 1.5
			Term. poles	2	Term. poles	1	Gland	inside
-0.2			Thread	M16 x 1.5	Thread	M16 x 1.5	<u> </u>	
15	ø16	, 4 -0.2	Gland	inside	Gland	inside		
Application	Coding	Color	Part No.		Part No.		Part No.	
	😵 N, L, 🕀	light gray black		32.2153.0 32.2153.1	96.032.6153.0 96.032.6153.1			2.2153.0 2.2153.1
250/400V	2, 1, 🕀	leaf green	96.03	32.2155.7	96.032.6155.7			
	2, 1, 3	light blue	96.03	96.032.2153.9		.6153.9		
~50/-120V	2, 1, 🖶	signal brown	96.03	32.2151.4	96.032	.6151.4		
			Fine-stranded and st ferrules (see accesso	randed wires <b>only with</b> ories)	Fine-stranded and strar ferrules	nded wires without	Contacts separately u	nder Accessories.

# M16 device connector angled 7°, modular



## M20 device connector angled 90°, modular

#### **Female connector**



#### Male connector

250/400V

~50/-120V

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. With locking device.

1, 2, 🕀 1, 2, 3

1, 2, 🕀

leaf green

light blue

signal brown

See the Technical Data for insulation strip lengths.



96.033.2055.7

96.033.2053.9

96.033.2051.4

Fine-stranded and stranded wires only with

ferrules (see accessories)



96.033.6055.7

96.033.6053.9

96.033.6051.4

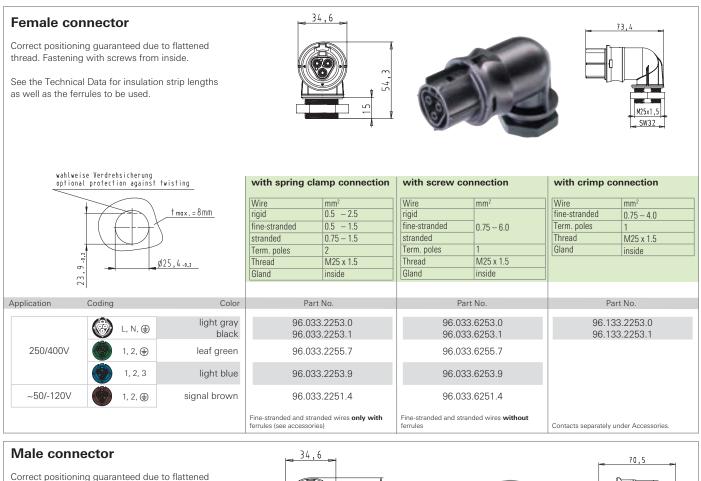
Fine-stranded and stranded wires without ferrules



Contacts separately under Accessories.

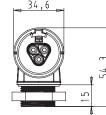
wahlv optic	weise Verdrehsicherung onal protection agains	t twisting	with spring clamp connection		with screw co	nnection	with crimp co	onnection
0		t_max.=8mm	Wire rigid fine-stranded stranded Term. poles Thread Gland	mm <sup>2</sup> 0.5 - 2.5 0.5 - 1.5 0.75 - 1.5 2 M20 x 1.5 inside	Wire rigid fine-stranded stranded Term. poles Thread Gland	mm <sup>2</sup> 0.75 - 6.0 1 M20 x 1.5 inside	Wire fine-stranded Term. poles Thread Gland	mm <sup>2</sup> 0.75 – 4.0 1 M20 x 1.5 inside
Application	Coding	Color	Part	No.	Par	t No.	Pa	rt No.
	谢 N, L, 🕀	light gray black		1.2053.0 1.2053.1		.6053.0 .6053.1		4.2053.0 4.2053.1
250/400V	2, 1, 🕀	leaf green	96.034	1.2055.7	96.034.6055.7			
	2, 1, 3	light blue	96.034	96.034.2053.9		.6053.9		
~50/-120V	2, 1, 🕀	signal brown	96.034	4.2051.4	96.034	.6051.4		
			Fine-stranded and strar ferrules (see accessorie		Fine-stranded and stran ferrules	nded wires without	Contacts separately u	nder Accessories.

# M25 device connector angled 90°, modular

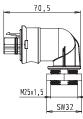


thread. Fastening with screws from inside. With locking device.

See the Technical Data for insulation strip lenaths.







wahlweise Verdrehsicherung optional protection against twisting with spring clamp connection with screw connection with crimp connection Wire Wire Wire mm<sup>2</sup> mm 0.5 - 2.5 † max. = 8 MM fine-stranded rigid riaid 0.75 - 4.0 0.5 - 1.5 fine-stranded Term, poles fine-stranded 0.75 - 6.0 0.75 - 1.5 stranded Thread stranded M25 x 1.5 Term. poles Term. poles Gland inside -0,2 Thread M25 x 1.5 Thread M25 x 1.5 Ø25,4-0,2 23,9-( inside Gland Gland inside Application Coding Color Part No. Part No. Part No. 96.134.2253.0 light gray 96.034.2253.0 96.034.6253.0 N, L, 🕀 black 96.034.2253.1 96.034.6253.1 96.134.2253.1 250/400V 96.034.2255.7 96.034.6255.7 2, 1, 🕀 leaf green light blue 2.1.3 96.034.2253.9 96.034.6253.9 ~50/-120V signal brown 96.034.2251.4 96.034.6251.4 2, 1, 🕀 Fine-stranded and stranded wires without ferrules Fine-stranded and stranded wires **only with** ferrules (see accessories) Contacts separately under Accessories

# Cable assemblies Cable 3 x 1.5 mm<sup>2</sup>; 16 A

Rated values			Pull relief	shrinkage tube
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color shrinkage tube	black

	ale – male		250V black	250/400V leaf green	250/400V light blue
	Cable	Length m	Part No.	Part No.	
		1	96.232.1000.1	96.232.1001.7	
		2	96.232.2000.1	96.232.2001.7	
	PVC cable	3	96.232.3000.1	96.232.3001.7	
	H05VV-F	4	96.232.4000.1	96.232.4001.7	
		5	96.232.5000.1	96.232.5001.7	
	containing halogen	6	96.232.6000.1	96.232.6001.7	
		7	96.232.7000.1	96.232.7001.7	
		8	96.232.8000.1	96.232.8001.7	
	Cable	Length m	Part No.	Part No.	Part No.
		1	96.232.1030.1	96.232.1031.7	96.232.1010.9
		2	96.232.2030.1	96.232.2031.7	96.232.2010.9
	Rubber-sheathed cable	3	96.232.3030.1	96.232.3031.7	96.232.3010.9
	H07RN-F	4	96.232.4030.1	96.232.4031.7	96.232.4010.9
		5	96.232.5030.1	96.232.5031.7	96.232.5010.9
	containing halogen	6	96.232.6030.1	96.232.6031.7	96.232.6010.9
		7	96.232.7030.1	96.232.7031.7	96.232.7010.9
		8	96.232.8030.1	96.232.8031.7	96.232.8010.9
	Cable	Length m	Part No.		
		1	96.232.1050.1		
		2	96.232.2050.1		
1	Rubber-sheathed cable	3	96.232.3050.1		
	H07RN-F	4	96.232.4050.1		
Ļ	enhanced version	5	96.232.5050.1		
_	halaway for a	6	96.232.6050.1		
	halogen-free	7	96.232.7050.1		
		8	96.232.8050.1		

ables female – free end		250 V black	250/400V leaf green	250/400V light blue
		$( \begin{array}{c} & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $	() = GN/YE 1 = BU 2 = BN	3 = BN 2 = BU 1 = BK
Ø 25	Length m	Part No.	Part No.	
	1	96.232.1003.1	96.232.1005.7	
	2	96.232.2003.1	96.232.2005.7	
PVC cable	3	96.232.3003.1	96.232.3005.7	
H05VV-F	4	96.232.4003.1	96.232.4005.7	
3	5	96.232.5003.1	96.232.5005.7	
containing halogen	6	96.232.6003.1	96.232.6005.7	
	7	96.232.7003.1	96.232.7005.7	
	8	96.232.8003.1	96.232.8005.7	
C the	t so att as	D N.	Devi Ne	Dent Ne
Cable	Length m	Part No. 96.232.1033.1	Part No. 96.232.1035.7	Part No.
	2	96.232.1033.1	96.232.1035.7	on request
Dubber sheethed		96.232.3033.1	96.232.3035.7	
Rubber-sheathed H07RN-F	<b>cable</b> 5	96.232.4033.1	96.232.4035.7	
HOTAN-F	5	96.232.5033.1	96.232.5035.7	
containing halogen	6	96.232.6033.1	96.232.6035.7	
	7	96.232.7033.1	96.232.7035.7	
	8	96.232.8033.1	96.232.8035.7	
L			,	
Cable	Length m	Part No.		
	1	96.232.1053.1		
Rubber-sheathed	2	96.232.2053.1		
H07RN-F	3	96.232.3053.1		
enhanced version	4	96.232.4053.1		
	5	96.232.5053.1		
halogen-free	6	96.232.6053.1		
nalogen noo	7	96.232.7053.1		
	8	96.232.8053.1		

# Cable assemblies Cable 3 x 1.5 mm<sup>2</sup>; 16 A

<b>Connection cables</b> m	ale – free end		250V black	250/400V leaf green	250/400V light blue
			() () () () () () () () () ()	() () () () () () () () () ()	3 = BN 2 = BU 1 = BK
Ø 25	Cable	Length m	Part No.	Part No.	
		1	96.232.1004.1	96.232.1006.7	
		2	96.232.2004.1	96.232.2006.7	
	PVC cable	3	96.232.3004.1	96.232.3006.7	
	H05VV-F	4	96.232.4004.1	96.232.4006.7	
		5	96.232.5004.1	96.232.5006.7	
	containing halogen	6	96.232.6004.1	96.232.6006.7	
		7	96.232.7004.1	96.232.7006.7	
		8	96.232.8004.1	96.232.8006.7	
		-			
	Cable	Length m	Part No.	Part No.	Part No.
		1	96.232.1034.1	96.232.1036.7	on request
		2	96.232.2034.1	96.232.2036.7	
	Rubber-sheathed cable	3	96.232.3034.1	96.232.3036.7	
	H07RN-F	4	96.232.4034.1	96.232.4036.7	
		5	96.232.5034.1	96.232.5036.7	
	containing halogen	6	96.232.6034.1	96.232.6036.7	
		7	96.232.7034.1	96.232.7036.7	
		8	96.232.8034.1	96.232.8036.7	
			I		
	Cable	Length m	Part No.		
🗶 / 派		1	96.232.1054.1		
		2	96.232.2054.1		
	Rubber-sheathed cable	3	96.232.3054.1		
	H07RN-F	4	96.232.4054.1		
1	enhanced version	5	96.232.5054.1		
	hologon from	6	96.232.6054.1		
	halogen-free	7	96.232.7054.1		
		8	96.232.8054.1		

#### Cable assemblies Cable 3 x 2.5 mm<sup>2</sup>; 20 A

Rated values			Pull relief	shrinkage tube
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color shrinkage tube	black

#### Connection cables female - male

925

		250V black	250/400V leaf green
		(C)	
Cable	Length m	Part No.	Part No.
	1	96.233.1000.1	96.233.1001.7
	2	96.233.2000.1	96.233.2001.7
PVC cable	3	96.233.3000.1	96.233.3001.7
H05VV-F	4	96.233.4000.1	96.233.4001.7
	5	96.233.5000.1	96.233.5001.7
containing halogen	6	96.233.6000.1	96.233.6001.7
	7	96.233.7000.1	96.233.7001.7
	8	96.233.8000.1	96.233.8001.7
Cable	Length m	Part No.	Part No.
	1	96.233.1030.1	96.233.1031.7
	2	96.233.2030.1	96.233.2031.7
Rubber-sheathed cable	3	96.233.3030.1	96.233.3031.7
H07RN-F	4	96.233.4030.1	96.233.4031.7
	5	96.233.5030.1	96.233.5031.7
containing halogen	6	96.233.6030.1	96.233.6031.7
	7	96.233.7030.1	96.233.7031.7
	8	96.233.8030.1	96.233.8031.7
Cable	Length m	Part No.	
	1	96.233.1050.1	
Rubber-sheathed cable	2	96.233.2050.1	
H07RN-F	3	96.233.3050.1	
enhanced version	4	96.233.4050.1	
	5	96.233.5050.1	
halogen-free	6	96.233.6050.1	
nalogon noo	7	96.233.7050.1	
	8	96.233.8050.1	

96.233.6053.1

96.233.7053.1

96.233.8053.1

6

7

#### Connection cables female - free end 250V 250/400V black leaf green ● GN/YE ● U L = BN Ø Part No. Part No. Cable Length m Ø 25 96.233.1003.1 96.233.1005.7 1 96.233.2005.7 96.233.2003.1 2 **PVC** cable 3 96.233.3003.1 96.233.3005.7 96.233.4005.7 H05VV-F 4 96.233.4003.1 5 96.233.5003.1 96.233.5005.7 containing halogen 96.233.6005.7 6 96.233.6003.1 96.233.7003.1 96.233.7005.7 8 96.233.8003.1 96.233.8005.7 Cable Length m Part No. Part No. 96.233.1033.1 96.233.1035.7 96.233.2033.1 96.233.2035.7 2 Rubber-sheathed cable 96.233.3033.1 96.233.3035.7 H07RN-F 4 96.233.4033.1 96.233.4035.7 96.233.5033.1 96.233.5035.7 5 containing halogen 6 96.233.6033.1 96.233.6035.7 96.233.7033.1 96.233.7035.7 96.233.8035.7 8 96.233.8033.1 Cable Length m Part No. 96.233.1053.1 96.233.2053.1 2 Rubber-sheathed cable 96.233.3053.1 H07RN-F 96.233.4053.1 96.233.5053.1 4 enhanced version 5

halogen-free

# Cable assemblies Cable 3 x 2.5 mm<sup>2</sup>; 20 A

Connection cables male – free end				
			250V black	250/400V leaf green
Ø 25 ,			(	() () () () () () () () () ()
	Cable	Length m	Part No.	Part No.
		1	96.233.1004.1	96.233.1006.7
		2	96.233.2004.1	96.233.2006.7
	PVC cable	3	96.233.3004.1	96.233.3006.7
	H05VV-F	4	96.233.4004.1	96.233.4006.7
		5	96.233.5004.1	96.233.5006.7
	containing halogen	6	96.233.6004.1	96.233.6006.7
		7	96.233.7004.1	96.233.7006.7
		8	96.233.8004.1	96.233.8006.7
	-			
	Cable	Length m	Part No.	Part No.
		1	96.233.1034.1	96.233.1036.7
		2	96.233.2034.1	96.233.2036.7
	Rubber-sheathed cable	3	96.233.3034.1	96.233.3036.7
	H07RN-F	4	96.233.4034.1	96.233.4036.7
		5	96.233.5034.1	96.233.5036.7
	containing halogen	6	96.233.6034.1	96.233.6036.7
		7	96.233.7034.1	96.233.7036.7
		8	96.233.8034.1	96.233.8036.7
	Cable	Length m	Part No.	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1	96.233.1054.1	
	Rubber-sheathed cable	2	96.233.2054.1	
	H07RN-F	3	96.233.3054.1	
	enhanced version	4	96.233.4054.1	
		5	96.233.5054.1	
	halogen-free	6	96.233.6054.1	
		7	96.233.7054.1	
		8	96.233.8054.1	

#### **Power Connection cable**

Male: european standard (SKII) – female: **RST**®



		250V gray
Cable	Length m	Part No.
	1.5	99.714.0000.7
PVC cable H05VV-F	2.5	99.715.0000.7
containing halogen		

		250V black
Cable	Length m	Part No.
	1.5	99.712.0000.7
Rubber-sheathed cable	2.5	99.713.0000.7
H07RN-F	4	99.716.0000.7
containing halogen	5	99.718.0000.7
	8	99.717.0000.7

# Cable assemblies Cable 3 x 2.5 mm<sup>2</sup>; 20 A

Rated values		Pull relief	shrinkage tube	
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color shrinkage tube	black

#### Power Connection cable

RST20i3 male - Schuko coupling

T'	Cable	Longth an	250V black Part No.
38	Cable	Length m 0.5	99.719.0000.7
3		1	99.719.0000.7
	Rubber-sheathed cable	2	Other lengths
Т	H07RN-F	3	on request
	containing halogen	4	
		5	

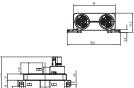
RST® CLASSIC

**RST 20i3** 

# **Distribution units**

#### Distribution block 1I/30





ation Pole ma	0 1	Outputs	Part No.
	- 1		
L, IN, I L	<u>:</u>	3	96.030.0153.1
L, N, PE	£ 1	3	96.030.0153.0
V 1, 2, PE	1	3	96.030.0155.7
OV 1, 2, PE	1	3	96.030.0151.4
	L, N, PE V 1, 2, PE	L, N, PE 1 V 1, 2, PE 1	L, N, PE 1 3 V 1, 2, PE 1 3

Yes

#### without fastening option

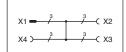
Color	Application	Pole marking	Input	Outputs	Part No.
black	250V	L, N, PE	1	3	96.030.0253.1
light grey	250V	L, N, PE	1	3	96.030.0253.0
leaf green	250/400V	1, 2, PE	1	3	96.030.0255.7
signal brown	~50/-120V	1, 2, PE	1	3	96.030.0251.4

Circuit diagram

Color

Interlock

al contractor



RST compact distr 1I/30	ribution unit
Dimensions	104 x 162 x 57.2 mm

fitted as required with M25 device connectors 3-pole 2.5 mm<sup>2</sup> (halogen free) pre-wired with Mounting option Yes





**RST** multi-distribution unit

104 x

11/70 Dimensions

	00101
Circuit diagram	■ black
$\begin{array}{c} X1 = \begin{array}{c} 3 \\ \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \begin{array}{c} 3 \\ \end{array} \begin{array}{c} 3 \\ \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \end{array} \end{array} \begin{array}{c} 3 \\ \end{array} \end{array} \end{array} \end{array} \end{array} $ \end{array} \begin{array}{c} 3 \\ \end{array}	

:	fitted as requi	red with	M25 device conne	ectors 3-pole		
	pre-wired wit	h	2.5 mm² (halogen	free)		
162 x 96 mm	Fuse		6.3 or 10A can be	integrated		
	Color	Application	Pole marking	Input	Outputs	Part No.
	black			1, RST20i3	7, RST20i3	99.929.0000.7
Circuit diagram						





# **Accessories**

**Cover pieces** 

#### For the safe closure of female and male connectors.

With mounting strap for snapping onto plug connectors and device connectors

for female



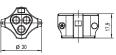


29,05

not captive against loss	for female	for male
Color	Part No.	Part No.
light gray	Z5.564.4553.0	05.564.4453.0
black	Z5.564.4553.1	05.564.4453.1

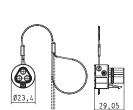
for male





for female

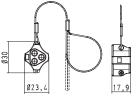




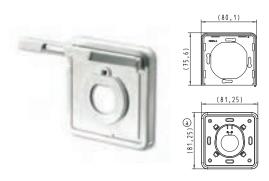
captive against loss	for female	for male
Color	Part No.	Part No.
light gray	99.413.6205.2	99.415.6205.2
■ black	99.414.6205.2	99.416.6205.2

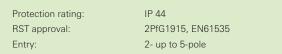
for male





Socket frame for device connectors M25 (female)







# **Accessories Crimp**

#### Female contacts and male contacts

#### **Female contacts**



#### Male contacts



Name	Marking	(groove) mm <sup>2</sup>	Part No.
Female crimp contact	1	0.75 – 1.0	02.122.9000.0
Female crimp contact	unmarked	1.5	02.122.9100.0
Female crimp contact	1	2.5	02.122.9200.0
Female crimp contact	unmarked	4.0	02.122.9300.0
Male crimp contact	1	0.75 – 1.0	05.544.7800.0
Male crimp contact	unmarked	1.5	05.544.7900.0
Male crimp contact	1	2.5	05.544.8000.0
Male crimp contact	unmarked	4.0	05.545.4600.0

#### **Crimping tool**



Name	Part No.
Crimping tool incl. system kit	95.101.0800.0
Crimping die B	05.502.2100.0
Contact positioner	05.502.3600.0

Unlocking tool for crimp contacts



Name Unlocking tool Part No. 05.502.3500.0

**RST 20i3** 





L. J. S. S. S.

FIFIE

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# Solar applications for systems up to 32 A for single-phase power 3-pole

# 

# General

The system is specially adapted to the requirements of solar technology. The connectors can be loaded with a maximum of 32 A on two contacts (L, N) and are used for single-phase power with ENS.

Special distribution boxes are used to bundle the electrical power of up to 6 inverters and thus complete the system.

These connectors have their own mechanical coding.

This means that only associated pairs of male and female can be connected with the correct polarity. This ensures a clear separation from the connectors of the other product series.

# Features:

**Application example** 

- Fast mounting through easy handling
- UV-resistant
- Rated current up to 32A (with 6.0 mm<sup>2</sup>)
- Cross-sections up to 6 mm<sup>2</sup>
- Degree of protection IP66/68 (3m; 2h) /69

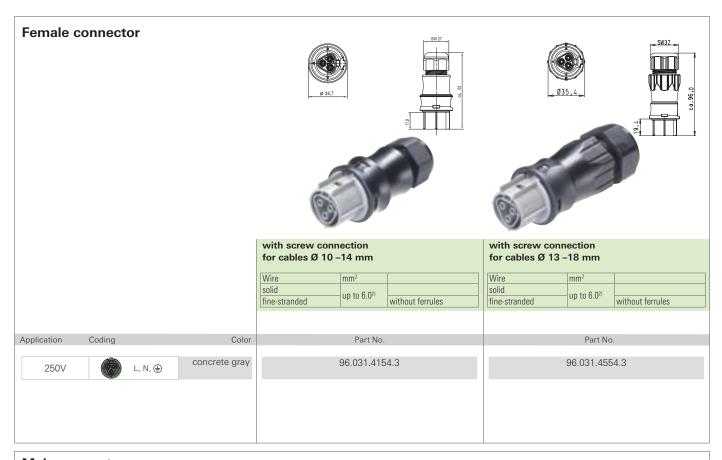
# Coding

	s visit the website at			Application	250V
http://eshop.wieland-electric.com. Assembly instructions and other technical information can be found in the Technical Data or in eShop.			Mechanical coding, for example	L, N,	
Name	Description	Connection style	Strain relief housing	Connection points per pole	concrete gray
Connector	1 x cable entry	Screw	yes	1	$\checkmark$
Distribution unit	Distribution box RST RAN Solar Distribution box RST Solar				$\overline{\checkmark}$
Device connectors	M25 device connector, standard				$\checkmark$
Cable assemblies	Connection cable Male – Free end	pre- assembled	pre- assembled	pre- assembled	$\checkmark$
	Connection cable Female – Free end Extension cable Male – Female	pre- assembled pre- assembled	pre- assembled pre- assembled	pre- assembled pre- assembled	$\overline{\checkmark}$



# Connectors, 25A, straight

for cables Ø 10 – 14 mm and 13 – 18 mm (up to 32A with 6.0 mm<sup>2</sup>)





<sup>1)</sup> With 6.0 mm<sup>2</sup> wires the pull and bending forces at the connector must be taken into consideration and compensated by suitable measures if required

# M25 device connector, 25 A straight (up to 32A with 6.0 mm<sup>2</sup>)

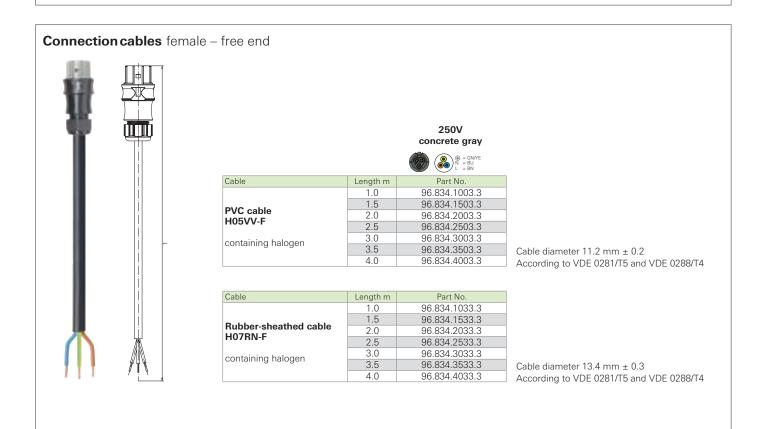
Female connector With sealing option	herung gainst twisting t max.=8mm	ON 3	51132 6.1	SW24
Application Coding	¢25, 4-4,2 Color concrete gray	with screw connection           Wire         mm²           solid         up to 6.0           fine-stranded         yes           Locking device         yes           Part No.         96.031.5054	without ferrules	
Male connector With sealing option valueise Verdrehsic optional protection	herung gainst twisting	1 Miles	54137	SW24
	¢25,4.4.2 Color	with screw connection           Wire         mm²           solid         up to 6.0           Locking device         yes	without ferrules	
Application     Coding       250V     ↓     L, N, ⊕	concrete gray	Part No. 96.032.5054	.3	1 Jan

# Cable assemblies Cable 3 x 4.0 mm<sup>2</sup>; 25 A

Rated values			Connection type of cable	Gland nut
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color handle shell	black

### Connection cables female - male

		250V concrete gray
		() () () () () () () () () ()
Cable	Length m	Part No.
	1.0	96.834.1000.3
PVC cable	1.5	96.834.1500.3
H05VV-F	2.0	96.834.2000.3
1100000	2.5	96.834.2500.3
containing halogen	3.0	96.834.3000.3
0 0	3.5	96.834.3500.3
	4.0	96.834.4000.3
Cable	Length m	Part No.
Cable	1.0	96.834.1030.3
	1.0 1.5	96.834.1030.3 96.834.1530.3
Rubber-sheathed cable	1.0 1.5 2.0	96.834.1030.3 96.834.1530.3 96.834.2030.3
	1.0 1.5 2.0 2.5	96.834.1030.3 96.834.1530.3 96.834.2030.3 96.834.2530.3
Rubber-sheathed cable H07RN-F	1.0 1.5 2.0 2.5 3.0	96.834.1030.3 96.834.1530.3 96.834.2030.3 96.834.2530.3 96.834.3030.3
Rubber-sheathed cable	1.0 1.5 2.0 2.5	96.834.1030.3 96.834.1530.3 96.834.2030.3 96.834.2530.3

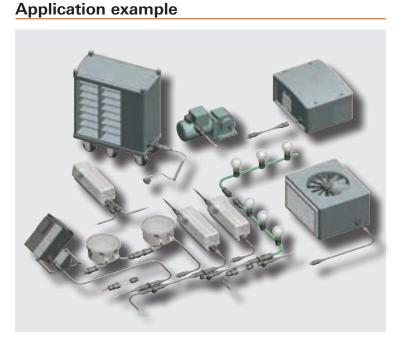


# Cable assemblies Cable 3 x 4.0 mm<sup>2</sup>; 25 A

Connection cables	<b>s</b> male – free end			
			250V concrete gray	
	Cable	Length m	Part No.	
	Cable	1.0	96.834.1004.3	
		1.5	96.834.1504.3	
	PVC cable			
	H05VV-F	2.0	96.834.2004.3	
			96.834.2504.3	
i  -	containing halogen	3.0	96.834.3004.3	
		3.5	96.834.3504.3	Cable diameter 11.2 mm ± 0.2
		4.0	96.834.4004.3	According to VDE 0281/T5 and VDE 0288/T
	Cable	Length m	Part No.	
		1.0	96.834.1034.3	
		1.5	96.834.1534.3	
	Rubber-sheathed cable	2.0	96.834.2034.3	
	H07RN-F	2.5	96.834.2534.3	
		3.0	96.834.3034.3	1
	containing halogen	3.5	96.834.3534.3	Cable diameter 13.4 mm ± 0.3
		4.0	96.834.4034.3	According to VDE 0281/T5 and VDE 0288/T
		1.0	50.004.4004.0	According to VDE 0261/15 and VDE 0288/14



# 2 versions for connecting electrical drives or for routing AS-i and extra-low voltages up to ${\sim}50{/}{-}120V$



## General

The four pole connector is based on the 5-pole variation with one pole not configured.

There are two mechanical codings. The black or light grey coding for applications up to 250/400V (e.g. connection of electrical drives) and the brown coding for extra-low voltages, for example for joint routing of the AS Interface and the 24V auxiliary voltage.

They are mechanically coded. This means that only associated pairs of male and female can be connected with the correct polarity. This ensures a clear separation from the connectors of the other product series.

# Coding

	visit the website at			Application	250/	400V	~50/-120V
http://eshop.wiela Assembly instruc in the Technical E	tions and other technical informat	tion can be found		Mechanical coding, for example	1, 2,	3, 🕀	1, 2, 3, 4
Name	Description	Connection style	Strain relief housing	Connection points per pole	light gray	black	signal brown
Connector	1 x cable entry	Screw Crimp	yes	1	$\checkmark$	$\checkmark$	$\checkmark$
Connector	2 x cable entry	Screw	yes	1	$\checkmark$	$\checkmark$	$\checkmark$
Distribution units	RST compact distribution unit/ multi-distribution unit				on request	on request	on request
	Individual distribution box				on request	on request	on request
	M16 device connector, modular, straight M16 device connector, modular, angled 7° M25 device connector,					$\overline{\checkmark}$	
Device connectors	standard M20 device connector, standard M20 device connector,				$\overline{\checkmark}$	$\overline{\checkmark}$	$\overline{\checkmark}$
	modular, angled M25 device connector, modular, angled				$\overline{\checkmark}$	$\overline{\mathbf{v}}$	$\overline{\mathbf{v}}$
Cable assemblies	Connection cable <u>Male – Free end</u> Connection cable Female – Free end	pre- assembled pre- assembled	pre- assembled pre- assembled	pre- assembled pre- assembled	$\overline{\checkmark}$	$\overline{\checkmark}$	$\overline{\checkmark}$
	Extension cable Male – Female	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$

# **Connectors,** straight for cables Ø 6 – 10 mm and 10 –14 mm

### **Female connector**

Unmounted with cable gland. Crimp contacts separately available under Accessories.

See Technical Data for sheath and insulation strip lengths.



					with screw connection <sup>1)</sup> Wire     mm <sup>2</sup> rigid     ine-stranded       fine-stranded     0.75 - 4.0       stranded     without ferrules	with crimp connection           Wire         mm²           fine-stranded         0.75 - 4.0
Application	Coding		Cable diameter in mm	Color	Part No.	Part No.
250/400V	<b>@</b>	1, 2, 3, 🕀	6 - 10 10 - 14	light gray black light gray black	96.041.4053.0 96.041.4053.1 96.041.4153.0 96.041.4153.1	96.141.0053.0 96.141.0053.1 96.141.0153.0 96.141.0153.1
~50/-120V		1, 2, 3, 4	6 – 10 1 x AS-i profile cable	signal brown	96.041.4051.4 96.041.4951.4	Contacts separately under Accessories, see following

### Male connector

Unmounted with cable gland and locking device.

Crimp contacts separately available under Accessories.

See Technical Data for sheath and insulation strip lengths.



					with screw connection <sup>1)</sup> Wire     mm <sup>2</sup> rigid        fine-stranded     0.75 - 4.0       stranded     without ferrules	with crimp connection       Wire     mm²       fine-stranded     0.75 - 4.0
Application	Coding		Cable diameter in mm	Color	Part No.	Part No.
250/400V	۲	1, 2, 3, 🕀	6 - 10 10 - 14	light gray black light gray black	96.042.4053.0 96.042.4053.1 96.042.4153.0 96.042.4153.1	96.142.0053.0 96.142.0053.1 96.142.0153.0 96.142.0153.1
~50/-120V	٢	1, 2, 3, 4	6 – 10 1 x AS-i profile cable	signal brown	96.042.4051.4 96.042.4951.4	
						Contacts separately under Accessories, see following pages.

<sup>1)</sup> With wire protection available on request

# **Connectors,** angled 90° for cables Ø 6 – 10 mm and 10 –14 mm

Female connector	ø34,6 ₽		
Unmounted with cable gland. 90° angle. Crimp contacts separately available under Accessories. See Technical Data for sheath and insulation strip lengths.			73.4 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		with screw connection <sup>1)</sup>	with crimp connection
		Wire         mm²           rigid	Wire         mm²           fine-stranded         0.75 - 4.0
Application Coding Cable diameter in mm	Color	Part No.	Part No.
250/400V (1, 2, 3, ⊕) 6 - 10 10 - 14 -50/-120V 1, 2, 3, 4 10 - 14 1 x AS-i profile cable 2 x AS-i profile cable	light gray black light gray black signal brown	96.043.4053.0 96.043.4053.1 96.043.4153.0 96.043.4153.1 96.043.4051.4 96.043.4951.4 96.043.4851.4	96.143.0053.0 96.143.0053.1 96.143.0153.0 96.143.0153.1
		00.040.4001.4	Contacts separately under Accessories, see following pages.
Male connector Unmounted with cable gland and locking device. 90° angle. Crimp contacts separately available under	Ø34.6	and the second s	71.4
See Technical Data for sheath and insulation strip			Si Sw27
Accessories. See Technical Data for sheath and insulation strip lengths.		with screw connection <sup>1)</sup>	with crimp connection
See Technical Data for sheath and insulation strip		with screw connection <sup>1)</sup> Wire         mm <sup>2</sup> rigid         0.75 - 4.0           stranded         0.75 - 4.0	Si Line Sw27
See Technical Data for sheath and insulation strip	Color	Wire         mm²           rigid         .75 – 4.0	with crimp connection
See Technical Data for sheath and insulation strip lengths.	Color light gray black light gray black	Wire     mm <sup>2</sup> rigid	with crimp connection       Wire     mm <sup>2</sup> fine-stranded     0.75 - 4.0

# **Connectors,** straight for cables Ø 13 – 18 mm

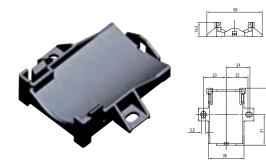
Unrounted with cable gland.         Singp contacts separately available under         See Technical Data for sheath and insulation strip         Singsts.         With screw conscion <sup>1</sup> Screw conscion <sup>1</sup> With screw conscion <sup>1</sup> With screw conscion <sup>1</sup> With screw conscion <sup>1</sup> With screw conscion <sup>1</sup> With screw conscion <sup>1</sup> With	Unmounted with cable gland.	SW33
Accessories.       See Technical Data for sheath and insulation strip ing this.       Image: stranded ing the street connection in the street connection is street connection.         Application Coding Cable downeter in mm       Color       Pert No.       Pert No.         260/400V       1.2.3. (a)       13 - 18       light gray.       96.041.4553.0       96.141.0553.0         260/400V       1.2.3. (a)       13 - 18       light gray.       96.041.4553.0       96.141.0553.0       96.141.0553.0         Vincounted with cable gland and looking device.       Contexts separately available under Accessories.       Sign of the sheath and insulation strip angths.       Sign of the sheath and insulation strip angths.         See Technical Data for sheath and insulation strip angths.       with screet connection in the street conn		
Definition calls for sheath and insulation stop       Image: calls of a sheath and insulation stop         with screw connection <sup>9</sup> with crimp connection         With crimp connection       With crimp connection         With crimp connection       With crimp connection         With crimp connection       With crimp connection         Mapplication       Coding       Cable dameter in mm         Coding       Cable dameter in mm       Color         250/400V       1.2.3.@       13 - 18       Inght gray black       96.041.4553.0       96.141.0553.1         Second       Cornect requirative under Accessories       96.041.4553.0       96.141.0553.1       Second         Maile connector       Unmounted with cable gland and locking device.       Cornect separately available under Accessories       Second       Second       Second         Sea Technical Data for sheath and insulation strip lengths       Second		
Wre       mm²       Wre       mm²         Implication       Coding       Cable diameter in mm       Color       Part No.       Part No.         250/400V       Implication       1.2,3, Implication       13 - 18       light gray black       96.041.4553.0       96.141.0553.1         250/400V       Implication       1.2,3, Implication       13 - 18       light gray black       96.041.4553.1       96.141.0553.1         Male connector       Unmounted with cable gland and locking device.       Contexts separately available under Accessories.       Contexts separately available under Accessories.       See Technical Data for sheath and insulation strip lengths.         See Technical Data for sheath and insulation strip lengths.       Implication       with screw connection**       with crimp connection         Write       mm2       figd       0.75 - 4.0       implication       implication		
Application       Coding       Cable diameter in mm       Color       Part No.       Part No.         250/400V       Image: angle of the stranded without femules       96.041.4553.0       96.141.0553.1         250/400V       Image: angle of the stranded without femules       96.041.4553.1       96.141.0553.1         Male connector       96.041.4553.1       96.141.0553.1       0.141.0553.1         Unmounted with cable gland and locking device.       Crimp contacts separately available under Accessories.       See Technical Data for sheath and insulation strip lengths.       Image: Base of the stranded 175-4.0         with screw connection*       with screw connection*       with crimp connection         Wire       mm2       mm2       mm2         Insestranded 175-4.0       175-4.0       175-4.0		with screw connection <sup>1)</sup> with crimp connection
Application       Coding       Cable diameter in mm       Color       Part No.         250/400V       Image: set and set		
250/400V       Image: 1, 2, 3, Image: 3, Image		fine-stranded up to 4.0
2004000     96.041.4553.1     96.141.0553.1       Contacts separately under Accessories, see following pages.       Male connector       Unmounted with cable gland and locking device.       Crimp contacts separately available under Accessories.       See Technical Data for sheath and insulation strip lengths.       with screw connection"       Wite mm2 rigid       Wite screw connection	Application Coding Cable diameter in mm Cole	or Part No. Part No.
Male connector     Unmounted with cable gland and locking device.       Crimp contacts separately available under Accessories.       See Technical Data for sheath and insulation strip lengths.       with screw connection*       with screw connection*       Wire mm2/rigid       Interstranded       0.75 - 4.0	250/400V ( 1 2 3 ( 13 - 18 light grav	96.041.4553.0 96.141.0553.0
Male connector         Unmounted with cable gland and locking device.         Crimp contacts separately available under         Accessories.         See Technical Data for sheath and insulation strip lengths.         Vith screw connection*         With screw connection*         Wire mm2 rigid fine-stranded         0.75 - 4.0		< <u>96.041.4553.1</u> 96.141.0553.1
Wire     mm2       rigid     fine-stranded       0.75 - 4.0	Unmounted with cable gland and locking device. Crimp contacts separately available under	pages.
Wire     mm2       rigid     fine-stranded       0.75 - 4.0		
fine-stranded 0.75 – 4.0		
		with screw connection <sup>1)</sup> with crimp connection
		with screw connection <sup>1</sup> )       with crimp connection         Wire       mm2         rigid       0.75 - 4.0
Application Coding Cable diameter in mm Color Part No. Part No.	lengths.	with screw connection <sup>1)</sup> with crimp connection         Wire       mm2         rigid       0.75 - 4.0         stranded       0.75 - 4.0         without ferrules       Image: Stranded in the strand
250/400V         Image: Weight of the second s	lengths.	with screw connection <sup>1)</sup> with crimp connection         Wire       mm2         rigid       0.75 - 4.0         stranded       0.75 - 4.0         without ferrules       Image: Stranded in the strand
Contacts separately under Accessories, see following pages.	Application     Coding     Cable diameter in mm     Color       250/400V     1 2 3 (b)     13 - 18     light grave	with screw connection <sup>1)</sup> with crimp connection         Wire       mm2         rigid       0.75 - 4.0         stranded       0.75 - 4.0         without ferrules       Part No.         Part No.       Part No.         96.042.4553.0       96.142.0553.0

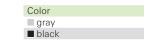
<sup>1)</sup> With wire protection available on request

# **Splitter connector,** straight for cables Ø 6 – 10 mm and 10 –14 mm

Female connector Unmounted with cable glands. See Technical Data for sheath and insulation strip lengths.	59	P.6	SW27 SW27
		with screw connection <sup>1)</sup> Wire     mm <sup>2</sup> rigid     ine-stranded       fine-stranded     0.75 – 1.5       stranded     without ferrules	
Application         Coding         Cable diameter in m           250/400∨         €         1, 2, 3, ⊕         6 - 1	0 light gray black	Part No. 96.041.4253.0 96.041.4253.1 96.041.4353.0	
10 - 1	black	96.041.4353.1	

### Mounting plate for splitter connectors

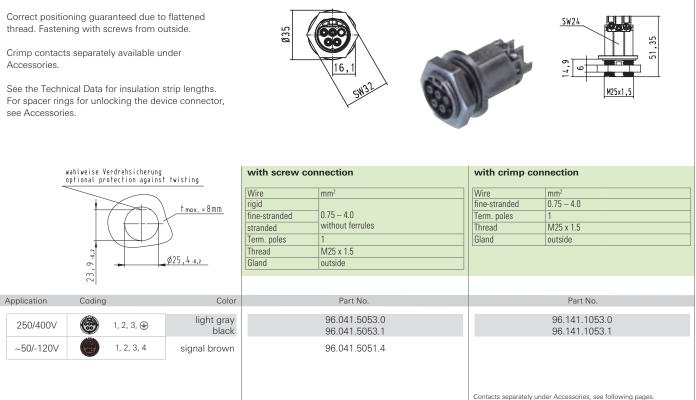




Part No.
01.006.1553.0
01.006.1553.1

# M25 device connector straight, standard

### **Female connector**



### Male connector

Correct positioning guaranteed due to flattened thread. Fastening with screws from outside. With locking device.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.



	wahlweise Verdrehsicherung optional protection agains	t twisting_	with screw c	onnection	with crimp co	onnection
	23.9-9.5	<u>t mox. = 8mm</u> <u>Ø25, 4 -a.1</u>	Wire rigid fine-stranded stranded Term. poles Thread Gland Locking device	mm <sup>2</sup> 0.75 – 4.0 without ferrules 1 M25 x 1.5 outside yes	Wire fine-stranded Term. poles Thread Gland Locking device	mm²           0.75 - 4.0           1           M25 x 1.5           outside           yes
Application	Coding	Color		Part No.		Part No.
250/400V	1, 2, 3, 🕀	light gray black		96.042.5053.0 96.042.5053.1		96.142.1053.0 96.142.1053.1
~50/-120V	1, 2, 3, 4	signal brown		96.042.5051.4		
					Contacts separately u	inder Accessories, see following pages.

# M20 device connector straight, modular



Ø34

With locking device.

Crimp contacts separately available under Accessories.

19 -0.2

d

Coding

1, 2, 3, 🕀

1, 2, 3, 4

Application

250/400V

~50/-120V

See the Technical Data for insulation strip lengths.



Contacts separately under Accessories, see following pages.

SW28

16,8

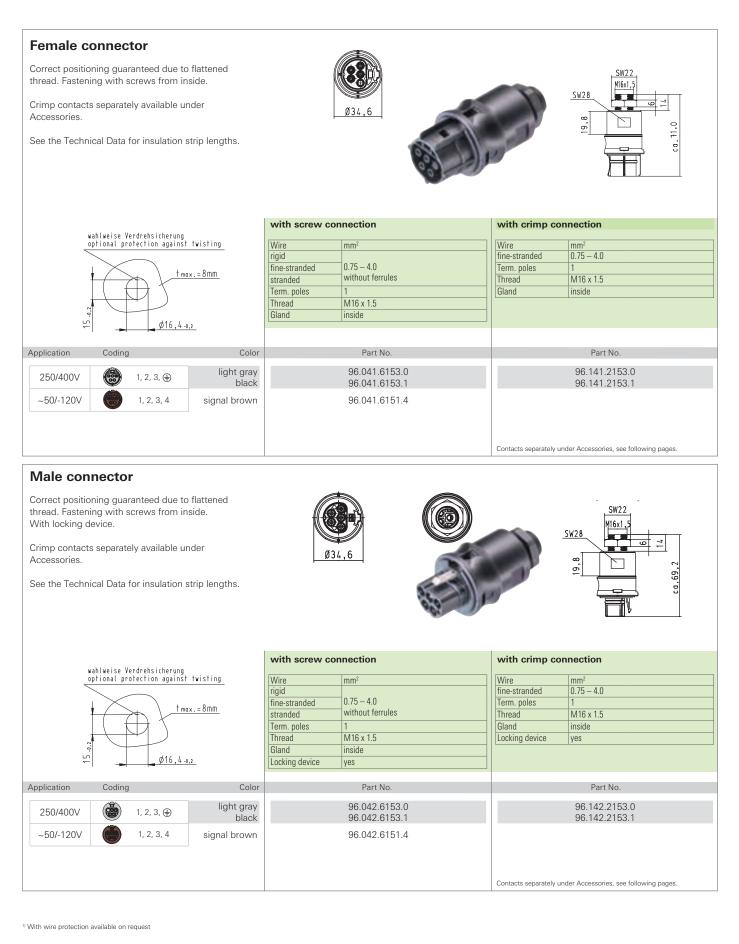
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1

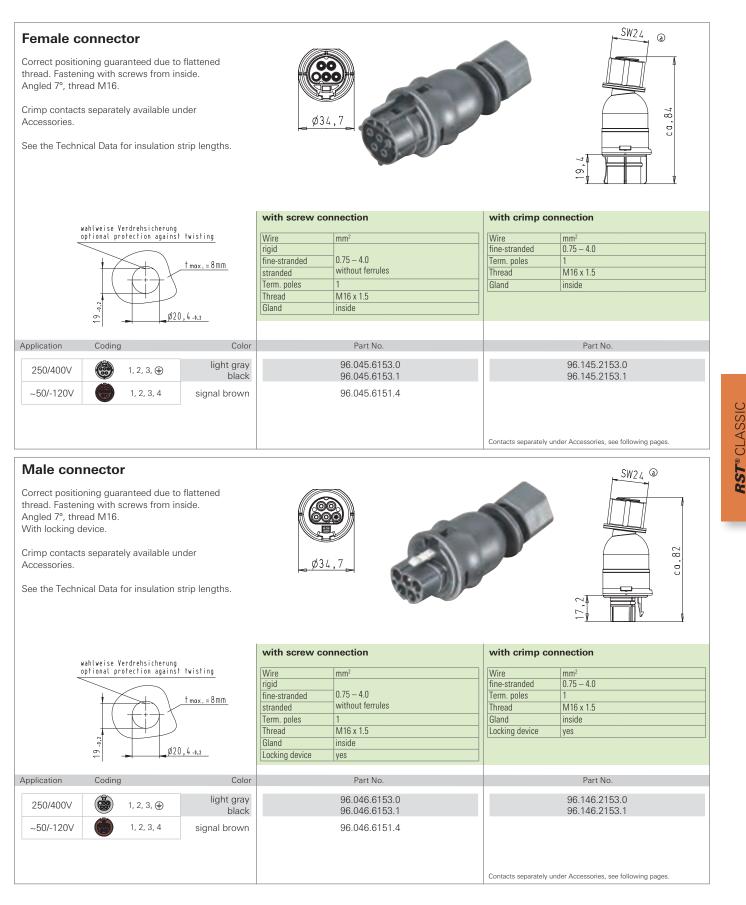
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66,

# M16 device connector straight, modular



# M16 device connector angled 7°, modular



121

# M20 device connector angled 90°, modular

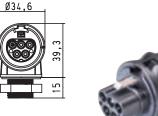
#### **Female connector** Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. Angled 90°, thread M20. တ္တ Crimp contacts separately available under ſ Accessories. See the Technical Data for insulation strip lengths. with crimp connection with screw connection wahlweise Verdrehsicherung optional protection against twisting Wire $\rm mm^2$ Wire mm<sup>2</sup> 0.75 - 4.0 fine-stranded rigid 0.75 - 4.0 fine-stranded Term. poles † max. = 8 MM without ferrules M20 x 1.5 stranded Thread Term. poles Gland inside M20 x 1.5 Thread 19 -0.2 Gland inside Ø20,4-0,2 Application Coding Color Part No. Part No. 96.043.6053.0 96.143.2053.0 light gray 250/400V 1, 2, 3, 🕀 black 96.043.6053.1 96.143.2053.1 1, 2, 3, 4 signal brown 96.043.6051.4 ~50/-120V Contacts separately under Accessories, see following pages.

### Male connector

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. Angled 90°, thread M20. With locking device.

Crimp contacts separately available under Accessories-

See the Technical Data for insulation strip lengths.







wahlwei	e Verdrehsicherung		with screw cor	nnection	with crimp cor	nnection
optiona	protection against	twisting	Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>
	$\sim$		rigid		fine-stranded	0.75 - 4.0
+	$\rightarrow$ $\downarrow$ $\downarrow$	t max. = 8 m m	fine-stranded	0.75 - 4.0	Term. poles	1
T			stranded	without ferrules	Thread	M20 x 1.5
			Term. poles	1	Gland	inside
, t			Thread	M20 x 1.5	Locking device	yes
-0,2	400	1	Gland	inside		
19	<sup>Ø20</sup>	, 4 -0,2	Locking device	yes		
Application C	ding	Color		Part No.		Part No.
250/400V	1, 2, 3, 🖶	light gray black		96.044.6053.0 96.044.6053.1		96.144.2053.0 96.144.2053.1
~50/-120V	1, 2, 3, 4	signal brown		96.044.6051.4		
					Contacts separately un	der Accessories, see following pages.

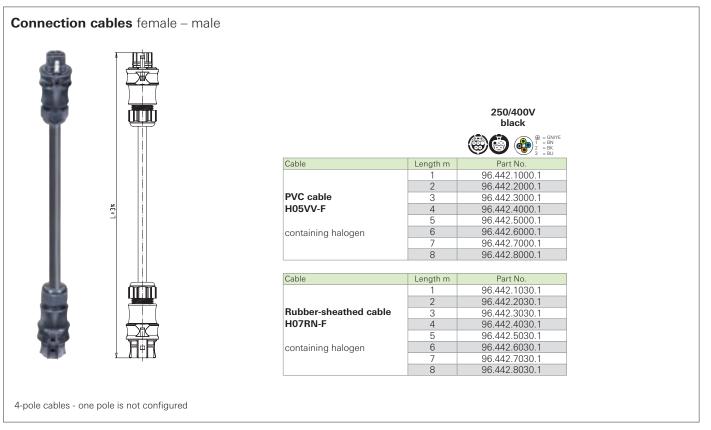
<sup>1)</sup> With wire protection available on request

# M25 device connector angled 90°, modular



# Cable assemblies Cable 4 x 1.5 mm<sup>2</sup>; 16 A

Rated values		Pull relief	Gland nut
Wire ends (open cable end) ultrason. welded		Interlock	integrated
Sheath strip length (open cable end) 35 mm		Color cable	black
Wire strip length (open cable end)	9 mm	Color handle shell	black



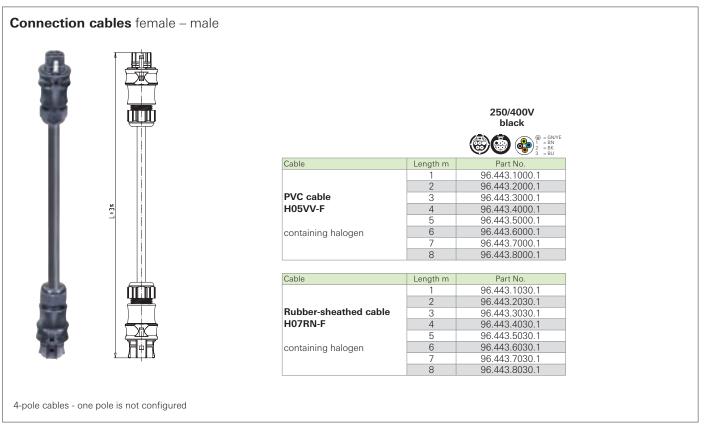
### Connection cables female - free end 250/400V black Cable Length m Part No. 96.442.1003.1 96.442.2003.1 2 **PVC** cable 3 96.442.3003.1 L±3% H05VV-F 4 96.442.4003.1 5 96.442.5003.1 6 96.442.6003.1 containing halogen 96.442.7003.1 8 96.442.8003.1 Part No. 96.442.1033.1 Cable Length m 1 96.442.2033.1 96.442.3033.1 2 Rubber-sheathed cable H07RN-F 96.442.4033.1 4 5 96.442.5033.1 96.442.6033.1 containing halogen 6 7 96.442.7033.1 96.442.8033.1 8 4-pole cables - one pole is not configured

# Cable assemblies Cable 4 x 1.5 mm<sup>2</sup>; 16 A

	l		
			250/400V
			black
			(     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )     (     )
	Cable	Length m	Part No.
		1	96.442.1004.1
		2	96.442.2004.1
	PVC cable	3	96.442.3004.1
	H05VV-F	4	96.442.4004.1
		5	96.442.5004.1
24	containing halogen	6	96.442.6004.1
		7	96.442.7004.1
		8	96.442.8004.1
	Cable	Length m	Part No.
		1	96.442.1034.1
		2	96.442.2034.1
	Rubber-sheathed cable	3	96.442.3034.1
	H07RN-F	4	96.442.4034.1
S S S S S S S S S S S S S S S S S S S		5	96.442.5034.1
10	containing halogen	6	96.442.6034.1
		7	96.442.7034.1
		8	96.442.8034.1

## Cable assemblies Cable 4 x 2.5 mm<sup>2</sup>; 20 A

Rated values		Pull relief	Gland nut
Wire ends (open cable end) ultrason. welded		Interlock	integrated
Sheath strip length (open cable end)	35 mm	Color cable	black
Wire strip length (open cable end)	9 mm	Color handle shell	black



#### Connection cables female - free end 250/400V black () 1 = BN 2 = BK 2 = BK Cable Length m Part No. 96.443.1003.1 1 96.443.2003.1 2 **PVC** cable 3 96.443.3003.1 L±3% H05VV-F 4 96.443.4003.1 5 96.443.5003.1 6 96.443.6003.1 containing halogen 96.443.7003.1 8 96.443.8003.1 Part No. 96.443.1033.1 Cable Length m 1 96.443.2033.1 2 Rubber-sheathed cable 96.443.3033.1 H07RN-F 96.443.4033.1 4 5 96.443.5033.1 containing halogen 6 96.443.6033.1 7 96.443.7033.1 96.443.8033.1 8 4-pole cables - one pole is not configured

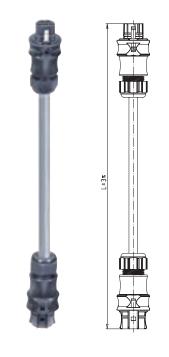
# Cable assemblies Cable 4 x 2.5 mm<sup>2</sup>; 20 A

Connection cables male – free end				
			250/400V black	
			() () () () () () () () () ()	
	Cable	Length m	Part No.	
		1	96.443.1004.1	
		2	96.443.2004.1	
	PVC cable	3	96.443.3004.1	
	H05VV-F	4	96.443.4004.1	
		5	96.443.5004.1	
i i i i i i i i i i i i i i i i i i i	containing halogen	6	96.443.6004.1	
		7	96.443.7004.1	
		8	96.443.8004.1	
	Cable	Length m	Part No.	
		1	96.443.1034.1	
		2	96.443.2034.1	
	Rubber-sheathed cable	3	96.443.3034.1	
	H07RN-F	4	96.443.4034.1	
S S S S S S S S S S S S S S S S S S S		5	96.443.5034.1	
	containing halogen	6	96.443.6034.1	
		7	96.443.7034.1	
		8	96.443.8034.1	
4-pole cables - one pole is not configured				

# Cable assemblies Cable 4 x 1.5 mm<sup>2</sup>; 16 A

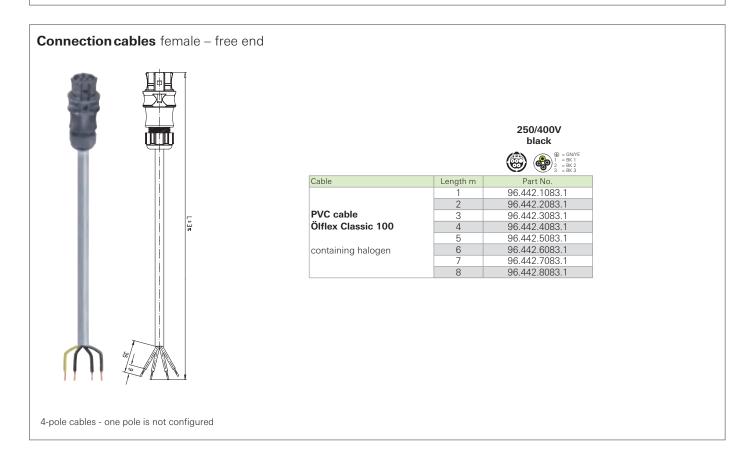
Rated values			Pull relief	Gland nut
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	grey
Wire strip length	(open cable end)	9 mm	Color handle shell	black

### Connection cables female - male

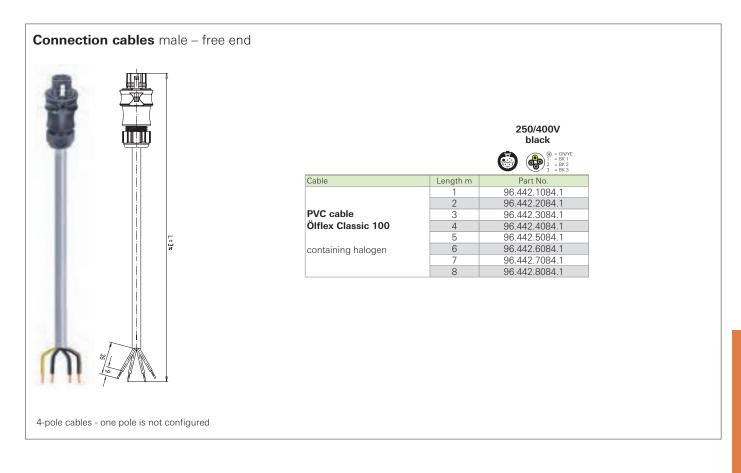


		250/400V black
Cable	Length m	Part No.
	1	96.442.1080.1
	2	96.442.2080.1
PVC cable	3	96.442.3080.1
Ölflex Classic 100	4	96.442.4080.1
	5	96.442.5080.1
containing halogen	6	96.442.6080.1
	7	96.442.7080.1
	8	96.442.8080.1

4-pole cables - one pole is not configured



## Cable assemblies Cable 4 x 1.5 mm<sup>2</sup>; 16 A



# Cable assemblies Cable 4 x 2.5 mm<sup>2</sup>; 20 A (AS-i 24 V)

Rated values			Pull relief	Gland nut
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	brown
Wire strip length	(open cable end)	9 mm	Color handle shell	signal brown

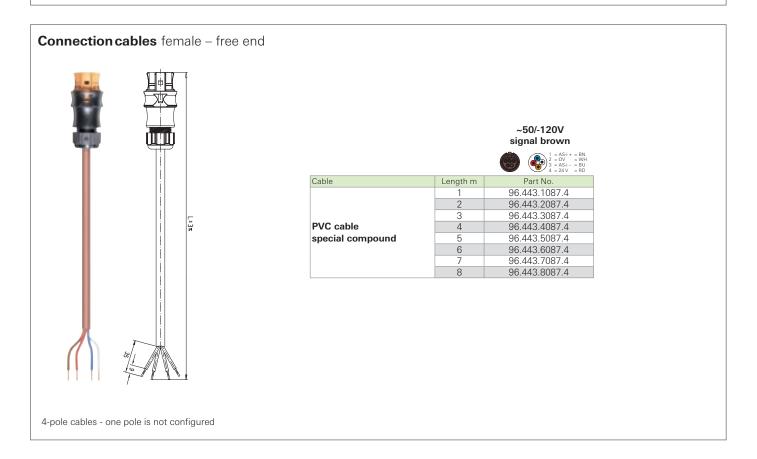


		~50/-120V signal brown
Cable	Length m	Part No.
	1	96.443.1082.4
	2	96.443.2082.4
	3	96.443.3082.4
PVC cable	4	96.443.4082.4
special compound	5	96.443.5082.4
	6	96.443.6082.4
	7	96.443.7082.4
	8	96.443.8082.4

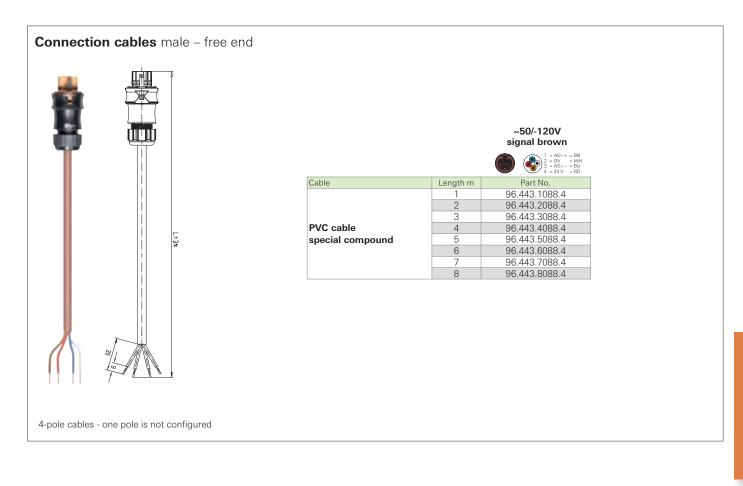
4-pole cables - one pole is not configured

L±3%

10:0



## Cable assemblies Cable 4 x 2.5 mm<sup>2</sup>; 20 A (AS-i 24 V)



# **Distribution units**

<b>RST compact distrib</b> Dimensions Fitted as required with	<b>ution unit</b> 104 x 162 x 57.2 mm M25 device connectors 4-pole	Pre-wired with Mounting option	2.5 mm² Yes			
Gala	Circuit diagram	Color ■ black		Input 1, RST20i4	Outputs 3, RST20i4	Part No. 99.911.0000.7

Color

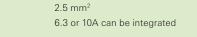
black black

black

### **RST** multiple distribution unit

Dimensions Fitted as required with

112 x 154 x 94 mm Pre-wired with M25 device connectors 4-pole Fuse



Input	Outputs	Part No.
1, RST20i4	4, RST20i4	99.935.00
1, RST20i4	5, RST20i4	99.916.00
1, RST20i4	7, RST20i4	99.936.00

000.7 000.7 99.936.0000.7



Circuit diagrai	m

Accessories	cover	pieces
/ 1000001100		piccoc

### **Cover pieces**

31,95 for female

for male



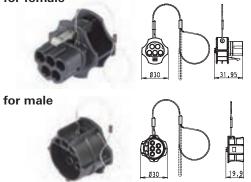


For the safe closure of female and male connectors.

With mounting strap for snapping onto plug connectors and device connectors

not captive against loss	for female	for male
Color	Part No.	Part No.
light grey	Z5.565.9853.0	05.565.9953.0
■ black	Z5.565.9853.1	05.565.9953.1

for female



captive against loss	for female	for male
Color	Part No.	Part No.
light grey	99.529.0000.7	99.531.0000.7
■ black	99.530.0000.7	99.532.0000.7

# **Accessories Crimp**

## Female contacts and male contacts

### Female contact



Male contact



### **Crimping tool**



Name	Marking	(groove) mm <sup>2</sup>	Part No.
Female contact	None	0.75 – 1.0	02.125.5521.8
Female contact	1	1.5	02.125.5621.8
Female contact	2	2.5	02.125.5721.8
Female contact	3	4.0	02.125.5821.8
Male contact	None	0.75 – 1.0	05.545.0021.8
Male contact	1	1.5	05.545.0121.8
Male contact	2	2.5	05.545.0221.8
Male contact	3	4.0	05.545.0321.8

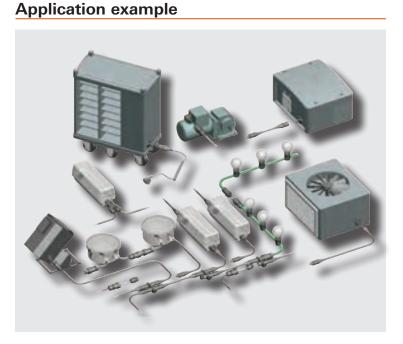
Name	Part No.
Crimping tool incl. system kit	95.101.0800.0
Crimping die B	05.502.2100.0
Contact positioner	05.502.3600.0



Name Extraction tool Part No. 05.502.3500.0



# General power applications, switching functions, power/dimming signals and low voltage



## General

Four variations are available for applications up to 250/400 V (for example mains, switching functions, a version to combine power and dimming signals), as well as a version for low-voltage applications up to 50/120 V.

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. The color of the connectors indicates the links that belong together.

## Coding

http://eshop.wiela		Application	250/400V		250V	250/400V	250/400V	~50/-120V		
Assembly instruction in the Technical [	tions and other technical informat Data or in eShop.	Mechanical coding, for	⊕, N,	3, 2, 1	L, N, (),D1, D2	1,2,3, 4,5	N,E,1,2,3	1,2,3,4,5		
		example	C	9		۲				
Name	Description	Connection style	Strain relief housing	Connection points per pole	light gray	black	turquoise	light blue	yellow	signal brown
Connector	1 x cable entry	Screw Crimp	yes	1	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Connector	2 x cable entry	Screw Spring clamp	yes	1	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Distribution units	RST compact distribution unit/ multi-distribution unit	RST compact distribution unit/			on request	on request	on request	on request	on request	on request
Distribution units	Individual distribution box				on request	on request	on request	on request	on request	on request
	M16 device connector, modular, straight				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
	M16 device connector, modular, angled 7°				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Device	M25 device connector, standard				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
connectors	M20 device connector, standard				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
	M20 device connector, modular, angled				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
	M25 device connector, modular, angled				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Cable assemblies	Connection cable Male – Free end	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
	Connection cable Female – Free end	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
	Extension cable Male – Female	pre- assembled	pre- assembled	pre- assembled	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$

# **Connectors,** straight for cables Ø 6 – 10 mm and 10 – 14 mm

### **Female connector**

Unmounted with cable gland.

Crimp contacts separately available under Accessories.

See the Technical Data for sheath and insulation strip lengths.





				with screw connection <sup>1)</sup>	with crimp connection
				Wire     mm²       rigid	Wiremm²fine-stranded0.75 - 4.0
Application	Coding Cable	e diameter in mm	Color	Part No.	Part No.
	⊕, N, 3, 2, 1	6 – 10	light gray black	96.051.4053.0 96.051.4053.1	96.151.0053.0 96.151.0053.1
	(∰, N, 3, 2, 1	10 - 14	light gray black	96.051.4153.0 96.051.4153.1	96.151.0153.0 96.151.0153.1
250/400V	() L, ⊕, N, D1, D2	6 - 10 10 -14	turquoise	96.051.4053.6 96.051.4153.6	96.151.0053.6 96.151.0153.6
	1, 2, 3, 4, 5	6 - 10 10 -14	light blue	96.051.4053.9 96.051.4153.9	96.151.0053.9 96.151.0153.9
	<b>N</b> , E, 1, 2, 3	6 – 10	yellow	96.051.4053.2	
~50/-120V	1, 2, 3, 4, 5	6 - 10 10 -14	signal brown	96.051.4051.4 96.051.4151.4	96.151.0051.4 96.151.0151.4 Contacts separately under Accessories, see following pages.

### Male connector

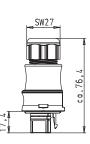
Unmounted with cable gland and locking device.

Crimp contacts separately available under Accessories.

See the Technical Data for sheath and insulation strip lengths.







				with screw connection <sup>1)</sup>	with crimp connection		
				Wire     mm²       rigid     Image: Constraint of the stranded       fine-stranded     0.75 – 4.0       stranded     without ferrules       Locking device     yes	Wire         mm²           fine-stranded         0.75 – 4.0           Locking device         yes		
Application	Coding Cable	e diameter in mm	Color	Part No.	Part No.		
	😩 (P. N. 3.	6 – 10	light gray black	96.052.4053.0 96.052.4053.1	96.152.0053.0 96.152.0053.1		
(	€, N, 3, 2, 1	10 – 14	light gray black	96.052.4153.0 96.052.4153.1	96.152.0153.0 96.152.0153.1		
250/400V	L, ⊕, N, D1, D2	6 – 10 10 –14	turquoise	96.052.4053.6 96.052.4153.6	96.152.0053.6 96.152.0153.6		
	1, 2, 3, 4, 5	6 – 10 10 –14	light blue	96.052.4053.9 96.052.4153.9	96.152.0053.9 96.152.0153.9		
	N, E, 1, 2, 3	6 – 10	yellow	96.052.4053.2			
~50/-120V	1, 2, 3, 4, 5	6 - 10 10 -14	signal brown	96.052.4051.4 96.052.4151.4	96.152.0051.4 96.152.0151.4 Contacts separately under Accessories, see following pages.		

<sup>1)</sup> With wire protection available on request

# **Connectors,** angled 90° for cables Ø 6 – 10 mm and 10 – 14 mm

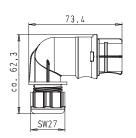
### **Female connector**

Unmounted with cable gland. 90° angle.

See the Technical Data for sheath and insulation strip length as well as the ferrules to be used.







				with screw connection <sup>1)</sup> Wire     mm <sup>2</sup> rigid     0.75 - 4.0       stranded     without ferrules	with crimp connection       Wire     mm <sup>2</sup> fine-stranded     0.75 - 4.0
Application Coding Cable diameter in mm Color		Part No.	Part No.		
	<ul> <li>⊕, N, 3,</li> <li>2, 1</li> </ul>	6 - 10 10 - 14	light gray black light gray black	96.053.4053.0 96.053.4053.1 96.053.4153.0 96.053.4153.1	96.153.0053.0 96.153.0053.1 96.153.0153.0 96.153.0153.1
250/400V	() L, ⊕, N, D1, D2	6 – 10 10 –14	turquoise	96.053.4053.6 96.053.4153.6	96.153.0053.6 96.153.0153.6
	1, 2, 3, 4, 5	6 – 10 10 –14	light blue	96.053.4053.9 96.053.4153.9	96.153.0053.9 96.153.0153.9
~50/-120V	1, 2, 3, 4, 5	6 – 10 10 –14	signal brown	96.053.4051.4 96.053.4151.4	96.153.0051.4 96.153.0151.4
					Contacts separately under Accessories, see following pages.

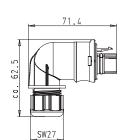
### Male connector

Unmounted with cable gland and locking device. 90° angle.

See the Technical Data for sheath and i nsulation strip length as well as the ferrules to be used.







with screw of	connection <sup>1)</sup>	with crimp connection		
Wire	mm <sup>2</sup>		Wire	mm <sup>2</sup>
rigid			fine-stranded	0.75 - 4.0
fine-stranded	0.75 - 4.0		Locking device	yes
stranded	without ferrules			
Locking device	yes			

Application	Coding Cable	e diameter in mm	Color	Part No.	Part No.
	(E) N. 3.	6 - 10	light gray black	96.054.4053.0 96.054.4053.1	96.154.0053.0 96.154.0053.1
250/4001/	(€), N, 3, 2, 1	10 – 14	light gray black	96.054.4153.0 96.054.4153.1	96.154.0153.0 96.154.0153.1
250/400V	L, ⊕, N, D1, D2	6 – 10 10 –14	turquoise	96.054.4053.6 96.054.4153.6	96.154.0053.6 96.154.0153.6
	1, 2, 3, 4, 5	6 - 10 10 -14	light blue	96.054.4053.9 96.054.4153.9	96.154.0053.9 96.154.0153.9
~50/-120V	1, 2, 3, 4, 5	6 - 10 10 -14	signal brown	96.054.4051.4 96.054.4151.4	96.154.0051.4 96.154.0151.4
					Contacts separately under Accessories, see following pages.

# **Connectors,** straight for cable Ø 13 – 18 mm

### **Female connector**

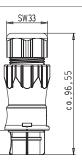
Unmounted with cable gland.

Crimp contacts separately available under Accessories.

See the Technical Data for sheath and insulation strip lengths.







6

				with screw connection <sup>1)</sup>	with crimp connection
				Wire         mm²           rigid	Wire         mm²           fine-stranded         0.75 - 4.0
Application	Coding Cable	diameter in mm	Color	Part No.	Part No.
	<ul> <li>⊕, N, 3,</li> <li>2, 1</li> </ul>	13 – 18	light gray black	96.051.4553.0 96.051.4553.1	96.151.0553.0 96.151.0553.1
250/400V	€ L, ⊕, N, D1, D2	13 – 18	turquoise	96.051.4553.6	96.151.0553.6
250/400 V	1, 2, 3, 4, 5	13 – 18	light blue	96.051.4553.9	96.151.0553.9
	N, E, 1, 2, 3	13 – 18	yellow	96.051.4553.2	
~50/-120V	1, 2, 3, 4, 5	13 – 18	signal brown	96.051.4551.4	96.151.0551.4
					Contacts separately under Accessories, see following pages.

### Male connector

Unmounted with cable gland and locking device. Crimp contacts separately available under Accessories.

See the Technical Data for sheath and insulation strip lengths.



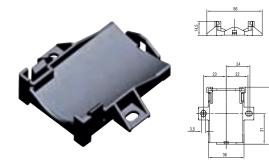
				with screw connection <sup>1)</sup> Wire         mm <sup>2</sup> rigid         ine-stranded           fine-stranded         0.75 - 4.0           stranded         without ferrules           Locking device         yes	with crimp connection           Wire         mm <sup>2</sup> fine-stranded         0.75 - 4.0           Locking device         yes
Application	Coding Cable	e diameter in mm	Color	Part No.	Part No.
	<ul> <li>⊕, N, 3,</li> <li>2, 1</li> </ul>	13 – 18	light gray black	96.052.4553.0 96.052.4553.1	96.152.0553.0 96.152.0553.1
250/4001/	L, ⊕, N, D1, D2	13 – 18	turquoise	96.052.4553.6	96.152.0553.6
250/400V	1, 2, 3, 4, 5	13 – 18	light blue	96.052.4553.9	96.152.0553.9
	N, E, 1, 2, 3	13 – 18	yellow	96.052.4553.2	
~50/-120V	1, 2, 3, 4, 5	13 – 18	signal brown	96.052.4551.4	96.152.0551.4
					Contacts separately under Accessories, see following pages.

<sup>1)</sup> With wire protection available on request

# **Splitter connector,** straight for cables Ø 6 – 10 mm and 10 – 14 mm

Unmounted	<b>connector</b> d with cable glands cal Data for sheath		n strip	
				with screw connection <sup>1)</sup> Wire     mm <sup>2</sup> rigid     infine-stranded       fine-stranded     0.75 – 1.5       stranded     without ferrules
Application	Coding Cable	diameter in mm	Color	Part No.
250/400V	<ul> <li>(€), N, 3, 2, 1</li> <li>(€), N,</li> </ul>	6 - 10 10 - 14 6 - 10	light gray black light gray black	96.051.4253.0 96.051.4253.1 96.051.4353.0 96.051.4353.1 96.051.4253.6
	L, ⊕, N, D1, D2	10 -14 6 - 10 10 -14	turquoise light blue	96.051.4353.6 96.051.4253.9 96.051.4353.9
~50/-120V	1, 2, 3, 4, 5	6 - 10 10 -14	signal brown	96.051.4251.4 96.051.4351.4

### Mounting plate for splitter connectors





# M25 device connector straight, standard



### Male connector

Application Coding

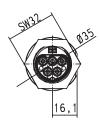
250/400V

~50/-120V

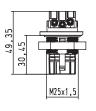
Correct positioning guaranteed due to flattened thread. With locking device. Fastening with screws from outside.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.







wahlwe	vahlweise. Verdrehsicheruna									
wahlweise Verdrehsicherung optional protection against twisting			with screw connection			with crimp connection				
		<u>t mox. = 8 mm</u> <u>Ø25, 4 -0, 2</u>		Wire     mm²       rigid     ine-stranded       fine-stranded     0.75 - 4.0       stranded     without ferrules       Term. poles     1       Thread     M25 x 1.5       Gland     outside       Locking device     yes			Wire     mm²       fine-stranded     0.75 – 4.0       Term. poles     1       Thread     M25 x 1.5       Gland     outside       Locking device     yes			
cation (	Coding	Color	Part No.			Part No.				
	🛞 🕀, N, 3, 2, 1	light gray black		96.052.5053.0 96.052.5053.1			96.152.1053.0 96.152.1053.1			
(400) (	👹 L, 🕀, N, D1, D2	turquoise		96.052.5053.6			96.152.1053.6			
/400V	1, 2, 3, 4, 5	light blue		96.052.5053.9			96.152.1053.9			
	N, E, 1, 2, 3	signal brown					96.152.1053.2			
/-120V	1, 2, 3, 4, 5	yellow	96.052.5051.4			96.152.1051.4				
						1				

# M20 device connector straight, modular

### **Female connector**

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside.

Crimp contacts separately available under Accessories.

See the Technical Data for sheath and insulation strip lengths.





mm 0.75 - 4.0

M20 x 1.5

Part No.

96.151.2053.0

96.151.2053.1

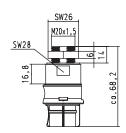
96.151.2053.6

96.151.2053.9

96.151.2051.4

Contacts separately under Accessories, see following pages.

inside



wahlweise Verdrehsicherung optional protection against twisting with screw connection with crimp connection Wire Wire mm<sup>2</sup> rigid fine-stranded † max. = 8 M M fine-stranded 0.75 - 4.0 Term. poles without ferrules stranded Thread Term. poles Gland 19 -0,2 M20 x 1.5 Thread ø20,4-0,2 Gland inside Application Coding Color Part No. 96.051.6053.0 light gray ⊕, N, 3, 2, 1 black 96.051.6053.1 250/400V L, 🕘, N, D1, D2 96.051.6053.6 turquoise 1, 2, 3, 4, 5 96.051.6053.9 light blue

signal brown

### Male connector

~50/-120V

Correct positioning guaranteed due to flattened thread. With locking device. Fastening with screws from inside.

1, 2, 3, 4, 5

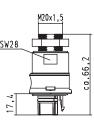
Crimp contacts separately available under Accessories.

See the Technical Data for sheath and insulation strip lengths.



96.051.6051.4





wa	ahlweise Verdrehsicherung stional protection against	twisting	with screw connection		with crimp connection			
<			Wire	mm <sup>2</sup>		Wire	mm <sup>2</sup>	
		t max. = 8mm	rigid			fine-stranded	0.75 - 4.0	
			fine-stranded	0.75 - 4.0		Term. poles	1	
			stranded	without ferrules		Thread	M20 x 1.5	
			Term. poles	1		Gland	inside	
	···	1	Thread	M20 x 1.5		Locking device	yes	
	¢20,	4 -0,2	Gland	inside				
			Locking device	yes				
Application	Coding	Color		Part No.			Part No.	
	🛞 🕀, N, 3, 2, 1	light gray		96.052.6053.0			96.152.2053.0	
	(T, 3, 2, 1	black		96.052.6053.1			96.152.2053.1	
250/400V	🐞 L, 🕀, N, D1, D2	turquoise		96.052.6053.6			96.152.2053.6	
	1, 2, 3, 4, 5	light blue		96.052.6053.9			96.152.2053.9	
~50/-120V	1, 2, 3, 4, 5	signal brown		96.052.6051.4			96.152.2051.4	
						Contacts separately u	inder Accessories, see following pages.	

# M16 device connector straight, modular

### **Female connector**

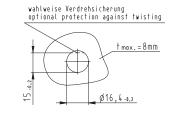
Correct positioning guaranteed due to flattened thread. Fastening with screws from inside.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.







Application Coding Color										
	<ul><li>(€), N, 3, 2, 1</li></ul>	light gray black								
250/400V	🧓 L, ⊕, N, D1, D2	turquoise								
	1, 2, 3, 4, 5	light blue								
~50/-120V	1, 2, 3, 4, 5	signal brown								
		, 								

with screw c	onnection	with crimp connection		
Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>	
rigid		fine-stranded	0.75 - 4.0	
fine-stranded	0.75 - 4.0	Term. poles	1	
stranded	without ferrules	Thread	M16 x 1.5	
Term. poles	1	Gland	inside	
Thread	M16 x 1.5			
Gland	inside			
	Part No.		Part No.	
	96.051.6153.0 96.051.6153.1		96.151.2153.0 96.151.2153.1	
	96.051.6153.6		96.151.2153.6	
	96.051.6153.9		96.151.2153.9	
	96.051.6151.4		96.151.2151.4	

Contacts separately under Accessories, see following pages.

### Male connector

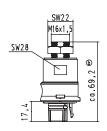
Correct positioning guaranteed due to flattened thread. With locking device. Fastening with screws from inside.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.







	wahlweise Verdrehsicherung optional protection agains	) it twisting	with screw connection			with crimp connection		
		Wire	mm <sup>2</sup>	ור	Wire	mm <sup>2</sup>		
		nax. = 8 mm	rigid			fine-stranded	0.75 - 4.0	
			fine-stranded	0.75 - 4.0		Term. poles	1	
			stranded	without ferrules		Thread	M16 x 1.5	
			Term. poles	1		Gland	inside	
L	¢16,4	• •	Thread	M16 x 1.5		Locking device	yes	
~	-   <del>                                   </del>	-0,2	Gland	inside				
			Locking device	yes				
Application	Coding	Color		Part No.			Part No.	
	(€), N, 3, 2, 1	light gray black		96.052.6153.0 96.052.6153.1			96.152.2153.0 96.152.2153.1	
250/400V	(∰ L, ⊕, N, D1, D2	turquoise		96.052.6153.6			96.152.2153.6	
	1, 2, 3, 4, 5	light blue		96.052.6153.9			96.152.2153.9	
~50/-120V	1, 2, 3, 4, 5	signal brown		96.052.6151.4			96.152.2151.4	
						Contacts separately un	der Accessories, see following pages.	

# M16 device connector angled 7°, modular

### **Female connector**

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. Angled 7°, thread M16.

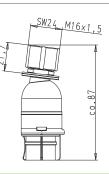
Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.



ν









with screw co	onnection	with crimp connection			
Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>		
rigid		fine-stranded	0.75 - 4.0		
fine-stranded	0.75 - 4.0	Term. poles	1		
stranded	without ferrules	Thread	M16 x 1.5		
Term. poles	1	Gland	inside		
Thread	M16 x 1.5				
Gland	inside				
	Part No.		Part No.		
	96.055.6153.0		96.155.2153.0		
	96.055.6153.1		96.155.2153.1		
	96.055.6153.6		96.155.2153.6		
	96.055.6153.9		96.155.2153.9		
	96.055.6151.4		96.155.2151.4		

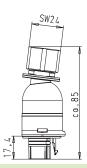
### Male connector

Correct positioning guaranteed due to flattened thread. With locking device. Fastening with screws from inside. Angled 7°, thread M16.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.





Contacts separately under Accessories, see following pages.

wah opt	lweise Verdrehsicherung ional protection against	twisting	with screw connection with crimp connection		onnection			
		Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>			
		† max. = 8 M M	rigid		fine-stranded	0.75 - 4.0		
	$H \rightarrow V$	T mux. = Omm	fine-stranded	0.75 - 4.0	Term. poles	1		
			stranded	without ferrules	Thread	M16 x 1.5		
			Term. poles	1	Gland	inside		
	-0.2		Thread	M16 x 1.5	Locking device	yes		
		<u>, 4 -0,2</u>	Gland	inside				
	,		Locking device	yes				
Application Co	oding	Color		Part No.	Part No.			
	⊕, N, 3, 2, 1	light gray black		96.056.6153.0 96.056.6153.1		96.156.2153.0 96.156.2153.1		
250/400V	蘭 L, 🕀, N, D1, D2	turquoise		96.056.6153.6		96.156.2153.6		
	1, 2, 3, 4, 5	light blue		96.056.6153.9		96.156.2153.9		
~50/-120V (1, 2, 3, 4, 5 signal brown			96.056.6151.4		96.156.2151.4			
					Contacts separately u	inder Accessories, see following pages.		

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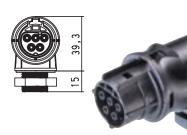
# M20 device connector angled 90°, modular

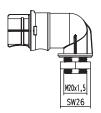
### **Female connector**

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. Angled 90°, thread M20.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.





	wahlweise Verdrehsicherung optional protection against twisting			onnection	with crimp co	nnection
	τ mox. = 8mm φ20.4-1.2		Wire rigid fine-stranded stranded Term. poles Thread Gland	mm <sup>2</sup> 0.75 – 4.0 without ferrules 1 M20 x 1.5 inside	Wire fine-stranded Term. poles Thread Gland	mm <sup>2</sup> 0.75 - 4.0 1 M20 x 1.5 inside
Application	Coding	Color		Part No.		Part No.
	<ul><li>(i) (i) (i) (i) (i) (i) (i) (i) (i) (i)</li></ul>	light gray black		96.053.6053.0 96.053.6053.1		96.153.2053.0 96.153.2053.1
250/400\	′ 🤓 L, ⊕, N, D1, D2	turquoise		96.053.6053.6		96.153.2053.6
	1, 2, 3, 4, 5	light blue		96.053.6053.9		96.153.2053.9
~50/-120	V 😨 1, 2, 3, 4, 5	signal brown		96.053.6051.4		96.153.2051.4

### Male connector

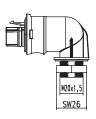
Correct positioning guaranteed due to flattened thread. With locking device. Fastening with screws from inside. Angled 90°, thread M20.

Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.







Contacts separately under Accessories, see following pages.

	wahlweise optional	Verdrehsicherung protection againsi	twisting	with screw cor	nnection	with crimp connection	
		$\frown$		Wire	mm <sup>2</sup>	Wire	mm <sup>2</sup>
	t max.=8mm		rigid		fine-stranded	0.75 - 4.0	
	17			fine-stranded	0.75 – 4.0	Term. poles	1
		、てけへ		stranded	without ferrules	Thread	M20 x 1.5
	~			Term. poles	1	Gland	inside
	6, <u>\$\phi_20, 4_{-0.2}</u>		Thread	M20 x 1.5	Locking device	yes	
			Gland	inside			
				Locking device	yes		
Application	Coding		Color		Part No.		Part No.
	۲	⊕, N, 3, 2, 1	light gray black		96.054.6053.0 96.054.6053.1		96.154.2053.0 96.154.2053.1
250/400V	8	L, 🕀, N, D1, D2	turquoise		96.054.6053.6		96.154.2053.6
	۲	1, 2, 3, 4, 5	light blue		96.054.6053.9		96.154.2053.9
~50/-120V		1, 2, 3, 4, 5	signal brown		96.054.6051.4		96.154.2051.4
						Contacts separate	ly under Accessories, see following pages.

### M25 device connector angled 90°, modular

#### **Female connector**

Correct positioning guaranteed due to flattened thread. Fastening with screws from inside. Angled 90°, thread M25.

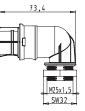
Crimp contacts separately available under Accessories.

See the Technical Data for insulation strip lengths.



Application	Coding	Color
rippiloudon	ooding	00101
	<ul><li>(e), N, 3, 2, 1</li></ul>	light gray black
250/400V	🐻 L, ⊕, N, D1, D2	turquoise
	1, 2, 3, 4, 5	light blue
~50/-120V	1, 2, 3, 4, 5	signal brown





with screw o	onnection	
Wire	mm <sup>2</sup>	
rigid		
fine-stranded	0.75 - 4.0	

strand

Term.

Thread Gland

n screw cor	inection	with crimp con	nection
	mm <sup>2</sup>	Wire	mm <sup>2</sup>
		fine-stranded	0.75 - 4.0
stranded	0.75 - 4.0	Term. poles	1
ded	without ferrules	Thread	M25 x 1.5
. poles	1	Gland	inside
ad	M25 x 1.5		
ł	inside		
	Part No.		Part No.
	96.053.6253.0		96.153.2253.0
	96.053.6253.1		96.153.2253.1
	96.053.6253.6		96.153.2253.6
	30.033.0233.0		30.133.2233.0
	96.053.6253.9		96.153.2253.9
	00.000.0200.0		00.100.2200.0
	96.053.6251.4		96.153.2251.4

Levelate antes

#### Male connector

Correct positioning guaranteed due to flattened thread. With locking device. Fastening with screws from inside. Angled 90°, thread M25.

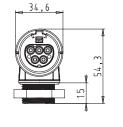
Crimp contacts separately available under Accessories.

Application Coding

250/400V

~50/-120V

See the Technical Data for insulation strip lengths.







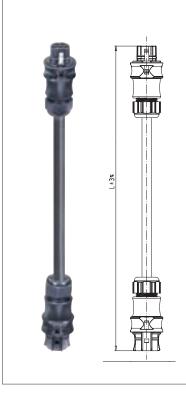
Contacts separately under Accessories, see following pages.

- 00		rotection against t	wisting	with screw connection	with crimp connection
	23, 9 -0.2		<u>t max. = 8 mm</u> 25 , 4 -0.2	Wire         mm²           rigid         .75 - 4.0           fine-stranded         without ferrules           stranded         without ferrules           Term. poles         1           Thread         M25 x 1.5           Gland         inside           Locking device         yes	Wire         mm²           fine-stranded         0.75 - 4.0           Term. poles         1           Thread         M25 x 1.5           Gland         inside           Locking device         yes
on	Coding		Color	Part No.	Part No.
		), N, 3, 2, 1	light gray black	96.054.6253.0 96.054.6253.1	96.154.2253.0 96.154.2253.1
00V	6	L, 🕀, N, D1, D2	turquoise	96.054.6253.6	96.154.2253.6
	۲	1, 2, 3, 4, 5	light blue	96.054.6253.9	96.154.2253.9
20V		1, 2, 3, 4, 5	signal brown	96.054.6251.4	96.154.2251.4
					Contacts separately under Accessories, see following pages.

### Cable assemblies Cable 5 x 1.5 mm<sup>2</sup>; 16 A

Rated values			Pull relief	with gland nut
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color handle shell	black

#### Connection cables female - male



black         turquoise           Image: black         Imag	
Cable         Length m         Part No.         Part No.         Part No.           1         96.452.1000.1         96.452.1000.6           2         96.452.2000.1         96.452.2000.6           3         96.452.3000.1         96.452.3000.6           405VV-F         4         96.452.4000.1         96.452.4000.6           5         96.452.5000.1         96.452.5000.6           containing halogen         6         96.452.6000.1         96.452.6000.6	CNIVE
PVC cable         1         96.452.1000.1         96.452.1000.6           2         96.452.2000.1         96.452.2000.6           3         96.452.3000.1         96.452.3000.6           H05VV-F         4         96.452.4000.1         96.452.4000.6           5         96.452.5000.1         96.452.5000.6         96.452.5000.6           containing halogen         6         96.452.6000.1         96.452.6000.6	BU BN GY
2         96.452.2000.1         96.452.2000.6           2VC cable         3         96.452.3000.1         96.452.3000.6           405VV-F         4         96.452.4000.1         96.452.4000.6           5         96.452.5000.1         96.452.5000.6           6         96.452.6000.1         96.452.6000.6	
PVC cable         3         96.452.3000.1         96.452.3000.6           H05VV-F         4         96.452.4000.1         96.452.4000.6           5         96.452.5000.1         96.452.5000.6           5         96.452.6000.1         96.452.6000.6           6         96.452.6000.1         96.452.6000.6	
405VV-F         4         96.452.4000.1         96.452.4000.6           5         96.452.5000.1         96.452.5000.6           containing halogen         6         96.452.6000.1         96.452.6000.6	
5         96.452.5000.1         96.452.5000.6           containing halogen         6         96.452.6000.1         96.452.6000.6	
containing halogen 6 96.452.6000.1 96.452.6000.6	
0 0 0 00 00 00 00 00 00 00 00 00 00 00	
7 96.452.7000.1 96.452.7000.6	
8 96.452.8000.1 96.452.8000.6	
Cable Length m Part No. Part No.	
1 96.452.1030.1 96.452.1030.6	
2 96.452.2030.1 96.452.2030.6	
Rubber-sheathed cable 3 96.452.3030.1 96.452.3030.6	
<b>HO7RN-F</b> 4 96.452.4030.1 96.452.4030.6	
5 96.452.5030.1 96.452.5030.6	
containing halogen 6 96.452.6030.1 96.452.6030.6	
7 96.452.7030.1 96.452.7030.6	
8 96.452.8030.1 96.452.8030.6	
Cable Length m Part No.	
1 96.452.1050.1	
2 96.452.2050.1	
Rubber-sheathed cable 3 96.452.3050.1	
H07RN-F 4 96.452.4050.1	
5 96.452.5050.1	
alogen-free 6 96.452.6050.1	
7 96.452.7050.1	
8 96.452.8050.1	

onnection cables female – free end			250/400V black	250V turquoise
			(     (     (         )         (	E GN/YE     N = BU     L = BN     D = GY     D2 = BK
Color Color	Cable	Length m	Part No.	Part No.
		1	96.452.1003.1	96.452.1003.6
		2	96.452.2003.1	96.452.2003.6
	PVC cable	3	96.452.3003.1	96.452.3003.6
	H05VV-F	4	96.452.4003.1	96.452.4003.6
		5	96.452.5003.1	96.452.5003.6
	containing halogen	6	96.452.6003.1	96.452.6003.6
<u>u</u>		7	96.452.7003.1	96.452.7003.6
		8	96.452.8003.1	96.452.8003.6
	Cable	Length m	Part No.	Part No.
		1	96.452.1033.1	96.452.1033.6
		2	96.452.2033.1	96.452.2033.6
	Rubber-sheathed cable	3	96.452.3033.1	96.452.3033.6
	H07RN-F	4	96.452.4033.1	96.452.4033.6
		5	96.452.5033.1	96.452.5033.6
	containing halogen	6	96.452.6033.1	96.452.6033.6
		7	96.452.7033.1	96.452.7033.6
		8	96.452.8033.1	96.452.8033.6
	Cable	Length m	Part No.	
		1	96.452.1053.1	
		2	96.452.2053.1	
	Rubber-sheathed cable	3	96.452.3053.1	
	H07RN-F enhanced version	4	96.452.4053.1	
	ennanced version	5	96.452.5053.1	
	halogen-free	6	96.452.6053.1	
	laiogen-nee	7	96.452.7053.1	
		8	96.452.8053.1	

Other cable lengths, other codings upon request

### Cable assemblies Cable 5 x 1.5 mm<sup>2</sup>; 16 A

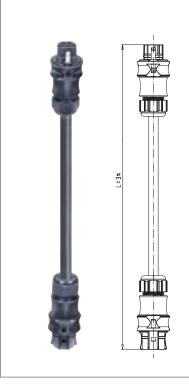
nection cables male – free end			250/400V black () = GN/YE N = BU 2 = BK 2 = GY	250V turquoise
	Cable	Length m	Part No.	Part No.
		1	96.452.1004.1	96,452,1004,6
		2	96.452.2004.1	96.452.2004.6
	PVC cable	3	96.452.3004.1	96.452.3004.6
	H05VV-F	4	96.452.4004.1	96.452.4004.6
		5	96.452.5004.1	96.452.5004.6
	containing halogen	6	96.452.6004.1	96.452.6004.6
		7	96.452.7004.1	96.452.7004.6
		8	96.452.8004.1	96.452.8004.6
	Cable	Length m	Part No.	Part No.
		1	96.452.1034.1	96.452.1034.6
		2	96.452.2034.1	96.452.2034.6
	Rubber-sheathed cable	3	96.452.3034.1	96.452.3034.6
	H07RN-F	4	96.452.4034.1	96.452.4034.6
		5	96.452.5034.1	96.452.5034.6
	containing halogen	6	96.452.6034.1	96.452.6034.6
		7	96.452.7034.1	96.452.7034.6
		8	96.452.8034.1	96.452.8034.6
	Cable	Length m	Part No.	
		1	96.452.1054.1	
		2	96.452.2054.1	
	Rubber-sheathed cable	3	96.452.3054.1	
	H07RN-F enhanced version	4	96.452.4054.1	
	ennanced version	5	96.452.5054.1	
	halogen-free	6	96.452.6054.1	
	laiogen-nee	7	96.452.7054.1	
		8	96.452.8054.1	

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#### **Cable assemblies** Cable 5 x 2.5 mm<sup>2</sup>; 20 A

Rated values		Pull relief	with gland nut
Wire ends (open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length (open cable end)	35 mm	Color cable	black
Wire strip length (open cable end)	9 mm	Color handle shell	black

#### Connection cables female - male



		250/400V black	250V turquoise
		() = GN/YE N = BU N = BU 1 = BK 2 = BK 3 = GY	
Cable	Length m	Part No.	Part No.
	1	96.453.1000.1	96.453.1000.6
	2	96.453.2000.1	96.453.2000.6
PVC cable	3	96.453.3000.1	96.453.3000.6
H05VV-F	4	96.453.4000.1	96.453.4000.6
	5	96.453.5000.1	96.453.5000.6
containing halogen	6	96.453.6000.1	96.453.6000.6
	7	96.453.7000.1	96.453.7000.6
	8	96.453.8000.1	96.453.8000.6
Cable	Length m	Part No.	Part No.
	1	96.453.1030.1	96.453.1030.6
	2	96.453.2030.1	96.453.2030.6
Rubber-sheathed cable	3	96.453.3030.1	96.453.3030.6
H07RN-F	4	96.453.4030.1	96.453.4030.6
	5	96.453.5030.1	96.453.5030.6
containing halogen	6	96.453.6030.1	96.453.6030.6
	7	96.453.7030.1	96.453.7030.6
	8	96.453.8030.1	96.453.8030.6
Cable	Length m	Part No.	
	1	96.453.1050.1	
	2	96.453.2050.1	
Rubber-sheathed cable	3	96.453.3050.1	
H07RN-F	4	96.453.4050.1	
enhanced version	5	96.453.5050.1	
halagan frag	6	96.453.6050.1	
halogen-free	7	96.453.7050.1	
	8	96.453.8050.1	

<b>ection cables</b> female – free end			250/400V black @ = GN/YE N = BU 1 = BN 2 = BK 3 = GY	250V turquoise @ = GNYE N = BU N = BN L = BN D = GY
	Cable	Length m	Part No.	Part No.
100	Capie	1 Length III	96.453.1003.1	96.453.1003.6
		2	96.453.2003.1	96.453.2003.6
	DVO sala	3	96.453.3003.1	96.453.3003.6
	PVC cable H05VV-F	4	96.453.4003.1	96.453.4003.6
	H03VV-F	5	96.453.5003.1	96.453.5003.6
	containing halogen	6	96.453.6003.1	96.453.6003.6
	containing halogen	7	96.453.7003.1	96.453.7003.6
		8	96.453.8003.1	96.453.8003.6
		0	00.100.0000.1	00.100.0000.0
	Cable	Length m	Part No.	Part No.
		1	96.453.1033.1	96.453.1033.6
		2	96.453.2033.1	96.453.2033.6
	Rubber-sheathed cable	3	96.453.3033.1	96.453.3033.6
	H07RN-F	4	96.453.4033.1	96.453.4033.6
		5	96.453.5033.1	96.453.5033.6
<sup>24</sup>	containing halogen	6	96.453.6033.1	96.453.6033.6
		7	96.453.7033.1	96.453.7033.6
		8	96.453.8033.1	96.453.8033.6
	Cable	Length m	Part No.	
		1	96.453.1053.1	
	Dubben ab a sthe dealership	2	96.453.2053.1	
	Rubber-sheathed cable H07RN-F	3	96.453.3053.1	
	enhanced version	4	96.453.4053.1	
	ennanceu version	5	96.453.5053.1	
	halogen-free	6	96.453.6053.1	
		7	96.453.7053.1	
		8	96.453.8053.1	

#### Other cable lengths, other codings upon request

### Cable assemblies Cable 5 x 2.5 mm<sup>2</sup>; 20 A

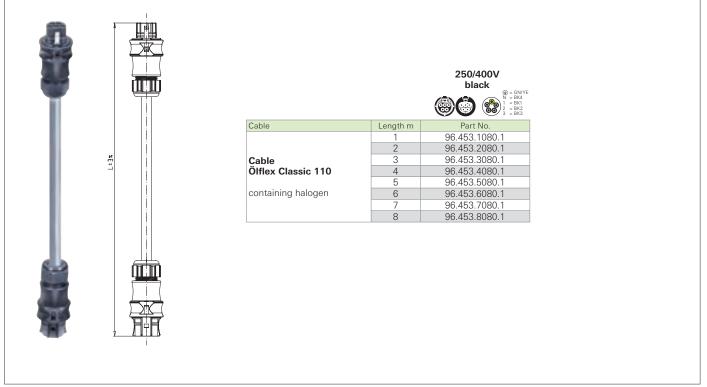
nection cables male – free	end		250/400V black	250V turquoise
				(€ = GN/YE N = BU L = BN D2 = BK
	Cable	Length m	Part No.	Part No.
ran A		1	96.453.1004.1	96.453.1004.6
		2	96.453.2004.1	96.453.2004.6
	PVC cable	3	96.453.3004.1	96.453.3004.6
	H05VV-F	4	96.453.4004.1	96.453.4004.6
		5	96.453.5004.1	96.453.5004.6
	containing halogen	6	96.453.6004.1	96.453.6004.6
		7	96.453.7004.1	96.453.7004.6
		8	96.453.8004.1	96.453.8004.6
	Cable	Length m	Part No.	Part No.
		1	96.453.1034.1	96.453.1034.6
		2	96.453.2034.1	96.453.2034.6
	Rubber-sheathed cable	3	96.453.3034.1	96.453.3034.6
	H07RN-F	4	96.453.4034.1	96.453.4034.6
		5	96.453.5034.1	96.453.5034.6
μ μ	containing halogen	6	96.453.6034.1	96.453.6034.6
		7	96.453.7034.1	96.453.7034.6
		8	96.453.8034.1	96.453.8034.6
	Cable	Length m	Part No.	
		1	96.453.1054.1	
		2	96.453.2054.1	
	Rubber-sheathed cable	3	96.453.3054.1	
	H07RN-F enhanced version	4	96.453.4054.1	
	ennanced version	5	96.453.5054.1	
	halogen-free	6	96.453.6054.1	
	nalogen-fiee	7	96.453.7054.1	
		8	96.453.8054.1	

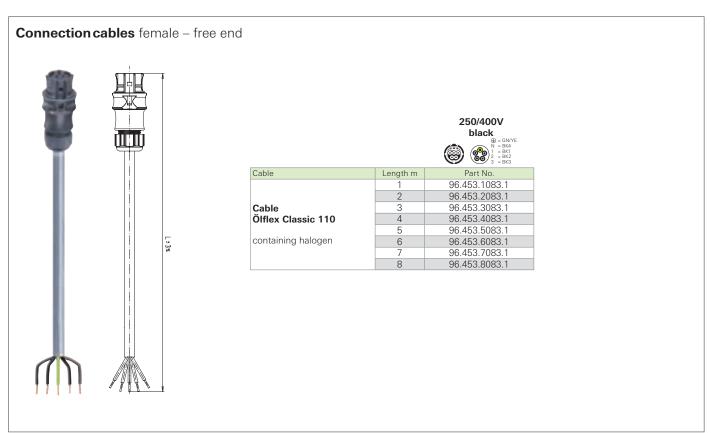
RST® CLASSIC

### Cable assemblies Cable 5 x 2.5 mm<sup>2</sup>; 20 A (Power 5-pole)

Rated values		Pull relief	with gland nut	
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	gray
Wire strip length	(open cable end)	9 mm	Color handle shell	black

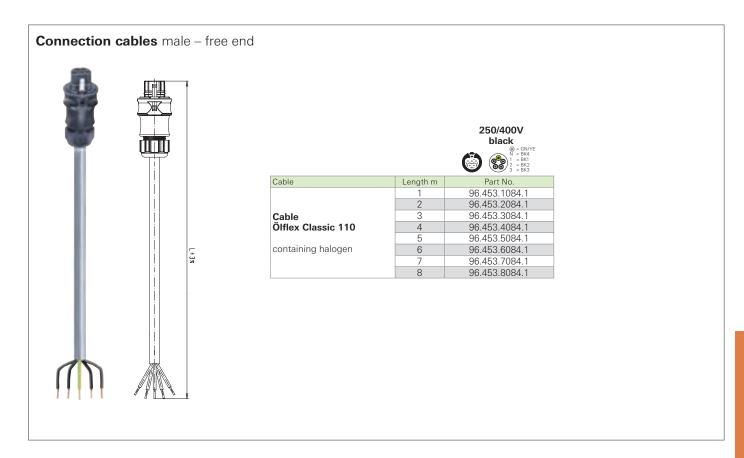






Other cable lengths, other codings upon request

#### **Cable assemblies** Cable 5 x 2.5 mm<sup>2</sup>; 20 A (Power 5-pole)



### Cable assemblies Cable 5 x 4.0 mm<sup>2</sup>; 20 A

Rated values		Pull relief	with gland nut	
Wire ends	(open cable end)	ultrason. welded	Interlock	integrated
Sheath strip length	(open cable end)	35 mm	Color cable	black
Wire strip length	(open cable end)	9 mm	Color handle shell	black

#### Connection cables female - male

		250/400V black	250V turquoise ⊛ = GN/
		N = BU 1 = BN 2 = BK 3 = GY	N = BU L = BN D1 = GY D2 = BK
Cable	Length m	Part No.	Part No.
	1	96.454.1000.1	96.454.1000.6
	2	96.454.2000.1	96.454.2000.6
PVC cable	3	96.454.3000.1	96.454.3000.6
H05VV-F	4	96.454.4000.1	96.454.4000.6
	5	96.454.5000.1	96.454.5000.6
containing halogen	6	96.454.6000.1	96.454.6000.6
	7	96.454.7000.1	96.454.7000.6
	8	96.454.8000.1	96.454.8000.6
Cable	Length m	Part No.	Part No.
	1	96,454,1030,1	96.454.1030.6
	2	96.454.2030.1	96.454.2030.6
Rubber-sheathed cable	3	96.454.3030.1	96.454.3030.6
H07RN-F	4	96.454.4030.1	96.454.4030.6
	5	96.454.5030.1	96.454.5030.6
containing halogen	6	96.454.6030.1	96.454.6030.6
	7	96.454.7030.1	96.454.7030.6
	8	96.454.8030.1	96.454.8030.6

#### Connection cables female - free end



		250/400V black	250V turquoise • GN/YE • BU • BU
Cable	Length m	Part No.	Part No.
	1	96.454.1003.1	96.454.1003.6
	2	96.454.2003.1	96.454.2003.6
PVC cable	3	96.454.3003.1	96.454.3003.6
H05VV-F	4	96.454.4003.1	96.454.4003.6
	5	96.454.5003.1	96.454.5003.6
containing halogen	6	96.454.6003.1	96.454.6003.6
	7	96.454.7003.1	96.454.7003.6
	8	96.454.8003.1	96.454.8003.6
Cable	Length m	Part No.	Part No.
	1	96.454.1033.1	96.454.1033.6
	2	96.454.2033.1	96.454.2033.6
Rubber-sheathed cable	3	96.454.3033.1	96.454.3033.6
H07RN-F	4	96.454.4033.1	96.454.4033.6
	5	96.454.5033.1	96.454.5033.6
containing halogen	6	96.454.6033.1	96.454.6033.6
-	7	96.454.7033.1	96.454.7033.6
	8	96.454.8033.1	96.454.8033.6

### Cable assemblies Cable 5 x 4.0 mm<sup>2</sup>; 20 A

		250/400V black	250V turquoise © = GNVYE N = BN D = GV D = CV D =
Cable	Length m	Part No.	Part No.
Cable	1	96.454.1004.1	96,454,1004,6
	2	96.454.2004.1	96.454.2004.6
PVC cable	3	96.454.3004.1	96.454.3004.6
H05VV-F	4	96.454.4004.1	96.454.4004.6
	5	96.454.5004.1	96.454.5004.6
containing halogen	6	96.454.6004.1	96.454.6004.6
	7	96.454.7004.1	96.454.7004.6
	8	96.454.8004.1	96.454.8004.6
Cable	Length m	Part No.	Part No.
	1	96.454.1034.1	96.454.1034.6
	2	96.454.2034.1	96.454.2034.6
Rubber-sheathed cable	3	96.454.3034.1	96.454.3034.6
H07RN-F	4	96.454.4034.1	96.454.4034.6
	5	96.454.5034.1	96.454.5034.6
containing halogen	6	96.454.6034.1	96.454.6034.6
	7	96.454.7034.1	96.454.7034.6
	8	96.454.8034.1	96.454.8034.6

### **Distributors**

<b>RST compact distri</b> Dimensions Pre-wired with	<b>bution unit</b> 104 x 162 x 57.2 mm 2.5 mm <sup>2</sup>	3 outputs routing 230/400V, 20A Mounting option	RST 20i5 Coding Yes	g Color black	
Gall	Circuit diagram	Color light grey black 5 5 5	Input 1 1	Outputs 3 3	Part No. upon request 96.050.0153.1
<b>RST multiple distril</b> Dimensions	<b>5 oution unit</b> 104 x 162 x 96 mm	Fitted as required with Fuse	M25 device con 6.3 or 10A can b		5-pole

Pre-wired with

2.5 mm<sup>2</sup>

Fitted as	required with	1
Fuse		

Color	Input	Outputs	Part No.
■ black	1	7	upon request
black	1	5	96.050.2153.1



### **Cover pieces**

**Cover pieces** 



for male









With mounting strap for snapping onto plug connectors and device connectors

For the safe closure of female and male connectors.

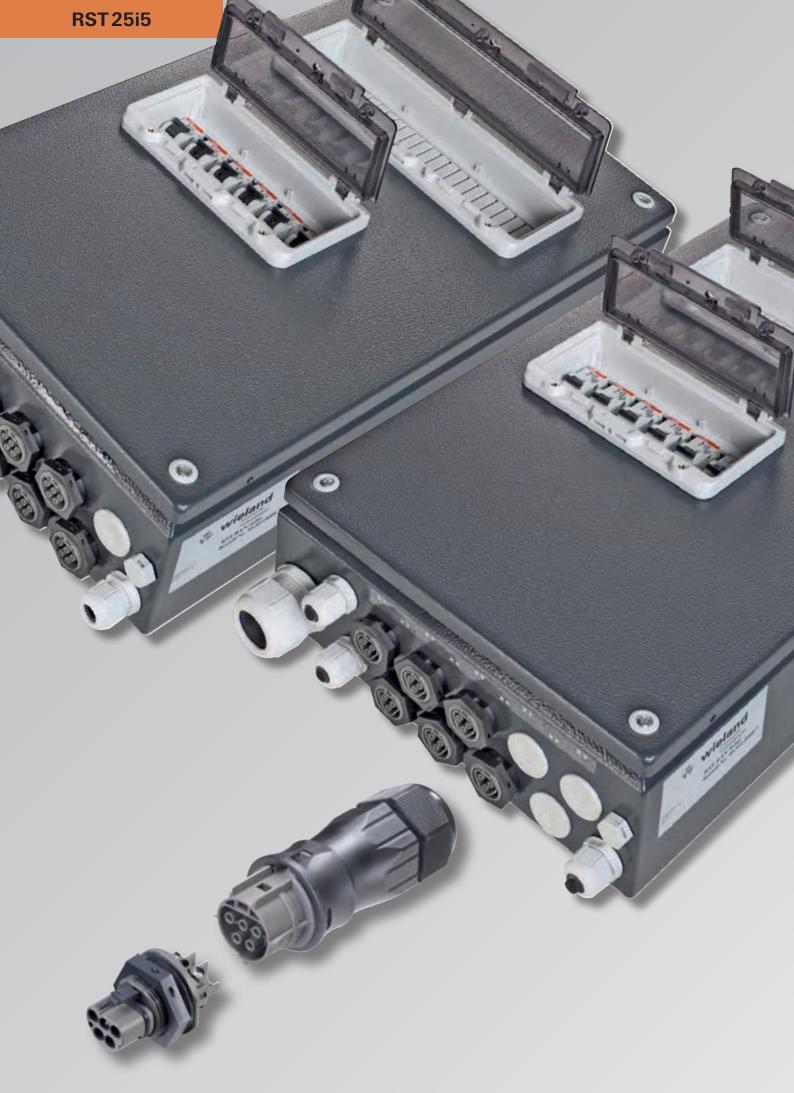
not captive against loss	for female	for male
Color	Part No.	Part No.
light grey	Z5.565.9853.0	05.565.9953.0
black	Z5.565.9853.1	05.565.9953.1

captive against loss	for female	for male
Color	Part No.	Part No.
light grey	99.529.0000.7	99.531.0000.7
■ black	99.530.0000.7	99.532.0000.7

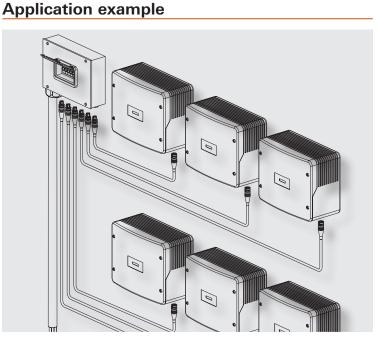
### Accessories

#### Female contacts and male contacts

emale contact	Name	Marking	(groove) mm <sup>2</sup>	Part No.
	Female contact	None	0.75 – 1.0	02.125.5521.8
	Female contact	1	1.5	02.125.5621.8
	Female contact Female contact	2 3	2.5 4.0	02.125.5721.8 02.125.5821.8
	Tennale contact	5	4.0	02.120.0021.0
Aale contact	Male contact	None	0.75 – 1.0	05.545.0021.8
viale contact	Male contact	1	1.5	05.545.0121.8
0-0	Male contact	2	2.5	05.545.0221.8
and the second	Male contact	3	4.0	05.545.0321.8
	*available on straps or in magazine	s on request		
Crimping tool				
	Name			Part No.
	Crimping tool incl. sy	stem kit		95.101.0800.0
ANSING TAN	Crimping die B			05.502.2100.0
	Contact positioner			05.502.3600.0
Extraction tool for crimp contacts				
	Name			Part No.
THE STREET	Extraction tool			05.502.3500.0
Socket frame for device connectors M25				
	Protection rating:	IP 44		
(female)	RST 20 Approval:	2PfG1915, EN615	35	
	Entry:	2- up to 5-pole		
- (00, I)	Color			Part No. 99.400.9999.7
(81,25)	Li white	290	ha	99.400.9999.7



# Solar applications up to 25 A for single-phase supply with three-phase power monitoring or three-phase supply



#### General

The system has been specially adapted to the requirements of solar technology.

The connectors can be loaded with 25 A and are used for single-phase supply with power monitoring or three-phase supply.

Special distribution boxes are used to bundle the electrical power of up to 6 inverters and thus complete the system.

These connectors have their own mechanical coding. This means that only associated pairs of male and female can be connected with the correct polarity. This ensures a clear separation from the connectors of the other product series.

### **Features:**

- Fast mounting through easy handling
- UV-resistant
- Rated current up to 25 A
- Cross-sections up to 6 mm<sup>2</sup>
- Degree of protection IP66/68 (3m; 2h) /69



#### Coding

http://eshop.wiela	tions and other technical infor	rmation can be found		Application Mechanical coding, for example	250/400V L, N, (), 1, 2
Name	Description	Connection style	Strain relief housing	Connection points per pole	concrete gray
Connector	1 x cable entry	Screw	yes	1	$\checkmark$
Distribution units	Distribution box RST RAN Solar Distribution box RST Solar				$\overline{\checkmark}$
Device connectors	M25 device connector, Standard				$\checkmark$
Cable assemblies	Connection cable Male – Free end Connection cable Female – Free end Extension cable Male – Female	pre- assembled pre- assembled pre- assembled	pre- assembled pre- assembled pre- assembled	pre- assembled pre- assembled pre- assembled	

# **Connectors,** straight for cables Ø 10 – 14 mm and 13 – 18 mm

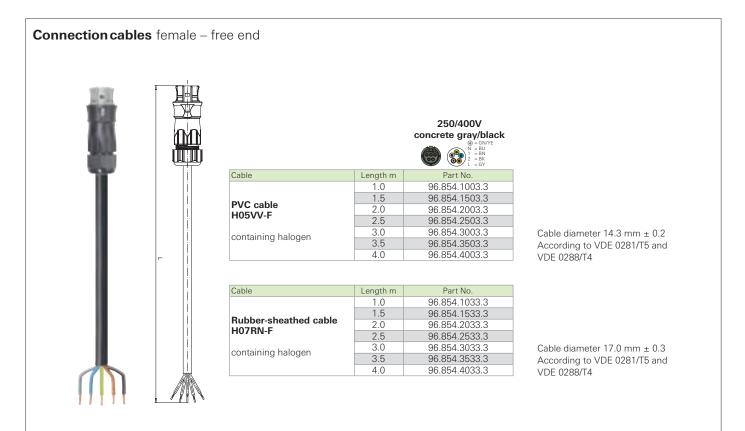


# M25 device connector straight, standard

Female connector With sealing option For spacer rings for unlocking the device connector, see Accessories.	or valiveise Verdrehsicherung optional protection against tvisting tmox.=8mm optional protection option tmox.=8mm optional protection optional protec	with screw connection           Wire         mm <sup>2</sup> solid         up to 4.0           fine-stranded         up to 6.0	M25x1,5 16,103 without ferrules	SW24
250/400V	L, N, ⊕, 1, 2 L, N, ⊕, 1, 2	96.051.5054.3 99.577.0000.7	4 mm² 6 mm²	A ANT
Male connector With sealing option	vahlveise Verdrehsicherung optional protection against tvisting tmox.=8mm	·m·	-5102- (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5 (1)-5	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
	¢25,44,2	with screw connection           Wire         mm²           solid         up to 4.0           fine-stranded         up to 6.0	without ferrules	
250/400V	L, N, (), 1, 2 concrete gray/ black	96.052.5054.3 99.578.0000.7	4 mm² 6 mm²	La Var

#### Cable assemblies Cable 5 x 4.0 mm<sup>2</sup>; 25 A

Sheath strip length (ope	n cable end) n cable end) n cable end)	ultrason. welded 35 mm 9 mm		Interlock Color cable Color handle shell	integrated black black
Wire strip length (ope					
Wire strip length (ope		9 mm		Color handle shell	black
Connection cable					Diddic
	<b>es</b> female – male				
Ť.				250/400V concrete gray/black	
				() = GN/YE N = BU D = BU 2 = BK L = GY	
	Ca	able	Length m	Part No.	
			1.0	96.854.1000.3	
	P	VC cable	1.5	96.854.1500.3	
		05VV-F	2.0	96.854.2000.3	
			2.5 3.0	96.854.2500.3	
	j co	ontaining halogen	3.5	96.854.3000.3 96.854.3500.3	
			4.0	96.854.4000.3	
			4.0	90.894.4000.3	
	Ca	able	Length m	Part No.	
			1.0	96.854.1030.3	
			1.5	96.854.1530.3	
		ubber-sheathed cable	2.0	96.854.2030.3	
		07RN-F	2.5	96.854.2530.3	
		antoining balagen	3.0	96.854.3030.3	
		ontaining halogen	3.5	96.854.3530.3	
			4.0	96.854.4030.3	



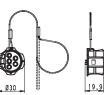
### Cable assemblies Cable 5 x 4.0 mm<sup>2</sup>; 25 A

4				
<u> </u>				
	Λ/Λ		250/400V	
T CON			concrete gray/black	
	Cable	Length m	Part No.	
		1.0	96.854.1004.3	
		1.5	96.854.1504.3	
	PVC cable	2.0	96.854.2004.3	
	H05VV-F	2.5	96.854.2504.3	
	containing halogen	3.0	96.854.3004.3	Cable diameter 14.3 mm ± 0.2
		3.5	96.854.3504.3	According to VDE 0281/T5 and
-		4.0	96.854.4004.3	VDE 0288/T4
	Cable	Length m	Part No.	
		1.0	96.854.1034.3	
		15	96.854.1534.3	
	Rubber-sheathed cab	2.0	96.854.2034.3	
	H07RN-F	2.5	96.854.2534.3	
	containing halogen	3.0	96.854.3034.3	Cable diameter 17.0 mm $\pm$ 0.3
		3.5	96.854.3534.3	According to VDE 0281/T5 and
((1))		4.0	96.854.4034.3	VDE 0288/T4

### **Cover pieces**

Cover pieces		For the safe closure of female and male connectors. With mounting strap for snapping onto plug connectors and	device connectors	3
for female	90g Ø 23.4	not captive against loss Color ■ light gray ■ black	for female Part No. Z5.564.4553.0 Z5.564.4553.1	<b>for male</b> Part No. 05.564.4453.0 05.564.4453.1
for male				
for female	<u>023,4</u> 29,05	captive against loss Color ■ light gray ■ black	for female Part No. 99.413.6205.2 99.414.6205.2	
Cover pieces		For the safe closure of female and male connectors.		
		With mounting strap for snapping onto plug connectors and	device connectors	3
for female	11,95 0	not captive against loss Color Ight gray Islack	for female Part No. Z5.565.9853.0 Z5.565.9853.1	for male Part No. 05.565.9953.0 05.565.9953.1
for male				
or female		captive against loss Color ■ light gray ■ black	for female Part No. 99.529.0000.7 99.530.0000.7	<b>for male</b> Part No. 99.531.0000.7 99.532.0000.7





### **Mounting material**

astening cord	laterial		
		Color Iight gray	Part No. 99.000.9950.6
Anual disconnect		Poles	2- up to 5-pole
		Color black concrete gray leaves green With the manual discon connections. Also see the Mounting	Part No. 05.564.8653.1 05.564.8653.3 05.564.8653.7 nect tool, only one button must be pressed to easily disconnect th nstructions!
Ianual disconnect etrofitting of pre-asser		Cable Model	RST20i2, RST20i3 shrinkage tube
		disconne	Part No. 05.565.8653.1 05.565.8653.3 05.565.8653.7 manual disconnect tool, only one button must be pressed to easily of the connections. the Mounting Instructions!
ocking slide - Safe	ety Clip	for replacement need	, delivery quantity 100 pieces
		audibly when plugged i a screw driver or with th excessive tension on th pulled out of the contact	Part No. 05.583.2900.1 05.583.2900.3 The safe connection. They are by default loosened w the manual disconnect facility (can be ordered separately). In case of e connection these will loosen, however, to prevent hazards by wir ts. This safety mechanism will lead to wear or destroy the slider, we r having been activated several times.
pacer ring for dev emale connector 2	ice connector M25, 2- up to 5-pole	for replacement need	
anually actuated	Screwdriver actuated	Color ■ light gray ■ black	manually actuated     with screwdriv.       Part No.     Part No.       05.568.8853.0     05.566.525       05.568.8853.1     05.566.525       05.568.8853.1     05.566.525

### **RST® CLASSIC Crimp contacts**

#### **RST 3-pole**

#### Female contact



#### Name Marking (groove) mm<sup>2</sup> Part No. Female contact 0.75 - 1.0 02.122.9000.0 02.122.9100.0 02.122.9200.0 Female contact None 1.5 Female contact 2.5 1 Female contact None 4.0 02.122.9300.0 0.75 - 1.0 Male contact 05.544.7800.0 1 05.544.7900.0 Male contact None 1.5 Male contact 2.5 05.544.8000.0 05.545.4600.0 Male contact None 4.0

#### Male contact



#### **RST 4- and 5-pole**

Female contact



#### Male contact



#### Female contacts and male contacts

Female contacts and male contacts

Name	Marking	(groove) mm <sup>2</sup>	Part No.
Female contact	None	0.75 – 1.0	02.125.5521.8
Female contact	1	1.5	02.125.5621.8
Female contact	2	2.5	02.125.5721.8
Female contact	3	4.0	02.125.5821.8
Male contact	None	0.75 – 1.0	05.545.0021.8
Male contact	1	1.5	05.545.0121.8
Male contact	2	2.5	05.545.0221.8
Male contact	3	4.0	05.545.0321.8

Extraction tool for crimp contacts



Name Extraction tool Part No. 05.502.3500.0

**Crimping tool** 



Name		Part No.
Crimping tool incl. system kit		95.101.0800.0
Crimping die B	0.75 – 4.0 mm <sup>2</sup>	05.502.2100.0
Contact positioner		05.502.3600.0

### **Tools**, ferrules

Ferrule crimping tool for termination points with spring clamp technology



Cable end sleeves 0.08 - 6.0 mm<sup>2</sup>, AWG 28 - 10 174 mm Total length Square compression; releasable latch; compression adjustable

Name Ferrule crimping tool

for wires

0.50 mm<sup>2</sup>

0.75 mm<sup>2</sup>

1.00 mm<sup>2</sup>

1.50 mm<sup>2</sup>

Part No. 95.101.1300.0

#### **Cable end sleeves**

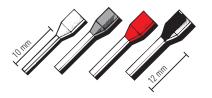
Materials Sleeve Temperature resistance Tube

Polypropylene up to 105 °C, tracking resistant E-Cu, galvanically tin-plated

#### for RST 20i3 spring clamp connectors

Insulating sleeve Yes DIN 46228-E0,5-10 DIN 46228-E0,75-12 DIN 46228-E1,0-12 DIN 46228-E1,5-12

Name	mm <sup>2</sup>	Color	Part No.
Cable end sleeves	0.50	white	06.600.3827.0
Cable end sleeves	0.75	gray	06.600.3727.0
Cable end sleeves	1.00	red	06.600.3627.0
Cable end sleeves	1.50	black	06.600.3927.0



Screwdriver		
according to	DIN	5264



for RST spring clamp connections Blade 0.4 –2.5 mm

Name Screwdriver Part No. 06.502.4300.0

### Sample kits

Sample kit RST 20i3 getting to know	Contents:	– Connector – Device connector – Cover pieces	
A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE OWNER OWNE	Name Sample set RST 20i3		Part No. 99.429.0000.0
Sample kit RST 20i5 getting to know	Contents:	– Connector – Device connector – Cover pieces	
BBCC	Name Sample kit RST 20i5		Part No. 99.430.0000.0
Sample kit RST 20i2i5 getting to know	Contents:	<ul> <li>connectors, including all codings</li> <li>device connectors</li> <li>pre-assembled cables</li> <li>distributors</li> <li>Cover pieces</li> </ul>	
	Name Sample set RST 20i2.	i5 complete kit	Part No. 99.431.0000.0

20

### Sample kits

Sample set RST 20i3 getting to know	Contents:	1x X6.030.0153.1 1x X6.031.1053.0 1x X6.031.1053.1 1x X6.032.1053.0 1x X6.032.1053.1	
	Name ATEX , IECEx RST20i	3	Part No. 99.663.0000.0
Sample set RST 20i5 getting to know	Contents:	1x X6.051.4153.0 1x X6.052.4153.0 1x X6.051.5053.1 1x X6.052.5053.0	
	Name ATEX RST20i5		Part No. 99.664.0000.0
Sample illumination cable getting to know	Contents: The illumination cable is	<ul> <li>– connector RST 20i2, pre-assembled with illumir</li> <li>– lamp base and end piece (no lamp)</li> <li>not a standard Wieland product.</li> </ul>	nation cable
	Name Sample illumination o	cable	Part No. 99.490.0000.0

## Technical data RST® CLASSIC

	RST 20i2/i3	<b>RST 25i3</b>	RST 20i4/i5	RST 25i5		
Rated voltage	250/400 V	250 V	250/400 V	250/400V		
Rated current	20 A	<b>25 A</b> <b>32 A</b> (with 6.0 mm <sup>2</sup> )	20 A	25 A		
Number of poles	2- or 3-poles	3-poles	4- or 5-poles	5-poles		
perating temperature:			I-F max. 60 °C, H07	RN-F enhanced 90		
aterial:			eated aterial PA 66, haloge	en-free, V2		
egulations:	IEC 61535 (VDE 0606); DIN EN 61984 (VDE 0627); VDE 0110 IEC 60999: UL 2238; CSA: C22.2 No.182.2-M1987; LR Type Approval System 2 PfG 1915					
ollution severity:	3 (when con	nected)				
ugging cycles:	100x without	load and 50x unde	er nominal load (cos	$\phi$ = 0.6) as per IEC		
	RST20i2/3 / RST25i3 provide up to 5,000 plugging cycles and RST20i4/5 / RST25i5 to 3,000 plugging cycles without load. After approx. 600 plugging cycles, however the sealing should be checked and, if required, re-lubricated with a suitable lubrication (e.g. Berulub FR 43 UV).					
oprovals:	<ul> <li>VDE; TÜV Rheinland; LR; GL; DNV; RINA; BV; ATEX; IECEx; CSA**; UL*</li> <li>(observe conditions of acceptability)</li> <li>* without cable assembles in shrinkage tube technology and connectors with spring clamp technology</li> <li>** without cable assembles in shrinkage tube technology</li> <li>You can find the direct assignment of approvals and part numbers in the internet in the eShop under http://eshop.wieland-electric.com, or consult us.</li> </ul>					
egree of protection:	IP66/68 (3m; 2h)/69 The installation instructions must be observed (see page with installation instruction					
code:	IK 07 (2 Joule	e)				
ow-wire test 50° C, 30 s:	for connecto	rs, distribution unit	s, cable assemblies	and device connect		
coding:		coding symbolized l coding. Other codin	by color code. Color gs are optional.	gray and black wit		

Note:

Protection against shock generally guaranteed even when disconnected. Ground conductor leading.
Connection to the live cable must be with a female connector according to the regulations.
It is therefore not possible to have a ring circuit arrangement.
Only pluggable in the correct pole configuration; 1 pole cannot be connected.
Contacts protected against strain on the cable. All components can be interlocked.

A locking device is required for IEC 6153 approval.

DIN VDE 0606 T200 conformity does not automatically exclude the danger of confusion with third-party installation plug connector systems! Installation plug connector systems are no substitute for national plug/outlet systems for domestic use. IEC 60364-5-52 must be observed – see note under "Electrical installations with increased degree of protection".

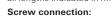
AWG 12-18

8

### Wire preparation

#### RST 2-/3-pole

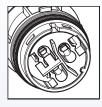
### Insulation strip lengths and ferrules all lengths indicated in mm Connector Connector 6 – 10 mm 10 – 14 mm





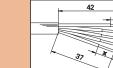
Screwdriver PZ1 Rated torque: 0.8 – 1.0 Nm

Spring clamp connection:



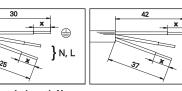
Crimp connection:

insulation strip length X =						
Conductor cross-section	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>
solid	8	8	8	8	8	8
fine-stranded	8	8	8	8	8	8
stranded	8	8	8	8	8	8
ultrasonically compressed	8	8	8	8	8	8
Fine-stranded and stranded wires	Connector		Splitte	er connector		
		10 - X		- 55	x	
				-		
		N, L			₹ }N,L	
Ferrules required	35	T .		50 + X	ζ ,	
nsulation strip length X =		7	-	$\sim$		
Conductor cross-section	0.5 mm <sup>2</sup>	0.75 mm <sup>2</sup>	1 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	
solid	14.5 + 1	14.5 + 1	14.5 + 1	14.5 + 1	14.5 + 1	
fine-stranded	12.0 + 1	13.0 + 1	13.0 + 1	13.0 + 1		
Ferrules according to DIN		46228-E0.75-12		_	2	
stranded		13.0 + 1	13.0 + 1	13.0 + 1		
Ferrules according to DIN		46228-E0.75-12			2	
ultrasonically compressed				14.5 + 1	14.5 + 1	
Connector 6 – 10 mm, 10 – 14 r	nm		Copp	ector 13 –18 m		
	11111		Conn	ector 13-10 II	1/11	
				21 57 - 57		
				28	<u>*</u>	
₹ Į N,L			5			
				1 / 7	] { N,L	
nsulation strip length X =				52 10	7	
Conductor cross-section	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
fine-stranded	8.0 + 1	8.0 + 1	8.0 + 1	8.0 + 1	8.0 + 1	
Inte-stranded	0.0 + 1	0.0 + 1	0.0 + 1	0.0 + 1	0.0 + 1	
Connector	Connector			er connector		
6 – 10 mm I0 – 14 mm	13 – 18 mm	1	max.	2 x 1.5 mm²!		
	-			. 45		
30 x	⊢	42		45	x	
			⁻⊜   -=			
}N, L						
25 TX 5 14, L		37 7 1	• N, L 🛛 🗸	40 - 1	7 <b>/ / /</b>	
Insulation strip lengthh X =		,		· · ·		
Conductor cross-section	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>
solid	8	8	8	2.5 1111-	4.0 11111-	8
fine-stranded	8	8	8	8	8	8
stranded	8	8	8	8	8	8
ultrasonically compressed	8	8	8	8	8	8
	0	0	0	0	0	0
Connector	Connector					
6 – 10 mm 10 – 14 mm	13 – 18 mm	١				
42		49				
		- X -				
/ }N,L			N, L			
37 7		4				



#### Insulation strip length X =

Conductor cr	oss-section	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>
fine-stranded	l	7.0 +1	7.0 +1	7.0 +1	7.0 +1	7.0 +1



Connector 13 – 18 mm

Splitter connector max. 2 x 2.5 mm²!

٢

} N, L

45

- ×

٢

} N, L

Insulation strip length X =						
Conductor cross-section	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>				
solid	8	8				
fine-stranded	8	8				
stranded	8	8				
ultrasonically compressed	8	8				

#### RST 4 /5-pole

all lengths indicated in mm Screw connection:



Screwdriver PZ1 Rated torque: 0.5 – 0.7 Nm

#### Crimp connection:



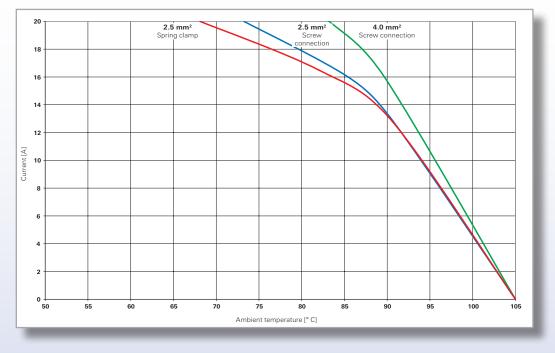
AWG 12-18

8

### **Derating curves**

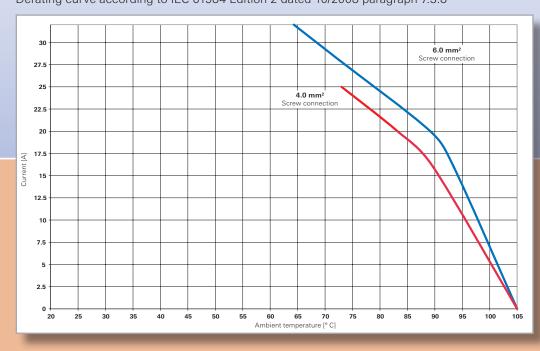
#### **RST 20i3**

Screw connection – spring clamp connection Derating curve according to IEC 61984 Edition 2 dated 10/2008 paragraph 7.3.8



#### **RST 25i3**

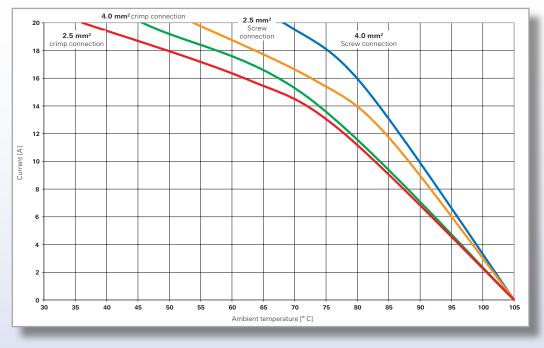
Screw connection Derating curve according to IEC 61984 Edition 2 dated 10/2008 paragraph 7.3.8



## **Derating curves**

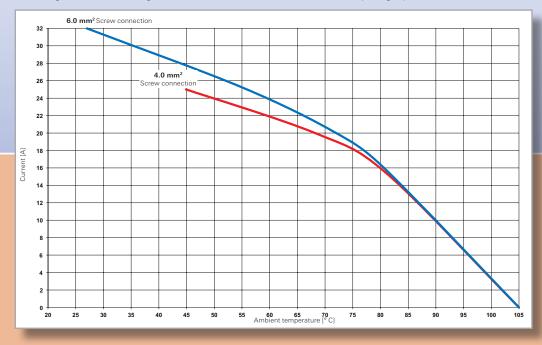
#### **RST 20i5**

Screw connection – crimp connection Derating curve according to IEC 61984 Edition 2 dated 10/2008 paragraph 7.3.8



#### **RST 25i5**

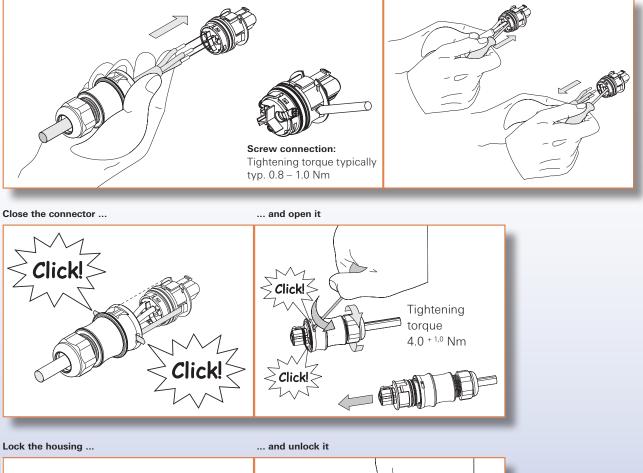
Screw connection Derating curve according to IEC 61984 Edition 2 dated 10/2008 paragraph 7.3.8



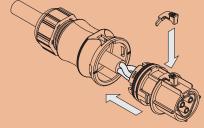
### **Connectors 2- and 3-pole**

Connect the wires ...

... and disconnect them



How to insert the (optional) manual disconnect tool into the connector (only possible for the female connector)



The manual disconnect tool can be used as an alternative and enables disconnecting without a tool.

The descriptions on this page merely serve as an overview. For assembly and installation, only the installation instructions supplied together with the products are binding

The respective installation instructions BA000104 can be found under https://eshop.wieland-electric.com

max. 8mm

2 ... 2.5 Nm

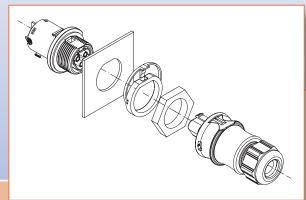
### **Device connections 2- and 3-pole**

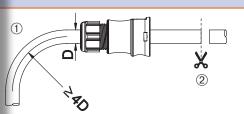
Installation of a standard system, for M16 and M20 feed-through

Installation of a standard system, for M25 feed-through

## Dimensions in mm Dimensions in mm max.8mm Tightening torque 2 ... 2.5 Nm Note: Tightening Effectiveness of the protection against twisting can only torque

be guaranteed when the lower tolerance limit is ensured for the diameter of the hole.





**Bending radius (for conductors)** Note the minimum bending radius for conductors  $> 2.5 \text{ mm}^2$ . Pull forces on the contact points can be avoided by proceeding as follows::

Bend the wire as required Cut the wire to length 2 Strip the cable and wires ③

### **Connectors 4- and 5-pole**

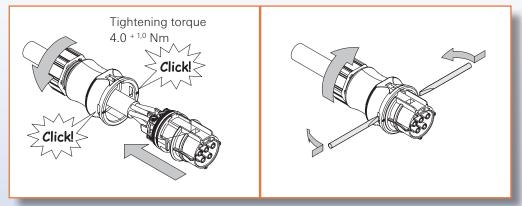
#### Connect the wires ...

Screv connection: Tightening torque 0.5 - 0.7 Nm

... and disconnect them

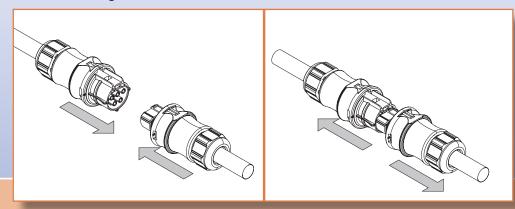
Close the connector ...

... and open it

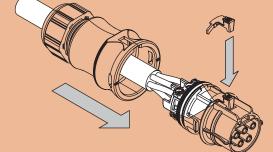


Lock the housing ...

... and unlock it



How to insert the (optional) manual disconnect tool into the connector (only possible for the female connector)



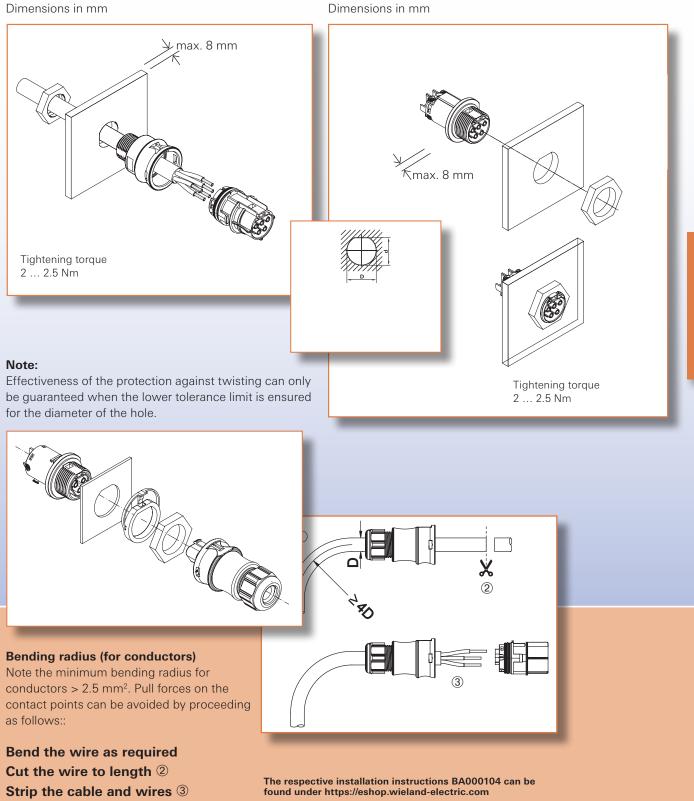
The manual disconnect tool can be used as an alternative and enables disconnecting without a tool.

The descriptions on this page merely serve as an overview. For assembly and installation, only the installation instructions supplied together with the products are binding

## **Device connections 4- and 5-pole**

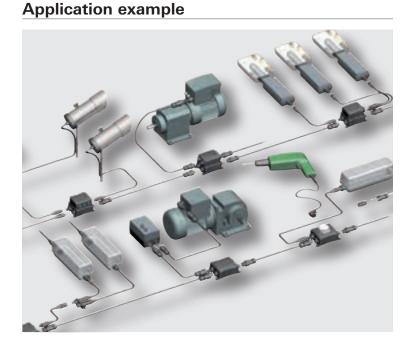
Installation of a standard system, for M16 and M20 feed-through

Installation of a standard system, for M25 feed-through





# Compact and multi-distribution units for use in rough environments



#### General

The pluggable distribution units play a major role in power distribution. In their simplest function, they merely have to provide branches in the required locations. Practice shows, however, that the requirements may be much more complex.

Examples can be found in AC and DC wiring through distribution units with microfuses up to boxes with integrated safety outlets or switches.



### **Compact and multi-distribution units** Flexibility according to the modular **RST**<sup>®</sup> principle

#### The highest level of flexibility!

Two housing variations are the basis: a flat design with up to four slots, and a high design with a total of up to eight slots. Unused slots are closed at the factory.

The distribution units are equipped individually with suitable device connectors.

These connectors are available in various pole configurations, with

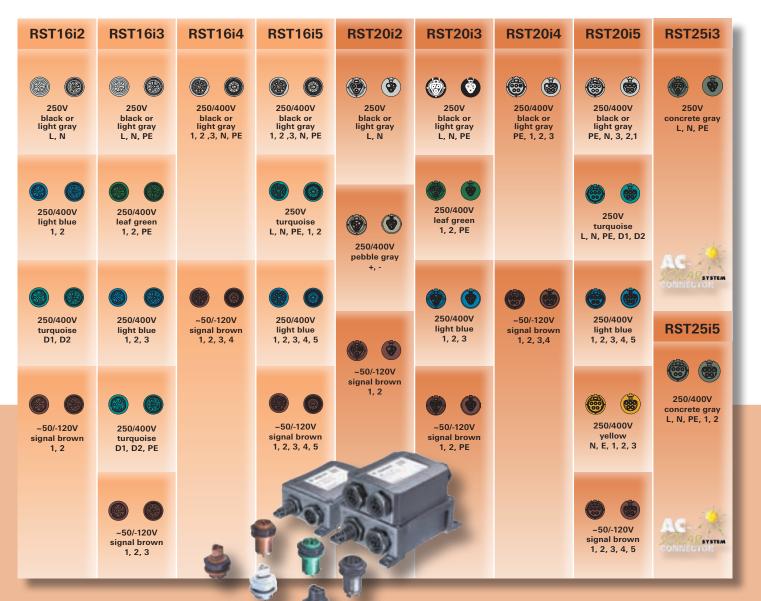
mechanical coding and designs; they are wired to customer's requirements.

## Overview of the standard components:

Depending on the application, you can choose among 30 codings from the range of **RST**<sup>®</sup> CLASSIC and **RST**<sup>®</sup> MINI. Mechanically coded means that only the matching male and female connectors can be plugged together. Thus you

can be sure that your different applications are clearly distinguished – without having to rework incorrect connections.The connector colors signal the matching connections. The standard power coding is an exception. Here you can select between black and gray.

These are compatible with one another.





#### Mounting

Four fixing clips on the outside ensure easy installation and safe fixation.

At the bottom, there are extra fixing holes for attachment of a special mounting plate.



#### Unlocking

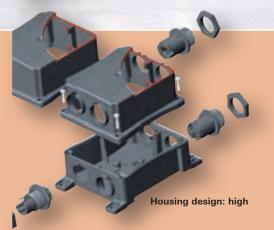
All pluggable connections are protected against accidental loosening. This is guaranteed by a locking facility integrated during production. On plug-in, the locking facility latches with an audible click. The connection is released using a screwdriver.





Housing design: flat





#### Circuit diagram

**Cover pieces** 

outputs.

loss.

Cover pieces are required for safely covering unused

These are available either with or without protection against

A circuit diagram on the housing cover provides information about the internal wiring. The outputs are numbered from X1 to X8.



Compact/multidistribution units

### **Compact distribution units with max. 4 slots**

<b>RST compact distril</b> Dimensions (W x L x H) Number of poles	<b>Dution unit</b> 104 x 162 x 57.2 mm 5-pole	routing 3 outputs 230/400V, 20A Pre-wired with Mounting option	RST 20i5 coding Col 2.5 mm² Yes	or black
Sals	Circuit diagram	Color gray black 5 5 5	Input         Οι           1         3           1         3	utputs Part No. upon request 96.050.0153.1
<b>RST compact distril</b> Dimensions (W x L x H) Number of poles	<b>Dution unit</b> 104 x 162 x 57.2 mm 5-pole	routing 2 outputs 230/400V, 20A Pre-wired with Mounting option	RST 20i5 Coding Col 2.5 mm² Yes	or black
Gala	Circuit diagram	Color gray black 5 5 5	Input Ou 1 2 1 2	utputs Part No. upon request 96.050.1153.1
<b>RST compact distril</b> Dimensions (W x L x H) Number of poles	<b>Dution unit</b> 104 x 162 x 57.2 mm 5-/3-pole	routing 1 output 230/400V, 20A 1 output 230V, 20A Pre-wired with Mounting option	RST 20i5 coding Col RST 20i3 coding Col 2.5 mm <sup>2</sup> Yes	
fare	Circuit diagram	Color gray black black black black c 5 3	Pole marking         Input         Out           1         2           L         1         2           L         1         2           L         1         2           L         1         2           L         1         2	utputs Part No. upon request 96.050.3153. 96.050.4153. 96.050.5153.
<b>RST compact distril</b> Dimensions (W x L x H) Number of poles	<b>Dution unit</b> 104 x 162 x 57.2 mm 5-/3-pole	1 input 230/400V, 20A 3 outputs 230V, 20A Pre-wired with Mounting option	RST 20i5 coding Col RST 20i3 coding Col 2.5 mm² Yes	
Land	Circuit diagram	Color gray black	Pole marking Input Ou 1 3 L1, L2, L3 1 3	utputs Part No. Upon request 96.050.6153.1

#### 180

### AS-i distribution unit

<b>Distribution box AS</b> - Dimensions (W x L x H) Number of poles	<b>i / 24V</b> 104 x 162 x 57.2 mm 4-pole	3 outputs 230/400V, 20A Pre-wired with Mounting option	RST 20i4 codi 2.5 mm² Yes	ng Color brown	
(falle	Circuit diagram	Color gray black	Input 1 1	Outputs 3 3	Part No. upon request 96.040.0151.4
Mounting plate for e mesh cable tray (see illustration below)	xample to fit on the	Dimensions (W x L x H) Mounting option	105 x 154 x 4.5 mm Yes		
ł					Part No. G0.500.2041.5



<image>

### Multi-distribution units with max. 8 slots

Multi-distribution unit 5-/3-pole, 1I/70, 2x L1, L2, L3

Dimensions (W x L x H) routing outputs 230/400V, 20A outputs 230V, 20A 104 x 162 x 96 mm 1, RST 20i5 coding black 6, RST 20i3 coding black

Input

Outputs

Outputs

4

4

Part No.

Part No. upon request 99.902.0000.7

99.903.0000.7

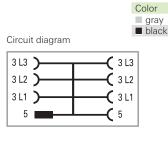
3

1

upon request

96.050.7153.1





Multi-distribution unit 5-/3-pole, 1I/30, L1, L2, L3

Dimensions (W x L x H) routing outputs 230/400V, 20A outputs 230V, 20A

Color

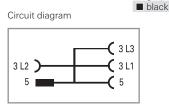
gray

104 x 162 x 96 mm 1, RST 20i5 coding black 3, RST 20i3 coding black

Input

1





### Multi-distribution unit 5-/3-pole,

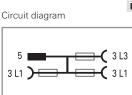
**11/30, L1, L2, L3** Dimensions (W x L x H)

Protection type

104 x 162 x 96 mm IP 65, 66, 67 input 230/400V, 20A outputs 230 V, with 3 integrated microfuse holders up to 10 A including microfuse 1, RST 20i5 coding black 3, RST 20i3 coding black

10A, 5 x 20 mm



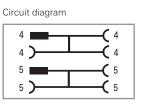


including microfuse	10A, 5 X 20 III		
Color	Input	Outputs	Part No.
gray	1	3	upon request
black	1	3	99.901.0000.7

Distribution box		Input power 230/400V, 20A 1				
Power and AS-i / 24	ŧV	Outputs power 230/400V, 20A 3, RST 20i5 coding black	black			
Dimensions (W $\times$ L $\times$ H)	104 x 162 x 96 mm	input AS-i/24V, 20A	1			
		outputs AS-i/24V, 20A	3, RST 20i4 c	oding brown		
-		Color	Input	Outputs	Part No.	

black





**Distribution units** 

### Multi-distribution units, radio, halogen technology, LED technology

#### Switching output unit EnOcean 4-fold

Power In-/Output Outputs Connection type

230V AC / 20A connectors RST 20i3 coding black 4 connector RST20i3, coding black

Rated voltage 230 V AC 6A (max. two of the LED/LV halogen Switching capacity modules given below) IP 65, 66, 67, 68 (3m; 2h) Protection type Dimensions (length/width/height) 104/162/96 mm Mounting option 4 elongated holes

Part No. Name Type RC RST-0/4 4 relay outputs, 1 feed-through wiring 83.020.0505.0 Circuit diagram X5 -C X6 X1 ` -C X2 RC Χ4 X3 The EnOcean 4-fold switching output unit in IP68 surface housing for outdoor use features four 230V relays. They can be programmed for 30 push button pairs. All electrical connections are pluggable.

#### Switching output unit EnOcean 1-fold

Power In-/Output Outputs Connection type

230V AC / 20 A connector RST 20i3 coding black connector RST 20i3, coding black

Rated voltage	230 V AC
Switching capacity	5A total ohmic load
Protection type	IP 65, 66, 67, 68 (3m; 2h), 69K
Dimensions (length/width/height)	104/162/57 mm
Mounting option	4 elongated holes



Type Name Part No. RC RST-0/1 1 relay output, 1 feed-through wiring 83.020.0504.0 RC RST-0/1x2 2 relay outputs connected in parallel 83.020.0504.1

The EnOcean 1-fold switching output unit in IP68 surface housing for outdoor use features one 230V relay. They can be programmed for 30 push button pairs. All electrical connections are pluggable.

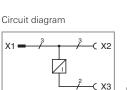
#### Constant power supply unit, 350 mA DC

Power input (male connector) Power output (female connector) Output LED (female connector)

230V AC/20A RST 20i3 coding black 230V AC/20A RST 20i3 coding black 350mA DC/max. 12W RST 20i2 coding brown

Protection type IP 65, 66, 67, 68 (3m; 2h), 69K Ambient temperature -25 °C up to +55 °C Dimensions (length/width/height) 104/162/96 mm Mounting option 4 elongated holes pluggable with RST 20i2...20i3 Electrical connections





Type **RST PSI 350/12 LED**  Part No. 83.020.0902.0

Constant power supply unit 350 mA for connecting LEDs. Connections not used have to be closed.

#### Constant power supply unit, 700 mA DC

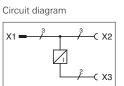
Power input (male connector) Power output (female connector) Output LED (female connector)

230V AC/20A, RST 20i3 coding black 230V AC/20A RST 20i3, coding black 700mA DC/max. 12W, RST 20i2 coding brown

Protection type Ambient temperature -25 °C up to +55 °C Dimensions (length/width/height) 104/162/96 mm Mounting option 4 elongated holes Electrical connections

IP 65, 66, 67, 68 (3m; 2h), 69K pluggable with RST 20i2...20i3





Type **RST PSI 700/12 LED**  Part No. 83.020.0903.0

Constant power supply unit 700 mA for connecting LEDs. Connections not used have to be closed

#### Constant power supply unit, 12 V DC

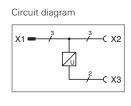
Power input (male connector) Output LED (female connector)

230V AC/20A RST 20i3, coding black Power output (female connector) 230V AC/20A RST 20i3, coding black 12V DC/max. 12W RST 20i2, coding signal brown

Protection type Ambient temperature Dimensions (length/width/height) 104/162/96 mm Mounting option Electrical connections

IP 65, 66, 67, 68 (3m; 2h), 69K -25 °C up to +55 °C 4 elongated holes pluggable with RST 20i2...20i3





#### Constant power supply unit, 24 V DC

power input (male connector) power output (female connector) output LED (female connector)

230V AC/20A RST 20i3, coding black 230V AC/20A RST 20i3, coding black 24V DC/max. 12W RST20i2, coding signal brown

Protection type
Ambient temperature
Dimensions (length/width/height)
Mounting option
Electrical connections

Constant voltage supply unit 12 V for connecting LEDs. Connections not used have to be closed.

IP 65, 66, 67, 68 (3m; 2h), 69K -25 °C up to +55 °C 104/162/96 mm 4 elongated holes pluggable with RST 20i2...20i3





RST PSU 24/12 LED

RST PSU 12/12 LED

83.020.0901.0

83.020.0900.0

### Transformer for low voltage halogen luminaires, 12 V AC Output LV halogen

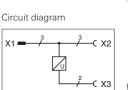
Power input (male connector) Power output (female connector) Output LV halogen (female connector)

230 V AC/20 A RST 20i3, coding black 230 V AC/20 A RST 20i3, coding black 12V AC/20 - 70W RST 20i2, coding signal brown

Protection type Ambient temperature Dimensions (length/width/height) Mounting option Electrical connections

max. 2 m cable length IP 65, 66, 67, 68 (3m; 2h), 69K 0 °C up to +45 °C (derating from 35 °C) 104/162/96 mm 4 elongated holes pluggable with RST 20i2...20i3





#### Type RST PSU 12/70 LVH

Part No 83.020.0904.0

Power supply unit 12 V for connecting halogen luminaires. Connections not used have to be closed.

**Accessories Covers** Suitable for all RST 20i2 and RST 20i3 codings

The covers have to be used to close all unused inputs and outputs. Without these covers, only IP20 is achieved!

for male	for female	Туре	Part No.
		Cover for male connector, captive against loss	99.416.6205.2
		Cover for male connector, not captive against loss	05.564.4453.1
		Cover for female connector, captive against loss	99.414.6205.2
		Cover for female connector, not captive against loss	Z5.564.4553.1
	100		

### Radio switch / hand-held radio transmitter

#### Radio switch, 2/4 channels glossy with suitable frame





This push button series features a glossy, smooth surface. The radio switches with 2 or 4 channels do not require batteries or maintenance. The rockers are in neutral central position and without marking with 1/0 or up/down symbols. The matching frames for these push buttons can be found below.



Frame for installation of the 2/4 channel glossy radio switches. Suitable for vertical and horizontal mounting.

glossy surface
 batteryless and maintenance free

- for installation on flat surfaces with screws or adhesive pads (included in delivery)

- the combination frames have to be ordered separately

Туре	Color	Marking	Part No.
Radio switch, 2 channels	pure white	1/0	F0.000.0025.0
	pure white	(△▼)	F0.000.0025.2
	pure white		F0.000.0025.4
	piano black	1/0	F0.000.0025.9
	piano black	(△▼)	F0.000.0026.1
	piano black		F0.000.0026.3
	aluminum	1/0	F0.000.0026.8
	aluminum	$(\triangle \mathbf{\nabla})$	F0.000.0027.0
	aluminum		F0.000.0027.2
Radio switch, 4 channels	pure white	1/0	F0.000.0025.1
	pure white	(△▼)	F0.000.0025.3
	pure white		F0.000.0025.5
	Piano black	1/0	F0.000.0026.0
	Piano black	(△▼)	F0.000.0026.2
	Piano black		F0.000.0026.4
	aluminum	1/0	F0.000.0026.9
	aluminum	(△▼)	F0.000.0027.1
	aluminum		F0.000.0027.3

\* 2 channels represent a rocker in neutral center position. This function is defined in the receiver.

\* 4 channels represent two rockers in neutral center position. This function is defined in the receiver.

Туре	Color	Marking	Part No.
Combination frame 1-fold	pure white		F0.000.0025.6
Combination frame 2-fold	pure white		F0.000.0025.7
Combination frame 3-fold	pure white		F0.000.0025.8
Combination frame 1-fold	piano black		F0.000.0026.5
Combination frame 2-fold	piano black		F0.000.0026.6
Combination frame 3-fold	piano black		F0.000.0026.7
Combination frame 1-fold	aluminum		F0.000.0027.4
Combination frame 2-fold	aluminum		F0.000.0027.5
Combination frame 3-fold	aluminum		F0.000.0027.6

#### Handheld radio transmitter, 4 channels

Handheld radio transmitter

- Batteryless and maintenance-free

- For stick-on surface mounting or as a handheld remote control.

Туре	Color
Handheld radio transmitter	pure \
Handheld radio transmitter	black
Handheld radio transmitter	silber

	Color	Marking	Part No.
o transmitter	pure white RAL 9010		F0.000.0009.1
o transmitter	black RAL 9005		F0.000.0009.2
o transmitter	silber lackiert		F0.000.0009.3

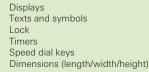


Batteryless and maintenance-free 4-channel handheld transmitter for direct control of the actuators.

### Radio switch / hand-held transmitter

#### **Convenient hand-held transmitter**

Radio channels Configurable levels	512 32	
---------------------------------------	-----------	--



Special EnOcean function:

Power supply:

Charging device

Supply with batteries

**Convenient hand-held transmitter** 

Type

Time, date, temperature pre-defined or configurable with pin code 32 8 165/55/21 mm

EnOcean service function, e.g. ID display, quality of radio signals, and a radio link test (enables range test

between two hand-held terminals)

USB charging device and separate USB cable (included in delivery)

3 AAA-NiMH power packs (included in delivery)

The convenient hand-held transmitter allows for control of the complete building. Whether complex lighting concepts or comprehensive actions following a detailed schedule: This hand-held terminal lets you program building functions in the twinkling of an eye. Menu navigation is intuitive and is supported by easily understandable symbols. Additionally, the device offers service functions for the installer regarding range planning and

The radio switches fit the frames with 55mm installation size of the vendors and their

Part No. F0.000.0024.4



Included in delivery

#### Multivendor radio switch, 2/4 channels

- Batteryless and maintenance-free
- for mounting on flat surfaces with screws or adhesive pads (included in delivery)
- Jung: A500, A plus – Merten: M-Smart, M-Arc, M-Plan

Berker: S1, B1, B3, B7 Glas
Gira: Standard 55, E2, Event, Esprit

designs listed:

serves for function testing during commissioning.







Туре	Color	Marking	Part No.
Radio switch, 2 channels	white	1/0	F0.000.0005.6
	anthracite	1/0	F0.000.0007.5
	aluminum finish	1/0	F0.000.0007.6
Radio switch, 2 channels	white	(△▼)	F0.000.0005.8
	anthracite	( <b>△</b> ▼)	F0.000.0007.7
	aluminum finish	(△▼)	F0.000.0007.8
Radio switch, 4 channels	white	1/0	F0.000.0005.7
	anthracite	1/0	F0.000.0007.9
	aluminum finish	1/0	F0.000.0008.0
Radio switch, 4 channels	white	(△▼)	F0.000.0005.9
	anthracite	( <b>△</b> ▼)	F0.000.0008.1
	aluminum finish	(△▼)	F0.000.0008.2

Batteryless and maintenance-free radio switches with 2/4 channels for direct control of the actuators. The rockers in neutral center position are marked with I/O or Up/Down ( $\Delta \mathbf{\nabla}$ ) symbols. These 55x55 mm switches enable installation in various designs of various manufacturer

- Multivendor radio switches with 2/4 channels (light) (I / 0)
- the rockers are printed with I/0 symbols
- Multivendor radio switches with 2/4 channels (sunblind) (Up / Down) (△▼)
- the rockers are printed with Up/Down (△ ▼) symbols

### Compact and multiple distribution units Flexibility according to RST<sup>®</sup> modularity

The pluggable distributors play a major role in power or signal distribution. In their simplest function, they merely have to provide branches in the required locations. Practice shows, however, that the requirements may be much more complex. Examples can be found in rotary A/C current distributors and distributors with integrated fine fuses, all the way through to boxes with integrated electronics, such as constant current sources, voltage sources, or radio actuators.

Two housing variations are the basis:

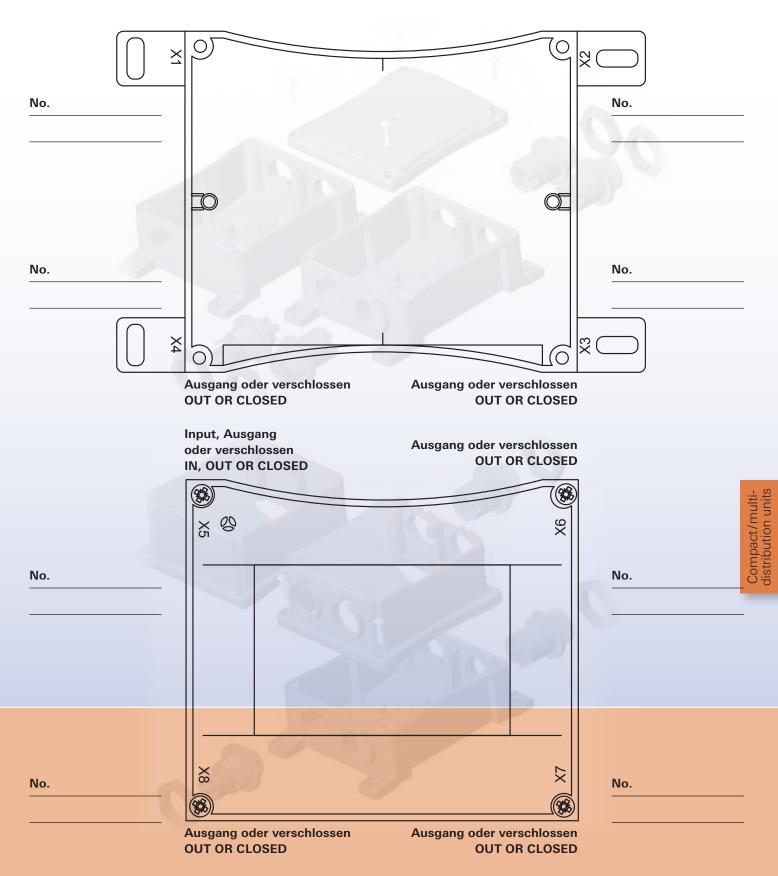
a flat design with up to four slots, and a high design with a total of up to eight slots. Alongside a customized configuration with the new RST16i device connectors, the existing components of the RST20i and RST25i lines can also be used for variety, of course.

The coded connectors give you the security of a clear distinction between different circuits – no need to redo any incorrect connections. In addition to the compact and multiple distributors, standard distribution boxes can also be customequipped with device connectors.



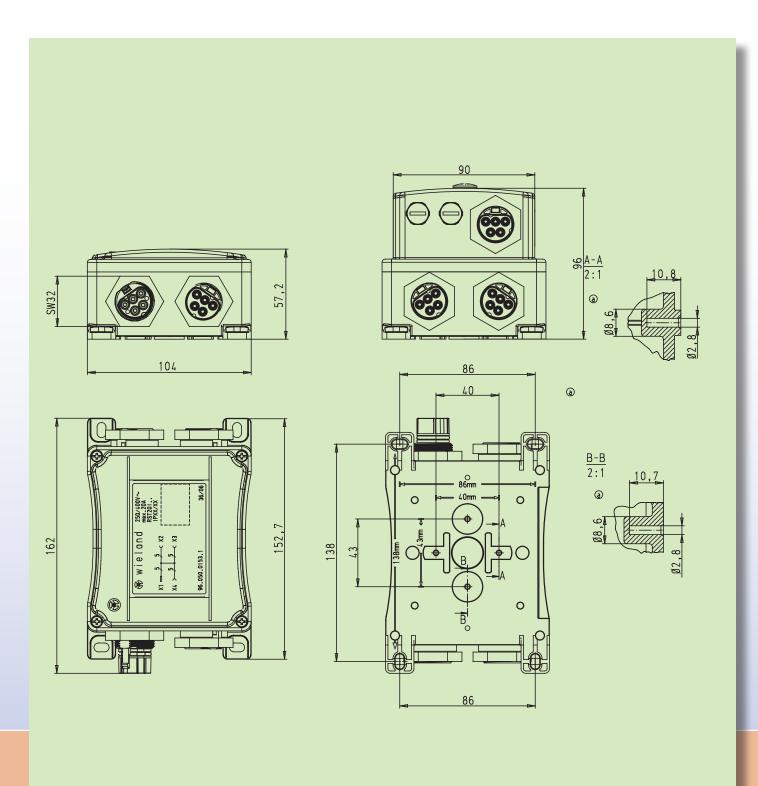
Example

# Special variant request – please complete and fax: +49-951-9326-996



Bitte die benötigten Komponenten (Artikelnummer oder Polzal und Farbe) ergänzen und Verdrahtung einzeichnen. Please add required components (either article code or number of poles and color) and the wiring scheme.

### **RST**<sup>®</sup> compact and multi-distribution units



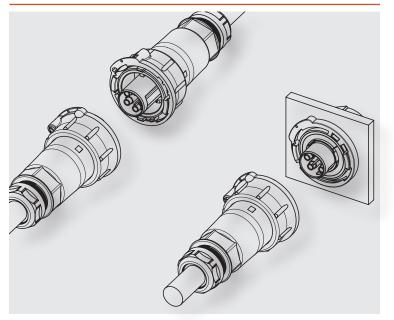
Operating temperature:	-40° C up to +100° C
Material:	Contact parts: brass, silver-plated Housing parts: thermoplastic material PA 66, halogen-free, V2 Sealing material: NBR
Wiring:	Individual wires 2.5 mm², halogen-free (other cross-sections on request)
Regulations:	DIN VDE 0606 T200; DIN EN 61984 (VDE 0627); VDE 0110 IEC 60999
Approvals:	VDE You can find the direct assignment of approvals and part numbers in the internet in the eShop under http://eshop.wieland-electric.com, or consult us.
Degree of protection:	IP66/68 (3m; 2h)/69 Special variants may occur different degrees of protection.
IK code:	IK 07 (2 Joule) according to DIN EN 62262
Rated voltage:	250V/400V
Rated current:	20 A (25 A)
Coding:	Mechanical coding symbolized by color code. Gray and black with the same mechanical coding. Other codings are optional.
Note:	Protection against shock generally guaranteed even when disconnected. Ground conductor leading. Connection to the live cable must be with a female connector according to the regulations. It is therefore not possible to have a ring circuit arrangement! Only pluggable in the correct pole configuration; 1-pole cannot be connected. Contacts protected against strain on the cable. All components can be interlocked. A locking device is required for DIN EN 61535 approval. DIN VDE 0606 T200 conformity does not automatically exclude the danger of confusion with third-party installation plug connector systems! Installation plug connector systems are no substitute for national plug/outlet systems for domestic use.



milling

### The new RST® POWER series up to 50 A

### **Application example**



### General

The new **RST**<sup>®</sup> POWER series is particularly designed for device engineering. With a current-carrying capability of 50 A combined with an extremely compact design, the connector fits almost everywhere.

The 4-pole connector is based on the 5-pole variation, with one pole left empty.

### Coding

For daily updates v http://eshop.wielar				Application	Power max. 50 A
Assembly instructi	ons and other technical inform		250/400 V		
in the Technical Da	ata or in eShop.			Mechanical	1, 2, 3, 🖶
				coding	
		0	Of the local line (	0	
Name	Description	Connection style	Strain relief housing	Connection points per pole	black
Connectors	1 x wire entry	Screw Crimp	yes	1	$\checkmark$
Device connectors	M32 connector, standard	Screw Crimp	yes	1	$\checkmark$

# **Connectors,** straight for cables Ø 4 – 6 mm and 4 – 10 mm

Female connector	Illustration M 32 cable gland	SW38 SW36 965
	with screw connection	with crimp connection
	Wire         mm²           solid         from 4.0 to 6.0*)	Wire         mm²           flexible wires         from 4.0 to 10.0
	flexible wires from 4.0 to 16.0	Approvals VDE, c CSA us
	Approvals VDE, c CSA us	
Application Coding Cable gland Cable Ø in mm Color	Part No.	Part No.
M 32         15 - 25         black           Power         M 40         20 - 32         black	97.041.4053.1 97.041.4253.1	97.141.0053.1 97.141.0253.1
Power max. 50A 1, 2, 3, (+)		Contacts separately under Accessories, see following pages.
Male connector	Illustration M 40 cable gland	
	with screw connection	with crimp connection
	Wire         mm <sup>2</sup> solid         from 4.0 to 6.0*)           stranded         from 4.0 to 16.0           flexible wires         from 4.0 to 16.0           Approvals         VDE, c CSA us	Wire         mm²           flexible wires         from 4.0 to 10.0           Approvals         VDE, c CSA us
Application Coding Cable gland Cable Ø in mm Color	Part No.	Part No.
Power max. 50A Power 1, 2, 3, ⊕ M32 M32 N32 N32 N32 N32 N32 N32 N32 N32 N32 N	97.042.4053.1 97.042.4253.1	97.142.0053.1 97.142.0253.1
		Contacts separately under Accessories, see following pages.

 $^{*\!j}$  Solid and stranded wires > 6.0 mm² cannot be connected in the available space due to their rigidity.

# M32 device connector straight, standard

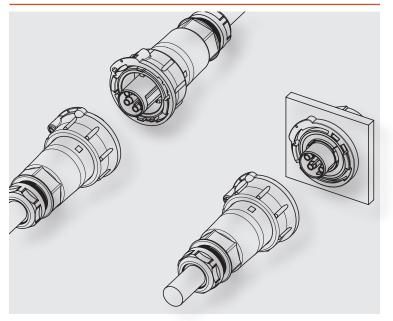
Female connec	,101					s.	
			0				SW55 6 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2
Drilling template for c device connectors fixed d n position c		wi	ith screw co	onnection		with crimp co	onnection
n position 6		Wir	re	mm <sup>2</sup>		Wire	mm <sup>2</sup>
		soli		- from 4.0 to 16.0		flexible wires	from 4.0 to 10.0
			anded xible wires	from 4.0 to 16.0		Approvals	VDE, c CSA us
			provals	VDE, c CSA us			
	Ø32,5±0,25						
application Coding	Fixation with bolts	Color		Part No.			Part No.
	fixed in position	black		97.041.5553.1			97.141.1553.1
Power max. 50A 1, 2, 3,	not fixed in position	black		97.041.5053.1		Contacts separately	97.141.1053.1 under Accessories, see following pages.
			1			55	16,9 39,8 101 (56,7)
			(C))		⊭ SW	55	,
Drilling template for gradevice connectors fixed to residen fixed to resident fixed to resident fixed to restrict fixed	<u>93,3+0,1</u>		ith screw co	onnection	⊨ <u>S</u> W	with crimp ca	
Drilling template for device connectors fixed in position	97.3±011	Wir	ire	onnection	<u>,                                    </u>	with crimp co	onnection
Drilling template for device connectors fixed n position State St	\$93,3×0,1	Wir soli	ire		<u>,                                    </u>	Wire flexible wires	ponnection mm <sup>2</sup> from 4.0 to 10.0
Drilling template for levice connectors fixed n position 2	92,3-U,1	Wir soli stra flex	ire iid anded xible wires	mm <sup>2</sup> - from 4.0 to 16.0 from 4.0 to 16.0	, <u> </u>	with crimp co	onnection
Drilling template for every levice connectors fixed of n position S	¢2,3×0,1 ¢32,5±0,25	Wir soli stra flex	ire lid anded	mm² - from 4.0 to 16.0	, <u> </u>	Wire flexible wires	ponnection mm <sup>2</sup> from 4.0 to 10.0
		Wir soli stra flex	ire iid anded xible wires	mm <sup>2</sup> - from 4.0 to 16.0 from 4.0 to 16.0	یم _ SW	Wire flexible wires	ponnection mm <sup>2</sup> from 4.0 to 10.0
Drilling template for gradient	Fixation with bolts	Color	ire iid anded xible wires	mm <sup>2</sup> from 4.0 to 16.0 from 4.0 to 16.0 VDE, c CSA us Part No.	, <u> </u>	Wire flexible wires	mm <sup>2</sup> from 4.0 to 10.0 VDE, c CSA us Part No.
	¢32,5±0,25	Wir soli stra flex App	ire iid anded xible wires	mm <sup>2</sup> from 4.0 to 16.0 from 4.0 to 16.0 VDE, c CSA us	, <u> </u>	Wire flexible wires	mm <sup>2</sup> from 4.0 to 10.0 VDE, c CSA us



milling

### The new **RST**® POWER series up to 50 A

### **Application example**



### General

The new **RST**<sup>®</sup> POWER series is particulary designed for device engineering. With a current-carrying capability of 50A combined with an extremely compact design, the connector fits almost everywhere.

### Coding

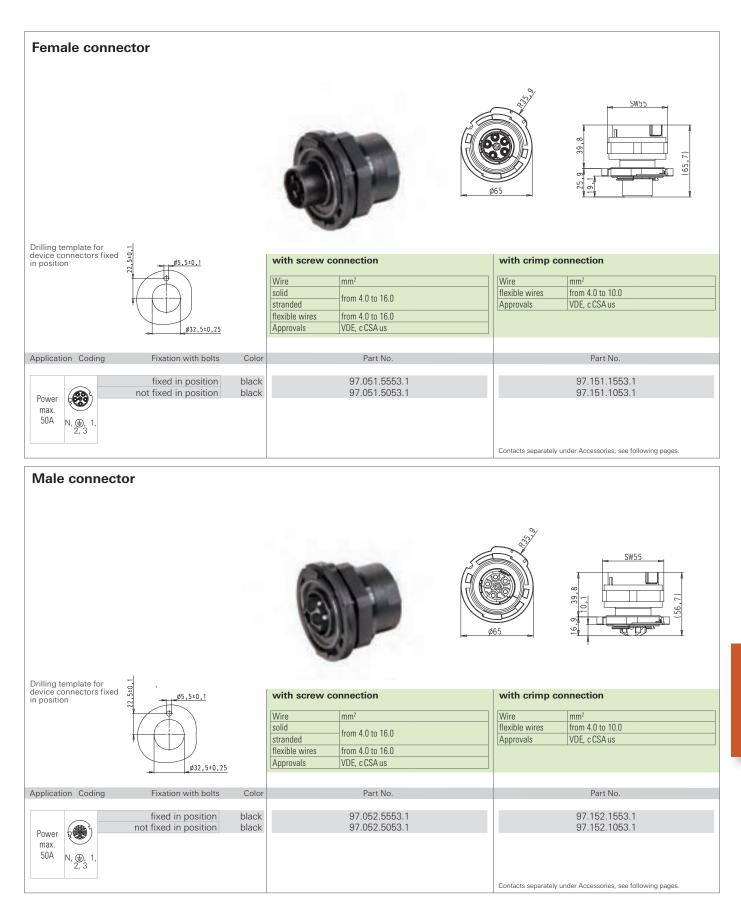
	tes visit the website at			Application	Power max. 50A
Assembly inst	ieland-electric.com. ructions and other technical inform al Data or in eShop.	Mechanical coding	250/400V 1, 2, 3, N, 使		
Name	Description	Connection style	Strain relief housing	Connection points per pole	black
Connectors	1 x wire entry	Screw Crimp	yes	1	$\checkmark$
Device connectors	M32 connector, standard	Screw Crimp	yes	1	$\checkmark$

# **Connectors,** straight for cables Ø 4 – 6 mm and 4 – 10 mm

Female connector	Illustration M 32 cable gland	SW38 SW36 665
	with screw connection       Wire     mm <sup>2</sup>	Wire mm <sup>2</sup>
	write         mm           solid         from 4.0 to 6.0*)           stranded         flexible wires           flexible wires         from 4.0 to 16.0           Approvals         VDE, c CSA us	flexible wires from 4.0 to 10.0 Approvals VDE, c CSA us
Application Coding Cable gland Cable Ø in mm Color	Part No.	Part No.
Power max. 50A N, ⊕, 1, 2, 3 2, 3 M 32 15 - 25 black M 40 20 - 32 black	97.051.4053.1 97.051.4253.1	97.151.0053.1 97.151.0253.1 Contacts separately under Accessories, see following pages.
Male connector	Illustration M 40 cable gland	W45 SW45 SW45
	with screw connection           Wire         mm <sup>2</sup> solid         from 4.0 to 6.0*)           stranded         from 4.0 to 16.0           Approvals         VDE, c CSA us	with crimp connection           Wire         mm²           flexible wires         from 4.0 to 10.0           Approvals         VDE, c CSA us
Application Coding Cable gland Cable Ø in mm Color	Part No.	Part No.
Power max. 50A Power max. 50A N, ⊕, 1, 2, 3 N (⊕) 1,	97.052.4053.1 97.052.4253.1	97.152.0053.1 97.152.0253.1 Contacts separately under Accessories, see following pages.

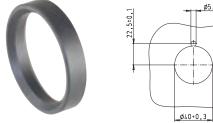
 $^{*\!j}$  Solid and stranded wires > 6.0 mm² cannot be connected in the available space due to their rigidity.

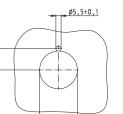
### M32 device connector straight, standard



Cover		For safe covering of unu	sed male or female components	
	50 R35.9	Name Cover	Color black	Part No. 25.567.5653.0
	<sup>10.5</sup>			
Sample kit RST 50i5 Complete kit		Contents:	– Connectors – Device connection – Cover – Knock-out (metal sheet)	
		Name Sample kit RST50i5	Color black	Part No. 99.628.0000.0

### Adapter ring 40 mm





For fixing the device connector inside 40 mm knock-outs

Name	Color	Part No.
Adapter ring	black	05.568.1853.0

#### **RST**<sup>®</sup> POWER Crimp contacts

#### Female contact



Male contact



#### Crimping tool with system kit



Name	Marking	(groove) mm <sup>2</sup>	Part No.
Female contact	None	4.0	02.126.0621.8
Female contact	1	6.0	02.126.0721.8
Female contact	None	10.0	02.126.0821.8
Male contact	None	4.0	05.545.2821.8
Male contact	1	6.0	05.545.2921.8
Male contact	None	10.0	05.545.3021.8

Name	Part No.
Crimping tool (supplied in case)	95.101.0800.0
Crimping die D	05.502.2300.0

### **Convincing technology**

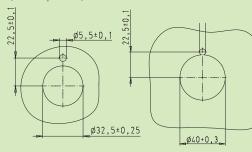


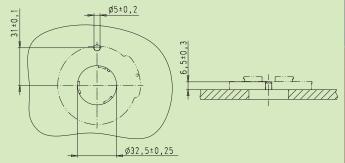
### **RST®** POWER

Rated voltage: Rated current: Rated cross-section:	250/400 V 50 A rigid cables with 4.0 mm <sup>2</sup> to 6.0 mm <sup>2</sup> for plug connectors (up to 16 mm <sup>2</sup> with device connectors) fine-stranded cables with 4.0 mm <sup>2</sup> to 16.0 mm <sup>2</sup>
Number of poles: Pole designation:	4-pole 5-pole 1, 2, 3, ⊕ 1, 2, 3, N, ⊕
Material:	Contact parts: brass, surface-plated Housing parts: thermoplastic material PA 66, halogen-free, V2 Sealing material NBR, TPE
Degree of protection: Approvals:	IP66/67/69 VDE, cCSAus You can find the direct assignment of approvals and part numbers in the internet in the eShop under http://eshop.wieland-electric.com, or consult us.
Sheath strip length: Insulation strip length: Torques:	L/N = 70 mm, SL = 80 mm Screw 10 mm (crimp 11 mm) Cable glandSW 36: 8 Nm; SW 38: 14 Nm
132,899	
Hole pattern for M32 device conr alternative M40 with adapter ring	· · · · · · · · · · · · · · · · · · ·

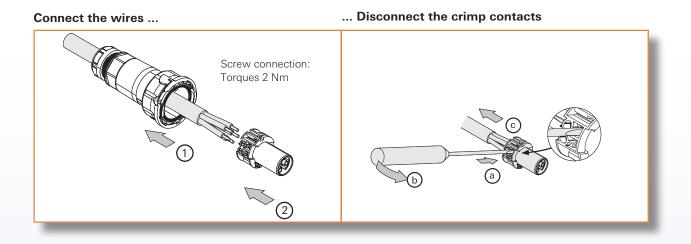
**RST®** POWER

(fixed in position)



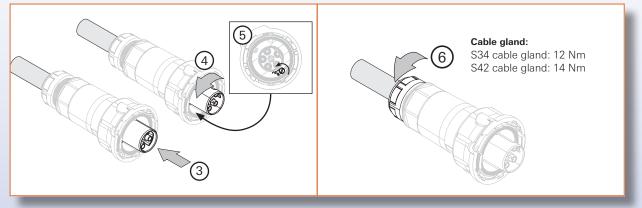


### **Connectors 4- and 5-pole**

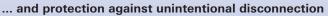


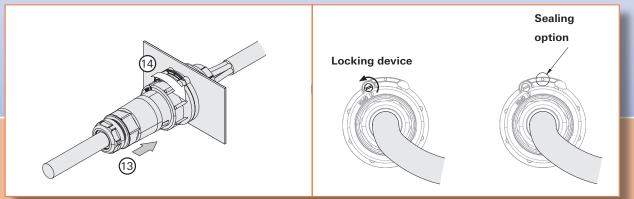
Secure the contact inserts ...

... Tighten the cable gland



Bayonet lock ...

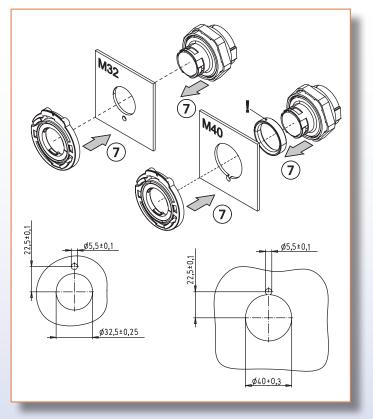


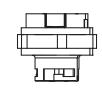


### **Device connections 4- and 5-pole**

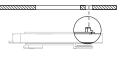
### Mounting housing flange, dimensions in mm

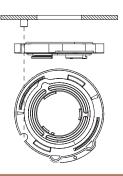
#### **Positioning option**



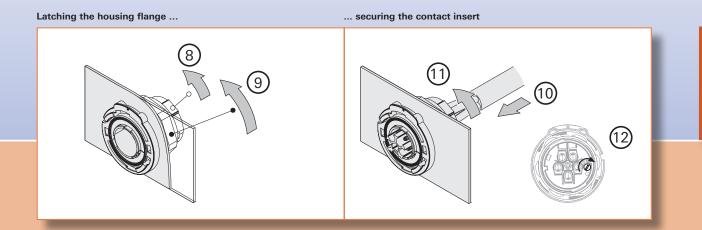








**Note:** With correct positioning (observe part number)



**RST®** POWER

# Definition of IP protection degrees (DIN EN 60529-1)

imentation:	Example: IP65			
tection ratings against ingr				tection ratings against ingress of water
Protection against contact	Protection against ingress of objects			
no protection	no protection		0	no protection
Any large surface of the body (e.g. back of the hand)	Large foreign objects (> 50 mm in Ø)		1	Protection against vertically falling water
Finger	Medium-sized foreign objects (> 12 mm in Ø)		2	Protection from diagonally (up to 15°) falling water drops
Tools and wires (> 2.5 mm in Ø)	Small foreign objects (> 2.5 mm in Ø)		3	Protection against spraying water up to 60° to the vertical
Tools and wires (> 1.0 mm in Ø)	Grain-shaped foreign objects (> 12 mm in Ø)		4	Protection from splashing water from any direction
Complete protection against contact	Dust deposition		5	Protection against water jets
Complete protection against contact	Dust ingress		6	Protected against powerful water jets
			7	Protection against temporary immersion in water
			8	Protection against continuous immersion in water
			9	Protection against high pressure, high temperature spray downs
	Protection against contactno protectionAny large surface of the body (e.g. back of the hand)FingerTools and wires (> 2.5 mm in Ø)Tools and wires (> 1.0 mm in Ø)Complete protection against contactComplete protection	Ist digitProtection against ingress of objects and contactProtection against contactProtection against ingress of objectsno protectionno protectionAny large surface of the body (e.g. back of the hand)Large foreign objects (> 50 mm in Ø)FingerMedium-sized foreign objects (> 12 mm in Ø)Tools and wires (> 2.5 mm in Ø)Small foreign objects (> 2.5 mm in Ø)Tools and wires (> 1.0 mm in Ø)Grain-shaped foreign objects (> 12 mm in Ø)Complete protection against contactDust depositionComplete protection potectionDust ingress	Ist digit 2nd diverse 2nd diverse 1Protection against ingress of objects and contactProtection against contactProtection against ingress of objects and contactno protectionno protectionAny large surface of the body (e.g. back of the hand)Large foreign objects (> 50 mm in Ø)FingerMedium-sized foreign objects (> 12 mm in Ø)Tools and wires (> 2.5 mm in Ø)Small foreign objects (> 2.5 mm in Ø)Tools and wires (> 1.0 mm in Ø)Grain-shaped foreign objects (> 12 mm in Ø)Complete protection against contactDust depositionComplete protectionDust ingress	Ist digit 2nd digitIst digit 2nd digitProtection against ingress of objects and contactIP protectionProtection against contactProtection against ingress of objectsIP protectionno protectionno protectionagainst0Any large surface of the body (e.g. back of the hand)Large foreign objects (> 50 mm in Ø)1FingerMedium-sized foreign objects (> 12 mm in Ø)2Tools and wires (> 1.0 mm in Ø)Small foreign objects (> 2.5 mm in Ø)3Complete protection against contactDust deposition5Complete protection against contactDust ingress6Image: Some state st

## As an innovative installation system, Wieland offers a global concept for efficient outdoor installation and industrial application.

In many applications, electrotechnical devices and systems must reliably work for many years under tough environmental conditions. To ensure a reliable function, it is essential to prevent the penetration of humidity or particles (e.g. dust, oil, soot, etc.) in production plants, garages or in outdoor areas. Even an unplanned immersion is possible with the **RST**<sup>®</sup> system within the scope of the specified degree of protection.

### The system is not designed for permanent operation under water.

It is not possible to lay the components directly in the ground.

According to VDE 0100-520, connectors must be protected using suitable additional facilities and must be accessible for visual inspection, testing, and maintenance.

Refer also to the installation instructions.

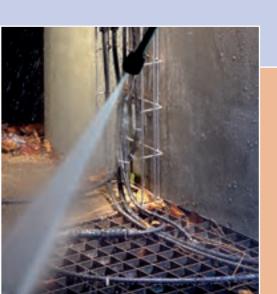
#### Degree of protection achieved:

- IP65 Water jets
- **IP66** Powerful water jets
- **IP67** Temporary immersion
- IP68 Continuous immersion
  - (for 2 hours at a water depth of 3 m)
- IP69 High-pressure spray down

### **Material resistance**

Please contact us for applications under different c	ond	itions.	
UV light (use black-colored connectors!)	+	Motor oil (SAE 20W/55)	+
Oil and grease resistance	+	Nickel chloride	+
Aliphatic carbon hydride	+	Paraffin and paraffin derivates	+
Aromatic hydrocarbons	+	Phosphoric ester	+
Alcohols	+	Phthalic ester	+
Ammonia, water-free	+	Polyamide resin	+
Ammonium chloride (salmiac)	+	Polyester polyoles	+
Ammonium sulfate	+	Polyether polyoles	+
Barium chloride	+	Polyglycols	+
Beer	+	Polymeric softeners	+
Butter	+	Polyurethane resins	+
Butyl alcohol	+	Mercury	+
Calcium chloride, aqueous solution, 10%	+	Castor oil	+
Citric acid, aqueous solution, 10%	+	Salmiac	+
Ferric sulfide	+	Oxygen, RT	+
Ethyl ether	+	Lubricating oil (O-149), (not bunker oil, oil tankers)	+
Paint, varnish, with low sulphuric acid content	+	Sulfur, wet	+
Fruit juice, fruit acid	+	Sulfuric acid (diluted, RT)	+
Tannic acid	+	Sulfur hexafluoride	+
Glycerin	+	Sweat	+
Glysantine, aqueous solution, 40%	+	Sebacic acid ester	+
Potassium chloride	+	Spirits	+
Caustic potash solution, aqueous solution, 10%	+	Nitric acid (10%)	+
Sodium, aqueous solution, 10%	+	Hydrochloric acid (10%)	+
Linseed oil	+	Water, RT, free from chlorine up to 80 °C	+
Milk	+	Water: sea water resistance, artificial, 20 °C	+
Lactic acid, 20 °C	+	Stannic chloride, 20 °C, saturated	+

### TÜV certificate for outdoor use



### **RST**<sup>®</sup> long-term studies:

In addition to the tests required by the standard, a continuous test was performed over 14 months. During this time, the connectors were exposed to direct sunlight, frost and occasional flooding. For this purpose, the **RST**  $^{\circ}$  components were installed in an eaves gutter and monitored by a 30 mA circuit breaker with the mains voltage applied. The following tests were performed in addition to the continuous test: - Temperature change test (– 40  $^{\circ}$ C to + 60  $^{\circ}$ C) Please observe overleaf installation instructions.

The complete test report can be ordered from our hotline using the phone number +49 951/9324-996.

### Installation instructions for outdoor electrical installations

Outdoor electrical installations are particularly tricky. Constant temperature changes, high UV radiation, high ozone values and, not least, mechanical wear leading to material fatigue, water ingress, and, finally, system failure.

### Installation instructions

A horizontal installation position is preferable in order to ensure that water drains off. In accordance with installation regulation IEC 60364-5-52 (DIN VDE 0100-522.3), cable systems must be designed in such a way that damage caused by the ingress of water is avoided.

Cable systems must satisfy the required degree of protection. If water can accumulate or water condensation can occur, provisions for water drainage must be made! This particularly applies to sealing points in the area of the strain relief. If abrasion might occur (in flexible installations), wear of the pre-assembled cable must be taken into consideration and must be monitored.

Avoid any bending of the cable in the area of the strain relief.

Control mechanical bending in the area of the strain relief using suitable measures (e.g. cable clamps).

Laying of the system components directly in the ground is not possible. According to VDE 0100-520, connectors must be protected using suitable additional facilities and must be accessible for visual inspection, testing, and maintenance.

The connector system is not designed for continuous operation under water. However, unplanned immersion is possible as foreseen by the specification.

### Connectors for equipment with protection class II

Connectors from Wieland that are type-tested as per EN 61535 can be used in equipment with protection class II meeting pollution degree 2. They fulfill the requirements of protection class II of the next higher overvoltage category for clearances (6 kV).

Assembly parts have to provide contact protection for double or reinforced insulation. The relevant technical standards must be observed.

We recommend using the product families GST18<sup>®</sup>, GST15, RST20 and RST16.



Further information can be found in our White Paper "Installation instructions for outdoor electrical installations", order no. 0693.1



### ... always the right cable

What is crucial for the durability of your unit is the perfect interaction between the materials used in order to defy the environmental conditions.

While all connectors and distribution units are designed for continuous indoor and outdoor operation, the cables are clearly a different matter. Selection of the appropriate cable plays a major role for continuous operation of the installation.

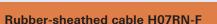
By default, we offer the low-cost H05VV-F cable, but its field of applications is restricted to indoor areas. This cable is not suitable for outdoor areas and constantly humid or wet rooms! Protection from foreign bodies (IP6X) is at the fore here. Temporary wetness for cleaning purposes, however, is allowed.

Temporary outdoor installations without special demands can be implemented using H07RN-F rubbersheathed cables. However, it is essential to check whether or not any additional action, such as laying inside installation pipes, is required.

If installations will be directly exposed to environmental influences for some time, the selection of a suitable cable must be discussed with Wieland.

#### **PVC** cable H05VV-F

Use inside dry rooms, not outdoors, not directly in the ground. Not UV resistant. **Minimum bending radius: 4 x outside diameter Service temperature: 70 °C** 



Use inside dry, and wet rooms, as well as outdoors, but not directly in the ground. Limited UV resistant.. Minimum bending radius: 4 x outside diameter Service temperature: 60 °C

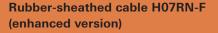












Use in dry, humid and wet rooms, as well as outdoors. UV and Ozon resistant. Cable halogen-free and flame retardant. Laying of the cable not directly in the ground.

Minimum bending radius: 4 x outside diameter Service temperature: von -50 °C bis +90 °C









209

### Part number | page

01.006.1553.0	68	05.545.4600.0	164	46.031.4554.1	42	46.051.5053.0	
01.006.1553.0	89	05.564.4453.0	75	46.031.4554.9	42	46.051.5053.1	
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01.006.1553.0	139	05.564.4453.0	162	46.031.4951.4	42	46.051.5053.9	
01.006.1553.1	68	05.564.4453.1	75	46.031.4951.6	42	46.051.5054.0	
01.006.1553.1	89	05.564.4453.1	103	46.031.5050.4	43	46.051.5054.1	
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02.122.9000.0	164	05.564.8653.3	163	46.031.5053.0	43	46.052.4553.1	
02.122.9100.0	104	05.564.8653.7	163	46.031.5053.1	43	46.052.4553.6	
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96.021.5053.0         69           96.021.5053.1         69           96.021.6053.1         69           96.021.6053.0         72           96.021.6053.1         72           96.021.6053.1         72           96.021.6153.1         72           96.021.6153.1         70           96.021.6153.1         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0053.1         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         72           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         72           96.022.1053.1         72           96.022.1053.1         72           96.022.1053.1         72           96.022.2053.1         72		
96.021.5053.0         69           96.021.6053.1         69           96.021.6053.0         72           96.021.6053.1         72           96.021.6053.1         72           96.021.6153.1         72           96.021.6153.1         72           96.021.6153.1         70           96.021.6153.1         70           96.021.6153.1         70           96.022.0051.4         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         72           96.022.1053.1         72           96.022.1053.1         72           96.022.1053.1         72           96.022.1053.1         72           96.022.2053.1         72           96.022.4053.1         66		
96.021.5053.1         69           96.021.6053.8         72           96.021.6053.0         72           96.021.6053.1         72           96.021.6150.8         70           96.021.6151.4         70           96.021.6153.0         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.1053.3         69           96.022.1053.4         69           96.022.1053.5         70           96.022.1053.1         69           96.022.1053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66	96.021.5051.4	69
96.021.6050.8         72           96.021.6053.0         72           96.021.6053.1         72           96.021.6150.8         70           96.021.6151.4         70           96.021.6153.1         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0051.4         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         72           96.022.1053.1         72           96.022.1053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66	96.021.5053.0	69
96.021.6051.4         72           96.021.6053.1         72           96.021.6150.8         70           96.021.6151.4         70           96.021.6153.1         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0051.4         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.051.4         66           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         72           96.022.1053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.021.5053.1	69
96.021.6053.0         72           96.021.6053.1         72           96.021.6150.8         70           96.021.6153.0         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0051.4         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.053.1         69           96.022.053.1         66           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.021.6050.8	72
96.021.6053.0         72           96.021.6053.1         72           96.021.6150.8         70           96.021.6153.0         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0051.4         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.053.1         69           96.022.053.1         66           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.021.6051.4	72
96.021.6053.1         72           96.021.6150.8         70           96.021.6153.0         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0051.4         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.053.1         69           96.022.053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66		
96.021.6150.8         70           96.021.6153.0         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0053.1         66           96.022.0153.0         66           96.022.0153.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.051.4         69           96.022.053.1         69           96.022.053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66		
96.021.6151.4         70           96.021.6153.0         70           96.022.0050.8         66           96.022.0051.4         66           96.022.0053.1         66           96.022.0153.0         66           96.022.0153.1         66           96.022.0451.4         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.053.1         69           96.022.053.1         69           96.022.1053.3         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66		
96.021.6153.0         70           96.021.6153.1         70           96.022.0050.8         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.0         66           96.022.0153.1         66           96.022.0451.4         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.053.1         69           96.022.053.1         69           96.022.053.1         69           96.022.1051.4         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66		
96.021.6153.1         70           96.022.0050.8         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0951.4         66           96.022.1053.0         69           96.022.1053.1         69           96.022.1053.0         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.0         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.021.6151.4	70
96.022.0050.8         66           96.022.0053.0         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0951.4         66           96.022.1050.8         69           96.022.1053.0         69           96.022.1053.1         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.8         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.021.6153.0	70
96.022.0051.4         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0950.8         66           96.022.0951.4         66           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.0         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.021.6153.1	70
96.022.0051.4         66           96.022.0053.1         66           96.022.0153.1         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0950.8         66           96.022.0951.4         66           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.0         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66	96.022.0050.8	66
96.022.0053.0         66           96.022.0153.0         66           96.022.0153.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0951.4         66           96.022.1050.8         69           96.022.1053.0         69           96.022.1053.1         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.0         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         69		
96.022.0053.1         66           96.022.0153.0         66           96.022.0153.1         66           96.022.0451.4         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0453.1         66           96.022.1050.8         69           96.022.1051.4         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.24053.1         72           96.022.4053.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66		
96.022.0153.0         66           96.022.0153.1         66           96.022.0451.4         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0950.8         66           96.022.1050.8         69           96.022.1053.0         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.24053.1         72           96.022.24053.1         70           96.022.24053.1         70           96.022.4053.0         70           96.022.4053.1         70           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4453.1         66           96.022.4453.1         66		
96.022.0153.1         66           96.022.0451.4         66           96.022.0453.1         66           96.022.0453.1         66           96.022.0950.8         66           96.022.1050.8         69           96.022.1051.4         69           96.022.1053.1         69           96.022.2053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.24053.0         70           96.022.24053.1         70           96.022.4053.0         70           96.022.4053.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         69		
96.022.0451.4       66         96.022.0453.1       66         96.022.0950.8       66         96.022.1050.8       69         96.022.1051.4       69         96.022.1053.1       69         96.022.1053.1       69         96.022.2053.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       70         96.022.2153.1       70         96.022.24053.1       70         96.022.4053.1       70         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.5053.1       69         96.022.6053.1       72 <td></td> <td></td>		
96.022.0453.0         66           96.022.0453.1         66           96.022.0950.8         66           96.022.1050.8         69           96.022.1051.4         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2153.0         72           96.022.2053.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.24053.1         70           96.022.4053.0         66           96.022.4053.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         69           96.022.4053.1         69           96.022.5053.1         69	96.022.0153.1	66
96.022.0453.1         66           96.022.0950.8         66           96.022.1050.8         69           96.022.1051.4         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.0         72           96.022.2153.1         72           96.022.2153.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.24053.0         70           96.022.24053.1         70           96.022.4053.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         69           96.022.4053.1         69           96.022.5053.1         69	96.022.0451.4	66
96.022.0950.8         66           96.022.0951.4         66           96.022.1050.8         69           96.022.1053.0         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         72           96.022.2153.1         72           96.022.2153.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.0         70           96.022.4053.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6053.1         72	96.022.0453.0	66
96.022.0950.8         66           96.022.0951.4         66           96.022.1050.8         69           96.022.1053.0         69           96.022.1053.1         69           96.022.2053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2153.1         72           96.022.2153.1         72           96.022.2153.1         72           96.022.2153.1         70           96.022.2153.1         70           96.022.4053.0         70           96.022.4053.1         70           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6053.1         72	96.022.0453.1	66
96.022.0951.4       66         96.022.1050.8       69         96.022.1053.0       69         96.022.1053.1       69         96.022.2053.1       72         96.022.2053.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       72         96.022.2153.1       70         96.022.2153.1       70         96.022.24053.0       70         96.022.4053.1       70         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4053.1       69         96.022.5053.1       69         96.022.5053.1       69         96.022.6053.1       72         96.022.6053.1       72 <td></td> <td></td>		
96.022.1050.8         69           96.022.1051.4         69           96.022.1053.1         69           96.022.0053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2053.1         72           96.022.2150.8         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.24053.0         70           96.022.4053.1         70           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72		
96.022.1051.4       69         96.022.1053.0       69         96.022.2051.4       72         96.022.2053.0       72         96.022.2053.1       72         96.022.2150.8       70         96.022.2153.1       72         96.022.2153.1       70         96.022.2153.1       70         96.022.2153.1       70         96.022.4050.8       66         96.022.4053.0       66         96.022.4053.1       66         96.022.4053.1       66         96.022.4153.0       66         96.022.4153.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.5053.1       69         96.022.5053.1       69         96.022.5053.1       69         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72 <td></td> <td></td>		
96.022.1053.0         69           96.022.1053.1         69           96.022.2051.4         72           96.022.2053.0         72           96.022.2053.1         72           96.022.2150.8         70           96.022.2153.0         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4951.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72		
96.022.1053.1       69         96.022.2051.4       72         96.022.2053.0       72         96.022.2150.8       70         96.022.2151.4       70         96.022.2153.0       70         96.022.2153.1       70         96.022.2153.1       70         96.022.2153.1       70         96.022.4050.8       66         96.022.4053.0       66         96.022.4053.1       66         96.022.4153.0       66         96.022.4153.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.5053.1       69         96.022.5053.1       69         96.022.5053.1       69         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72         96.022.6153.1       70 <td>96.022.1051.4</td> <td>69</td>	96.022.1051.4	69
96.022.2051.4         72           96.022.2053.0         72           96.022.2053.1         72           96.022.2150.8         70           96.022.2153.0         70           96.022.2153.1         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4553.1         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70	96.022.1053.0	69
96.022.2053.0         72           96.022.2053.1         72           96.022.2150.8         70           96.022.2151.4         70           96.022.2153.0         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4051.4         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70	96.022.1053.1	69
96.022.2053.1         72           96.022.2150.8         70           96.022.2151.4         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4051.4         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70	96.022.2051.4	72
96.022.2053.1         72           96.022.2150.8         70           96.022.2151.4         70           96.022.2153.1         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4051.4         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70	96.022.2053.0	72
96.022.2150.8         70           96.022.2151.4         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4051.4         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70		
96.022.2151.4         70           96.022.2153.0         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4053.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4505.8         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70		
96.022.2153.0         70           96.022.2153.1         70           96.022.4050.8         66           96.022.4051.4         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4153.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70		
96.022.2153.1         70           96.022.4050.8         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4153.0         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4951.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70		
96.022.4050.8       66         96.022.4051.4       66         96.022.4053.0       66         96.022.4053.1       66         96.022.4153.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4453.1       66         96.022.4950.8       66         96.022.5051.4       69         96.022.5053.1       69         96.022.6053.1       69         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72         96.022.6053.1       72         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.022.6153.1       70         96.023.0050.8       67         96.023.0053.0       67 <td>96.022.2153.0</td> <td>70</td>	96.022.2153.0	70
96.022.4051.4         66           96.022.4053.0         66           96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4950.8         66           96.022.4951.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67	96.022.2153.1	70
96.022.4053.0         66           96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.0         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4951.4         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67	96.022.4050.8	66
96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.0         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4950.8         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0050.8         67           96.023.0051.4         67	96.022.4051.4	66
96.022.4053.1         66           96.022.4153.0         66           96.022.4153.1         66           96.022.4453.1         66           96.022.4453.0         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4453.1         66           96.022.4950.8         66           96.022.4951.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6053.1         69           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67	96.022.4053.0	66
96.022.4153.0         66           96.022.4153.1         66           96.022.4451.4         66           96.022.4453.0         66           96.022.4453.1         66           96.022.4950.8         66           96.022.4951.4         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67	96 022 /053 1	
96.022.4153.1         66           96.022.4451.4         66           96.022.4453.0         66           96.022.4453.1         66           96.022.4950.8         66           96.022.4950.8         66           96.022.4951.4         66           96.022.5053.1         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         72           96.022.6153.1         72           96.022.6153.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67		
96.022.4451.4         66           96.022.4453.0         66           96.022.4453.1         66           96.022.4950.8         66           96.022.4951.4         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.022.4453.0         66           96.022.4453.1         66           96.022.4950.8         66           96.022.4950.8         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.0         72           96.022.6153.1         72           96.022.6153.1         72           96.022.6153.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67           96.023.0053.0         67		
96.022.4453.1         66           96.022.4950.8         66           96.022.4951.4         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         72           96.022.6153.1         72           96.022.6153.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67		
96.022.4950.8         66           96.022.4951.4         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.5053.1         69           96.022.6053.1         69           96.022.6053.8         69           96.022.6053.0         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.8         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0050.8         67           96.023.0053.0         67	96.022.4453.0	66
96.022.4951.4         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.5058.8         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0050.8         67           96.023.0053.0         67	96.022.4453.1	66
96.022.4951.4         66           96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5053.1         69           96.022.5058.8         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0050.8         67           96.023.0053.0         67	96.022.4950.8	66
96.022.5051.4         69           96.022.5053.0         69           96.022.5053.1         69           96.022.5058.8         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6150.8         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67		
96.022.5053.0         69           96.022.5053.1         69           96.022.5058.8         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6053.1         72           96.022.6153.0         72           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.0         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0050.8         67           96.023.0053.0         67		
96.022.5053.1         69           96.022.5058.8         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6153.0         72           96.022.6153.1         72           96.022.6151.4         70           96.022.6153.1         70           96.022.6153.0         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0053.0         67           96.023.0053.0         67		
96.022.5058.8         69           96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6150.8         70           96.022.6151.4         70           96.022.6153.1         70           96.022.6153.0         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.022.6050.8         72           96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6150.8         70           96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.022.6051.4         72           96.022.6053.0         72           96.022.6053.1         72           96.022.6150.8         70           96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67	96.022.5058.8	69
96.022.6053.0         72           96.022.6053.1         72           96.022.6150.8         70           96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67	96.022.6050.8	72
96.022.6053.0         72           96.022.6053.1         72           96.022.6150.8         70           96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67	96.022.6051.4	72
96.022.6053.1         72           96.022.6150.8         70           96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67	96.022.6053.0	
96.022.6150.8         70           96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.022.6151.4         70           96.022.6153.0         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.022.6153.0         70           96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.022.6153.1         70           96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67		
96.023.0050.8         67           96.023.0051.4         67           96.023.0053.0         67	96.022.6153.0	70
96.023.0051.46796.023.0053.067	96.022.6153.1	70
96.023.0053.0 67	96.023.0050.8	67
96.023.0053.0 67	96.023.0051.4	67
	96.023.0053.0	67
	00.020.0000.1	07

46.452.5033.1         54           46.452.5033.6         54           46.452.5033.6         55           83.020.0504.0         184           83.020.0504.0         184           83.020.0505.0         184           83.020.0900.0         185           83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         104           95.101.0800.0         164           95.101.0800.0         165           96.020.0151.4         82           96.020.0153.0         82           96.020.0253.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         86           96.021.0053.1         86           96.021.0053.1         86           96.021.0253.1         88           96.021.0253.1         88
46.452.5034.1         55           46.452.5034.6         55           83.020.0504.0         184           83.020.0505.0         184           83.020.0900.0         185           83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         104           95.101.0800.0         164           95.101.0800.0         165           96.020.0153.0         82           96.020.0153.1         82           96.020.0153.1         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         68           96.021.0053.1         68           96.021.0053.1         68           96.021.0053.1         68           96.021.0053.1         68           96.021.0253.1         68           96.021.0253.1         68
46.452.5034.6         55           83.020.0504.0         184           83.020.0505.0         184           83.020.0900.0         185           83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0903.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         103           95.101.0800.0         164           95.101.0800.0         165           96.020.0153.0         82           96.020.0153.1         82           96.020.0153.1         82           96.020.0253.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         68           96.021.0053.1         68           96.021.0053.1         68           96.021.0053.1         68           96.021.0253.1         68           96.021.0253.1         68
83.020.0504.0         184           83.020.0505.0         184           83.020.0900.0         185           83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         104           95.101.0800.0         164           95.101.0800.0         165           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0053.0         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         68           96.021.0053.1         68           96.021.0053.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68
83.020.0504.1         184           83.020.0505.0         184           83.020.0900.0         185           83.020.0902.0         184           83.020.0902.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         103           95.101.0800.0         164           95.101.0800.0         165           95.101.0800.0         164           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68
83.020.0505.0         184           83.020.0900.0         185           83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         133           95.101.0800.0         164           95.101.0800.0         164           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0051.4         82           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.0         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68
83.020.0900.0         185           83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         105           95.101.0800.0         164           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.1         82           96.020.0251.4         82           96.020.0253.1         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0053.6         66           96.021.0053.7         66           96.021.0053.8         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68      <
83.020.0901.0         185           83.020.0902.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         133           95.101.0800.0         164           95.101.0800.0         165           95.101.0800.0         164           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0251.4         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0051.4         82           96.021.0051.4         82           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68
83.020.0902.0         184           83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         133           95.101.0800.0         164           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0053.6         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68 <tr< td=""></tr<>
83.020.0903.0         184           83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         155           95.101.0800.0         164           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0051.4         66           96.021.0053.0         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0453.1         66
83.020.0904.0         185           95.101.0800.0         104           95.101.0800.0         133           95.101.0800.0         165           95.101.0800.0         164           95.101.0800.0         201           95.101.0800.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0051.4         82           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.0         86           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66 <tr< td=""></tr<>
95.101.0800.0         104           95.101.0800.0         133           95.101.0800.0         155           95.101.0800.0         164           95.101.0800.0         201           95.101.0800.0         201           95.101.0800.0         201           95.101.1300.0         165           96.020.0153.0         82           96.020.0153.1         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0051.4         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0251.4         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66 <t< td=""></t<>
95.101.0800.0         133           95.101.0800.0         155           95.101.0800.0         164           95.101.0800.0         201           95.101.0800.0         165           96.020.0150.8         82           96.020.0151.4         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.020.0253.1         82           96.021.0051.4         82           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0251.4         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66
95.101.0800.0         155           95.101.0800.0         201           95.101.1300.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0253.1         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0053.1         82           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66
95.101.0800.0       164         95.101.0800.0       201         95.101.1300.0       165         96.020.0150.8       82         96.020.0153.1       82         96.020.0250.8       82         96.020.0253.0       82         96.020.0253.1       82         96.020.0253.1       82         96.021.0053.1       82         96.021.0053.1       82         96.021.0053.1       82         96.021.0053.1       82         96.021.0053.1       82         96.021.0053.1       66         96.021.0053.1       66         96.021.0053.1       66         96.021.0053.1       66         96.021.0053.1       66         96.021.0251.4       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0353.1       68         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.054.4       69         96.021.055.3       69         96.021.055.4       69         96.021.055.5       69
95.101.0800.0         201           95.101.1300.0         165           96.020.0150.8         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0250.8         82           96.020.0253.0         82           96.020.0253.0         82           96.021.0051.4         82           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0051.4         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0153.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0453.0         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.051.4         69           96.021.1053.1         69
95.101.1300.0       165         96.020.0150.8       82         96.020.0153.0       82         96.020.0153.1       82         96.020.0250.8       82         96.020.0253.0       82         96.020.0253.0       82         96.021.0053.1       82         96.021.0053.0       82         96.021.0053.1       82         96.021.0053.1       82         96.021.0053.1       66         96.021.0053.1       66         96.021.0053.1       66         96.021.0153.1       66         96.021.0251.4       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0353.1       68         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.053.1       69         96.021.053.1       69         96.021.053.1       69         96.021.053.1       69         96.021.053.1       69
96.020.0150.8         82           96.020.0151.4         82           96.020.0153.0         82           96.020.0250.8         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0050.8         66           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0153.1         66           96.021.0153.1         66           96.021.0251.4         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.053.1         69           96.021.1053.4         69           96.021.1053.1         69
96.020.0151.4         82           96.020.0153.0         82           96.020.0153.1         82           96.020.0250.8         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0050.8         66           96.021.0053.0         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0153.1         66           96.021.0251.4         68           96.021.0253.0         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.053.1         69           96.021.1053.4         69           96.021.1053.1         69           96.021.1053.1         69
96.020.0153.0         82           96.020.0153.1         82           96.020.0250.8         82           96.020.0251.4         82           96.020.0253.0         82           96.020.0253.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         82           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0153.1         66           96.021.0251.4         68           96.021.0253.0         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.053.1         69           96.021.053.1         69           96.021.053.1         69           96.021.053.1         69           96.021.1053.6         69           <
96.020.0153.1       82         96.020.0250.8       82         96.020.0251.4       82         96.020.0253.0       82         96.021.0050.8       66         96.021.0053.0       66         96.021.0053.0       66         96.021.0053.0       66         96.021.0053.1       66         96.021.0053.1       66         96.021.0153.1       66         96.021.0153.1       66         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.053.1       69         96.021.053.1       69         96.021.1053.0       69         96.021.1053.1       69         96.021.1053.1       69         96.021.1053.1       69         96.021.2053.1       72
96.020.0250.8         82           96.020.0251.4         82           96.020.0253.0         82           96.021.0050.8         66           96.021.0050.8         66           96.021.0051.4         66           96.021.0053.0         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0153.0         66           96.021.0153.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0951.4         66           96.021.0951.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.1053.1         69           96.021.2053.1         72           96.021.2053.1         72
96.020.0251.4       82         96.020.0253.0       82         96.021.0050.8       66         96.021.0051.4       66         96.021.0053.0       66         96.021.0053.1       66         96.021.0053.1       66         96.021.0153.0       66         96.021.0153.1       66         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0351.4       68         96.021.0353.0       68         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.051.4       69         96.021.1051.4       69         96.021.1053.1       69         96.021.1053.1       69         96.021.2053.1       72         96.021.2053.1       72         96.021.2053.1       72         96.021.2053.1       72         96.021.2153.0       70
96.020.0253.0         82           96.021.0050.8         66           96.021.0051.4         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0053.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0351.4         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.050.8         69           96.021.1051.4         69           96.021.1053.1         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2053.1         72
96.020.0253.1         82           96.021.0050.8         66           96.021.0051.4         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0153.0         66           96.021.0153.1         66           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0351.4         68           96.021.0353.0         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0951.4         69           96.021.0951.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.1053.1         69           96.021.2053.1         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2153.0         70
96.021.0050.8         66           96.021.0051.4         66           96.021.0053.0         66           96.021.0053.1         66           96.021.0153.0         66           96.021.0153.1         66           96.021.0253.1         68           96.021.0253.0         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0451.4         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0951.4         69           96.021.1051.4         69           96.021.1051.4         69           96.021.1053.1         69           96.021.1053.1         69           96.021.2053.1         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.0         70
96.021.0051.4       66         96.021.0053.0       66         96.021.0153.0       66         96.021.0153.1       66         96.021.0153.1       66         96.021.0251.4       68         96.021.0253.0       68         96.021.0253.1       68         96.021.0253.1       68         96.021.0353.1       68         96.021.0353.1       68         96.021.0451.4       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0950.8       66         96.021.1051.4       69         96.021.1051.4       69         96.021.1053.1       69         96.021.1053.1       69         96.021.1053.1       69         96.021.2051.4       72         96.021.2053.0       72         96.021.2053.1       72         96.021.2053.1       72         96.021.2153.0       70         96.021.2153.0       70         96.021.2153.1       70
96.021.0053.0         66           96.021.0053.1         66           96.021.0153.0         66           96.021.0153.1         66           96.021.0251.4         68           96.021.0253.0         68           96.021.0253.1         68           96.021.0253.1         68           96.021.0353.0         68           96.021.0353.1         68           96.021.0451.4         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0950.8         66           96.021.1051.4         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.1053.1         69           96.021.2053.1         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.1         70
96.021.0053.1       66         96.021.0153.0       66         96.021.0251.4       68         96.021.0253.0       68         96.021.0253.1       68         96.021.0351.4       68         96.021.0353.0       68         96.021.0353.0       68         96.021.0353.1       68         96.021.0451.4       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.051.4       69         96.021.1050.8       69         96.021.1051.4       69         96.021.1053.1       69         96.021.2051.4       72         96.021.2053.0       72         96.021.2053.1       72         96.021.2151.4       70         96.021.2153.0       70         96.021.2153.0       70         96.021.2153.1       70
96.021.0153.0         66           96.021.0153.1         66           96.021.0251.4         68           96.021.0253.0         68           96.021.0253.1         68           96.021.0351.4         68           96.021.0353.0         68           96.021.0353.0         68           96.021.0353.1         68           96.021.0451.4         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0950.8         66           96.021.0951.4         69           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0153.1       66         96.021.0251.4       68         96.021.0253.0       68         96.021.0253.1       68         96.021.0351.4       68         96.021.0353.0       68         96.021.0353.1       68         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0950.8       66         96.021.10950.8       69         96.021.1050.8       69         96.021.1051.4       69         96.021.1053.0       69         96.021.1053.1       69         96.021.2051.4       72         96.021.2053.0       72         96.021.2053.1       72         96.021.2153.0       70         96.021.2153.0       70         96.021.2153.0       70         96.021.2153.1       70
96.021.0251.4         68           96.021.0253.0         68           96.021.0253.1         68           96.021.0351.4         68           96.021.0353.0         68           96.021.0353.1         68           96.021.0353.1         68           96.021.0451.4         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0951.4         66           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0253.0         68           96.021.0253.1         68           96.021.0351.4         68           96.021.0353.0         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0951.4         66           96.021.0951.4         69           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.0         70           96.021.2153.1         70
96.021.0253.1         68           96.021.0351.4         68           96.021.0353.0         68           96.021.0353.1         68           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0453.1         66           96.021.0951.4         66           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70
96.021.0351.4       68         96.021.0353.0       68         96.021.0353.1       68         96.021.0451.4       66         96.021.0453.0       66         96.021.0453.1       66         96.021.0453.1       66         96.021.0950.8       66         96.021.1050.8       69         96.021.1050.8       69         96.021.1053.0       69         96.021.1053.1       69         96.021.2051.4       72         96.021.2053.1       72         96.021.2053.1       72         96.021.2151.4       70         96.021.2153.0       70         96.021.2153.0       70         96.021.2153.0       70         96.021.2153.1       70
96.021.0353.0         68           96.021.0353.1         68           96.021.0451.4         66           96.021.0453.0         66           96.021.0453.1         66           96.021.0950.8         66           96.021.0951.4         66           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2151.4         70           96.021.2053.1         72           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0353.1         68           96.021.0451.4         66           96.021.0453.0         66           96.021.0453.1         66           96.021.0950.8         66           96.021.0951.4         66           96.021.1051.4         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2151.4         70           96.021.2153.1         70           96.021.2153.1         70           96.021.2153.1         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0451.4         66           96.021.0453.0         66           96.021.0453.1         66           96.021.0950.8         66           96.021.0951.4         66           96.021.1051.4         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0453.0         66           96.021.0453.1         66           96.021.0950.8         66           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2051.4         72           96.021.2053.0         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0453.1         66           96.021.0950.8         66           96.021.1050.8         69           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70
96.021.0950.8         66           96.021.0951.4         66           96.021.1050.8         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.1         70
96.021.0951.4         66           96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70
96.021.1050.8         69           96.021.1051.4         69           96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70
96.021.1051.4         69           96.021.1053.0         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70
96.021.1053.0         69           96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70
96.021.1053.1         69           96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70           96.021.2153.0         70           96.021.2153.1         70
96.021.2051.4         72           96.021.2053.0         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70
96.021.2053.0         72           96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70
96.021.2053.1         72           96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70
96.021.2150.8         70           96.021.2151.4         70           96.021.2153.0         70           96.021.2153.1         70
96.021.2151.47096.021.2153.07096.021.2153.170
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44       46.452.0503.1         45       46.452.0504.1         45       46.452.0504.6         44       46.452.0530.1         44       46.452.0530.6         44       46.452.0533.1         45       46.452.0533.6         44       46.452.0533.6         44       46.452.0534.6         44       46.452.1000.1         44       46.452.1000.6         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.103.1         45       46.452.103.1         45       46.452.103.1         45       46.452.103.1         45       46.452.103.1         45       46.452.103.1         45       46.452.103.1         45       46.452.000.1         44       46.452.000.1         44       46.452.200.1         44       46.452.200.1         44       46.452.2003.1         45       46.452.003.1         44       46.452.003.1         45       46.452.003.1         44       46.452.033.1         44       46.452.033.1	54 55 55 54 54 54 54 54 54 54 55 55 55 5
44       46.452.0504.1         45       46.452.0504.6         44       46.452.0530.1         44       46.452.0530.6         44       46.452.0533.1         45       46.452.0533.6         44       46.452.0534.1         45       46.452.0534.6         44       46.452.000.1         44       46.452.1000.1         44       46.452.1003.1         45       46.452.1003.6         44       46.452.103.1         45       46.452.103.1         45       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.300.1      <	<ul> <li>55</li> <li>54</li> <li>54</li> <li>54</li> <li>55</li> <li>54</li> <li>54</li> <li>54</li> <li>55</li> <li>54</li> <li>54</li> <li>54</li> <li>54</li> <li>54</li> <li>54</li> <li>54</li> <li>54</li> <li>54</li> </ul>
45       46.452.0504.6         44       46.452.0530.1         44       46.452.0530.6         44       46.452.0533.1         45       46.452.0533.6         44       46.452.0533.6         44       46.452.0534.1         45       46.452.0534.6         44       46.452.1000.1         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.1030.1         45       46.452.1030.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.000.1         44       46.452.000.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.300.1         44       46.452.300.1	<ul> <li>55</li> <li>54</li> <li>54</li> <li>55</li> <li>54</li> <li>54</li> <li>54</li> <li>55</li> <li>54</li> </ul>
44     46.452.0530.1       44     46.452.0533.1       45     46.452.0533.6       44     46.452.0534.1       45     46.452.0534.6       44     46.452.1000.1       44     46.452.1000.6       44     46.452.1003.1       45     46.452.1003.6       44     46.452.1003.6       44     46.452.1003.6       44     46.452.103.1       45     46.452.103.1       44     46.452.103.1       45     46.452.103.1       44     46.452.103.1       45     46.452.103.1       44     46.452.103.1       45     46.452.103.1       44     46.452.103.1       45     46.452.103.1       44     46.452.103.1       45     46.452.103.1       44     46.452.200.1       44     46.452.200.1       44     46.452.200.1       44     46.452.2003.1       44     46.452.2003.1       45     46.452.2003.1       44     46.452.203.1       45     46.452.203.1       44     46.452.203.1       45     46.452.203.1       44     46.452.300.6       45     46.452.300.1       44     46.4	54 54 54 55 55 54 54 55 55 55 55 54 54 5
44       46.452.0530.6         44       46.452.0533.1         45       46.452.0533.6         44       46.452.0534.1         45       46.452.0534.6         44       46.452.1000.1         44       46.452.1000.6         44       46.452.1000.6         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.1         45       46.452.1030.1         44       46.452.1030.1         45       46.452.1033.1         44       46.452.1033.1         45       46.452.1033.6         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         44       46.452.3003.1         44       46.452.3003.1     <	54 54 55 55 54 54 54 55 55 55 55 54 54 5
44       46.452.0533.1         45       46.452.0533.6         44       46.452.0534.1         45       46.452.0534.6         44       46.452.1000.1         44       46.452.1000.6         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         46       452.103.6         44       46.452.103.1         45       46.452.103.1         46       452.2000.1         44       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.300.6         44       46.452.300.1         44       46.452.300.1	54 55 55 54 54 54 55 55 55 54 54 54
45       46.452.0533.6         44       46.452.0534.1         45       46.452.0534.6         44       46.452.000.1         44       46.452.1000.6         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.103.1         45       46.452.1030.1         44       46.452.1033.1         45       46.452.1033.6         44       46.452.1033.1         45       46.452.2003.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.300.1         44       46.452.3003.1	54 55 54 54 54 54 55 55 55 54 54
44       46.452.0534.1         45       46.452.0534.6         44       46.452.1000.1         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.1004.1         45       46.452.1004.1         45       46.452.103.1         44       46.452.103.1         44       46.452.103.1         44       46.452.103.6         44       46.452.103.6         44       46.452.103.6         44       46.452.2003.1         45       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         45       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.200.1         44       46.452.203.1         44       46.452.203.1	55 54 54 54 54 54 55 55 54 54 54
45       46.452.0534.6         44       46.452.1000.1         44       46.452.1000.6         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.103.6         44       46.452.103.1         45       46.452.103.1         44       46.452.103.6         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.103.1         44       46.452.103.1         45       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.1      <	55 54 54 54 55 55 55 54 54
44       46.452.1000.1         44       46.452.1000.6         44       46.452.1003.1         45       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.6         44       46.452.1003.1         45       46.452.1004.6         44       46.452.103.1         45       46.452.1030.1         44       46.452.1033.1         45       46.452.1033.6         44       46.452.1033.6         44       46.452.2003.1         45       46.452.2000.1         44       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.300.1         44       46.452.300.1         44       46.452.300.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.303.1 <td>54 54 54 55 55 55 54 54 54</td>	54 54 54 55 55 55 54 54 54
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44       46.452.1003.1         45       46.452.1003.6         44       46.452.1004.1         45       46.452.1004.6         44       46.452.1003.1         45       46.452.1004.6         44       46.452.1030.1         44       46.452.1030.6         44       46.452.1033.1         45       46.452.1033.6         44       46.452.1033.6         44       46.452.2003.1         45       46.452.2000.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1 <td>54 54 55 55 54 54 54</td>	54 54 55 55 54 54 54
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45       46.452.1003.6         44       46.452.1004.1         45       46.452.1004.6         44       46.452.1030.1         44       46.452.1030.6         44       46.452.1033.1         45       46.452.1033.6         44       46.452.1033.6         44       46.452.1033.6         44       46.452.1034.6         44       46.452.2003.1         45       46.452.2000.1         44       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.6         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         45       46.452.203.1         44       46.452.3000.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.303.1 </td <td>54 55 55 54 54 54</td>	54 55 55 54 54 54
44       46.452.1004.1         45       46.452.1030.1         44       46.452.1030.6         44       46.452.1033.1         45       46.452.1033.1         45       46.452.1034.1         45       46.452.1034.1         45       46.452.2003.1         44       46.452.2000.1         44       46.452.2000.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.2003.1         45       46.452.2003.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.203.1         44       46.452.3000.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.303.1         44       46.452.303.1 <td>55 54 54 54</td>	55 54 54 54
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44       46.452.2004.1         45       46.452.2004.6         44       46.452.2030.1         44       46.452.2030.6         45       46.452.2033.1         44       46.452.2033.6         44       46.452.2034.1         45       46.452.2034.6         44       46.452.3000.1         44       46.452.3000.1         44       46.452.3003.1         44       46.452.3003.6         45       46.452.3003.6         44       46.452.3003.1         44       46.452.3003.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1         44       46.452.303.6         44       46.452.303.6         44       46.452.303.1         45       46.452.303.6         44       46.452.4000.1         45       46.452.4000.1         44       46.452.4000.1         45       46.452.4000.6         45       46.452.4003.1	54
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44     46.452.2030.1       44     46.452.2030.6       45     46.452.2033.1       44     46.452.2033.6       44     46.452.2034.1       45     46.452.2034.1       45     46.452.2034.6       44     46.452.3000.1       44     46.452.3000.1       44     46.452.3003.1       44     46.452.3003.1       44     46.452.3003.6       44     46.452.3003.6       44     46.452.3003.1       45     46.452.3003.1       44     46.452.303.1       44     46.452.303.1       44     46.452.303.1       44     46.452.303.1       44     46.452.303.6       44     46.452.303.1       44     46.452.303.1       44     46.452.303.1       44     46.452.303.1       44     46.452.4000.1       45     46.452.4000.1       44     46.452.4000.1       44     46.452.4000.6       45     46.452.4003.1       44     46.452.4003.6       44     46.452.4003.6       44     46.452.4003.1       44     46.452.4003.1       45     46.452.4004.1	55
44       46.452.2030.6         45       46.452.2033.1         44       46.452.2033.6         44       46.452.2034.1         45       46.452.2034.1         45       46.452.2034.6         44       46.452.3000.1         44       46.452.3000.1         44       46.452.3003.1         44       46.452.3003.1         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.1         45       46.452.3003.1         44       46.452.303.1         45       46.452.303.1         44       46.452.303.6         45       46.452.303.1         44       46.452.303.6         44       46.452.303.1         44       46.452.303.6         44       46.452.303.1         44       46.452.4000.1         44       46.452.4000.1         44       46.452.4000.1         45       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.6         44       46.452.4003.1         45       46.452.4003.6         44       46.452.4003.1 </td <td>55</td>	55
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44       46.452.2033.6         44       46.452.2034.1         45       46.452.2034.6         44       46.452.3000.1         44       46.452.3000.6         45       46.452.3003.1         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.1         45       46.452.3003.1         44       46.452.303.1         45       46.452.303.1         44       46.452.303.1         44       46.452.303.6         44       46.452.303.6         44       46.452.303.1         44       46.452.303.1         44       46.452.303.1         44       46.452.4000.1         45       46.452.4000.1         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.6         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.1         45       46.452.4003.1         46       452.4004.1	54
44       46.452.2034.1         45       46.452.2034.6         44       46.452.3000.1         44       46.452.3000.6         45       46.452.3003.1         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3003.6         44       46.452.303.1         45       46.452.303.1         44       46.452.303.1         44       46.452.303.6         45       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.1         44       46.452.4000.1         45       46.452.4000.1         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.6         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.6	54
45         46.452.2034.6           44         46.452.3000.1           44         46.452.3000.6           45         46.452.3003.1           44         46.452.3003.6           44         46.452.3003.6           44         46.452.3003.6           44         46.452.3004.1           45         46.452.3004.6           44         46.452.3003.6           44         46.452.303.1           44         46.452.303.1           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.1           44         46.452.4000.1           45         46.452.4000.1           44         46.452.4003.1           44         46.452.4003.6           44         46.452.4003.6           44         46.452.4003.6           44         46.452.4004.1	54
44       46.452.3000.1         44       46.452.3000.6         45       46.452.3003.1         44       46.452.3003.6         44       46.452.3003.6         44       46.452.3004.1         45       46.452.3004.6         44       46.452.3003.1         45       46.452.3003.6         44       46.452.303.1         44       46.452.303.6         45       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.1         45       46.452.4000.1         44       46.452.4000.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1	55
44       46.452.3000.6         45       46.452.3003.1         44       46.452.3003.6         44       46.452.3004.1         45       46.452.3004.6         44       46.452.3004.6         44       46.452.3003.6         44       46.452.303.1         44       46.452.303.6         45       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.303.6         44       46.452.4000.1         45       46.452.4003.1         44       46.452.4003.6         45       46.452.4003.6         44       46.452.4003.6         44       46.452.4004.1	55
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44         46.452.3003.6           44         46.452.3003.6           44         46.452.3004.1           45         46.452.3004.6           44         46.452.3030.1           44         46.452.3030.6           45         46.452.303.1           44         46.452.303.6           45         46.452.303.1           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.303.6           44         46.452.4000.1           45         46.452.4000.1           44         46.452.4003.1           44         46.452.4003.6           44         46.452.4003.6           44         46.452.4003.1           44         46.452.4004.1	54
44       46.452.3004.1         45       46.452.3004.6         44       46.452.3030.1         44       46.452.3030.6         45       46.452.3033.1         44       46.452.3033.6         44       46.452.3034.1         45       46.452.3034.1         45       46.452.3034.6         44       46.452.4000.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.1         44       46.452.4003.1	54
45         46.452.3004.6           44         46.452.3030.1           44         46.452.3030.6           45         46.452.3033.1           44         46.452.3033.6           44         46.452.3033.6           44         46.452.3034.1           45         46.452.3034.6           44         46.452.4000.1           44         46.452.4000.6           45         46.452.4003.1           44         46.452.4003.6           44         46.452.4003.6           44         46.452.4003.1           44         46.452.4003.1           44         46.452.4003.1           44         46.452.4003.1	54
44     46.452.3030.1       44     46.452.3030.6       45     46.452.3033.1       44     46.452.3033.6       44     46.452.3034.1       45     46.452.3034.6       44     46.452.4000.1       44     46.452.4003.1       45     46.452.4003.1       44     46.452.4003.6       44     46.452.4003.1       44     46.452.4003.1       44     46.452.4003.1	55
44       46.452.3030.6         45       46.452.3033.1         44       46.452.3033.6         44       46.452.3034.1         45       46.452.3034.6         44       46.452.4000.1         44       46.452.4000.6         45       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.1	55
45       46.452.3033.1         44       46.452.3033.6         44       46.452.3034.1         45       46.452.3034.6         44       46.452.4000.1         44       46.452.4000.6         45       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.6	54
44     46.452.3033.6       44     46.452.3034.1       45     46.452.3034.6       44     46.452.4000.1       44     46.452.4000.6       45     46.452.4003.1       44     46.452.4003.6       44     46.452.4003.6       44     46.452.4003.6	54
44       46.452.3034.1         45       46.452.3034.6         44       46.452.4000.1         44       46.452.4000.6         45       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.1         44       46.452.4003.6         44       46.452.4003.1         44       46.452.4003.1	54
45     46.452.3034.6       44     46.452.4000.1       44     46.452.4000.6       45     46.452.4003.1       44     46.452.4003.6       44     46.452.4003.1	54
44     46.452.4000.1       44     46.452.4000.6       45     46.452.4003.1       44     46.452.4003.6       44     46.452.4004.1	55
44     46.452.4000.6       45     46.452.4003.1       44     46.452.4003.6       44     46.452.4004.1	55
45         46.452.4003.1           44         46.452.4003.6           44         46.452.4004.1	54
4446.452.4003.64446.452.4004.1	54
46.452.4004.1	54
	54
	55
45 46.452.4004.6	55
44 46.452.4030.1	54
44 46.452.4030.6	54
45 46.452.4033.1	54
44 46.452.4033.6	54
44 46.452.4034.1	55
45 46.452.4034.6	55
44 46.452.5000.1	
40.452.5000.1	54
40.452.5000.0	54 54
	54
44 46.452.5003.6	54 54
44 46.452.5004.1	54 54 54
45 46.452.5004.6	54 54 54 55
54 46.452.5030.1	54 54 55 55
54 46.452.5030.6	54 54 54 55

46.422.3033.1	44
46.422.3034.1	45
46.422.3037.4	44
46.422.3038.4	45
46.422.4000.1 46.422.4002.4	44 44
46.422.4002.4	44
46.422.4003.1	44
46.422.4007.4	44
46.422.4008.4	45
46.422.4030.1	44
46.422.4032.4	44
46.422.4033.1	44
46.422.4034.1	45
46.422.4037.4	44
46.422.4038.4	45
46.422.5000.1	44
46.422.5002.4	44
46.422.5003.1	44
46.422.5004.1	45
46.422.5007.4	44
46.422.5008.4	45
46.422.5030.1	44
46.422.5032.4	44
46.422.5033.1	44
46.422.5034.1	45
46.422.5037.4	44
46.422.5038.4	45
46.432.0500.1 46.432.0503.1	44 44
46.432.0503.1	44
46.432.0530.1	40
46.432.0533.1	44
46.432.0534.1	45
46.432.1000.1	44
46.432.1003.1	44
46.432.1004.1	45
46.432.1030.1	44
46.432.1033.1	44
46.432.1034.1	45
46.432.2000.1	44
46.432.2003.1	44
46.432.2004.1	45
46.432.2030.1	44
46.432.2033.1	44
46.432.2034.1	45
46.432.3000.1	44
46.432.3003.1	44
46.432.3004.1	45
46.432.3030.1	44
46.432.3033.1	44
46.432.3034.1	45
46.432.4000.1	44
46.432.4003.1	44
46.432.4004.1	45
46.432.4030.1	44
46.432.4033.1	44
46.432.4034.1	45
46.432.5000.1	44
	A A
46.432.5003.1	44
46.432.5003.1 46.432.5004.1	45
46.432.5003.1 46.432.5004.1 46.432.5030.1	45 44
46.432.5003.1 46.432.5004.1 46.432.5030.1 46.432.5033.1	45 44 44
46.432.5003.1 46.432.5004.1 46.432.5030.1	45 44

46.452.0500.6

### Part number | page

96.023.0153.0	67	96.024.6053.0	73	96.031.4151.4	86
96.023.0153.1	67	96.024.6053.1	73	96.031.4153.0	86
96.023.0451.4	67	96.024.6250.8	74	96.031.4153.1	86
96.023.0453.0	67	96.024.6251.4	74	96.031.4153.9	86
96.023.0453.1	67	96.024.6253.0	74	96.031.4154.3	108
96.023.0950.8	67	96.024.6253.1	74	96.031.4155.7	86
96.023.0951.4	67	96.025.2151.4	71	96.031.4253.0	89
96.023.2050.8	73	96.025.2153.0	71	96.031.4253.1	89
96.023.2051.4	73	96.025.2153.1	71	96.031.4255.7	89
96.023.2053.0	73	96.025.6150.8	71	96.031.4353.0	89
96.023.2053.1	73	96.025.6151.4	71	96.031.4353.1	89
96.023.2250.8	74	96.025.6153.0	71	96.031.4355.7	89
96.023.2251.4	74	96.025.6153.1	71	96.031.4553.0	88
96.023.2253.0	74	96.026.2150.8	71	96.031.4553.1	88
96.023.2253.1	74	96.026.2151.4	71	96.031.4553.9	88
96.023.4050.8	67	96.026.2153.0	71	96.031.4554.3	108
96.023.4051.4	67	96.026.2153.1	71	96.031.4555.7	88
96.023.4053.0	67	96.026.6150.8	71	96.031.5051.4	90
96.023.4053.1	67	96.026.6151.4	71	96.031.5053.0	90
96.023.4153.0	67	96.026.6153.0	71	96.031.5053.1	90
96.023.4153.1	67	96.026.6153.1	71	96.031.5053.9	90
96.023.4451.4	67	96.030.0151.4	102	96.031.5054.3	109
96.023.4453.0	67	96.030.0153.0	102	96.031.5055.7	90
96.023.4453.1	67	96.030.0153.1	102	96.031.6051.4	91
96.023.4950.8	67	96.030.0155.7	102	96.031.6053.0	91
96.023.4951.4	67	96.030.0251.4	102	96.031.6053.1	91
96.023.6050.8	73	96.030.0253.0	102	96.031.6053.9	91
96.023.6051.4	73	96.030.0253.1	102	96.031.6055.7	91
96.023.6053.0	73	96.030.0255.7	102	96.031.6151.4	92
96.023.6053.1	73	96.031.0051.4	86	96.031.6153.0	92
96.023.6250.8	74	96.031.0053.0	86	96.031.6153.1	92
96.023.6251.4	74	96.031.0053.1	86	96.031.6153.9	92
96.023.6253.0	74	96.031.0053.9	86	96.031.6155.7	92
96.023.6253.1	74	96.031.0055.7	86	96.032.0051.4	86
96.024.0050.8	67	96.031.0151.4	86	96.032.0053.0	86
96.024.0051.4	67	96.031.0153.0	86	96.032.0053.1	86
96.024.0053.0	67	96.031.0153.1	86	96.032.0053.9	86
96.024.0053.1	67	96.031.0153.9	86	96.032.0055.7	86
96.024.0153.0	67	96.031.0155.7	86	96.032.0151.4	86
96.024.0153.1	67	96.031.0253.0	89	96.032.0153.0	86
96.024.0451.4	67	96.031.0253.1	89	96.032.0153.1	86
96.024.0453.0	67	96.031.0255.7	89	96.032.0153.9	86
96.024.0453.1	67	96.031.0353.0	89	96.032.0155.7	86
96.024.0950.8	67	96.031.0353.1	89	96.032.1051.4	90
96.024.0951.4	67	96.031.0353.9	89	96.032.1053.0	90
96.024.2050.8	73	96.031.0355.7	89	96.032.1053.1	90
96.024.2051.4	73	96.031.1051.4	90	96.032.1053.9	90
96.024.2053.0	73	96.031.1053.0	90	96.032.1055.7	90
96.024.2053.1	73	96.031.1053.1	90	96.032.2051.4	91
96.024.2250.8	74	96.031.1053.9	90	96.032.2053.0	91
96.024.2251.4	74	96.031.1055.7	90	96.032.2053.1	91
96.024.2253.0	74	96.031.2051.4	91	96.032.2053.9	91
96.024.2253.1	74	96.031.2053.0	91	96.032.2055.7	91
96.024.4050.8	67	96.031.2053.1	91	96.032.2151.4	92
96.024.4050.8	67	96.031.2053.9	91	96.032.2151.4	92
96.024.4053.0	67	96.031.2055.7	91	96.032.2153.1	92
96.024.4053.0	67	96.031.2055.7	92	96.032.2153.1	92
96.024.4053.1	67	96.031.2153.0	92	96.032.2155.7	92
96.024.4153.1	67	96.031.2153.1	92	96.032.4051.4	86
96.024.4451.4	67	96.031.2153.9	92	96.032.4053.0	86
	67	96.031.2155.7	92	96.032.4053.1 96.032.4053.9	86 86
	67			MD U 3770053 M	X k
96.024.4453.0 96.024.4453.1	67	96.031.4051.4	86		
96.024.4453.1 96.024.4950.8	67	96.031.4053.0	86	96.032.4055.7	86
96.024.4453.1					

96.032.4153.9	86
96.032.4154.3	108
96.032.4155.7	86
96.032.4553.0	88
96.032.4553.1	88
96.032.4553.9	88
96.032.4554.3	108
96.032.4555.7	88
96.032.5051.4	90
96.032.5053.0	90
96.032.5053.1	90
96.032.5053.9	90
96.032.5054.3	109
96.032.5055.7	90
96.032.6051.4	91
96.032.6053.0	91
96.032.6053.1	91
96.032.6053.9	91
96.032.6055.7	91
96.032.6151.4	92
96.032.6153.0	92
96.032.6153.1	92
96.032.6153.9	92
96.032.6155.7	92
96.033.0051.4	87
96.033.0053.0	87
96.033.0053.1	87
96.033.0053.9	87
96.033.0055.7	87
96.033.0151.4	87
96.033.0153.0	87
96.033.0153.1	87
96.033.0153.9	87
96.033.0155.7	87
96.033.2051.4	94
96.033.2053.0	94
96.033.2053.1	94
96.033.2053.9	94
96.033.2055.7	94
96.033.2251.4	95
96.033.2253.0	95
96.033.2253.1	95
96.033.2253.9	95
96.033.2255.7	95
96.033.4051.4	87
96.033.4053.0	87
96.033.4053.1	87
96.033.4053.9	87
96.033.4055.7	87
96.033.4151.4	87
96.033.4153.0	87
96.033.4153.1	87
96.033.4153.9	87
96.033.4155.7	87
96.033.6051.4	94
96.033.6053.0	94
96.033.6053.1	94
96.033.6053.9	94
96.033.6055.7	94
96.033.6251.4	95
96.033.6253.0	95
96.033.6253.1	95
96.033.6253.9	95
96.033.6255.7	95
96.034.0051.4	87
96.034.0053.0	87

		1
		1

96.052.4553.2	138
96.052.4553.6	138
96.052.4553.9	138
96.052.4554.3	158
96.052.5051.4	140
96.052.5053.0	140
96.052.5053.1	140
96.052.5053.6	140
96.052.5053.9	140
96.052.5054.3	159
96.052.6051.4	141
96.052.6053.0	141
96.052.6053.1	141
96.052.6053.6	141
96.052.6053.9	141
96.052.6151.4	142
96.052.6153.0	142
96.052.6153.1	142
96.052.6153.6	142
96.052.6153.9	142
96.053.4051.4	137
96.053.4053.0	137
96.053.4053.1	137
96.053.4053.6	137
96.053.4053.9	137
96.053.4151.4	137
96.053.4153.0	137
96.053.4153.1	137
96.053.4153.6	137
96.053.4153.9	137
96.053.6051.4	144
96.053.6053.0	144
96.053.6053.1	144
96.053.6053.6 96.053.6053.9	144 144
96.053.6251.4	144
96.053.6253.0	145
96.053.6253.1	145
96.053.6253.6	145
96.053.6253.9	145
96.054.4051.4	137
96.054.4053.0	137
96.054.4053.1	137
96.054.4053.6	137
96.054.4053.9	137
96.054.4151.4	137
96.054.4153.0	137
96.054.4153.1	137
96.054.4153.6	137
96.054.4153.9	137
96.054.6051.4	144
96.054.6053.0	144
96.054.6053.1	144
96.054.6053.6	144
96.054.6053.9	144
96.054.6251.4	145
96.054.6253.0	145
96.054.6253.1	145
96.054.6253.6	145
96.054.6253.9	145
96.055.6151.4	143
96.055.6153.0	143
96.055.6153.1	143
96.055.6153.6	143
96.055.6153.9	143
96.056.6151.4	143

96.050.2153.1	154
96.050.3153.1	180
96.050.4153.1	180
96.050.5153.1	180
96.050.6153.1	180
96.050.7153.1	182
96.051.4051.4	136
96.051.4053.0 96.051.4053.1	136 136
96.051.4053.2	136
96.051.4053.6	136
96.051.4053.9	136
96.051.4151.4	136
96.051.4153.0	136
96.051.4153.1	136
96.051.4153.6	136
96.051.4153.9	136
96.051.4154.3	158
96.051.4251.4	139
96.051.4253.0	139
96.051.4253.1	139
96.051.4253.6	139
96.051.4253.9	139
96.051.4351.4	139
96.051.4353.0 96.051.4353.1	139
96.051.4353.6	139 139
96.051.4353.9	139
96.051.4551.4	138
96.051.4553.0	138
96.051.4553.1	138
96.051.4553.2	138
96.051.4553.6	138
96.051.4553.9	138
96.051.4554.3	158
96.051.5051.4	140
96.051.5053.0	140
96.051.5053.1	140
96.051.5053.6	140
96.051.5053.9	140
96.051.5054.3 96.051.6051.4	159 141
96.051.6053.0	141
96.051.6053.1	141
96.051.6053.6	141
96.051.6053.9	141
96.051.6151.4	142
96.051.6153.0	142
96.051.6153.1	142
96.051.6153.6	142
96.051.6153.9	142
96.052.4051.4	136
96.052.4053.0	136
96.052.4053.1	136
96.052.4053.2	136
96.052.4053.6	136
96.052.4053.9	136
96.052.4151.4	136
96.052.4153.0 96.052.4153.1	136 136
96.052.4153.1	136
96.052.4153.9	136
96.052.4154.3	158
96.052.4551.4	138
96.052.4553.0	138
96.052.4553.1	138

87	96.041.4353.0	117
87	96.041.4353.1	117
87	96.041.4553.0	116
87	96.041.4553.1	116
87	96.041.4951.4	114
87	96.041.5051.4	118
87	96.041.5053.0	118
87	96.041.5053.1	118
94	96.041.6051.4	119
94	96.041.6053.0	119
94	96.041.6053.1	119
94	96.041.6151.4	120
94	96.041.6153.0	120
95	96.041.6153.1	120
95	96.042.4051.4	114
95	96.042.4053.0	114
95	96.042.4053.1	114
95	96.042.4153.0	114
87	96.042.4153.1	114
87	96.042.4553.0	116
87	96.042.4553.1	116
87	96.042.4951.4	114
87	96.042.5051.4	118
87	96.042.5053.0	118
87	96.042.5053.1	118
87	96.042.6051.4	119
87	96.042.6053.0	119
87	96.042.6053.1	119
94	96.042.6151.4	120
94	96.042.6153.0	120
94	96.042.6153.1	120
94	96.043.4051.4	115
94	96.043.4053.0	115
95	96.043.4053.1	115
95	96.043.4153.0	115
95	96.043.4153.1	115
95	96.043.4851.4	115
95	96.043.4951.4	115
93	96.043.6051.4	122
93	96.043.6053.0	122
93	96.043.6053.1	122
93	96.043.6251.4	123
93	96.043.6253.0	123
93	96.043.6253.1	123
93	96.044.4051.4	115
93	96.044.4053.0	115
93	96.044.4053.1	115
93	96.044.4153.0	115
93	96.044.4153.1	115
93	96.044.4851.4 96.044.4951.4	115 115
93		
93	96.044.6051.4 96.044.6053.0	122
93		122
93	96.044.6053.1 96.044.6251.4	122
93 93	96.044.6253.0	123 123
93	96.044.6253.1	123
93	96.045.6151.4	123
181	96.045.6153.0	121
114	96.045.6153.1	121
114	96.046.6151.4	121
114	96.046.6153.0	121
114	96.046.6153.1	121
114	96.050.0153.1	154
117	96.050.0153.1	180
117	96.050.1153.1	180
	00.000.1100.1	100

96.034.0053.1	87
96.034.0053.9	87
96.034.0055.7	87
96.034.0151.4	87
96.034.0153.0	87
96.034.0153.1	87
96.034.0153.9	87
96.034.0155.7	87
96.034.2051.4	94
96.034.2053.0	94
96.034.2053.1	94
96.034.2053.9	94
96.034.2055.7	94
96.034.2251.4	95
96.034.2253.0	95
96.034.2253.1	95
96.034.2253.9	95
96.034.2255.7	95
96.034.4051.4	87
96.034.4053.0	87
96.034.4053.1	87
96.034.4053.9	87
96.034.4055.7	87
96.034.4151.4	87
96.034.4153.0	87
96.034.4153.1	87
96.034.4153.9	87
96.034.4155.7	87
96.034.6051.4	94
96.034.6053.0	94
96.034.6053.1	94
96.034.6053.9	94
96.034.6055.7	94
96.034.6251.4	95
96.034.6253.0	95 95
96.034.6253.1 96.034.6253.9	95 95
96.034.6255.7	95 95
96.035.2151.4	93
96.035.2151.4	93
96.035.2153.1	93
96.035.2153.9	
96.035.2155.7	93 93
96.035.6151.4	93
96.035.6153.0	93
96.035.6153.1	93
96.035.6153.9	93
96.035.6155.7	93
96.036.2151.4	93
96.036.2153.0	93
96.036.2153.0	93
96.036.2153.9	93
96.036.2155.7	93
96.036.6151.4	93
96.036.6153.0	93
96.036.6153.1	93
96.036.6153.9	93
96.036.6155.7	93
96.040.0151.4	181
96.040.0151.4	181
96.041.4053.0	114
96.041.4053.0	
	114
96.041.4153.0 96.041.4153.1	114
96.041.4153.1	114 117
50.041.4255.0	117

96.041.4253.1

### Part number | page

96.056.6153.0	143	96.142.0553.0	116	96.152.0153.1	136	96.155.2153.1	143
96.056.6153.1	143	96.142.0553.1	116	96.152.0153.6	136	96.155.2153.6	143
96.056.6153.6	143	96.142.1053.0	118	96.152.0153.9	136	96.155.2153.9	143
96.056.6153.9	143	96.142.1053.1	118	96.152.0551.4	138	96.156.2151.4	143
96.131.0053.0	86	96.142.2053.0	119	96.152.0553.0	138	96.156.2153.0	143
96.131.0053.1	86	96.142.2053.1	119	96.152.0553.1	138	96.156.2153.1	143
96.131.0153.0	86	96.142.2153.0	120	96.152.0553.6	138	96.156.2153.6	143
96.131.0153.1	86	96.142.2153.1	120	96.152.0553.9	138	96.156.2153.9	143
96.131.1053.0	90	96.143.0053.0	115	96.152.1051.4	140	96.222.1000.1	76
96.131.1053.1	90	96.143.0053.1	115	96.152.1053.0	140	96.222.1002.4	76
96.131.1055.7	90	96.143.0153.0	115	96.152.1053.1	140	96.222.1003.1	76
96.131.2053.0	91	96.143.0153.1	115	96.152.1053.2	140	96.222.1004.1	77
96.131.2053.1	91	96.143.2053.0	122	96.152.1053.6	140	96.222.1007.4	76
96.131.2153.0	92	96.143.2053.1	122	96.152.1053.9	140	96.222.1008.4	77
96.131.2153.1	92	96.143.2253.0	123	96.152.2051.4	141	96.222.1030.1	76
96.131.4553.0	88	96.143.2253.1	123	96.152.2053.0	141	96.222.1032.4	76
96.131.4553.1	88	96.144.0053.0	115	96.152.2053.1	141	96.222.1033.1	76
96.132.0053.0	86	96.144.0053.1	115	96.152.2053.6	141	96.222.1034.1	77
96.132.0053.1	86	96.144.0153.0	115	96.152.2053.9	141	96.222.1037.4	76
96.132.0153.0	86	96.144.0153.1	115	96.152.2151.4	142	96.222.1038.4	77
	86		122	96.152.2153.0	142		78
96.132.0153.1		96.144.2053.0 96.144.2053.1				96.222.1092.4	
96.132.1053.0	90	96.144.2053.1	122	96.152.2153.1	142	96.222.1092.8	78
96.132.1053.1	90	96.144.2253.0	123	96.152.2153.6	142	96.222.1097.4	78
96.132.1055.7	90	96.144.2253.1	123	96.152.2153.9	142	96.222.1097.8	78
96.132.2053.0	91	96.145.2153.0	121	96.153.0051.4	137	96.222.1098.4	79
96.132.2053.1	91	96.145.2153.1	121	96.153.0053.0	137	96.222.1098.8	79
96.132.2153.0	92	96.146.2153.0	121	96.153.0053.1	137	96.222.2000.1	76
96.132.2153.1	92	96.146.2153.1	121	96.153.0053.6	137	96.222.2002.4	76
96.132.4553.0	88	96.151.0051.4	136	96.153.0053.9	137	96.222.2003.1	76
96.132.4553.1	88	96.151.0053.0	136	96.153.0151.4	137	96.222.2004.1	77
96.133.0053.0	87	96.151.0053.1	136	96.153.0153.0	137	96.222.2007.4	76
96.133.0053.1	87	96.151.0053.6	136	96.153.0153.1	137	96.222.2008.4	77
96.133.0153.0	87	96.151.0053.9	136	96.153.0153.6	137	96.222.2030.1	76
96.133.0153.1	87	96.151.0151.4	136	96.153.0153.9	137	96.222.2032.4	76
96.133.2053.0	94	96.151.0153.0	136	96.153.2051.4	144	96.222.2033.1	76
96.133.2053.1	94	96.151.0153.1	136	96.153.2053.0	144	96.222.2034.1	77
96.133.2253.0	95	96.151.0153.6	136	96.153.2053.1	144	96.222.2037.4	76
96.133.2253.1	95	96.151.0153.9	136	96.153.2053.6	144	96.222.2038.4	77
96.134.0053.0	87	96.151.0551.4	138	96.153.2053.9	144	96.222.2092.4	78
96.134.0053.1	87	96.151.0553.0	138	96.153.2251.4	145	96.222.2092.8	78
96.134.0153.0	87	96.151.0553.1	138	96.153.2253.0	145	96.222.2097.4	78
96.134.0153.1	87	96.151.0553.6	138	96.153.2253.1	145	96.222.2097.8	78
96.134.2053.0	94	96.151.0553.9	138	96.153.2253.6	145	96.222.2098.4	79
96.134.2053.1	94	96.151.1051.4	140	96.153.2253.9	145	96.222.2098.8	79
96.134.2253.0	95	96.151.1053.0	140	96.154.0051.4	137	96.222.3000.1	76
			140				
96.134.2253.1	95	96.151.1053.1		96.154.0053.0	137	96.222.3002.4	76
96.135.2153.0	93	96.151.1053.2	140	96.154.0053.1	137	96.222.3003.1	76
96.135.2153.1	93	96.151.1053.6	140	96.154.0053.6	137	96.222.3004.1	77
96.136.2153.0	93	96.151.1053.9	140	96.154.0053.9	137	96.222.3007.4	76
96.136.2153.1	93	96.151.2051.4	141	96.154.0151.4	137	96.222.3008.4	77
96.141.0053.0	114	96.151.2053.0	141	96.154.0153.0	137	96.222.3030.1	76
96.141.0053.1	114	96.151.2053.1	141	96.154.0153.1	137	96.222.3032.4	76
96.141.0153.0	114	96.151.2053.6	141	96.154.0153.6	137	96.222.3033.1	76
96.141.0153.1	114	96.151.2053.9	141	96.154.0153.9	137	96.222.3034.1	77
96.141.0553.0	116	96.151.2151.4	142	96.154.2051.4	144	96.222.3037.4	76
96.141.0553.1	116	96.151.2153.0	142	96.154.2053.0	144	96.222.3038.4	77
96.141.1053.0	118	96.151.2153.0	142	96.154.2053.1	144	96.222.3038.4	78
96.141.1053.1	118	96.151.2153.6	142	96.154.2053.6	144	96.222.3092.8	78
96.141.2053.0	119	96.151.2153.9	142	96.154.2053.9	144	96.222.3097.4	78
96.141.2053.1	119	96.152.0051.4	136	96.154.2251.4	145	96.222.3097.8	78
96.141.2153.0	120	96.152.0053.0	136	96.154.2253.0	145	96.222.3098.4	79
96.141.2153.1	120	96.152.0053.1	136	96.154.2253.1	145	96.222.3098.8	79
96.142.0053.0	114	96.152.0053.6	136	96.154.2253.6	145	96.222.4000.1	76
96.142.0053.1	114	96.152.0053.9	136	96.154.2253.9	145	96.222.4002.4	76
		00 450 0454 4		00 155 0151 4	140	00 000 4000 1	70
96.142.0153.0	114	96.152.0151.4	136	96.155.2151.4	143	96.222.4003.1	76

96.222.4007.4	76	96.222.7098.4	79	96.223.8098.4	81	96.232.5000.1
96.222.4008.4	77	96.222.7098.8	79	96.223.8098.8	81	96.232.5001.7
96.222.4030.1	76	96.222.8000.1	76	96.232.1000.1	96	96.232.5003.1
96.222.4032.4	76	96.222.8002.4	76	96.232.1001.7	96	96.232.5004.1
96.222.4033.1	76	96.222.8003.1	76	96.232.1003.1	96	96.232.5005.7
96.222.4034.1	77	96.222.8004.1	77	96.232.1004.1	97	96.232.5006.7
96.222.4037.4	76	96.222.8007.4	76	96.232.1005.7	96	96.232.5010.9
96.222.4038.4	77	96.222.8008.4	77	96.232.1006.7	97	96.232.5030.1
96.222.4092.4	78	96.222.8030.1	76	96.232.1010.9	96	96.232.5031.7
96.222.4092.8	78	96.222.8032.4	76	96.232.1030.1	96	96.232.5033.1
96.222.4097.4	78	96.222.8033.1	76	96.232.1031.7	96	96.232.5034.1
96.222.4097.8	78	96.222.8034.1	77	96.232.1033.1	96	96.232.5035.7
96.222.4098.4	79	96.222.8037.4	76	96.232.1034.1	97	96.232.5036.7
96.222.4098.8	79	96.222.8038.4	77	96.232.1035.7	96	96.232.5050.1
96.222.5000.1	76	96.222.8092.4	78	96.232.1036.7	97	96.232.5053.1
96.222.5002.4	76	96.222.8092.8	78	96.232.1050.1	96	96.232.5054.1
96.222.5003.1	76	96.222.8097.4	78	96.232.1053.1	96	96.232.6000.1
96.222.5004.1	77	96.222.8097.8	78	96.232.1054.1	97	96.232.6001.7
96.222.5007.4	76	96.222.8098.4	79	96.232.2000.1	96	96.232.6003.1
96.222.5008.4	77	96.222.8098.8	79	96.232.2001.7	96	96.232.6004.1
96.222.5030.1	76	96.223.1092.4	80	96.232.2003.1	96	96.232.6005.7
96.222.5032.4	76	96.223.1092.8	80	96.232.2004.1	97	96.232.6006.7
96.222.5033.1	76	96.223.1097.4	80	96.232.2005.7	96	96.232.6010.9
96.222.5034.1	77	96.223.1097.8	80	96.232.2006.7	97	96.232.6030.1
96.222.5037.4	76	96.223.1098.4	81	96.232.2010.9	96	96.232.6031.7
96.222.5038.4	77	96.223.1098.8	81	96.232.2030.1	96	96.232.6033.1
96.222.5092.4	78	96.223.2092.4	80	96.232.2031.7	96	96.232.6034.1
96.222.5092.8	78	96.223.2092.8	80	96.232.2033.1	96	96.232.6035.7
96.222.5097.4	78	96.223.2097.4	80	96.232.2034.1	97	96.232.6036.7
96.222.5097.8	78	96.223.2097.8	80	96.232.2035.7	96	96.232.6050.1
96.222.5098.4	79	96.223.2098.4	81	96.232.2036.7	97	96.232.6053.1
96.222.5098.8	79	96.223.2098.8	81	96.232.2050.1	96	96.232.6054.1
96.222.6000.1	76	96.223.3092.4	80	96.232.2053.1	96	96.232.7000.1
96.222.6002.4	76	96.223.3092.8	80	96.232.2054.1	97	96.232.7001.7
96.222.6003.1	76	96.223.3097.4	80	96.232.3000.1	96	96.232.7003.1
96.222.6004.1	77	96.223.3097.8	80	96.232.3001.7	96	96.232.7004.1
96.222.6007.4	76	96.223.3098.4	81	96.232.3003.1	96	96.232.7005.7
96.222.6008.4	77	96.223.3098.8	81	96.232.3004.1	97	96.232.7006.7
96.222.6030.1	76	96.223.4092.4	80	96.232.3005.7	96	96.232.7010.9
96.222.6032.4	76	96.223.4092.8	80	96.232.3006.7	97	96.232.7030.1
96.222.6033.1	76	96.223.4097.4	80	96.232.3010.9	96	96.232.7031.7
96.222.6034.1	77	96.223.4097.8	80	96.232.3030.1	96	96.232.7033.1
96.222.6037.4	76	96.223.4098.4	81	96.232.3031.7	96	96.232.7034.1
96.222.6038.4	77	96.223.4098.8	81	96.232.3033.1	96	96.232.7035.7
96.222.6092.4	78	96.223.5092.4	80	96.232.3034.1	97	96.232.7036.7
96.222.6092.8	78	96.223.5092.8	80	96.232.3035.7	96	96.232.7050.1
96.222.6097.4	78	96.223.5097.4	80	96.232.3036.7	97	96.232.7053.1
96.222.6097.8	78	96.223.5097.8	80	96.232.3050.1	96	96.232.7054.1
96.222.6098.4	79	96.223.5098.4	81	96.232.3053.1	96	96.232.8000.1
96.222.6098.8	79	96.223.5098.8	81	96.232.3054.1	97	96.232.8001.7
96.222.7000.1	76	96.223.6092.4	80	96.232.4000.1	96	96.232.8003.1
96.222.7002.4	76	96.223.6092.8	80	96.232.4001.7	96	96.232.8004.1
96.222.7003.1	76	96.223.6097.4	80	96.232.4003.1	96	96.232.8005.7
96.222.7004.1	77	96.223.6097.8	80	96.232.4004.1	97	96.232.8006.7
96.222.7007.4	76	96.223.6098.4	81	96.232.4005.7	96	96.232.8010.9
96.222.7008.4	77	96.223.6098.8	81	96.232.4006.7	97	96.232.8030.1
96.222.7030.1	76	96.223.7092.4	80	96.232.4010.9	96	96.232.8031.7
96.222.7032.4	76	96.223.7092.8	80	96.232.4030.1	96	96.232.8033.1
96.222.7033.1	76	96.223.7097.4	80	96.232.4031.7	96	96.232.8034.1
96.222.7034.1	77	96.223.7097.8	80	96.232.4033.1	96	96.232.8035.7
96.222.7037.4	76	96.223.7098.4	81	96.232.4034.1	97	96.232.8036.7
96.222.7038.4	77	96.223.7098.8	81	96.232.4035.7	96	96.232.8050.1
96.222.7092.4	78	96.223.8092.4	80	96.232.4036.7	97	96.232.8053.1
96.222.7092.8	78	96.223.8092.8	80	96.232.4050.1	96	96.232.8054.1
96.222.7097.4	78	96.223.8097.4	80	96.232.4053.1	96	96.233.1000.1
96.222.7097.8	78	96.223.8097.8	80	96.232.4054.1	97	96.233.1001.7
00.222.7007.0	, 0	00.220.0007.0	50	00.202.100 <del>1</del> .1	57	00.200.1001.7



### Part number | page

00 000 1000 1	00	00 000 5000 1	00	00 440 0004 1	105	00 440 1000 4	101
96.233.1003.1	98	96.233.5033.1	98	96.442.2034.1	125	96.443.1088.4	131
96.233.1004.1	99	96.233.5034.1	99	96.442.2080.1	128	96.443.2000.1	126
96.233.1005.7	98	96.233.5035.7	98	96.442.2083.1	128	96.443.2003.1	126
96.233.1006.7	99	96.233.5036.7	99	96.442.2084.1	129	96.443.2004.1	127
96.233.1030.1	98	96.233.5050.1	98	96.442.3000.1	124	96.443.2030.1	126
96.233.1031.7	98	96.233.5053.1	98	96.442.3003.1	124	96.443.2033.1	126
96.233.1033.1	98	96.233.5054.1	99	96.442.3004.1	125	96.443.2034.1	127
96.233.1034.1	99	96.233.6000.1	98	96.442.3030.1	124	96.443.2082.4	130
96.233.1035.7	98	96.233.6001.7	98	96.442.3033.1	124	96.443.2087.4	130
96.233.1036.7	99	96.233.6003.1	98	96.442.3034.1	125	96.443.2088.4	131
96.233.1050.1	98	96.233.6004.1	99	96.442.3080.1	128	96.443.3000.1	126
96.233.1053.1	98	96.233.6005.7	98	96.442.3083.1	128	96.443.3003.1	126
96.233.1054.1	99	96.233.6006.7	99	96.442.3084.1	129	96.443.3004.1	127
96.233.2000.1	98	96.233.6030.1	98	96.442.4000.1	124	96.443.3030.1	126
96.233.2001.7	98	96.233.6031.7	98	96.442.4003.1	124	96.443.3033.1	126
96.233.2003.1	98	96.233.6033.1	98	96.442.4004.1	125	96.443.3034.1	127
96.233.2004.1	99	96.233.6034.1	99	96.442.4030.1	124	96.443.3082.4	130
96.233.2005.7	98	96.233.6035.7	98	96.442.4033.1	124	96.443.3087.4	130
96.233.2006.7	99	96.233.6036.7	99	96.442.4034.1	124	96.443.3088.4	131
96.233.2030.1	98	96.233.6050.1	98	96.442.4080.1	128	96.443.4000.1	126
96.233.2031.7	98	96.233.6053.1	98	96.442.4083.1	128	96.443.4003.1	126
96.233.2033.1	98	96.233.6054.1	99	96.442.4084.1	129	96.443.4004.1	127
96.233.2034.1	99	96.233.7000.1	98	96.442.5000.1	124	96.443.4030.1	126
96.233.2035.7	98	96.233.7001.7	98	96.442.5003.1	124	96.443.4033.1	126
96.233.2036.7	99	96.233.7003.1	98	96.442.5004.1	125	96.443.4034.1	127
96.233.2050.1	98	96.233.7004.1	99	96.442.5030.1	124	96.443.4082.4	130
96.233.2053.1	98	96.233.7005.7	98	96.442.5033.1	124	96.443.4087.4	130
96.233.2054.1	99	96.233.7006.7	99	96.442.5034.1	125	96.443.4088.4	131
96.233.3000.1	98	96.233.7030.1	98	96.442.5080.1	128	96.443.5000.1	126
96.233.3001.7	98	96.233.7031.7	98	96.442.5083.1	128	96.443.5003.1	126
96.233.3003.1	98	96.233.7033.1	98	96.442.5084.1	129	96.443.5004.1	127
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96.453.7004.6	149
96.453.7030.1	148
96.453.7030.6	148
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	149
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96.453.8050.1 96.453.8053.1 96.453.8054.1 96.453.8080.1 96.453.8083.1 96.453.8084.1	149 148 148 149 150 150 151

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		96.453.1004.6	149
146			148
146 147		96.453.1030.1	
146 147 146		96.453.1030.1 96.453.1030.6	148
146 147 146 146			
146 147 146 146 146		96.453.1030.6	148
146 147 146 146 146 146		96.453.1030.6 96.453.1033.1	148 148
146 147 146 146 146 146 147	ł	96.453.1030.6 96.453.1033.1 96.453.1033.6	148 148 148
146 147 147 146 146 146 146 147 147 147		96.453.1030.6 96.453.1033.1 96.453.1033.6 96.453.1034.1	148 148 148 149

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96.452.1003.6	146
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96.452.1030.1	146
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96.452.5000.1	146
96.452.5000.6	146
96.452.5003.1	146
96.452.5003.6	146
96.452.5004.1	147
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96.452.5030.1	146
96.452.5030.6	146
30.432.3030.0	140

### Part number | page

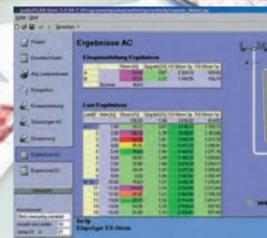
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6.454.6004.6	153	96.834.3534.3	111	97.141.0253.1	194	99.704.0000.8	4
	152						
96.454.6030.1	157	96.834.4000.3	110	97.141.1053.1	195	99.705.0000.8	4

### Index

99.707.0000.8	46	F	=0
99.708.0000.7	77	F	=0
99.708.0000.8	46	F	=0
99.709.0000.7	77	F	=0
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99.710.0000.8	46	(	G0
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99.713.0000.7	99	Z	Z5
99.714.0000.7	99	Z	<u>z</u> 5.
99.715.0000.7	99	Z	Z5.
99.716.0000.7	99	Z	<u>7</u> 5
99.717.0000.7	99	Z	Z5.
99.718.0000.7	99		Z5.
99.719.0000.7	100	Z	Z5.
99.901.0000.7	182		Z5
99.902.0000.7	182		Z5.
99.903.0000.7	182		Z5.
99.906.0000.7	102		Z5.
99.910.0000.7	82		<u>Z</u> 5
99.911.0000.7	132		Z5.
99.916.0000.7	132		Z6.
99.929.0000.7	102		Z6.
99.935.0000.7	132		Z6.
99.936.0000.7	132		_0
99.942.0000.0	83		Z6.
99.946.0000.7	83		_0
99.988.0000.7	83		_0
99.990.0000.7	83		_0 Z6
F0.000.0005.6	187	2	_0
F0.000.0005.7	187		
F0.000.0005.8	187		
F0.000.0005.8	187		
F0.000.0005.9	187		
F0.000.0007.6	187		
F0.000.0007.7	187		
F0.000.0007.8 F0.000.0007.9	187		
	187		
F0.000.0008.0	187		
F0.000.0008.1	187		
F0.000.0008.2	187		
F0.000.0009.1	186		
F0.000.0009.2	186		
F0.000.0009.3	186		
F0.000.0024.4	187		
F0.000.0025.0	186		
F0.000.0025.1	186		
F0.000.0025.2	186		
F0.000.0025.3	186		
F0.000.0025.4	186		
F0.000.0025.5	186		
F0.000.0025.6	186		
F0.000.0025.7	186		
F0.000.0025.8	186		
F0.000.0025.9			
	186		
F0.000.0026.0	186 186		
F0.000.0026.0 F0.000.0026.1			
	186		
F0.000.0026.1	186 186		
F0.000.0026.1 F0.000.0026.2	186 186 186		
F0.000.0026.1 F0.000.0026.2 F0.000.0026.3	186 186 186 186		
F0.000.0026.1 F0.000.0026.2 F0.000.0026.3 F0.000.0026.4	186 186 186 186 186		
F0.000.0026.1 F0.000.0026.2 F0.000.0026.3 F0.000.0026.4 F0.000.0026.5	186 186 186 186 186 186		
F0.000.0026.1 F0.000.0026.2 F0.000.0026.3 F0.000.0026.4 F0.000.0026.5 F0.000.0026.6	186 186 186 186 186 186 186		
F0.000.0026.1 F0.000.0026.2 F0.000.0026.3 F0.000.0026.4 F0.000.0026.5 F0.000.0026.6 F0.000.0026.7	186 186 186 186 186 186 186 186		
F0.000.0026.1 F0.000.0026.2 F0.000.0026.3 F0.000.0026.4 F0.000.0026.5 F0.000.0026.6 F0.000.0026.7 F0.000.0026.8	186 186 186 186 186 186 186 186 186		

F0.000.0027.2	186
F0.000.0027.3	186
F0.000.0027.4	186
F0.000.0027.5	186
F0.000.0027.6	186
G0.500.2041.5	181
Z5.564.4553.0	75
Z5.564.4553.0	103
Z5.564.4553.0	162
Z5.564.4553.1	75
Z5.564.4553.1	103
Z5.564.4553.1	162
Z5.564.4553.1	185
Z5.565.9853.0	132
Z5.565.9853.0	154
Z5.565.9853.0	162
Z5.565.9853.1	132
Z5.565.9853.1	154
Z5.565.9853.1	162
Z5.567.5653.0	200
Z6.561.6853.0	57
Z6.561.6853.1	57
Z6.561.6953.0	49
Z6.561.6953.1	49
Z6.561.7153.0	57
Z6.561.7153.1	57
Z6.561.7253.0	49
Z6.561.7253.1	49







C

1



### **Products and systems** Service and attendance are granted

Ranging from smart installation, automation, safety technology up to terminal blocks and PC board terminals - Wieland Electric is active in most areas of automation systems and appears as a driving force for innovation within the industry.

In the business segment of building system technology, Wieland Electric with their gesis® system is a global market leader in pluggable electric installation - from indoor and outdoor applications up to intelligent building automation.

Wieland accomplish their product portfolio for the users providing workshops for the implementation of new guidelines and standards as well as for the implementation of risk assessments. These services are also offered on a customer-specific basis. In this context, our focus is on applicationoriented solutions and competent consulting.

The flexible use of buildings does not only require an appropriate design during construction. The documentation of the installed systems must also meet these requirements.

Documenting the installed components plays a vital role. Wieland creates installation and wiring plans according to your specifications

#### Service & attendance

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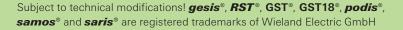
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### Industrial technology

#### Solutions for the control cabinet

- DIN rail terminal blocks
  - Screw, tension spring or push-in connection technology
  - Wire cross sections up to 300 mm<sup>2</sup>
  - Numerous special functions
  - Software solutions interfacing to CAE systems
- Safety
  - Safe signal acquisition
  - Safety switching devices
  - Modular safety modules
  - Compact safety controllers
- Application consulting and training
- Network engineering and fieldbus systems
  - Remote maintenance via VPN industrial router and VPN service portal
  - Industrial Ethernet switches
  - PLC and I/O systems, standard and
  - increased environmental conditions
- Interface
  - Power supply units
  - Overvoltage protection
  - Coupling relays, semiconductor switches
  - Timer relays, measuring and monitoring relays
  - Analog coupling and converter modules
  - Passive interfaces

#### Solutions for field applications

- Decentralized installation and automation technology
   Electrical installation for wind tower
- Fieldbus interfaces and motor starters
- Connectors for industrial applications
  - Rectangular and round connectors
  - Aluminium or plastic housings
  - Degree of protection up to IP69
  - Current-carrying capacity up to 100A
  - Connectors for hazardous areas
- Modular, application-specific technology

#### PC board terminals and connectors

- Screw or spring clamp connection technology
- Spacings: 3.5 mm to 10.16 mm
- Reflow or wave soldering process

#### **Building and installation technology**

#### • Building installation systems

- Main power supply connectors IP20/IP65... IP69
- Bus connectors
- Low-voltage connectors
- Power distribution system with flat cables
- Distribution systems
- Room automation with KNX, EnOcean, SMI and DALI
- DIN rail terminal blocks for electrical installations
- Overvoltage protection

contacts are green. 0690.1 K 06/17

